FINAL

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL

RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO

PREPARED FOR

US Army Corps of Engineers®

LOUISVILLE DISTRICT

CONTRACT No. DACA27-97-D-0025
Delivery Order 003

January 1999

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Prepared for:
U.S. Army Corps of Engineers
Louisville District
Under Contract Number DACA27-97-D-0025
Delivery Order No. 003

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January 1999

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List of Acronyms

amsl	above mean sea level
AOC	area of concern
BGS	below ground surface
DNB	dinitrobenzene
DNT	dinitrotoluene
MCL	Maximum Contaminant Level
OAC	Ohio Administrative Code
Ohio EPA	Ohio Environmental Protection Agency
OVA	organic vapor analyzer
PAH	polynuclear aromatic hydrocarbon
PID	photoionization detector
PVC	polyvinyl chloride
RQL	Ramsdell Quarry Landfill
RVAAP	Ravenna Army Ammunition Plant
SVOC	semivolatile organic compound
TAL	Target Analyte List
TNT	trinitrotoluene
USACE	U.S. Army Corps of Engineers
USAEHA	U.S. Army Environmental Hygiene Agency
UXO	unexploded ordnance
VOC	volatile organic compound

EXECUTIVE SUMMARY

This report documents the results of the initial phase of the Groundwater Investigation of Ramsdell Quarry Landfill (RQL) at Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio. The initial phase of the Groundwater Investigation was conducted for RVAAP by Science Applications International Corporation under contract DACA27-97-D-0025, Delivery Order No. 003, with the U.S. Army Corps of Engineers (USACE), Louisville District. The Groundwater Investigation is conducted in a manner consistent with the Department of Defense Installation Restoration Program guidelines, following work plans reviewed and commented on by the Ohio Environmental Protection Agency, Northeast District Office, Division of Solid and Infectious Waste.

ES.1 OBJECTIVES

This Groundwater Investigation Report summarizes the results of the initial phase of field activities conducted in July 1998 at RQL. The specific objectives of the Groundwater Investigation are as follows:

- to assess the hydrogeologic conditions and groundwater quality of shallow groundwater beneath the site using monitoring wells of known integrity suited to this purpose;

- to evaluate the RQL pond water and sediment for evidence of contamination, either via the groundwater pathway, or by surface runoff of contaminated soils to the pond;

- to establish whether there is a hydraulic connection between shallow groundwater and the pond and to continuously monitor water levels in six monitoring wells and the pond for one year for this purpose; and

- to provide for the quarterly collection of samples of upgradient and downgradient groundwater and surface water for one year, and during two significant hydrogeologic events, to maintain compliance with post-closure monitoring requirements.

ES.2 FIELD INVESTIGATION

The RQL Groundwater Investigation is organized in two distinct phases of data collection and analysis. The initial phase, completed in July 1998, consisted of the following activities:

- installation, development, testing, sampling, and instrumentation of six new monitoring wells;
- testing, sampling, and water level measurements at five monitoring wells constructed in 1988;
- sampling of sediments and surface water at the RQL pond;
- construction of an instrumented staff gauge at the RQL pond; and
- surveying of all monitoring wells and pond sediment/surface water sampling locations.

The initial field effort was conducted in accordance with the *Facility-Wide Sampling and Analysis Plan for Ravenna Army Ammunition Plant* (USACE 1996a) and the *Sampling and Analysis Plan Addendum for the Groundwater Investigation of the Former Ramsdell Quarry Landfill* (USACE 1998). The initial phase of the investigation specifically addresses the first two objectives as stated above, and provides

the basis for the remaining objectives to be accomplished. These field activities are the subject of this report.

The follow-up phase consists of the collection of groundwater samples from each of the six newly installed monitoring wells and collection of samples from one surface water location. This work is to be repeated for the next three quarters and in two separate hydrogeologic events (i.e., either a storm or a prolonged dry period), ending in 1999. The purpose of this monitoring is to establish a statistically sound data set to determine whether contaminants are migrating via groundwater from the former landfill. In addition, follow-up work will consist of continuous water-level measurements using data loggers on the six new wells, and monthly manual water level readings on the previously installed monitoring wells, for a period of one year following the installation of the six new wells. The results of sampling in each quarter will be the subject of three individual quarterly reports.

ES.3 GROUNDWATER HYDROGEOLOGY AND FLOW

Six monitoring wells were installed as a part of the initial phase of the Groundwater Investigation. A staff gauge was installed in the pond to provide correlative pond surface elevation data to groundwater elevations. RQL and the adjacent pond are underlain by weathered, fractured fine- to medium-grained, sandstones of the Sharon Member of the Pennsylvanian Pottsville Formation. All of the wells are completed in the most shallow water-bearing zone in this stratigraphic unit. Open, recemented, and highly weathered fractures were observed throughout the drilled intervals. Fracturing occurs both along bedding planes and as joints in massive zones. Groundwater circulates along fractures, as evidenced by limonitic or black oxidized stainings and coatings on the rock or on grains. The pervasive character of fracturing in the sandstone suggests that vertical movement of groundwater through both the primary and secondary porosity takes place at RQL to some degree.

Water level measurements in the six new wells and pond staff gauge indicate a local hydraulic gradient to the northeast. Water level measurements from the original five monitoring wells (which are screened deeper than the new wells) collected during the same week, and historical information for water levels in the summer months, illustrate the same general potentiometric surface geometry. These data indicate a high degree of vertical communication between the zones across permeable primary and secondary flow paths in the highly fractured and weathered sandstones at RQL.

The pond is small and shallow, and much of its former extent is now covered with vegetation. RQL pond is underlain by bedrock, covered to varying degrees by fine-grained sediment. The presence of this sediment may effectively reduce the amount of any hydraulic communication that may exist between the water-bearing zone in the sandstone and the pond, especially at times when the water level (i.e., the hydraulic head) in the pond is low. However, water levels in the pond have appeared to mimic those in the original monitoring wells and in the newly installed wells between the landfill toe and the pond.

ES.4 ANALYTICAL RESULTS

The results of the Groundwater Investigation initial sampling at RQL are summarized in the following sections.

ES.4.1 Groundwater

Groundwater contains low levels of explosives such as RDX, 1,3-dinitrobenzene, and nitrotoluenes. Two explosives were identified in the newly designated upgradient well, RQLmw-006. These explosives also occur in one or more of the downgradient wells. The propellant nitroglycerine was also identified in the upgradient well, and in one downgradient well, in low concentrations. These occurrences suggest a contaminant source upgradient of the former quarry, or reversal of flow in the groundwater system transporting contaminants upgradient. Arsenic, cobalt, and nickel were identified in filtered samples from RQLmw-006 and five or more downgradient wells. Volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) were not present above detection levels in groundwater.

ES.4.2 Sediment

Sediment has accumulated to a depth of 1.2 m (4 ft) or greater in some places in the pond. Sediment samples from the 0- to 0.15-m (0- to 0.5-ft) sampling interval appear to harbor the greatest concentrations of contaminants. The explosive HMX was found in five of the eight locations, in two of these at depths of 0.15 to 0.60 m (0.5 to 2 ft) or greater. The propellant nitrocellulose was present in two samples in low concentrations.

Numerous polynuclear aromatic hydrocarbons were present in five of the eight sediment sampling locations in concentrations up to 2000 mg/kg. VOCs were generally not present above detection levels.

ES.4.3 Surface Water

The water depth in July 1998 varied from 0 to 0.97 m (0 to 3.18 ft). An instrumented staff gauge was established at the point where the water is deepest. Explosives, propellants, cyanide, VOCs, and SVOCs were not detected above detection levels in the pond water. Most of the metals in filtered surface water samples were non-detects, with the exception of iron, magnesium, and manganese, which were detected in most samples. Arsenic and barium were present in three or fewer samples at low concentrations.

ES.5 CONCLUSIONS

The results of the initial phase of sampling and measurements at RQL provide an assessment of summer (dry weather) conditions at the site, using new monitoring wells for the collection of chemical and hydraulic data. Follow-up sampling will provide information on the temporal variations in groundwater and surface water chemistry and movement. These data will be provided in quarterly monitoring reports and integrated in an annual summary report at the conclusion of the Groundwater Investigation.

1.0 INTRODUCTION

This report documents the results of the initial phase of the Groundwater Investigation of Ramsdell Quarry Landfill (RQL) at Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio. The initial phase of the Groundwater Investigation was conducted for RVAAP by Science Applications International Corporation under contract DACA27-97-D-0025, Delivery Order No. 003, with the U.S. Army Corps of Engineers (USACE), Louisville District. The Groundwater Investigation is conducted in a manner consistent with the Department of Defense Installation Restoration Program guidelines, following work plans reviewed and commented on by the Ohio Environmental Protection Agency (Ohio EPA), Northeast District Office, Division of Solid and Infectious Waste.

The RQL Groundwater Investigation at RVAAP, in Ravenna, Ohio (Figure 1-1), was conducted in July 1998 to provide a supplemental characterization of the shallow groundwater flow regimes and chemical water quality at this closed solid waste disposal facility. With this evaluation, the USACE seeks to close data gaps and to address potential impacts upon the groundwater from the former RQL and pre-landfill disposal activities. Data from this investigation may be used to establish that the new groundwater monitoring system meets the requirements of Ohio Administrative Code (OAC) 3745-27-10(B). Although this groundwater investigation is independent of semiannual post-closure monitoring, groundwater monitoring activities performed in this investigation shall be, to the extent possible, consistent with the requirements of OAC 3745-27-10.

1.1 PURPOSE OF STUDY

The purposes of the RQL Groundwater Investigation are as follows:

- to assess the hydrogeologic conditions and groundwater quality in shallow groundwater beneath the site using monitoring wells of known integrity suited to this purpose;

- to evaluate the RQL pond water and sediment for evidence of contamination, via the groundwater pathway, or as a result of incipient contamination from historical operations on the quarry floor;

- to establish whether there is a hydraulic connection between shallow groundwater and the pond, and to continuously monitor water levels in six monitoring wells and the pond for one year for this purpose; and

- to provide for the quarterly collection of samples of upgradient and downgradient groundwater and surface water for one year, and during two significant hydrogeologic events, to maintain compliance with post-closure monitoring requirements.

The work performed for this investigation included the installation, development, testing, sampling, and instrumentation of six new monitoring wells, as well as the sampling and testing of the five existing monitoring wells, and pond sediment and surface water sampling.

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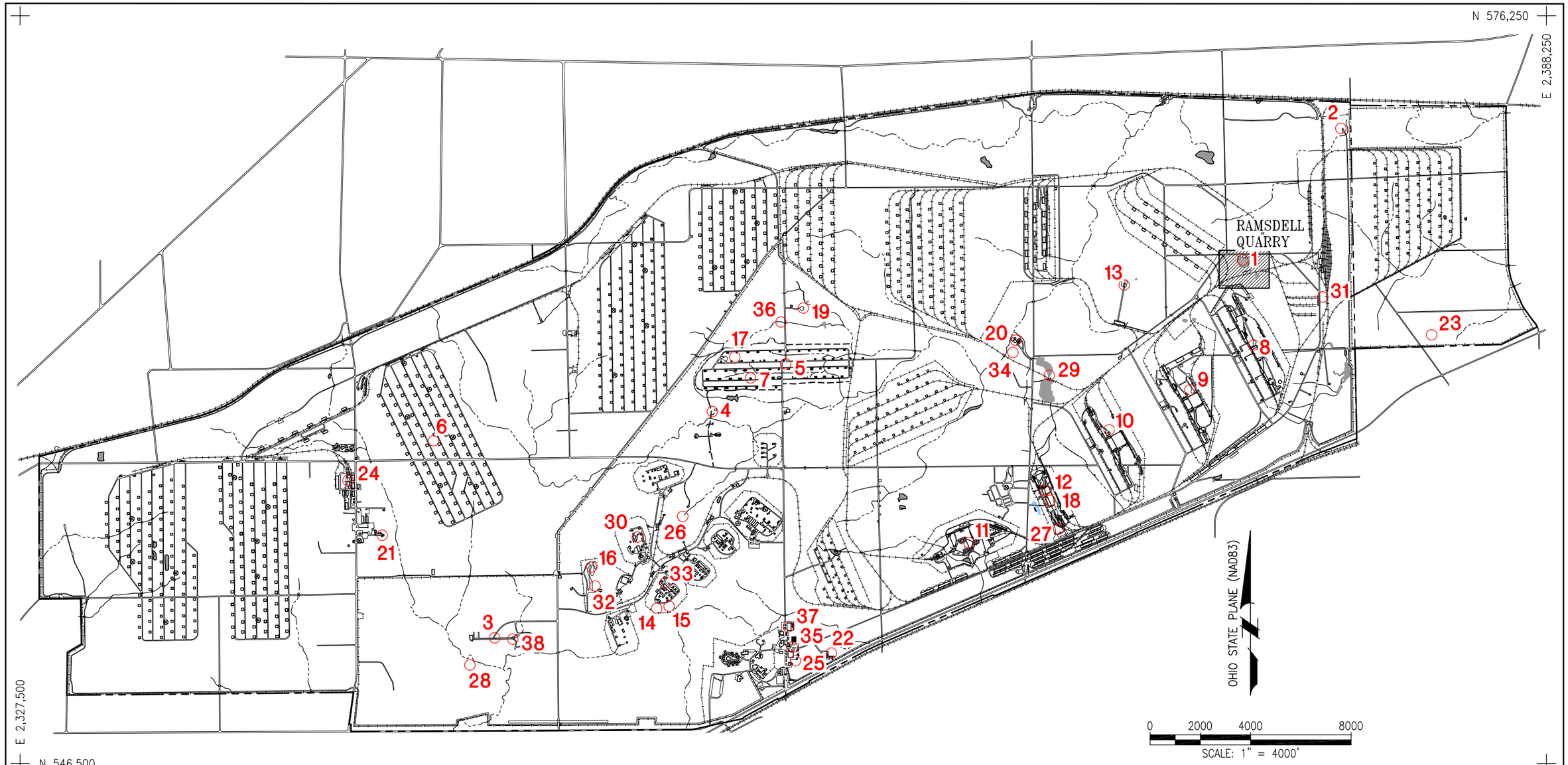

LEGEND OF SITES:

1. RAMSDELL QUARRY LANDFILL
2. ERIE BURNING GROUNDS
3. DEMOLITIONS AREA #1
4. DEMOLITIONS AREA #2
5. WINKLEPECK BURNING GROUNDS
6. C BLOCK QUARRY
7. BLDG 1601 HAZARDOUS WASTE STORAGE
8. LOAD LINE 1 AND DILUTION/SETTLING POND
9. LOAD LINE 2 AND DILUTION/SETTLING POND
10. LOAD LINE 3 AND DILUTION/SETTLING POND
11. LOAD LINE 4 AND DILUTION/SETTLING POND
12. LOAD LINE 12 AND DILUTION/SETTLING POND
13. BLDG 1200 AND DILUTION/SETTLING POND
14. LOAD LINE 6, EVAPORATION UNIT
15. LOAD LINE 6, TREATMENT PLANT QUARRY LANDFILL/FORMER
16. FUZE & BOOSTER BURNING PITS
17. DEACTIVATION FURNACE
18. LOAD LINE 12 PINK WASTE WATER TREATMENT
19. LANDFILL NORTH OF WINKLEPECK BURNING GROUND
20. SAND CREEK SEWAGE TREATMENT PLANT
21. DEPOT SEWAGE TREATMENT PLANT
22. GEORGE ROAD SEWAGE TREATMENT PLANT
23. UNIT TRAINING SITE WASTE OIL TANK
24. RESERVE UNIT MAINTENANCE AREA WASTE OIL TANK
25. BLDG 1034 MOTOR POOL WASTE OIL TANK
26. FUZE BOOSTER AREA SETTLING TANKS
27. BLDG 854–PCB STORAGE
28. MUSTARD AGENT BURIAL SITE
29. UPPER AND LOWER COBBS POND COMPLEX LOAD LINE 7
30. PINK WASTEWATER TREATMENT PLANT
31. ORE PILE RETENTION POND
32. 40 AND 60 MM FIRING RANGE
33. FIRESTONE TEST FACILITY
34. SAND CREEK DISPOSAL ROAD LANDFILL
35. 1037 BUILDING–LAUNDRY WASTEWATER SUMP
36. PISTOL RANGE
37. PESTICIDE BUILDING S–44S2
38. NACA TEST AREA

US Army Corps of Engineers Louisville District

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO
FACILITY MAP

DRAWN BY:	REV. NO./DATE:	CAD FILE:
B. ALTOM	REV. 0/ 01-08-99	98032/DWGS/C69SITE

Figure 1–1. RVAAP Installation Map

1.2 SITE BACKGROUND

1.2.1 Site Description

A detailed history of process operations and waste processes for each area of concern (AOC) at RVAAP is presented in the *Preliminary Assessment for the Ravenna Army Ammunition Plant, Ravenna, Ohio* (USACE 1996b). The following is a summary of the history and of the related contaminants for RQL.

RQL (designated AOC RVAAP-01) is located in the western and southern portion of the abandoned Ramsdell Quarry (Figure 1-1), in the northeast corner of RVAAP. The quarry was excavated about 9 to 12 m (30 to 40 ft) below existing grade into the Sharon Member sandstone and conglomerate bedrock.

The original unconsolidated glacial material overlying the sandstone was only a few feet (<10 ft) thick and appears to have been entirely removed. The quarry was abandoned before 1941 and was used as a landfill from 1941 until 1989. 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. There is currently no historical information on how the quarry was used from the 1950s to 1976.

From 1976 until the landfill was closed in 1989, only nonhazardous solid waste was deposited in the abandoned quarry. 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.

Figures 1-2 and 1-3 depict current conditions at the RQL and adjacent pond. The closed landfill is U-shaped and has a compacted-soil cover that is vegetated and appears to be intact. The pond is generally less than 1.3 m (4 ft) deep and is underlain by thin deposits of sediment over bedrock.

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., TNT, RDX, 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 1-3). Although some aerial photographs have shown a small pond in this location, the pond is evidently of seasonal character, because no standing water was present at this location at the time of the field investigation. No documentation about potential waste disposed in this quarry is available.

Closure of the permitted sanitary landfill was completed in May 1990 under State of Ohio solid waste regulations (OAC 3745-27-10). A requirement of closure was installation and semiannual monitoring of five monitoring wells (see Figure 1-3).

1.2.2 Previous Investigations

Groundwater samples from RQL have been collected since 1987, beginning with semiannual detection monitoring in five open boreholes. Monitoring wells MW-1 through MW-5 (shown in

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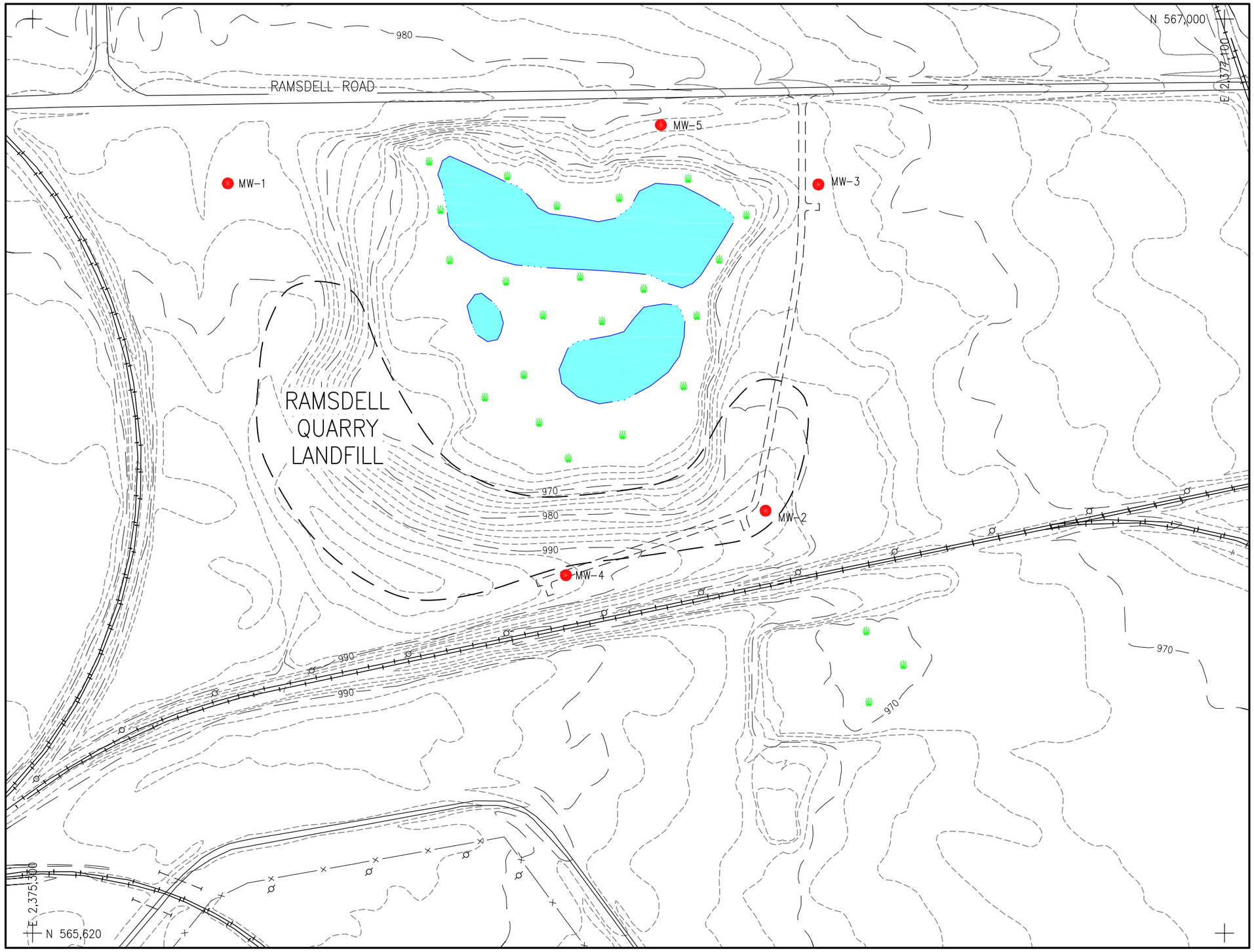

LEGEND:

- ASPHALT ROAD
- GRAVEL ROAD
- FENCE LINE
- RAILROAD TRACKS
- POND
- GROUND CONTOUR (2 FT. INTERVAL)
- GROUND CONTOUR (10 FT. INTERVAL)
- GRID TIC
- MONITORING WELL LOCATION
- VEGETATION
- APPROXIMATE LANDFILL BOUNDARY

OHIO STATE PLANE (NAD83)

0 50 100 150 300

SCALE: 1" = 150'

US Army Corps of Engineers Louisville District

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO
RAMSDELL QUARRY LANDFILL
(RVAAP-01)

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Figure 1-3. RQL Topography and Original Well Locations

Figure 1-3) were completed in these boreholes in January 1988 (USAEHA 1992), and semiannual monitoring continued until November 1991, when quarterly sampling was initiated. Quarterly sampling continued through February 1993. The wells have been sampled semiannually since February 1993.

RVAAP has performed semiannual groundwater monitoring of these constituents according to the requirements of OAC 3745-27-10 (March 1990), specified in a Groundwater Monitoring Plan for the Ramsdell Quarry Landfill (Revised), dated March 1995 (RVAAP 1995). In the semiannual monitoring program, unfiltered samples are analyzed for the volatile organic compounds (VOCs), five explosives, eleven metals, and indicator parameters listed in Table 1-1. In addition, the Portage County Health Department has sampled and analyzed surface water from the RQL pond.

The plan submitted to Ohio EPA for the closure of RQL in 1989 provides additional characterization information about the site. The closure plan contains stratigraphic information as well as lithologic cross-sections showing the elevation of the lower limit of waste placement for the sanitary landfill. According to the design drawings filed as a part of this plan, the lower limit of waste placement was many feet above the water level in the pond, which was presumed to mimic the elevation of the potentiometric surface.

Significant gaps in the monitoring data gathered before this Groundwater Investigation have been identified by Ohio EPA (Ohio EPA 1997) that prevent the determination of whether closure requirements are being met. The most significant deficiencies are as follows:

- Placement of the original monitoring wells (installed in 1988) is such that only one well (MW-5) is downgradient from the RQL. Prior to this effort, there were no monitoring wells located immediately downgradient of the toe of the landfill. Ohio regulations require a minimum of three downgradient wells at all times.

- Discrepancies in relative water level elevations in the five original wells during semiannual measurement events obscure whether a seasonal shift (reversal) in groundwater flow direction is occurring.

- Monitoring wells installed for detection monitoring in 1988 were screened 3 to 9 m (10 to 30 ft) below the water table, resulting in a concern that the present upgradient wells do not monitor the same water-bearing interval as the downgradient well.

- No information exists to determine the relationship between water levels in the uppermost groundwater zone and the surface of the pond.

- Explosives were detected in groundwater from all five monitoring wells in at least three sampling events, thus casting some doubt as to the integrity of the “upgradient” well (MW-4).

- Indicator parameters such as specific conductance and total dissolved solids continue to be analyzed, and upgradient/downgradient differences may result from variations in the sandstone intervals in which wells are screened rather than from the impact of the landfill on groundwater.

Table 1-1. List of Analytes for Ramsdell Quarry Landfill Semiannual Groundwater Monitoring

Inorganics (total)	Volatile Organic Compounds
Arsenic	Acetone
Barium	Acrolein
Cadmium	Acrylonitrile
Calcium	Benzene
Chromium	Bromodichloromethane
Copper	*cis*-1,3-Dichloropropene
Iron	*trans*-1,3-Dichloropropene
Lead	Ethylbenzene
Magnesium	Ethyl Methacrylate
Mercury	Bromoform
Potassium	Bromomethane
Nickel	2-Butanone
Selenium	Carbon Disulfide
Silver	Carbon Tetrachloride
Sodium	Chlorobenzene
Zinc	Chloroethane
Explosives	2-Chloroethyl Vinyl Ether
Trinitrotoluene	Chloroform
2,4-Dinitrotoluene	Chloromethane
2,6-Dinitrotoluene	Dichlorodifluoromethane
HMX	1,1-Dichloroethane
RDX	1,2-Dichloroethane
Inorganic/Indicator Parameters	2-Hexanone
Total Alkalinity	Methylene Chloride
Chloride	4-Methyl 2-Pentanone
Chemical Oxygen Demand	1,1-Dichloroethene
Cyanide	*trans*-1,2-Dichloroethene
Specific Conductivity	Styrene
Dissolved Fluoride	1,1, 2,2-Tetrachloroethene
MBAS, Colorimetric	Toluene
Nitrate (as N)	1,1,1-Trichloroethane
Ammonia (as N)	1,1,2-Trichloroethane
pH	Trichloroethene
Total Dissolved Solids	Trichlorofluoromethane
Sulfate	1,2,3-Trichloropropane
Total Organic Carbon	Vinyl Acetate
Temperature	Vinyl Chloride
Nitrate-nitrite	Xylene
Phosphorus	Phenols
Turbidity	

Source: USAEHA 1992

In summary, previous evaluations of groundwater at RQL have produced inconclusive results. Statistical analysis of water quality indicator parameters has shown some local impacts on the groundwater (e.g., specific conductance, total organic carbon, and total dissolved solids have been statistical triggers in both upgradient and downgradient wells).

USACE recently completed (February 1998) a topographic survey of RQL, including collection of new elevation data on the existing monitoring wells at the site. Topography of the site is now accurate to within 0.006 m (0.02 ft). A survey of the elevations of the existing wells was performed to correct discrepancies in water level elevations noted in the semiannual data. As a part of this Groundwater Investigation, the existing monitoring wells were re-surveyed, and the elevations shown for the wells in this report are the most recent.

1.3 REPORT ORGANIZATION

This Groundwater Investigation was designed to fill the data gaps described above, and to resolve uncertainties about the chemical quality and the physical groundwater regime beneath RQL. The field sampling efforts performed in this Groundwater Investigation consist of an initial phase and a follow-up phase. The initial field effort consisted of the following:

- installation, development, testing, sampling, and instrumentation of six new monitoring wells;
- sampling and water level measurements at the five existing wells;
- sampling of sediments and surface water at the RQL pond;
- construction of an instrumented staff gauge at the RQL pond; and
- surveying of all new monitoring wells and pond sediment/surface water sampling locations.

The follow-up phase will consist of the collection of groundwater samples from each of the six newly installed monitoring wells and the collection of surface water samples from one location, in each of the next three quarters and in two separate storm events, to compile statistics for the analytical parameters being evaluated at RQL. In addition, follow-up work will consist of continuous water level measurements using data loggers on the six new wells and the pond, and monthly manual water level readings on the previously installed monitoring wells, for a period of one year following the installation of the six new wells. Continuous monitoring of pond and water levels in the new monitoring wells will provide much useful data to analyze the relationship of the pond to the site groundwater regime. The results of sampling in each quarter will be the subject of each of three quarterly reports to USACE.

The initial phase of sampling is the subject of this report. Section 2 describes the field activities conducted, provides a discussion of the geologic and hydrologic conditions at RQL based on the field investigation findings, and discusses the analytical results from the initial field effort. Section 3 presents conclusions of the initial phase effort. Appendixes A through I contain boring logs, well construction diagrams, slug test data, analytical data, geotechnical data, survey data, UXO characterization results, sediment sampling logs, and daily quality control reports, respectively.

2.0 INVESTIGATION RESULTS

All sampling activities, including drilling, sample collection and preservation, decontamination, sample management, and documentation for the Groundwater Investigation at RQL were conducted according to guidance in the *Facility-Wide Sampling and Analysis Plan for Ravenna Army Ammunition Plant* (USACE 1996a) and the *Sampling and Analysis Plan Addendum for the Groundwater Investigation of the Former Ramsdell Quarry Landfill* (USACE 1998).

2.1 GROUNDWATER REGIME AND MONITORING

The purposes of the Groundwater Investigation at RQL are to determine the shallow groundwater hydrogeologic conditions, including groundwater flow direction, seasonal changes, and the hydraulic and geochemical relationships between the surface water in the pond and the groundwater. These characteristics must be clearly defined to evaluate whether the closed landfill is in compliance with Ohio solid waste regulations' post-closure requirements. Specifically, analytical results from the upgradient monitoring well (RQLmw-006) are to be compared with those results from the wells downgradient of the landfill (RQLmw-007, -008, and -009) to fulfill regulatory requirements for detection monitoring. Statistical comparisons are necessary to determine whether groundwater contamination is emanating from the landfill and migrating from the site. Additionally, data from the new monitoring wells RQLmw-010 and -011, in conjunction with other data, will provide information about the pond downgradient of the landfill.

2.1.1 Soil Borings and Subsurface Geology

As a former rock quarry, RQL's surroundings are characterized by bedrock exposed on the ground surface, with negligible natural soil cover. Figure 2-1 illustrates that, between the surface of the pond and the top of the closed landfill, there are approximately 13 m (40 ft) of topographic relief representing the former extent of quarrying in this area.

Six monitoring wells were installed to monitor the shallow groundwater at RQL. Drilling was accomplished using coring and air-rotary drilling equipment. The locations of the monitoring well borings are shown in Figure 2-1. These locations were selected based on water level data from the existing wells, which suggest that the groundwater flow direction in the uppermost water-bearing zone is northward, away from the landfill. Three of the borings (RQLmw-007, -008, and -009) are located below the toe (hydraulically downgradient) of RQL, two (RQLmw-010 and -011) are located downgradient of the pond, and one (RQLmw-006) is located upgradient of the landfill. Each of the new wells is located at least 30 m (100 ft) from any of the previously installed wells.

Lithologic logging was performed using cores from each of the six monitoring well borings. Correlations of stratigraphy between the new wells and the five original wells is problematic, because lithologies in the five original wells were logged from cuttings lifted from the borehole by compressed air, and the new wells were logged from undisturbed core samples. The core samples are more representative of subsurface conditions than the cuttings and are the basis of the geological interpretations in this report. Cores from the six new monitoring wells are stored at RVAAP.

The boring logs are presented in Appendix A. Information from the boring logs was used to construct a lithologic cross-section through the site (Figures 2-2 and 2-3). Figure 2-2 shows that the RQL is underlain by weathered, fractured, fine- to medium-grained quartzose sandstones of the

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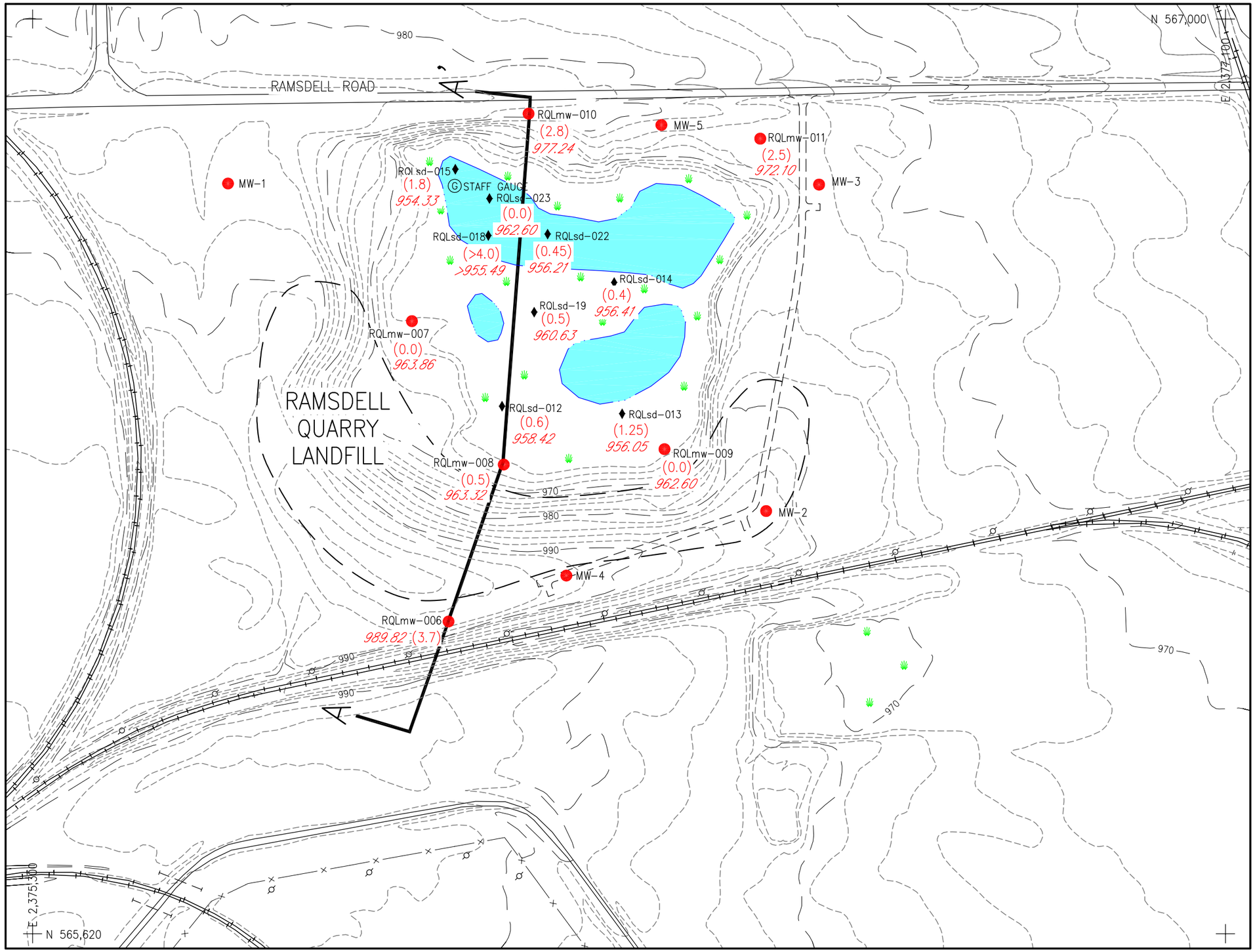

LEGEND:

- ASPHALT ROAD
- GRAVEL ROAD
- FENCE LINE
- RAILROAD TRACKS
- POND
- GROUND CONTOUR (2 FT. INTERVAL)
- GROUND CONTOUR (10 FT. INTERVAL)
- GRID TIC
- MONITORING WELL LOCATION
- SEDIMENT/SURFACE WATER SAMPLE LOCATION
- STAFF GAUGE LOCATION
- VEGETATION
- A A' LINE OF CROSS SECTION
- APPROXIMATE LANDFILL BOUNDARY
- (2.5) DEPTH TO BEDROCK (FT, BGS)
- 972.10 BEDROCK ELEVATION (FT, MSL)

OHIO STATE PLANE (NAD83)

0 50 100 150 300

SCALE: 1" = 150'

US Army Corps of Engineers Louisville District

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO
RAMSDELL QUARRY LANDFILL
(RVAAP-01)

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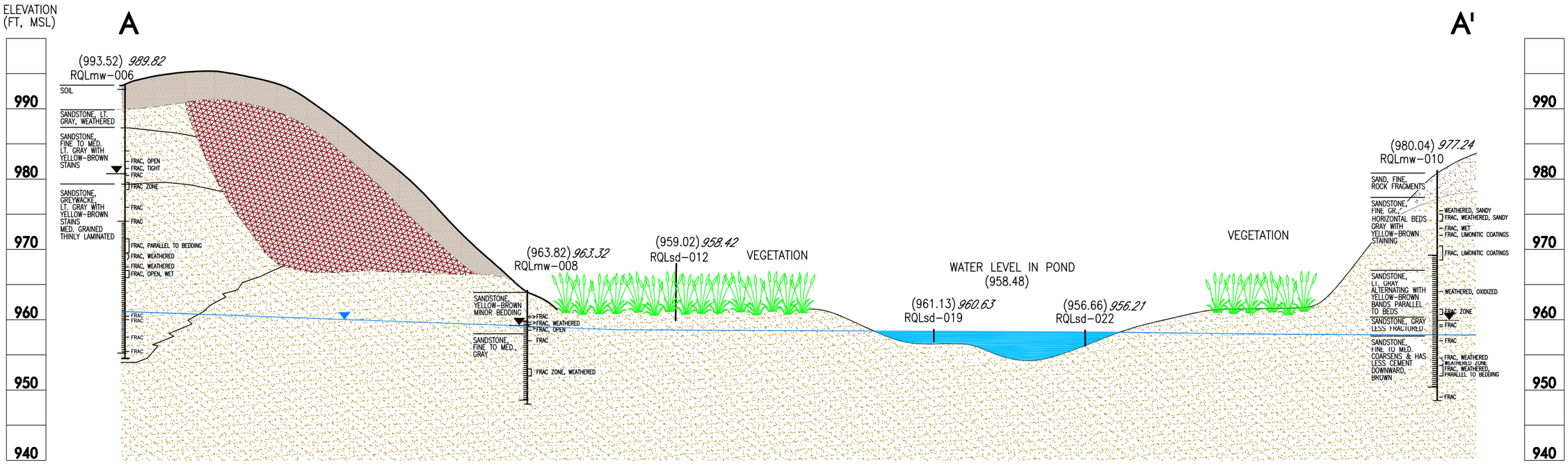
Figure 2-1. RQL Groundwater Investigation Monitoring Well and Pond Sampling Locations.



REFERENCE FIGURE 2-3. FOR CROSS-SECTION LOCATION.

LEGEND:

- STATIC WATER LEVEL
- SOIL
- WASTE MATERIAL
- SAND
- SANDSTONE
- EXTENT UNKNOWN
- FRAC — FRACTURE ZONE
- *963.32* — BEDROCK ELEVATION (FT, MSL)
- (963.82) — GROUND SURFACE ELEVATION (FT, MSL)
- WATER LEVEL DURING DRILLING
- WELL SCREEN

US Army Corps of Engineers Louisville District

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO
RAMSDELL QUARRY LANDFILL
(RVAAP-01)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
B. ALTOM	REV. 0/01-08-99	98032/DWGS/D69XSEC

Figure 2-2. Lithologic Cross Section A-A'

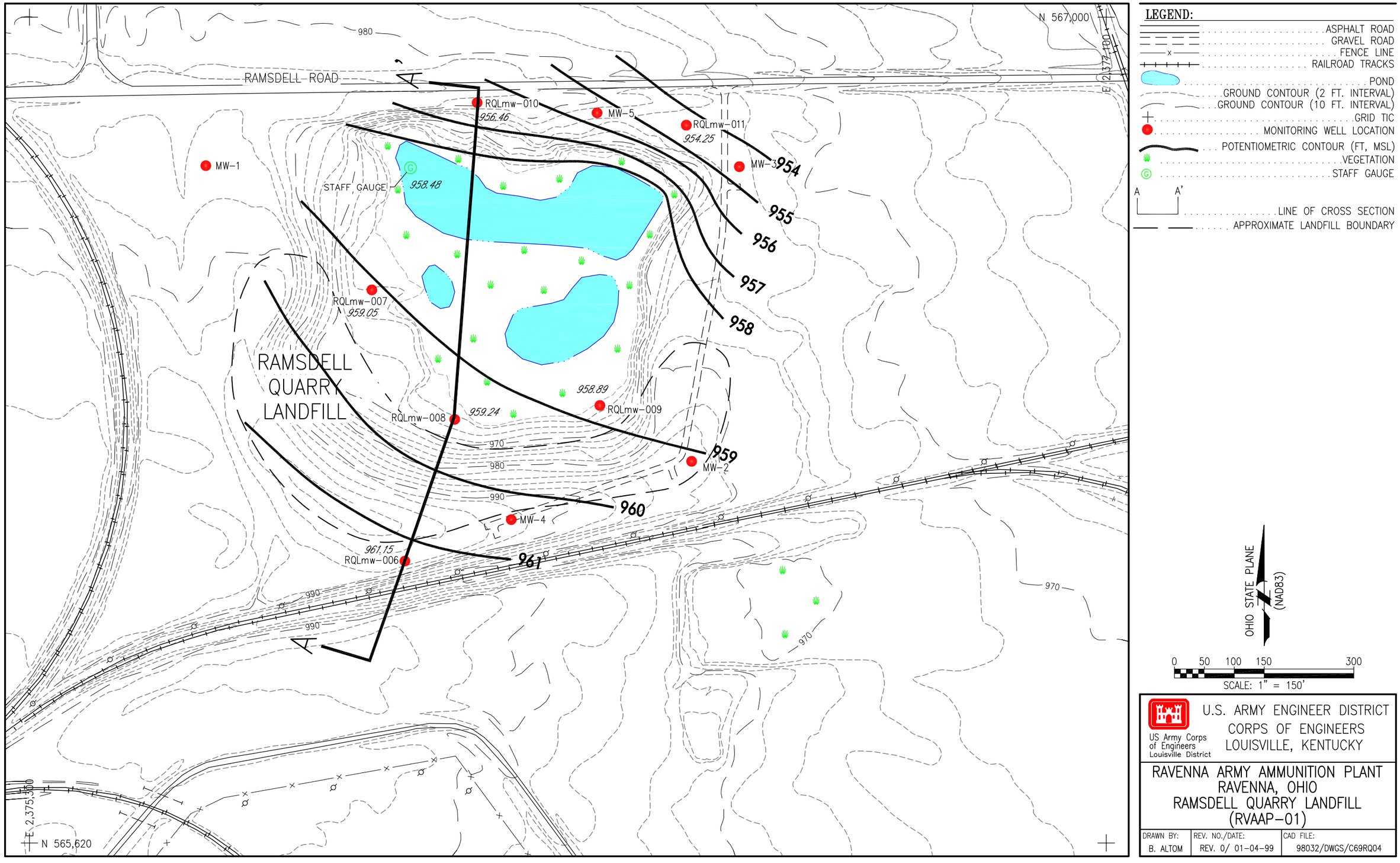


Figure 2-3. Potentiometric Surface Map for Ramsdell Quarry, July 1998 (New Monitoring Wells)

Sharon Member of the Pennsylvanian Pottsville Formation. Lithologies appear to be quite uniform across the site, with the exception of an occurrence of a more competent (unfractured), gray, poorly sorted sandstone with thinly bedded shale at RQLmw-006 and RQLmw-011. This lithology differs significantly from the surrounding quartz sandstones in that it contains a wider range of particle sizes and other non-quartz minerals. Thin bedding-plane laminations, consisting of finer-grained gray or black material, were observed in all cores. The Sharon Member is characterized by widespread cross-bedding. Bedding planes or laminations in cores range in orientation from horizontal to approximately 100 degrees from the core axis.

Open, recemented, and highly weathered fractures were observed in each of the cores. Fracturing occurs both parallel to and at oblique angles to bedding planes, as well as in massive zones. Weathering along fractures has been sufficient to completely break down the cement in some cases. Groundwater circulates along fractures, as evidenced by limonitic or black oxidized stainings and coatings on the rock or on grains. The pervasive character of fracturing in the sandstone suggests that vertical movement of groundwater through permeable primary and secondary flow pathways takes place at RQL to some degree.

2.1.2 Monitoring Well Installation

Following air-rotary overdrilling of the cored boreholes to achieve a 15-cm (6-in.) diameter borehole, monitoring wells were constructed at each of the six locations. All six wells were constructed as above-ground installations. Details of monitoring well construction are provided in Appendix B of this report. Well installation followed procedures described in the *Facility-Wide Sampling and Analysis Plan* (USACE 1996a) and the *Sampling and Analysis Plan Addendum for the Groundwater Investigation of the Former Ramsdell Quarry Landfill* (USACE 1998), with the following exceptions noted. Concurrence with Ohio EPA and USACE technical managers was obtained before each modification was made.

(1) RQLmw-006, RQLmw-010, and RQLmw-011 were completed with 6-m (20-ft) screens instead of 3-m (10-ft) screens, to ensure that the wells would produce a sufficient amount of water for sampling, or to ensure that the potentiometric surface intersected the screen. Because of the presence of water near the tops of the holes during drilling (potentially fracture storage), it was difficult to determine where the most productive water-bearing zones were.

(2) RQLmw-007, -008, and -009 were constructed with a modified surface casing designed to prevent frost heaving effects, because of these wells' proximity to the pond. The water level in the pond may rise high enough to partially inundate the well pads. A corrugated polyvinyl chloride (PVC) liner was placed outside the protective casing prior to filling the annular space from the frost line to the surface with concrete. The construction change allows the well pads to heave without affecting the protective well casing or well riser/screen string.

(3) Because the static water levels at RQLmw-007, -008, and -009 were close to the ground surface elevation, the filter pack in each well was reduced to a height of 0.30 to 0.33 m (1 to 1.1 ft) above the top of the screen, rather than the specified 1 m (3 ft), to allow adequate space for a 0.6-m (2-ft) bentonite seal and 0.85 to 1 m (2.8 to 3 ft) of grout. This modification to approved well construction specifications allows for construction of shallow wells with 3-m (10-ft) screens, without compromising the integrity of the filter pack or seal.

(4) Additional development of well RQLmw-006 was required over 12 days to achieve stable field parameter values (i.e., pH, conductance; see Appendix B).

There are noteworthy differences in the construction details between the previously existing and the newly installed wells. The six newly installed wells are constructed of 5-cm (2-in.) diameter PVC risers and 3-m (10-ft) or 6-m (20-ft) screens, with Global #7 filter packs and bentonite grout seals (as noted above), in accordance with the *Facility-Wide Sampling and Analysis Plan* (USACE 1996a). The screens were set such that the span of the monitored intervals ranged from 1.79 to 11.97 m (5.9 to 39.4 ft) below ground surface (BGS). Well construction diagrams for the six wells, designated RQLmw-006 through RQLmw-011, are provided in Appendix B of this report. The original wells, designated MW-1 through MW-5, were installed in 1988. They were constructed of 5-cm (2-in.) PVC pipe with 3-m (10-ft) screens; the interval spanned by the well screens ranges from 10.6 to 16.7 m (35 to 55 ft) BGS (Table 2-1). The borings for these wells extended to the top of the Meadville Shale, or roughly 48 m (160 ft) BGS, and were later backfilled with clean sand and gravel to 3 m (10 ft) below the base of the screen when the wells were installed (Ohio Drilling Co. 1988). Bentonite pellets were emplaced from that depth to the bottom of the screen. No well construction diagrams have been provided for these wells. Some differences in chemical quality are to be expected between the water from the new monitoring wells and the water from the original wells. For example, the condition of the grout seals and nonstandard construction may affect groundwater chemistry and sample quality in the original wells. Details of the completion of the monitoring wells are summarized in Table 2-1.

Table 2-1. Static Water Level Measurements, July 23 to 28, 1998

Monitoring Well ID	Water Level (ft below top of casing)	1998 Surveyed Top of Casing Elevation (ft amsl)	1998 Surveyed Ground Surface Elevation (ft amsl)	Water Level Elevation (ft amsl)	Screened Interval Elevation (ft amsl)
MW-1	27.88	986.13	985.53	958.25	930–940[a]
MW-2	24.28	981.90	982.74	957.62	942–952[a]
MW-3	19.90	975.54	973.55	955.64	929–939[a]
MW-4	32.04	991.80	990.85	959.76	935–945[a]
MW-5	21.65	977.38	976.14	955.73	938–948[a]
RQLmw-006	34.24	995.39	993.52	961.15	954.12–974.12
RQLmw-007	6.86	965.91	963.86	959.05	947.91–957.91
RQLmw-008	6.84	966.08	963.82	959.24	947.82–957.82
RQLmw-009	5.69	964.58	962.60	958.89	946.7–956.7
RQLmw-010	25.68	982.14	980.04	956.46	947.58–967.58
RQLmw-011	22.32	976.57	974.60	954.25	942.2–962.2
Pond Staff Gauge	--	961.66	--	958.48	---

[a]Estimated according to Ohio Drilling Co. (1988)
amsl = above mean sea level

2.1.3 Slug Test Results

Following sampling of the six newly installed and the five previously existing monitoring wells at RQL, slug tests were performed on each well to determine the hydraulic conductivity of the geologic material surrounding each well.

Slug testing followed the provisions of the *Sampling and Analysis Plan Addendum for the Groundwater Investigation of the Former Ramsdell Quarry Landfill* (USACE 1998). These analyses estimate horizontal hydraulic conductivities in the screened interval of each well. Rising-head tests were completed after each well had fully recovered from groundwater sampling, using automated data collection software and a notebook computer.

The results of the slug tests performed during July 1998 are presented in Appendix C. They reveal moderately high horizontal hydraulic conductivities in the weathered and fractured sandstone units underlying RQL. Typical hydraulic conductivities for sandstones range from 10^{-3} to 10^{-8} cm/s (Freeze and Cherry 1979). The calculated results for the 11 wells at RQL are shown in Table 2-2. The wells generally show conductivities in the sandstone ranging from 10^{-3} to 7×10^{-4} cm/s. However, it should be noted that, because construction details on the original wells (e.g., height of seal above the screen, borehole diameter) were not available, assumptions regarding well dimensions and completion were used to interpret the slug test data for these wells. The five original wells generally have hydraulic conductivities slightly higher than those in the new wells. Hydraulic conductivities in new wells screened below 16 ft BGS (i.e., 20-ft screens) were approximately an order of magnitude less than in the shallow wells screened above 16 ft BGS. Fracturing in the sandstone units undoubtedly contributes to the high observed conductivities in the monitoring wells at RQL.

2.1.4 Groundwater Sampling

2.1.4.1 Water Levels

New monitoring wells were developed following completion, according to criteria defined in the *Sampling and Analysis Plan Addendum for the Groundwater Investigation of the Former Ramsdell Quarry Landfill* (USACE 1998). Following well development, water levels were measured from the top of casing. Water levels measured during the initial phase of fieldwork have been tied to the surveyed elevation of the top of casing at each well, to present accurately the potentiometric surface and groundwater flow direction at RQL (Table 2-1).

Static water levels above the top of the well screen were observed in each of the original wells, and in RQLmw-007, RQLmw-008, and RQLmw-009, adjacent to the pond. These findings suggest either (1) a confined or semiconfined water-bearing zone, rather than an unconfined, "water table" system; or (2) hydraulic communication along fracture zones. In the wells at the toe of the landfill, this effect may result from the presence of the pond. In the other wells, elevated water levels may be the result of hydraulic communication among the fractures in the sandstone.

Figure 2-3 is a potentiometric surface map for shallow groundwater, as measured on July 23 – 28, 1998, using data from the six new wells. Initial water levels were collected on the day the well was sampled, due to an oversight in the field. Water level measurements in the six new wells indicate a local hydraulic gradient to the northeast. Water level measurements from the original five monitoring wells for the same dates, and historical information for water levels in the summer months, illustrate the same general potentiometric surface trend with respect to the newly surveyed top-of-casing elevations. However, July 1998 water levels in the original wells indicate

Table 2-2. Horizontal Hydraulic Conductivities Measured During the RQL Groundwater Investigation

Monitoring Well ID	Screened Interval (depth BGS, ft)	Total Depth (ft)	Geologic Material Adjacent to Screen	Hydraulic Conductivity (cm/s)
MW-1	45-55	54.26	gray-white sandstone	1.6×10^{-3}
MW-2	35-45	44.60	white sandstone	4.7×10^{-3}
MW-3	35-45	46.86	brown sandstone	2.3×10^{-3}
MW-4	45-55	56.98	white sandstone	1.8×10^{-3}
MW-5	33-43	40.76	brown sandstone	1.5×10^{-3}
RQLmw-006	19.4 - 39.4	42.08	weathered, fractured sandstone	2.0×10^{-4}
RQLmw-007	5.95 - 15.95	18.66	weathered, fractured sandstone	9.2×10^{-3}
RQLmw-008	6 – 16	18.70	fractured sandstone	5.4×10^{-3}
RQLmw-009	5.9 - 15.9	18.84	fractured sandstone	2.0×10^{-3}
RQLmw-010	12.46 - 32.46	35.36	weathered, fractured sandstone	6.7×10^{-4}
RQLmw-011	12.4 - 32.4	35.36	weathered, fractured sandstone	3.9×10^{-4}

Source: MW-1 through MW-5, according to Ohio Drilling Co. (1988).

potentiometric surface elevations from 0.30 to 0.60 m (1 to 2 ft) lower than those observed in the newly installed wells. One possible explanation for the disparities in water levels in wells screened in a deeper stratigraphic interval is that vertical communication is taking place to varying degrees in the highly fractured and weathered sandstones at RQL.

The data in Table 2-1 show that the upgradient well, RQLmw-006, is screened approximately 2.7 m (9 ft) above the screened interval in the previous upgradient well, MW-4. MW-1 is also screened significantly lower than any of the new wells, at 283 to 286 m (930 to 940 ft) amsl. However, RQLmw-007, -008, -009, -010, and -011 are screened at depths that overlap with the screened intervals of MW-2, MW-3, and MW-5. Figure 2-4 is a potentiometric surface map for shallow groundwater, as measured on July 23-28, 1998, using data from the original five wells.

2.1.4.2 Discussion of Analytical Results

All eleven monitoring wells were initially sampled for explosives, propellants (nitroguanidine, nitrocellulose, and nitroglycerine), Target Analyte List (TAL) metals, cyanide, VOCs, and semivolatile organic compounds (SVOCs). Groundwater was submitted for analysis of both total (unfiltered) and dissolved (filtered) TAL metals. The validated analytical data for the groundwater sampling effort are presented in their entirety in Appendix D. Tables in Appendix D present the data both by analyte and by sample station. Standard method reporting limits for some VOC compounds (vinyl chloride, tetrachloroethene, trichloroethene) are higher than promulgated drinking water standards; however, any estimated detected values less than reporting limits are provided.

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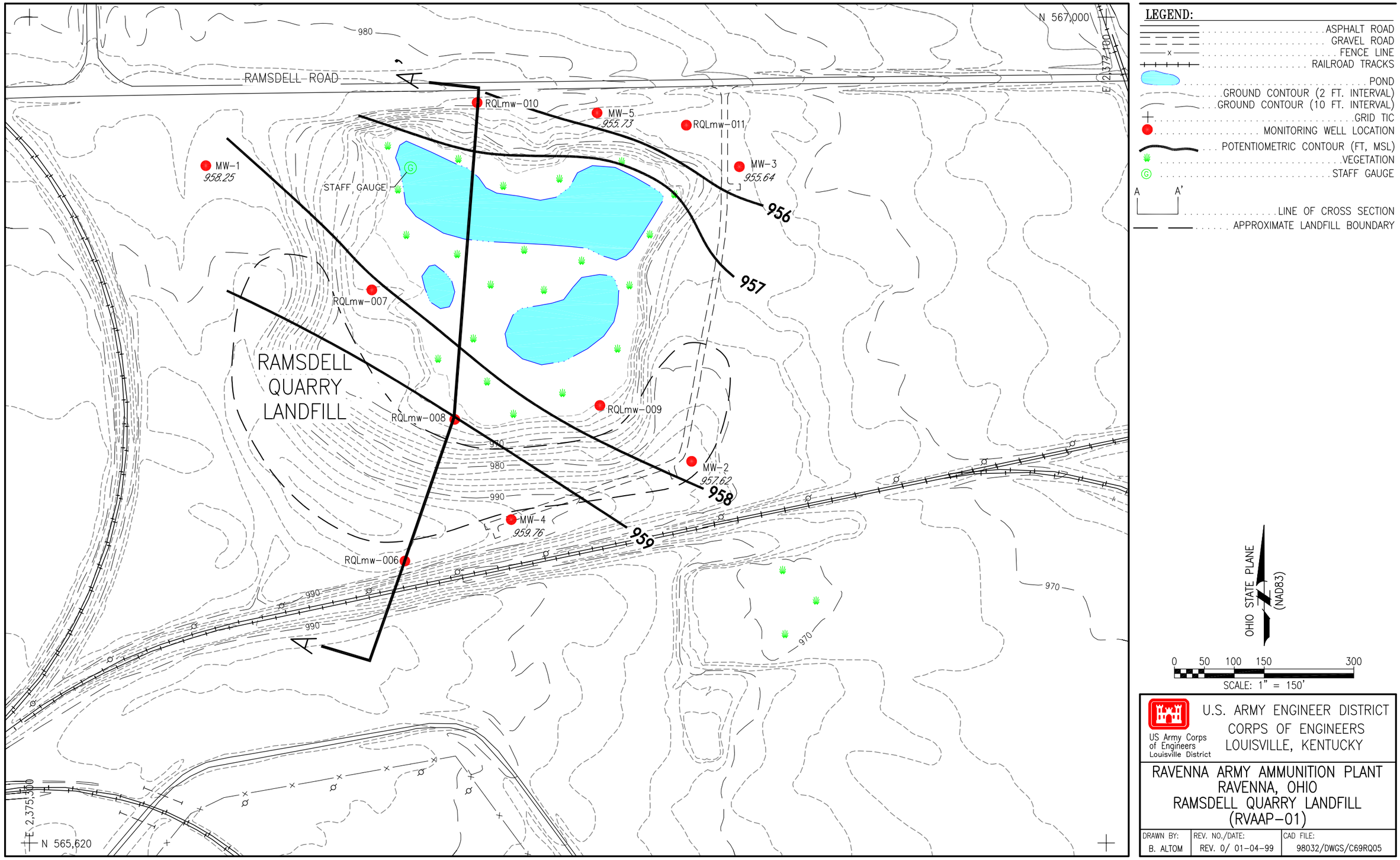

Figure 2-4. Potentiometric Surface Map for Ramsdell Quarry, July 1998 (Previously Installed Monitoring Wells)

The eleven wells were field screened for VOCs using a hand-held photoionization detector (PID) organic vapor analyzer (OVA) during groundwater sample collection. Generally, volatile organics were not detected in the breathing zone; however, 0.2 to 95 ppm of organic vapors were measured above the cores for RQLmw-006, -007, -008, and -009. In addition, field measurements of pH, temperature, specific conductance, and dissolved oxygen were recorded for each sample.

Aside from construction differences, there were differing approaches to the purging and sampling of the two sets of monitoring wells in the initial phase of this Groundwater Investigation. The six new wells were purged using a micro-purge method and dedicated equipment, including sampling pumps and tubing. Very small amounts of water (typically less than 3 gallons) were removed from the wells during micro-purging, and samples were withdrawn from the wells using the dedicated pump. Samples from the newly installed wells will continue to be sampled with this equipment throughout the Groundwater Investigation. In contrast, the previously existing wells were purged using conventional equipment and methods described in the *Facility-Wide Sampling and Analysis Plan* (USACE 1996a). Three well volumes were removed from the wells (from 20 to 28 gallons), and purging was terminated when water quality readings of pH, turbidity, and conductivity stabilized for three consecutive readings. Purging and sampling were accomplished using disposable Teflon bailers. Conventional purging and sampling were performed on the original wells because a one-time use of dedicated equipment for the sampling of these wells was not cost-justified. No re-development of the original wells was attempted as a part of this study. These differences may contribute further to the observed variations in the analytical results between the two sets of wells from the initial phase of sampling.

The following sections discuss the chemical quality of groundwater at RQL.

Explosives

Trace quantities of nine explosives were detected in RQL groundwater. The results of groundwater analyses are as follows:

- No explosives were detected in groundwater from RQLmw-007, -009, or -010.
- Trinitrotoluene (TNT) was found in MW-5 at 0.27 µg/L.
- 2,6-Dinitrotoluene (DNT) was present at 0.085J µg/L in MW-4 (a "J" indicates an estimated quantity).
- 2,4-DNT was present at 0.13 µg/L in RQLmw-008.
- HMX was found in RQLmw-008 at 0.06J µg/L, and at 0.076J µg/L in RQLmw-011.
- RDX was found in MW-2, MW-3, and RQLmw-006, at 0.14J, 0.28J, and 0.12J µg/L, respectively.
- Tetryl was found in MW-1 at 0.0685 µg/L, and at 0.12 µg/L in MW-4.
- 1,3-Dintrobenzene (DNB) was detected at 0.099J µg/L in RQLmw-006.
- 4-Nitrotoluene was detected at 0.082 µg/L in MW-5.
- Nitrobenzene was detected once, at 0.091J µg/L in RQLmw-011.

Figure 2-5 displays the distributions of these explosives in groundwater samples.

Propellants

Nitroglycerine was detected in two samples of groundwater. RQLmw-008 had 2J µg/L of nitroglycerine; RQLmw-006 had 2.8J µg/L. No other propellants were detected in RQL groundwater during the initial phase of sampling.

TAL Metals and Cyanide

Metals were analyzed in both filtered and unfiltered samples from each groundwater sampling location. Both sets of results are discussed below. However, filtered sample results are more representative of the true composition of the groundwater than the unfiltered results. Essential nutrients such as calcium, potassium, and sodium were present above detection levels in all samples, but are not further discussed as they are not considered potential contaminants at RQL.

In the unfiltered groundwater samples, the results of the analyses are as follows:

- Neither antimony nor silver were detected.
- Cadmium, chromium, and vanadium were detected only in MW-2, at 19, 23.3, and 22.4J µg/L, respectively.
- MW-2 was the locus of maximum concentrations for 11 of the 23 TAL metals.
- Arsenic was detected in all wells, except for MW-3, RQLmw-009, and RQLmw-010, at concentrations ranging from 3.3J to 108 µg/L; concentrations exceeded the Maximum Contaminant Level (MCL) in samples from wells MW-2 (108 µg/L), RQLmw-007 (89.4 µg/L), and RQLmw-008 (51.6 µg/L).
- Cobalt was detected in MW-1, MW-2, MW-4, RQLmw-006, RQLmw-008, and RQLmw-011 at concentrations ranging from 29.7 to 196 µg/L.
- Trace amounts of mercury were reported from 0.09J to 0.29 µg/L in 8 of 11 wells.
- Lead was detected only in three wells: at 4.2 µg/L in MW-1, 74.8 µg/L in MW-2, and 2.4 µg/L in MW-4.
- In the upgradient well RQLmw-006, arsenic, barium, and cobalt were present at 15, 30.2J, and 196 µg/L, respectively. Iron, manganese, nickel , and zinc were present at 1760, 5550, 937, and 47.8 µg/L, respectively.

Arsenic was present in the unfiltered groundwater samples at concentrations above the MCL for drinking water (0.05 mg/L) in all three locations where it was detected (MW-2 at 108 µg/L; RQLmw-007 at 59.4 µg/L; and RQLmw-008 at 51.6 µg/L). MCLs for cadmium, nickel, thallium, and lead were exceeded at MW-2.

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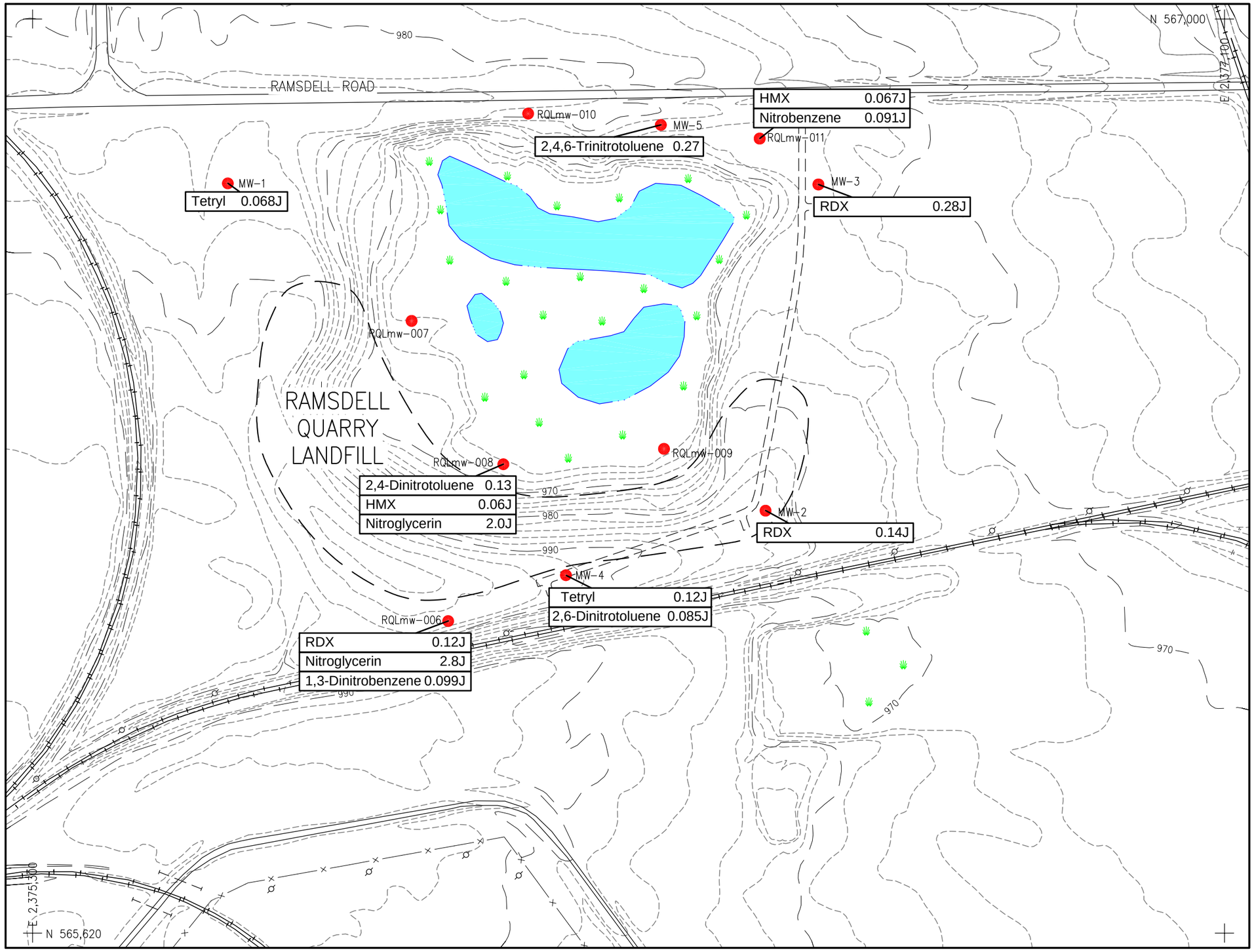

LEGEND:

- ASPHALT ROAD
- GRAVEL ROAD
- FENCE LINE
- RAILROAD TRACKS
- POND
- GROUND CONTOUR (2 FT. INTERVAL)
- GROUND CONTOUR (10 FT. INTERVAL)
- GRID TIC
- MONITORING WELL LOCATION
- VEGETATION
- APPROXIMATE LANDFILL BOUNDARY

NOTE: ALL CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (μg/L).

J = ESTIMATED

OHIO STATE PLANE (NAD83)

0 50 100 150 300

SCALE: 1" = 150'

US Army Corps of Engineers Louisville District

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO
RAMSDELL QUARRY LANDFILL
(RVAAP-01)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
B. ALTOM	REV. 0/ 01-13-99	98032/DWGS/D69RQ01

Figure 2-5. Summary of Explosives Results in Groundwater

For the filtered groundwater samples, the results of the analyses are as follows:

- Five of the 23 TAL metals analyzed in filtered groundwater were not detected. These were antimony, chromium, lead, selenium, and silver.

- The upgradient well RQLmw-006 had low estimated concentrations of arsenic (9.9J µg/L) and barium (29.7 µg/L). Cobalt was present at 206 µg/L. The concentration of iron was 1240 µg/L. Manganese was present at 5460 µg/L, and nickel at 945 µg/L. Zinc was measured at 41.7 µg/L.

- Cadmium was detected in well MW-2 (2.4 µg/L) and copper in MW-4 (3.4 µg/L).

In the monitoring wells, filtered TAL metals were detected as shown in Table 2-3. The maximum value for arsenic exceeds the primary MCL for drinking water. The maximum values for iron and manganese exceed secondary MCLs.

Table 2-3. Summary of Filtered TAL Metals Results for Groundwater at RQL (concentrations in µg/L)

Analyte	No. of Detects	Minimum	Maximum	Location of Maximum
Antimony	ND			
Arsenic	6	3.1	62.7	RQLmw-007
Barium	9	16.7	62.6	RQLmw-007
Beryllium	1	0.91J	--	RQLmw-011
Cadmium	1	2.4		RQLmw-002
Chromium	ND			
Cobalt	6	18.7J	206	RQLmw-006
Copper	1	3.4		RQLmw-004
Iron	9	93.5J	140,000	RQLmw-008
Lead	ND			
Magnesium	11	9190	67,700	RQLmw-007
Manganese	11	12.6J	6960	RQLmw-005
Mercury	9	0.081J	0.1J	RQLmw-011
Nickel	11	15J	945	RQLmw-006
Selenium	ND			
Silver	ND			
Thallium	5	1.1J	1.9J	RQLmw-008
Zinc	10	29.6	1040	RQLmw-002
Cyanide was not present at concentrations above detection limits in the groundwater at RQL.				

ND = not detected

NOTE: Number of detects shown in table includes duplicates as well as primary samples.

VOCs

The occurrence of VOCs was limited to 4 of the 11 monitoring wells during the initial phase of sampling. No VOCs were reported at concentrations above detection levels in monitoring wells MW-1 through MW-5, RQLmw-007 or -009. However, VOCs were reported near or below the laboratory detection levels (estimated quantities) in three monitoring wells. RQLmw-006 had acetone, benzene, and carbon disulfide (8.1J, 0.52J, and 2.4J µg/L, respectively). Acetone was detected in well RQLmw-008 at a

concentration of 9 µg/L. RQLmw-010 and -011 both had toluene in low concentrations, at 0.72J and 0.51J µg/L, respectively.

SVOCs

No SVOCs were present at concentrations above detection limits in the groundwater at RQL. Two sets of SVOC analyses for groundwater samples are presented in Appendix C. Two analyses were required because matrix spike/matrix spike duplicate recoveries were less than 10%. In addition, surrogate compound recoveries were zero. Analytical method protocol specified re-extraction and re-analysis of the samples. Due to the time delay, the re-extraction occurred outside the official holding time and the subsequent data are qualified as estimated (J flag) or undetected estimated (UJ) with a reason code of A01 (extraction holding times exceeded). Validation concludes that the original data should be rejected while the re-analysis should be used with the estimated qualification.

2.1.5 Geotechnical Results

One geotechnical soil sample was collected from each of two representative soil intervals during drilling of monitoring well boreholes. One geotechnical soil sample each was collected from monitoring well boreholes RQLmw-006 and RQLmw-011. Soil cover was not present at the remaining boreholes. The samples were analyzed for grain size, moisture content, Atterberg limits, and Unified Soil Classification, in accordance with the *Sampling and Analysis Plan Addendum for the Groundwater Investigation of the Former Ramsdell Quarry Landfill* (USACE 1998). Results of the geotechnical analyses are presented in their entirety in Appendix E.

2.1.6 Survey Results

Appendix F presents the survey (X,Y, and Z) coordinates of all sampling points established during the RQL Groundwater Investigation. Table 2-1 summarizes the elevation data for the six newly installed and five original monitoring wells, all of which were surveyed in July 1998.

2.2 POND SURFACE WATER AND SEDIMENT SAMPLING

The chemical water quality of the pond at RQL was evaluated through sampling of both surface water and sediment in the initial phase of the Groundwater Investigation. Because of the potential for unexploded ordnance (UXO) submerged in the pond, all sampling activities in the RQL pond were overseen by a certified UXO specialist. No evidence of UXO was encountered during the investigation. However, non-UXO debris such as steel-reinforced concrete, pipes, scrap metal, culverts, and an empty metal drum were identified in the pond (see Appendix G).

The RQL pond is shown in Figure 2-1. The pond is small and shallow, and about 50% of its former area is now vegetated with cattails. Although the pond is underlain by bedrock, thin deposits of fine-grained sediment have accumulated on top of the rock, in places to a depth of 1.2 m (4 ft) or greater. Portions of the pond with sufficient water to allow sediment to accumulate are quite limited; however, in the main body of the pond (northernmost body) the distribution is laterally continuous. Water depths and sediment thicknesses were measured at each of the sediment sampling stations during sample collection (Table 2-4). The maximum water depth encountered was 0.9 m (3 ft) in RQLsd-022. The maximum depth to bedrock was encountered at RQLsd-018, where the sediment thickness on top of rock is greater than 1.2 m (4 ft). Appendix H presents the descriptions of all sediments sampled. Sediment depths where cattails and other vegetation have grown are not known. The pond sediment may reduce the amount of any hydraulic communication to some degree between the water-bearing zone in the sandstone and the pond,

especially at times when the water level (i.e., hydraulic head) in the pond is low. However, the limited thickness and discontinuous distribution across the quarry limits this effect.

Table 2-4. Sediment Sampling Data, Ramsdell Quarry Landfill Pond

Sediment Sample Location ID	Sediment Thickness (ft)	Description
RQLsd-012 (-017)	0.6	Poorly sorted gravel, traces of silt and sand, dark grey
RQLsd-013 (-020)	1.25	Silty clay with organic debris and traces of fine sand, light grey
RQLsd-014 (-021)	0.4	Silt with organic debris and traces of gravel, black
RQLsd-015 (-024)	1.8	Silt and clay with traces of gravel, black
RQLsd-018	> 4.0	Silt with coarse sand to medium, organic debris
RQLsd-019	0.5	Clay with silt and traces of gravel, roots, light brown
RQLsd-022	0.45	Silt with gravel and sand, black
RQLsd-023	1.2	Silt with some gravel and clay, dark grey

2.2.1 Survey Results

The field sampling team measured the water level in the pond from the surveyed staff gauge. The water level elevation at RQL pond at the time of the initial sampling effort was 958.48 ft amsl.

2.2.2 Geotechnical Sampling Results

One geotechnical sample was collected at each of the sediment sampling locations from representative sediment sampling intervals. The samples were analyzed for grain size, Atterberg limits, and Unified Soil Classification, in accordance with the *Sampling and Analysis Plan Addendum for the Groundwater Investigation of the Former Ramsdell Quarry Landfill* (USACE 1998). Moisture content was not evaluated because the samples were water saturated. Results of the geotechnical analyses are presented in their entirety in Appendix E.

2.2.3 Surface Water Sampling Results

The objective of surface water sampling at RQL pond was to determine whether pre-existing contamination related to past burning activities has impacted sediment or water quality in the pond. Four locations were selected for surface water sample collection in the initial sampling effort (see Figure 2-1). These locations are also the sites of four of the eight sediment samples collected as part of this investigation (see Section 2.2.4). All surface water samples were analyzed for explosives, propellants, TAL metals, cyanide, VOCs, and SVOCs. Surface water was analyzed for both total (unfiltered) and dissolved (filtered) metals. Water from the pond will also be collected during the follow-up phases of sampling and analyzed for the same parameters as in the initial phase. The same location (RQLsw-015) will be sampled each time for consistency and to establish trends within the main body of the pond over time. Surface water samples were collected before sediment sampling began, to minimize the likelihood of sediment suspension affecting surface water quality. The analytical data for surface water collected during this investigation are presented in Appendix C.

2.2.3.1 Explosives

Explosives were not present at concentrations above detection limits in the surface water at RQL.

2.2.3.2 Propellants

Propellants were not present at concentrations above detection limits in the surface water at RQL.

2.2.3.3 TAL Metals and Cyanide

Metals were analyzed in both filtered and unfiltered samples from each surface water sampling location. Both sets of results are discussed below. However, filtered sample results are more representative of the true composition of the surface water than the unfiltered results. Essential nutrients such as calcium, potassium, and sodium were present above detection levels in all samples, but are not further discussed as they are not considered potential contaminants at RQL.

In the unfiltered surface water samples, antimony, beryllium, and silver were not detected. Barium, iron, magnesium, and manganese were detected in all four samples. The majority of the other metal ions were found in RQLsw-013, with RQLsw-014 and -015 having only barium, iron, magnesium, manganese, lead, and zinc above detection limits. The maximum concentration of every TAL metal detected was found at RQLsw-012. Arsenic concentrations ranged from 23 to 41.7 µg/L. Iron concentrations varied from 377 to 84,300 ug/L. Lead was present in RQLsw-013 and -012, at 38.2 and 110 µg/L, respectively. Magnesium was detected at concentrations from 30,800 to 202,000 µg/L, and manganese varied from 67.2 to 5130 µg/L.

Comparison of unfiltered surface water sample data to statewide water quality criteria for the protection of human health (OAC 3745-1-07) indicated exceedances for iron and manganese. Iron was present above the criterion for soluble iron (300 µg/L) in all four samples. Manganese also exceeded its criterion of 50 µg/L (total recoverable) in all four samples. No exceedances were observed for arsenic or zinc. Nitrate, chloride, dissolved solids, and sulfate also have criteria; however, these constituents were not analyzed as part of the investigation.

Most of the 23 metals and cyanide in filtered surface water samples were non-detects, with the exception of iron, magnesium, and manganese. Iron concentrations ranged from 51.5 to 213 µg/L. Magnesium concentrations ranged from 28,900 to 168,000 µg/L, and manganese from 8.8J to 316 µg/L. The maximum manganese value exceeds the statewide water quality criterion of 50 µg/L for total recoverable manganese. Aluminum was also present at RQLsw-012 at 92.9J µg/L, and at 72J µg/L at RQLsw-013. Arsenic was present at 3.7J µg/L at RQLsw-013. Barium was detected in RQLsw-012 at 45.8J µg/L, RQLsw-013 at 15.2J µg/L, 38.5 µg/L at RQLsw-014, and 22.9J µg/L at RQLsw-015; however, barium was also present in laboratory blanks. No other metals were detected in the filtered samples.

2.2.3.4 VOCs

VOCs were not present at concentrations above detection limits in the surface water at RQL.

2.2.3.5 SVOCs

SVOCs were not present at concentrations above detection limits in the surface water at RQL.

2.2.4 Sediment Sampling Results

The objective of sediment sampling was to determine if the former landfill or pre-landfill waste disposal activities have resulted in a release of contaminants to the pond. Eight locations in the pond were targeted for sediment sample collection during the initial field effort. These samples were analyzed for explosives,

propellants, TAL metals, cyanide, VOCs, and SVOCs. The analytical results for sediments (dry weight basis) are presented in their entirety in Appendix C of this report. Geotechnical analyses of sediments included grain size, Atterberg limits, and Unified Soil Classification (moisture content was omitted because the samples were all water saturated). Sediment sampling locations are shown in Figure 2-1.

Sediments were collected at each location from the sediment-water interface to a depth of 0.5 ft below the interface, or refusal. If there was no refusal, sediment was sampled from 0.5 to 2 ft and, if possible, from 2 to 4 ft. At RQLsd-018, for example, sampling of sediment was performed in all three depth intervals, and there was no refusal at 4 ft. At RQLsd-013, sediments were collected at 1.25 ft, and at RQLsd-023, 1.2 ft. RQLsd-015 was sampled from 0.0 to 0.5 ft and from 0.5 to 2 ft, refusing on unknown material. All other samples were collected from 0 to 0.5 ft or less.

2.2.4.1 Explosives

Explosives were present in very low concentrations in seven of the eight sediment sampling locations. A summary of these results is as follows:

- TNT was detected in three locations: RQLsd-012 at 0.021J mg/kg, and RQLsd-018 and RQLsd-019 at 0. 047J mg/kg.

- HMX was detected at five locations. RQLsd-012, -018, -019, -022, and -023 had detections of HMX in the 0.0 to 0.5-ft interval. In addition, the 0.5- to 2.0-ft and the 2- to 4-ft intervals in RQLsd-018 and the 0.5 to 2-ft interval in RQLsd-023 had small quantities of HMX. Concentrations ranged from 0.11J to 0.14mg/kg.

- 2,6-DNT was detected in RQLsd-012, RQLsd-022, and RQLsd-023, in concentrations of 0.076J, 0.064J, and 0.34J mg/kg, respectively.

- 2,4-DNT was detected in the 0.5- to 2-ft interval at RQLsd-023.

- 2-Nitrotoluene, 3-nitrotoluene, and 4-nitrotoluene were detected in low, estimated quantities in RQLsd-013, RQLsd-014, RQLsd-23, and RQLsd-012.

2.2.4.2 Propellants

Propellants were not present in sediments at concentrations above detection levels, with the exception of three occurrences of nitrocellulose. Nitrocellulose was detected at RQLsd-015 in the 0- to 0.5-ft sample at 4.3 mg/kg, and in the 0.5- to 2-ft sample at 2.3 mg/kg. Nitrocellulose occurred in the field duplicate sample of RQLsd-012 (0 to 0.5 ft) at 1.7J mg/kg.

2.2.4.3 TAL Metals and Cyanide

Of the 23 metals analyzed in pond sediments, antimony and silver were never detected above detection limits. Occurrences of selenium, thallium, and cadmium were limited to five or fewer of the eight sediment sampling locations. The remaining analytes were present above detection limits in nearly every sample. In general, where two or more depth intervals were sampled, concentrations of metals decreased with increasing depth. Sampling location RQLsd-022 had the greatest number (11) of maximum concentrations of the TAL metals. A summary of the metals results for sediments is shown in Table 2-5. Where multiple depth intervals were sampled, the depth interval of the maximum concentration is noted. Cyanide was detected at 2.8 mg/kg in one sediment sample, RQLsd-023, in the 0- to 0.5-ft interval.

Table 2-5. Summary of TAL Metals Results for RQL Pond Sediments (concentrations in mg/kg)

Analyte	No. of Detects	Minimum	Maximum	Location of Maximum
Arsenic	12	7.6	32.5	RQLsd-022
Barium	12	33J	145	RQLsd-022
Beryllium	9	0.33	0.65	RQLsd-018, 0.5- to 2 ft
Cadmium	4	1.4	6.4	RQLsd-018
Chromium	12	8.7	30.9	RQLsd-022
Cobalt	12	5J	33.6	RQLsd-022
Copper	12	19.5	134	RQLsd-022
Iron	12	13,700	54,500	RQLsd-018, 0.5- to 2 ft
Lead	12	21.1	87.2	RQLsd-022
Magnesium	12	1300J	58,000J	RQLsd-022
Manganese	12	189J	2590J	RQLsd-022
Mercury	12	0.033J	0.89J	RQLsd-012
Nickel	12	12.8	86.8	RQLsd-022
Selenium	5	0.6	2	RQLsd-013, 0- to 0.5 ft
Thallium	3	1.2	1.9	RQLsd-022
Vanadium	12	9J	40.7	RQLsd-013, 0- to 0.5 ft
Zinc	12	100	894	RQLsd-022

2.2.4.4 VOCs

VOCs were reported at concentrations near the laboratory detection levels in sediment. Acetone was detected in every sampling location except for RQLsd-019. Concentrations of acetone ranged from 3.7J to 26J µg/kg, with the highest concentration encountered at 0.5 to 2 ft in RQLsd-024. 2-Butanone was detected in RQLsd-013, -015, and -023 at concentrations ranging from 6.5J to 10J µg/kg. There was one occurrence of methylene chloride above detection levels, in RQLsd-019 at 0.73 µg/kg.

2.2.4.5 SVOCs

Polynuclear aromatic hydrocarbons (PAHs) were detected in five of the eight sampling locations. At RQLsd-012, -014, -015, -018, and -023, PAHs such as benzo(*a*)anthracene, fluoranthene, pyrene, and others were detected at concentrations ranging from 65J to 2000 µg/kg. This maximum value (for phenanthrene) was observed in the 0- to 0.5-ft sample at RQLsd-012. Some PAHs were also detected in the 0.5- to 2-ft intervals at RQLsd-015 and -023. PAHs were not detected in samples from RQLsd-013, -019, or -022.

2-Methylnaphthalene and acenaphthene were detected in the 0- to 0.5-ft sample at RQLsd-012, at 110J and 340J µg/kg, respectively.

2.2.5 Continuous Water Level Data Collection

In order to monitor water levels in RQL pond continuously until the completion of all groundwater and surface water sampling activities performed as a part of this Groundwater Investigation, a staff gauge with automated data collection capability was installed at the pond in July 1998. Figure 2-6 is a photograph of the completed platform and staff gauge.

The data logger collects and records water level data on a daily basis for the duration of sampling activities at RQL. The data will be downloaded to a notebook computer on site, at a minimum, during every groundwater sampling event or manual water level measurement event. Because the electronic pressure transducer used to automatically record data is submerged, it must be removed during the months in which the pond freezes. A visual gauge (scaled to 0.10 ft) installed on the platform can be used during winter months and is visible from the shore.

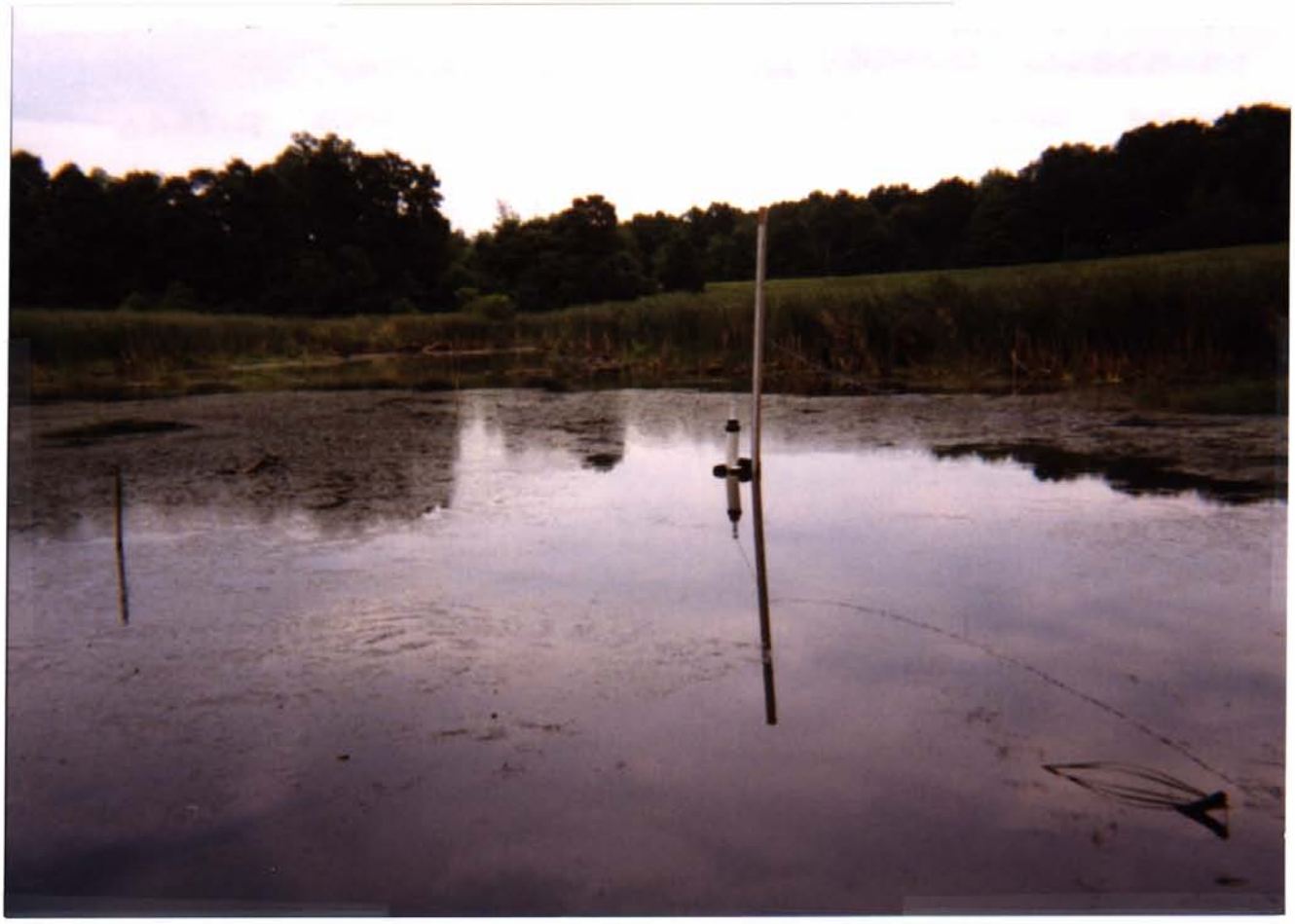

Figure 2-6. Photograph of Staff Gauge at Ramsdell Quarry Landfill Pond, Looking Southeastward from Northwest Corner of Pond

3.0 CONCLUSIONS

The results of the initial phase of sampling and measurements at RQL provide an assessment of summer conditions at the site. Follow-up work will provide information on temporal variations in groundwater and surface water chemistry, groundwater flow directions, and the degree of connectivity between RQL pond and the shallow groundwater system.

3.1 GROUNDWATER CONDITIONS AND QUALITY

- Groundwater flow is to the northeast across the site under a gentle (0.008) gradient.

- Shallow groundwater occurs within both primary and secondary porosity in the highly fractured, highly weathered Sharon sandstones.

- Groundwater in upgradient well RQLmw-006 contains low concentrations of the explosives RDX and 1,3-dinitrobenzene. These compounds also occur in one or more of the downgradient wells. The propellant nitroglycerine was found in the upgradient well, with the only other occurrence in RQLmw-008.

- Cobalt, nickel, and arsenic were identified in filtered samples from RQLmw-006 and five or more downgradient wells.

- SVOCs and VOCs were not present above detection levels in groundwater.

- Cyanide was not detected in groundwater.

- Vertical movement of groundwater and a substantial degree of interconnection may explain the similarities in water levels observed in the original wells, screened in deeper stratigraphic intervals, and the new wells, installed in shallow bedrock.

3.2 SURFACE WATER/SEDIMENT CONDITIONS AND QUALITY

- The elevation of the water surface in the pond during the initial sampling event was 958.48 ft amsl at the staff gauge. The staff gauge was set at the location where the pond is deepest.

- Surface water samples contained no explosives, propellants, VOCs, or SVOCs in concentrations above detection limits. Iron, magnesium, and manganese were the most frequently detected metals, with two or fewer occurrences each of arsenic, barium, and aluminum.

- Sediment samples exhibited the greatest amounts of explosives and other contaminants in the 0- to 0.5-ft interval. HMX was found in five of the eight locations, and at depths of 0.5 to 2 ft or greater in two of these. Nitrocellulose occurs in RQLsd-015, where no explosives were detected, and in RQLsd-012, in concentrations less than 5 mg/kg. PAHs were also present in five of the eight sampling locations and may reflect the former sites of open burning of wastes. These occurrences may result from either runoff or incipient contamination from historical operations on the quarry floor.

- Sediment has accumulated to a depth of 1.2 m (> 4 ft) at some locations in the pond. Water depth varies from 0 to 1m (0 to 3.18 ft). Thick sediment accumulations may diminish the amount of hydraulic communication between the pond and the shallow water-bearing zone.

- The potential connection between the pond and the shallow groundwater system cannot be discerned with only the initial data.

3.3 FOLLOW-UP INVESTIGATION

Five additional groundwater and surface water sampling events will follow the initial phase. These additional events began in September 1998. In addition, water level measurements will continue to be monitored daily in the six newly installed wells, monthly in the previously existing wells at RQL, and daily in RQL pond. As the data are assembled and analyzed, results will be reported to USACE each quarter. Upon completion of a full year of sampling of groundwater at RQL, an annual report will be prepared to integrate the observations made throughout a full year of water quality monitoring.

4.0 REFERENCES

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APPENDIX A

MONITORING WELL BORING LOGS

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

HTRW DRILLING LOG

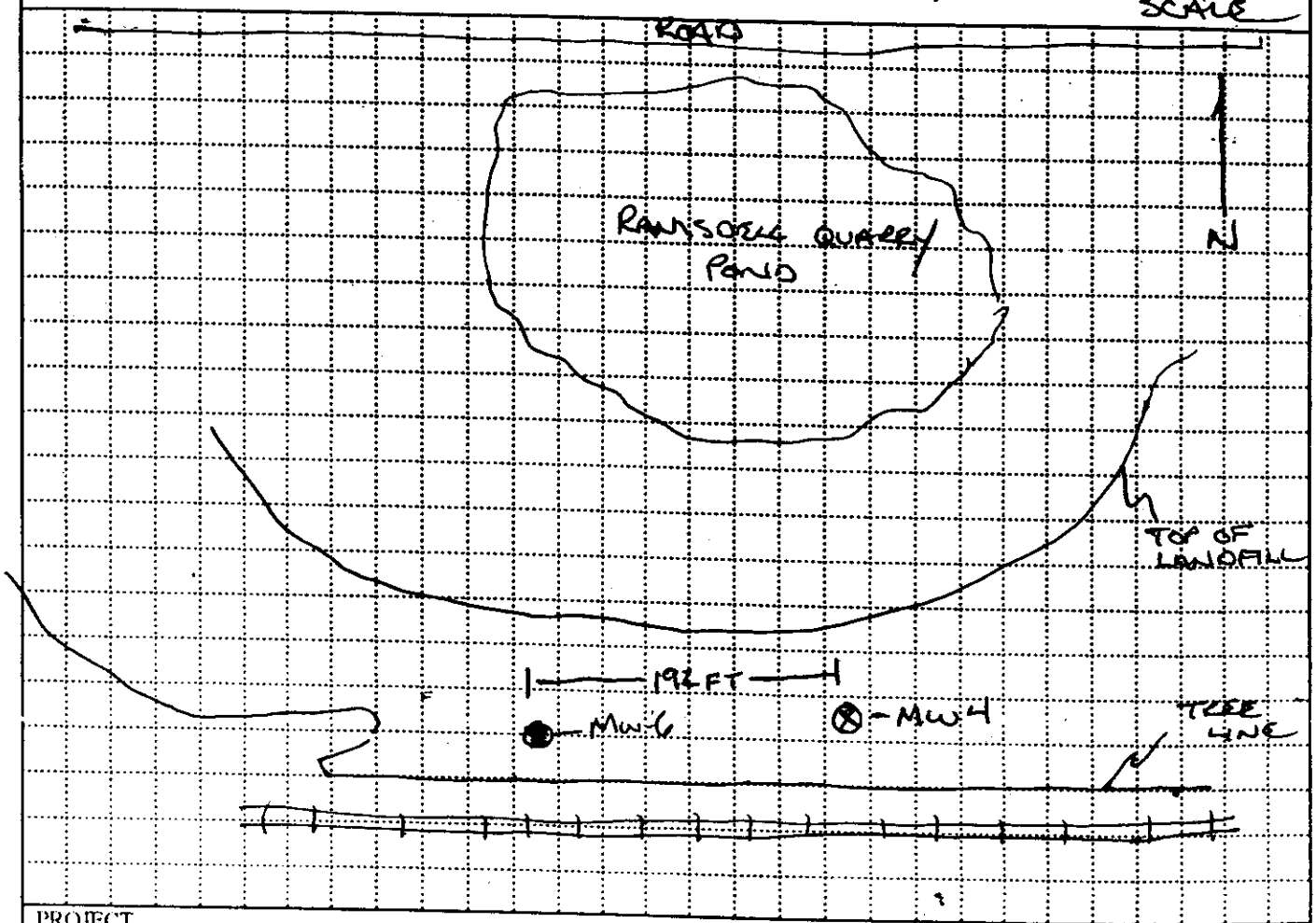
1. COMPANY NAME: SAIC	DISTRICT: LOUISVILLE
2. DRILL SUBCONTRACTOR: ROUSER MARNER.	HOLE NUMBER: MW-6
3. PROJECT: RAMSDELL QUARRY/ GW INVEST.	SHEET 1 OF 5 SHEETS
4. LOCATION:	
5. NAME OF DRILLER: ALLAN WOLFE	6. MANUFACTURERS DESIGNATION OF DRILL: MOBILE B-59
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: -6IN ID HSA; -2IN OAM SPLIT SPOON; NX WIRE LINE CORE; 6IN DIAM TRI-CONE ROLLER BIT	8. HOLE LOCATION: RAMSDELL QUARRY
	9. SURFACE ELEVATION: 993.52'
	10. DATE STARTED: 7/7/98 — 11. DATE COMPLETED: 7/8/98
12. OVERBURDEN THICKNESS: 4.2 FT	15. DEPTH GROUNDWATER ENCOUNTERED: SEE ACTIVITY LOG
13. DEPTH DRILLED INTO ROCK: 35.7	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: SEE ACTIVITY LOG
14. TOTAL DEPTH OF HOLE: 39.9 FT	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): SEE ACTIVITY LOG

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
1-2 FT	X		

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
NONE	—	—	—	—	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	—	X	—	

LOCATION SKETCH/COMMENTS — SCALE: NOT TO SCALE



PROJECT	HOLE NO.
RAP RAMSDELL QUARRY/ GW INVEST.	RQLMW-6

DRILLING LOG

PROJECT

INSPECTOR Mike Kliczewski

HOLE NUMBER RQLMW-6

SHEET 2 OF 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	1	CLAYEY SILT (40% CLAY) FIRM, CRUMBLY, MINOR SMALL PEBBLES, DRY LT OLIVE BROWN	0.0 ppm OVER BKGD			DRIVE 2 IN DIAM SPLIT SPOON 0-2 FT
		REC 1.7 FT		RQ0006		AUGER W/ 6 1/4 IN ID HSA AUGER TO ~3 FT
	2	5/8/7/21		1-2'		
		2.0-2.4 - SAME AS ABOVE 2.4-2.7 - WEATHERED SANDSTONE FRAGMENT 2.7-3.4 - SAME AS 2.0-2.4	0.0 ppm OVER BKGD			DRIVE SPOON 2-4 FT
	3	REC 1.4 9/27/21/50-4 in				TAG ~ TOP OF ROCK AT 3.7 FT BGS (MINOR SLOUGH IN HOLE 4.2 FT ACTUAL)
	4					6 IN TEMPORARY STEEL CASING SET AND SEALED W/ BENTONITE
		4.2 - 6.2: HIGHLY WEA. SANDSTONE, WEATHERED TO LOOSE SAND ACROSS MOST OF INTERVAL. SOME HARD THIN BEDS AND FRAGMENTS, WET, LIGHT GRAY (2.5Y 7/1) STAINED DARK GRAYISH BROWN (2.5Y 4/2) FROM 5.4 - 6.0. PROBABLE FRACTURES THROUGHOUT INTERVAL		CORE BOX 1		BEGIN CORING AT 4.2 FT BGS (NX) RUN 1 PA 14.2 CA 14.0 START 1705 END ~~1710~~ 1716 TIME ~~5 MIN~~ 11 MIN RUN - 10 FT REC 9.4
	5		46 ppm OVER CORE			
	6	NUMEROUS BREAKS OR FRACTURES, ~ HORIZ.				
		6.2 - 13.9: SANDSTONE, FINE TO MED GRAINED. PRED. HARD W/ SOME THIN WEATHERED SAND/BONES LT GRAY (2.5Y 7/1) W/ FEW COMMON LT YELLOWISH BROWN (2.5Y 6/4) STAINING OPEN, WELL CEMENTED (SILICA)				WATER LEVEL ON 7/8/98 (0835) 13.08 FT
	7					N 566091.259
	8					E 2375927.713 (KD)
	9	FRACTURE(?), WEATHERED ZONE, LOOSE SAND				

PROJECT

RAAP RAMSDELL QUARRY GW INVEST.

HOLE NO

RQLMW-6

DRILLING LOG

PROJECT | INSPECTOR Mike Kludzeis | HOLE NUMBER RQL MW-6 | SHEET 3 of 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	11	FRACS, WEATHERED SANDY FACES FRAC., SLIGHTLY OPEN WEA., SANDY FACES				
	12	FRAC ZONE (?), ROCK BROKEN TO 1/2 - 3/4 IN FRAGMENTS				
	13	FRAC, TIGHT, FACES FE STAINED				
	14	FRACTURES, SL. OPEN WEATHERED, FACES STAINED STRONG BROWN (7.5YR 5/6) ~~13.5-14.0 LOST CORE~~ ~~14.0-24.5 39.5~~ GRAYWACKE SANDSTONE WELL CEMENTED, HARD (SILICA CEMENT) FINE-MED. GRAINED. GRAY W/ SOME THIN (1-5mm) LAMINATIONS OF BLACK CLAY, SHALE OR ORGANICS, SOME INTERVALS ESPECIALLY BETWEEN 21 AND 30.3 STAINED LIGHT YELLOWISH BROWN	95 ppm over core			RUN 2 PD 24.2 CD 23.6 FT START 0846 END 0858 TIME 12 RUN 10 REC 9.9FT 10.0FT
	15					
	16	13.8-14.1 FT: FRACT. ZONE, WEATHERED, TO SAN CLAYEY SAND W/ SANDSTONE FRAGMENTS, WET 14.3-14.4' FRAC ZONE, ROCK BROKEN TO 1/4-1/2 IN. FRAGMENTS, BOTTOM FACE STAINED				WL = 19.7FT BGS
	17	FRACS., SL. WEA, MINOR STAINING	50 ppm			~5 GAL WATER ADDED TO BOREHOLE TO HELP CLEAN
	18	FRAC, OPEN 17.4-17.5 - FRAC ZONE SAND & 1/2 IN FRAGMENTS STAINED				
	19	FRAC. ZONE, WEATHERED, SANDY. STAINED	15 ppm	Box 2 ↓		
	20					

PROJECT RAAP RAMSDELL QUARRY GW INVEST. | HOLE NO RQL MW-6

DRILLING LOG

HOLE NUMBER RQLMW-6

PROJECT

INSPECTOR M. KLIDZEJS

SHEET 4 OF 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
				BOX 2 (CONT.)		
	21					
	22	21.9 - 23.6 FT NUMEROUS BREAKS PARALLEL TO BEDDING HORIZONTAL TO 100° FROM CORE AXIS.				REAM HOLE TO 23.6 W/ TRICONE
	23					
	24	0.6FT ACCUM. LOST CORE FROM 1ST 2 RUNS PICKED UP IN RUN 3 FRACTURES 24.1 - 24.3 - BREAKS				RUN 3 START 13:12 END NA TIME NA 33.6 MK 7/6/92 PD - ~~33.6~~ 34.2 CO - NA RUN - 10 FT REC - 9.7 FT LOSS - 0.3FT WL - 24.2 FT BGS JB
	25	24.4 - 24.8 - WEATHERED FRACTURE ZONE. ROCK FRAGMENTS TO 1/2 IN (WEATHERED, ROUNDED AND PREDOMINANT CLAYEY SAND. WET.				
	26	FRAC, BOTTOM FACE SLIGHTLY WEA, SANDY FRAC. SLIGHTLY OPEN				
	27	NUMEROUS ~ HORIZ. BREAKS 27.3 - 27.6 - WEATHERED ZONE, SANDY, STAINED PROBABLE WBZ				
	28					HOLE REAMED TO 33.9FT BGS
	29	FRACTURES, TIGHT, WEATHERED FRAC, SL. OPEN FRAC, OPEN ~ 3/8 in NUMEROUS ~ HORIZ. BREAKS 29.4 - 31.3				5

PROJECT RAAP RAMSDELL QUARRY GW INVEST.

HOLE NO RQLMW-6

DRILLING LOG

PROJECT

INSPECTOR M. KLIDZEJS

HOLE NUMBER RQLMW-6

SHEET 5 OF 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	31			BOX 2 (CONT.)		
	32					
	33	FRACT., SL. WEATHERED ~ HORIZ.				BEGIN CORING RUN 4 AT 33.9 FT BGS
		33.3-33.6 FT LOST CORE FROM RUN 3				
		33.6-33.9 FT LOST DURING REAMING				
	34	NUMEROUS BREAKS 34.2-37.6 FT		BOX 3 ↓		RUN 4 START 1503 END 1512 TIME 9 MIN PD-39.9 CD-NA RUN-6 FT REC-5.6 FT LOSS-0.4 FT
	35					
	36	FRAC. ZONE, WEATHERED, SANDY FACES, ~ HORIZ.				
	37					HOLE REAMED TO 39.9 FT BGS
	38	FRAC., BLACK (MnO) COATING FACES 115° FROM CORE AXIS				
	39					TD-39.9 FT BGS
		0.4 FT LOST CORE TD = 39.9				

PROJECT RAAP RAMSDELL QUARRY GW INVEST.

HOLE NO RQLMW-6

HTRW DRILLING LOG

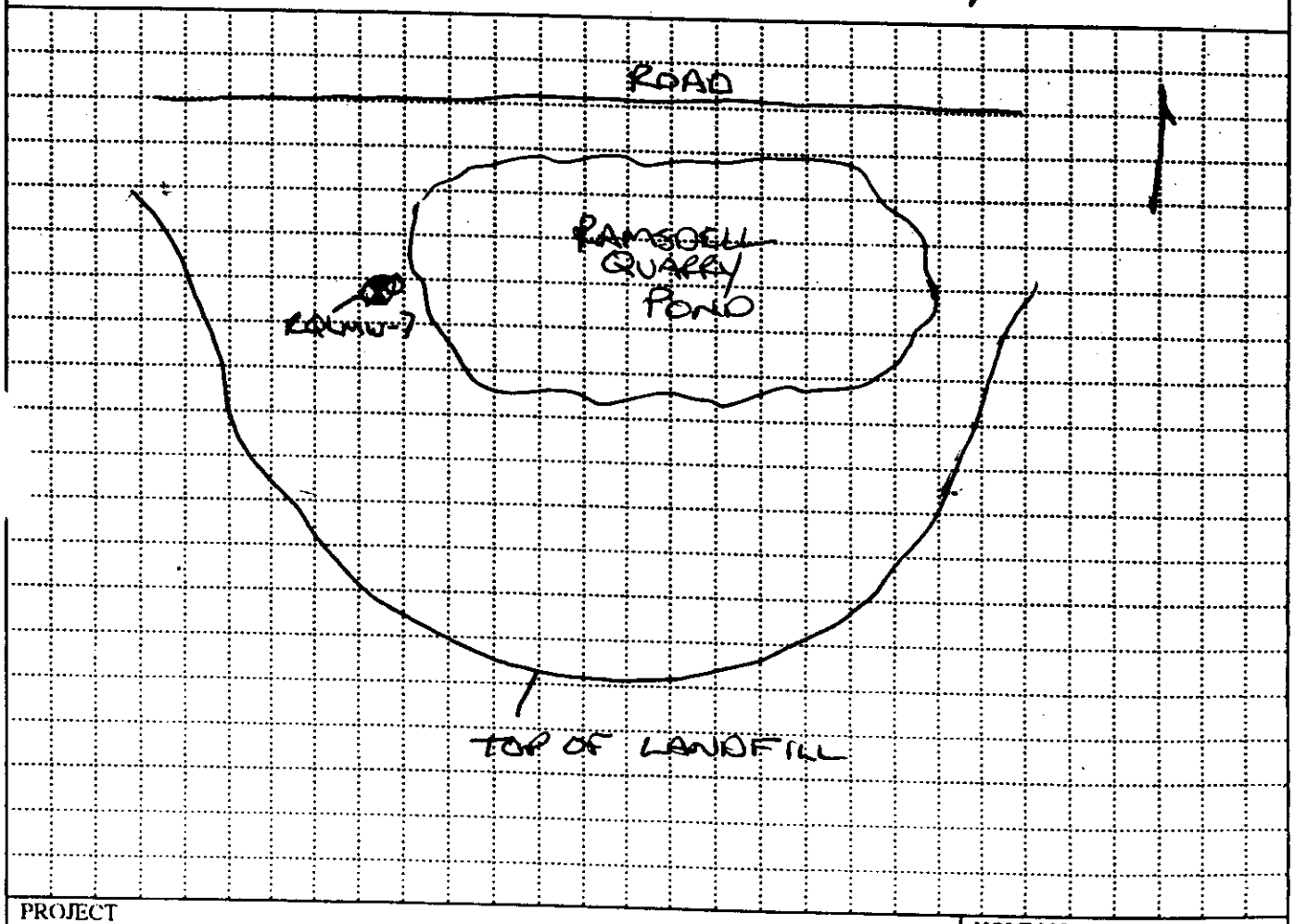
1. COMPANY NAME: SAIC	DISTRICT: LOUISVILLE	HOLE NUMBER: RQLMW-7
2. DRILL SUBCONTRACTOR: BOWSER MORNER		SHEET 1 OF 3 SHEETS
3. PROJECT: RAAP RAMSDELL QUARRY GW INVEST	4. LOCATION	
5. NAME OF DRILLER: ALLAN WOLFE	6. MANUFACTURERS DESIGNATION OF DRILL: MOBILE B-59	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: -6 1/2 IN. TRICONE; -6 IN TRICONE; -NX CORE	8. HOLE LOCATION: SEE MAP BELOW	
	9. SURFACE ELEVATION: 963.86'	
	10. DATE STARTED: 7/11/98	11. DATE COMPLETED: 7/12/98
12. OVERBURDEN THICKNESS: 0 FT	15. DEPTH GROUNDWATER ENCOUNTERED: 3.7 FT BGS (FIRST WATER BEARING FRACTURE)	
13. DEPTH DRILLED INTO ROCK: 16.2 FT	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 4.2 FT BGS / 5 MIN	
14. TOTAL DEPTH OF HOLE: 16.2 FT	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NONE	—	—	1

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
NONE	—	—	—			

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	—	X		

LOCATION SKETCH/COMMENTS — SCALE: NOT TO SCALE



PROJECT	HOLE NO.
RAAP RAMSDELL QUARRY GW INVESTIGATION	RQLMW-7

DRILLING LOG

PROJECT | INSPECTOR M. KLIDZEJS | HOLE NUMBER RQLMW-7 | SHEET 2 OF 3

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0	0.0 - 2.4 FT: MAGGI SANDSTONE, FINE-GRAINED, WELL CEMENTED (SILICA) REL HARD, RELATIVELY UNWEATHERED, UNFRACTURED. DRY, FACE YELLOW (2.5Y 7/3)		-		OPEN HOLE W/ 6 1/2 IN. DIAM TRI-CONE AND AIR TO 2.4 FT TO SET SURFACE CASING
	1					
	2					BEGIN RUN 1 AT 2.4 FT BGS CORING W/ WATER
	3	NUMEROUS BROKEN, RECOVERABLE FRACT. ZONE: LITHOLOGY SAME AS ABOVE; STAINED YELLOWISH BROWN (10YR 5/6) FROM 2.4 - 5.5 FT. BEDDING DEFINED BY INFREQUENT DARK GRAY LAMINATIONS	6.4 ppm over core	CORE BOX 1 ↓		RUN 1 START 0933 END 0953 TIME 20 MIN PD 12.4 FT CD 12.0 RUN 10.0 REC 9.6 ~~RQD 0.7 FT~~ WL - 6.4 FT BGS
	4	THIN FRACT. ZONE FRACT. ZONE, FACES LIGHTLY COATED DARK GRAY FRACT., TIGHT, FACES DARK GRAY				
	5	FRACT. ZONE, WEATHERED, ROCK FRAGMENTED TO ~1/2 IN, SOFT 4.5-4.6, STAINED DARK GRAY BLACK ~ HORIZONTAL 4.9 FRACT. OPEN ~1/4 in., 110° FACES SLIGHTLY WEATHERED, SANDY				
	6	FRACT. ZONE, ROCK FRAGMENTED TO 1/4 IN ~ HORIZONTAL NUMEROUS THIN TIGHT FRACTURES, FACES STAINED YELLOWISH BROWN	4.3 ppm over core			- DRILLER REPORTS POSSIBLE WATER BEARING FRACTURE AT ~ 6 FT BGS BASED ON CORE, PROBABLE WATER BEARING ZONE FROM 3.7 - 5.3 FT
	7					
	8	POSSIBLE FRACTURE FRACTURE, SLIGHTLY WEATHERED				
	9	FRACT ZONE, ROCK FRAGMENT TO ~3/8, STAINED ON BOTTOM FACE		A-9		

PROJECT: RAAP RAMSDELL QUARRY GW INVEST. | HOLE NO: RQLMW-7

INSPECTOR M. KLIDZEJS

SHEET 3 OF 3

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	11	BEDDING DEFINED BY LAMINATIONS AT ~100° FROM CORE AXIS				
		FRACT. FACES SLIGHTLY WEATHERED				
	12	FRACT. FACES ONE SLIGHTLY WEATHERED, SANDY				
		~~LOST CORE 12.0-12.4~~	0.7 ppm OVER CORE			
	13	LITHOLOGY: SANDSTONE AS ABOVE BUT EXPERIENCING COARSENING DOWNWARD FINE-MED. GRAINED BELOW ~13FT. GRAY (2.5Y 6/1). STAINING ABSENT	MAX PID = 4.1 ppm OVER CORE			RUN 2 START - 1100 END - 1110 TIME - 10 MIN PD - 16.4 FT CD - 16.0 FT RUN - 4.0 REC - 4.2 WL - 4.1
	14					
	15	NUMEROUS BREAKS, HORIZONTAL, NO STAINING ON FACES. DIFFICULT TO DETERMINE IF THESE REPRESENT FRACTURES, BUT BELIEVE NOT.				HOLE REAMED TO 16.2FT BGS W/ 6.0 IN TRI-CONE WL = 4.2FT BGS
	16	ACCUMULATED 0.2FT LOST CORE				DRILLER ADVISES THAT HE BELIEVES ROCK AT BOTTOM OF HOLE IS FAIRLY HARD & COMPETENT
	17					
	18					N 566544.355 E 2375872.562
	19					

PROJECT RAAP RAMSDELL QUARRY GW INVESTIGATION

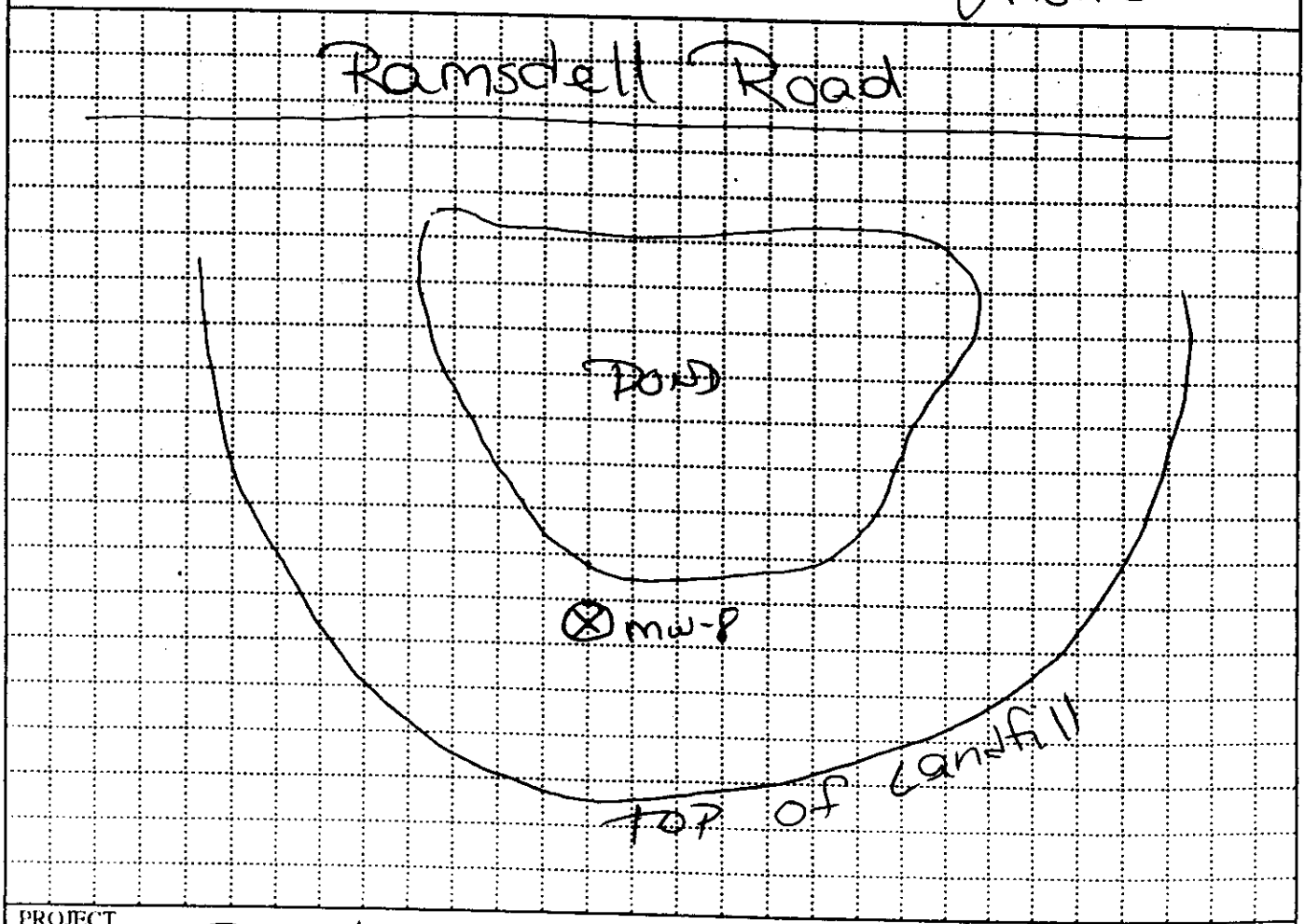
HOLE NO RQLMW-7

HTRW DRILLING LOG

1. COMPANY NAME: SAIC.	DISTRICT: Louisville	HOLE NUMBER: RQLmw-8
2. DRILL SUBCONTRACTOR: Bowser-Morner		SHEET 1 OF 2 SHEETS
3. PROJECT: Ramsdell Quarry GW Invest	4. LOCATION: Ramsdell Quarry	
5. NAME OF DRILLER: Allan Wolfe	6. MANUFACTURER'S DESIGNATION OF DRILL: B-59 Mobile Drill	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 6¼" tricone bit; 6" tricone; NX-core	8. HOLE LOCATION: Ramsdell Quarry	
	9. SURFACE ELEVATION: 963.82'	
	10. DATE STARTED: 07-11-98	11. DATE COMPLETED: 07-12-98
12. OVERBURDEN THICKNESS: ~.5'	15. DEPTH GROUNDWATER ENCOUNTERED: ~6.7½' BGS	
13. DEPTH DRILLED INTO ROCK: ~~16.2~~ 15.7	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: ~6' (~5 minutes)	
14. TOTAL DEPTH OF HOLE: 16.2	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR: Heather L Smith		
		X				

LOCATION SKETCH/COMMENTS — SCALE: none



PROJECT	HOLE NO.
RAAP Ramsdell Quarry GW. Invest.	RQLmw-8

Ramsdell Quarry GW Invest — H. SMITH — SHEET 2 of 3

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0	Soil to .5' Roots & other organics common				Opened hole w/ 6½" d.i.a. tricone bit. Installed temporary 6" casing to 2.5' BGS.
	1	Sand Stone. fine-med grained. Stained dk. yellowish brown (10YR5/4) Weathered along fractures. where fractured - sandy & friable. Unweathered rock is hard. Silica cement. Moderately well Sorted grains.	Ø.5 ppm Breathing Zone			
	2					cored w/ NR bits & barrels.
	3	Same lithology as above. Actual color seen here unless Staining indicated. Actual color is H.grey 2.5Y 7/1	11.7 ppm over core (6.7 ppm breathing zone)	CORE-BOX #1		2.5' Begin Run! P.D 12.5' C.D. 11.7 Run 10' Rec. 9.2' Accumulated Loss .8' from 11.7-12.5'
	4	Large fracture area Sandy & weathered				
	5	Sandy, weathered, fracture				
	6	5.8'-7.0' Dk. Yellowish Red-Brown staining (10YR5/4) Weathered/Sandy	6.3 ppm over core			Driller states "water at ~6-7½"
	7	Horizontal bedding mm scale throughout core.	(Ø.1 ppm breathing zone)			
	8	~~(dk yellow-brown staining)~~ dk yellow-brown staining along fractures.				
	9					
	10					

PROJECT: Ramsdell Quarry GW Invest — HOLE NO: RQLmw-8

PROJECT: Ramsdell Quarry | INSPECTOR: H. SMITH | SHEET 23

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	10	F, F, F, F — Same lithology as above.	Ø.8 ppm breathing zone	Core Box #1		
	11	F — ~~lost .6' from 11.7 to 12.3~~ HS 7-13-98; accumulated loss .6' 11.7-12.3'				
	12	Recovered 12.3'-12.5' in Run 2				
	13	12.7-15.2 major fracture zone. fracture every ~½". Very weathered & sandy. Same lithology as above.	Ø.4 over core.			Run #2 P.D. 15.5' C.D. 15.5' Run 3' Rec. 3.2'
	14					recovered .2' from Run 1 in Run #2.
	15	-F	Ø.2 over core.			Bit Refusal at 15.5'
	16					reamed to 16.2' BGS w/ 6" tricone roller bit. (16.2)
	17					
	18					N 566327.945 E 2376011.082
	19					
	20					

PROJECT: KAAP Ramsdell Quarry GW Invest

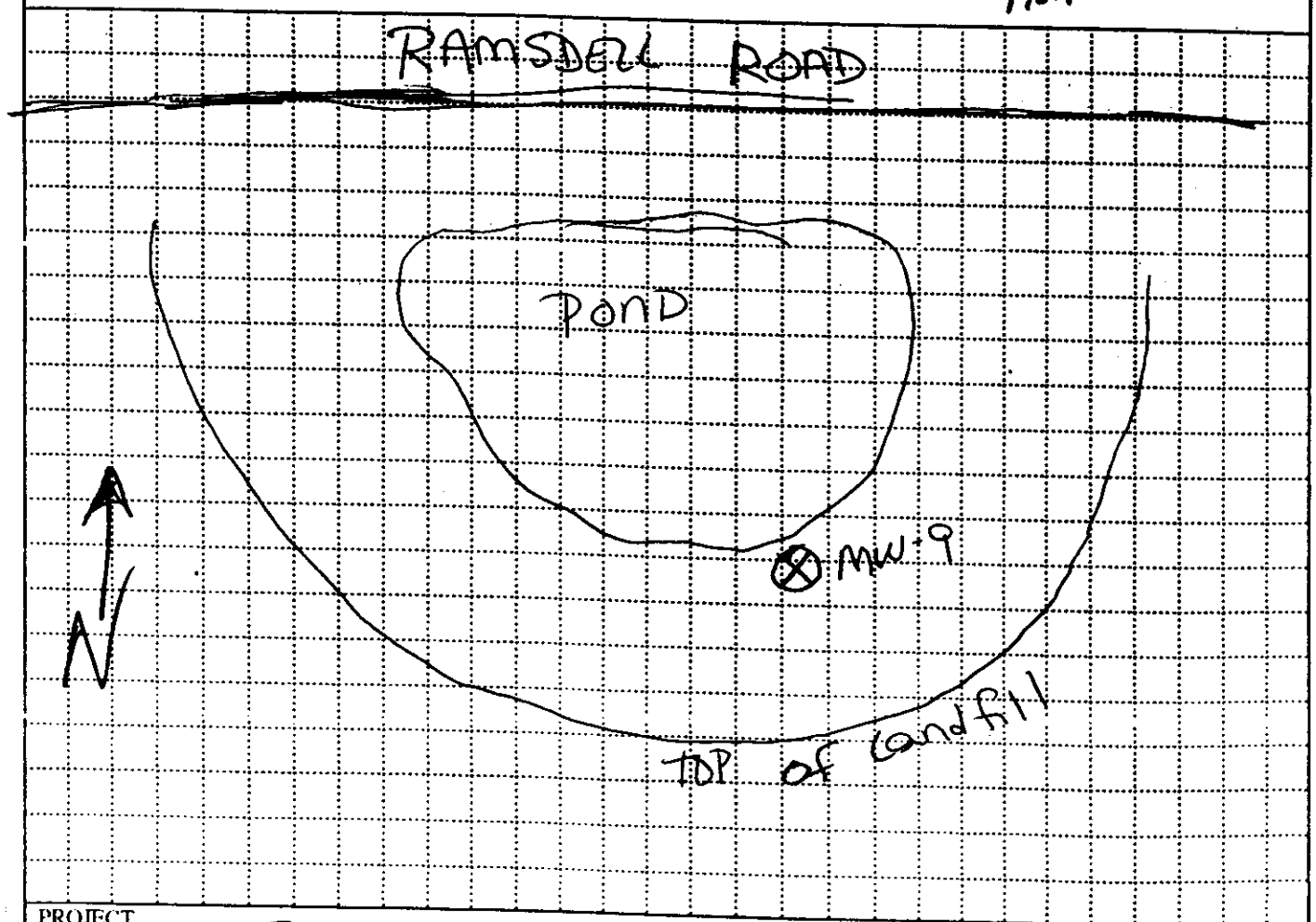
HOLE NO: RQLmw-8

HTRW DRILLING LOG

1. COMPANY NAME: SAIC	DISTRICT: Louisville	HOLE NUMBER: RQLmw-9
	2. DRILL SUBCONTRACTOR: Bowser Morner	SHEET 1 OF 1
3. PROJECT: RAAP Ramsdell Quarry GW Invest.	4. LOCATION: Ramsdell Quarry	
5. NAME OF DRILLER: Alan Wolfe	6. MANUFACTURER'S DESIGNATION OF DRILL: Mobile Drill B-59	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 6 1/2" tricone rollerbit; 6" tricone roller bit; AX bit & core barrel	8. HOLE LOCATION: Ramsdell Quarry	
	9. SURFACE ELEVATION: 962.60'	
	10. DATE STARTED: 07-12-98	11. DATE COMPLETED:
12. OVERBURDEN THICKNESS: no over burden	15. DEPTH GROUNDWATER ENCOUNTERED:	
13. DEPTH DRILLED INTO ROCK: ~~16.5~~ 16.4	16. DEPTH TO WATER AND TIME AFTER DRILLING COMPLETED:	
14. TOTAL DEPTH OF HOLE: 16.4	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES			
20. SAMPLES FOR CHEMICAL ANALYSIS	**VOC**	**METALS**	**OTHER (SPECIFY)**	**OTHER (SPECIFY)**	**OTHER (SPECIFY)**	**21. TOTAL CORE RECOVERY %**
22. DISPOSITION OF HOLE	**BACKFILLED**	**MONITORING WELL**	**OTHER (SPECIFY)**	**23. SIGNATURE OF INSPECTOR**		
		X		Agatha L. Smith		

LOCATION SKETCH/COMMENTS — SCALE: none



PROJECT	HOLE NO.
RAAP Ramsdell Quarry GW Invest.	RQLmw-9

DRILLING LOG

PROJECT: RAPP Ramsdell Quarry | INSPECTOR: H.SMITH | HOLE NUMBER: RQLmw-9 | SHEET: 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0	no overburden.				Open hole with 6½ tricone roller bit to 2.2' BGS
	1	Rock is fine-med. grained. Stained dark yellowish brown (10YR5/4) Weathered along fractures Sandy & friable along fractures. Where unweathered, rock is hard.	Background BZ 0.0 ppm to 1.0 ppm			Rock outcrops at ground surface no overburden.
	2	Well sorted grains w/ silicon cement.				
	3	F Fractured Weathered Sandy zone. fractures at least every ½" F Dark yellow brown staining (10YR5/6) prevalent as main color throughout runs		CoreBox #1		RUN #1 P.D. ~~8.2~~ 8.3 C.D. 8.2 Run. 6.1 Rec. 6.0 start: 1027 end: 1045 time 18 min Loss .1' from 8.2'-8.3'
	4	F Horizontal bedding on mm scale seen throughout core. Fractured zone, Weathered stained, Sandy	PID reading 1.5 ppm to 3.0 ppm over core			
	5	F				
		E Fractures Sandy & stained				
	6	F				Loose No return water Driller states Probable fracture in formation taking water.
	7	F Fractured Weathered Sandy zone.				
	8	F				Bottom tagged at 8.2' BGS
		Breaks every ½" Stained (lightly)	PID Readings 0.5-1.5 ppm over core			RUN #2 P.D. 12.2 C.D 12.0 RUN 3.9 REC 3.3
	9	F zone stained, Sandy Weathered.				
	10	F				

PROJECT: RAPP Ramsdell Quarry GW Invest. | HOLE NO: RQLmw-9

Ramsdell Quarry — L. SMITH — SHEET RD 2

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	10	Horizontal bedding (laminations) on mm scale throughout Fzone core.	PID overcore 0.8 ppm	CORE BOX #1		LOSS .6' from 11.6'-12.2'
	11	Staining on F core still represents the main color on this run. Fracture zone				
	12	.6' LOST				Reamed to 12.2 Before RUN 3 w/6" tricone bit. Total Depth for run #2 = 12.2
		F Same lithology as above				RUN #3
	13	F Color now unstained (mostly) lt. grey 2.5Y 7/1	PID overcore 0.0-0.5 ppm			PD 16.5'
		F orange staining along fractures in 1st 1½' of RUN 3				CD 16.4'
		F Well sorted fine-med. grained sand				RUN 4.3'
	14	F Stone. fine interbedded				REC 4.1'
		dark & light grey horizontal laminations				Start 1220
		F Silica Cement.				END 1236
	15	F Hard.				TIME 16min
		F				Loss .2' from 16.3'-16.5'
		F				
	16	F 16.3 Bottom of recovery				
		Bottom of core 16.5'				LOST .2' from 16.3'-16.5'
	17					
	18					N 566351.199 E 2376253.654
	19					
	20					

PROJECT: RAAP Ramsdell Quarry GW Investigation

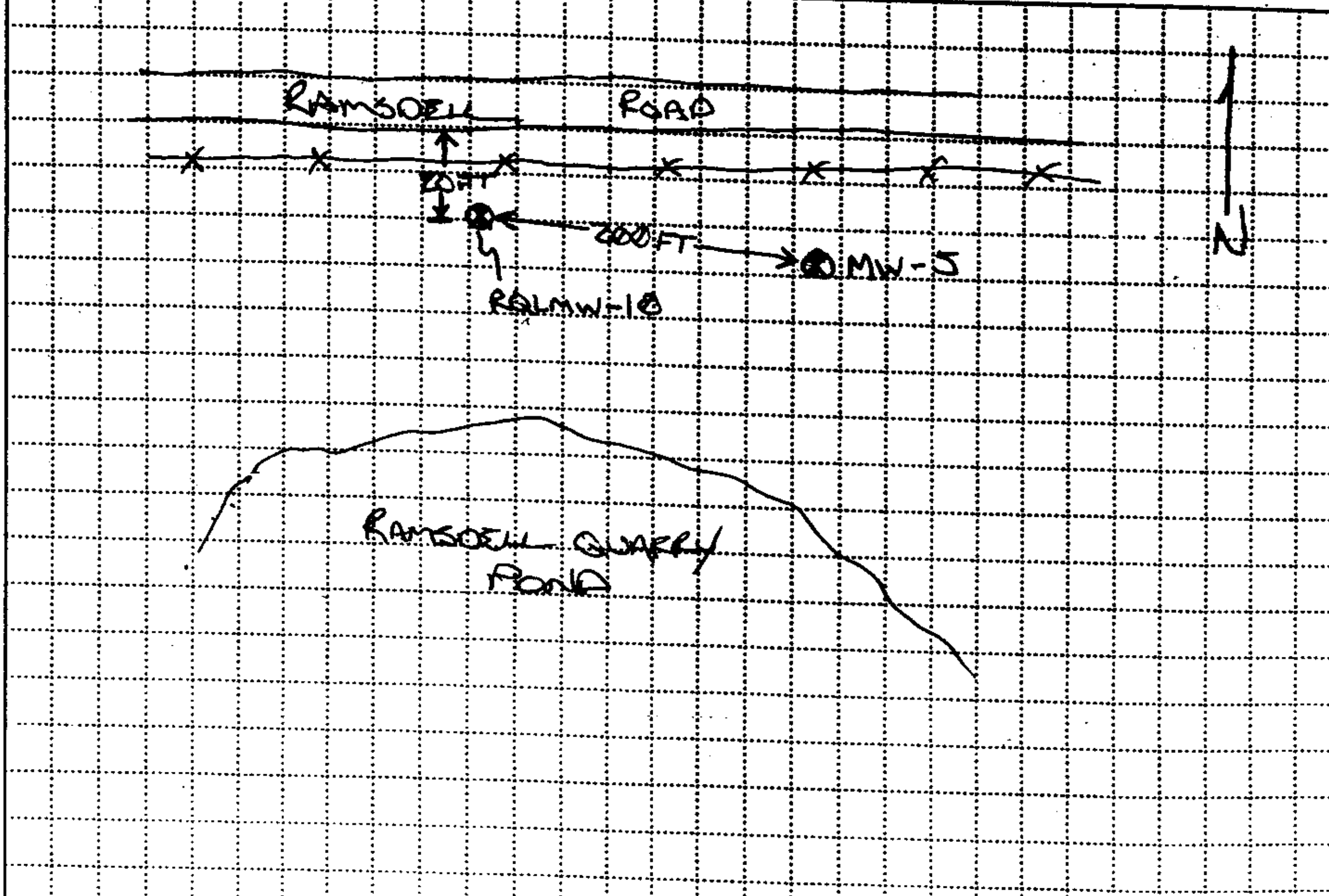
HOLE NO: RQ2mw-9

HTRW DRILLING LOG

Field	Entry
DISTRICT	LOUISVILLE
HOLE NUMBER	RQLMW-10
SHEET / SHEETS	1 of 5
1. COMPANY NAME	SAIC
2. DRILL SUBCONTRACTOR	BOWSER MORNER
3. PROJECT	RAAP RAMSDELL QUARRY GW INVEST
4. LOCATION	RAAP Ramsdell Quarry
5. NAME OF DRILLER	ALLAN WOLFE
6. MANUFACTURER'S DESIGNATION OF DRILL	MOBILE B-59
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	-6 in ID HSA -NX WIRELINE CORE -6 in DIAM TRI-CONE ROLLER BIT
8. HOLE LOCATION	SEE MAP BELOW
9. SURFACE ELEVATION	1980.4'
10. DATE STARTED	7/9/98
11. DATE COMPLETED	7/9/98
12. OVERBURDEN THICKNESS	2.8 FT
13. DEPTH DRILLED INTO ROCK	30.1
14. TOTAL DEPTH OF HOLE	32.9 FT
15. DEPTH GROUNDWATER ENCOUNTERED	WET SEAMS 3-18 FT (PERCHED)
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	22.8 FT BGS, 55 MIN. AFTER TD
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	
18. GEOTECHNICAL SAMPLES	NONE
DISTURBED	—
UNDISTURBED	—
19. TOTAL NUMBER OF CORE BOXES	2
20. SAMPLES FOR CHEMICAL ANALYSIS	NONE
VOC	—
METALS	—
OTHER (SPECIFY)	—
OTHER (SPECIFY)	—
OTHER (SPECIFY)	—
21. TOTAL CORE RECOVERY %	
22. DISPOSITION OF HOLE	
BACKFILLED	—
MONITORING WELL	X
OTHER (SPECIFY)	—
23. SIGNATURE OF INSPECTOR	[signature]

LOCATION SKETCH/COMMENTS

SCALE: NOT TO SCALE



PROJECT	HOLE NO.
RAAP RAMSDELL QUARRY GW INVEST.	RQLMW-10

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

INSPECTOR M. KLIDZEJS | SHEET 2 OF 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0	~~0.0-4.8~~ 0.0-3.1: VERY FINE SAND AND WEATHERED SANDSTONE FRAGMENTS SL. MOIST, LT. YELLOWISH BROWN (10 YR 6/4)	PID IN BZ AND OVER CUTTINGS = 0.0ppm			AUGER W/ ~~6IN~~ 3.6IN HSA TO ~~4.0FT~~ 3.1 BGS (AUGER REFUSAL)
	1					HOLE CLEANED TO ~~5.2FT~~
	2					
	3	~~3.1~~ 2.8 - : SANDSTONE, FINE GRAINED, HARD. SILICA CEMENTED, ALTERNATING GRAY (2.5Y 6/1), YELLOWISH BROWN (10YR 4/6) AND STRONG BROWN (7.5 YR 5/8), STAINING? DARKER ZONES APPEAR LIMONITIC. ~ HORIZ	PID = 0.0 PPM OVER RUN 1 CORE			BEGIN RUN 1 AT ~~5.2 FT~~ ~~3.1~~ 2.8 FT
	4	3.1 - BEDDING. ~~3.1-3.9~~ - HIGHLY WEATHERED, SAND & FRAGMENTS; 4.1-4.2 - F ZONE, WEATHERED, STAINED SANDY				RUN 1 START 0955 TIME? END 1021 7/8/98 PD - ~~3.1~~ 12.8 CO - 12.8 RUN - 10.0 REC - 9.0 FT
	5	~~5.1 FT - 5.2 FT~~ : WEATHERED ZONE, SANDY, WET 4.8-4.9				
		THIN FRACT. ZONE, WEATHERED				
	6	F, WEATHERED				
		F, WEATHERED, SANDY				
	7					
		FRACT. ZONE - WEATHERED, SANDY, WET, SOFT, GRAY				
	8					
		F, LIMONITIC COATING				
	9	F, WEATHERED,				

PROJECT: RAAP RAMSDELL QUARRY GW INVEST.

HOLE NO: RQLMW-10

DRILLING LOG

PROJECT

INSPECTOR M. KLIDZEJS

HOLE NUMBER RQLMW-10

SHEET 2 OF 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	0	0.0-4.0: VERY FINE SAND AND WEATHERED SANDSTONE FRAGMENTS, SL. MOIST, LT. YELLOWISH BROWN (10YR 6/4)	PID IN BZ AND OVER CUTTINGS = 0.0 ppm			AUGER W/ 3.6 IN HSA TO 4.0 FT BGS (AUGER REFUSAL)
	1					HOLE CLEANED TO 5.2 FT
	2					
	3	3.8-4.1: SANDSTONE, FINE GRAINED, HARD, SILICA CEMENTED, ALTERNATING GRAY (2.5Y 6/1), YELLOWISH BROWN (10YR 4/6) AND STRONG BROWN (7.5 YR 5/8), STAINING? DARKER ZONES APPEAR LIMONITIC. ~ HORIZ	PID=0.0 ppm OVER RUN 1 CORE			BEGIN RUN 1 AT 5.2 FT 3.1 2.8 FT
	4	3.1 BROWN. 3.1-3.9 - HIGHLY WEATHERED, SAND & FRAGMENTS 4.1-4.2 - F ZONE, WEATHERED, STAINED SANDY				RUN 1 START 0955 TIME 26 MIN END 1021 7/18/98 PD - 13.1 12.8 CO - 12.8 RUN - 10.0 REC - 9.0 FT
	5	5.1 FT - 5.2 FT: WEATHERED ZONE, SANDY, WET 4.8-4.9 THIN FRACT. ZONE, WEATHERED				
	6	F, WEATHERED F, WEATHERED, SANDY				
	7					
	8	FRACT. ZONE-WEATHERED, SANDY, WET, SOFT, GRAY F, LIMONITIC COATING				
	9	F, WEATHERED.				

PROJECT RAAP RAMSDELL QUARRY GW INVEST.

HOLE NO RQLMW-10

DRILLING LOG

PROJECT | INSPECTOR M. KLIDZEJS | HOLE NUMBER RQLMW-10 | SHEET 3 OF 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	11	F, LIMONITIC COATING F, LIMONITIC COATING F, LIMONITIC COATING ON FACES F, LIMONITE COATING ON FACES F, WEATHERED, & LIMONITIC F, LIMONITIC COATING ON FACES				
	12	FRACT. ZONE, FACES OF FRAGS. SL WEATHERED LOSS CORE 11.8-12.8FT				
	13	12.8–19.5FT SANDSTONE AS ABOVE IN ALTERNATING LIGHT GRAY (2.5Y 7/1) AND YELLOWISH BROWN (10YR 5/6) BANDS, APPROX PARALLEL TO BEDDING BEDDING DEFINED BY SOME DARK GRAY SILT? LAMINATIONS				RUN 2 START 1103 END 1136 TIME ~33MIN RUN 10 REC 10 PA ~~23.1~~ 22.8 CO 22.8 BWL 22.5 FT BGS
	14	13.7 F, OXIDE COATING ON FACES 14.1–14.2 F, OXIDIZED FACES SL. WEATHERED				
	15	WEATHERED ZONE, SANDY				
	16	WEATHERED ZONE, OXIDIZED, CRUMBLY.				
	17	BEDDING INDICATED BY SILT LAMINATIONS 115° FROM CORE AXIS				
	18			BOX 2 ↓		
	19	FRACT ZONE, ORTHOGONAL FRACTURES, SOME SPLINTERY F, IRREGULAR FACES, SL OXIDIZED 19.5–22.8 SANDSTONE AS ABOVE, PREDOMINANTLY LIGHT GRAY, MORE ABUNDANT SILT LAMINATIONS				

PROJECT RAAP RAMSDELL QUARRY GW INVEST | HOLE NO RQLMW-10

DRILLING LOG

PROJECT

INSPECTOR M. KLIDZEJS

HOLE NUMBER RQLMW-10

SHEET 4 OF 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	21	FRAC, TIGHT, OXIDIZED FACES				
		FRAC., AS ABOVE				
	22					
	23	22.8-33.0 FT: SANDSTONE, FINE TO MED GRAINED, COARSENING DOWNWARD; MOD. WELL CEMENTED LESS WELL DOWNWARD, SILICA CEMENT), DARK YELLOWISH BROWN (10YR4/6)				RUN 3 START 1341 END 1400 TIME 19 MIN RUN 10 FT REC 9.2 FT PD 32.8 FT CD 32.8 FT
	24	FRAC, TIGHT 130° FROM BORE AXIS				
		FRAC. ZONE; BOTTOM FRACTURE WEATHERED, SANDY.				
	25					
	26	FRAC. ZONE, ~110° WEATHERED, 1/4-1/2 in FRAGMENTS				
	27	WEATHERED ZONE, LOOSE SAND W/ 1/4-1/2 in SANDSTONE FRAGMENTS				
	28	WEATHERED, FRACTURED ZONE; BREAKS PARALLEL TO BEDDING, EACH WEATHERED SHOWING SANDY FACES. SOME ZONES UP TO 0.1 FT OF LOOSE SAND				
	29					

PROJECT RAAP RAMSDELL QUARRY/GW INVEST.

HOLE NO RQLMW-10

DRILLING LOG

PROJECT

INSPECTOR M. KLIDZEJS

HOLE NUMBER RQLMW-10

SHEET 5 OF 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
		FRACTURE ZONE LOOSE SAND AND FRAGS WEATHERED				
	31	FRACTURES, WEATHERED FACES				
		FRACTURE, 145° WEATHERED FACES				
	32	32.0 - 32.8 LAST CORE				HOLE REAMED TO TO OF 32.9FT BGS.
	33					

N 566857.393
E 2376048.582

A-22

PROJECT RAAP RAMSDELL QUARRY GW INVEST.

HOLE NO RQLMW-10

HTRW DRILLING LOG

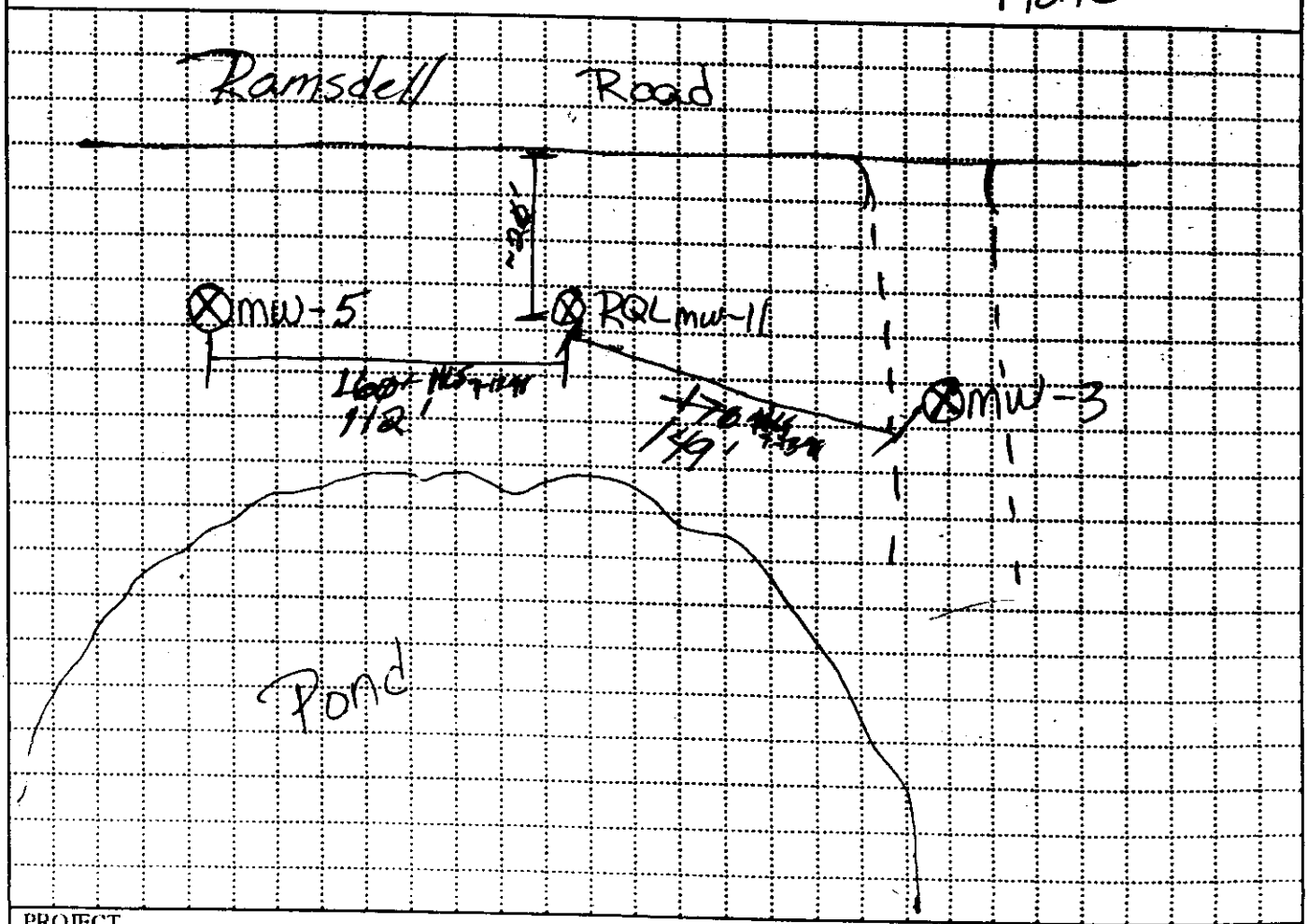
1. COMPANY NAME: SAIC	2. DISTRICT: Louisville	HOLE NUMBER: RQLmw-11
3. PROJECT: Ramsdell Quarry G.W. Investigation	3. DRILL SUBCONTRACTOR: Bowser Morner	SHEET 1 OF 5
5. NAME OF DRILLER: Alan Wolfe	4. LOCATION: Ramsdell Quarry	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 6" dia. ID HSA; 2" dia. split spoon; NX core; 6" dia tricone bit.	6. MANUFACTURER'S DESIGNATION OF DRILL: Mobile B-59	
	8. HOLE LOCATION: Ramsdell Quarry	
	9. SURFACE ELEVATION: 974.60'	
	10. DATE STARTED: 7-10-98	11. DATE COMPLETED: 7-10-98
12. OVERBURDEN THICKNESS: 2.5'	15. DEPTH GROUNDWATER ENCOUNTERED	
13. DEPTH DRILLED INTO ROCK: 30.4'	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE: 32.9	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
0.3' - 7.0'	X		2

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		Heather L Smith

LOCATION SKETCH/COMMENTS — SCALE: none



PROJECT	HOLE NO.
RAAP Ramsdell Quarry GW Invest.	RQLmw-11

DRILLING LOG

PROJECT: RAAP Ramsdell Quarry GW Invest. | INSPECTOR: H. SMITH | HOLE NUMBER: RQLmw-11 | SHEET: 2 of 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	0	0.0-0.3' Soil - Clayey silt, moist, slightly plastic - organic material - roots	P.I.D. 0.0 ppm	RQ@@16		Geotech sample taken from 0.3'-1.0'
	1	0.3-1.0' flat sandstone Pebbles in loose, sandy, dry, fine grained sand 2.5Y 7/3 Mes 7-10-97				Blow count for S.S. 12/12/50 for 5
	2	1.0'-2.5' lost				
		2.5' Begin Coring				hole cleaned to 2.5 solid tag.
	3	2.5-3.9' Lost		Core box #1		Run 1 START 0950 END 1030 TIME 40 min. PD 12.5 CD 12.3 WL 10.8' BGS (1.5' above bottom of core) RUN 10' REC 8.4' lost 1.4 at top of run left .2 at bottom of hole.
	4	3.9'-5.7' Moist w/ Wet Lenses				
	5	Med-Fine grained S.S. Grey color 2.5Y 6/1. Weathered, staining to brownish red 10YR 7/8 to 10YR 7/6 Soft to 5.7' (friable) Quartzose cement fine laminations seen throughout core. (1mm wide)	PID over core 0.0 ppm			
	6					
	7	5.7-7.8 harder S.S. less weathered. Same staining as above.				
	8	7.8-8.2 Wet, weathered S.S. fracture zone.				
	9					
	10					

PROJECT: RAAP Ramsdell Quarry GW Invest. | HOLE NO: RQLmw-11

DRILLING LOG

PROJECT: RHHP Ramsdell Quarry G.W Invest | INSPECTOR: H. SMITH | HOLE NUMBER: RQLmw-11 | SHEET: 3 of 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	10	10.4 Wet, weathered S.S. fracture.	P.I.D. 0.0 ppm	Core box #1		
	11	Greywacke S.S. softer in wet, weathered regions brownish-red 10YR7/6 Staining continues.				
	12	12.3'-12.5' Lost				Driller reports "good amt. of water" at start of Run 2 from run 1.
	13	13.0'-15.0' Very broken up wet weathered S.S. fracture zone	PID 0.0 ppm			Run #2 Start 1110 End ~~1035~~ 1135 Time 2s P.D. ~~22.5~~ 22.5 C.D. ~~22.5~~ 22.5 WL Run 10' Rec 10'
	14	13.5 → 22.5 grey S.S. color now dominant, Reddish-brown staining seen only in fracture zones. 2.5Y6/4. Greywacke S.S. med-fine grained. fairly well sorted. fine (1mm width) laminations present through out core.				
	15	Very Hard				
	16	Dark Brown/Black interbed? lens?				
	17		PID 0.0 ppm	17.8 core box 1 / core box 2		
	18	18.5 Moist weathered S.S. fracture.				
	19	19.5'-22.5' Hard grey S.S. fewer fractures		CORE BOX #2		
	20					

PROJECT: RHHP Ramsdell Quarry G.W. Invest. | HOLE NO: RQLmw-11

DRILLING LOG

PROJECT: RAAP Ramsdell Quarry GW | INSPECTOR: H. SMITH | HOLE NUMBER: RQLmw-11 | SHEET: 3 of 5

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	20	20-22.5' hard greywacke S.S. Color 2.5Y 8/1 (light grey) few fractures very little weathering or staining	PID 0.0 ppm BZ			Run 2 cont
	21					
		21.7-22.3 Stained				
	22	21.9 Fracture, sandy weathered				
		LOST				
		Run 3 Fracture zone 22.5-23.3 no staining, Fractures every ~½"		Core box #2		Run 3 PD 27.8 CD 27.8 WL 8.5' from Bottom of core hole Start 1345 End 1400 Time 15 min Run 5.3 Rec 5.3
	23	23.2 Staining returns 10YR 6/6 Brownish-yellow	PID 0.0 ppm breathing zone & over core			
	24	23.9-24.1 Poorly Sorted, med. to cs. grained Sand stone Very Stained 10YR 4/6 (dk yellowish brown) Very weathered				
		Red oxidized spots along core from. 25.9-27.8				
	25	Fracture zone 25'-25.4' ~ ev. 0.15'. Some lgr. XTLS (upto 0.01' dia). RK still grey in color even broken. Staining on outer edges.				
	26	Lithology from 26.4 thru Rdw 3 is cs. grained-med gr. Sstone.				
		Dark staining 10YR 3/4 (dk yellowish brown) along fractures.		Core Box #2		
	27	Highly weathered-Stained				
	28	Run 4 from 27.8 med/cs gr. lithology thru. 28.3' Then return to med-fine gr. well sorted quartzose sandstone w/ Silica cement & fine horizontal laminations w/ lt. staining on core.	PID 0.0 ppm breathing zone & over core.			Run 4 P.D 32.5 CD 32.4 WL 6.5' from bottom of hole Start 1443 End 1452 Time 9 min Run 4.7 Rec. 4.5
	29					
	30					

PROJECT: RAAP Ramsdell Quarry GW Invest. | HOLE NO: RQLmw-11

DRILLING LOG

PROJECT: RAAP Ramsdell Quarry GW | INSPECTOR: H. SMITH | HOLE NUMBER: RQLMW11 | SHEET: 595

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO (E)	ANALYTICAL SAMPLE NO (F)	REMARKS (G)
	31	F fine-med. grained well sorted horizontally laminated silica cemented Quartzose Sand stone. F Hard, ~~but~~ predominantly unweathered. Itly. Stained 10YR7/6. 50% Stained 50% grey original color.	PID Ø.ØppM	Core box #2		Run 4 (cont)
	32	Break lost Ø.2' from 32.3'-32.5'	P.I.D. Ø.Øppm over hole ? in breathing zone	Core ends @ 32.3' BGS		Only got core to 32.3' BGS.
	33					Reamed to 32.9' (w/ 6" tricone Roller bit)

N566819.656
E 2376398.191

Heather L. Smith 7-25-96

PROJECT: RAAP Ramsdell Quarry G.W Invest. | HOLE NO.: RQLMW-11

APPENDIX B

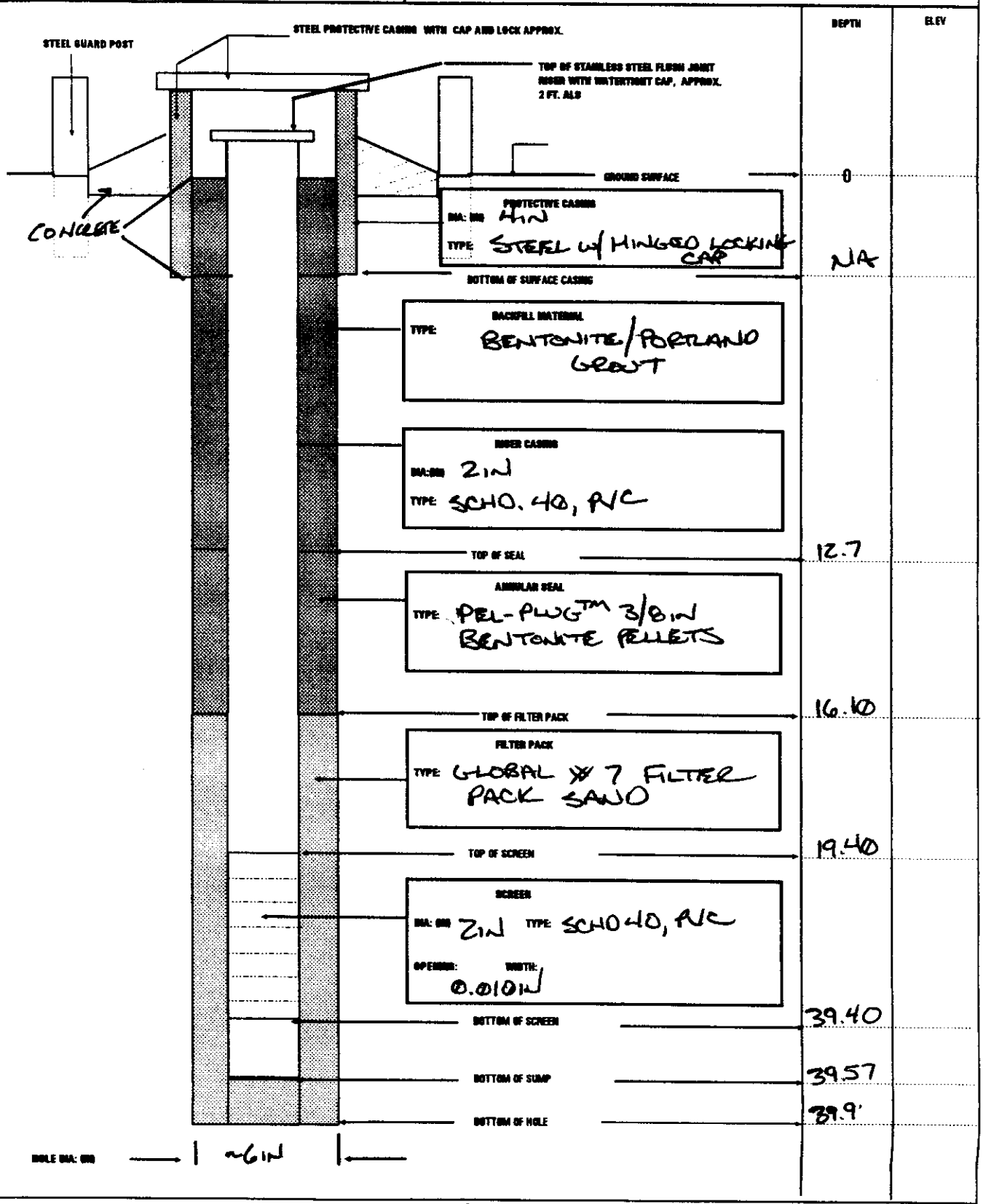
MONITORING WELL CONSTRUCTION DIAGRAMS/ WELL DEVELOPMENT RECORDS

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

MONITORING WELL

PROJECT NAME: Rockwell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 083

WELL NUMBER: RQLMW-6	**BEGIN:** 7/7/98	**END:** 7/8/98
COORDINATES: N: 566091.259 E: 2375927.713	**REFERENCE POINT:**	**ELEVATION:** ft MSL 945.39



WELL DEVELOPMENT RECORD

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 003

PAGE 1 OF 1

WELL NUMBER AND LOCATION: RQLMW-6

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (uMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
7/12/98	1040	1/4 GAL	12.7	0.709	7.13	>999	1/4 GAL		FIRST WATER REMOVED
7/13/98	0825	1/4	10.6	0.798	6.12	103	20 1/2 GAL	~5	TOTAL OF 20 GALS REMOVED ON 7/12/98
7/13/98	0845	5	11.0	0.751	5.94	98	25 1/2	~6	FIRST WATER REMOVED ON 7/13/98
7/14/98		8					33 1/2		WELL ~ DRY AFTER ~5 GALLONS
7/15/98	1105								8 GALS. REMOVED ON 7/14/98
7/15/98	1103	1/4	~~12.7~~ ~~+0.7~~ 7/15/98	0.761	6.09	183	33 3/4		1ST WATER REMOVED ON 7/15/98
7/15/98	1112	4	13.3 13.4	0.893	6.08	43	37 3/4		~ DRY
				2w 7/24/98					~3 1/2 gal. removed 7/22 & 9 gal removed
7/24/98	0921	1	12.1	0.762	6.06	287	41 1/4	~10	Need to establish stable parameters
	0924	1	11.6	0.735	6.23	215	42 1/4		
	0927	1	11.6	0.779	6.25	177	43 1/4	~10.5	STABLE
J. Sent gpm verbal O.K. to K. Dominge to remove maximum of 5 well volumes and reach stability. Unable to remove 5 times the water added due to well cavitating.									
					2w 7/27/98				

RECORDED BY: [signature] (Signature and Date)

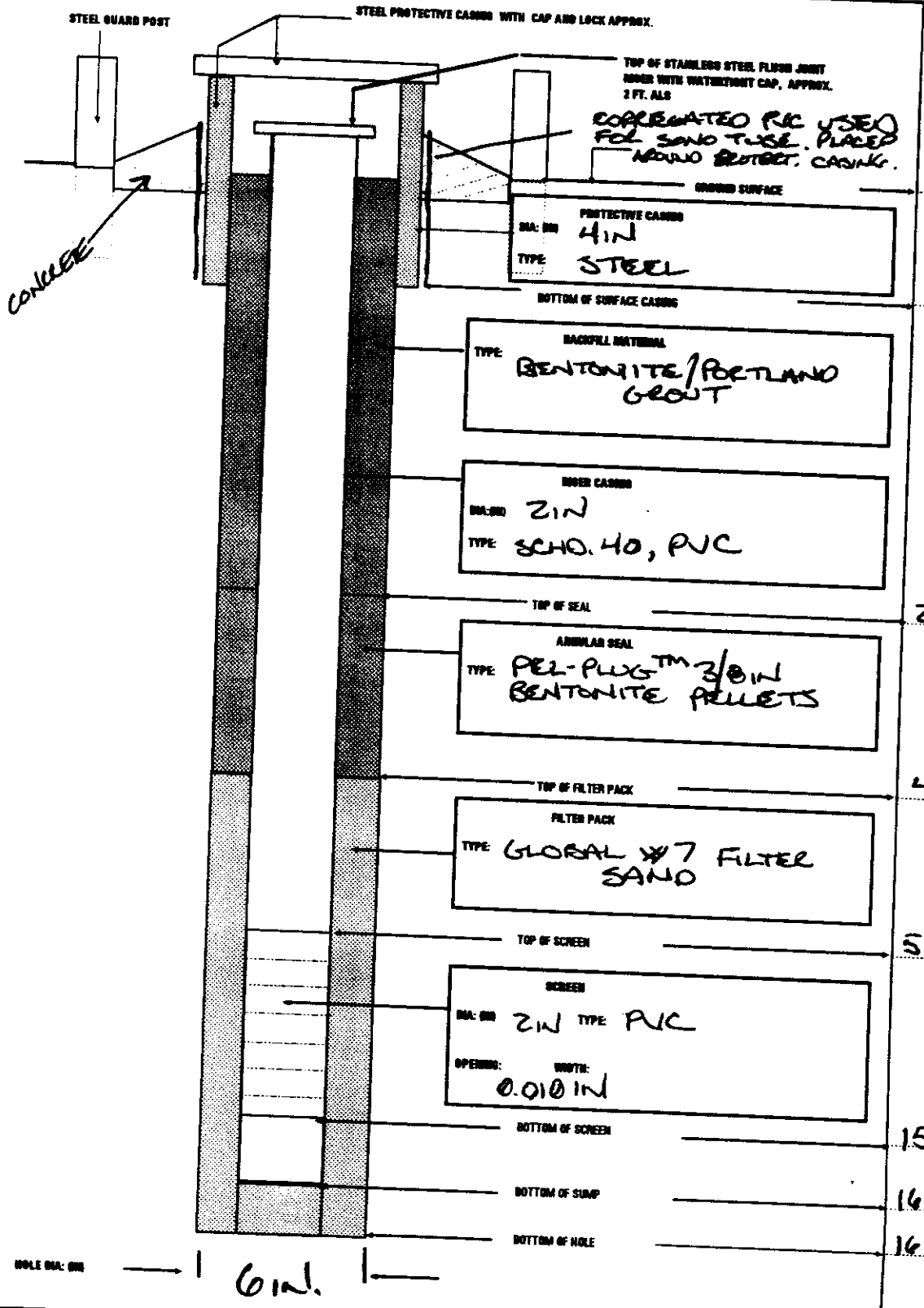
QA CHECK BY: _____ (Signature and Date)

B4

MONITORING WELL

PROJECT NAME: [illegible] DELIVERY ORDER NO: [illegible]

WELL NUMBER: RQLMW-7	BEGIN: 7/11/98	END: 7/12/98	
COORDINATES: N: 566544.355 E: 2375872.562	REFERENCE POINT: TOC	ELEVATION: ft MSL 965.91	



WELL DEVELOPMENT RECORD

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

PAGE 1 OF 1

WELL NUMBER AND LOCATION: RQLMW-7 RAMSDELL QUARRY

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY ~~uMHOS/CM~~ mS/cm	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
7/14/98	1000	<1	20.1	1.29	6.36	999	<1	<1	INITIAL WATER
	1006	6.5	16.2	1.29	6.40	615	~~6.5~~ 7.5	1+	
	1013	6.5	16.1	1.26	6.40	999	13.0	2+	
	1020	6.5	16.1	1.27	6.41	202	19.5	3+	
	1028	8	16.1	1.30	6.40	66	27.5	4+	
	1035	8	16.1	1.30	6.39	76	35.5	5+	
	1053	~20	16.1	1.30	6.41	10	~55	~8½	DEVELOPMENT CONTINUED AFTER STABILITY TO REDUCE TURBIDITY

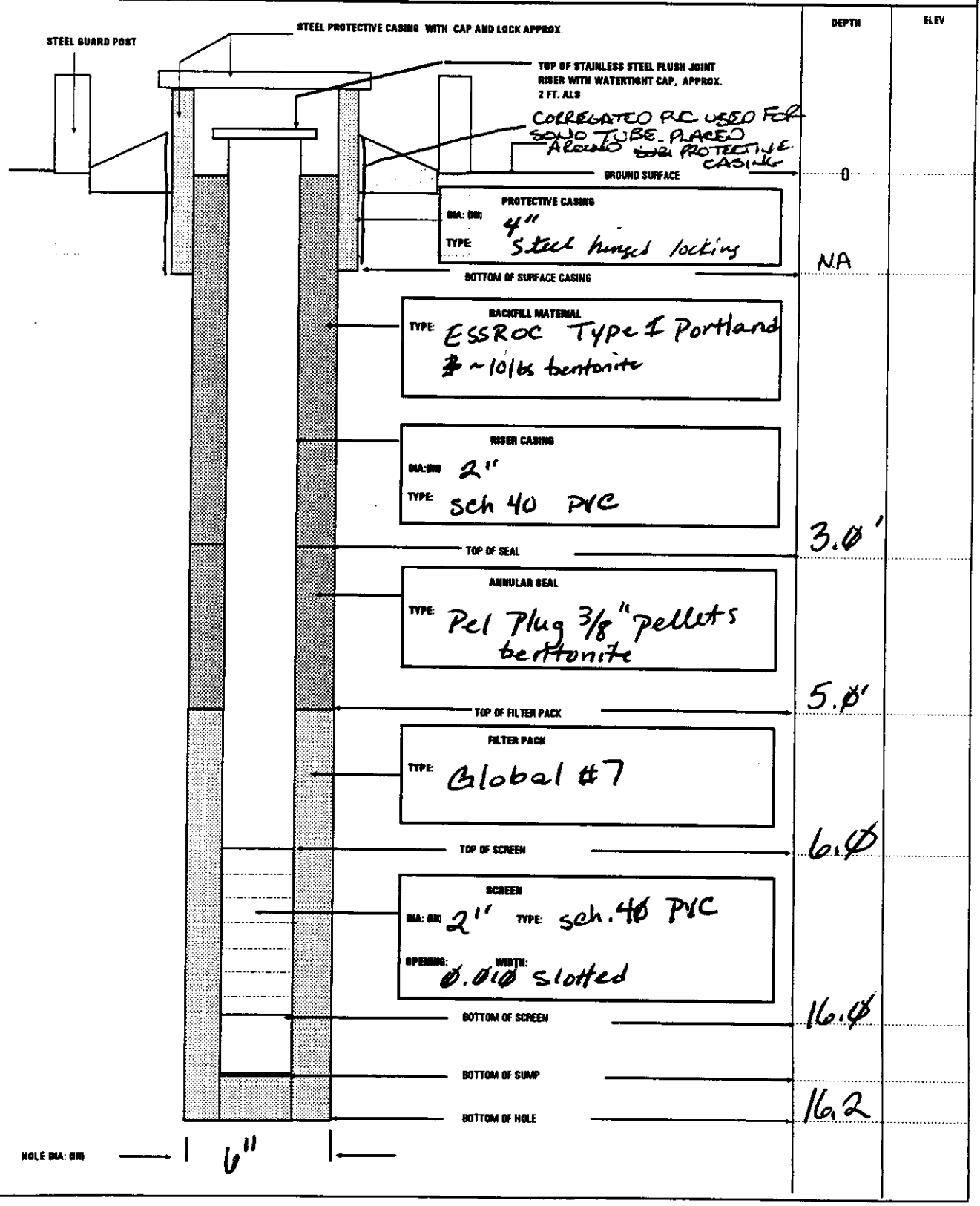
RECORDED BY: [signature] 7/14/98
(Signature and Date)

QA CHECK BY: _____
(Signature and Date)

MONITORING WELL

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 003

WELL NUMBER: RQLmw-8	**BEGIN:** 1825 07-11-98	**END:** 7-12-98
COORDINATES: N: 566327.945 E: 2376011.082	**REFERENCE POINT:** TOC	**ELEVATION:** ft MSL 966.08



WELL DEVELOPMENT RECORD

PROJECT NAME: Ramadell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 003

PAGE 1 OF 1

WELL NUMBER AND LOCATION: ROLMW-8, RAMSDELL QUARRY

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
7/14/98	1212	1	17.4	1.52	6.48	999	1	<1	INITIAL
	1218	6	15.6	1.25	6.11	349	67	7 1+	
	1224	6	14.9	1.20	6.17	137	13	2+	
	1228	6	14.9	1.15	6.20	10	19	3+	
	1234	6	14.9	1.20	6.25	10	25	4+	
	1240	6	14.7	1.14	6.22	10	31	5+	
	NOTE: WATER CLEAR AFTER DEVELOPMENT AT 1240.								
	PHOTOGRAPH OF FINAL WATER TAKEN AT 15:30.								
	WATER IN CONTAINER CHANGED COLOR (CLEAR TO ORANGE-RED)								
	IN LAPSE.								
				MK 7/14/98					

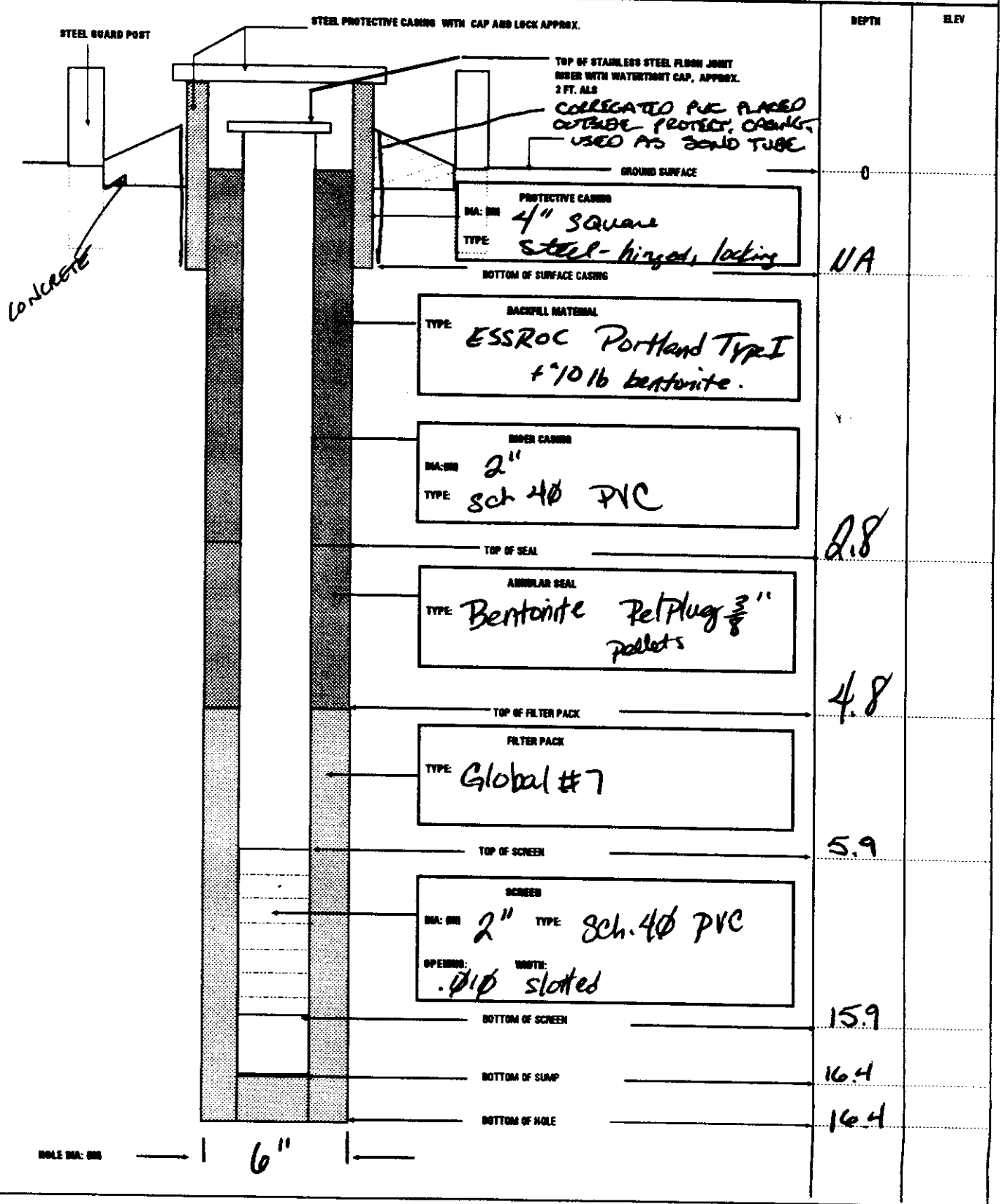
RECORDED BY: _____ 7/14/98
(Signature and Date)

QA CHECK BY: _____
(Signature and Date)

MONITORING WELL

PROJECT NAME: Ramadell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 002

WELL NUMBER: RQLMW-9		**BEGIN:** 1445 07-12-98	**END:** 7-12-98
COORDINATES:	N: 566351.199 E: 2376253.654	**REFERENCE POINT:** TOC	**ELEVATION:** ft MSL 964.580



WELL DEVELOPMENT RECORD

PROJECT NAME: Remedell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 003

PAGE 1 OF 1

WELL NUMBER AND LOCATION: RQLMW-9

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
7/14/98	1416	<1	18.3	0.364	6.68	769	8 <1	<1	INITIAL READING
	1420	8	17.4	0.408	6.52	77	~~16~~ 8	1+	
	1425	8	17.0	0.416	6.51	10	~~24~~ 16	2+	
	1432	8	16.5	0.426	6.49	10	~~32~~ 24	3+	
	1439	8	16.5	0.445	6.50	10	~~40~~ 32	4+	
	1445	8	16.5	0.445	6.55	10	40	5+	
	1454	8	16.4	0.447	6.52	10	48	6+	

MK 7/14/98

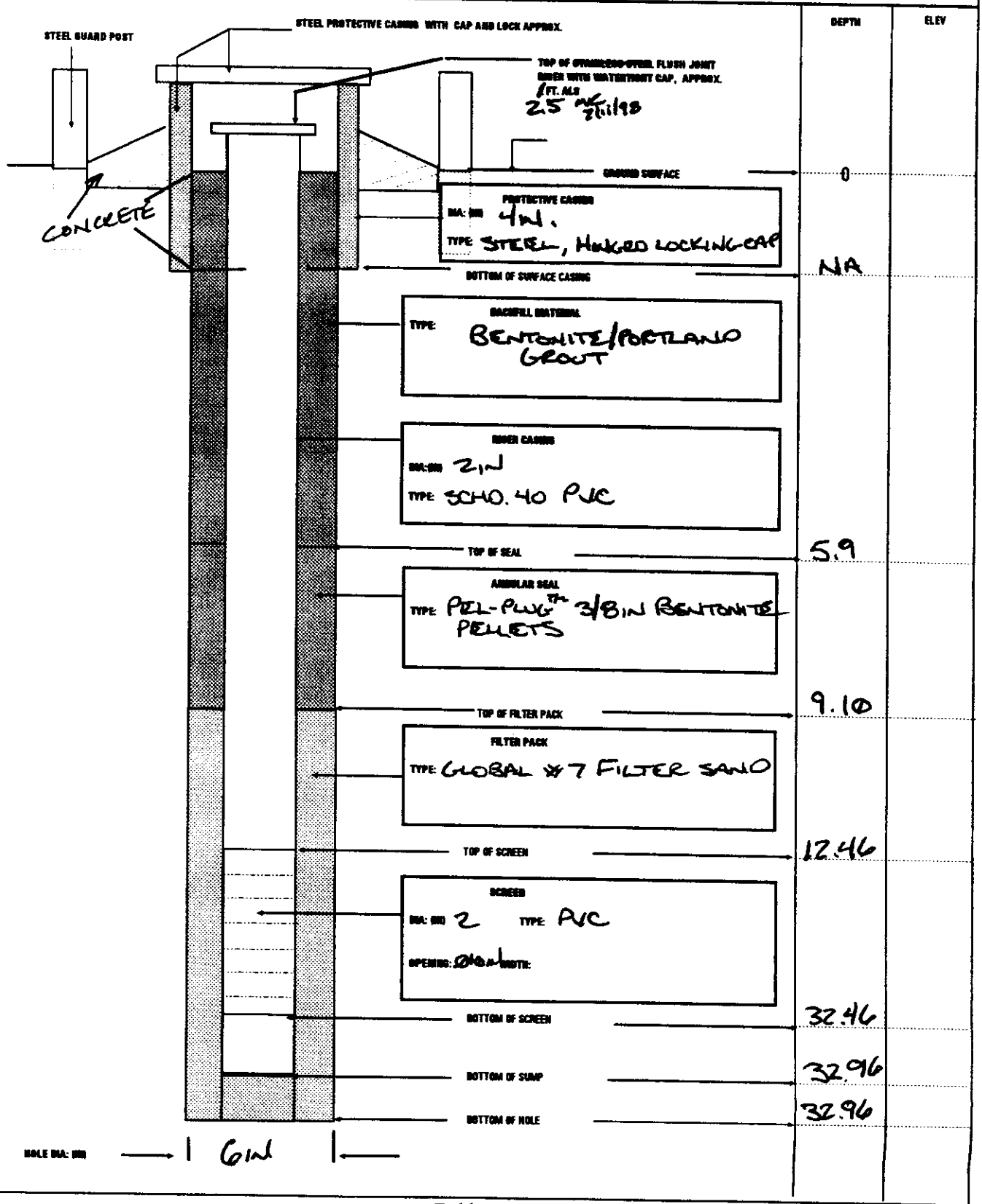
RECORDED BY: [signature] 7/14/98
(Signature and Date)

QA CHECK BY: _____
(Signature and Date)

MONITORING WELL

PROJECT NAME: Ramadell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 003

WELL NUMBER: RQLMW-10	**BEGIN:** 7/9/98	**END:** 7/11/98
COORDINATES: N: 566857.393 E: 2376048.582	**REFERENCE POINT:** TOC **ELEVATION:** ft MSL 982.140	



WELL DEVELOPMENT RECORD

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 003

PAGE 1 OF _____

WELL NUMBER AND LOCATION: RQLmw-10

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM) mS/cm	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
7/13/98	1020	~1/4	13.5	0.619	6.59	991	~1/4	<1	INITIAL READING
	1035	5.5	12.8	0.618	6.53	999	5.75	~1	
	1340	60	14.4	0.620	6.68	123	65		
	~~1315~~ 1742	40	16.3	0.614	6.94	35	105		
	1800	5	14.9	0.665	6.81	57	110		
	1813	5	14.5	0.697	6.85	97	115		
	1828	5	14.9	0.688	6.75	83	120		
	1839	5	14.9	0.643	6.71	63	125		Parameters Stable

mk 7/13/98

RECORDED BY: mk Klopp 7/13/98
(Signature and Date)

QA CHECK BY: _____
(Signature and Date)

MONITORING WELL

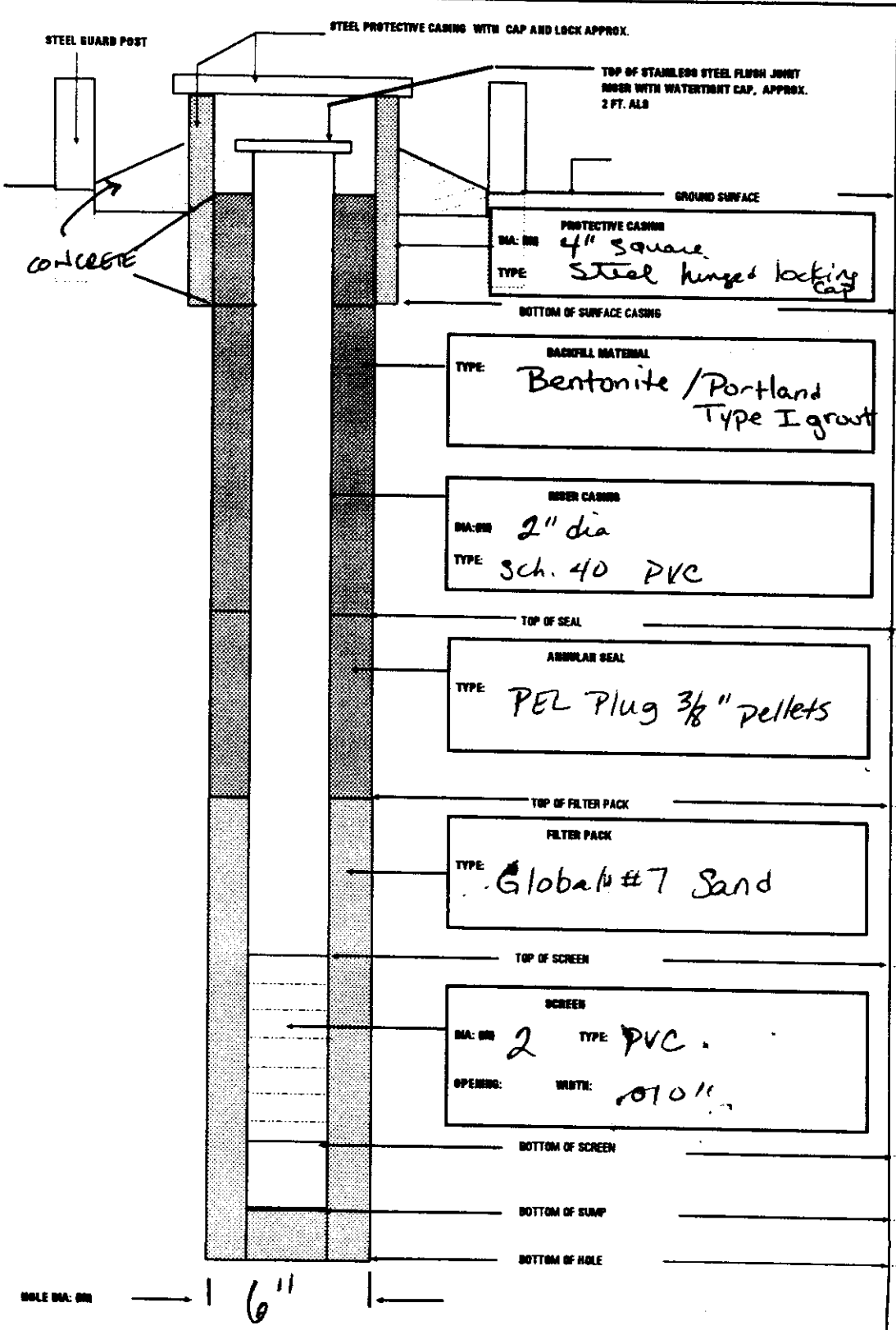
PROJECT NAME: Remedell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 063

WELL NUMBER: RQLmw-11

BEGIN: ~~10/7/98~~ 7/11/98 1630 **END:** 7/11/98

COORDINATES: N: 566819.656 E: 2376398.191

REFERENCE POINT: TOC **ELEVATION:** ft MSL 976.57



WELL DEVELOPMENT RECORD

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO:** 003

PAGE 1 OF 1

WELL NUMBER AND LOCATION: RQLMW-11

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
07-14-98	0930	2	12.7	0.233	5.90	999	2	<1	initial reading
	1305	~130	13.2	0.684	6.50	~10	~130		
	1610	~~210~~ 80	16.1	0.681	6.49	671	210		
	1618	7	13.6	0.720	6.36	496	217		
	1624	7	13.8	0.692	6.47	176	224		
	1632	7	14.1	0.672	6.48	101	231		
	1643	7	14.5	0.687	6.44	10	238		
	1648	7	14.4	0.678	6.48	10	245		
	1655	7	14.3	0.698	6.47	10	252		

RECORDED BY: [signature] 7/14/98
(Signature and Date)

QA CHECK BY: _____
(Signature and Date)

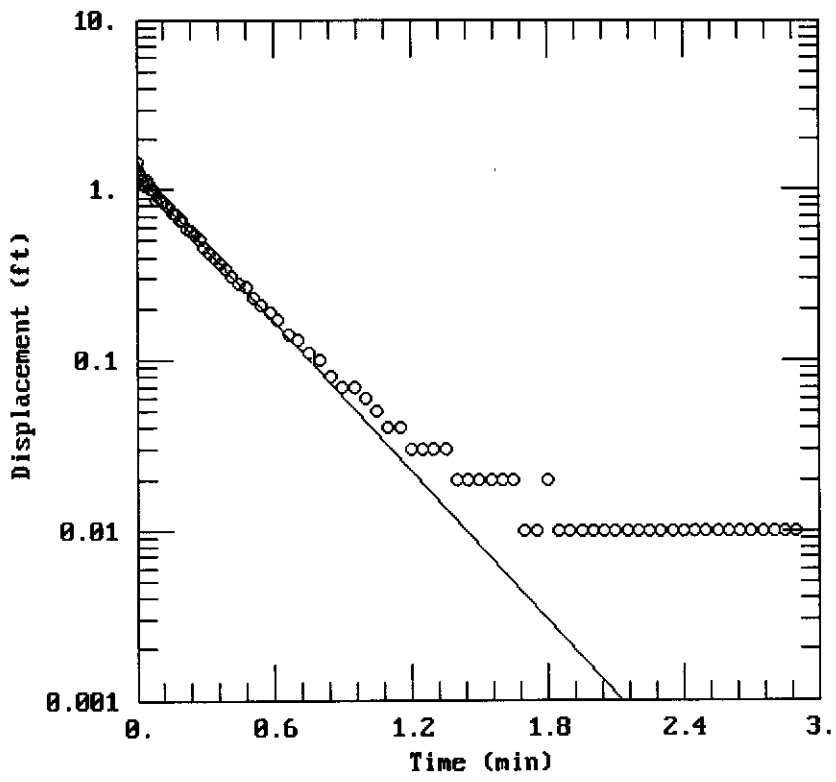
APPENDIX C

SLUG TEST DATA

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-xxxx-04-9558-500

MW-1



DATA SET:
RQLMW1.DAT
09/09/98

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Bouwer-Rice

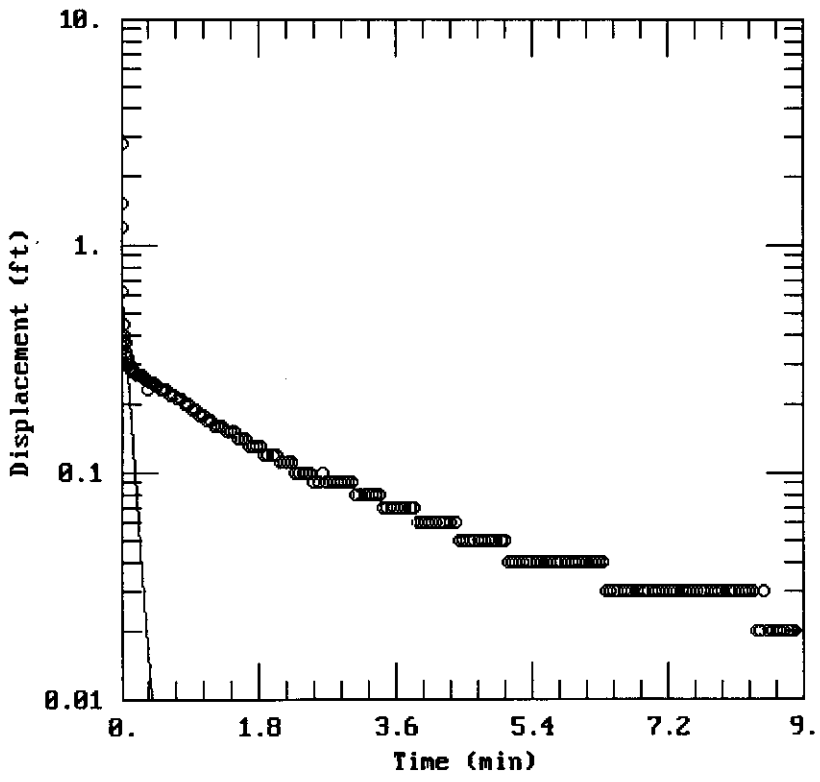
TEST DATA:
H0= 1.44 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 10. ft
b = 100. ft
H = 26.38 ft

PARAMETER ESTIMATES:
K = 0.0016 cm/sec
y0 = 1.22 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

MW-2



DATA SET:
RQLMW2.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

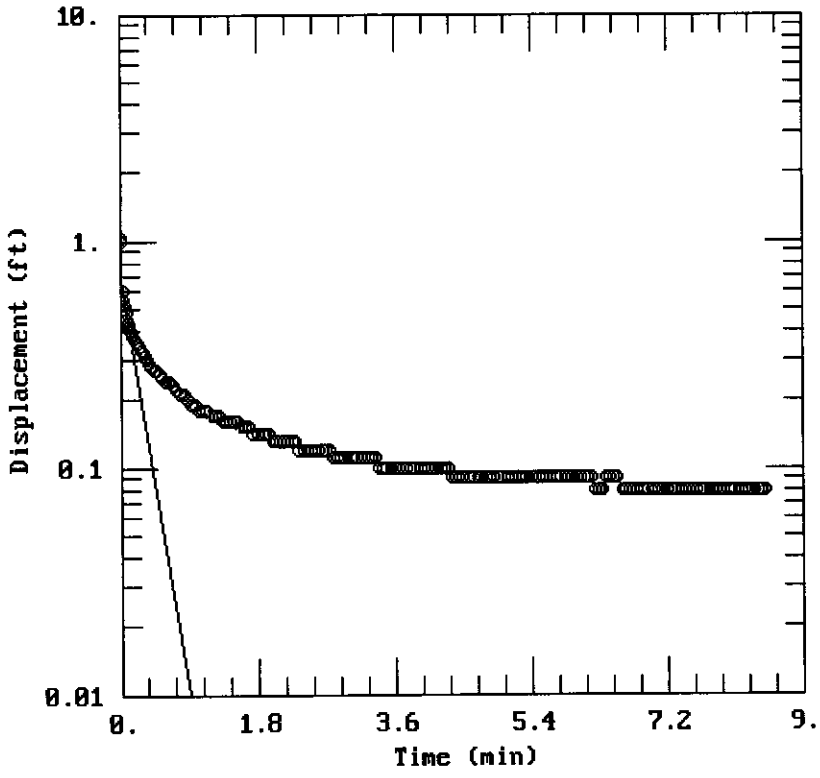
TEST DATA:
H0= 2.77 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 10. ft
b = 100. ft
H = 20.32 ft

PARAMETER ESTIMATES:
K = 0.004732 cm/sec
y0 = 0.618 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

MW-3



DATA SET:
RQLMW3.DAT
09/09/98

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Bouwer-Rice

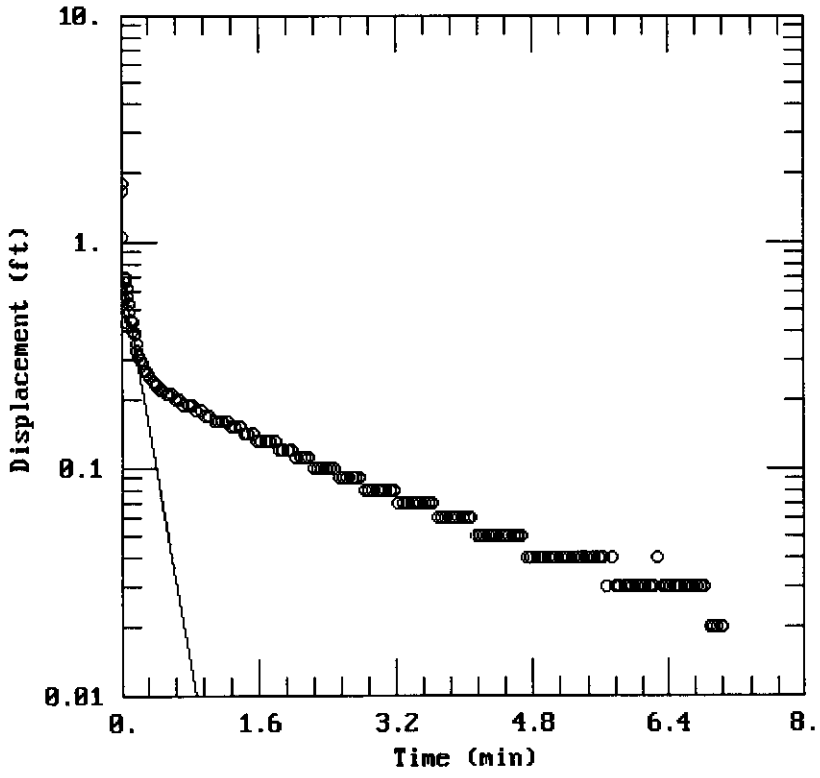
TEST DATA:
H0= 1.03 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 10. ft
b = 100. ft
H = 26.96 ft

PARAMETER ESTIMATES:
K = 0.002255 cm/sec
y0 = 0.675 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

MW-4



DATA SET:
RQLMW4.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

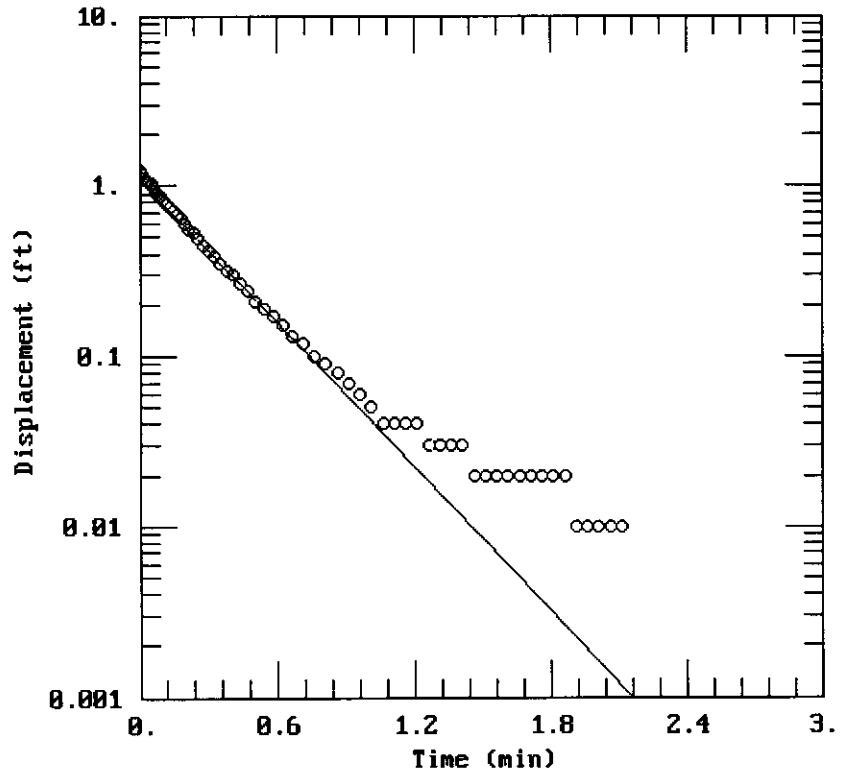
TEST DATA:
H0= 1.79 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 14. ft
b = 100. ft
H = 24.94 ft

PARAMETER ESTIMATES:
K = 0.001765 cm/sec
y0 = 0.728 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

MW-5



DATA SET:
RQLMW5.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

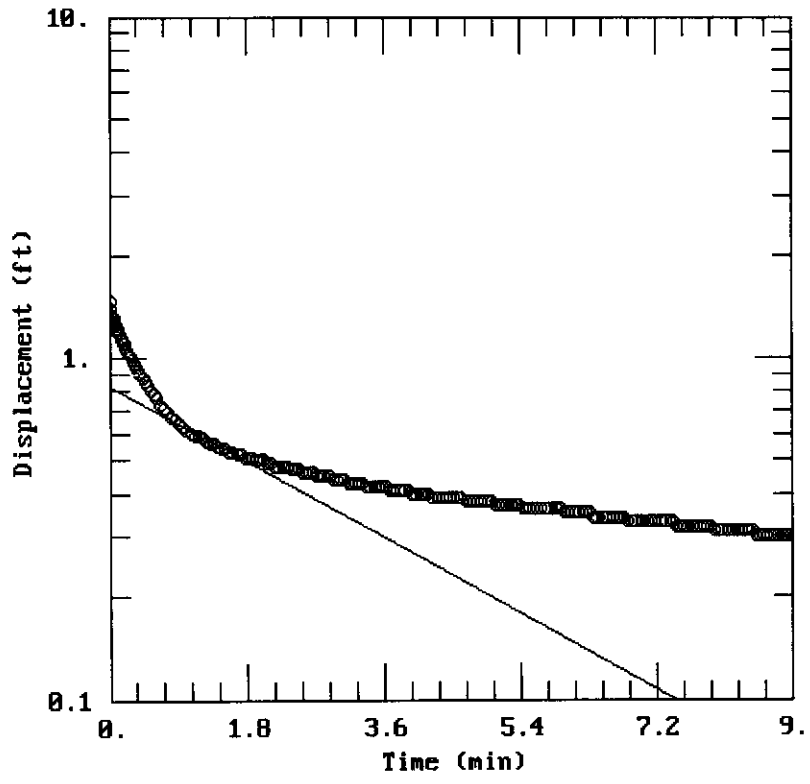
TEST DATA:
H0= 1.21 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 10. ft
b = 100. ft
H = 19.02 ft

PARAMETER ESTIMATES:
K = 0.001474 cm/sec
y0 = 1.095 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-xxxx-04-9558-500

RQLmw-006



DATA SET:
RQLMW006.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

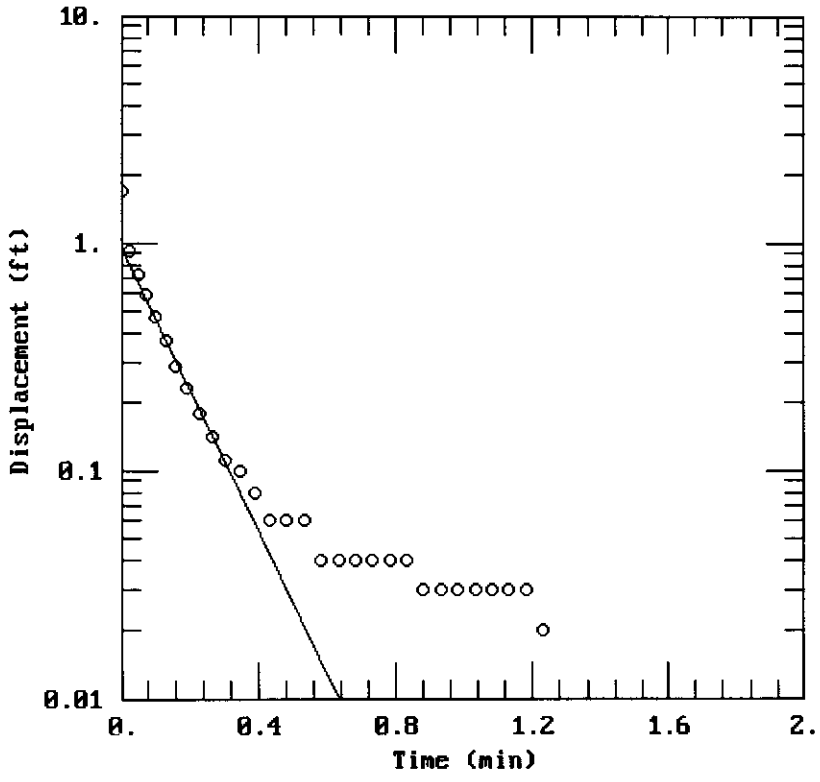
TEST DATA:
H0= 1.46 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 20. ft
b = 100. ft
H = 7.84 ft

PARAMETER ESTIMATES:
K = 0.0002044 cm/sec
y0 = 0.825 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

RQLmw-007



DATA SET:
RQLMW7.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

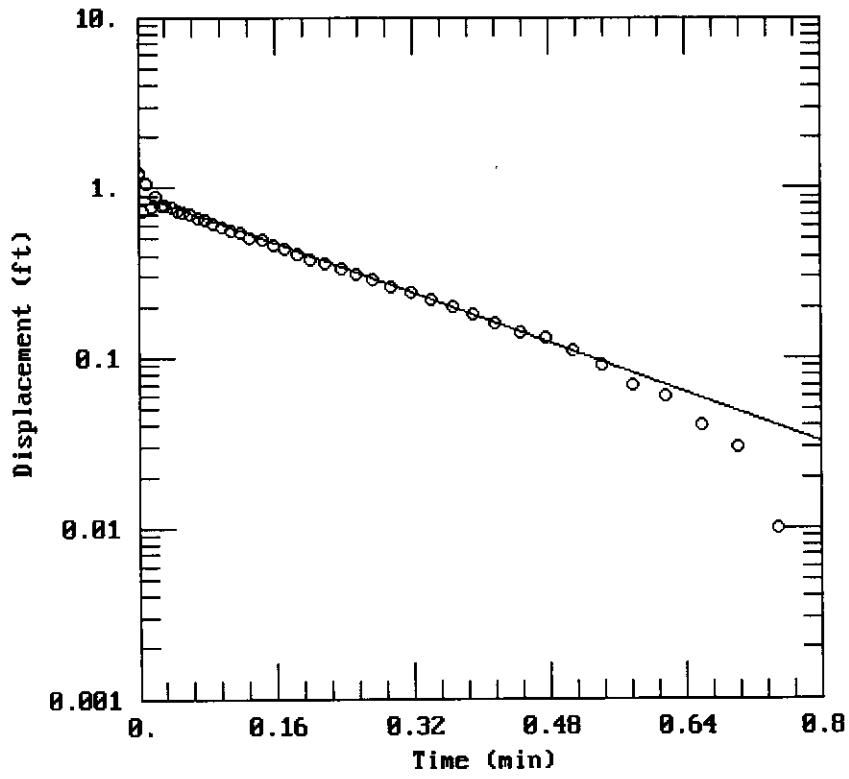
TEST DATA:
H0= 1.68 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 11.35 ft
b = 100. ft
H = 11.8 ft

PARAMETER ESTIMATES:
K = 0.0092 cm/sec
y0 = 0.938 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-xxxx-04-9558-500

RQLmw-008



DATA SET:
RQLMW8.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

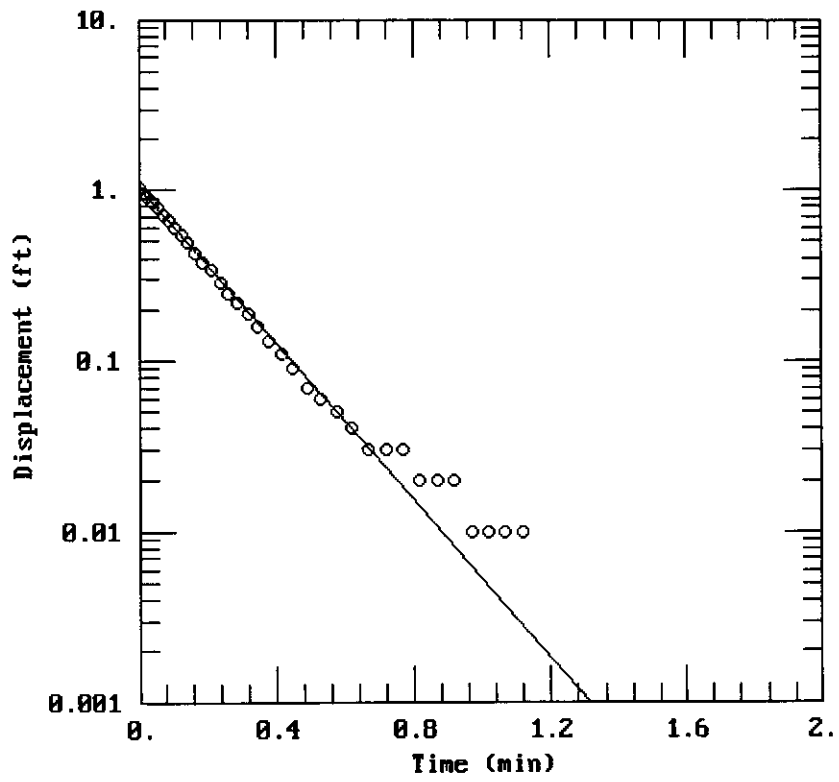
TEST DATA:
H0= 1.21 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 11.2 ft
b = 100. ft
H = 11.86 ft

PARAMETER ESTIMATES:
K = 0.005396 cm/sec
y0 = 0.9017 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

RQLmw-009



DATA SET:
RQLMW9.DAT
09/09/98

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Bouwer-Rice

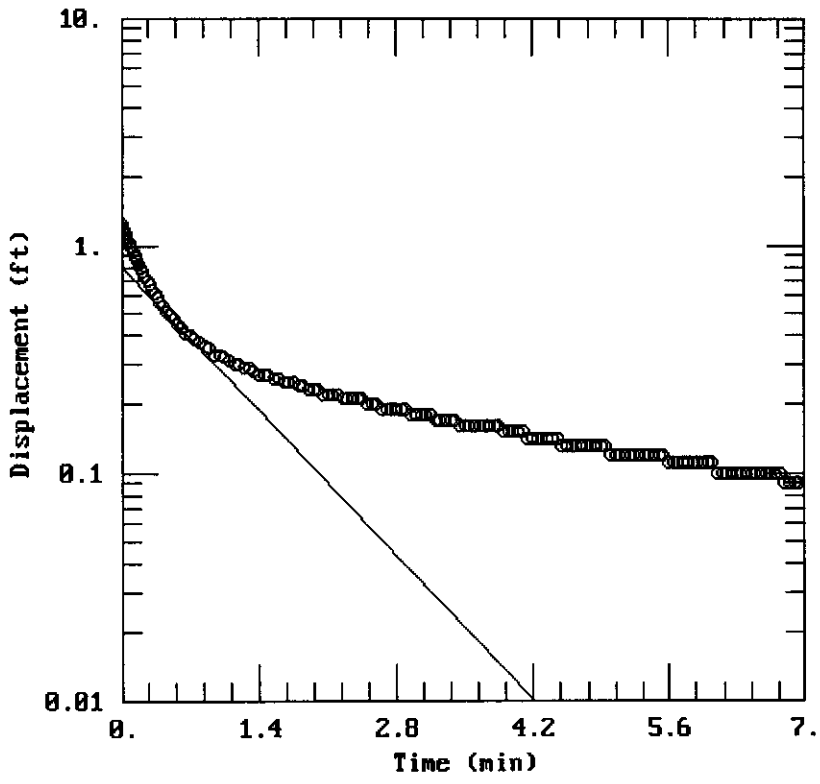
TEST DATA:
H0= 1.03 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 11.6 ft
b = 100. ft
H = 13.15 ft

PARAMETER ESTIMATES:
K = 0.001996 cm/sec
y0 = 1.019 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

RQLmw-010



DATA SET:
RQLMW10.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

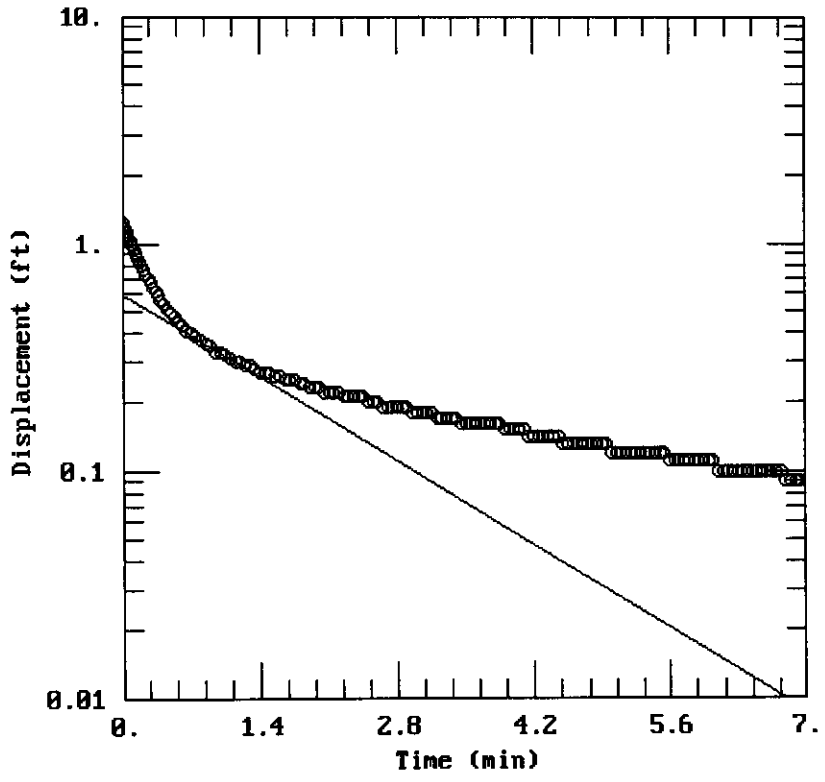
TEST DATA:
H0= 1.24 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 23.86 ft
b = 100. ft
H = 9.68 ft

PARAMETER ESTIMATES:
K = 0.0006693 cm/sec
y0 = 0.791 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

RQLmw-010



DATA SET:
RQLMW10.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

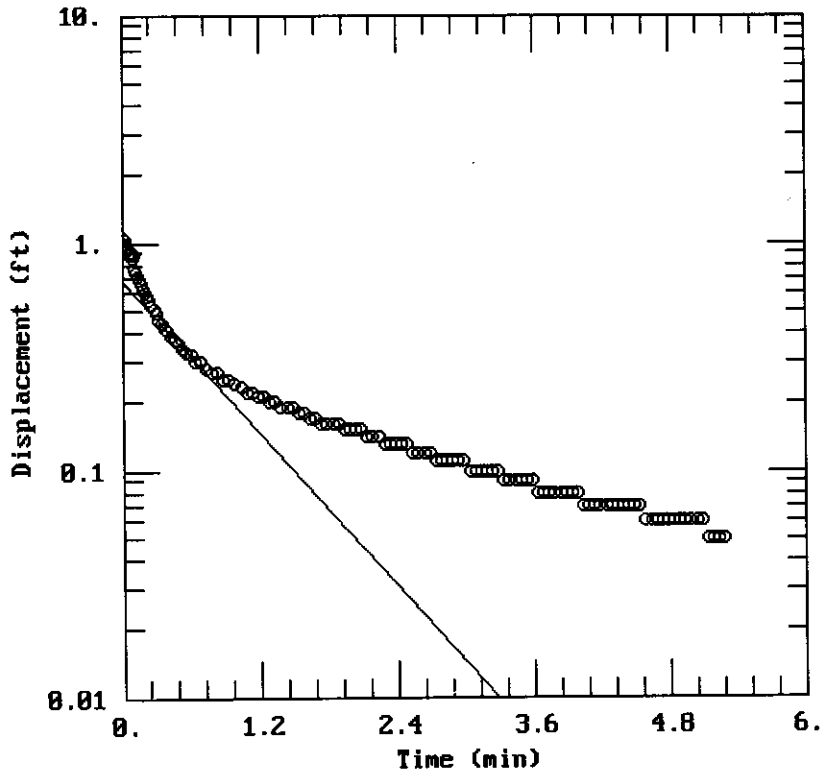
TEST DATA:
H0= 1.24 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 23.86 ft
b = 100. ft
H = 9.68 ft

PARAMETER ESTIMATES:
K = 0.0003891 cm/sec
y0 = 0.593 ft

AQTESOLV

CLIENT: USACE	COMPANY: SAIC
LOCATION: Ravenna, Ohio	PROJECT: 01-XXXX-04-9558-500

RQLmw-011



DATA SET:
RQLMW11.DAT
09/09/98

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATA:
H0= 1.04 ft
r_c= 0.0833 ft
r_w= 0.25 ft
L = 23.25 ft
b = 100. ft
H = 13.04 ft

PARAMETER ESTIMATES:
K = 0.0009034 cm/sec
y0 = 0.6726 ft

AQTESOLV

APPENDIX D

CHEMICAL ANALYTICAL DATA

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

DATA VALIDATION REASON CODES

Organic, Inorganic, and Radiological Analytical Data

Holding Times

A01 Extraction holding times were exceeded.
A02 Extraction holding times were grossly exceeded.
A03 Analysis holding times were exceeded.
A04 Analysis holding times were grossly exceeded.
A05 Samples were not preserved properly.
A06 Professional judgement was used to qualify the data.

GC/MS Tuning

B01 Mass calibration was in error, even after applying expanded criteria.
B02 Mass calibration was not performed every 12 hours.
B03 Mass calibration did not meet ion abundance criteria.
B04 Professional judgement was used to qualify the data.

Initial/Continuing Calibration - Organics

C01 Initial calibration RRF was <0.05.
C02 Initial calibration RSD was $>30\%$.
C03 Initial calibration sequence was not followed as required.
C04 Continuing calibration RRF was <0.05.
C05 Continuing calibration %D was $>25\%$.
C06 Continuing calibration was not performed at the required frequency.
C07 Resolution criteria were not met.
C08 RPD criteria were not met.
C09 RSD criteria were not met.
C10 Retention time of compounds was outside windows.
C11 Compounds were not adequately resolved.
C12 Breakdown of endrin or DDT was $>20\%$.
C13 Combined breakdown of endrin/DDT was $>30\%$.
C14 Professional judgement was used to qualify the data.

Initial/Continuing Calibration - Inorganics

D01 ICV or CCV were not performed for every analyte.
D02 ICV recovery was above the upper control limit.
D03 ICV recovery was below the lower control limit.
D04 CCV recovery was above the upper control limit.
D05 CCV recovery was below the lower control limit.
D06 Standard curve was not established with the minimum number of standards.
D07 Instrument was not calibrated daily or each time the instrument was set up.
D08 Correlation coefficient was <0.995.
D09 Mid range cyanide standard was not distilled.
D10 Professional judgement was used to qualify the data.

ICP and Furnace Requirements

E01 Interference check sample recovery was outside the control limit.
E02 Duplicate injections were outside the control limit.
E03 Post digestion spike recovery was outside the control limit.
E04 MSA was required but not performed.
E05 MSA correlation coefficient was <0.995.
E06 MSA spikes were not at the correct concentration.
E07 Serial dilution criteria were not met.
E08 Professional judgement was used to qualify the data.

Blanks

F01 Sample data were qualified as a result of the method blank.
F02 Sample data were qualified as a result of the field blank.
F03 Sample data were qualified as a result of the equipment rinsate.
F04 Sample data were qualified as a result of the trip blank.
F05 Gross contamination exists.
F06 Concentration of the contaminant was detected at a level below the CRQL.
F07 Concentration of the contaminant was detected at a level less than the action limit, but greater than the CRQL.
F08 Concentration of the contaminant was detected at a level that exceeds the action level.
F09 No laboratory blanks were analyzed.
F10 Blank had a negative value $>2\times$'s the IDL.
F11 Blanks were not analyzed at required frequency.
F12 Professional judgement was used to qualify the data.

Surrogate/Radiological Chemical Recovery

G01 Surrogate/radiological chemical recovery was above the upper control limit.
G02 Surrogate/radiological chemical recovery was below the lower control limit.
G03 Surrogate recovery was <10%.
G04 Surrogate recovery was zero.
G05 Surrogate/radiological chemical recovery data was not present.
G06 Professional judgement was used to qualify the data.
G07 Radiological chemical recovery was <20%.
G08 Radiological chemical recovery was >150%.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

H01 MS/MSD recovery was above the upper control limit.
H02 MS/MSD recovery was below the lower control limit.
H03 MS/MSD recovery was <10%.
H04 MS/MSD pairs exceed the RPD limit.
H05 No action was taken on MS/MSD results.
H06 Professional judgement was used to qualify the data.
H07 Radiological MS/MSD recovery was <20%.
H08 Radiological MS/MSD recovery was >160%.
H09 Radiological MS/MSD samples were not analyzed at the required frequency.

Matrix Spike

I01 MS recovery was above the upper control limit.
I02 MS recovery was below the lower control limit.
I03 MS recovery was <30%.
I04 No action was taken on MS data.
I05 Professional judgement was used to qualify the data.

Laboratory Duplicate

J01 Duplicate RPD/radiological duplicate error ratio (DER) was outside the control limit.
J02 Duplicate sample results were >5× the CRDL.
J03 Duplicate sample results were <5× the CRDL.
J04 Professional judgement was used to qualify the data.
J05 Duplicate was not analyzed at the required frequency.

Internal Area Summary

K01 Area counts were outside the control limits.
K02 Extremely low area counts or performance was exhibited by a major drop off.
K03 IS retention time varied by more than 30 seconds.
K04 Professional judgement was used to qualify the data.

Pesticide Cleanup Checks

L01 10% recovery was obtained during either check.
L02 Recoveries during either check were >120%.
L03 GPC Cleanup recoveries were outside the control limits.
L04 Florisil cartridge cleanup recoveries were outside the control limits.
L05 Professional judgement was used to qualify the data.

Target Compound Identification

M01 Incorrect identifications were made.
M02 Qualitative criteria were not met.
M03 Cross contamination occurred.
M04 Confirmatory analysis was not performed.
M05 No results were provided.
M06 Analysis occurred outside 12 hr GC/MS window.
M07 Professional judgement was used to qualify the data.
M08 The %D between the two pesticide/PCB column checks was >25%.

Compound Quantitation and Reported CROLs

N01 Quantitation limits were affected by large off-scale peaks.
N02 MDLs reported by the laboratory exceeded corresponding CRQLs.
N03 Professional judgement used to qualify the data.

Tentatively Identified Compounds (TICs)

O01 Compound was suspected laboratory contaminant and was not detected in the blank.
O02 TIC result was not above 10× the level found in the blank.
O03 Professional judgement was used to qualify analytical data.

Laboratory Control Samples (LCSs)

P01 LCS recovery was above upper control limit.
P02 LCS recovery was below lower control limit.
P03 LCS recovery was <50%.
P04 No action was taken on the LCS data.
P05 LCS was not analyzed at required frequency.
P06 Radiological LCS recovery was <50% for aqueous samples; <40% for solid samples.
P07 Radiological LCS recovery was >150% for aqueous samples; >160% for solid samples.
P08 Professional judgement was used to qualify the data.

Field Duplicate

Q01 Field duplicate RPDs were >30% for waters and/or > 50% for soils.
Q02 Radiological field duplicate error ratio (DER) was outside the control limit.
Q03 Duplicate sample results were >5× the CRDL.
Q04 Duplicate sample results were <5× the CRDL.

Radiological Calibration

R01 Efficiency calibration criteria were not met.
R02 Energy calibration criteria were not met.
R03 Resolution calibration criteria were not met.
R04 Background determination criteria were not met.
R05 Quench curve criteria were not met.
R06 Absorption curve criteria were not met.
R07 Plateau curve criteria were not met.
R08 Professional judgement was used to qualify the data.

Radiological Calibration Verification

S01 Efficiency verification criteria were not met.
S02 Energy verification criteria were not met.
S03 Resolution verification criteria were not met.
S04 Background verification criteria were not met.
S05 Cross-talk verification criteria were not met.
S06 Professional judgement was used to qualify the data.

Radionuclide Quantitation

T01 Detection limits were not met.
T02 Analytical uncertainties were not met and/or not reported.
T03 Inappropriate aliquot sizes were used.
T04 Professional judgement was used to qualify the data.

System Performance

V01 High background levels or a shift in the energy calibration were observed.
V02 Extraneous peaks were observed.
V03 Loss of resolution was observed.
V04 Peak-tailing or peak splitting that may result in inaccurate quantitation were observed.
V05 Professional judgement was used to qualify the data.

Laboratory Qualifiers

U — Indicates that the compound was analyzed for but not detected. The sample quantitation limit (SQL) must be corrected for dilution. For a soil/sediment sample, the value must also be corrected for percent moisture.

J — Indicates an estimated value. This qualifier is used either when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed, or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the SQL but greater than zero.

N — Indicates presumptive evidence of a compound. This qualifier is used only for TICs, where the identification is based on a mass spectral library search.

P — Used for pesticide/PCB target analytes when there is greater than 25% difference for detected concentrations between the two GC columns.

C — Applies to pesticide results where the identification has been confirmed by gas chromatography/mass spectrometry (GC/MS). If GC/MS confirmation was attempted but was unsuccessful, this qualifier is not applied; instead a laboratory-defined qualifier is used.

B — Used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and alerts the data user to take appropriate action. This qualifier is used for TICs as well as for positively identified target compounds.

E — Identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

D — Identifies all compounds identified in an analysis at a secondary dilution factor. This qualifier alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A — Indicates that a TIC was a suspected aldol-condensation product.

X — Indicates that other specific qualifiers were required to properly define the results. If used, the qualifier must be fully described and such description must be included in the Sample Data Summary Package and SDG narrative.

Validation Qualifiers

U — Indicates that the compound was analyzed for but was not detected above the reported SQL.

UJ — Indicates that the compound was not detected above the reported SQL. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the compound in the sample.

J — Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.

N — The analysis indicates the presence of a compound for which there is presumptive evidence to make a "tentative identification."

NJ — Indicates that the analysis indicates the presence of a compound that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R — Indicates that the sample results for the compound are unusable due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the compound cannot be verified.

= — Indicates that the value has been validated and that the compound has been positively identified and the associated concentration value is accurate.

Data Qualifiers for Inorganic Analytical Data

Laboratory Qualifiers

B — Indicates that the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

U — Indicates that the analyte was analyzed for but not detected.

E — Used when the reported value was estimated because of the presence of interference.

M — Indicates that the duplicate injection precision was not met.

N — Indicates that the spiked sample recovery was not within control limits.

S — Indicates that the reported value was determined by the method of standard additions (MSA).

W — Used when the post-digestion spike for furnace atomic absorption analysis was not within control limits (85 - 115%), while sample absorbance was less than 50% of spike absorbance.

*** —** Indicates that the duplicate analysis was not within control limits.

+ — Indicates that the correlation coefficient for the MSA was less than 0.995.

Validation Qualifiers

U — Indicates that the analyte was analyzed for but was not detected above the reported sample quantitation limit.

UJ — Indicates that the analyte was not detected above the reported SQL. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

J — Indicates that the analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.

R — Indicates that the sample results for the analyte are unusable due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

= — Indicates that the value has been validated and that the analyte has been positively identified and the associated concentration value is accurate.

Data Qualifiers for Radiochemical Analytical Data

Laboratory Qualifiers

< — The numerical value reported was less than the MDA.

N — The sample results were qualified to denote poor spike recovery.

* — The sample results were qualified to denote poor duplicate results.

Validation Qualifiers

U — Indicates that the radionuclide was analyzed for but was not detected above the reported sample quantitation limit.

J — Indicates that the radionuclide was positively identified. The associated numerical value is the approximate concentration of the radionuclide in the sample.

N — The analysis indicates the presence of a radionuclide for which there was presumptive evidence to make a "tentative identification."

DL — The detection limit requirements were not met. The data quality objectives may not be met.

UI — Indicates that there was uncertain identification for gamma spectroscopy. The radionuclide peaks are detected but fail to meet the positive identification criteria.

R — Indicates that the sample results for the radionuclide are unusable due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the radionuclide cannot be verified.

= — Indicates that the value has been validated and that the radionuclide has been positively identified and the associated concentration value is accurate.

Data Qualifiers for Wet Chemistry Analytical Data

Laboratory Qualifiers

U — Indicates that the analyte was analyzed for but was not detected above the reported sample quantitation limit.

J — Indicates that the analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.

Validation Qualifiers

U — Indicates that the analyte was analyzed for but was not detected above the reported sample quantitation limit.

UJ — Indicates that the analyte was not detected above the reported SQL. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

J — Indicates that the analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.

R — Indicates that the sample results for the analyte are unusable due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

= — Indicates that the value has been validated and that the analyte has been positively identified and the associated concentration value is accurate.

D1. BY ANALYTE – GROUNDWATER, SEDIMENT, AND SURFACE WATER

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4
Sample Id		RQ0001	RQ0001	RQ0002	RQ0002	RQ0003	RQ0003	RQ0004
Date		07/14/98	07/14/98	07/13/98	07/13/98	07/13/98	07/13/98	07/13/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Grab
Cyanide	MG/L	0.01 U		0.01 U		0.01 U		0.01 U
1,3,5-Trinitrobenzene	UG/L	0.2 U		0.2 U		0.2 U		0.27 U
1,3-Dinitrobenzene	UG/L	0.2 U		0.2 U		0.2 U		0.27 U
2,4,6-Trinitrotoluene	UG/L	0.2 U		0.2 U		0.2 U		0.27 U
2,4-Dinitrotoluene	UG/L	0.13 U		0.13 U		0.13 U		0.18 U
2,6-Dinitrotoluene	UG/L	0.13 U		0.13 U		0.13 U		0.085 J
2-Nitrotoluene	UG/L	0.2 U		0.2 U		0.2 U		0.27 U
3-Nitrotoluene	UG/L	0.2 U		0.2 U		0.2 U		0.27 U
4-Nitrotoluene	UG/L	0.2 U		0.2 U		0.2 U		0.27 U
HMX	UG/L	0.5 U		0.5 U		0.5 U		0.68 U
Nitrobenzene	UG/L	0.2 U		0.2 U		0.2 U		0.27 U
Nitrocellulose as N	MG/L	0.02 U		0.02 U		0.02 U		0.02 U
Nitroglycerin	UG/L	2.5 U		2.5 U		2.5 U		2.5 U
Nitroguanidine	UG/L	20 U		20 U		20 U		20 U
RDX	UG/L	0.5 U		0.14 J		0.28 J		0.68 U
Tetryl	UG/L	0.068 J		0.2 U		0.2 U		0.12 J
Aluminum	UG/L	751 J	200 U	87700 J	200 U	93.9 J	200 U	2960 J
Antimony	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Arsenic	UG/L	15.8 =	10 U	108 =	3.2 J	5 U	10 U	9.1 =
Barium	UG/L	27.5 J	17.9 U	181 J	42.7 J	48.1 J	45.5 J	64.5 J
Beryllium	UG/L	4 U	5 U	3.6 J	5 U	4 U	5 U	4 U
Cadmium	UG/L	5 U	5 U	19 =	2.4 J	5 U	5 U	5 U
Calcium	UG/L	56100 =	58200 =	91300 =	85800 =	156000 =	152000 =	118000 =
Chromium	UG/L	10 U	10 U	23.3 =	10 U	10 U	10 U	3.8 J
Cobalt	UG/L	47.2 J	38.8 J	90.6 =	50 U	50 U	50 U	29.7 J
Copper	UG/L	12.9 J	25 U	72.8 =	25 U	3.7 J	3.8 J	14 J
Iron	UG/L	19700 =	3270 =	55600 =	100 U	221 =	100 U	9880 =
Lead	UG/L	4.2 =	3 U	74.8 =	3 U	3 U	3 U	2.4 J
Magnesium	UG/L	22500 =	23400 =	29700 =	18500 =	37900 =	36700 =	22100 =
Manganese	UG/L	2320 =	2410 =	4490 =	614 =	28.1 =	12.6 J	5770 =
Mercury	UG/L	0.16 J	0.081 J	0.29 =	0.087 J	0.14 J	0.094 J	0.16 J
Nickel	UG/L	117 =	109 =	169 =	18.8 J	40 U	40 U	76.8 =

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4
Sample Id		RQ0001	RQ0001	RQ0002	RQ0002	RQ0003	RQ0003	RQ0004
Date		07/14/98	07/14/98	07/13/98	07/13/98	07/13/98	07/13/98	07/13/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Grab
Potassium	UG/L	5840 =	6260 =	5790 =	3340 J	15800 =	15500 =	2250 J
Selenium	UG/L	5 U	5 U	4.8 J	5 U	5 U	5 U	5 U
Silver	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sodium	UG/L	4650 U	3910 U	2920 U	2050 U	7660 =	7590 =	2070 U
Thallium	UG/L	2 U	2 U	3.7 =	1.1 J	2 U	2 U	2 U
Vanadium	UG/L	50 U	50 U	22.4 J	50 U	50 U	50 U	50 U
Zinc	UG/L	596 =	374 =	1040 =	168 =	41.9 =	71.4 =	381 =
1,2,4-Trichlorobenzene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
1,2-Dichlorobenzene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
1,3-Dichlorobenzene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
1,4-Dichlorobenzene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2,2'-oxybis (1-chloropropane)	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2,4,5-Trichlorophenol	UG/L	25 UJ		25 UJ		25 UJ		25 UJ
2,4,6-Trichlorophenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2,4-Dichlorophenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2,4-Dimethylphenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2,4-Dinitrophenol	UG/L	25 UJ		25 UJ		25 UJ		25 UJ
2,4-Dinitrotoluene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2,6-Dinitrotoluene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2-Chloronaphthalene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2-Chlorophenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2-Methylnaphthalene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2-Methylphenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
2-Nitroaniline	UG/L	25 UJ		25 UJ		25 UJ		25 UJ
2-Nitrophenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
3,3'-Dichlorobenzidine	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
3-Nitroaniline	UG/L	25 UJ		25 UJ		25 UJ		25 UJ
4,6-Dinitro-o-Cresol	UG/L	25 UJ		25 UJ		25 UJ		25 UJ
4-Bromophenyl-phenyl Ether	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
4-Chloroaniline	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
4-Chlorophenyl-phenylether	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
4-Methylphenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4
Sample Id		RQ0001	RQ0001	RQ0002	RQ0002	RQ0003	RQ0003	RQ0004
Date		07/14/98	07/14/98	07/13/98	07/13/98	07/13/98	07/13/98	07/13/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Grab
4-Nitroaniline	UG/L	25 UJ		25 UJ		25 UJ		25 UJ
4-Nitrophenol	UG/L	25 UJ		25 UJ		25 UJ		25 UJ
4-chloro-3-methylphenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Acenaphthene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Acenaphthylene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Anthracene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Benzo(a)anthracene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Benzo(a)pyrene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Benzo(b)fluoranthene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Benzo(g,h,i)perylene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Benzo(k)fluoranthene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Bis(2-chloroethoxy)methane	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Bis(2-chloroethyl)ether	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Bis(2-ethylhexyl)phthalate	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Butyl Benzyl Phthalate	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Carbazole	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Chrysene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Di-n-butyl Phthalate	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Di-n-octyl Phthalate	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Dibenzo(a,h)anthracene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Dibenzofuran	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Diethyl Phthalate	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Dimethyl Phthalate	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Fluoranthene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Fluorene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Hexachlorobenzene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Hexachlorobutadiene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Hexachlorocyclopentadiene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Hexachloroethane	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Indeno(1,2,3-cd)pyrene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Isophorone	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
N-Nitroso-di-n-propylamine	UG/L	10 UJ		10 UJ		10 UJ		10 UJ

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4
Sample Id		RQ0001	RQ0001	RQ0002	RQ0002	RQ0003	RQ0003	RQ0004
Date		07/14/98	07/14/98	07/13/98	07/13/98	07/13/98	07/13/98	07/13/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Grab
N-Nitrosodiphenylamine	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Naphthalene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Nitrobenzene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Pentachlorophenol	UG/L	25 UJ		25 UJ		25 UJ		25 UJ
Phenanthrene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Phenol	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
Pyrene	UG/L	10 UJ		10 UJ		10 UJ		10 UJ
1,1,1-Trichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1,2,2-Tetrachloroethane	UG/L	5 U		5 U		5 U		5 U
1,1,2-Trichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1-Dichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1-Dichloroethene	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloroethane	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloroethene	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloropropane	UG/L	5 U		5 U		5 U		5 U
1,3-cis-Dichloropropene	UG/L	5 U		5 U		5 U		5 U
1,3-trans-Dichloropropene	UG/L	5 U		5 U		5 U		5 U
2-Butanone	UG/L	10 U		10 U		10 U		10 U
2-Hexanone	UG/L	10 U		10 U		10 U		10 U
4-Methyl-2-pentanone	UG/L	10 U		10 U		10 U		10 U
Acetone	UG/L	10 U		10 U		10 U		10 U
Benzene	UG/L	5 U		5 U		5 U		5 U
Bromodichloromethane	UG/L	5 U		5 U		5 U		5 U
Bromoform	UG/L	5 U		5 U		5 U		5 U
Bromomethane	UG/L	10 U		10 U		10 U		10 U
Carbon Disulfide	UG/L	5 U		5 U		5 U		5 U
Carbon Tetrachloride	UG/L	5 U		5 U		5 U		5 U
Chlorobenzene	UG/L	5 U		5 U		5 U		5 U
Chloroethane	UG/L	10 U		10 U		10 U		10 U
Chloroform	UG/L	5 U		5 U		5 U		5 U
Chloromethane	UG/L	10 U		10 U		10 U		10 U
Dibromochloromethane	UG/L	5 U		5 U		5 U		5 U

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4
Sample Id		**RQ0001**	**RQ0001**	**RQ0002**	**RQ0002**	**RQ0003**	**RQ0003**	**RQ0004**
Date		**07/14/98**	**07/14/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**	**07/13/98**
Filtered		**Total**	**Dissolved**	**Total**	**Dissolved**	**Total**	**Dissolved**	**Total**
Sample Type		**Grab**	**Grab**	**Grab**	**Grab**	**Grab**	**Grab**	**Grab**
Ethylbenzene	UG/L	5 U		5 U		5 U		5 U
Methylene Chloride	UG/L	5 U		5 U		5 U		5 U
Styrene	UG/L	5 U		5 U		5 U		5 U
Tetrachloroethene	UG/L	5 U		5 U		5 U		5 U
Toluene	UG/L	5 U		5 U		5 U		5 U
Trichloroethene	UG/L	5 U		5 U		5 U		5 U
Vinyl Chloride	UG/L	10 U		10 U		10 U		10 U
Xylenes, Total	UG/L	5 U		5 U		5 U		5 U

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-4	MW-5	MW-5	MW-5	MW-5	RQLmw-006	RQLmw-006
Sample Id		RQ0004	RQ0047	RQ0047	RQ0005	RQ0005	RQ0007	RQ0007
Date		07/13/98	07/13/98	07/13/98	07/13/98	07/13/98	07/25/98	07/25/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab
Cyanide	MG/L		0.01 U		0.01 U		0.01 UJ	
1,3,5-Trinitrobenzene	UG/L		0.2 U		0.2 U		0.2 UJ	
1,3-Dinitrobenzene	UG/L		0.2 U		0.2 U		0.099 J	
2,4,6-Trinitrotoluene	UG/L		0.26 =		0.27 =		0.2 UJ	
2,4-Dinitrotoluene	UG/L		0.13 U		0.13 U		0.13 UJ	
2,6-Dinitrotoluene	UG/L		0.13 U		0.13 U		0.13 UJ	
2-Nitrotoluene	UG/L		0.2 U		0.2 U		0.2 UJ	
3-Nitrotoluene	UG/L		0.2 U		0.2 U		0.2 UJ	
4-Nitrotoluene	UG/L		0.082 J		0.2 U		0.2 UJ	
HMX	UG/L		0.5 U		0.5 U		0.5 UJ	
Nitrobenzene	UG/L		0.2 U		0.2 U		0.2 UJ	
Nitrocellulose as N	MG/L		0.02 U		0.02 U		0.2 U	
Nitroglycerin	UG/L		2.5 U		2.5 U		2.8 J	
Nitroguanidine	UG/L		20 U		20 U		20 U	
RDX	UG/L		0.5 U		0.5 U		0.12 J	
Tetryl	UG/L		0.2 U		0.2 U		0.2 UJ	
Aluminum	UG/L	200 U	59.4 J	54.4 J	200 U	200 U	200 U	200 U
Antimony	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Arsenic	UG/L	10 U	5.4 =	4 J	3.3 J	3.1 J	15 =	9.9 J
Barium	UG/L	42.7 J	17.4 U	17.7 U	16.7 U	16.6 U	30.2 J	29.7 J
Beryllium	UG/L	5 U	4 U	5 U	4 U	5 U	4 U	5 U
Cadmium	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Calcium	UG/L	109000 =	47600 =	52900 =	51100 =	53300 =	98800 =	94000 =
Chromium	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cobalt	UG/L	22.7 J	50 U	50 U	50 U	50 U	196 =	206 =
Copper	UG/L	3.4 J	4.3 J	25 U	25 U	25 U	25 U	25 U
Iron	UG/L	4650 =	7990 =	6090 =	8260 =	6690 =	1780 =	1240 =
Lead	UG/L	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Magnesium	UG/L	21100 =	30000 =	32300 =	32900 =	34100 =	38500 =	37200 =
Manganese	UG/L	5220 =	6270 =	6830 =	6650 =	6960 =	5550 J	5460 J
Mercury	UG/L	0.081 J	0.085 J	0.092 J	0.098 J	0.087 J	0.2 U	0.2 U
Nickel	UG/L	51.4 =	40 U	17.6 J	15.1 J	15 J	937 =	945 =

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-4	MW-5	MW-5	MW-5	MW-5	RQLmw-006	RQLmw-006
Sample Id		RQ0004	RQ0047	RQ0047	RQ0005	RQ0005	RQ0007	RQ0007
Date		07/13/98	07/13/98	07/13/98	07/13/98	07/13/98	07/25/98	07/25/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab
Potassium	UG/L	1620 J	4010 J	4350 J	4440 J	4540 J	2910 J	2910 J
Selenium	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Silver	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sodium	UG/L	2050 U	4130 U	3950 U	3990 U	4150 U	1760 J	1900 J
Thallium	UG/L	2 U	1.3 J	2 U	2 U	2 U	2 U	2 U
Vanadium	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Zinc	UG/L	155 =	20 U	20 U	20 U	20 U	47.8 =	41.7 =
1,2,4-Trichlorobenzene	UG/L		10 UJ		10 UJ		10 UJ	
1,2-Dichlorobenzene	UG/L		10 UJ		10 UJ		10 UJ	
1,3-Dichlorobenzene	UG/L		10 UJ		10 UJ		10 UJ	
1,4-Dichlorobenzene	UG/L		10 UJ		10 UJ		10 UJ	
2,2'-oxybis (1-chloropropane)	UG/L		10 UJ		10 UJ		10 UJ	
2,4,5-Trichlorophenol	UG/L		25 UJ		25 UJ		25 UJ	
2,4,6-Trichlorophenol	UG/L		10 UJ		10 UJ		10 UJ	
2,4-Dichlorophenol	UG/L		10 UJ		10 UJ		10 UJ	
2,4-Dimethylphenol	UG/L		10 UJ		10 UJ		10 UJ	
2,4-Dinitrophenol	UG/L		25 UJ		25 UJ		25 UJ	
2,4-Dinitrotoluene	UG/L		10 UJ		10 UJ		10 UJ	
2,6-Dinitrotoluene	UG/L		10 UJ		10 UJ		10 UJ	
2-Chloronaphthalene	UG/L		10 UJ		10 UJ		10 UJ	
2-Chlorophenol	UG/L		10 UJ		10 UJ		10 UJ	
2-Methylnaphthalene	UG/L		10 UJ		10 UJ		10 UJ	
2-Methylphenol	UG/L		10 UJ		10 UJ		10 UJ	
2-Nitroaniline	UG/L		25 UJ		25 UJ		25 UJ	
2-Nitrophenol	UG/L		10 UJ		10 UJ		10 UJ	
3,3'-Dichlorobenzidine	UG/L		10 UJ		10 UJ		10 UJ	
3-Nitroaniline	UG/L		25 UJ		25 UJ		25 UJ	
4,6-Dinitro-o-Cresol	UG/L		25 UJ		25 UJ		25 UJ	
4-Bromophenyl-phenyl Ether	UG/L		10 UJ		10 UJ		10 UJ	
4-Chloroaniline	UG/L		10 UJ		10 UJ		10 UJ	
4-Chlorophenyl-phenylether	UG/L		10 UJ		10 UJ		10 UJ	
4-Methylphenol	UG/L		10 UJ		10 UJ		10 UJ	

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-4	MW-5	MW-5	MW-5	MW-5	RQLmw-006	RQLmw-006
Sample Id		RQ0004	RQ0047	RQ0047	RQ0005	RQ0005	RQ0007	RQ0007
Date		07/13/98	07/13/98	07/13/98	07/13/98	07/13/98	07/25/98	07/25/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab
4-Nitroaniline	UG/L		25 UJ		25 UJ		25 UJ	
4-Nitrophenol	UG/L		25 UJ		25 UJ		25 UJ	
4-chloro-3-methylphenol	UG/L		10 UJ		10 UJ		10 UJ	
Acenaphthene	UG/L		10 UJ		10 UJ		10 UJ	
Acenaphthylene	UG/L		10 UJ		10 UJ		10 UJ	
Anthracene	UG/L		10 UJ		10 UJ		10 UJ	
Benzo(a)anthracene	UG/L		10 UJ		10 UJ		10 UJ	
Benzo(a)pyrene	UG/L		10 UJ		10 UJ		10 UJ	
Benzo(b)fluoranthene	UG/L		10 UJ		10 UJ		10 UJ	
Benzo(g,h,i)perylene	UG/L		10 UJ		10 UJ		10 UJ	
Benzo(k)fluoranthene	UG/L		10 UJ		10 UJ		10 UJ	
Bis(2-chloroethoxy)methane	UG/L		10 UJ		10 UJ		10 UJ	
Bis(2-chloroethyl)ether	UG/L		10 UJ		10 UJ		10 UJ	
Bis(2-ethylhexyl)phthalate	UG/L		10 UJ		10 UJ		10 UJ	
Butyl Benzyl Phthalate	UG/L		10 UJ		10 UJ		10 UJ	
Carbazole	UG/L		10 UJ		10 UJ		10 UJ	
Chrysene	UG/L		10 UJ		10 UJ		10 UJ	
Di-n-butyl Phthalate	UG/L		10 UJ		10 UJ		10 UJ	
Di-n-octyl Phthalate	UG/L		10 UJ		10 UJ		10 UJ	
Dibenzo(a,h)anthracene	UG/L		10 UJ		10 UJ		10 UJ	
Dibenzofuran	UG/L		10 UJ		10 UJ		10 UJ	
Diethyl Phthalate	UG/L		10 UJ		10 UJ		10 UJ	
Dimethyl Phthalate	UG/L		10 UJ		10 UJ		10 UJ	
Fluoranthene	UG/L		10 UJ		10 UJ		10 UJ	
Fluorene	UG/L		10 UJ		10 UJ		10 UJ	
Hexachlorobenzene	UG/L		10 UJ		10 UJ		10 UJ	
Hexachlorobutadiene	UG/L		10 UJ		10 UJ		10 UJ	
Hexachlorocyclopentadiene	UG/L		10 UJ		10 UJ		10 UJ	
Hexachloroethane	UG/L		10 UJ		10 UJ		10 UJ	
Indeno(1,2,3-cd)pyrene	UG/L		10 UJ		10 UJ		10 UJ	
Isophorone	UG/L		10 UJ		10 UJ		10 UJ	
N-Nitroso-di-n-propylamine	UG/L		10 UJ		10 UJ		10 UJ	

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-4	MW-5	MW-5	MW-5	MW-5	RQLmw-006	RQLmw-006
Sample Id		RQ0004	RQ0047	RQ0047	RQ0005	RQ0005	RQ0007	RQ0007
Date		07/13/98	07/13/98	07/13/98	07/13/98	07/13/98	07/25/98	07/25/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab
N-Nitrosodiphenylamine	UG/L		10 UJ		10 UJ		10 UJ	
Naphthalene	UG/L		10 UJ		10 UJ		10 UJ	
Nitrobenzene	UG/L		10 UJ		10 UJ		10 UJ	
Pentachlorophenol	UG/L		25 UJ		25 UJ		25 UJ	
Phenanthrene	UG/L		10 UJ		10 UJ		10 UJ	
Phenol	UG/L		10 UJ		10 UJ		10 UJ	
Pyrene	UG/L		10 UJ		10 UJ		10 UJ	
1,1,1-Trichloroethane	UG/L		5 U		5 U		5 UJ	
1,1,2,2-Tetrachloroethane	UG/L		5 U		5 U		5 UJ	
1,1,2-Trichloroethane	UG/L		5 U		5 U		5 UJ	
1,1-Dichloroethane	UG/L		5 U		5 U		5 UJ	
1,1-Dichloroethene	UG/L		5 U		5 U		5 UJ	
1,2-Dichloroethane	UG/L		5 U		5 U		5 UJ	
1,2-Dichloroethene	UG/L		5 U		5 U		5 UJ	
1,2-Dichloropropane	UG/L		5 U		5 U		5 UJ	
1,3-cis-Dichloropropene	UG/L		5 U		5 U		5 UJ	
1,3-trans-Dichloropropene	UG/L		5 U		5 U		5 UJ	
2-Butanone	UG/L		10 U		10 U		10 UJ	
2-Hexanone	UG/L		10 U		10 U		10 UJ	
4-Methyl-2-pentanone	UG/L		10 U		10 U		10 UJ	
Acetone	UG/L		10 U		10 U		8.1 J	
Benzene	UG/L		5 U		5 U		0.52 J	
Bromodichloromethane	UG/L		5 U		5 U		5 UJ	
Bromoform	UG/L		5 U		5 U		5 UJ	
Bromomethane	UG/L		10 U		10 U		10 UJ	
Carbon Disulfide	UG/L		5 U		5 U		2.4 J	
Carbon Tetrachloride	UG/L		5 U		5 U		5 UJ	
Chlorobenzene	UG/L		5 U		5 U		5 UJ	
Chloroethane	UG/L		10 U		10 U		10 UJ	
Chloroform	UG/L		5 U		5 U		5 UJ	
Chloromethane	UG/L		10 U		10 U		10 UJ	
Dibromochloromethane	UG/L		5 U		5 U		5 UJ	

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		MW-4	MW-5	MW-5	MW-5	MW-5	RQLmw-006	RQLmw-006
Sample Id		RQ0004	RQ0047	RQ0047	RQ0005	RQ0005	RQ0007	RQ0007
Date		07/13/98	07/13/98	07/13/98	07/13/98	07/13/98	07/25/98	07/25/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab
Ethylbenzene	UG/L		5 U		5 U		5 UJ	
Methylene Chloride	UG/L		5 U		5 U		5 UJ	
Styrene	UG/L		5 U		5 U		5 UJ	
Tetrachloroethene	UG/L		5 U		5 U		5 UJ	
Toluene	UG/L		5 U		5 U		5 UJ	
Trichloroethene	UG/L		5 U		5 U		5 UJ	
Vinyl Chloride	UG/L		10 U		10 U		10 UJ	
Xylenes, Total	UG/L		5 U		5 U		5 UJ	

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-007	RQLmw-007	RQLmw-008	RQLmw-008	RQLmw-009	RQLmw-009	RQLmw-010
Sample Id		RQ0009	RQ0009	RQ0011	RQ0011	RQ0013	RQ0013	RQ0015
Date		07/22/98	07/22/98	07/22/98	07/22/98	07/17/98	07/17/98	07/25/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Grab
Cyanide	MG/L	0.01 U		0.01 U		0.01 U		0.01 U
1,3,5-Trinitrobenzene	UG/L	0.2 UJ		0.2 U		0.2 U		0.2 U
1,3-Dinitrobenzene	UG/L	0.2 UJ		0.2 U		0.2 U		0.2 U
2,4,6-Trinitrotoluene	UG/L	0.2 UJ		0.2 U		0.2 U		0.2 U
2,4-Dinitrotoluene	UG/L	0.13 UJ		0.13 =		0.13 U		0.13 U
2,6-Dinitrotoluene	UG/L	0.13 UJ		0.13 U		0.13 U		0.13 U
2-Nitrotoluene	UG/L	0.2 UJ		0.2 U		0.2 U		0.2 U
3-Nitrotoluene	UG/L	0.2 UJ		0.2 U		0.2 U		0.2 U
4-Nitrotoluene	UG/L	0.2 UJ		0.2 U		0.2 U		0.2 U
HMX	UG/L	0.5 UJ		0.06 J		0.5 U		0.5 U
Nitrobenzene	UG/L	0.2 UJ		0.2 U		0.2 U		0.2 U
Nitrocellulose as N	MG/L	0.2 U		0.2 U		0.2 U		0.2 U
Nitroglycerin	UG/L	2.5 U		2 J		2.5 U		2.5 U
Nitroguanidine	UG/L	20 U		20 U		20 U		20 U
RDX	UG/L	0.5 UJ		0.5 U		0.5 U		0.5 U
Tetryl	UG/L	0.2 UJ		0.2 U		0.2 U		0.2 U
Aluminum	UG/L	74.3 J	200 U	58.4 J	200 U	133 J	83 J	200 U
Antimony	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Arsenic	UG/L	59.4 =	62.7 =	51.6 =	53.3 =	5 U	5 U	5 U
Barium	UG/L	58.3 J	62.6 J	41.9 J	42.3 J	32.3 J	31.7 J	11.4 J
Beryllium	UG/L	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Cadmium	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Calcium	UG/L	147000 =	159000 =	119000 =	120000 =	25900 =	27800 =	57800 =
Chromium	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cobalt	UG/L	50 U	18.7 J	73.8 =	74 =	50 U	50 U	50 U
Copper	UG/L	25 U	25 U	25 U	25 U	5.5 J	25 U	25 U
Iron	UG/L	61000 =	65600 =	138000 =	140000 =	1600 =	1630 =	288 =
Lead	UG/L	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Magnesium	UG/L	61100 =	67700 =	55300 =	55500 =	23500 =	26500 =	27900 =
Manganese	UG/L	3800 =	4100 =	6190 =	6160 =	1010 =	1130 =	2590 J
Mercury	UG/L	0.09 J	0.082 J	0.1 J	0.092 J	0.089 J	0.088 J	0.2 U
Nickel	UG/L	36.5 J	39.4 J	230 =	225 =	40 U	40 U	24.4 J

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-007	RQLmw-007	RQLmw-008	RQLmw-008	RQLmw-009	RQLmw-009	RQLmw-010
Sample Id		RQ0009	RQ0009	RQ0011	RQ0011	RQ0013	RQ0013	RQ0015
Date		07/22/98	07/22/98	07/22/98	07/22/98	07/17/98	07/17/98	07/25/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Grab
Potassium	UG/L	10700 =	12000 =	9190 =	9420 =	2890 J	3110 J	3430 J
Selenium	UG/L	4.8 J	5 U	5 U	5 U	5 U	5 U	5 U
Silver	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sodium	UG/L	21500 =	24000 =	15300 =	15500 =	4190 U	4040 U	4060 J
Thallium	UG/L	1.5 J	1.8 J	2 =	1.9 J	1 J	2 U	2 U
Vanadium	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Zinc	UG/L	81.7 =	84 =	821 =	772 =	47.2 =	29.6 =	32.3 =
1,2,4-Trichlorobenzene	UG/L	10 U		10 U		10 U		10 U
1,2-Dichlorobenzene	UG/L	10 U		10 U		10 U		10 U
1,3-Dichlorobenzene	UG/L	10 U		10 U		10 U		10 U
1,4-Dichlorobenzene	UG/L	10 U		10 U		10 U		10 U
2,2'-oxybis (1-chloropropane)	UG/L	10 U		10 U		10 U		10 U
2,4,5-Trichlorophenol	UG/L	25 U		25 U		25 U		25 U
2,4,6-Trichlorophenol	UG/L	10 U		10 U		10 U		10 U
2,4-Dichlorophenol	UG/L	10 U		10 U		10 U		10 U
2,4-Dimethylphenol	UG/L	10 U		10 U		10 U		10 U
2,4-Dinitrophenol	UG/L	25 U		25 U		25 U		25 U
2,4-Dinitrotoluene	UG/L	10 U		10 U		10 U		10 U
2,6-Dinitrotoluene	UG/L	10 U		10 U		10 U		10 U
2-Chloronaphthalene	UG/L	10 U		10 U		10 U		10 U
2-Chlorophenol	UG/L	10 U		10 U		10 U		10 U
2-Methylnaphthalene	UG/L	10 U		10 U		10 U		10 U
2-Methylphenol	UG/L	10 U		10 U		10 U		10 U
2-Nitroaniline	UG/L	25 U		25 U		25 U		25 U
2-Nitrophenol	UG/L	10 U		10 U		10 U		10 U
3,3'-Dichlorobenzidine	UG/L	10 U		10 U		10 U		10 U
3-Nitroaniline	UG/L	25 U		25 U		25 U		25 U
4,6-Dinitro-o-Cresol	UG/L	25 U		25 U		25 U		25 U
4-Bromophenyl-phenyl Ether	UG/L	10 U		10 U		10 U		10 U
4-Chloroaniline	UG/L	10 U		10 U		10 U		10 U
4-Chlorophenyl-phenylether	UG/L	10 U		10 U		10 U		10 U
4-Methylphenol	UG/L	10 U		10 U		10 U		10 U

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-007	RQLmw-007	RQLmw-008	RQLmw-008	RQLmw-009	RQLmw-009	RQLmw-010
Sample Id		RQ0009	RQ0009	RQ0011	RQ0011	RQ0013	RQ0013	RQ0015
Date		07/22/98	07/22/98	07/22/98	07/22/98	07/17/98	07/17/98	07/25/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Grab
4-Nitroaniline	UG/L	25 U		25 U		25 U		25 U
4-Nitrophenol	UG/L	25 U		25 U		25 U		25 U
4-chloro-3-methylphenol	UG/L	10 U		10 U		10 U		10 U
Acenaphthene	UG/L	10 U		10 U		10 U		10 U
Acenaphthylene	UG/L	10 U		10 U		10 U		10 U
Anthracene	UG/L	10 U		10 U		10 U		10 U
Benzo(a)anthracene	UG/L	10 U		10 U		10 U		10 U
Benzo(a)pyrene	UG/L	10 U		10 U		10 U		10 U
Benzo(b)fluoranthene	UG/L	10 U		10 U		10 U		10 U
Benzo(g,h,i)perylene	UG/L	10 U		10 U		10 U		10 U
Benzo(k)fluoranthene	UG/L	10 U		10 U		10 U		10 U
Bis(2-chloroethoxy)methane	UG/L	10 U		10 U		10 U		10 U
Bis(2-chloroethyl)ether	UG/L	10 U		10 U		10 U		10 U
Bis(2-ethylhexyl)phthalate	UG/L	10 U		10 U		10 U		10 U
Butyl Benzyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Carbazole	UG/L	10 U		10 U		10 U		10 U
Chrysene	UG/L	10 U		10 U		10 U		10 U
Di-n-butyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Di-n-octyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Dibenzo(a,h)anthracene	UG/L	10 U		10 U		10 U		10 U
Dibenzofuran	UG/L	10 U		10 U		10 U		10 U
Diethyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Dimethyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Fluoranthene	UG/L	10 U		10 U		10 U		10 U
Fluorene	UG/L	10 U		10 U		10 U		10 U
Hexachlorobenzene	UG/L	10 U		10 U		10 U		10 U
Hexachlorobutadiene	UG/L	10 U		10 U		10 U		10 U
Hexachlorocyclopentadiene	UG/L	10 UJ		10 UJ		10 U		10 UJ
Hexachloroethane	UG/L	10 U		10 U		10 U		10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U		10 U		10 U		10 U
Isophorone	UG/L	10 U		10 U		10 U		10 U
N-Nitroso-di-n-propylamine	UG/L	10 U		10 U		10 U		10 U

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-007	RQLmw-007	RQLmw-008	RQLmw-008	RQLmw-009	RQLmw-009	RQLmw-010
Sample Id		RQ0009	RQ0009	RQ0011	RQ0011	RQ0013	RQ0013	RQ0015
Date		07/22/98	07/22/98	07/22/98	07/22/98	07/17/98	07/17/98	07/25/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Grab
N-Nitrosodiphenylamine	UG/L	10 U		10 U		10 U		10 U
Naphthalene	UG/L	10 U		10 U		10 U		10 U
Nitrobenzene	UG/L	10 U		10 U		10 U		10 U
Pentachlorophenol	UG/L	25 U		25 U		25 U		25 U
Phenanthrene	UG/L	10 U		10 U		10 U		10 U
Phenol	UG/L	10 U		10 U		10 U		10 U
Pyrene	UG/L	10 U		10 U		10 U		10 U
1,1,1-Trichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1,2,2-Tetrachloroethane	UG/L	5 U		5 U		5 U		5 U
1,1,2-Trichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1-Dichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1-Dichloroethene	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloroethane	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloroethene	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloropropane	UG/L	5 U		5 U		5 U		5 U
1,3-cis-Dichloropropene	UG/L	5 U		5 U		5 U		5 U
1,3-trans-Dichloropropene	UG/L	5 U		5 U		5 U		5 U
2-Butanone	UG/L	10 U		10 U		10 U		10 U
2-Hexanone	UG/L	10 U		10 U		10 U		10 U
4-Methyl-2-pentanone	UG/L	10 U		10 U		10 U		10 U
Acetone	UG/L	10 U		9 J		10 U		10 U
Benzene	UG/L	5 U		5 U		5 U		5 U
Bromodichloromethane	UG/L	5 U		5 U		5 U		5 U
Bromoform	UG/L	5 U		5 U		5 U		5 U
Bromomethane	UG/L	10 U		10 U		10 U		10 U
Carbon Disulfide	UG/L	5 U		5 U		5 U		5 U
Carbon Tetrachloride	UG/L	5 U		5 U		5 U		5 U
Chlorobenzene	UG/L	5 U		5 U		5 U		5 U
Chloroethane	UG/L	10 U		10 U		10 U		10 U
Chloroform	UG/L	5 U		5 U		5 U		5 U
Chloromethane	UG/L	10 U		10 U		10 U		10 U
Dibromochloromethane	UG/L	5 U		5 U		5 U		5 U

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-007	RQLmw-007	RQLmw-008	RQLmw-008	RQLmw-009	RQLmw-009	RQLmw-010
Sample Id		**RQ0009**	**RQ0009**	**RQ0011**	**RQ0011**	**RQ0013**	**RQ0013**	**RQ0015**
Date		**07/22/98**	**07/22/98**	**07/22/98**	**07/22/98**	**07/17/98**	**07/17/98**	**07/25/98**
Filtered		**Total**	**Dissolved**	**Total**	**Dissolved**	**Total**	**Dissolved**	**Total**
Sample Type		**Grab**	**Grab**	**Grab**	**Grab**	**Grab**	**Grab**	**Grab**
Ethylbenzene	UG/L	5 U		5 U		5 U		5 U
Methylene Chloride	UG/L	5 U		5 U		5 U		5 U
Styrene	UG/L	5 U		5 U		5 U		5 U
Tetrachloroethene	UG/L	5 U		5 U		5 U		5 U
Toluene	UG/L	5 U		5 U		5 U		0.72 J
Trichloroethene	UG/L	5 U		5 U		5 U		5 U
Vinyl Chloride	UG/L	10 U		10 U		10 U		10 U
Xylenes, Total	UG/L	5 U		5 U		5 U		5 U

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-010	RQLmw-011	RQLmw-011	RQLmw-011	RQLmw-011
Sample Id		RQ0015	RQ9047	RQ9047	RQ0017	RQ0017
Date		07/25/98	07/27/98	07/27/98	07/27/98	07/27/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab
Cyanide	MG/L		0.01 UJ		0.01 UJ	
1,3,5-Trinitrobenzene	UG/L		0.2 UJ		0.2 UJ	
1,3-Dinitrobenzene	UG/L		0.2 UJ		0.2 UJ	
2,4,6-Trinitrotoluene	UG/L		0.2 UJ		0.2 UJ	
2,4-Dinitrotoluene	UG/L		0.13 UJ		0.13 UJ	
2,6-Dinitrotoluene	UG/L		0.13 UJ		0.13 UJ	
2-Nitrotoluene	UG/L		0.2 UJ		0.2 UJ	
3-Nitrotoluene	UG/L		0.2 UJ		0.2 UJ	
4-Nitrotoluene	UG/L		0.2 UJ		0.2 UJ	
HMX	UG/L		0.076 J		0.067 J	
Nitrobenzene	UG/L		0.092 J		0.091 J	
Nitrocellulose as N	MG/L		0.2 U		0.2 U	
Nitroglycerin	UG/L		2.5 UJ		2.5 UJ	
Nitroguanidine	UG/L		20 U		20 U	
RDX	UG/L		0.5 UJ		0.5 UJ	
Tetryl	UG/L		0.2 UJ		0.2 UJ	
Aluminum	UG/L	200 U	832 =	698 =	1400 =	776 =
Antimony	UG/L	5 U	5 U	5 U	5 U	5 U
Arsenic	UG/L	10 U	8.5 =	12.6 =	11.9 =	11.3 =
Barium	UG/L	16.7 J	35.5 J	37.2 J	38.6 J	38.2 J
Beryllium	UG/L	5 U	0.87 J	0.89 J	1 J	0.91 J
Cadmium	UG/L	5 U	5 U	5 U	5 U	5 U
Calcium	UG/L	66600 =	14700 =	15300 =	15100 =	15200 =
Chromium	UG/L	10 U	10 U	10 U	10 U	10 U
Cobalt	UG/L	50 U	48.5 J	55.3 =	57.8 =	57.1 =
Copper	UG/L	25 U	3.9 J	25 U	25 U	25 U
Iron	UG/L	93.5 J	5300 =	5700 =	6000 =	5630 =
Lead	UG/L	3 U	3 U	3 U	3 U	3 U
Magnesium	UG/L	26800 =	8550 =	9230 =	9440 =	9190 =
Manganese	UG/L	3480 J	1650 J	1760 J	1780 J	1720 J
Mercury	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.1 J
Nickel	UG/L	34.8 J	139 =	155 =	162 =	158 =

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-010	RQLmw-011	RQLmw-011	RQLmw-011	RQLmw-011
Sample Id		RQ0015	RQ9047	RQ9047	RQ0017	RQ0017
Date		07/25/98	07/27/98	07/27/98	07/27/98	07/27/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab
Potassium	UG/L	3570 J	4380 J	4810 J	5060 =	4960 J
Selenium	UG/L	5 U	5 U	5 U	5 U	5 U
Silver	UG/L	10 U	10 U	10 U	10 U	10 U
Sodium	UG/L	5490 J	2160 J	1710 J	1780 J	1780 J
Thallium	UG/L	2 U	2.8 =	1.4 J	2 U	1.7 J
Vanadium	UG/L	50 U	50 U	50 U	50 U	50 U
Zinc	UG/L	38.8 =	83.3 =	77.2 =	82.5 =	94.4 =
1,2,4-Trichlorobenzene	UG/L		10 UJ		10 UJ	
1,2-Dichlorobenzene	UG/L		10 UJ		10 UJ	
1,3-Dichlorobenzene	UG/L		10 UJ		10 UJ	
1,4-Dichlorobenzene	UG/L		10 UJ		10 UJ	
2,2'-oxybis (1-chloropropane)	UG/L		10 UJ		10 UJ	
2,4,5-Trichlorophenol	UG/L		25 UJ		25 UJ	
2,4,6-Trichlorophenol	UG/L		10 UJ		10 UJ	
2,4-Dichlorophenol	UG/L		10 UJ		10 UJ	
2,4-Dimethylphenol	UG/L		10 UJ		10 UJ	
2,4-Dinitrophenol	UG/L		25 UJ		25 UJ	
2,4-Dinitrotoluene	UG/L		10 UJ		10 UJ	
2,6-Dinitrotoluene	UG/L		10 UJ		10 UJ	
2-Chloronaphthalene	UG/L		10 UJ		10 UJ	
2-Chlorophenol	UG/L		10 UJ		10 UJ	
2-Methylnaphthalene	UG/L		10 UJ		10 UJ	
2-Methylphenol	UG/L		10 UJ		10 UJ	
2-Nitroaniline	UG/L		25 UJ		25 UJ	
2-Nitrophenol	UG/L		10 UJ		10 UJ	
3,3'-Dichlorobenzidine	UG/L		10 UJ		10 UJ	
3-Nitroaniline	UG/L		25 UJ		25 UJ	
4,6-Dinitro-o-Cresol	UG/L		25 UJ		25 UJ	
4-Bromophenyl-phenyl Ether	UG/L		10 UJ		10 UJ	
4-Chloroaniline	UG/L		10 UJ		10 UJ	
4-Chlorophenyl-phenylether	UG/L		10 UJ		10 UJ	
4-Methylphenol	UG/L		10 UJ		10 UJ	

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-010	RQLmw-011	RQLmw-011	RQLmw-011	RQLmw-011
Sample Id		RQ0015	RQ9047	RQ9047	RQ0017	RQ0017
Date		07/25/98	07/27/98	07/27/98	07/27/98	07/27/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab
4-Nitroaniline	UG/L		25 UJ		25 UJ	
4-Nitrophenol	UG/L		25 UJ		25 UJ	
4-chloro-3-methylphenol	UG/L		10 UJ		10 UJ	
Acenaphthene	UG/L		10 UJ		10 UJ	
Acenaphthylene	UG/L		10 UJ		10 UJ	
Anthracene	UG/L		10 UJ		10 UJ	
Benzo(a)anthracene	UG/L		10 UJ		10 UJ	
Benzo(a)pyrene	UG/L		10 UJ		10 UJ	
Benzo(b)fluoranthene	UG/L		10 UJ		10 UJ	
Benzo(g,h,i)perylene	UG/L		10 UJ		10 UJ	
Benzo(k)fluoranthene	UG/L		10 UJ		10 UJ	
Bis(2-chloroethoxy)methane	UG/L		10 UJ		10 UJ	
Bis(2-chloroethyl)ether	UG/L		10 UJ		10 UJ	
Bis(2-ethylhexyl)phthalate	UG/L		10 UJ		10 UJ	
Butyl Benzyl Phthalate	UG/L		10 UJ		10 UJ	
Carbazole	UG/L		10 UJ		10 UJ	
Chrysene	UG/L		10 UJ		10 UJ	
Di-n-butyl Phthalate	UG/L		10 UJ		10 UJ	
Di-n-octyl Phthalate	UG/L		10 UJ		10 UJ	
Dibenzo(a,h)anthracene	UG/L		10 UJ		10 UJ	
Dibenzofuran	UG/L		10 UJ		10 UJ	
Diethyl Phthalate	UG/L		10 UJ		10 UJ	
Dimethyl Phthalate	UG/L		10 UJ		10 UJ	
Fluoranthene	UG/L		10 UJ		10 UJ	
Fluorene	UG/L		10 UJ		10 UJ	
Hexachlorobenzene	UG/L		10 UJ		10 UJ	
Hexachlorobutadiene	UG/L		10 UJ		10 UJ	
Hexachlorocyclopentadiene	UG/L		10 UJ		10 UJ	
Hexachloroethane	UG/L		10 UJ		10 UJ	
Indeno(1,2,3-cd)pyrene	UG/L		10 UJ		10 UJ	
Isophorone	UG/L		10 UJ		10 UJ	
N-Nitroso-di-n-propylamine	UG/L		10 UJ		10 UJ	

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-010	RQLmw-011	RQLmw-011	RQLmw-011	RQLmw-011
Sample Id		RQ0015	RQ9047	RQ9047	RQ0017	RQ0017
Date		07/25/98	07/27/98	07/27/98	07/27/98	07/27/98
Filtered		Dissolved	Total	Dissolved	Total	Dissolved
Sample Type		Grab	Field Duplicate	Field Duplicate	Grab	Grab
N-Nitrosodiphenylamine	UG/L		10 UJ		10 UJ	
Naphthalene	UG/L		10 UJ		10 UJ	
Nitrobenzene	UG/L		10 UJ		10 UJ	
Pentachlorophenol	UG/L		25 UJ		25 UJ	
Phenanthrene	UG/L		10 UJ		10 UJ	
Phenol	UG/L		10 UJ		10 UJ	
Pyrene	UG/L		10 UJ		10 UJ	
1,1,1-Trichloroethane	UG/L		5 UJ		5 UJ	
1,1,2,2-Tetrachloroethane	UG/L		0.84 J		5 UJ	
1,1,2-Trichloroethane	UG/L		5 UJ		5 UJ	
1,1-Dichloroethane	UG/L		5 UJ		5 UJ	
1,1-Dichloroethene	UG/L		5 UJ		5 UJ	
1,2-Dichloroethane	UG/L		5 UJ		5 UJ	
1,2-Dichloroethene	UG/L		5 UJ		5 UJ	
1,2-Dichloropropane	UG/L		5 UJ		5 UJ	
1,3-cis-Dichloropropene	UG/L		5 UJ		5 UJ	
1,3-trans-Dichloropropene	UG/L		5 UJ		5 UJ	
2-Butanone	UG/L		10 UJ		10 UJ	
2-Hexanone	UG/L		10 UJ		10 UJ	
4-Methyl-2-pentanone	UG/L		10 UJ		10 UJ	
Acetone	UG/L		10 UJ		10 UJ	
Benzene	UG/L		5 UJ		5 UJ	
Bromodichloromethane	UG/L		5 UJ		5 UJ	
Bromoform	UG/L		0.35 J		5 UJ	
Bromomethane	UG/L		10 UJ		10 UJ	
Carbon Disulfide	UG/L		5 UJ		5 UJ	
Carbon Tetrachloride	UG/L		5 UJ		5 UJ	
Chlorobenzene	UG/L		5 UJ		5 UJ	
Chloroethane	UG/L		10 UJ		10 UJ	
Chloroform	UG/L		5 UJ		5 UJ	
Chloromethane	UG/L		10 UJ		10 UJ	
Dibromochloromethane	UG/L		5 UJ		5 UJ	

Analytical Summary Table for Ramsdell Quarry Landfill
Groundwater Results

Station		RQLmw-010	RQLmw-011	RQLmw-011	RQLmw-011	RQLmw-011
Sample Id		**RQ0015**	**RQ9047**	**RQ9047**	**RQ0017**	**RQ0017**
Date		**07/25/98**	**07/27/98**	**07/27/98**	**07/27/98**	**07/27/98**
Filtered		**Dissolved**	**Total**	**Dissolved**	**Total**	**Dissolved**
Sample Type		**Grab**	**Field Duplicate**	**Field Duplicate**	**Grab**	**Grab**
Ethylbenzene	UG/L		5 UJ		5 UJ	
Methylene Chloride	UG/L		5 UJ		5 UJ	
Styrene	UG/L		5 UJ		5 UJ	
Tetrachloroethene	UG/L		5 UJ		5 UJ	
Toluene	UG/L		5 UJ		0.51 J	
Trichloroethene	UG/L		5 UJ		5 UJ	
Vinyl Chloride	UG/L		10 UJ		10 UJ	
Xylenes, Total	UG/L		5 UJ		5 UJ	

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-013	RQLsd-013	RQLsd-014
Sample Id		RQ0053	RQ0065	RQ0023	RQ0064	RQ0032	RQ0033	RQ0035
Date		07/08/98	07/27/98	07/08/98	07/27/98	07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	0 - 0	0 - 1	0 - 0	0 - 1	1 - 2	0 - 1
Filtered		Total	Total	Total	Total	Total	Total	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
Cyanide	MG/KG	0.78 U	0.98 UJ	0.7 U	0.87 UJ	1.9 U	1 U	0.98 U
1,3,5-Trinitrobenzene	MG/KG	0.25 U	0.25 UJ	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene	MG/KG	0.25 U	0.25 UJ	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene	MG/KG	0.25 U	0.25 UJ	0.021 J	0.25 UJ	0.25 U	0.25 U	0.25 U
2,4-Dinitrotoluene	MG/KG	0.25 U	0.25 UJ	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U
2,6-Dinitrotoluene	MG/KG	0.076 J	0.25 UJ	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U
2-Nitrotoluene	MG/KG	0.25 U	0.25 UJ	0.25 U	0.25 UJ	0.07 J	0.25 U	0.25 U
3-Nitrotoluene	MG/KG	0.25 U	0.25 UJ	0.25 U	0.25 UJ	0.25 U	0.25 U	0.071 J
4-Nitrotoluene	MG/KG	0.07 J	0.25 UJ	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U
HMX	MG/KG	0.11 J	0.5 UJ	0.13 J	0.5 UJ	0.15 J	0.5 U	0.5 U
Nitrobenzene	MG/KG	0.25 U	0.25 UJ	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U
Nitrocellulose as N	MG/KG	2 U	1.7 J	2 U	2 U	2 U	2 U	2 U
Nitroglycerin	MG/KG	2.5 U	2.5 UJ	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Nitroguanidine	MG/KG	0.25 U	0.25 U	0.25 R	0.25 U	0.25 U	0.25 U	0.25 U
RDX	MG/KG	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Tetryl	MG/KG	0.65 U	0.65 UJ	0.65 R	0.65 UJ	0.65 U	0.65 U	0.65 U
Aluminum	MG/KG	8270 =	11500 =	8460 =	9300 =	22100 =	4300 =	3550 =
Antimony	MG/KG	0.78 UJ	1.5 J	0.7 UJ	1.9 J	1.9 UJ	1 UJ	0.98 UJ
Arsenic	MG/KG	14.9 =	15.4 =	11 =	12.6 =	15.2 =	13.4 =	17.5 =
Barium	MG/KG	77 =	108 =	77.3 =	91.8 =	118 =	33 J	70.3 =
Beryllium	MG/KG	0.36 J	0.42 J	0.38 J	0.34 J	.59 J	1 U	0.98 U
Cadmium	MG/KG	0.78 U	0.98 U	0.7 U	0.87 U	1.9 U	1 U	0.98 U
Calcium	MG/KG	11400 J	14600 =	12200 J	11000 =	1530 J	1270 J	23700 J
Chromium	MG/KG	15.3 =	19.6 =	14.7 =	17.3 =	29.1 =	8.7 =	12.8 =
Cobalt	MG/KG	7.3 J	10.1 =	7.1 =	8.9 =	10.8 J	5 J	8 J
Copper	MG/KG	64 =	58.4 =	48.2 =	48.8 =	41.1 =	19.5 =	134 =
Iron	MG/KG	25300 =	28400 =	21200 =	25400 =	28600 =	13700 =	21800 =
Lead	MG/KG	79.5 =	40.6 =	27.1 =	36.3 =	38.4 =	21.1 =	43.9 =
Magnesium	MG/KG	19100 J	15400 =	22100 J	13100 =	4660 J	2180 J	18900 J
Manganese	MG/KG	2120 J	1190 =	829 J	1000 =	223 J	432 J	1240 J
Mercury	MG/KG	0.099 J	0.11 J	0.89 J	0.12 J	0.15 J	.048 J	.067 J

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-013	RQLsd-013	RQLsd-014
Sample Id		RQ0053	RQ0065	RQ0023	RQ0064	RQ0032	RQ0033	RQ0035
Date		07/08/98	07/27/98	07/08/98	07/27/98	07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	0 - 0	0 - 1	0 - 0	0 - 1	1 - 2	0 - 1
Filtered		Total	Total	Total	Total	Total	Total	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
Nickel	MG/KG	17.2 =	24.4 =	15.3 =	21.5 =	30.1 =	12.8 =	23 =
Potassium	MG/KG	994 J	1590 =	895 J	1320 =	3300 J	713 J	421 J
Selenium	MG/KG	0.78 U	0.98 U	0.7 U	0.87 U	2 =	1 U	0.98 U
Silver	MG/KG	1.6 U	2 U	1.4 U	1.7 U	3.7 U	2.1 U	2 U
Sodium	MG/KG	108 J	116 J	137 J	73.3 J	1870 U	1050 U	41 J
Thallium	MG/KG	1.3 J	0.98 U	0.7 U	0.87 U	1.9 U	1 U	0.98 U
Vanadium	MG/KG	15.7 =	22.7 =	14.4 =	19.2 =	40.7 =	9 J	10.1 =
Zinc	MG/KG	106 =	155 =	100 =	147 =	214 =	135 =	285 =
1,2,4-Trichlorobenzene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
1,2-Dichlorobenzene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
1,3-Dichlorobenzene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
1,4-Dichlorobenzene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2,2'-oxybis (1-chloropropane)	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2,4,5-Trichlorophenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2,4,6-Trichlorophenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2,4-Dichlorophenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2,4-Dimethylphenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2,4-Dinitrophenol	UG/KG	1200 U	1600 UJ	1100 U	1400 UJ	3000 U	1700 U	1600 U
2,4-Dinitrotoluene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2,6-Dinitrotoluene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2-Chloronaphthalene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2-Chlorophenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2-Methylnaphthalene	UG/KG	520 U	650 UJ	110 J	580 UJ	1200 U	690 U	650 U
2-Methylphenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
2-Nitroaniline	UG/KG	1200 U	1600 UJ	1100 U	1400 UJ	3000 U	1700 U	1600 U
2-Nitrophenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
3,3'-Dichlorobenzidine	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
3-Nitroaniline	UG/KG	1200 U	1600 UJ	1100 U	1400 UJ	3000 U	1700 U	1600 U
4,6-Dinitro-o-Cresol	UG/KG	1200 U	1600 UJ	1100 U	1400 UJ	3000 U	1700 U	1600 U
4-Bromophenyl-phenyl Ether	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
4-Chloroaniline	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-013	RQLsd-013	RQLsd-014
Sample Id		RQ0053	RQ0065	RQ0023	RQ0064	RQ0032	RQ0033	RQ0035
Date		07/08/98	07/27/98	07/08/98	07/27/98	07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	0 - 0	0 - 1	0 - 0	0 - 1	1 - 2	0 - 1
Filtered		Total	Total	Total	Total	Total	Total	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
4-Chlorophenyl-phenylether	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
4-Methylphenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
4-Nitroaniline	UG/KG	1200 U	1600 UJ	1100 U	1400 UJ	3000 U	1700 U	1600 U
4-Nitrophenol	UG/KG	1200 U	1600 UJ	1100 U	1400 UJ	3000 U	1700 U	1600 U
4-chloro-3-methylphenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Acenaphthene	UG/KG	520 U	650 UJ	340 J	580 UJ	1200 U	690 U	650 U
Acenaphthylene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Anthracene	UG/KG	110 J	200 J	710 =	68 J	1200 U	690 U	650 U
Benzo(a)anthracene	UG/KG	290 J	500 J	690 =	180 J	1200 U	690 U	650 U
Benzo(a)pyrene	UG/KG	270 J	480 J	510 =	190 J	1200 U	690 U	650 U
Benzo(b)fluoranthene	UG/KG	330 J	610 J	580 =	250 J	1200 U	690 U	650 U
Benzo(g,h,i)perylene	UG/KG	160 J	220 J	230 J	97 J	1200 U	690 U	650 U
Benzo(k)fluoranthene	UG/KG	140 J	260 J	250 J	110 J	1200 U	690 U	650 U
Bis(2-chloroethoxy)methane	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Bis(2-chloroethyl)ether	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Bis(2-ethylhexyl)phthalate	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Butyl Benzyl Phthalate	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Carbazole	UG/KG	120 J	650 UJ	410 J	580 UJ	1200 U	690 U	650 U
Chrysene	UG/KG	290 J	500 J	590 =	190 J	1200 U	690 U	650 U
Di-n-butyl Phthalate	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Di-n-octyl Phthalate	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Dibenzo(a,h)anthracene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Dibenzofuran	UG/KG	520 U	650 UJ	240 J	580 UJ	1200 U	690 U	650 U
Diethyl Phthalate	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Dimethyl Phthalate	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Fluoranthene	UG/KG	630 =	1100 J	1800 =	380 J	1200 U	690 U	120 J
Fluorene	UG/KG	520 U	650 UJ	390 J	580 UJ	1200 U	690 U	650 U
Hexachlorobenzene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Hexachlorobutadiene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Hexachlorocyclopentadiene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Hexachloroethane	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-013	RQLsd-013	RQLsd-014
Sample Id		RQ0053	RQ0065	RQ0023	RQ0064	RQ0032	RQ0033	RQ0035
Date		07/08/98	07/27/98	07/08/98	07/27/98	07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	0 - 0	0 - 1	0 - 0	0 - 1	1 - 2	0 - 1
Filtered		Total	Total	Total	Total	Total	Total	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
Indeno(1,2,3-cd)pyrene	UG/KG	180 J	250 J	270 J	100 J	1200 U	690 U	650 U
Isophorone	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
N-Nitroso-di-n-propylamine	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
N-Nitrosodiphenylamine	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Naphthalene	UG/KG	520 U	650 UJ	100 J	580 UJ	1200 U	690 U	650 U
Nitrobenzene	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Pentachlorophenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Phenanthrene	UG/KG	400 J	600 J	2000 =	230 J	1200 U	690 U	650 U
Phenol	UG/KG	520 U	650 UJ	460 U	580 UJ	1200 U	690 U	650 U
Pyrene	UG/KG	480 J	900 J	1200 J	310 J	1200 U	690 U	99 J
1,1,1-Trichloroethane	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,1,2,2-Tetrachloroethane	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,1,2-Trichloroethane	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,1-Dichloroethane	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,1-Dichloroethene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,2-Dichloroethane	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,2-Dichloroethene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,2-Dichloropropane	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,3-cis-Dichloropropene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
1,3-trans-Dichloropropene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
2-Butanone	UG/KG	31 U	39 UJ	28 U	35 UJ	35 J	6.5 J	39 U
2-Hexanone	UG/KG	31 U	39 UJ	28 U	35 UJ	75 U	42 U	39 U
4-Methyl-2-pentanone	UG/KG	31 U	39 UJ	28 U	35 UJ	75 U	42 U	39 U
Acetone	UG/KG	31 U	39 UJ	3.7 J	35 UJ	98 J	19 J	8.7 J
Benzene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Bromodichloromethane	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Bromoform	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Bromomethane	UG/KG	16 U	20 UJ	14 U	17 UJ	37 U	21 U	20 U
Carbon Disulfide	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Carbon Tetrachloride	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Chlorobenzene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-012	RQLsd-013	RQLsd-013	RQLsd-014
Sample Id		**RQ0053**	**RQ0065**	**RQ0023**	**RQ0064**	**RQ0032**	**RQ0033**	**RQ0035**
Date		**07/08/98**	**07/27/98**	**07/08/98**	**07/27/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)		**0 - 1**	**0 - 0**	**0 - 1**	**0 - 0**	**0 - 1**	**1 - 2**	**0 - 1**
Filtered		**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**
Sample Type		**Field Duplicate**	**Field Duplicate**	**Grab**	**Grab**	**Grab**	**Grab**	**Grab**
Chloroethane	UG/KG	16 U	20 UJ	14 U	17 UJ	37 U	21 U	20 U
Chloroform	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Chloromethane	UG/KG	16 U	20 UJ	14 U	17 UJ	37 U	21 U	20 U
Dibromochloromethane	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Ethylbenzene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Methylene Chloride	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Styrene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Tetrachloroethene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Toluene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Trichloroethene	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U
Vinyl Chloride	UG/KG	16 U	20 UJ	14 U	17 UJ	37 U	21 U	20 U
Xylenes, Total	UG/KG	7.8 U	9.8 UJ	7 U	8.7 UJ	19 U	10 U	9.8 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-015	RQLsd-015	RQLsd-018	RQLsd-018	RQLsd-018	RQLsd-019	RQLsd-022
Sample Id		RQ0044	RQ0045	RQ0026	RQ0027	RQ0028	RQ0029	RQ0054
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	1 - 2	0 - 1	1 - 2	2 - 4	0 - 1	0 - 1
Filtered		Total	Total	Total	Total	Total	Total	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Field Duplicate
Cyanide	MG/KG	1 U	0.84 U	0.87 U	0.8 U	0.65 U	0.54 U	1 U
1,3,5-Trinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.047 J	0.25 U	0.25 U
2,4-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 J	0.033 J
2,6-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
3-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HMX	MG/KG	0.5 U	0.5 U	0.11 J	0.14 J	0.13 J	0.13 J	0.13 J
Nitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Nitrocellulose as N	MG/KG	4.3 =	2.3 =	2 U	2 U	2 U	2 U	2 U
Nitroglycerin	MG/KG	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Nitroguanidine	MG/KG	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
RDX	MG/KG	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetryl	MG/KG	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Aluminum	MG/KG	21200 =	13500 =	13400 =	11600 =	12200 =	5560 =	8000 =
Antimony	MG/KG	1 UJ	0.84 UJ	0.87 UJ	0.8 UJ	0.65 UJ	0.54 UJ	1 UJ
Arsenic	MG/KG	15.9 =	10.3 =	9.5 =	16.9 =	7.6 =	12.3 =	25.3 =
Barium	MG/KG	141 =	113 =	118 =	98.4 =	73.3 =	35.9 =	112 =
Beryllium	MG/KG	.65 J	.52 J	0.39 J	0.65 J	.33 J	0.18 U	0.39 U
Cadmium	MG/KG	1 U	0.84 U	6.4 =	1.7 =	0.65 U	0.54 U	1.8 =
Calcium	MG/KG	6410 J	7750 J	4020 J	9180 J	4870 J	614 J	38800 J
Chromium	MG/KG	30.5 =	20.9 =	20.2 =	18.3 =	21 =	9 =	21.4 =
Cobalt	MG/KG	13.3 =	11.6 =	8.6 J	14.3 =	8.2 =	13.9 =	25.1 =
Copper	MG/KG	46.4 =	44 =	29 =	20.6 =	48.7 =	20.7 =	96.2 =
Iron	MG/KG	40900 =	31500 =	18500 =	54400 =	20500 =	16800 =	30600 =
Lead	MG/KG	66.6 =	51.3 =	56.1 =	54.5 =	25.3 =	26.7 =	63.9 =
Magnesium	MG/KG	5320 J	6180 J	4240 J	7060 J	9820 J	1300 J	44700 J
Manganese	MG/KG	585 J	561 J	233 J	402 =	359 J	189 J	2160 J
Mercury	MG/KG	.18 J	0.2 =	0.084 J	.088 J	.039 J	.033 J	.073 J

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-015	RQLsd-015	RQLsd-018	RQLsd-018	RQLsd-018	RQLsd-019	RQLsd-022
Sample Id		RQ0044	RQ0045	RQ0026	RQ0027	RQ0028	RQ0029	RQ0054
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	1 - 2	0 - 1	1 - 2	2 - 4	0 - 1	0 - 1
Filtered		Total	Total	Total	Total	Total	Total	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Field Duplicate
Nickel	MG/KG	35.1 =	29.2 =	21.9 =	20.1 =	19.2 =	28.4 =	64.7 =
Potassium	MG/KG	3010 J	1420 J	1330 J	1120 J	1670 J	447 J	636 J
Selenium	MG/KG	1 U	0.84 U	1.1 =	0.91 =	0.8 =	0.6 =	1 U
Silver	MG/KG	2.1 U	1.7 U	1.7 U	1.6 U	1.3 U	1.1 U	2 U
Sodium	MG/KG	58.2 J	28.9 J	43 J	41.4 J	46.4 J	540 U	79.6 J
Thallium	MG/KG	1 U	1.2 =	1.2 =	1.8 =	0.65 U	0.54 U	1 U
Vanadium	MG/KG	38.1 =	23.6 =	28 =	28.9 =	22.4 =	10.5 =	16.7 =
Zinc	MG/KG	427 =	282 =	255 =	237 =	107 =	124 =	711 =
1,2,4-Trichlorobenzene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
1,2-Dichlorobenzene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
1,3-Dichlorobenzene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
1,4-Dichlorobenzene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2,2'-oxybis (1-chloropropane)	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2,4,5-Trichlorophenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2,4,6-Trichlorophenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2,4-Dichlorophenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2,4-Dimethylphenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2,4-Dinitrophenol	UG/KG	1600 U	1300 U	1400 U	1300 U	1000 U	860 U	1600 U
2,4-Dinitrotoluene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2,6-Dinitrotoluene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2-Chloronaphthalene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2-Chlorophenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2-Methylnaphthalene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2-Methylphenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
2-Nitroaniline	UG/KG	1600 U	1300 U	1400 U	1300 U	1000 U	860 U	1600 U
2-Nitrophenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
3,3'-Dichlorobenzidine	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
3-Nitroaniline	UG/KG	1600 U	1300 U	1400 U	1300 U	1000 U	860 U	1600 U
4,6-Dinitro-o-Cresol	UG/KG	1600 U	1300 U	1400 U	1300 U	1000 U	860 U	1600 U
4-Bromophenyl-phenyl Ether	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
4-Chloroaniline	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-015	RQLsd-015	RQLsd-018	RQLsd-018	RQLsd-018	RQLsd-019	RQLsd-022
Sample Id		RQ0044	RQ0045	RQ0026	RQ0027	RQ0028	RQ0029	RQ0054
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	1 - 2	0 - 1	1 - 2	2 - 4	0 - 1	0 - 1
Filtered		Total	Total	Total	Total	Total	Total	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Field Duplicate
4-Chlorophenyl-phenylether	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
4-Methylphenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
4-Nitroaniline	UG/KG	1600 U	1300 U	1400 U	1300 U	1000 U	860 U	1600 U
4-Nitrophenol	UG/KG	1600 U	1300 U	1400 U	1300 U	1000 U	860 U	1600 U
4-chloro-3-methylphenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Acenaphthene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Acenaphthylene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Anthracene	UG/KG	680 U	550 U	180 J	72 J	430 U	360 U	670 U
Benzo(a)anthracene	UG/KG	99 J	71 J	430 J	200 J	430 U	360 U	670 U
Benzo(a)pyrene	UG/KG	110 J	73 J	340 J	210 J	430 U	360 U	670 U
Benzo(b)fluoranthene	UG/KG	170 J	100 J	430 J	270 J	430 U	360 U	670 U
Benzo(g,h,i)perylene	UG/KG	680 U	550 U	170 J	140 J	430 U	360 U	670 U
Benzo(k)fluoranthene	UG/KG	680 U	550 U	180 J	95 J	430 U	360 U	670 U
Bis(2-chloroethoxy)methane	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Bis(2-chloroethyl)ether	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Bis(2-ethylhexyl)phthalate	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Butyl Benzyl Phthalate	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Carbazole	UG/KG	680 U	550 U	130 J	530 U	430 U	360 U	670 U
Chrysene	UG/KG	120 J	84 J	410 J	210 J	430 U	360 U	670 U
Di-n-butyl Phthalate	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Di-n-octyl Phthalate	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Dibenzo(a,h)anthracene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Dibenzofuran	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Diethyl Phthalate	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Dimethyl Phthalate	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Fluoranthene	UG/KG	220 J	150 J	1000 =	450 J	65 J	67 J	670 U
Fluorene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Hexachlorobenzene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Hexachlorobutadiene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Hexachlorocyclopentadiene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Hexachloroethane	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-015	RQLsd-015	RQLsd-018	RQLsd-018	RQLsd-018	RQLsd-019	RQLsd-022
Sample Id		RQ0044	RQ0045	RQ0026	RQ0027	RQ0028	RQ0029	RQ0054
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	1 - 2	0 - 1	1 - 2	2 - 4	0 - 1	0 - 1
Filtered		Total	Total	Total	Total	Total	Total	Total
Sample Type		Grab	Grab	Grab	Grab	Grab	Grab	Field Duplicate
Indeno(1,2,3-cd)pyrene	UG/KG	86 J	550 U	200 J	140 J	430 U	360 U	670 U
Isophorone	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
N-Nitroso-di-n-propylamine	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
N-Nitrosodiphenylamine	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Naphthalene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Nitrobenzene	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Pentachlorophenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Phenanthrene	UG/KG	94 J	550 U	700 =	310 J	430 U	360 U	670 U
Phenol	UG/KG	680 U	550 U	580 U	530 U	430 U	360 U	670 U
Pyrene	UG/KG	170 J	130 J	780 =	310 J	58 J	53 J	670 U
1,1,1-Trichloroethane	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,1,2,2-Tetrachloroethane	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,1,2-Trichloroethane	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,1-Dichloroethane	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,1-Dichloroethene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,2-Dichloroethane	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,2-Dichloroethene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,2-Dichloropropane	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,3-cis-Dichloropropene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
1,3-trans-Dichloropropene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
2-Butanone	UG/KG	10 J	9.3 J	5.7 J	32 U	26 U	22 U	9.5 J
2-Hexanone	UG/KG	41 U	34 U	35 U	32 U	26 U	22 U	40 U
4-Methyl-2-pentanone	UG/KG	41 U	34 U	35 U	32 U	26 U	22 U	40 U
Acetone	UG/KG	34 J	38 J	17 J	15 J	7.6 J	22 U	35 J
Benzene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Bromodichloromethane	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Bromoform	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Bromomethane	UG/KG	21 U	17 U	17 U	16 U	13 U	11 U	20 U
Carbon Disulfide	UG/KG	10 U	3.4 J	8.7 U	8 U	6.5 U	5.4 U	10 U
Carbon Tetrachloride	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Chlorobenzene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-015	RQLsd-015	RQLsd-018	RQLsd-018	RQLsd-018	RQLsd-019	RQLsd-022
Sample Id		**RQ0044**	**RQ0045**	**RQ0026**	**RQ0027**	**RQ0028**	**RQ0029**	**RQ0054**
Date		**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)		**0 - 1**	**1 - 2**	**0 - 1**	**1 - 2**	**2 - 4**	**0 - 1**	**0 - 1**
Filtered		**Total**	**Total**	**Total**	**Total**	**Total**	**Total**	**Total**
Sample Type		**Grab**	**Grab**	**Grab**	**Grab**	**Grab**	**Grab**	**Field Duplicate**
Chloroethane	UG/KG	21 U	17 U	17 U	16 U	13 U	11 U	20 U
Chloroform	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Chloromethane	UG/KG	21 U	17 U	17 U	16 U	13 U	11 U	20 U
Dibromochloromethane	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Ethylbenzene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Methylene Chloride	UG/KG	10 U	8.4 U	8.7 U	8 U	1.2 J	0.73 =	10 U
Styrene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Tetrachloroethene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Toluene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Trichloroethene	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U
Vinyl Chloride	UG/KG	21 U	17 U	17 U	16 U	13 U	11 U	20 U
Xylenes, Total	UG/KG	10 U	8.4 U	8.7 U	8 U	6.5 U	5.4 U	10 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-022	RQLsd-023	RQLsd-023
Sample Id		RQ0038	RQ0041	RQ0042
Date		07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	0 - 1	1 - 2
Filtered		Total	Total	Total
Sample Type		Grab	Grab	Grab
Cyanide	MG/KG	1.1 U	2.8 =	0.86 U
1,3,5-Trinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U
2,4-Dinitrotoluene	MG/KG	0.064 J	0.25 U	0.034 J
2,6-Dinitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U
2-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U
3-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.13 J
4-Nitrotoluene	MG/KG	0.25 U	0.25 U	0.25 U
HMX	MG/KG	0.12 J	0.5 U	0.13 J
Nitrobenzene	MG/KG	0.25 U	0.25 U	0.25 U
Nitrocellulose as N	MG/KG	2 U	2 U	2 U
Nitroglycerin	MG/KG	2.5 U	2.5 U	2.5 U
Nitroguanidine	MG/KG	0.25 U	0.25 U	0.25 U
RDX	MG/KG	0.5 U	0.5 U	0.5 U
Tetryl	MG/KG	0.65 U	0.65 U	0.65 U
Aluminum	MG/KG	12200 =	14700 =	12300 =
Antimony	MG/KG	1.1 UJ	1 UJ	0.86 UJ
Arsenic	MG/KG	32.5 =	25.5 =	18.2 =
Barium	MG/KG	145 =	125 =	98.4 =
Beryllium	MG/KG	.58 J	0.54 J	.56 J
Cadmium	MG/KG	2.5 =	1.4 =	0.86 U
Calcium	MG/KG	46900 J	28400 J	15700 J
Chromium	MG/KG	30.9 =	26 =	20.1 =
Cobalt	MG/KG	33.6 =	19.4 =	16.8 =
Copper	MG/KG	124 =	80.5 =	51.2 =
Iron	MG/KG	41400 =	40200 =	32200 =
Lead	MG/KG	87.2 =	73.3 =	48.4 =
Magnesium	MG/KG	58000 J	16000 J	12000 J
Manganese	MG/KG	2590 J	1820 J	894 J
Mercury	MG/KG	.11 J	.12 J	.13 J

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-022	RQLsd-023	RQLsd-023
Sample Id		RQ0038	RQ0041	RQ0042
Date		07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	0 - 1	1 - 2
Filtered		Total	Total	Total
Sample Type		Grab	Grab	Grab
Nickel	MG/KG	86.8 =	52.3 =	43.2 =
Potassium	MG/KG	1120 J	1700 J	1400 J
Selenium	MG/KG	1.1 U	1 U	0.86 U
Silver	MG/KG	2.2 U	2.1 U	1.7 U
Sodium	MG/KG	109 J	78.6 J	42.5 J
Thallium	MG/KG	1.9 =	1 U	0.86 U
Vanadium	MG/KG	23.4 =	27 =	21 =
Zinc	MG/KG	894 =	634 =	428 =
1,2,4-Trichlorobenzene	UG/KG	730 U	680 U	570 U
1,2-Dichlorobenzene	UG/KG	730 U	680 U	570 U
1,3-Dichlorobenzene	UG/KG	730 U	680 U	570 U
1,4-Dichlorobenzene	UG/KG	730 U	680 U	570 U
2,2'-oxybis (1-chloropropane)	UG/KG	730 U	680 U	570 U
2,4,5-Trichlorophenol	UG/KG	730 U	680 U	570 U
2,4,6-Trichlorophenol	UG/KG	730 U	680 U	570 U
2,4-Dichlorophenol	UG/KG	730 U	680 U	570 U
2,4-Dimethylphenol	UG/KG	730 U	680 U	570 U
2,4-Dinitrophenol	UG/KG	1800 U	1600 U	1400 U
2,4-Dinitrotoluene	UG/KG	730 U	680 U	570 U
2,6-Dinitrotoluene	UG/KG	730 U	680 U	570 U
2-Chloronaphthalene	UG/KG	730 U	680 U	570 U
2-Chlorophenol	UG/KG	730 U	680 U	570 U
2-Methylnaphthalene	UG/KG	730 U	680 U	570 U
2-Methylphenol	UG/KG	730 U	680 U	570 U
2-Nitroaniline	UG/KG	1800 U	1600 U	1400 U
2-Nitrophenol	UG/KG	730 U	680 U	570 U
3,3'-Dichlorobenzidine	UG/KG	730 U	680 U	570 U
3-Nitroaniline	UG/KG	1800 U	1600 U	1400 U
4,6-Dinitro-o-Cresol	UG/KG	1800 U	1600 U	1400 U
4-Bromophenyl-phenyl Ether	UG/KG	730 U	680 U	570 U
4-Chloroaniline	UG/KG	730 U	680 U	570 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-022	RQLsd-023	RQLsd-023
Sample Id		RQ0038	RQ0041	RQ0042
Date		07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	0 - 1	1 - 2
Filtered		Total	Total	Total
Sample Type		Grab	Grab	Grab
4-Chlorophenyl-phenylether	UG/KG	730 U	680 U	570 U
4-Methylphenol	UG/KG	730 U	680 U	570 U
4-Nitroaniline	UG/KG	1800 U	1600 U	1400 U
4-Nitrophenol	UG/KG	1800 U	1600 U	1400 U
4-chloro-3-methylphenol	UG/KG	730 U	680 U	570 U
Acenaphthene	UG/KG	730 U	680 U	570 U
Acenaphthylene	UG/KG	730 U	680 U	570 U
Anthracene	UG/KG	730 U	680 U	570 U
Benzo(a)anthracene	UG/KG	730 U	680 U	570 U
Benzo(a)pyrene	UG/KG	730 U	680 U	570 U
Benzo(b)fluoranthene	UG/KG	730 U	680 U	570 U
Benzo(g,h,i)perylene	UG/KG	730 U	680 U	570 U
Benzo(k)fluoranthene	UG/KG	730 U	680 U	570 U
Bis(2-chloroethoxy)methane	UG/KG	730 U	680 U	570 U
Bis(2-chloroethyl)ether	UG/KG	730 U	680 U	570 U
Bis(2-ethylhexyl)phthalate	UG/KG	730 U	680 U	570 U
Butyl Benzyl Phthalate	UG/KG	730 U	680 U	570 U
Carbazole	UG/KG	730 U	680 U	570 U
Chrysene	UG/KG	730 U	680 U	570 U
Di-n-butyl Phthalate	UG/KG	730 U	680 U	570 U
Di-n-octyl Phthalate	UG/KG	730 U	680 U	570 U
Dibenzo(a,h)anthracene	UG/KG	730 U	680 U	570 U
Dibenzofuran	UG/KG	730 U	680 U	570 U
Diethyl Phthalate	UG/KG	730 U	680 U	570 U
Dimethyl Phthalate	UG/KG	730 U	680 U	570 U
Fluoranthene	UG/KG	730 U	82 J	81 J
Fluorene	UG/KG	730 U	680 U	570 U
Hexachlorobenzene	UG/KG	730 U	680 U	570 U
Hexachlorobutadiene	UG/KG	730 U	680 U	570 U
Hexachlorocyclopentadiene	UG/KG	730 U	680 U	570 U
Hexachloroethane	UG/KG	730 U	680 U	570 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-022	RQLsd-023	RQLsd-023
Sample Id		RQ0038	RQ0041	RQ0042
Date		07/08/98	07/08/98	07/08/98
Depth (ft)		0 - 1	0 - 1	1 - 2
Filtered		Total	Total	Total
Sample Type		Grab	Grab	Grab
Indeno(1,2,3-cd)pyrene	UG/KG	730 U	680 U	570 U
Isophorone	UG/KG	730 U	680 U	570 U
N-Nitroso-di-n-propylamine	UG/KG	730 U	680 U	570 U
N-Nitrosodiphenylamine	UG/KG	730 U	680 U	570 U
Naphthalene	UG/KG	730 U	680 U	570 U
Nitrobenzene	UG/KG	730 U	680 U	570 U
Pentachlorophenol	UG/KG	730 U	680 U	570 U
Phenanthrene	UG/KG	730 U	680 U	570 U
Phenol	UG/KG	730 U	680 U	570 U
Pyrene	UG/KG	730 U	89 J	75 J
1,1,1-Trichloroethane	UG/KG	11 U	10 U	8.6 U
1,1,2,2-Tetrachloroethane	UG/KG	11 U	10 U	8.6 U
1,1,2-Trichloroethane	UG/KG	11 U	10 U	8.6 U
1,1-Dichloroethane	UG/KG	11 U	10 U	8.6 U
1,1-Dichloroethene	UG/KG	11 U	10 U	8.6 U
1,2-Dichloroethane	UG/KG	11 U	10 U	8.6 U
1,2-Dichloroethene	UG/KG	11 U	10 U	8.6 U
1,2-Dichloropropane	UG/KG	11 U	10 U	8.6 U
1,3-cis-Dichloropropene	UG/KG	11 U	10 U	8.6 U
1,3-trans-Dichloropropene	UG/KG	11 U	10 U	8.6 U
2-Butanone	UG/KG	44 U	9.6 J	6.8 J
2-Hexanone	UG/KG	44 U	41 U	35 U
4-Methyl-2-pentanone	UG/KG	44 U	41 U	35 U
Acetone	UG/KG	12 J	34 J	26 J
Benzene	UG/KG	11 U	10 U	8.6 U
Bromodichloromethane	UG/KG	11 U	10 U	8.6 U
Bromoform	UG/KG	11 U	10 U	8.6 U
Bromomethane	UG/KG	22 U	21 U	17 U
Carbon Disulfide	UG/KG	11 U	10 U	8.6 U
Carbon Tetrachloride	UG/KG	11 U	10 U	8.6 U
Chlorobenzene	UG/KG	11 U	10 U	8.6 U

Analytical Summary Table for Ramsdell Quarry Landfill
Sediment Results

Station		RQLsd-022	RQLsd-023	RQLsd-023
Sample Id		**RQ0038**	**RQ0041**	**RQ0042**
Date		**07/08/98**	**07/08/98**	**07/08/98**
Depth (ft)		**0 - 1**	**0 - 1**	**1 - 2**
Filtered		**Total**	**Total**	**Total**
Sample Type		**Grab**	**Grab**	**Grab**
Chloroethane	UG/KG	22 U	21 U	17 U
Chloroform	UG/KG	11 U	10 U	8.6 U
Chloromethane	UG/KG	22 U	21 U	17 U
Dibromochloromethane	UG/KG	11 U	10 U	8.6 U
Ethylbenzene	UG/KG	11 U	10 U	8.6 U
Methylene Chloride	UG/KG	11 U	10 U	8.6 U
Styrene	UG/KG	11 U	10 U	8.6 U
Tetrachloroethene	UG/KG	11 U	10 U	8.6 U
Toluene	UG/KG	11 U	10 U	8.6 U
Trichloroethene	UG/KG	11 U	10 U	8.6 U
Vinyl Chloride	UG/KG	22 U	21 U	17 U
Xylenes, Total	UG/KG	11 U	10 U	8.6 U

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-013	RQLsw-013	RQLsw-014
Sample Id		RQ0051	RQ0051	RQ0018	RQ0018	RQ0019	RQ0019	RQ0020
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
Cyanide	MG/L	0.01 U		0.01 U		0.01 U		0.01 U
1,3,5-Trinitrobenzene	UG/L	0.45 UJ		0.42 UJ		0.65 U		0.2 U
1,3-Dinitrobenzene	UG/L	0.45 UJ		0.42 UJ		0.65 U		0.2 U
2,4,6-Trinitrotoluene	UG/L	0.45 UJ		0.42 UJ		0.65 U		0.2 U
2,4-Dinitrotoluene	UG/L	0.3 UJ		0.27 UJ		0.42 U		0.13 U
2,6-Dinitrotoluene	UG/L	0.3 UJ		0.27 UJ		0.42 U		0.13 U
2-Nitrotoluene	UG/L	0.45 UJ		0.42 UJ		0.65 U		0.2 U
3-Nitrotoluene	UG/L	0.45 UJ		0.42 UJ		0.65 U		0.2 U
4-Nitrotoluene	UG/L	0.45 UJ		0.42 UJ		0.65 U		0.2 U
HMX	UG/L	1.1 UJ		1 UJ		1.6 U		0.5 U
Nitrobenzene	UG/L	0.45 UJ		0.42 UJ		0.65 U		0.2 U
Nitrocellulose as N	MG/L	0.02 U		0.02 U		0.02 U		0.02 U
Nitroglycerin	UG/L	5.7 UJ		5.2 UJ		8.1 U		2.5 U
Nitroguanidine	UG/L	20 U		20 U		20 U		20 U
RDX	UG/L	1.1 UJ		1 UJ		1.6 U		0.5 U
Tetryl	UG/L	0.45 UJ		0.42 UJ		0.65 U		0.2 U
Aluminum	UG/L	39400 =	84 J	49600 =	92.9 J	25500 =	72 J	200 U
Antimony	UG/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Arsenic	UG/L	41.7 =	10 U	39.3 =	10 U	23 =	3.7 J	5 U
Barium	UG/L	406 =	45.8 J	405 =	51.1 J	175 J	15.2 J	40.1 J
Beryllium	UG/L	1.4 U	5 U	1.3 U	5 U	4 U	5 U	4 U
Cadmium	UG/L	2.1 J	5 U	1.5 J	5 U	5 U	5 U	5 U
Calcium	UG/L	63300 =	19000 =	58300 =	20200 =	15100 =	12300 =	18000 =
Chromium	UG/L	57.2 =	10 U	64.7 =	10 U	29.7 =	10 U	10 U
Cobalt	UG/L	32 J	50 U	29.5 J	50 U	50 U	50 U	50 U
Copper	UG/L	165 =	25 U	160 =	25 U	44.9 =	25 U	25 U
Iron	UG/L	84300 =	100 U	80200 =	51.5 J	42700 =	213 =	828 =
Lead	UG/L	110 =	3 U	99.2 =	3 U	38.2 =	3 U	3 U
Magnesium	UG/L	201000 =	154000 =	202000 =	168000 =	73500 =	67600 =	33000 =
Manganese	UG/L	5130 =	273 =	4630 =	316 =	831 =	22.3 =	67.2 =
Mercury	UG/L	0.27 =	0.2 U	0.26 =	0.2 U	.15 J	0.2 U	0.2 U
Nickel	UG/L	70.8 =	40 U	67.9 =	40 U	35.1 J	40 U	40 U

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-013	RQLsw-013	RQLsw-014
Sample Id		RQ0051	RQ0051	RQ0018	RQ0018	RQ0019	RQ0019	RQ0020
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
Potassium	UG/L	6440 J	1400 J	9550 J	1560 J	4730 J	1020 J	1050 J
Selenium	UG/L	4.2 J	5 U	5 U	5 U	5 U	5 U	5 U
Silver	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sodium	UG/L	4450 J	3160 J	4460 J	3220 J	2450 J	2140 J	1490 J
Thallium	UG/L	2 J	2 UJ	1.7 J	2 UJ	1.8 J	2 UJ	2 UJ
Vanadium	UG/L	68.6 =	50 U	85.3 =	50 U	40.3 J	50 U	50 U
Zinc	UG/L	531 =	20 U	492 =	20 U	264 =	20 U	20 U
1,2,4-Trichlorobenzene	UG/L	10 U		10 U		10 U		10 U
1,2-Dichlorobenzene	UG/L	10 U		10 U		10 U		10 U
1,3-Dichlorobenzene	UG/L	10 U		10 U		10 U		10 U
1,4-Dichlorobenzene	UG/L	10 U		10 U		10 U		10 U
2,2'-oxybis (1-chloropropane)	UG/L	10 U		10 U		10 U		10 U
2,4,5-Trichlorophenol	UG/L	25 U		25 U		25 U		25 U
2,4,6-Trichlorophenol	UG/L	10 U		10 U		10 U		10 U
2,4-Dichlorophenol	UG/L	10 U		10 U		10 U		10 U
2,4-Dimethylphenol	UG/L	10 U		10 U		10 U		10 U
2,4-Dinitrophenol	UG/L	25 U		25 U		25 U		25 U
2,4-Dinitrotoluene	UG/L	10 U		10 U		10 U		10 U
2,6-Dinitrotoluene	UG/L	10 U		10 U		10 U		10 U
2-Chloronaphthalene	UG/L	10 U		10 U		10 U		10 U
2-Chlorophenol	UG/L	10 U		10 U		10 U		10 U
2-Methylnaphthalene	UG/L	10 U		10 U		10 U		10 U
2-Methylphenol	UG/L	10 U		10 U		10 U		10 U
2-Nitroaniline	UG/L	25 U		25 U		25 U		25 U
2-Nitrophenol	UG/L	10 U		10 U		10 U		10 U
3,3'-Dichlorobenzidine	UG/L	10 U		10 U		10 U		10 U
3-Nitroaniline	UG/L	25 U		25 U		25 U		25 U
4,6-Dinitro-o-Cresol	UG/L	25 U		25 U		25 U		25 U
4-Bromophenyl-phenyl Ether	UG/L	10 U		10 U		10 U		10 U
4-Chloroaniline	UG/L	10 U		10 U		10 U		10 U
4-Chlorophenyl-phenylether	UG/L	10 U		10 U		10 U		10 U
4-Methylphenol	UG/L	10 U		10 U		10 U		10 U

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-013	RQLsw-013	RQLsw-014
Sample Id		RQ0051	RQ0051	RQ0018	RQ0018	RQ0019	RQ0019	RQ0020
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
4-Nitroaniline	UG/L	25 U		25 U		25 U		25 U
4-Nitrophenol	UG/L	25 U		25 U		25 U		25 U
4-chloro-3-methylphenol	UG/L	10 U		10 U		10 U		10 U
Acenaphthene	UG/L	10 U		10 U		10 U		10 U
Acenaphthylene	UG/L	10 U		10 U		10 U		10 U
Anthracene	UG/L	10 U		10 U		10 U		10 U
Benzo(a)anthracene	UG/L	10 U		10 U		10 U		10 U
Benzo(a)pyrene	UG/L	10 U		10 U		10 U		10 U
Benzo(b)fluoranthene	UG/L	10 U		10 U		10 U		10 U
Benzo(g,h,i)perylene	UG/L	10 U		10 U		10 U		10 U
Benzo(k)fluoranthene	UG/L	10 U		10 U		10 U		10 U
Bis(2-chloroethoxy)methane	UG/L	10 U		10 U		10 U		10 U
Bis(2-chloroethyl)ether	UG/L	10 U		10 U		10 U		10 U
Bis(2-ethylhexyl)phthalate	UG/L	10 U		10 U		10 U		10 U
Butyl Benzyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Carbazole	UG/L	10 U		10 U		10 U		10 U
Chrysene	UG/L	10 U		10 U		10 U		10 U
Di-n-butyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Di-n-octyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Dibenzo(a,h)anthracene	UG/L	10 U		10 U		10 U		10 U
Dibenzofuran	UG/L	10 U		10 U		10 U		10 U
Diethyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Dimethyl Phthalate	UG/L	10 U		10 U		10 U		10 U
Fluoranthene	UG/L	10 U		10 U		10 U		10 U
Fluorene	UG/L	10 U		10 U		10 U		10 U
Hexachlorobenzene	UG/L	10 U		10 U		10 U		10 U
Hexachlorobutadiene	UG/L	10 U		10 U		10 U		10 U
Hexachlorocyclopentadiene	UG/L	10 U		10 U		10 U		10 U
Hexachloroethane	UG/L	10 U		10 U		10 U		10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U		10 U		10 U		10 U
Isophorone	UG/L	10 U		10 U		10 U		10 U
N-Nitroso-di-n-propylamine	UG/L	10 U		10 U		10 U		10 U

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-013	RQLsw-013	RQLsw-014
Sample Id		RQ0051	RQ0051	RQ0018	RQ0018	RQ0019	RQ0019	RQ0020
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
N-Nitrosodiphenylamine	UG/L	10 U		10 U		10 U		10 U
Naphthalene	UG/L	10 U		10 U		10 U		10 U
Nitrobenzene	UG/L	10 U		10 U		10 U		10 U
Pentachlorophenol	UG/L	25 U		25 U		25 U		25 U
Phenanthrene	UG/L	10 U		10 U		10 U		10 U
Phenol	UG/L	10 U		10 U		10 U		10 U
Pyrene	UG/L	10 U		10 U		10 U		10 U
1,1,1-Trichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1,2,2-Tetrachloroethane	UG/L	5 U		5 U		5 U		5 U
1,1,2-Trichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1-Dichloroethane	UG/L	5 U		5 U		5 U		5 U
1,1-Dichloroethene	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloroethane	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloroethene	UG/L	5 U		5 U		5 U		5 U
1,2-Dichloropropane	UG/L	5 U		5 U		5 U		5 U
1,3-cis-Dichloropropene	UG/L	5 U		5 U		5 U		5 U
1,3-trans-Dichloropropene	UG/L	5 U		5 U		5 U		5 U
2-Butanone	UG/L	10 U		10 U		10 U		10 U
2-Hexanone	UG/L	10 U		10 U		10 U		10 U
4-Methyl-2-pentanone	UG/L	10 U		10 U		10 U		10 U
Acetone	UG/L	10 U		10 U		10 U		10 U
Benzene	UG/L	5 U		5 U		5 U		5 U
Bromodichloromethane	UG/L	5 U		5 U		5 U		5 U
Bromoform	UG/L	5 U		5 U		5 U		5 U
Bromomethane	UG/L	10 U		10 U		10 U		10 U
Carbon Disulfide	UG/L	5 U		5 U		5 U		5 U
Carbon Tetrachloride	UG/L	5 U		5 U		5 U		5 U
Chlorobenzene	UG/L	5 U		5 U		5 U		5 U
Chloroethane	UG/L	10 U		10 U		10 U		10 U
Chloroform	UG/L	5 U		5 U		5 U		5 U
Chloromethane	UG/L	10 U		10 U		10 U		10 U
Dibromochloromethane	UG/L	5 U		5 U		5 U		5 U

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-012	RQLsw-013	RQLsw-013	RQLsw-014
Sample Id		RQ0051	RQ0051	RQ0018	RQ0018	RQ0019	RQ0019	RQ0020
Date		07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98	07/08/98
Filtered		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type		Field Duplicate	Field Duplicate	Grab	Grab	Grab	Grab	Grab
Ethylbenzene	UG/L	5 U		5 U		5 U		5 U
Methylene Chloride	UG/L	5 U		5 U		5 U		5 U
Styrene	UG/L	5 U		5 U		5 U		5 U
Tetrachloroethene	UG/L	5 U		5 U		5 U		5 U
Toluene	UG/L	5 U		5 U		5 U		5 U
Trichloroethene	UG/L	5 U		5 U		5 U		5 U
Vinyl Chloride	UG/L	10 U		10 U		10 U		10 U
Xylenes, Total	UG/L	5 U		5 U		5 U		5 U

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-014	RQLsw-015	RQLsw-015
Sample Id		RQ0020	RQ0021	RQ0021
Date		07/08/98	07/08/98	07/08/98
Filtered		Dissolved	Total	Dissolved
Sample Type		Grab	Grab	Grab
Cyanide	MG/L		0.01 U	
1,3,5-Trinitrobenzene	UG/L		0.2 U	
1,3-Dinitrobenzene	UG/L		0.2 U	
2,4,6-Trinitrotoluene	UG/L		0.2 U	
2,4-Dinitrotoluene	UG/L		0.13 U	
2,6-Dinitrotoluene	UG/L		0.13 U	
2-Nitrotoluene	UG/L		0.2 U	
3-Nitrotoluene	UG/L		0.2 U	
4-Nitrotoluene	UG/L		0.2 U	
HMX	UG/L		0.5 U	
Nitrobenzene	UG/L		0.2 U	
Nitrocellulose as N	MG/L		0.02 U	
Nitroglycerin	UG/L		2.5 U	
Nitroguanidine	UG/L		20 U	
RDX	UG/L		0.5 U	
Tetryl	UG/L		0.2 U	
Aluminum	UG/L	200 U	200 U	200 U
Antimony	UG/L	5 U	5 U	5 U
Arsenic	UG/L	10 U	5 U	10 U
Barium	UG/L	38.5 J	31.4 J	22.9 J
Beryllium	UG/L	5 U	4 U	5 U
Cadmium	UG/L	5 U	5 U	5 U
Calcium	UG/L	18000 =	16800 =	14100 =
Chromium	UG/L	10 U	10 U	10 U
Cobalt	UG/L	50 U	50 U	50 U
Copper	UG/L	25 U	25 U	25 U
Iron	UG/L	169 =	377 =	78.2 J
Lead	UG/L	3 U	3 U	3 U
Magnesium	UG/L	33200 =	30800 =	28900 =
Manganese	UG/L	40.6 =	72 =	8.8 J
Mercury	UG/L	0.2 U	0.2 U	0.2 U
Nickel	UG/L	40 U	40 U	40 U

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-014	RQLsw-015	RQLsw-015
Sample Id		RQ0020	RQ0021	RQ0021
Date		07/08/98	07/08/98	07/08/98
Filtered		Dissolved	Total	Dissolved
Sample Type		Grab	Grab	Grab
Potassium	UG/L	1060 J	1520 J	1690 J
Selenium	UG/L	5 U	5 U	5 U
Silver	UG/L	10 U	10 U	10 U
Sodium	UG/L	1510 J	1570 J	1670 J
Thallium	UG/L	2 U	2 UJ	2 U
Vanadium	UG/L	50 U	50 U	50 U
Zinc	UG/L	20 U	16.9 J	20 U
1,2,4-Trichlorobenzene	UG/L		10 U	
1,2-Dichlorobenzene	UG/L		10 U	
1,3-Dichlorobenzene	UG/L		10 U	
1,4-Dichlorobenzene	UG/L		10 U	
2,2'-oxybis (1-chloropropane)	UG/L		10 U	
2,4,5-Trichlorophenol	UG/L		25 U	
2,4,6-Trichlorophenol	UG/L		10 U	
2,4-Dichlorophenol	UG/L		10 U	
2,4-Dimethylphenol	UG/L		10 U	
2,4-Dinitrophenol	UG/L		25 U	
2,4-Dinitrotoluene	UG/L		10 U	
2,6-Dinitrotoluene	UG/L		10 U	
2-Chloronaphthalene	UG/L		10 U	
2-Chlorophenol	UG/L		10 U	
2-Methylnaphthalene	UG/L		10 U	
2-Methylphenol	UG/L		10 U	
2-Nitroaniline	UG/L		25 U	
2-Nitrophenol	UG/L		10 U	
3,3'-Dichlorobenzidine	UG/L		10 U	
3-Nitroaniline	UG/L		25 U	
4,6-Dinitro-o-Cresol	UG/L		25 U	
4-Bromophenyl-phenyl Ether	UG/L		10 U	
4-Chloroaniline	UG/L		10 U	
4-Chlorophenyl-phenylether	UG/L		10 U	
4-Methylphenol	UG/L		10 U	

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-014	RQLsw-015	RQLsw-015
Sample Id		RQ0020	RQ0021	RQ0021
Date		07/08/98	07/08/98	07/08/98
Filtered		Dissolved	Total	Dissolved
Sample Type		Grab	Grab	Grab
4-Nitroaniline	UG/L		25 U	
4-Nitrophenol	UG/L		25 U	
4-chloro-3-methylphenol	UG/L		10 U	
Acenaphthene	UG/L		10 U	
Acenaphthylene	UG/L		10 U	
Anthracene	UG/L		10 U	
Benzo(a)anthracene	UG/L		10 U	
Benzo(a)pyrene	UG/L		10 U	
Benzo(b)fluoranthene	UG/L		10 U	
Benzo(g,h,i)perylene	UG/L		10 U	
Benzo(k)fluoranthene	UG/L		10 U	
Bis(2-chloroethoxy)methane	UG/L		10 U	
Bis(2-chloroethyl)ether	UG/L		10 U	
Bis(2-ethylhexyl)phthalate	UG/L		10 U	
Butyl Benzyl Phthalate	UG/L		10 U	
Carbazole	UG/L		10 U	
Chrysene	UG/L		10 U	
Di-n-butyl Phthalate	UG/L		10 U	
Di-n-octyl Phthalate	UG/L		10 U	
Dibenzo(a,h)anthracene	UG/L		10 U	
Dibenzofuran	UG/L		10 U	
Diethyl Phthalate	UG/L		10 U	
Dimethyl Phthalate	UG/L		10 U	
Fluoranthene	UG/L		10 U	
Fluorene	UG/L		10 U	
Hexachlorobenzene	UG/L		10 U	
Hexachlorobutadiene	UG/L		10 U	
Hexachlorocyclopentadiene	UG/L		10 U	
Hexachloroethane	UG/L		10 U	
Indeno(1,2,3-cd)pyrene	UG/L		10 U	
Isophorone	UG/L		10 U	
N-Nitroso-di-n-propylamine	UG/L		10 U	

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-014	RQLsw-015	RQLsw-015
Sample Id		RQ0020	RQ0021	RQ0021
Date		07/08/98	07/08/98	07/08/98
Filtered		Dissolved	Total	Dissolved
Sample Type		Grab	Grab	Grab
N-Nitrosodiphenylamine	UG/L		10 U	
Naphthalene	UG/L		10 U	
Nitrobenzene	UG/L		10 U	
Pentachlorophenol	UG/L		25 U	
Phenanthrene	UG/L		10 U	
Phenol	UG/L		10 U	
Pyrene	UG/L		10 U	
1,1,1-Trichloroethane	UG/L		5 U	
1,1,2,2-Tetrachloroethane	UG/L		5 U	
1,1,2-Trichloroethane	UG/L		5 U	
1,1-Dichloroethane	UG/L		5 U	
1,1-Dichloroethene	UG/L		5 U	
1,2-Dichloroethane	UG/L		5 U	
1,2-Dichloroethene	UG/L		5 U	
1,2-Dichloropropane	UG/L		5 U	
1,3-cis-Dichloropropene	UG/L		5 U	
1,3-trans-Dichloropropene	UG/L		5 U	
2-Butanone	UG/L		10 U	
2-Hexanone	UG/L		10 U	
4-Methyl-2-pentanone	UG/L		10 U	
Acetone	UG/L		10 U	
Benzene	UG/L		5 U	
Bromodichloromethane	UG/L		5 U	
Bromoform	UG/L		5 U	
Bromomethane	UG/L		10 U	
Carbon Disulfide	UG/L		5 U	
Carbon Tetrachloride	UG/L		5 U	
Chlorobenzene	UG/L		5 U	
Chloroethane	UG/L		10 U	
Chloroform	UG/L		5 U	
Chloromethane	UG/L		10 U	
Dibromochloromethane	UG/L		5 U	

Analytical Summary Table for Ramsdell Quarry Landfill
Surface Water Results

Station		RQLsw-014	RQLsw-015	RQLsw-015
Sample Id		**RQ0020**	**RQ0021**	**RQ0021**
Date		**07/08/98**	**07/08/98**	**07/08/98**
Filtered		**Dissolved**	**Total**	**Dissolved**
Sample Type		**Grab**	**Grab**	**Grab**
Ethylbenzene	UG/L		5 U	
Methylene Chloride	UG/L		5 U	
Styrene	UG/L		5 U	
Tetrachloroethene	UG/L		5 U	
Toluene	UG/L		5 U	
Trichloroethene	UG/L		5 U	
Vinyl Chloride	UG/L		10 U	
Xylenes, Total	UG/L		5 U	

D2. BY SAMPLE STATION – ALL MEDIA

Location: Ramsdell Quarry Landfill
Station : MW-1 Existing Well

RQLmw-001-0001-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/14/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	751	UG/L		J	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	15.8	UG/L		=	
REG	Barium	27.5	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	56100	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	47.2	UG/L	B	J	
REG	Copper	12.9	UG/L	B	J	
REG	Iron	19700	UG/L		=	
REG	Lead	4.2	UG/L		=	
REG	Magnesium	22500	UG/L		=	
REG	Manganese	2320	UG/L		=	
REG	Mercury	0.16	UG/L	B	J	
REG	Nickel	117	UG/L		=	
REG	Potassium	5840	UG/L		=	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	4650	UG/L	B	U	F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	596	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	10	UG/L	U	U	
REG	Barium	17.9	UG/L	B	U	F06
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	58200	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	38.8	UG/L	B	J	
REG	Copper	25	UG/L	U	U	
REG	Iron	3270	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	23400	UG/L		=	
REG	Manganese	2410	UG/L		=	
REG	Mercury	0.081	UG/L	B	J	
REG	Nickel	109	UG/L		=	
REG	Potassium	6260	UG/L		=	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	3910	UG/L	B	U	F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	374	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-1 Existing Well

RQLmw-001-0001-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/14/98

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.068	UG/L	J	J	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A01
REA	1,2-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,3-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,4-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A01
REA	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A01
REA	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dimethylphenol	10	UG/L	U	UJ	A01
REA	2,4-Dinitrophenol	25	UG/L	U	UJ	A01
REA	2,4-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2,6-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2-Chloronaphthalene	10	UG/L	U	UJ	A01
REA	2-Chlorophenol	10	UG/L	U	UJ	A01
REA	2-Methylnaphthalene	10	UG/L	U	UJ	A01
REA	2-Methylphenol	10	UG/L	U	UJ	A01
REA	2-Nitroaniline	25	UG/L	U	UJ	A01
REA	2-Nitrophenol	10	UG/L	U	UJ	A01
REA	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A01
REA	3-Nitroaniline	25	UG/L	U	UJ	A01
REA	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A01
REA	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A01
REA	4-Chloroaniline	10	UG/L	U	UJ	A01
REA	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A01
REA	4-Methylphenol	10	UG/L	U	UJ	A01
REA	4-Nitroaniline	25	UG/L	U	UJ	A01
REA	4-Nitrophenol	25	UG/L	U	UJ	A01
REA	4-chloro-3-methylphenol	10	UG/L	U	UJ	A01
REA	Acenaphthene	10	UG/L	U	UJ	A01
REA	Acenaphthylene	10	UG/L	U	UJ	A01
REA	Anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)pyrene	10	UG/L	U	UJ	A01
REA	Benzo(b)fluoranthene	10	UG/L	U	UJ	A01
REA	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A01
REA	Benzo(k)fluoranthene	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A01
REA	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A01
REA	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A01
REA	Carbazole	10	UG/L	U	UJ	A01
REA	Chrysene	10	UG/L	U	UJ	A01
REA	Di-n-butyl Phthalate	10	UG/L	U	UJ	A01
REA	Di-n-octyl Phthalate	10	UG/L	U	UJ	A01
REA	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A01
REA	Dibenzofuran	10	UG/L	U	UJ	A01
REA	Diethyl Phthalate	10	UG/L	U	UJ	A01
REA	Dimethyl Phthalate	10	UG/L	U	UJ	A01
REA	Fluoranthene	10	UG/L	U	UJ	A01
REA	Fluorene	10	UG/L	U	UJ	A01
REA	Hexachlorobenzene	10	UG/L	U	UJ	A01
REA	Hexachlorobutadiene	10	UG/L	U	UJ	A01
REA	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A01,C05
REA	Hexachloroethane	10	UG/L	U	UJ	A01
REA	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A01
REA	Isophorone	10	UG/L	U	UJ	A01
REA	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A01
REA	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A01
REA	Naphthalene	10	UG/L	U	UJ	A01
REA	Nitrobenzene	10	UG/L	U	UJ	A01
REA	Pentachlorophenol	25	UG/L	U	UJ	A01
REA	Phenanthrene	10	UG/L	U	UJ	A01
REA	Phenol	10	UG/L	U	UJ	A01

Location: Ramsdell Quarry Landfill
Station : MW-1 Existing Well

RQLmw-001-0001-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/14/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	Pyrene	10	UG/L	U	UJ	A01

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	R	G04
REG	2,4,6-Trichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dimethylphenol	10	UG/L	U	R	G04
REG	2,4-Dinitrophenol	25	UG/L	U	R	G04
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	R	G04,H03
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	R	G04
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	R	G04
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	R	G04
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	R	G07
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	R	G04,H03
REG	4-chloro-3-methylphenol	10	UG/L	U	R	H03,G04
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	R	H03,G04
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	R	G04,H03
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-2 Existing Well

RQLmw-002-0002-GW **Field Sample Type: Grab** **Matrix: Groundwater** **Collected:** 07/13/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	87700	UG/L		J	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	108	UG/L		=	
REG	Barium	181	UG/L	B	J	
REG	Beryllium	3.6	UG/L	B	J	
REG	Cadmium	19	UG/L		=	
REG	Calcium	91300	UG/L		=	
REG	Chromium	23.3	UG/L		=	
REG	Cobalt	90.6	UG/L		=	
REG	Copper	72.8	UG/L		=	
REG	Iron	55600	UG/L		=	
REG	Lead	74.8	UG/L		=	
REG	Magnesium	29700	UG/L		=	
REG	Manganese	4490	UG/L		=	
REG	Mercury	0.29	UG/L		=	
REG	Nickel	169	UG/L		=	
REG	Potassium	5790	UG/L		=	
REG	Selenium	4.8	UG/L	B	J	
REG	Silver	10	UG/L	U	U	
REG	Sodium	2920	UG/L	B	U	F06
REG	Thallium	3.7	UG/L		=	
REG	Vanadium	22.4	UG/L	B	J	
REG	Zinc	1040	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-2 Existing Well

RQLmw-002-0002-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Arsenic	3.2	UG/L	B	J	
REG	Barium	42.7	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	2.4	UG/L	B	J	
REG	Calcium	85800	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	100	UG/L	U	U	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	18500	UG/L		=	
REG	Manganese	614	UG/L		=	
REG	Mercury	0.087	UG/L	B	J	
REG	Nickel	18.8	UG/L	B	J	
REG	Potassium	3340	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	2050	UG/L	B	U	F06
REG	Thallium	1.1	UG/L	B	J	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	168	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.14	UG/L	J	J	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A01
REA	1,2-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,3-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,4-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A01
REA	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A01
REA	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dimethylphenol	10	UG/L	U	UJ	A01
REA	2,4-Dinitrophenol	25	UG/L	U	UJ	A01
REA	2,4-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2,6-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2-Chloronaphthalene	10	UG/L	U	UJ	A01
REA	2-Chlorophenol	10	UG/L	U	UJ	A01
REA	2-Methylnaphthalene	10	UG/L	U	UJ	A01
REA	2-Methylphenol	10	UG/L	U	UJ	A01
REA	2-Nitroaniline	25	UG/L	U	UJ	A01
REA	2-Nitrophenol	10	UG/L	U	UJ	A01
REA	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A01
REA	3-Nitroaniline	25	UG/L	U	UJ	A01
REA	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A01
REA	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A01
REA	4-Chloroaniline	10	UG/L	U	UJ	A01
REA	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A01
REA	4-Methylphenol	10	UG/L	U	UJ	A01
REA	4-Nitroaniline	25	UG/L	U	UJ	A01

Location: Ramsdell Quarry Landfill
Station : MW-2 Existing Well

RQLmw-002-0002-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	4-Nitrophenol	25	UG/L	U	UJ	A01
REA	4-chloro-3-methylphenol	10	UG/L	U	UJ	A01
REA	Acenaphthene	10	UG/L	U	UJ	A01
REA	Acenaphthylene	10	UG/L	U	UJ	A01
REA	Anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)pyrene	10	UG/L	U	UJ	A01
REA	Benzo(b)fluoranthene	10	UG/L	U	UJ	A01
REA	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A01
REA	Benzo(k)fluoranthene	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A01
REA	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A01
REA	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A01
REA	Carbazole	10	UG/L	U	UJ	A01
REA	Chrysene	10	UG/L	U	UJ	A01
REA	Di-n-butyl Phthalate	10	UG/L	U	UJ	A01
REA	Di-n-octyl Phthalate	10	UG/L	U	UJ	A01
REA	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A01
REA	Dibenzofuran	10	UG/L	U	UJ	A01
REA	Diethyl Phthalate	10	UG/L	U	UJ	A01
REA	Dimethyl Phthalate	10	UG/L	U	UJ	A01
REA	Fluoranthene	10	UG/L	U	UJ	A01
REA	Fluorene	10	UG/L	U	UJ	A01
REA	Hexachlorobenzene	10	UG/L	U	UJ	A01
REA	Hexachlorobutadiene	10	UG/L	U	UJ	A01
REA	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A01,C05
REA	Hexachloroethane	10	UG/L	U	UJ	A01
REA	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A01
REA	Isophorone	10	UG/L	U	UJ	A01
REA	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A01
REA	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A01
REA	Naphthalene	10	UG/L	U	UJ	A01
REA	Nitrobenzene	10	UG/L	U	UJ	A01
REA	Pentachlorophenol	25	UG/L	U	UJ	A01
REA	Phenanthrene	10	UG/L	U	UJ	A01
REA	Phenol	10	UG/L	U	UJ	A01
REA	Pyrene	10	UG/L	U	UJ	A01

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	R	G04
REG	2,4,6-Trichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dimethylphenol	10	UG/L	U	R	G04
REG	2,4-Dinitrophenol	25	UG/L	U	R	G04
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	R	G04
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	R	G04
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	R	G04
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	R	G04
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	R	G04
REG	4-chloro-3-methylphenol	10	UG/L	U	R	G04

Location: Ramsdell Quarry Landfill
Station : MW-2 Existing Well

RQLmw-002-0002-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	R	G04
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	R	G04
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-2 Existing Well

RQLmw-002-0002-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-3 Existing Well

RQLmw-003-0003-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	93.9	UG/L	B	J	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5	UG/L	U	U	
REG	Barium	48.1	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	156000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	3.7	UG/L	B	J	
REG	Iron	221	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	37900	UG/L		=	
REG	Manganese	28.1	UG/L		=	
REG	Mercury	0.14	UG/L	B	J	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	15800	UG/L		=	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	7660	UG/L		=	
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	41.9	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	10	UG/L	U	U	
REG	Barium	45.5	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	152000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	3.8	UG/L	B	J	
REG	Iron	100	UG/L	U	U	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	36700	UG/L		=	
REG	Manganese	12.6	UG/L	B	J	
REG	Mercury	0.094	UG/L	B	J	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	15500	UG/L		=	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	7590	UG/L		=	
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	71.4	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code

Location: Ramsdell Quarry Landfill
Station : MW-3 Existing Well

RQLmw-003-0003-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.28	UG/L	J	J	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A01
REA	1,2-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,3-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,4-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A01
REA	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A01
REA	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dimethylphenol	10	UG/L	U	UJ	A01
REA	2,4-Dinitrophenol	25	UG/L	U	UJ	A01
REA	2,4-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2,6-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2-Chloronaphthalene	10	UG/L	U	UJ	A01
REA	2-Chlorophenol	10	UG/L	U	UJ	A01
REA	2-Methylnaphthalene	10	UG/L	U	UJ	A01
REA	2-Methylphenol	10	UG/L	U	UJ	A01
REA	2-Nitroaniline	25	UG/L	U	UJ	A01
REA	2-Nitrophenol	10	UG/L	U	UJ	A01
REA	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A01
REA	3-Nitroaniline	25	UG/L	U	UJ	A01
REA	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A01
REA	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A01
REA	4-Chloroaniline	10	UG/L	U	UJ	A01
REA	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A01
REA	4-Methylphenol	10	UG/L	U	UJ	A01
REA	4-Nitroaniline	25	UG/L	U	UJ	A01
REA	4-Nitrophenol	25	UG/L	U	UJ	A01
REA	4-chloro-3-methylphenol	10	UG/L	U	UJ	A01
REA	Acenaphthene	10	UG/L	U	UJ	A01
REA	Acenaphthylene	10	UG/L	U	UJ	A01
REA	Anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)pyrene	10	UG/L	U	UJ	A01
REA	Benzo(b)fluoranthene	10	UG/L	U	UJ	A01
REA	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A01
REA	Benzo(k)fluoranthene	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A01
REA	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A01
REA	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A01
REA	Carbazole	10	UG/L	U	UJ	A01
REA	Chrysene	10	UG/L	U	UJ	A01
REA	Di-n-butyl Phthalate	10	UG/L	U	UJ	A01
REA	Di-n-octyl Phthalate	10	UG/L	U	UJ	A01
REA	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A01
REA	Dibenzofuran	10	UG/L	U	UJ	A01
REA	Diethyl Phthalate	10	UG/L	U	UJ	A01
REA	Dimethyl Phthalate	10	UG/L	U	UJ	A01
REA	Fluoranthene	10	UG/L	U	UJ	A01
REA	Fluorene	10	UG/L	U	UJ	A01
REA	Hexachlorobenzene	10	UG/L	U	UJ	A01

Location: Ramsdell Quarry Landfill
Station : MW-3 Existing Well

RQLmw-003-0003-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	Hexachlorobutadiene	10	UG/L	U	UJ	A01
REA	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A01,C05
REA	Hexachloroethane	10	UG/L	U	UJ	A01
REA	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A01
REA	Isophorone	10	UG/L	U	UJ	A01
REA	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A01
REA	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A01
REA	Naphthalene	10	UG/L	U	UJ	A01
REA	Nitrobenzene	10	UG/L	U	UJ	A01
REA	Pentachlorophenol	25	UG/L	U	UJ	A01
REA	Phenanthrene	10	UG/L	U	UJ	A01
REA	Phenol	10	UG/L	U	UJ	A01
REA	Pyrene	10	UG/L	U	UJ	A01

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	R	G04
REG	2,4,6-Trichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dimethylphenol	10	UG/L	U	R	G04
REG	2,4-Dinitrophenol	25	UG/L	U	R	G04
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	R	G04
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	R	G04
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	R	G04
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	R	G04
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	R	G04
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-3 Existing Well

RQLmw-003-0003-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	R	G04
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	R	G04
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-4 Existing Well

RQLmw-004-0004-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	2960	UG/L		J	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	9.1	UG/L		=	
REG	Barium	64.5	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	118000	UG/L		=	
REG	Chromium	3.8	UG/L	B	J	
REG	Cobalt	29.7	UG/L	B	J	

Location: Ramsdell Quarry Landfill
Station : MW-4 Existing Well

RQLmw-004-0004-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Copper	14	UG/L	B	J	
REG	Iron	9880	UG/L		=	
REG	Lead	2.4	UG/L	B	J	
REG	Magnesium	22100	UG/L		=	
REG	Manganese	5770	UG/L		=	
REG	Mercury	0.16	UG/L	B	J	
REG	Nickel	76.8	UG/L		=	
REG	Potassium	2250	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	2070	UG/L	B	U	F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	381	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	10	UG/L	U	U	
REG	Barium	42.7	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	109000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	22.7	UG/L	B	J	
REG	Copper	3.4	UG/L	B	J	
REG	Iron	4650	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	21100	UG/L		=	
REG	Manganese	5220	UG/L		=	
REG	Mercury	0.081	UG/L	B	J	
REG	Nickel	51.4	UG/L		=	
REG	Potassium	1620	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	2050	UG/L	B	U	F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	155	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.27	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.27	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.27	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.18	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.085	UG/L	J	J	
REG	2-Nitrotoluene	0.27	UG/L	U	U	
REG	3-Nitrotoluene	0.27	UG/L	U	U	
REG	4-Nitrotoluene	0.27	UG/L	U	U	
REG	HMX	0.68	UG/L	U	U	
REG	Nitrobenzene	0.27	UG/L	U	U	
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.68	UG/L	U	U	
REG	Tetryl	0.12	UG/L	J	J	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A01
REA	1,2-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,3-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,4-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A01
REA	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A01
REA	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A01

Location: Ramsdell Quarry Landfill
Station : MW-4 Existing Well

RQLmw-004-0004-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	2,4-Dichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dimethylphenol	10	UG/L	U	UJ	A01
REA	2,4-Dinitrophenol	25	UG/L	U	UJ	A01
REA	2,4-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2,6-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2-Chloronaphthalene	10	UG/L	U	UJ	A01
REA	2-Chlorophenol	10	UG/L	U	UJ	A01
REA	2-Methylnaphthalene	10	UG/L	U	UJ	A01
REA	2-Methylphenol	10	UG/L	U	UJ	A01
REA	2-Nitroaniline	25	UG/L	U	UJ	A01
REA	2-Nitrophenol	10	UG/L	U	UJ	A01
REA	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A01
REA	3-Nitroaniline	25	UG/L	U	UJ	A01
REA	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A01
REA	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A01
REA	4-Chloroaniline	10	UG/L	U	UJ	A01
REA	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A01
REA	4-Methylphenol	10	UG/L	U	UJ	A01
REA	4-Nitroaniline	25	UG/L	U	UJ	A01
REA	4-Nitrophenol	25	UG/L	U	UJ	A01
REA	4-chloro-3-methylphenol	10	UG/L	U	UJ	A01
REA	Acenaphthene	10	UG/L	U	UJ	A01
REA	Acenaphthylene	10	UG/L	U	UJ	A01
REA	Anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)pyrene	10	UG/L	U	UJ	A01
REA	Benzo(b)fluoranthene	10	UG/L	U	UJ	A01
REA	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A01
REA	Benzo(k)fluoranthene	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A01
REA	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A01
REA	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A01
REA	Carbazole	10	UG/L	U	UJ	A01
REA	Chrysene	10	UG/L	U	UJ	A01
REA	Di-n-butyl Phthalate	10	UG/L	U	UJ	A01
REA	Di-n-octyl Phthalate	10	UG/L	U	UJ	A01
REA	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A01
REA	Dibenzofuran	10	UG/L	U	UJ	A01
REA	Diethyl Phthalate	10	UG/L	U	UJ	A01
REA	Dimethyl Phthalate	10	UG/L	U	UJ	A01
REA	Fluoranthene	10	UG/L	U	UJ	A01
REA	Fluorene	10	UG/L	U	UJ	A01
REA	Hexachlorobenzene	10	UG/L	U	UJ	A01
REA	Hexachlorobutadiene	10	UG/L	U	UJ	A01
REA	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A01,C05
REA	Hexachloroethane	10	UG/L	U	UJ	A01
REA	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A01
REA	Isophorone	10	UG/L	U	UJ	A01
REA	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A01
REA	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A01
REA	Naphthalene	10	UG/L	U	UJ	A01
REA	Nitrobenzene	10	UG/L	U	UJ	A01
REA	Pentachlorophenol	25	UG/L	U	UJ	A01
REA	Phenanthrene	10	UG/L	U	UJ	A01
REA	Phenol	10	UG/L	U	UJ	A01
REA	Pyrene	10	UG/L	U	UJ	A01

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	R	G04
REG	2,4,6-Trichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dimethylphenol	10	UG/L	U	R	G04

Location: Ramsdell Quarry Landfill
Station : MW-4 Existing Well

RQLmw-004-0004-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	R	G04
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	R	G04
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	R	G04
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	R	G04
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	R	G04
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	R	G04
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	R	G04
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-4 Existing Well

RQLmw-004-0004-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-5 Existing Well

RQLmw-005-0005-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	3.3	UG/L	B	J	
REG	Barium	16.7	UG/L	B	U	F06
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	51100	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	8260	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	32900	UG/L		=	
REG	Manganese	6650	UG/L		=	
REG	Mercury	0.098	UG/L	B	J	
REG	Nickel	15.1	UG/L	B	J	
REG	Potassium	4440	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	3990	UG/L	B	U	F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	3.1	UG/L	B	J	
REG	Barium	16.6	UG/L	B	U	F06
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	53300	UG/L		=	
REG	Chromium	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-5 Existing Well

RQLmw-005-0005-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	6690	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	34100	UG/L		=	
REG	Manganese	6960	UG/L		=	
REG	Mercury	0.087	UG/L	B	J	
REG	Nickel	15	UG/L	B	J	
REG	Potassium	4540	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	4150	UG/L	B	U	F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	Nitroglycerin	2.5	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.27	UG/L		=	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A01
REA	1,2-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,3-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,4-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A01
REA	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A01
REA	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dimethylphenol	10	UG/L	U	UJ	A01
REA	2,4-Dinitrophenol	25	UG/L	U	UJ	A01
REA	2,4-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2,6-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2-Chloronaphthalene	10	UG/L	U	UJ	A01
REA	2-Chlorophenol	10	UG/L	U	UJ	A01
REA	2-Methylnaphthalene	10	UG/L	U	UJ	A01
REA	2-Methylphenol	10	UG/L	U	UJ	A01
REA	2-Nitroaniline	25	UG/L	U	UJ	A01
REA	2-Nitrophenol	10	UG/L	U	UJ	A01
REA	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A01
REA	3-Nitroaniline	25	UG/L	U	UJ	A01
REA	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A01
REA	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A01
REA	4-Chloroaniline	10	UG/L	U	UJ	A01
REA	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A01
REA	4-Methylphenol	10	UG/L	U	UJ	A01
REA	4-Nitroaniline	25	UG/L	U	UJ	A01
REA	4-Nitrophenol	25	UG/L	U	UJ	A01
REA	4-chloro-3-methylphenol	10	UG/L	U	UJ	A01
REA	Acenaphthene	10	UG/L	U	UJ	A01

Location: Ramsdell Quarry Landfill
Station : MW-5 Existing Well

RQLmw-005-0005-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	Acenaphthylene	10	UG/L	U	UJ	A01
REA	Anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)pyrene	10	UG/L	U	UJ	A01
REA	Benzo(b)fluoranthene	10	UG/L	U	UJ	A01
REA	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A01
REA	Benzo(k)fluoranthene	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A01
REA	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A01
REA	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A01
REA	Carbazole	10	UG/L	U	UJ	A01
REA	Chrysene	10	UG/L	U	UJ	A01
REA	Di-n-butyl Phthalate	10	UG/L	U	UJ	A01
REA	Di-n-octyl Phthalate	10	UG/L	U	UJ	A01
REA	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A01
REA	Dibenzofuran	10	UG/L	U	UJ	A01
REA	Diethyl Phthalate	10	UG/L	U	UJ	A01
REA	Dimethyl Phthalate	10	UG/L	U	UJ	A01
REA	Fluoranthene	10	UG/L	U	UJ	A01
REA	Fluorene	10	UG/L	U	UJ	A01
REA	Hexachlorobenzene	10	UG/L	U	UJ	A01
REA	Hexachlorobutadiene	10	UG/L	U	UJ	A01,C05
REA	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A01
REA	Hexachloroethane	10	UG/L	U	UJ	A01
REA	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A01
REA	Isophorone	10	UG/L	U	UJ	A01
REA	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A01
REA	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A01
REA	Naphthalene	10	UG/L	U	UJ	A01
REA	Nitrobenzene	10	UG/L	U	UJ	A01
REA	Pentachlorophenol	25	UG/L	U	UJ	A01
REA	Phenanthrene	10	UG/L	U	UJ	A01
REA	Phenol	10	UG/L	U	UJ	A01
REA	Pyrene	10	UG/L	U	UJ	A01

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	R	G04
REG	2,4,6-Trichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dimethylphenol	10	UG/L	U	R	G04
REG	2,4-Dinitrophenol	25	UG/L	U	R	G04
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	R	G04
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	R	G04
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	R	G04
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	R	G04
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	R	G04
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-5 Existing Well

RQLmw-005-0005-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	R	G04
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	R	G04
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

RQLmw-005-0047-FD | Field Sample Type: Field Duplicate | Matrix: Groundwater | Collected: 07/13/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	59.4	UG/L	B	J	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5.4	UG/L		=	
REG	Barium	17.4	UG/L	B	U	F06
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	47600	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	4.3	UG/L	B	J	
REG	Iron	7990	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	30000	UG/L		=	
REG	Manganese	6270	UG/L		=	
REG	Mercury	0.085	UG/L	B	J	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	4010	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	4130	UG/L	B	U	F06
REG	Thallium	1.3	UG/L	B	J	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	54.4	UG/L	B	J	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	4	UG/L	B	J	
REG	Barium	17.7	UG/L	B	U	F06
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	52900	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	6090	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	32300	UG/L		=	
REG	Manganese	6830	UG/L		=	
REG	Mercury	0.092	UG/L	B	J	
REG	Nickel	17.6	UG/L	B	J	
REG	Potassium	4350	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	3950	UG/L	B	U	F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	Nitroglycerin	2.5	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.26	UG/L		=	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.082	UG/L	J	J	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : MW-5 Existing Well

RQLmw-005-0047-FD | Field Sample Type: Field Duplicate | Matrix: Groundwater | Collected: 07/13/98

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A01
REA	1,2-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,3-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	1,4-Dichlorobenzene	10	UG/L	U	UJ	A01
REA	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A01
REA	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A01
REA	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dichlorophenol	10	UG/L	U	UJ	A01
REA	2,4-Dimethylphenol	10	UG/L	U	UJ	A01
REA	2,4-Dinitrophenol	25	UG/L	U	UJ	A01
REA	2,4-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2,6-Dinitrotoluene	10	UG/L	U	UJ	A01
REA	2-Chloronaphthalene	10	UG/L	U	UJ	A01
REA	2-Chlorophenol	10	UG/L	U	UJ	A01
REA	2-Methylnaphthalene	10	UG/L	U	UJ	A01
REA	2-Methylphenol	10	UG/L	U	UJ	A01
REA	2-Nitroaniline	25	UG/L	U	UJ	A01
REA	2-Nitrophenol	10	UG/L	U	UJ	A01
REA	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A01
REA	3-Nitroaniline	25	UG/L	U	UJ	A01
REA	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A01
REA	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A01
REA	4-Chloroaniline	10	UG/L	U	UJ	A01
REA	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A01
REA	4-Methylphenol	10	UG/L	U	UJ	A01
REA	4-Nitroaniline	25	UG/L	U	UJ	A01
REA	4-Nitrophenol	25	UG/L	U	UJ	A01
REA	4-chloro-3-methylphenol	10	UG/L	U	UJ	A01
REA	Acenaphthene	10	UG/L	U	UJ	A01
REA	Acenaphthylene	10	UG/L	U	UJ	A01
REA	Anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)anthracene	10	UG/L	U	UJ	A01
REA	Benzo(a)pyrene	10	UG/L	U	UJ	A01
REA	Benzo(b)fluoranthene	10	UG/L	U	UJ	A01
REA	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A01
REA	Benzo(k)fluoranthene	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A01
REA	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A01
REA	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A01
REA	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A01
REA	Carbazole	10	UG/L	U	UJ	A01
REA	Chrysene	10	UG/L	U	UJ	A01
REA	Di-n-butyl Phthalate	10	UG/L	U	UJ	A01
REA	Di-n-octyl Phthalate	10	UG/L	U	UJ	A01
REA	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A01
REA	Dibenzofuran	10	UG/L	U	UJ	A01
REA	Diethyl Phthalate	10	UG/L	U	UJ	A01
REA	Dimethyl Phthalate	10	UG/L	U	UJ	A01
REA	Fluoranthene	10	UG/L	U	UJ	A01
REA	Fluorene	10	UG/L	U	UJ	A01
REA	Hexachlorobenzene	10	UG/L	U	UJ	A01
REA	Hexachlorobutadiene	10	UG/L	U	UJ	A01
REA	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A01,C05
REA	Hexachloroethane	10	UG/L	U	UJ	A01
REA	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A01
REA	Isophorone	10	UG/L	U	UJ	A01
REA	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A01
REA	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A01
REA	Naphthalene	10	UG/L	U	UJ	A01
REA	Nitrobenzene	10	UG/L	U	UJ	A01
REA	Pentachlorophenol	25	UG/L	U	UJ	A01
REA	Phenanthrene	10	UG/L	U	UJ	A01

Location: Ramsdell Quarry Landfill
Station : MW-5 Existing Well

RQLmw-005-0047-FD Field Sample Type: Field Duplicate Matrix: Groundwater Collected: 07/13/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	Phenol	10	UG/L	U	UJ	A01
REA	Pyrene	10	UG/L	U	UJ	A01

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	R	G04
REG	2,4,6-Trichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dichlorophenol	10	UG/L	U	R	G04
REG	2,4-Dimethyiphenol	10	UG/L	U	R	G04
REG	2,4-Dinitrophenol	25	UG/L	U	R	G04
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	R	G04
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	R	G04
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	R	G04
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	R	G04
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	R	G04
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	R	G04
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	R	G04
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-006 Initial Phase

RQLmw-006-0007-GW **Field Sample Type: Grab** **Matrix: Groundwater** **Collected: 07/25/98**

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	UJ	A05

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	15	UG/L		=	
REG	Barium	30.2	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	98800	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	196	UG/L		=	
REG	Copper	25	UG/L	U	U	
REG	Iron	1780	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	38500	UG/L		=	
REG	Manganese	5550	UG/L		J	I02
REG	Mercury	0.2	UG/L	U	U	I01
REG	Nickel	937	UG/L		=	
REG	Potassium	2910	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	1760	UG/L	B	J	F10
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	47.8	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-006 Initial Phase

RQLmw-006-0007-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/25/98

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	9.9	UG/L	B	J	
REG	Barium	29.7	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	94000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	206	UG/L		=	
REG	Copper	25	UG/L	U	U	
REG	Iron	1240	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	37200	UG/L		=	
REG	Manganese	5460	UG/L		J	I02
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	945	UG/L		=	
REG	Potassium	2910	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	1900	UG/L	B	J	F10
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	41.7	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	UJ	A05
REG	1,3-Dinitrobenzene	0.099	UG/L	J	J	A05
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	UJ	A05
REG	2,4-Dinitrotoluene	0.13	UG/L	U	UJ	A05
REG	2,6-Dinitrotoluene	0.13	UG/L	U	UJ	A05
REG	2-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	3-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	4-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	HMX	0.5	UG/L	U	UJ	A05
REG	Nitrobenzene	0.2	UG/L	U	UJ	A05
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2.8	UG/L		J	A05
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.12	UG/L	J	J	A05
REG	Tetryl	0.2	UG/L	U	UJ	A05

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A05
REG	1,2-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	1,3-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	1,4-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A05
REG	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A05
REG	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A05
REG	2,4-Dichlorophenol	10	UG/L	U	UJ	A05
REG	2,4-Dimethylphenol	10	UG/L	U	UJ	A05
REG	2,4-Dinitrophenol	25	UG/L	U	UJ	A05
REG	2,4-Dinitrotoluene	10	UG/L	U	UJ	A05
REG	2,6-Dinitrotoluene	10	UG/L	U	UJ	A05
REG	2-Chloronaphthalene	10	UG/L	U	UJ	A05
REG	2-Chlorophenol	10	UG/L	U	UJ	A05
REG	2-Methylnaphthalene	10	UG/L	U	UJ	A05
REG	2-Methylphenol	10	UG/L	U	UJ	A05
REG	2-Nitroaniline	25	UG/L	U	UJ	A05
REG	2-Nitrophenol	10	UG/L	U	UJ	A05
REG	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A05
REG	3-Nitroaniline	25	UG/L	U	UJ	A05
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A05
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A05
REG	4-Chloroaniline	10	UG/L	U	UJ	A05
REG	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A05
REG	4-Methylphenol	10	UG/L	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLmw-006 Initial Phase

RQLmw-006-0007-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/25/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4-Nitroaniline	25	UG/L	U	UJ	A05
REG	4-Nitrophenol	25	UG/L	U	UJ	A05
REG	4-chloro-3-methylphenol	10	UG/L	U	UJ	A05
REG	Acenaphthene	10	UG/L	U	UJ	A05
REG	Acenaphthylene	10	UG/L	U	UJ	A05
REG	Anthracene	10	UG/L	U	UJ	A05
REG	Benzo(a)anthracene	10	UG/L	U	UJ	A05
REG	Benzo(a)pyrene	10	UG/L	U	UJ	A05
REG	Benzo(b)fluoranthene	10	UG/L	U	UJ	A05
REG	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A05
REG	Benzo(k)fluoranthene	10	UG/L	U	UJ	A05
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A05
REG	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A05
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A05
REG	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A05
REG	Carbazole	10	UG/L	U	UJ	A05
REG	Chrysene	10	UG/L	U	UJ	A05
REG	Di-n-butyl Phthalate	10	UG/L	U	UJ	A05
REG	Di-n-octyl Phthalate	10	UG/L	U	UJ	A05
REG	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A05
REG	Dibenzofuran	10	UG/L	U	UJ	A05
REG	Diethyl Phthalate	10	UG/L	U	UJ	A05
REG	Dimethyl Phthalate	10	UG/L	U	UJ	A05
REG	Fluoranthene	10	UG/L	U	UJ	A05
REG	Fluorene	10	UG/L	U	UJ	A05
REG	Hexachlorobenzene	10	UG/L	U	UJ	A05
REG	Hexachlorobutadiene	10	UG/L	U	UJ	A05
REG	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A05,C05
REG	Hexachloroethane	10	UG/L	U	UJ	A05
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A05
REG	Isophorone	10	UG/L	U	UJ	A05
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A05
REG	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A05
REG	Naphthalene	10	UG/L	U	UJ	A05
REG	Nitrobenzene	10	UG/L	U	UJ	A05
REG	Pentachlorophenol	25	UG/L	U	UJ	A05
REG	Phenanthrene	10	UG/L	U	UJ	A05
REG	Phenol	10	UG/L	U	UJ	A05
REG	Pyrene	10	UG/L	U	UJ	A05

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	UJ	A05
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	UJ	A05
REG	1,1,2-Trichloroethane	5	UG/L	U	UJ	A05
REG	1,1-Dichloroethane	5	UG/L	U	UJ	A05
REG	1,1-Dichloroethene	5	UG/L	U	UJ	A05
REG	1,2-Dichloroethane	5	UG/L	U	UJ	A05
REG	1,2-Dichloroethene	5	UG/L	U	UJ	A05
REG	1,2-Dichloropropane	5	UG/L	U	UJ	A05
REG	1,3-cis-Dichloropropene	5	UG/L	U	UJ	A05
REG	1,3-trans-Dichloropropene	5	UG/L	U	UJ	A05
REG	2-Butanone	10	UG/L	U	UJ	A05
REG	2-Hexanone	10	UG/L	U	UJ	A05
REG	4-Methyl-2-pentanone	10	UG/L	U	UJ	A05
REG	Acetone	8.1	UG/L	J	J	C02,A05
REG	Benzene	0.52	UG/L	J	J	A05
REG	Bromodichloromethane	5	UG/L	U	UJ	A05
REG	Bromoform	5	UG/L	U	UJ	A05
REG	Bromomethane	10	UG/L	U	UJ	A05
REG	Carbon Disulfide	2.4	UG/L	J	J	A05
REG	Carbon Tetrachloride	5	UG/L	U	UJ	A05
REG	Chlorobenzene	5	UG/L	U	UJ	A05
REG	Chloroethane	10	UG/L	U	UJ	A05
REG	Chloroform	5	UG/L	U	UJ	A05
REG	Chloromethane	10	UG/L	U	UJ	A05
REG	Dibromochloromethane	5	UG/L	U	UJ	A05
REG	Ethylbenzene	5	UG/L	U	UJ	A05
REG	Methylene Chloride	5	UG/L	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLmw-006 Initial Phase

RQLmw-006-0007-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/25/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Styrene	5	UG/L	U	UJ	A05
REG	Tetrachloroethene	5	UG/L	U	UJ	A05
REG	Toluene	5	UG/L	U	UJ	A05
REG	Trichloroethene	5	UG/L	U	UJ	A05
REG	Vinyl Chloride	10	UG/L	U	UJ	A05
REG	Xylenes, Total	5	UG/L	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLmw-007 Initial Phase

RQLmw-007-0009-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/22/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	74.3	UG/L	B	J	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	59.4	UG/L		=	
REG	Barium	58.3	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	147000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	61000	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	61100	UG/L		=	
REG	Manganese	3800	UG/L		=	
REG	Mercury	0.09	UG/L	B	J	
REG	Nickel	36.5	UG/L	B	J	
REG	Potassium	10700	UG/L		=	
REG	Selenium	4.8	UG/L	B	J	
REG	Silver	10	UG/L	U	U	
REG	Sodium	21500	UG/L		=	
REG	Thallium	1.5	UG/L	B	J	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	81.7	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	62.7	UG/L		=	
REG	Barium	62.6	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	159000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	18.7	UG/L	B	J	
REG	Copper	25	UG/L	U	U	
REG	Iron	65600	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	67700	UG/L		=	
REG	Manganese	4100	UG/L		=	
REG	Mercury	0.082	UG/L	B	J	
REG	Nickel	39.4	UG/L	B	J	
REG	Potassium	12000	UG/L		=	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	24000	UG/L		=	
REG	Thallium	1.8	UG/L	B	J	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	84	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	UJ	G06
REG	1,3-Dinitrobenzene	0.2	UG/L	U	UJ	G06
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	UJ	G06
REG	2,4-Dinitrotoluene	0.13	UG/L	U	UJ	G06
REG	2,6-Dinitrotoluene	0.13	UG/L	U	UJ	G06
REG	2-Nitrotoluene	0.2	UG/L	U	UJ	G06
REG	3-Nitrotoluene	0.2	UG/L	U	UJ	G06
REG	4-Nitrotoluene	0.2	UG/L	U	UJ	G06
REG	HMX	0.5	UG/L	U	UJ	G06
REG	Nitrobenzene	0.2	UG/L	U	UJ	G06
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	UJ	G06
REG	Tetryl	0.2	UG/L	U	UJ	G06

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	UJ	C05
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-007 Initial Phase

RQLmw-007-0009-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/22/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-008 Initial Phase

RQLmw-008-0011-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/22/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	58.4	UG/L	B	J	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	51.6	UG/L		=	
REG	Barium	41.9	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	119000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	73.8	UG/L		=	
REG	Copper	25	UG/L	U	U	
REG	Iron	138000	UG/L		=	
REG	Lead	3	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-008 Initial Phase

RQLmw-008-0011-GW | Field Sample Type: Grab | Matrix: Groundwater | Collected: 07/22/98

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Magnesium	55300	UG/L		=	
REG	Manganese	6190	UG/L		=	
REG	Mercury	0.1	UG/L	B	J	
REG	Nickel	230	UG/L		=	
REG	Potassium	9190	UG/L		=	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	15300	UG/L		=	
REG	Thallium	2	UG/L		=	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	821	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	53.3	UG/L		=	
REG	Barium	42.3	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	120000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	74	UG/L		=	
REG	Copper	25	UG/L	U	U	
REG	Iron	140000	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	55500	UG/L		=	
REG	Manganese	6160	UG/L		=	
REG	Mercury	0.092	UG/L	B	J	
REG	Nickel	225	UG/L		=	
REG	Potassium	9420	UG/L		=	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	15500	UG/L		=	
REG	Thallium	1.9	UG/L	B	J	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	772	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.13	UG/L		=	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.06	UG/L	J	J	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2	UG/L	J	J	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-008 Initial Phase

RQLmw-008-0011-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/22/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	UJ	C05
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-008 Initial Phase

RQLmw-008-0011-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/22/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	9	UG/L	J	J	C02
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-009 Initial Phase

RQLmw-009-0013-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/17/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	133	UG/L	B	J	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5	UG/L	U	U	
REG	Barium	32.3	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	25900	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	5.5	UG/L	B	J	
REG	Iron	1600	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	23500	UG/L		=	
REG	Manganese	1010	UG/L		=	
REG	Mercury	0.089	UG/L	B	J	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	2890	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	4190	UG/L	B	U	F06
REG	Thallium	1	UG/L	B	J	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	47.2	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	83	UG/L	B	J	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5	UG/L	U	U	
REG	Barium	31.7	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	27800	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-009 Initial Phase

RQLmw-009-0013-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/17/98

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Copper	25	UG/L	U	U	
REG	Iron	1630	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	26500	UG/L		=	
REG	Manganese	1130	UG/L		=	
REG	Mercury	0.088	UG/L	B	J	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	3110	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	4040	UG/L	B	U	F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	29.6	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-009 Initial Phase

RQLmw-009-0013-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/17/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-010 Initial Phase

RQLmw-010-0015-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/25/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5	UG/L	U	U	
REG	Barium	11.4	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	57800	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	288	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	27900	UG/L		=	
REG	Manganese	2590	UG/L		J	I02
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	24.4	UG/L	B	J	
REG	Potassium	3430	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	4060	UG/L	B	J	F10
REG	Thallium	2	UG/L	U	U	E03
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	32.3	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	10	UG/L	U	U	
REG	Barium	16.7	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	66600	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	93.5	UG/L	B	J	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	26800	UG/L		=	
REG	Manganese	3480	UG/L		J	I02
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	34.8	UG/L	B	J	
REG	Potassium	3570	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	5490	UG/L		J	F10
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	38.8	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-010 Initial Phase

RQLmw-010-0015-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/25/98

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	UJ	C05
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-010 Initial Phase

RQLmw-010-0015-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/25/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	0.72	UG/L	J	J	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-011 Initial Phase

RQLmw-011-0017-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/27/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	UJ	A05

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	1400	UG/L		=	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	11.9	UG/L		=	
REG	Barium	38.6	UG/L	B	J	
REG	Beryllium	1	UG/L	B	J	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	15100	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	57.8	UG/L		=	
REG	Copper	25	UG/L	U	U	
REG	Iron	6000	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	9440	UG/L		=	
REG	Manganese	1780	UG/L		J	I02
REG	Mercury	0.2	UG/L	U	U	I01
REG	Nickel	162	UG/L		=	
REG	Potassium	5060	UG/L		=	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-011 Initial Phase

RQLmw-011-0017-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/27/98

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Sodium	1780	UG/L	B	J	F10
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	82.5	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	776	UG/L		=	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	11.3	UG/L		=	
REG	Barium	38.2	UG/L	B	J	
REG	Beryllium	0.91	UG/L	B	J	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	15200	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	57.1	UG/L		=	
REG	Copper	25	UG/L	U	U	
REG	Iron	5630	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	9190	UG/L		=	
REG	Manganese	1720	UG/L		J	I02
REG	Mercury	0.1	UG/L	B	J	
REG	Nickel	158	UG/L		=	
REG	Potassium	4960	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	1780	UG/L	B	J	F10
REG	Thallium	1.7	UG/L	B	J	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	94.4	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	UJ	A05
REG	1,3-Dinitrobenzene	0.2	UG/L	U	UJ	A05
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	UJ	A05
REG	2,4-Dinitrotoluene	0.13	UG/L	U	UJ	A05
REG	2,6-Dinitrotoluene	0.13	UG/L	U	UJ	A05
REG	2-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	3-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	4-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	HMX	0.067	UG/L	J	J	A05
REG	Nitrobenzene	0.091	UG/L	J	J	A05
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	UJ	A05
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	UJ	A05
REG	Tetryl	0.2	UG/L	U	UJ	A05

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A05
REG	1,2-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	1,3-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	1,4-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A05
REG	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A05
REG	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A05
REG	2,4-Dichlorophenol	10	UG/L	U	UJ	A05
REG	2,4-Dimethylphenol	10	UG/L	U	UJ	A05
REG	2,4-Dinitrophenol	25	UG/L	U	UJ	A05
REG	2,4-Dinitrotoluene	10	UG/L	U	UJ	A05
REG	2,6-Dinitrotoluene	10	UG/L	U	UJ	A05
REG	2-Chloronaphthalene	10	UG/L	U	UJ	A05
REG	2-Chlorophenol	10	UG/L	U	UJ	A05
REG	2-Methylnaphthalene	10	UG/L	U	UJ	A05
REG	2-Methylphenol	10	UG/L	U	UJ	A05
REG	2-Nitroaniline	25	UG/L	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLmw-011 Initial Phase

RQLmw-011-0017-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/27/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2-Nitrophenol	10	UG/L	U	UJ	A05
REG	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A05
REG	3-Nitroaniline	25	UG/L	U	UJ	A05
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A05
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A05
REG	4-Chloroaniline	10	UG/L	U	UJ	A05
REG	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A05
REG	4-Methylphenol	10	UG/L	U	UJ	A05
REG	4-Nitroaniline	25	UG/L	U	UJ	A05
REG	4-Nitrophenol	25	UG/L	U	UJ	A05
REG	4-chloro-3-methylphenol	10	UG/L	U	UJ	A05
REG	Acenaphthene	10	UG/L	U	UJ	A05
REG	Acenaphthylene	10	UG/L	U	UJ	A05
REG	Anthracene	10	UG/L	U	UJ	A05
REG	Benzo(a)anthracene	10	UG/L	U	UJ	A05
REG	Benzo(a)pyrene	10	UG/L	U	UJ	A05
REG	Benzo(b)fluoranthene	10	UG/L	U	UJ	A05
REG	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A05
REG	Benzo(k)fluoranthene	10	UG/L	U	UJ	A05
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A05
REG	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A05
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A05
REG	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A05
REG	Carbazole	10	UG/L	U	UJ	A05
REG	Chrysene	10	UG/L	U	UJ	A05
REG	Di-n-butyl Phthalate	10	UG/L	U	UJ	A05
REG	Di-n-octyl Phthalate	10	UG/L	U	UJ	A05
REG	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A05
REG	Dibenzofuran	10	UG/L	U	UJ	A05
REG	Diethyl Phthalate	10	UG/L	U	UJ	A05
REG	Dimethyl Phthalate	10	UG/L	U	UJ	A05
REG	Fluoranthene	10	UG/L	U	UJ	A05
REG	Fluorene	10	UG/L	U	UJ	A05
REG	Hexachlorobenzene	10	UG/L	U	UJ	A05
REG	Hexachlorobutadiene	10	UG/L	U	UJ	A05
REG	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A05,C05
REG	Hexachloroethane	10	UG/L	U	UJ	A05
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A05
REG	Isophorone	10	UG/L	U	UJ	A05
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A05
REG	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A05
REG	Naphthalene	10	UG/L	U	UJ	A05
REG	Nitrobenzene	10	UG/L	U	UJ	A05
REG	Pentachlorophenol	25	UG/L	U	UJ	A05
REG	Phenanthrene	10	UG/L	U	UJ	A05
REG	Phenol	10	UG/L	U	UJ	A05
REG	Pyrene	10	UG/L	U	UJ	A05

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	UJ	A05
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	UJ	A05
REG	1,1,2-Trichloroethane	5	UG/L	U	UJ	A05
REG	1,1-Dichloroethane	5	UG/L	U	UJ	A05
REG	1,1-Dichloroethene	5	UG/L	U	UJ	A05
REG	1,2-Dichloroethane	5	UG/L	U	UJ	A05
REG	1,2-Dichloroethene	5	UG/L	U	UJ	A05
REG	1,2-Dichloropropane	5	UG/L	U	UJ	A05
REG	1,3-cis-Dichloropropene	5	UG/L	U	UJ	A05
REG	1,3-trans-Dichloropropene	5	UG/L	U	UJ	A05
REG	2-Butanone	10	UG/L	U	UJ	A05
REG	2-Hexanone	10	UG/L	U	UJ	A05
REG	4-Methyl-2-pentanone	10	UG/L	U	UJ	A05
REG	Acetone	10	UG/L	U	UJ	A05
REG	Benzene	5	UG/L	U	UJ	A05
REG	Bromodichloromethane	5	UG/L	U	UJ	A05
REG	Bromoform	5	UG/L	U	UJ	A05
REG	Bromomethane	10	UG/L	U	UJ	A05
REG	Carbon Disulfide	5	UG/L	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLmw-011 Initial Phase

RQLmw-011-0017-GW Field Sample Type: Grab Matrix: Groundwater Collected: 07/27/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Carbon Tetrachloride	5	UG/L	U	UJ	A05
REG	Chlorobenzene	5	UG/L	U	UJ	A05
REG	Chloroethane	10	UG/L	U	UJ	A05
REG	Chloroform	5	UG/L	U	UJ	A05
REG	Chloromethane	10	UG/L	U	UJ	A05
REG	Dibromochloromethane	5	UG/L	U	UJ	A05
REG	Ethylbenzene	5	UG/L	U	UJ	A05
REG	Methylene Chloride	5	UG/L	U	UJ	A05
REG	Styrene	5	UG/L	U	UJ	A05
REG	Tetrachloroethene	5	UG/L	U	UJ	A05
REG	Toluene	0.51	UG/L	J	J	A05
REG	Trichloroethene	5	UG/L	U	UJ	A05
REG	Vinyl Chloride	10	UG/L	U	UJ	A05
REG	Xylenes, Total	5	UG/L	U	UJ	A05

RQLmw-011-9047-FD Field Sample Type: Field Duplicate Matrix: Groundwater Collected: 07/27/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	UJ	A05

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	832	UG/L		=	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	8.5	UG/L		=	
REG	Barium	35.5	UG/L	B	J	
REG	Beryllium	0.87	UG/L	B	J	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	14700	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	48.5	UG/L	B	J	
REG	Copper	3.9	UG/L	B	J	
REG	Iron	5300	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	8550	UG/L		=	
REG	Manganese	1650	UG/L		J	I02
REG	Mercury	0.2	UG/L	U	U	I01
REG	Nickel	139	UG/L		=	
REG	Potassium	4380	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	2160	UG/L	B	J	F10
REG	Thallium	2.8	UG/L		=	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	83.3	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	698	UG/L		=	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	12.6	UG/L		=	
REG	Barium	37.2	UG/L	B	J	
REG	Beryllium	0.89	UG/L	B	J	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	15300	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	55.3	UG/L		=	
REG	Copper	25	UG/L	U	U	
REG	Iron	5700	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	9230	UG/L		=	
REG	Manganese	1760	UG/L		J	I02
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	155	UG/L		=	
REG	Potassium	4810	UG/L	B	J	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLmw-011 Initial Phase

RQLmw-011-9047-FD Field Sample Type: Field Duplicate Matrix: Groundwater Collected: 07/27/98

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Sodium	1710	UG/L	B	J	F10
REG	Thallium	1.4	UG/L	B	J	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	77.2	UG/L		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	UJ	A05
REG	1,3-Dinitrobenzene	0.2	UG/L	U	UJ	A05
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	UJ	A05
REG	2,4-Dinitrotoluene	0.13	UG/L	U	UJ	A05
REG	2,6-Dinitrotoluene	0.13	UG/L	U	UJ	A05
REG	2-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	3-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	4-Nitrotoluene	0.2	UG/L	U	UJ	A05
REG	HMX	0.076	UG/L	J	J	A05
REG	Nitrobenzene	0.092	UG/L	J	J	A05
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	UJ	A05
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	UJ	A05
REG	Tetryl	0.2	UG/L	U	UJ	A05

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	UJ	A05
REG	1,2-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	1,3-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	1,4-Dichlorobenzene	10	UG/L	U	UJ	A05
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	UJ	A05
REG	2,4,5-Trichlorophenol	25	UG/L	U	UJ	A05
REG	2,4,6-Trichlorophenol	10	UG/L	U	UJ	A05
REG	2,4-Dichlorophenol	10	UG/L	U	UJ	A05
REG	2,4-Dimethylphenol	10	UG/L	U	UJ	A05
REG	2,4-Dinitrophenol	25	UG/L	U	UJ	A05
REG	2,4-Dinitrotoluene	10	UG/L	U	UJ	A05
REG	2,6-Dinitrotoluene	10	UG/L	U	UJ	A05
REG	2-Chloronaphthalene	10	UG/L	U	UJ	A05
REG	2-Chlorophenol	10	UG/L	U	UJ	A05
REG	2-Methylnaphthalene	10	UG/L	U	UJ	A05
REG	2-Methylphenol	10	UG/L	U	UJ	A05
REG	2-Nitroaniline	25	UG/L	U	UJ	A05
REG	2-Nitrophenol	10	UG/L	U	UJ	A05
REG	3,3'-Dichlorobenzidine	10	UG/L	U	UJ	A05
REG	3-Nitroaniline	25	UG/L	U	UJ	A05
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	UJ	A05
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	UJ	A05
REG	4-Chloroaniline	10	UG/L	U	UJ	A05
REG	4-Chlorophenyl-phenylether	10	UG/L	U	UJ	A05
REG	4-Methylphenol	10	UG/L	U	UJ	A05
REG	4-Nitroaniline	25	UG/L	U	UJ	A05
REG	4-Nitrophenol	25	UG/L	U	UJ	A05
REG	4-chloro-3-methylphenol	10	UG/L	U	UJ	A05
REG	Acenaphthene	10	UG/L	U	UJ	A05
REG	Acenaphthylene	10	UG/L	U	UJ	A05
REG	Anthracene	10	UG/L	U	UJ	A05
REG	Benzo(a)anthracene	10	UG/L	U	UJ	A05
REG	Benzo(a)pyrene	10	UG/L	U	UJ	A05
REG	Benzo(b)fluoranthene	10	UG/L	U	UJ	A05
REG	Benzo(g,h,i)perylene	10	UG/L	U	UJ	A05
REG	Benzo(k)fluoranthene	10	UG/L	U	UJ	A05
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	UJ	A05
REG	Bis(2-chloroethyl)ether	10	UG/L	U	UJ	A05
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	UJ	A05
REG	Butyl Benzyl Phthalate	10	UG/L	U	UJ	A05
REG	Carbazole	10	UG/L	U	UJ	A05
REG	Chrysene	10	UG/L	U	UJ	A05
REG	Di-n-butyl Phthalate	10	UG/L	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLmw-011 Initial Phase

RQLmw-011-9047-FD | Field Sample Type: Field Duplicate | Matrix: Groundwater | Collected: 07/27/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Di-n-octyl Phthalate	10	UG/L	U	UJ	A05
REG	Dibenzo(a,h)anthracene	10	UG/L	U	UJ	A05
REG	Dibenzofuran	10	UG/L	U	UJ	A05
REG	Diethyl Phthalate	10	UG/L	U	UJ	A05
REG	Dimethyl Phthalate	10	UG/L	U	UJ	A05
REG	Fluoranthene	10	UG/L	U	UJ	A05
REG	Fluorene	10	UG/L	U	UJ	A05
REG	Hexachlorobenzene	10	UG/L	U	UJ	A05
REG	Hexachlorobutadiene	10	UG/L	U	UJ	A05
REG	Hexachlorocyclopentadiene	10	UG/L	U	UJ	A05,C05
REG	Hexachloroethane	10	UG/L	U	UJ	A05
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	UJ	A05
REG	Isophorone	10	UG/L	U	UJ	A05
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	UJ	A05
REG	N-Nitrosodiphenylamine	10	UG/L	U	UJ	A05
REG	Naphthalene	10	UG/L	U	UJ	A05
REG	Nitrobenzene	10	UG/L	U	UJ	A05
REG	Pentachlorophenol	25	UG/L	U	UJ	A05
REG	Phenanthrene	10	UG/L	U	UJ	A05
REG	Phenol	10	UG/L	U	UJ	A05
REG	Pyrene	10	UG/L	U	UJ	A05

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	UJ	A05
REG	1,1,2,2-Tetrachloroethane	0.84	UG/L	J	J	A05
REG	1,1,2-Trichloroethane	5	UG/L	U	UJ	A05
REG	1,1-Dichloroethane	5	UG/L	U	UJ	A05
REG	1,1-Dichloroethene	5	UG/L	U	UJ	A05
REG	1,2-Dichloroethane	5	UG/L	U	UJ	A05
REG	1,2-Dichloroethene	5	UG/L	U	UJ	A05
REG	1,2-Dichloropropane	5	UG/L	U	UJ	A05
REG	1,3-cis-Dichloropropene	5	UG/L	U	UJ	A05
REG	1,3-trans-Dichloropropene	5	UG/L	U	UJ	A05
REG	2-Butanone	10	UG/L	U	UJ	A05
REG	2-Hexanone	10	UG/L	U	UJ	A05
REG	4-Methyl-2-pentanone	10	UG/L	U	UJ	A05
REG	Acetone	10	UG/L	U	UJ	A05
REG	Benzene	5	UG/L	U	UJ	A05
REG	Bromodichloromethane	5	UG/L	U	UJ	A05
REG	Bromoform	0.35	UG/L	J	J	A05
REG	Bromomethane	10	UG/L	U	UJ	A05
REG	Carbon Disulfide	5	UG/L	U	UJ	A05
REG	Carbon Tetrachloride	5	UG/L	U	UJ	A05
REG	Chlorobenzene	5	UG/L	U	UJ	A05
REG	Chloroethane	10	UG/L	U	UJ	A05
REG	Chloroform	5	UG/L	U	UJ	A05
REG	Chloromethane	10	UG/L	U	UJ	A05
REG	Dibromochloromethane	5	UG/L	U	UJ	A05
REG	Ethylbenzene	5	UG/L	U	UJ	A05
REG	Methylene Chloride	5	UG/L	U	UJ	A05
REG	Styrene	5	UG/L	U	UJ	A05
REG	Tetrachloroethene	5	UG/L	U	UJ	A05
REG	Toluene	5	UG/L	U	UJ	A05
REG	Trichloroethene	5	UG/L	U	UJ	A05
REG	Vinyl Chloride	10	UG/L	U	UJ	A05
REG	Xylenes, Total	5	UG/L	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0023-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.7	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	8460	MG/KG		=	
REG	Antimony	0.7	MG/KG	U	UJ	I02
REG	Arsenic	11	MG/KG		=	
REG	Barium	77.3	MG/KG		=	
REG	Beryllium	0.38	MG/KG	B	J	
REG	Cadmium	0.7	MG/KG	U	U	
REG	Calcium	12200	MG/KG		J	I02
REG	Chromium	14.7	MG/KG		=	
REG	Cobalt	7.1	MG/KG		=	
REG	Copper	48.2	MG/KG		=	
REG	Iron	21200	MG/KG		=	
REG	Lead	27.1	MG/KG		=	
REG	Magnesium	22100	MG/KG		J	I03
REG	Manganese	829	MG/KG	L	J	E07
REG	Mercury	0.89	MG/KG	B	J	
REG	Nickel	15.3	MG/KG		=	
REG	Potassium	895	MG/KG		J	F10
REG	Selenium	0.7	MG/KG	U	U	
REG	Silver	1.4	MG/KG	U	U	
REG	Sodium	137	MG/KG	B	J	
REG	Thallium	0.7	MG/KG	U	U	
REG	Vanadium	14.4	MG/KG		=	
REG	Zinc	100	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.021	MG/KG	J	J	H02
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.13	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	R	H03
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	R	H03

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	460	UG/KG	U	U	
REG	1,2-Dichlorobenzene	460	UG/KG	U	U	
REG	1,3-Dichlorobenzene	460	UG/KG	U	U	
REG	1,4-Dichlorobenzene	460	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	460	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	460	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	460	UG/KG	U	U	
REG	2,4-Dichlorophenol	460	UG/KG	U	U	
REG	2,4-Dimethylphenol	460	UG/KG	U	U	
REG	2,4-Dinitrophenol	1100	UG/KG	U	U	
REG	2,4-Dinitrotoluene	460	UG/KG	U	U	
REG	2,6-Dinitrotoluene	460	UG/KG	U	U	
REG	2-Chloronaphthalene	460	UG/KG	U	U	
REG	2-Chlorophenol	460	UG/KG	U	U	
REG	2-Methylnaphthalene	110	UG/KG	J	J	
REG	2-Methylphenol	460	UG/KG	U	U	
REG	2-Nitroaniline	1100	UG/KG	U	U	
REG	2-Nitrophenol	460	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	460	UG/KG	U	U	
REG	3-Nitroaniline	1100	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0023-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4,6-Dinitro-o-Cresol	1100	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	460	UG/KG	U	U	
REG	4-Chloroaniline	460	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	460	UG/KG	U	U	
REG	4-Methylphenol	460	UG/KG	U	U	
REG	4-Nitroaniline	1100	UG/KG	U	U	
REG	4-Nitrophenol	1100	UG/KG	U	U	
REG	4-chloro-3-methylphenol	460	UG/KG	U	U	
REG	Acenaphthene	340	UG/KG	J	J	
REG	Acenaphthylene	460	UG/KG	U	U	
REG	Anthracene	710	UG/KG		=	
REG	Benzo(a)anthracene	690	UG/KG		=	
REG	Benzo(a)pyrene	510	UG/KG		=	
REG	Benzo(b)fluoranthene	580	UG/KG		=	
REG	Benzo(g,h,i)perylene	230	UG/KG	J	J	
REG	Benzo(k)fluoranthene	250	UG/KG	J	J	
REG	Bis(2-chloroethoxy)methane	460	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	460	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	460	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	460	UG/KG	U	U	
REG	Carbazole	410	UG/KG	J	J	
REG	Chrysene	590	UG/KG		=	
REG	Di-n-butyl Phthalate	460	UG/KG	U	U	
REG	Di-n-octyl Phthalate	460	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	460	UG/KG	U	U	
REG	Dibenzofuran	240	UG/KG	J	J	
REG	Diethyl Phthalate	460	UG/KG	U	U	
REG	Dimethyl Phthalate	460	UG/KG	U	U	
REG	Fluoranthene	1800	UG/KG		=	
REG	Fluorene	390	UG/KG	J	J	
REG	Hexachlorobenzene	460	UG/KG	U	U	
REG	Hexachlorobutadiene	460	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	460	UG/KG	U	U	
REG	Hexachloroethane	460	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	270	UG/KG	J	J	
REG	Isophorone	460	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	460	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	460	UG/KG	U	U	
REG	Naphthalene	100	UG/KG	J	J	
REG	Nitrobenzene	460	UG/KG	U	U	
REG	Pentachlorophenol	460	UG/KG	U	U	
REG	Phenanthrene	2000	UG/KG		=	
REG	Phenol	460	UG/KG	U	U	
REG	Pyrene	1200	UG/KG		J	H03

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	7	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	7	UG/KG	U	U	
REG	1,1,2-Trichloroethane	7	UG/KG	U	U	
REG	1,1-Dichloroethane	7	UG/KG	U	U	
REG	1,1-Dichloroethene	7	UG/KG	U	U	
REG	1,2-Dichloroethane	7	UG/KG	U	U	
REG	1,2-Dichloroethene	7	UG/KG	U	U	
REG	1,2-Dichloropropane	7	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	7	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	7	UG/KG	U	U	
REG	2-Butanone	28	UG/KG	U	U	
REG	2-Hexanone	28	UG/KG	U	U	
REG	4-Methyl-2-pentanone	28	UG/KG	U	U	
REG	Acetone	3.7	UG/KG	J	J	C05
REG	Benzene	7	UG/KG	U	U	
REG	Bromodichloromethane	7	UG/KG	U	U	
REG	Bromoform	7	UG/KG	U	U	
REG	Bromomethane	14	UG/KG	U	U	
REG	Carbon Disulfide	7	UG/KG	U	U	
REG	Carbon Tetrachloride	7	UG/KG	U	U	
REG	Chlorobenzene	7	UG/KG	U	U	
REG	Chloroethane	14	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0023-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Chloroform	7	UG/KG	U	U	
REG	Chloromethane	14	UG/KG	U	U	
REG	Dibromochloromethane	7	UG/KG	U	U	
REG	Ethylbenzene	7	UG/KG	U	U	
REG	Methylene Chloride	7	UG/KG	U	U	
REG	Styrene	7	UG/KG	U	U	
REG	Tetrachloroethene	7	UG/KG	U	U	
REG	Toluene	7	UG/KG	U	U	
REG	Trichloroethene	7	UG/KG	U	U	
REG	Vinyl Chloride	14	UG/KG	U	U	
REG	Xylenes, Total	7	UG/KG	U	U	

RQLsd-012(p)-0053-FD 0.0 - 0.0 FT Field Sample Type: Field Duplicate Matrix: Sediment Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.78	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	8270	MG/KG		=	
REG	Antimony	0.78	MG/KG	U	UJ	I02
REG	Arsenic	14.9	MG/KG		=	
REG	Barium	77	MG/KG		=	
REG	Beryllium	0.36	MG/KG	B	J	
REG	Cadmium	0.78	MG/KG	U	U	
REG	Calcium	11400	MG/KG		J	I02
REG	Chromium	15.3	MG/KG		=	
REG	Cobalt	7.3	MG/KG	B	J	
REG	Copper	64	MG/KG		=	
REG	Iron	25300	MG/KG		=	
REG	Lead	79.5	MG/KG		=	
REG	Magnesium	19100	MG/KG		J	I03
REG	Manganese	2120	MG/KG		J	E07
REG	Mercury	0.099	MG/KG	B	J	
REG	Nickel	17.2	MG/KG		=	
REG	Potassium	994	MG/KG		J	F10
REG	Selenium	0.78	MG/KG	U	U	
REG	Silver	1.6	MG/KG	U	U	
REG	Sodium	108	MG/KG	B	J	
REG	Thallium	1.3	MG/KG	B	J	
REG	Vanadium	15.7	MG/KG		=	
REG	Zinc	106	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.076	MG/KG	J	J	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.07	MG/KG	J	J	
REG	HMX	0.11	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	520	UG/KG	U	U	
REG	1,2-Dichlorobenzene	520	UG/KG	U	U	
REG	1,3-Dichlorobenzene	520	UG/KG	U	U	
REG	1,4-Dichlorobenzene	520	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0053-FD 0.0 - 0.0 FT Field Sample Type: Field Duplicate Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2,2'-oxybis (1-chloropropane)	520	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	520	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	520	UG/KG	U	U	
REG	2,4-Dichlorophenol	520	UG/KG	U	U	
REG	2,4-Dimethylphenol	520	UG/KG	U	U	
REG	2,4-Dinitrophenol	1200	UG/KG	U	U	
REG	2,4-Dinitrotoluene	520	UG/KG	U	U	
REG	2,6-Dinitrotoluene	520	UG/KG	U	U	
REG	2-Chloronaphthalene	520	UG/KG	U	U	
REG	2-Chlorophenol	520	UG/KG	U	U	
REG	2-Methylnaphthalene	520	UG/KG	U	U	
REG	2-Methylphenol	520	UG/KG	U	U	
REG	2-Nitroaniline	1200	UG/KG	U	U	
REG	2-Nitrophenol	520	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	520	UG/KG	U	U	
REG	3-Nitroaniline	1200	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1200	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	520	UG/KG	U	U	
REG	4-Chloroaniline	520	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	520	UG/KG	U	U	
REG	4-Methylphenol	520	UG/KG	U	U	
REG	4-Nitroaniline	1200	UG/KG	U	U	
REG	4-Nitrophenol	1200	UG/KG	U	U	
REG	4-chloro-3-methylphenol	520	UG/KG	U	U	
REG	Acenaphthene	520	UG/KG	U	U	
REG	Acenaphthylene	520	UG/KG	U	U	
REG	Anthracene	110	UG/KG	J	J	
REG	Benzo(a)anthracene	290	UG/KG	J	J	
REG	Benzo(a)pyrene	270	UG/KG	J	J	
REG	Benzo(b)fluoranthene	330	UG/KG	J	J	
REG	Benzo(g,h,i)perylene	160	UG/KG	J	J	
REG	Benzo(k)fluoranthene	140	UG/KG	J	J	
REG	Bis(2-chloroethoxy)methane	520	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	520	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	520	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	520	UG/KG	U	U	
REG	Carbazole	120	UG/KG	J	J	
REG	Chrysene	290	UG/KG	J	J	
REG	Di-n-butyl Phthalate	520	UG/KG	U	U	
REG	Di-n-octyl Phthalate	520	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	520	UG/KG	U	U	
REG	Dibenzofuran	520	UG/KG	U	U	
REG	Diethyl Phthalate	520	UG/KG	U	U	
REG	Dimethyl Phthalate	520	UG/KG	U	U	
REG	Fluoranthene	630	UG/KG		=	
REG	Fluorene	520	UG/KG	U	U	
REG	Hexachlorobenzene	520	UG/KG	U	U	
REG	Hexachlorobutadiene	520	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	520	UG/KG	U	U	
REG	Hexachloroethane	520	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	180	UG/KG	J	J	
REG	Isophorone	520	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	520	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	520	UG/KG	U	U	
REG	Naphthalene	520	UG/KG	U	U	
REG	Nitrobenzene	520	UG/KG	U	U	
REG	Pentachlorophenol	520	UG/KG	U	U	
REG	Phenanthrene	400	UG/KG	J	J	
REG	Phenol	520	UG/KG	U	U	
REG	Pyrene	480	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	7.8	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	7.8	UG/KG	U	U	
REG	1,1,2-Trichloroethane	7.8	UG/KG	U	U	
REG	1,1-Dichloroethane	7.8	UG/KG	U	U	
REG	1,1-Dichloroethene	7.8	UG/KG	U	U	
REG	1,2-Dichloroethane	7.8	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0053-FD 0.0 - 0.0 FT Field Sample Type: Field Duplicate Matrix: Sediment Collected: 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2-Dichloroethene	7.8	UG/KG	U	U	
REG	1,2-Dichloropropane	7.8	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	7.8	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	7.8	UG/KG	U	U	
REG	2-Butanone	31	UG/KG	U	U	
REG	2-Hexanone	31	UG/KG	U	U	
REG	4-Methyl-2-pentanone	31	UG/KG	U	U	
REG	Acetone	31	UG/KG	U	U	
REG	Benzene	7.8	UG/KG	U	U	
REG	Bromodichloromethane	7.8	UG/KG	U	U	
REG	Bromoform	7.8	UG/KG	U	U	
REG	Bromomethane	16	UG/KG	U	U	
REG	Carbon Disulfide	7.8	UG/KG	U	U	
REG	Carbon Tetrachloride	7.8	UG/KG	U	U	
REG	Chlorobenzene	7.8	UG/KG	U	U	
REG	Chloroethane	16	UG/KG	U	U	
REG	Chloroform	7.8	UG/KG	U	U	
REG	Chloromethane	16	UG/KG	U	U	
REG	Dibromochloromethane	7.8	UG/KG	U	U	
REG	Ethylbenzene	7.8	UG/KG	U	U	
REG	Methylene Chloride	7.8	UG/KG	U	U	
REG	Styrene	7.8	UG/KG	U	U	
REG	Tetrachloroethene	7.8	UG/KG	U	U	
REG	Toluene	7.8	UG/KG	U	U	
REG	Trichloroethene	7.8	UG/KG	U	U	
REG	Vinyl Chloride	16	UG/KG	U	U	
REG	Xylenes, Total	7.8	UG/KG	U	U	

RQLsd-012(p)-0064-SD 0.0 - 0.0 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/27/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.87	MG/KG	U	UJ	A05

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	9300	MG/KG		=	
REG	Antimony	1.9	MG/KG		J	I02
REG	Arsenic	12.6	MG/KG		=	
REG	Barium	91.8	MG/KG		=	
REG	Beryllium	0.34	MG/KG	B	J	
REG	Cadmium	0.87	MG/KG	U	U	
REG	Calcium	11000	MG/KG		=	
REG	Chromium	17.3	MG/KG		=	
REG	Cobalt	8.9	MG/KG		=	
REG	Copper	48.8	MG/KG		=	
REG	Iron	25400	MG/KG		=	
REG	Lead	36.3	MG/KG		=	
REG	Magnesium	13100	MG/KG		=	
REG	Manganese	1000	MG/KG		=	
REG	Mercury	0.12	MG/KG	B	J	
REG	Nickel	21.5	MG/KG		=	
REG	Potassium	1320	MG/KG		=	
REG	Selenium	0.87	MG/KG	U	U	
REG	Silver	1.7	MG/KG	U	U	
REG	Sodium	73.3	MG/KG	B	J	F10
REG	Thallium	0.87	MG/KG	U	U	
REG	Vanadium	19.2	MG/KG		=	
REG	Zinc	147	MG/KG		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	UJ	A05
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	UJ	A05
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	UJ	A05
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	UJ	A05
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	UJ	A05
REG	2-Nitrotoluene	0.25	MG/KG	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0064-SD 0.0 - 0.0 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/27/98

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	3-Nitrotoluene	0.25	MG/KG	U	UJ	A05
REG	4-Nitrotoluene	0.25	MG/KG	U	UJ	A05
REG	HMX	0.5	MG/KG	U	UJ	A05
REG	Nitrobenzene	0.25	MG/KG	U	UJ	A05
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	UJ	A05
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	UJ	A05
REG	Tetryl	0.65	MG/KG	U	UJ	A05

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	1,2,4-Trichlorobenzene	580	UG/KG	U	UJ	A01,A05
REA	1,2-Dichlorobenzene	580	UG/KG	U	UJ	A01,A05
REA	1,3-Dichlorobenzene	580	UG/KG	U	UJ	A01,A05
REA	1,4-Dichlorobenzene	580	UG/KG	U	UJ	A01,A05
REA	2,2'-oxybis (1-chloropropane)	580	UG/KG	U	UJ	A01,A05
REA	2,4,5-Trichlorophenol	580	UG/KG	U	UJ	A01,A05
REA	2,4,6-Trichlorophenol	580	UG/KG	U	UJ	A01,A05
REA	2,4-Dichlorophenol	580	UG/KG	U	UJ	A01,A05
REA	2,4-Dimethylphenol	580	UG/KG	U	UJ	A01,A05
REA	2,4-Dinitrophenol	1400	UG/KG	U	UJ	A01,A05
REA	2,4-Dinitrotoluene	580	UG/KG	U	UJ	A01,A05
REA	2,6-Dinitrotoluene	580	UG/KG	U	UJ	A01,A05
REA	2-Chloronaphthalene	580	UG/KG	U	UJ	A01,A05
REA	2-Chlorophenol	580	UG/KG	U	UJ	A01,A05
REA	2-Methylnaphthalene	580	UG/KG	U	UJ	A01,A05
REA	2-Methylphenol	580	UG/KG	U	UJ	A01,A05
REA	2-Nitroaniline	1400	UG/KG	U	UJ	A01,A05
REA	2-Nitrophenol	580	UG/KG	U	UJ	A01,A05
REA	3,3'-Dichlorobenzidine	580	UG/KG	U	UJ	A01,A05
REA	3-Nitroaniline	1400	UG/KG	U	UJ	A01,A05
REA	4,6-Dinitro-o-Cresol	1400	UG/KG	U	UJ	A01,A05
REA	4-Bromophenyl-phenyl Ether	580	UG/KG	U	UJ	A01,A05
REA	4-Chloroaniline	580	UG/KG	U	UJ	A01,A05
REA	4-Chlorophenyl-phenylether	580	UG/KG	U	UJ	A01,A05
REA	4-Methylphenol	580	UG/KG	U	UJ	A01,A05
REA	4-Nitroaniline	1400	UG/KG	U	UJ	A01,A05
REA	4-Nitrophenol	1400	UG/KG	U	UJ	A01,A05
REA	4-chloro-3-methylphenol	580	UG/KG	U	UJ	A01,A05
REA	Acenaphthene	580	UG/KG	U	UJ	A01,A05
REA	Acenaphthylene	580	UG/KG	U	UJ	A01,A05
REA	Anthracene	580	UG/KG	U	UJ	A01,A05
REA	Benzo(a)anthracene	580	UG/KG	U	UJ	A01,A05
REA	Benzo(a)pyrene	580	UG/KG	U	UJ	A01,A05
REA	Benzo(b)fluoranthene	580	UG/KG	U	UJ	A01,A05
REA	Benzo(g,h,i)perylene	580	UG/KG	U	UJ	A01,A05
REA	Benzo(k)fluoranthene	580	UG/KG	U	UJ	A01,A05
REA	Bis(2-chloroethoxy)methane	580	UG/KG	U	UJ	A01,A05
REA	Bis(2-chloroethyl)ether	580	UG/KG	U	UJ	A01,A05
REA	Bis(2-ethylhexyl)phthalate	580	UG/KG	U	UJ	A01,A05
REA	Butyl Benzyl Phthalate	580	UG/KG	U	UJ	A01,A05
REA	Carbazole	580	UG/KG	U	UJ	A01,A05
REA	Chrysene	580	UG/KG	U	UJ	A01,A05
REA	Di-n-butyl Phthalate	580	UG/KG	U	UJ	A01,A05
REA	Di-n-octyl Phthalate	580	UG/KG	U	UJ	A01,A05
REA	Dibenzo(a,h)anthracene	580	UG/KG	U	UJ	A01,A05
REA	Dibenzofuran	580	UG/KG	U	UJ	A01,A05
REA	Diethyl Phthalate	580	UG/KG	U	UJ	A01,A05
REA	Dimethyl Phthalate	580	UG/KG	U	UJ	A01,A05
REA	Fluoranthene	580	UG/KG	U	UJ	A01,A05
REA	Fluorene	580	UG/KG	U	UJ	A01,A05
REA	Hexachlorobenzene	580	UG/KG	U	UJ	A01,A05
REA	Hexachlorobutadiene	580	UG/KG	U	UJ	A01,A05
REA	Hexachlorocyclopentadiene	580	UG/KG	U	UJ	A01,A05
REA	Hexachloroethane	580	UG/KG	U	UJ	A01,A05
REA	Indeno(1,2,3-cd)pyrene	580	UG/KG	U	UJ	A01,A05
REA	Isophorone	580	UG/KG	U	UJ	A01,A05
REA	N-Nitroso-di-n-propylamine	580	UG/KG	U	UJ	A01,A05

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0064-SD 0.0 - 0.0 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/27/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	N-Nitrosodiphenylamine	580	UG/KG	U	UJ	A01,A05
REA	Naphthalene	580	UG/KG	U	UJ	A01,A05
REA	Nitrobenzene	580	UG/KG	U	UJ	A01,A05
REA	Pentachlorophenol	580	UG/KG	U	UJ	A01,A05
REA	Phenanthrene	580	UG/KG	U	UJ	A01,A05
REA	Phenol	580	UG/KG	U	UJ	A01,A05
REA	Pyrene	140	UG/KG	J	J	A01,A05

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	580	UG/KG	U	UJ	A05
REG	1,2-Dichlorobenzene	580	UG/KG	U	UJ	A05
REG	1,3-Dichlorobenzene	580	UG/KG	U	UJ	A05
REG	1,4-Dichlorobenzene	580	UG/KG	U	UJ	A05
REG	2,2'-oxybis (1-chloropropane)	580	UG/KG	U	UJ	A05
REG	2,4,5-Trichlorophenol	580	UG/KG	U	UJ	A05
REG	2,4,6-Trichlorophenol	580	UG/KG	U	UJ	A05
REG	2,4-Dichlorophenol	580	UG/KG	U	UJ	A05
REG	2,4-Dimethylphenol	580	UG/KG	U	UJ	A05
REG	2,4-Dinitrophenol	1400	UG/KG	U	UJ	A05
REG	2,4-Dinitrotoluene	580	UG/KG	U	UJ	A05
REG	2,6-Dinitrotoluene	580	UG/KG	U	UJ	A05
REG	2-Chloronaphthalene	580	UG/KG	U	UJ	A05
REG	2-Chlorophenol	580	UG/KG	U	UJ	A05
REG	2-Methylnaphthalene	580	UG/KG	U	UJ	A05
REG	2-Methylphenol	580	UG/KG	U	UJ	A05
REG	2-Nitroaniline	1400	UG/KG	U	UJ	A05
REG	2-Nitrophenol	580	UG/KG	U	UJ	A05
REG	3,3'-Dichlorobenzidine	580	UG/KG	U	UJ	A05
REG	3-Nitroaniline	1400	UG/KG	U	UJ	A05,C02
REG	4,6-Dinitro-o-Cresol	1400	UG/KG	U	UJ	A05
REG	4-Bromophenyl-phenyl Ether	580	UG/KG	U	UJ	A05
REG	4-Chloroaniline	580	UG/KG	U	UJ	A05,C05,C02
REG	4-Chlorophenyl-phenylether	580	UG/KG	U	UJ	A05
REG	4-Methylphenol	580	UG/KG	U	UJ	A05
REG	4-Nitroaniline	1400	UG/KG	U	UJ	A05
REG	4-Nitrophenol	1400	UG/KG	U	UJ	A05
REG	4-chloro-3-methylphenol	580	UG/KG	U	UJ	A05
REG	Acenaphthene	580	UG/KG	U	UJ	A05
REG	Acenaphthylene	580	UG/KG	U	UJ	A05
REG	Anthracene	68	UG/KG	J	J	A05
REG	Benzo(a)anthracene	180	UG/KG	J	J	A05
REG	Benzo(a)pyrene	190	UG/KG	J	J	A05
REG	Benzo(b)fluoranthene	250	UG/KG	J	J	A05
REG	Benzo(g,h,i)perylene	97	UG/KG	J	J	A05
REG	Benzo(k)fluoranthene	110	UG/KG	J	J	A05
REG	Bis(2-chloroethoxy)methane	580	UG/KG	U	UJ	A05
REG	Bis(2-chloroethyl)ether	580	UG/KG	U	UJ	A05
REG	Bis(2-ethylhexyl)phthalate	580	UG/KG	U	UJ	A05
REG	Butyl Benzyl Phthalate	580	UG/KG	U	UJ	A05
REG	Carbazole	580	UG/KG	U	UJ	A05
REG	Chrysene	190	UG/KG	J	J	A05
REG	Di-n-butyl Phthalate	580	UG/KG	U	UJ	A05
REG	Di-n-octyl Phthalate	580	UG/KG	U	UJ	A05
REG	Dibenzo(a,h)anthracene	580	UG/KG	U	UJ	A05
REG	Dibenzofuran	580	UG/KG	U	UJ	A05
REG	Diethyl Phthalate	580	UG/KG	U	UJ	A05
REG	Dimethyl Phthalate	580	UG/KG	U	UJ	A05
REG	Fluoranthene	380	UG/KG	J	J	A05
REG	Fluorene	580	UG/KG	U	UJ	A05
REG	Hexachlorobenzene	580	UG/KG	U	UJ	A05
REG	Hexachlorobutadiene	580	UG/KG	U	UJ	A05
REG	Hexachlorocyclopentadiene	580	UG/KG	U	UJ	A05
REG	Hexachloroethane	580	UG/KG	U	UJ	A05
REG	Indeno(1,2,3-cd)pyrene	100	UG/KG	J	J	A05
REG	Isophorone	580	UG/KG	U	UJ	A05
REG	N-Nitroso-di-n-propylamine	580	UG/KG	U	UJ	A05
REG	N-Nitrosodiphenylamine	580	UG/KG	U	UJ	A05
REG	Naphthalene	580	UG/KG	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0064-SD 0.0 - 0.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected:** 07/27/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Nitrobenzene	580	UG/KG	U	UJ	A05
REG	Pentachlorophenol	580	UG/KG	U	UJ	A05
REG	Phenanthrene	230	UG/KG	J	J	A05
REG	Phenol	580	UG/KG	U	UJ	A05
REG	Pyrene	310	UG/KG	J	J	A05

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	8.7	UG/KG	U	UJ	A05
REG	1,1,2,2-Tetrachloroethane	8.7	UG/KG	U	UJ	A05
REG	1,1,2-Trichloroethane	8.7	UG/KG	U	UJ	A05
REG	1,1-Dichloroethane	8.7	UG/KG	U	UJ	A05
REG	1,1-Dichloroethene	8.7	UG/KG	U	UJ	A05
REG	1,2-Dichloroethane	8.7	UG/KG	U	UJ	A05
REG	1,2-Dichloroethene	8.7	UG/KG	U	UJ	A05
REG	1,2-Dichloropropane	8.7	UG/KG	U	UJ	A05
REG	1,3-cis-Dichloropropene	8.7	UG/KG	U	UJ	A05
REG	1,3-trans-Dichloropropene	8.7	UG/KG	U	UJ	A05
REG	2-Butanone	35	UG/KG	U	UJ	A05
REG	2-Hexanone	35	UG/KG	U	UJ	A05
REG	4-Methyl-2-pentanone	35	UG/KG	U	UJ	A05
REG	Acetone	35	UG/KG	U	UJ	A05
REG	Benzene	8.7	UG/KG	U	UJ	A05
REG	Bromodichloromethane	8.7	UG/KG	U	UJ	A05
REG	Bromoform	8.7	UG/KG	U	UJ	A05
REG	Bromomethane	17	UG/KG	U	UJ	A05
REG	Carbon Disulfide	8.7	UG/KG	U	UJ	A05
REG	Carbon Tetrachloride	8.7	UG/KG	U	UJ	A05
REG	Chlorobenzene	8.7	UG/KG	U	UJ	A05
REG	Chloroethane	17	UG/KG	U	UJ	A05
REG	Chloroform	8.7	UG/KG	U	UJ	A05
REG	Chloromethane	17	UG/KG	U	UJ	A05
REG	Dibromochloromethane	8.7	UG/KG	U	UJ	A05
REG	Ethylbenzene	8.7	UG/KG	U	UJ	A05
REG	Methylene Chloride	8.7	UG/KG	U	UJ	A05
REG	Styrene	8.7	UG/KG	U	UJ	A05
REG	Tetrachloroethene	8.7	UG/KG	U	UJ	A05
REG	Toluene	8.7	UG/KG	U	UJ	A05
REG	Trichloroethene	8.7	UG/KG	U	UJ	A05
REG	Vinyl Chloride	17	UG/KG	U	UJ	A05
REG	Xylenes, Total	8.7	UG/KG	U	UJ	A05

RQLsd-012(p)-0065-FD 0.0 - 0.0 FT **Field Sample Type: Field Duplicate** **Matrix: Sediment** **Collected:** 07/27/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.98	MG/KG	U	UJ	A05

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	11500	MG/KG		=	
REG	Antimony	1.5	MG/KG		J	I02
REG	Arsenic	15.4	MG/KG		=	
REG	Barium	108	MG/KG		=	
REG	Beryllium	0.42	MG/KG	B	J	
REG	Cadmium	0.98	MG/KG	U	U	
REG	Calcium	14600	MG/KG		=	
REG	Chromium	19.6	MG/KG		=	
REG	Cobalt	10.1	MG/KG		=	
REG	Copper	58.4	MG/KG		=	
REG	Iron	28400	MG/KG		=	
REG	Lead	40.6	MG/KG		=	
REG	Magnesium	15400	MG/KG		=	
REG	Manganese	1190	MG/KG		=	
REG	Mercury	0.11	MG/KG	B	J	
REG	Nickel	24.4	MG/KG		=	
REG	Potassium	1590	MG/KG		=	
REG	Selenium	0.98	MG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0065-FD 0.0 - 0.0 FT Field Sample Type: Field Duplicate Matrix: Sediment Collected: 07/27/98

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Silver	2	MG/KG	U	U	
REG	Sodium	116	MG/KG	B	J	F10
REG	Thallium	0.98	MG/KG	U	U	
REG	Vanadium	22.7	MG/KG		=	
REG	Zinc	155	MG/KG		=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	UJ	A05
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	UJ	A05
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	UJ	A05
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	UJ	A05
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	UJ	A05
REG	2-Nitrotoluene	0.25	MG/KG	U	UJ	A05
REG	3-Nitrotoluene	0.25	MG/KG	U	UJ	A05
REG	4-Nitrotoluene	0.25	MG/KG	U	UJ	A05
REG	HMX	0.5	MG/KG	U	UJ	A05
REG	Nitrobenzene	0.25	MG/KG	U	UJ	A05
REG	Nitrocellulose as N	1.7	MG/KG	J	J	
REG	Nitroglycerin	2.5	MG/KG	U	UJ	A05
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	UJ	A05
REG	Tetryl	0.65	MG/KG	U	UJ	A05

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	1,2,4-Trichlorobenzene	650	UG/KG	U	UJ	A01,A05
REA	1,2-Dichlorobenzene	650	UG/KG	U	UJ	A01,A05
REA	1,3-Dichlorobenzene	650	UG/KG	U	UJ	A01,A05
REA	1,4-Dichlorobenzene	650	UG/KG	U	UJ	A01,A05
REA	2,2'-oxybis (1-chloropropane)	650	UG/KG	U	UJ	A01,A05
REA	2,4,5-Trichlorophenol	650	UG/KG	U	UJ	A01,A05
REA	2,4,6-Trichlorophenol	650	UG/KG	U	UJ	A01,A05
REA	2,4-Dichlorophenol	650	UG/KG	U	UJ	A01,A05
REA	2,4-Dimethylphenol	650	UG/KG	U	UJ	A01,A05
REA	2,4-Dinitrophenol	1600	UG/KG	U	UJ	A01,A05
REA	2,4-Dinitrotoluene	650	UG/KG	U	UJ	A01,A05
REA	2,6-Dinitrotoluene	650	UG/KG	U	UJ	A01,A05
REA	2-Chloronaphthalene	650	UG/KG	U	UJ	A01,A05
REA	2-Chlorophenol	650	UG/KG	U	UJ	A01,A05
REA	2-Methylnaphthalene	650	UG/KG	U	UJ	A01,A05
REA	2-Methylphenol	650	UG/KG	U	UJ	A01,A05
REA	2-Nitroaniline	1600	UG/KG	U	UJ	A01,A05
REA	2-Nitrophenol	650	UG/KG	U	UJ	A01,A05
REA	3,3'-Dichlorobenzidine	650	UG/KG	U	UJ	A01,A05
REA	3-Nitroaniline	1600	UG/KG	U	UJ	A01,A05
REA	4,6-Dinitro-o-Cresol	1600	UG/KG	U	UJ	A01,A05
REA	4-Bromophenyl-phenyl Ether	650	UG/KG	U	UJ	A01,A05
REA	4-Chloroaniline	650	UG/KG	U	UJ	A01,A05
REA	4-Chlorophenyl-phenylether	650	UG/KG	U	UJ	A01,A05
REA	4-Methylphenol	650	UG/KG	U	UJ	A01,A05
REA	4-Nitroaniline	1600	UG/KG	U	UJ	A01,A05
REA	4-Nitrophenol	1600	UG/KG	U	UJ	A01,A05
REA	4-chloro-3-methylphenol	650	UG/KG	U	UJ	A01,A05
REA	Acenaphthene	650	UG/KG	U	UJ	A01,A05
REA	Acenaphthylene	650	UG/KG	U	UJ	A01,A05
REA	Anthracene	650	UG/KG	U	UJ	A01,A05
REA	Benzo(a)anthracene	650	UG/KG	U	UJ	A01,A05
REA	Benzo(a)pyrene	650	UG/KG	U	UJ	A01,A05
REA	Benzo(b)fluoranthene	650	UG/KG	U	UJ	A01,A05
REA	Benzo(g,h,i)perylene	650	UG/KG	U	UJ	A01,A05
REA	Benzo(k)fluoranthene	650	UG/KG	U	UJ	A01,A05
REA	Bis(2-chloroethoxy)methane	650	UG/KG	U	UJ	A01,A05
REA	Bis(2-chloroethyl)ether	650	UG/KG	U	UJ	A01,A05
REA	Bis(2-ethylhexyl)phthalate	650	UG/KG	U	UJ	A01,A05
REA	Butyl Benzyl Phthalate	650	UG/KG	U	UJ	A01,A05
REA	Carbazole	650	UG/KG	U	UJ	A01,A05
REA	Chrysene	650	UG/KG	U	UJ	A01,A05

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0065-FD 0.0 - 0.0 FT Field Sample Type: Field Duplicate Matrix: Sediment Collected: 07/27/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REA	Di-n-butyl Phthalate	650	UG/KG	U	UJ	A01,A05
REA	Di-n-octyl Phthalate	650	UG/KG	U	UJ	A01,A05
REA	Dibenzo(a,h)anthracene	650	UG/KG	U	UJ	A01,A05
REA	Dibenzofuran	650	UG/KG	U	UJ	A01,A05
REA	Diethyl Phthalate	650	UG/KG	U	UJ	A01,A05
REA	Dimethyl Phthalate	650	UG/KG	U	UJ	A01,A05
REA	Fluoranthene	650	UG/KG	U	UJ	A01,A05
REA	Fluorene	650	UG/KG	U	UJ	A01,A05
REA	Hexachlorobenzene	650	UG/KG	U	UJ	A01,A05
REA	Hexachlorobutadiene	650	UG/KG	U	UJ	A01,A05
REA	Hexachlorocyclopentadiene	650	UG/KG	U	UJ	A01,A05
REA	Hexachloroethane	650	UG/KG	U	UJ	A01,A05
REA	Indeno(1,2,3-cd)pyrene	650	UG/KG	U	UJ	A01,A05
REA	Isophorone	650	UG/KG	U	UJ	A01,A05
REA	N-Nitroso-di-n-propylamine	650	UG/KG	U	UJ	A01,A05
REA	N-Nitrosodiphenylamine	650	UG/KG	U	UJ	A01,A05
REA	Naphthalene	650	UG/KG	U	UJ	A01,A05
REA	Nitrobenzene	650	UG/KG	U	UJ	A01,A05
REA	Pentachlorophenol	650	UG/KG	U	UJ	A01,A05
REA	Phenanthrene	650	UG/KG	U	UJ	A01,A05
REA	Phenol	650	UG/KG	U	UJ	A01,A05
REA	Pyrene	190	UG/KG	J	J	A01,A05

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	650	UG/KG	U	UJ	A05
REG	1,2-Dichlorobenzene	650	UG/KG	U	UJ	A05
REG	1,3-Dichlorobenzene	650	UG/KG	U	UJ	A05
REG	1,4-Dichlorobenzene	650	UG/KG	U	UJ	A05
REG	2,2'-oxybis (1-chloropropane)	650	UG/KG	U	UJ	A05
REG	2,4,5-Trichlorophenol	650	UG/KG	U	UJ	A05
REG	2,4,6-Trichlorophenol	650	UG/KG	U	UJ	A05
REG	2,4-Dichlorophenol	650	UG/KG	U	UJ	A05
REG	2,4-Dimethylphenol	650	UG/KG	U	UJ	A05
REG	2,4-Dinitrophenol	1600	UG/KG	U	UJ	A05
REG	2,4-Dinitrotoluene	650	UG/KG	U	UJ	A05
REG	2,6-Dinitrotoluene	650	UG/KG	U	UJ	A05
REG	2-Chloronaphthalene	650	UG/KG	U	UJ	A05
REG	2-Chlorophenol	650	UG/KG	U	UJ	A05
REG	2-Methylnaphthalene	650	UG/KG	U	UJ	A05
REG	2-Methylphenol	650	UG/KG	U	UJ	A05
REG	2-Nitroaniline	1600	UG/KG	U	UJ	A05
REG	2-Nitrophenol	650	UG/KG	U	UJ	A05
REG	3,3'-Dichlorobenzidine	650	UG/KG	U	UJ	A05
REG	3-Nitroaniline	1600	UG/KG	U	UJ	A05,C05,C02
REG	4,6-Dinitro-o-Cresol	1600	UG/KG	U	UJ	A05
REG	4-Bromophenyl-phenyl Ether	650	UG/KG	U	UJ	A05
REG	4-Chloroaniline	650	UG/KG	U	UJ	A05,C05,C02
REG	4-Chlorophenyl-phenylether	650	UG/KG	U	UJ	A05
REG	4-Methylphenol	650	UG/KG	U	UJ	A05
REG	4-Nitroaniline	1600	UG/KG	U	UJ	A05
REG	4-Nitrophenol	1600	UG/KG	U	UJ	A05
REG	4-chloro-3-methylphenol	650	UG/KG	U	UJ	A05
REG	Acenaphthene	650	UG/KG	U	UJ	A05
REG	Acenaphthylene	650	UG/KG	U	UJ	A05
REG	Anthracene	200	UG/KG	J	J	A05
REG	Benzo(a)anthracene	500	UG/KG	J	J	A05
REG	Benzo(a)pyrene	480	UG/KG	J	J	A05
REG	Benzo(b)fluoranthene	610	UG/KG	J	J	A05
REG	Benzo(g,h,i)perylene	220	UG/KG	J	J	A05
REG	Benzo(k)fluoranthene	260	UG/KG	J	J	A05
REG	Bis(2-chloroethoxy)methane	650	UG/KG	U	UJ	A05
REG	Bis(2-chloroethyl)ether	650	UG/KG	U	UJ	A05
REG	Bis(2-ethylhexyl)phthalate	650	UG/KG	U	UJ	A05
REG	Butyl Benzyl Phthalate	650	UG/KG	U	UJ	A05
REG	Carbazole	650	UG/KG	U	UJ	A05
REG	Chrysene	500	UG/KG	J	J	A05
REG	Di-n-butyl Phthalate	650	UG/KG	U	UJ	A05
REG	Di-n-octyl Phthalate	650	UG/KG	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLsd-012 Initial Phase

RQLsd-012(p)-0065-FD 0.0 - 0.0 FT Field Sample Type: Field Duplicate Matrix: Sediment Collected: 07/27/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Dibenzo(a,h)anthracene	650	UG/KG	U	UJ	A05
REG	Dibenzofuran	650	UG/KG	U	UJ	A05
REG	Diethyl Phthalate	650	UG/KG	U	UJ	A05
REG	Dimethyl Phthalate	650	UG/KG	U	UJ	A05
REG	Fluoranthene	1100	UG/KG		J	A05
REG	Fluorene	650	UG/KG	U	UJ	A05
REG	Hexachlorobenzene	650	UG/KG	U	UJ	A05
REG	Hexachlorobutadiene	650	UG/KG	U	UJ	A05
REG	Hexachlorocyclopentadiene	650	UG/KG	U	UJ	A05
REG	Hexachloroethane	650	UG/KG	U	UJ	A05
REG	Indeno(1,2,3-cd)pyrene	250	UG/KG	J	J	A05
REG	Isophorone	650	UG/KG	U	UJ	A05
REG	N-Nitroso-di-n-propylamine	650	UG/KG	U	UJ	A05
REG	N-Nitrosodiphenylamine	650	UG/KG	U	UJ	A05
REG	Naphthalene	650	UG/KG	U	UJ	A05
REG	Nitrobenzene	650	UG/KG	U	UJ	A05
REG	Pentachlorophenol	650	UG/KG	U	UJ	A05
REG	Phenanthrene	600	UG/KG	J	J	A05
REG	Phenol	650	UG/KG	U	UJ	A05
REG	Pyrene	900	UG/KG		J	A05

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	9.8	UG/KG	U	UJ	A05
REG	1,1,2,2-Tetrachloroethane	9.8	UG/KG	U	UJ	A05
REG	1,1,2-Trichloroethane	9.8	UG/KG	U	UJ	A05
REG	1,1-Dichloroethane	9.8	UG/KG	U	UJ	A05
REG	1,1-Dichloroethene	9.8	UG/KG	U	UJ	A05
REG	1,2-Dichloroethane	9.8	UG/KG	U	UJ	A05
REG	1,2-Dichloroethene	9.8	UG/KG	U	UJ	A05
REG	1,2-Dichloropropane	9.8	UG/KG	U	UJ	A05
REG	1,3-cis-Dichloropropene	9.8	UG/KG	U	UJ	A05
REG	1,3-trans-Dichloropropene	9.8	UG/KG	U	UJ	A05
REG	2-Butanone	39	UG/KG	U	UJ	A05
REG	2-Hexanone	39	UG/KG	U	UJ	A05
REG	4-Methyl-2-pentanone	39	UG/KG	U	UJ	A05
REG	Acetone	39	UG/KG	U	UJ	A05
REG	Benzene	9.8	UG/KG	U	UJ	A05
REG	Bromodichloromethane	9.8	UG/KG	U	UJ	A05
REG	Bromoform	9.8	UG/KG	U	UJ	A05
REG	Bromomethane	20	UG/KG	U	UJ	A05
REG	Carbon Disulfide	9.8	UG/KG	U	UJ	A05
REG	Carbon Tetrachloride	9.8	UG/KG	U	UJ	A05
REG	Chlorobenzene	9.8	UG/KG	U	UJ	A05
REG	Chloroethane	20	UG/KG	U	UJ	A05
REG	Chloroform	9.8	UG/KG	U	UJ	A05
REG	Chloromethane	20	UG/KG	U	UJ	A05
REG	Dibromochloromethane	9.8	UG/KG	U	UJ	A05
REG	Ethylbenzene	9.8	UG/KG	U	UJ	A05
REG	Methylene Chloride	9.8	UG/KG	U	UJ	A05
REG	Styrene	9.8	UG/KG	U	UJ	A05
REG	Tetrachloroethene	9.8	UG/KG	U	UJ	A05
REG	Toluene	9.8	UG/KG	U	UJ	A05
REG	Trichloroethene	9.8	UG/KG	U	UJ	A05
REG	Vinyl Chloride	20	UG/KG	U	UJ	A05
REG	Xylenes, Total	9.8	UG/KG	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : RQLsd-013 Initial Phase

RQLsd-013(p)-0032-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	1.9	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code

Location: Ramsdell Quarry Landfill
Station : RQLsd-013 Initial Phase

RQLsd-013(p)-0032-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	22100	MG/KG		=	
REG	Antimony	1.9	MG/KG	U	UJ	I02
REG	Arsenic	15.2	MG/KG		=	
REG	Barium	118	MG/KG		=	
REG	Beryllium	.59	MG/KG	B	J	
REG	Cadmium	1.9	MG/KG	U	U	
REG	Calcium	1530	MG/KG	B	J	I02
REG	Chromium	29.1	MG/KG		=	
REG	Cobalt	10.8	MG/KG	B	J	
REG	Copper	41.1	MG/KG		=	
REG	Iron	28600	MG/KG		=	
REG	Lead	38.4	MG/KG		=	
REG	Magnesium	4660	MG/KG		J	I03
REG	Manganese	223	MG/KG		J	E07
REG	Mercury	0.15	MG/KG	B	J	
REG	Nickel	30.1	MG/KG		=	
REG	Potassium	3300	MG/KG		J	F10
REG	Selenium	2	MG/KG		=	
REG	Silver	3.7	MG/KG	U	U	
REG	Sodium	1870	MG/KG	U	U	
REG	Thallium	1.9	MG/KG	U	U	
REG	Vanadium	40.7	MG/KG		=	
REG	Zinc	214	MG/KG	MBD	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.07	MG/KG	J	J	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.15	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	1200	UG/KG	U	U	
REG	1,2-Dichlorobenzene	1200	UG/KG	U	U	
REG	1,3-Dichlorobenzene	1200	UG/KG	U	U	
REG	1,4-Dichlorobenzene	1200	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	1200	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	1200	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	1200	UG/KG	U	U	
REG	2,4-Dichlorophenol	1200	UG/KG	U	U	
REG	2,4-Dimethylphenol	1200	UG/KG	U	U	
REG	2,4-Dinitrophenol	3000	UG/KG	U	U	
REG	2,4-Dinitrotoluene	1200	UG/KG	U	U	
REG	2,6-Dinitrotoluene	1200	UG/KG	U	U	
REG	2-Chloronaphthalene	1200	UG/KG	U	U	
REG	2-Chlorophenol	1200	UG/KG	U	U	
REG	2-Methylnaphthalene	1200	UG/KG	U	U	
REG	2-Methylphenol	1200	UG/KG	U	U	
REG	2-Nitroaniline	3000	UG/KG	U	U	
REG	2-Nitrophenol	1200	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	1200	UG/KG	U	U	
REG	3-Nitroaniline	3000	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	3000	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	1200	UG/KG	U	U	
REG	4-Chloroaniline	1200	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	1200	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-013 Initial Phase

RQLsd-013(p)-0032-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4-Methylphenol	1200	UG/KG	U	U	
REG	4-Nitroaniline	3000	UG/KG	U	U	
REG	4-Nitrophenol	3000	UG/KG	U	U	
REG	4-chloro-3-methylphenol	1200	UG/KG	U	U	
REG	Acenaphthene	1200	UG/KG	U	U	
REG	Acenaphthylene	1200	UG/KG	U	U	
REG	Anthracene	1200	UG/KG	U	U	
REG	Benzo(a)anthracene	1200	UG/KG	U	U	
REG	Benzo(a)pyrene	1200	UG/KG	U	U	
REG	Benzo(b)fluoranthene	1200	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	1200	UG/KG	U	U	
REG	Benzo(k)fluoranthene	1200	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	1200	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	1200	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	1200	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	1200	UG/KG	U	U	
REG	Carbazole	1200	UG/KG	U	U	
REG	Chrysene	1200	UG/KG	U	U	
REG	Di-n-butyl Phthalate	1200	UG/KG	U	U	
REG	Di-n-octyl Phthalate	1200	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	1200	UG/KG	U	U	
REG	Dibenzofuran	1200	UG/KG	U	U	
REG	Diethyl Phthalate	1200	UG/KG	U	U	
REG	Dimethyl Phthalate	1200	UG/KG	U	U	
REG	Fluoranthene	1200	UG/KG	U	U	
REG	Fluorene	1200	UG/KG	U	U	
REG	Hexachlorobenzene	1200	UG/KG	U	U	
REG	Hexachlorobutadiene	1200	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	1200	UG/KG	U	U	
REG	Hexachloroethane	1200	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	1200	UG/KG	U	U	
REG	Isophorone	1200	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	1200	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	1200	UG/KG	U	U	
REG	Naphthalene	1200	UG/KG	U	U	
REG	Nitrobenzene	1200	UG/KG	U	U	
REG	Pentachlorophenol	1200	UG/KG	U	U	
REG	Phenanthrene	1200	UG/KG	U	U	
REG	Phenol	1200	UG/KG	U	U	
REG	Pyrene	1200	UG/KG	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	19	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	19	UG/KG	U	U	
REG	1,1,2-Trichloroethane	19	UG/KG	U	U	
REG	1,1-Dichloroethane	19	UG/KG	U	U	
REG	1,1-Dichloroethene	19	UG/KG	U	U	
REG	1,2-Dichloroethane	19	UG/KG	U	U	
REG	1,2-Dichloroethene	19	UG/KG	U	U	
REG	1,2-Dichloropropane	19	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	19	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	19	UG/KG	U	U	
REG	2-Butanone	35	UG/KG	J	J	C05
REG	2-Hexanone	75	UG/KG	U	U	
REG	4-Methyl-2-pentanone	75	UG/KG	U	U	
REG	Acetone	98	UG/KG		J	C05
REG	Benzene	19	UG/KG	U	U	
REG	Bromodichloromethane	19	UG/KG	U	U	
REG	Bromoform	19	UG/KG	U	U	
REG	Bromomethane	37	UG/KG	U	U	
REG	Carbon Disulfide	19	UG/KG	U	U	
REG	Carbon Tetrachloride	19	UG/KG	U	U	
REG	Chlorobenzene	19	UG/KG	U	U	
REG	Chloroethane	37	UG/KG	U	U	
REG	Chloroform	19	UG/KG	U	U	
REG	Chloromethane	37	UG/KG	U	U	
REG	Dibromochloromethane	19	UG/KG	U	U	
REG	Ethylbenzene	19	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-013 Initial Phase

RQLsd-013(p)-0032-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Methylene Chloride	19	UG/KG	U	U	
REG	Styrene	19	UG/KG	U	U	
REG	Tetrachloroethene	19	UG/KG	U	U	
REG	Toluene	19	UG/KG	U	U	
REG	Trichloroethene	19	UG/KG	U	U	
REG	Vinyl Chloride	37	UG/KG	U	U	
REG	Xylenes, Total	19	UG/KG	U	U	

RQLsd-013(p)-0033-SD 0.5 - 2.0 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	1	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	4300	MG/KG		=	
REG	Antimony	1	MG/KG	U	UJ	I02
REG	Arsenic	13.4	MG/KG		=	
REG	Barium	33	MG/KG	B	J	
REG	Beryllium	1	MG/KG	U	U	
REG	Cadmium	1	MG/KG	U	U	
REG	Calcium	1270	MG/KG		J	I02
REG	Chromium	8.7	MG/KG		=	
REG	Cobalt	5	MG/KG	B	J	
REG	Copper	19.5	MG/KG		=	
REG	Iron	13700	MG/KG		=	
REG	Lead	21.1	MG/KG		=	
REG	Magnesium	2180	MG/KG		J	I03
REG	Manganese	432	MG/KG		J	E07
REG	Mercury	.048	MG/KG	B	J	
REG	Nickel	12.8	MG/KG		=	
REG	Potassium	713	MG/KG	B	J	F10
REG	Selenium	1	MG/KG	U	U	
REG	Silver	2.1	MG/KG	U	U	
REG	Sodium	1050	MG/KG	U	U	
REG	Thallium	1	MG/KG	U	U	
REG	Vanadium	9	MG/KG	B	J	
REG	Zinc	135	MG/KG	MBD	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.5	MG/KG	U	U	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	690	UG/KG	U	U	
REG	1,2-Dichlorobenzene	690	UG/KG	U	U	
REG	1,3-Dichlorobenzene	690	UG/KG	U	U	
REG	1,4-Dichlorobenzene	690	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	690	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	690	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	690	UG/KG	U	U	
REG	2,4-Dichlorophenol	690	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-013 Initial Phase

RQLsd-013(p)-0033-SD 0.5 - 2.0 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2,4-Dimethylphenol	690	UG/KG	U	U	
REG	2,4-Dinitrophenol	1700	UG/KG	U	U	
REG	2,4-Dinitrotoluene	690	UG/KG	U	U	
REG	2,6-Dinitrotoluene	690	UG/KG	U	U	
REG	2-Chloronaphthalene	690	UG/KG	U	U	
REG	2-Chlorophenol	690	UG/KG	U	U	
REG	2-Methylnaphthalene	690	UG/KG	U	U	
REG	2-Methylphenol	690	UG/KG	U	U	
REG	2-Nitroaniline	1700	UG/KG	U	U	
REG	2-Nitrophenol	690	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	690	UG/KG	U	U	
REG	3-Nitroaniline	1700	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1700	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	690	UG/KG	U	U	
REG	4-Chloroaniline	690	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	690	UG/KG	U	U	
REG	4-Methylphenol	690	UG/KG	U	U	
REG	4-Nitroaniline	1700	UG/KG	U	U	
REG	4-Nitrophenol	1700	UG/KG	U	U	
REG	4-chloro-3-methylphenol	690	UG/KG	U	U	
REG	Acenaphthene	690	UG/KG	U	U	
REG	Acenaphthylene	690	UG/KG	U	U	
REG	Anthracene	690	UG/KG	U	U	
REG	Benzo(a)anthracene	690	UG/KG	U	U	
REG	Benzo(a)pyrene	690	UG/KG	U	U	
REG	Benzo(b)fluoranthene	690	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	690	UG/KG	U	U	
REG	Benzo(k)fluoranthene	690	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	690	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	690	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	690	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	690	UG/KG	U	U	
REG	Carbazole	690	UG/KG	U	U	
REG	Chrysene	690	UG/KG	U	U	
REG	Di-n-butyl Phthalate	690	UG/KG	U	U	
REG	Di-n-octyl Phthalate	690	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	690	UG/KG	U	U	
REG	Dibenzofuran	690	UG/KG	U	U	
REG	Diethyl Phthalate	690	UG/KG	U	U	
REG	Dimethyl Phthalate	690	UG/KG	U	U	
REG	Fluoranthene	690	UG/KG	U	U	
REG	Fluorene	690	UG/KG	U	U	
REG	Hexachlorobenzene	690	UG/KG	U	U	
REG	Hexachlorobutadiene	690	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	690	UG/KG	U	U	
REG	Hexachloroethane	690	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	690	UG/KG	U	U	
REG	Isophorone	690	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	690	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	690	UG/KG	U	U	
REG	Naphthalene	690	UG/KG	U	U	
REG	Nitrobenzene	690	UG/KG	U	U	
REG	Pentachlorophenol	690	UG/KG	U	U	
REG	Phenanthrene	690	UG/KG	U	U	
REG	Phenol	690	UG/KG	U	U	
REG	Pyrene	690	UG/KG	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	10	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	10	UG/KG	U	U	
REG	1,1,2-Trichloroethane	10	UG/KG	U	U	
REG	1,1-Dichloroethane	10	UG/KG	U	U	
REG	1,1-Dichloroethene	10	UG/KG	U	U	
REG	1,2-Dichloroethane	10	UG/KG	U	U	
REG	1,2-Dichloroethene	10	UG/KG	U	U	
REG	1,2-Dichloropropane	10	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	10	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	10	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-013 Initial Phase

RQLsd-013(p)-0033-SD 0.5 - 2.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected:** 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2-Butanone	6.5	UG/KG	J	J	C05
REG	2-Hexanone	42	UG/KG	U	U	
REG	4-Methyl-2-pentanone	42	UG/KG	U	U	
REG	Acetone	19	UG/KG	J	J	C05
REG	Benzene	10	UG/KG	U	U	
REG	Bromodichloromethane	10	UG/KG	U	U	
REG	Bromoform	10	UG/KG	U	U	
REG	Bromomethane	21	UG/KG	U	U	
REG	Carbon Disulfide	10	UG/KG	U	U	
REG	Carbon Tetrachloride	10	UG/KG	U	U	
REG	Chlorobenzene	10	UG/KG	U	U	
REG	Chloroethane	21	UG/KG	U	U	
REG	Chloroform	10	UG/KG	U	U	
REG	Chloromethane	21	UG/KG	U	U	
REG	Dibromochloromethane	10	UG/KG	U	U	
REG	Ethylbenzene	10	UG/KG	U	U	
REG	Methylene Chloride	10	UG/KG	U	U	
REG	Styrene	10	UG/KG	U	U	
REG	Tetrachloroethene	10	UG/KG	U	U	
REG	Toluene	10	UG/KG	U	U	
REG	Trichloroethene	10	UG/KG	U	U	
REG	Vinyl Chloride	21	UG/KG	U	U	
REG	Xylenes, Total	10	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-014 Initial Phase

RQLsd-014(p)-0035-SD 0.0 - 0.5 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected:** 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.98	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	3550	MG/KG		=	
REG	Antimony	0.98	MG/KG	U	UJ	I02
REG	Arsenic	17.5	MG/KG		=	
REG	Barium	70.3	MG/KG		=	
REG	Beryllium	0.98	MG/KG	U	U	
REG	Cadmium	0.98	MG/KG	U	U	
REG	Calcium	23700	MG/KG		J	I02
REG	Chromium	12.8	MG/KG		=	
REG	Cobalt	8	MG/KG	B	J	
REG	Copper	134	MG/KG		=	
REG	Iron	21800	MG/KG		=	
REG	Lead	43.9	MG/KG		=	
REG	Magnesium	18900	MG/KG		J	I03
REG	Manganese	1240	MG/KG		J	E07
REG	Mercury	.067	MG/KG	B	J	
REG	Nickel	23	MG/KG		=	
REG	Potassium	421	MG/KG	B	J	F10
REG	Selenium	0.98	MG/KG	U	U	
REG	Silver	2	MG/KG	U	U	
REG	Sodium	41	MG/KG	B	J	
REG	Thallium	0.98	MG/KG	U	U	
REG	Vanadium	10.1	MG/KG		=	
REG	Zinc	285	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.071	MG/KG	J	J	

Location: Ramsdell Quarry Landfill
Station : RQLsd-014 Initial Phase

RQLsd-014(p)-0035-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.5	MG/KG	U	U	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	650	UG/KG	U	U	
REG	1,2-Dichlorobenzene	650	UG/KG	U	U	
REG	1,3-Dichlorobenzene	650	UG/KG	U	U	
REG	1,4-Dichlorobenzene	650	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	650	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	650	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	650	UG/KG	U	U	
REG	2,4-Dichlorophenol	650	UG/KG	U	U	
REG	2,4-Dimethylphenol	650	UG/KG	U	U	
REG	2,4-Dinitrophenol	1600	UG/KG	U	U	
REG	2,4-Dinitrotoluene	650	UG/KG	U	U	
REG	2,6-Dinitrotoluene	650	UG/KG	U	U	
REG	2-Chloronaphthalene	650	UG/KG	U	U	
REG	2-Chlorophenol	650	UG/KG	U	U	
REG	2-Methylnaphthalene	650	UG/KG	U	U	
REG	2-Methylphenol	650	UG/KG	U	U	
REG	2-Nitroaniline	1600	UG/KG	U	U	
REG	2-Nitrophenol	650	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	650	UG/KG	U	U	
REG	3-Nitroaniline	1600	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1600	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	650	UG/KG	U	U	
REG	4-Chloroaniline	650	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	650	UG/KG	U	U	
REG	4-Methylphenol	650	UG/KG	U	U	
REG	4-Nitroaniline	1600	UG/KG	U	U	
REG	4-Nitrophenol	1600	UG/KG	U	U	
REG	4-chloro-3-methylphenol	650	UG/KG	U	U	
REG	Acenaphthene	650	UG/KG	U	U	
REG	Acenaphthylene	650	UG/KG	U	U	
REG	Anthracene	650	UG/KG	U	U	
REG	Benzo(a)anthracene	650	UG/KG	U	U	
REG	Benzo(a)pyrene	650	UG/KG	U	U	
REG	Benzo(b)fluoranthene	650	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	650	UG/KG	U	U	
REG	Benzo(k)fluoranthene	650	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	650	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	650	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	650	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	650	UG/KG	U	U	
REG	Carbazole	650	UG/KG	U	U	
REG	Chrysene	650	UG/KG	U	U	
REG	Di-n-butyl Phthalate	650	UG/KG	U	U	
REG	Di-n-octyl Phthalate	650	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	650	UG/KG	U	U	
REG	Dibenzofuran	650	UG/KG	U	U	
REG	Diethyl Phthalate	650	UG/KG	U	U	
REG	Dimethyl Phthalate	650	UG/KG	U	U	
REG	Fluoranthene	120	UG/KG	J	J	
REG	Fluorene	650	UG/KG	U	U	
REG	Hexachlorobenzene	650	UG/KG	U	U	
REG	Hexachlorobutadiene	650	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	650	UG/KG	U	U	
REG	Hexachloroethane	650	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	650	UG/KG	U	U	
REG	Isophorone	650	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	650	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	650	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-014 Initial Phase

RQLsd-014(p)-0035-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Naphthalene	650	UG/KG	U	U	
REG	Nitrobenzene	650	UG/KG	U	U	
REG	Pentachlorophenol	650	UG/KG	U	U	
REG	Phenanthrene	650	UG/KG	U	U	
REG	Phenol	650	UG/KG	U	U	
REG	Pyrene	99	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	9.8	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	9.8	UG/KG	U	U	
REG	1,1,2-Trichloroethane	9.8	UG/KG	U	U	
REG	1,1-Dichloroethane	9.8	UG/KG	U	U	
REG	1,1-Dichloroethene	9.8	UG/KG	U	U	
REG	1,2-Dichloroethane	9.8	UG/KG	U	U	
REG	1,2-Dichloroethene	9.8	UG/KG	U	U	
REG	1,2-Dichloropropane	9.8	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	9.8	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	9.8	UG/KG	U	U	
REG	2-Butanone	39	UG/KG	U	U	
REG	2-Hexanone	39	UG/KG	U	U	
REG	4-Methyl-2-pentanone	39	UG/KG	U	U	
REG	Acetone	8.7	UG/KG	J	J	C05
REG	Benzene	9.8	UG/KG	U	U	
REG	Bromodichloromethane	9.8	UG/KG	U	U	
REG	Bromoform	9.8	UG/KG	U	U	
REG	Bromomethane	20	UG/KG	U	U	
REG	Carbon Disulfide	9.8	UG/KG	U	U	
REG	Carbon Tetrachloride	9.8	UG/KG	U	U	
REG	Chlorobenzene	9.8	UG/KG	U	U	
REG	Chloroethane	20	UG/KG	U	U	
REG	Chloroform	9.8	UG/KG	U	U	
REG	Chloromethane	20	UG/KG	U	U	
REG	Dibromochloromethane	9.8	UG/KG	U	U	
REG	Ethylbenzene	9.8	UG/KG	U	U	
REG	Methylene Chloride	9.8	UG/KG	U	U	
REG	Styrene	9.8	UG/KG	U	U	
REG	Tetrachloroethene	9.8	UG/KG	U	U	
REG	Toluene	9.8	UG/KG	U	U	
REG	Trichloroethene	9.8	UG/KG	U	U	
REG	Vinyl Chloride	20	UG/KG	U	U	
REG	Xylenes, Total	9.8	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-015 Initial Phase

RQLsd-015(p)-0044-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	1	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	21200	MG/KG		=	
REG	Antimony	1	MG/KG	U	UJ	I02
REG	Arsenic	15.9	MG/KG		=	
REG	Barium	141	MG/KG		=	
REG	Beryllium	.65	MG/KG	B	J	
REG	Cadmium	1	MG/KG	U	U	
REG	Calcium	6410	MG/KG		J	I02
REG	Chromium	30.5	MG/KG		=	
REG	Cobalt	13.3	MG/KG		=	
REG	Copper	46.4	MG/KG		=	
REG	Iron	40900	MG/KG		=	
REG	Lead	66.6	MG/KG		=	
REG	Magnesium	5320	MG/KG		J	I03
REG	Manganese	585	MG/KG		J	E07

Location: Ramsdell Quarry Landfill
Station : RQLsd-015 Initial Phase

RQLsd-015(p)-0044-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Mercury	.18	MG/KG	B	J	
REG	Nickel	35.1	MG/KG		=	
REG	Potassium	3010	MG/KG		J	F10
REG	Selenium	1	MG/KG	U	U	
REG	Silver	2.1	MG/KG	U	U	
REG	Sodium	58.2	MG/KG	B	J	
REG	Thallium	1	MG/KG	U	U	
REG	Vanadium	38.1	MG/KG		=	
REG	Zinc	427	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.5	MG/KG	U	U	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	4.3	MG/KG		=	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	680	UG/KG	U	U	
REG	1,2-Dichlorobenzene	680	UG/KG	U	U	
REG	1,3-Dichlorobenzene	680	UG/KG	U	U	
REG	1,4-Dichlorobenzene	680	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	680	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	680	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	680	UG/KG	U	U	
REG	2,4-Dichlorophenol	680	UG/KG	U	U	
REG	2,4-Dimethylphenol	680	UG/KG	U	U	
REG	2,4-Dinitrophenol	1600	UG/KG	U	U	
REG	2,4-Dinitrotoluene	680	UG/KG	U	U	
REG	2,6-Dinitrotoluene	680	UG/KG	U	U	
REG	2-Chloronaphthalene	680	UG/KG	U	U	
REG	2-Chlorophenol	680	UG/KG	U	U	
REG	2-Methylnaphthalene	680	UG/KG	U	U	
REG	2-Methylphenol	680	UG/KG	U	U	
REG	2-Nitroaniline	1600	UG/KG	U	U	
REG	2-Nitrophenol	680	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	680	UG/KG	U	U	
REG	3-Nitroaniline	1600	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1600	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	680	UG/KG	U	U	
REG	4-Chloroaniline	680	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	680	UG/KG	U	U	
REG	4-Methylphenol	680	UG/KG	U	U	
REG	4-Nitroaniline	1600	UG/KG	U	U	
REG	4-Nitrophenol	1600	UG/KG	U	U	
REG	4-chloro-3-methylphenol	680	UG/KG	U	U	
REG	Acenaphthene	680	UG/KG	U	U	
REG	Acenaphthylene	680	UG/KG	U	U	
REG	Anthracene	680	UG/KG	U	U	
REG	Benzo(a)anthracene	99	UG/KG	J	J	
REG	Benzo(a)pyrene	110	UG/KG	J	J	
REG	Benzo(b)fluoranthene	170	UG/KG	J	J	
REG	Benzo(g,h,i)perylene	680	UG/KG	U	U	
REG	Benzo(k)fluoranthene	680	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	680	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	680	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-015 Initial Phase

RQLsd-015(p)-0044-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Bis(2-ethylhexyl)phthalate	680	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	680	UG/KG	U	U	
REG	Carbazole	680	UG/KG	U	U	
REG	Chrysene	120	UG/KG	J	J	
REG	Di-n-butyl Phthalate	680	UG/KG	U	U	
REG	Di-n-octyl Phthalate	680	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	680	UG/KG	U	U	
REG	Dibenzofuran	680	UG/KG	U	U	
REG	Diethyl Phthalate	680	UG/KG	U	U	
REG	Dimethyl Phthalate	680	UG/KG	U	U	
REG	Fluoranthene	220	UG/KG	J	J	
REG	Fluorene	680	UG/KG	U	U	
REG	Hexachlorobenzene	680	UG/KG	U	U	
REG	Hexachlorobutadiene	680	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	680	UG/KG	U	U	
REG	Hexachloroethane	680	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	86	UG/KG	J	J	
REG	Isophorone	680	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	680	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	680	UG/KG	U	U	
REG	Naphthalene	680	UG/KG	U	U	
REG	Nitrobenzene	680	UG/KG	U	U	
REG	Pentachlorophenol	680	UG/KG	U	U	
REG	Phenanthrene	94	UG/KG	J	J	
REG	Phenol	680	UG/KG	U	U	
REG	Pyrene	170	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	10	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	10	UG/KG	U	U	
REG	1,1,2-Trichloroethane	10	UG/KG	U	U	
REG	1,1-Dichloroethane	10	UG/KG	U	U	
REG	1,1-Dichloroethene	10	UG/KG	U	U	
REG	1,2-Dichloroethane	10	UG/KG	U	U	
REG	1,2-Dichloroethene	10	UG/KG	U	U	
REG	1,2-Dichloropropane	10	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	10	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	10	UG/KG	U	U	
REG	2-Butanone	10	UG/KG	J	J	C05
REG	2-Hexanone	41	UG/KG	U	U	
REG	4-Methyl-2-pentanone	41	UG/KG	U	U	
REG	Acetone	34	UG/KG	J	J	
REG	Benzene	10	UG/KG	U	U	
REG	Bromodichloromethane	10	UG/KG	U	U	
REG	Bromoform	10	UG/KG	U	U	
REG	Bromomethane	21	UG/KG	U	U	
REG	Carbon Disulfide	10	UG/KG	U	U	
REG	Carbon Tetrachloride	10	UG/KG	U	U	
REG	Chlorobenzene	10	UG/KG	U	U	
REG	Chloroethane	21	UG/KG	U	U	
REG	Chloroform	10	UG/KG	U	U	
REG	Chloromethane	21	UG/KG	U	U	
REG	Dibromochloromethane	10	UG/KG	U	U	
REG	Ethylbenzene	10	UG/KG	U	U	
REG	Methylene Chloride	10	UG/KG	U	U	
REG	Styrene	10	UG/KG	U	U	
REG	Tetrachloroethene	10	UG/KG	U	U	
REG	Toluene	10	UG/KG	U	U	
REG	Trichloroethene	10	UG/KG	U	U	
REG	Vinyl Chloride	21	UG/KG	U	U	
REG	Xylenes, Total	10	UG/KG	U	U	

RQLsd-015(p)-0045-SD 0.5 - 2.0 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.84	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	13500	MG/KG		=	
REG	Antimony	0.84	MG/KG	U	UJ	I02
REG	Arsenic	10.3	MG/KG		=	
REG	Barium	113	MG/KG		=	
REG	Beryllium	.52	MG/KG	B	J	
REG	Cadmium	0.84	MG/KG	U	U	
REG	Calcium	7750	MG/KG		J	I02
REG	Chromium	20.9	MG/KG		=	
REG	Cobalt	11.6	MG/KG		=	
REG	Copper	44	MG/KG		=	
REG	Iron	31500	MG/KG		=	
REG	Lead	51.3	MG/KG		=	
REG	Magnesium	6180	MG/KG		J	I03
REG	Manganese	561	MG/KG		J	E07
REG	Mercury	0.2	MG/KG		=	
REG	Nickel	29.2	MG/KG		=	
REG	Potassium	1420	MG/KG		J	F10
REG	Selenium	0.84	MG/KG	U	U	
REG	Silver	1.7	MG/KG	U	U	
REG	Sodium	28.9	MG/KG	B	J	
REG	Thallium	1.2	MG/KG		=	
REG	Vanadium	23.6	MG/KG		=	
REG	Zinc	282	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.5	MG/KG	U	U	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2.3	MG/KG		=	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	550	UG/KG	U	U	
REG	1,2-Dichlorobenzene	550	UG/KG	U	U	
REG	1,3-Dichlorobenzene	550	UG/KG	U	U	
REG	1,4-Dichlorobenzene	550	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	550	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	550	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	550	UG/KG	U	U	
REG	2,4-Dichlorophenol	550	UG/KG	U	U	
REG	2,4-Dimethylphenol	550	UG/KG	U	U	
REG	2,4-Dinitrophenol	1300	UG/KG	U	U	
REG	2,4-Dinitrotoluene	550	UG/KG	U	U	
REG	2,6-Dinitrotoluene	550	UG/KG	U	U	
REG	2-Chloronaphthalene	550	UG/KG	U	U	
REG	2-Chlorophenol	550	UG/KG	U	U	
REG	2-Methylnaphthalene	550	UG/KG	U	U	
REG	2-Methylphenol	550	UG/KG	U	U	
REG	2-Nitroaniline	1300	UG/KG	U	U	
REG	2-Nitrophenol	550	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	550	UG/KG	U	U	
REG	3-Nitroaniline	1300	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1300	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	550	UG/KG	U	U	
REG	4-Chloroaniline	550	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	550	UG/KG	U	U	
REG	4-Methylphenol	550	UG/KG	U	U	
REG	4-Nitroaniline	1300	UG/KG	U	U	
REG	4-Nitrophenol	1300	UG/KG	U	U	
REG	4-chloro-3-methylphenol	550	UG/KG	U	U	
REG	Acenaphthene	550	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-015 Initial Phase

RQLsd-015(p)-0045-SD 0.5 - 2.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected:** 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Acenaphthylene	550	UG/KG	U	U	
REG	Anthracene	550	UG/KG	U	U	
REG	Benzo(a)anthracene	71	UG/KG	J	J	
REG	Benzo(a)pyrene	73	UG/KG	J	J	
REG	Benzo(b)fluoranthene	100	UG/KG	J	J	
REG	Benzo(g,h,i)perylene	550	UG/KG	U	U	
REG	Benzo(k)fluoranthene	550	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	550	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	550	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	550	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	550	UG/KG	U	U	
REG	Carbazole	550	UG/KG	U	U	
REG	Chrysene	84	UG/KG	J	J	
REG	Di-n-butyl Phthalate	550	UG/KG	U	U	
REG	Di-n-octyl Phthalate	550	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	550	UG/KG	U	U	
REG	Dibenzofuran	550	UG/KG	U	U	
REG	Diethyl Phthalate	550	UG/KG	U	U	
REG	Dimethyl Phthalate	550	UG/KG	U	U	
REG	Fluoranthene	150	UG/KG	J	J	
REG	Fluorene	550	UG/KG	U	U	
REG	Hexachlorobenzene	550	UG/KG	U	U	
REG	Hexachlorobutadiene	550	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	550	UG/KG	U	U	
REG	Hexachloroethane	550	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	550	UG/KG	U	U	
REG	Isophorone	550	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	550	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	550	UG/KG	U	U	
REG	Naphthalene	550	UG/KG	U	U	
REG	Nitrobenzene	550	UG/KG	U	U	
REG	Pentachlorophenol	550	UG/KG	U	U	
REG	Phenanthrene	550	UG/KG	U	U	
REG	Phenol	550	UG/KG	U	U	
REG	Pyrene	130	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	8.4	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	8.4	UG/KG	U	U	
REG	1,1,2-Trichloroethane	8.4	UG/KG	U	U	
REG	1,1-Dichloroethane	8.4	UG/KG	U	U	
REG	1,1-Dichloroethene	8.4	UG/KG	U	U	
REG	1,2-Dichloroethane	8.4	UG/KG	U	U	
REG	1,2-Dichloroethene	8.4	UG/KG	U	U	
REG	1,2-Dichloropropane	8.4	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	8.4	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	8.4	UG/KG	U	U	
REG	2-Butanone	9.3	UG/KG	J	J	C05
REG	2-Hexanone	34	UG/KG	U	U	
REG	4-Methyl-2-pentanone	34	UG/KG	U	U	
REG	Acetone	38	UG/KG		J	C05
REG	Benzene	8.4	UG/KG	U	U	
REG	Bromodichloromethane	8.4	UG/KG	U	U	
REG	Bromoform	8.4	UG/KG	U	U	
REG	Bromomethane	17	UG/KG	U	U	
REG	Carbon Disulfide	3.4	UG/KG	J	J	
REG	Carbon Tetrachloride	8.4	UG/KG	U	U	
REG	Chlorobenzene	8.4	UG/KG	U	U	
REG	Chloroethane	17	UG/KG	U	U	
REG	Chloroform	8.4	UG/KG	U	U	
REG	Chloromethane	17	UG/KG	U	U	
REG	Dibromochloromethane	8.4	UG/KG	U	U	
REG	Ethylbenzene	8.4	UG/KG	U	U	
REG	Methylene Chloride	8.4	UG/KG	U	U	
REG	Styrene	8.4	UG/KG	U	U	
REG	Tetrachloroethene	8.4	UG/KG	U	U	
REG	Toluene	8.4	UG/KG	U	U	
REG	Trichloroethene	8.4	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-015 Initial Phase

RQLsd-015(p)-0045-SD 0.5 - 2.0 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Vinyl Chloride	17	UG/KG	U	U	
REG	Xylenes, Total	8.4	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-018 Initial Phase

RQLsd-018(p)-0026-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.87	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	13400	MG/KG		=	
REG	Antimony	0.87	MG/KG	U	UJ	I02
REG	Arsenic	9.5	MG/KG		=	
REG	Barium	118	MG/KG		=	
REG	Beryllium	0.39	MG/KG	B	J	
REG	Cadmium	6.4	MG/KG		=	
REG	Calcium	4020	MG/KG		J	I02
REG	Chromium	20.2	MG/KG		=	
REG	Cobalt	8.6	MG/KG	B	J	
REG	Copper	29	MG/KG		=	
REG	Iron	18500	MG/KG		=	
REG	Lead	56.1	MG/KG		=	
REG	Magnesium	4240	MG/KG		J	I03
REG	Manganese	233	MG/KG		J	E07
REG	Mercury	0.084	MG/KG	B	J	
REG	Nickel	21.9	MG/KG		=	
REG	Potassium	1330	MG/KG		J	F10
REG	Selenium	1.1	MG/KG		=	
REG	Silver	1.7	MG/KG	U	U	
REG	Sodium	43	MG/KG	B	J	
REG	Thallium	1.2	MG/KG		=	
REG	Vanadium	28	MG/KG		=	
REG	Zinc	255	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.11	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	580	UG/KG	U	U	
REG	1,2-Dichlorobenzene	580	UG/KG	U	U	
REG	1,3-Dichlorobenzene	580	UG/KG	U	U	
REG	1,4-Dichlorobenzene	580	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	580	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	580	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	580	UG/KG	U	U	
REG	2,4-Dichlorophenol	580	UG/KG	U	U	
REG	2,4-Dimethylphenol	580	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-018 Initial Phase

RQLsd-018(p)-0026-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2,4-Dinitrophenol	1400	UG/KG	U	U	
REG	2,4-Dinitrotoluene	580	UG/KG	U	U	
REG	2,6-Dinitrotoluene	580	UG/KG	U	U	
REG	2-Chloronaphthalene	580	UG/KG	U	U	
REG	2-Chlorophenol	580	UG/KG	U	U	
REG	2-Methylnaphthalene	580	UG/KG	U	U	
REG	2-Methylphenol	580	UG/KG	U	U	
REG	2-Nitroaniline	1400	UG/KG	U	U	
REG	2-Nitrophenol	580	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	580	UG/KG	U	U	
REG	3-Nitroaniline	1400	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1400	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	580	UG/KG	U	U	
REG	4-Chloroaniline	580	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	580	UG/KG	U	U	
REG	4-Methylphenol	580	UG/KG	U	U	
REG	4-Nitroaniline	1400	UG/KG	U	U	
REG	4-Nitrophenol	1400	UG/KG	U	U	
REG	4-chloro-3-methylphenol	580	UG/KG	U	U	
REG	Acenaphthene	580	UG/KG	U	U	
REG	Acenaphthylene	580	UG/KG	U	U	
REG	Anthracene	180	UG/KG	J	J	
REG	Benzo(a)anthracene	430	UG/KG	J	J	
REG	Benzo(a)pyrene	340	UG/KG	J	J	
REG	Benzo(b)fluoranthene	430	UG/KG	J	J	
REG	Benzo(g,h,i)perylene	170	UG/KG	J	J	
REG	Benzo(k)fluoranthene	180	UG/KG	J	J	
REG	Bis(2-chloroethoxy)methane	580	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	580	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	580	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	580	UG/KG	U	U	
REG	Carbazole	130	UG/KG	J	J	
REG	Chrysene	410	UG/KG	J	J	
REG	Di-n-butyl Phthalate	580	UG/KG	U	U	
REG	Di-n-octyl Phthalate	580	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	580	UG/KG	U	U	
REG	Dibenzofuran	580	UG/KG	U	U	
REG	Diethyl Phthalate	580	UG/KG	U	U	
REG	Dimethyl Phthalate	580	UG/KG	U	U	
REG	Fluoranthene	1000	UG/KG		=	
REG	Fluorene	580	UG/KG	U	U	
REG	Hexachlorobenzene	580	UG/KG	U	U	
REG	Hexachlorobutadiene	580	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	580	UG/KG	U	U	
REG	Hexachloroethane	580	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	200	UG/KG	J	J	
REG	Isophorone	580	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	580	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	580	UG/KG	U	U	
REG	Naphthalene	580	UG/KG	U	U	
REG	Nitrobenzene	580	UG/KG	U	U	
REG	Pentachlorophenol	580	UG/KG	U	U	
REG	Phenanthrene	700	UG/KG		=	
REG	Phenol	580	UG/KG	U	U	
REG	Pyrene	780	UG/KG		=	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	8.7	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	8.7	UG/KG	U	U	
REG	1,1,2-Trichloroethane	8.7	UG/KG	U	U	
REG	1,1-Dichloroethane	8.7	UG/KG	U	U	
REG	1,1-Dichloroethene	8.7	UG/KG	U	U	
REG	1,2-Dichloroethane	8.7	UG/KG	U	U	
REG	1,2-Dichloroethene	8.7	UG/KG	U	U	
REG	1,2-Dichloropropane	8.7	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	8.7	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	8.7	UG/KG	U	U	
REG	2-Butanone	5.7	UG/KG	J	J	C05

Location: Ramsdell Quarry Landfill
Station : RQLsd-018 Initial Phase

RQLsd-018(p)-0026-SD 0.0 - 0.5 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected:** 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2-Hexanone	35	UG/KG	U	U	
REG	4-Methyl-2-pentanone	35	UG/KG	U	U	
REG	Acetone	17	UG/KG	J	J	C05
REG	Benzene	8.7	UG/KG	U	U	
REG	Bromodichloromethane	8.7	UG/KG	U	U	
REG	Bromoform	8.7	UG/KG	U	U	
REG	Bromomethane	17	UG/KG	U	U	
REG	Carbon Disulfide	8.7	UG/KG	U	U	
REG	Carbon Tetrachloride	8.7	UG/KG	U	U	
REG	Chlorobenzene	8.7	UG/KG	U	U	
REG	Chloroethane	17	UG/KG	U	U	
REG	Chloroform	8.7	UG/KG	U	U	
REG	Chloromethane	17	UG/KG	U	U	
REG	Dibromochloromethane	8.7	UG/KG	U	U	
REG	Ethylbenzene	8.7	UG/KG	U	U	
REG	Methylene Chloride	8.7	UG/KG	U	U	
REG	Styrene	8.7	UG/KG	U	U	
REG	Tetrachloroethene	8.7	UG/KG	U	U	
REG	Toluene	8.7	UG/KG	U	U	
REG	Trichloroethene	8.7	UG/KG	U	U	
REG	Vinyl Chloride	17	UG/KG	U	U	
REG	Xylenes, Total	8.7	UG/KG	U	U	

RQLsd-018(p)-0027-SD 0.5 - 2.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected:** 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.8	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	11600	MG/KG		=	
REG	Antimony	0.8	MG/KG	U	UJ	I02
REG	Arsenic	16.9	MG/KG		=	
REG	Barium	98.4	MG/KG		=	
REG	Beryllium	0.65	MG/KG	B	J	
REG	Cadmium	1.7	MG/KG		=	
REG	Calcium	9180	MG/KG		J	I02
REG	Chromium	18.3	MG/KG		=	
REG	Cobalt	14.3	MG/KG		=	
REG	Copper	20.6	MG/KG		=	
REG	Iron	54400	MG/KG		=	
REG	Lead	54.5	MG/KG		=	
REG	Magnesium	7060	MG/KG		J	E07,I03
REG	Manganese	402	MG/KG		=	
REG	Mercury	.088	MG/KG	B	J	
REG	Nickel	20.1	MG/KG		=	
REG	Potassium	1120	MG/KG		J	F10
REG	Selenium	0.91	MG/KG		=	
REG	Silver	1.6	MG/KG	U	U	
REG	Sodium	41.4	MG/KG	B	J	
REG	Thallium	1.8	MG/KG		=	
REG	Vanadium	28.9	MG/KG		=	
REG	Zinc	237	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.14	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-018 Initial Phase

RQLsd-018(p)-0027-SD 0.5 - 2.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	530	UG/KG	U	U	
REG	1,2-Dichlorobenzene	530	UG/KG	U	U	
REG	1,3-Dichlorobenzene	530	UG/KG	U	U	
REG	1,4-Dichlorobenzene	530	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	530	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	530	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	530	UG/KG	U	U	
REG	2,4-Dichlorophenol	530	UG/KG	U	U	
REG	2,4-Dimethylphenol	530	UG/KG	U	U	
REG	2,4-Dinitrophenol	1300	UG/KG	U	U	
REG	2,4-Dinitrotoluene	530	UG/KG	U	U	
REG	2,6-Dinitrotoluene	530	UG/KG	U	U	
REG	2-Chloronaphthalene	530	UG/KG	U	U	
REG	2-Chlorophenol	530	UG/KG	U	U	
REG	2-Methylnaphthalene	530	UG/KG	U	U	
REG	2-Methylphenol	530	UG/KG	U	U	
REG	2-Nitroaniline	1300	UG/KG	U	U	
REG	2-Nitrophenol	530	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	530	UG/KG	U	U	
REG	3-Nitroaniline	1300	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1300	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	530	UG/KG	U	U	
REG	4-Chloroaniline	530	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	530	UG/KG	U	U	
REG	4-Methylphenol	530	UG/KG	U	U	
REG	4-Nitroaniline	1300	UG/KG	U	U	
REG	4-Nitrophenol	1300	UG/KG	U	U	
REG	4-chloro-3-methylphenol	530	UG/KG	U	U	
REG	Acenaphthene	530	UG/KG	U	U	
REG	Acenaphthylene	530	UG/KG	U	U	
REG	Anthracene	72	UG/KG	J	J	
REG	Benzo(a)anthracene	200	UG/KG	J	J	
REG	Benzo(a)pyrene	210	UG/KG	J	J	
REG	Benzo(b)fluoranthene	270	UG/KG	J	J	
REG	Benzo(g,h,i)perylene	140	UG/KG	J	J	
REG	Benzo(k)fluoranthene	95	UG/KG	J	J	
REG	Bis(2-chloroethoxy)methane	530	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	530	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	530	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	530	UG/KG	U	U	
REG	Carbazole	530	UG/KG	U	U	
REG	Chrysene	210	UG/KG	J	J	
REG	Di-n-butyl Phthalate	530	UG/KG	U	U	
REG	Di-n-octyl Phthalate	530	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	530	UG/KG	U	U	
REG	Dibenzofuran	530	UG/KG	U	U	
REG	Diethyl Phthalate	530	UG/KG	U	U	
REG	Dimethyl Phthalate	530	UG/KG	U	U	
REG	Fluoranthene	450	UG/KG	J	J	
REG	Fluorene	530	UG/KG	U	U	
REG	Hexachlorobenzene	530	UG/KG	U	U	
REG	Hexachlorobutadiene	530	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	530	UG/KG	U	U	
REG	Hexachloroethane	530	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	140	UG/KG	J	J	
REG	Isophorone	530	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	530	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	530	UG/KG	U	U	
REG	Naphthalene	530	UG/KG	U	U	
REG	Nitrobenzene	530	UG/KG	U	U	
REG	Pentachlorophenol	530	UG/KG	U	U	
REG	Phenanthrene	310	UG/KG	J	J	

Location: Ramsdell Quarry Landfill
Station : RQLsd-018 Initial Phase

RQLsd-018(p)-0027-SD 0.5 - 2.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Phenol	530	UG/KG	U	U	
REG	Pyrene	310	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	8	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	8	UG/KG	U	U	
REG	1,1,2-Trichloroethane	8	UG/KG	U	U	
REG	1,1-Dichloroethane	8	UG/KG	U	U	
REG	1,1-Dichloroethene	8	UG/KG	U	U	
REG	1,2-Dichloroethane	8	UG/KG	U	U	
REG	1,2-Dichloroethene	8	UG/KG	U	U	
REG	1,2-Dichloropropane	8	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	8	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	8	UG/KG	U	U	
REG	2-Butanone	32	UG/KG	U	U	
REG	2-Hexanone	32	UG/KG	U	U	
REG	4-Methyl-2-pentanone	32	UG/KG	U	U	
REG	Acetone	15	UG/KG	J	J	C05
REG	Benzene	8	UG/KG	U	U	
REG	Bromodichloromethane	8	UG/KG	U	U	
REG	Bromoform	8	UG/KG	U	U	
REG	Bromomethane	16	UG/KG	U	U	
REG	Carbon Disulfide	8	UG/KG	U	U	
REG	Carbon Tetrachloride	8	UG/KG	U	U	
REG	Chlorobenzene	8	UG/KG	U	U	
REG	Chloroethane	16	UG/KG	U	U	
REG	Chloroform	8	UG/KG	U	U	
REG	Chloromethane	16	UG/KG	U	U	
REG	Dibromochloromethane	8	UG/KG	U	U	
REG	Ethylbenzene	8	UG/KG	U	U	
REG	Methylene Chloride	8	UG/KG	U	U	
REG	Styrene	8	UG/KG	U	U	
REG	Tetrachloroethene	8	UG/KG	U	U	
REG	Toluene	8	UG/KG	U	U	
REG	Trichloroethene	8	UG/KG	U	U	
REG	Vinyl Chloride	16	UG/KG	U	U	
REG	Xylenes, Total	8	UG/KG	U	U	

RQLsd-018(p)-0028-SD 2.0 - 4.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.65	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	12200	MG/KG		=	
REG	Antimony	0.65	MG/KG	U	UJ	I02
REG	Arsenic	7.6	MG/KG		=	
REG	Barium	73.3	MG/KG		=	
REG	Beryllium	.33	MG/KG	B	J	
REG	Cadmium	0.65	MG/KG	U	U	
REG	Calcium	4870	MG/KG		J	I02
REG	Chromium	21	MG/KG		=	
REG	Cobalt	8.2	MG/KG		=	
REG	Copper	48.7	MG/KG		=	
REG	Iron	20500	MG/KG		=	
REG	Lead	25.3	MG/KG		=	
REG	Magnesium	9820	MG/KG		J	I03
REG	Manganese	359	MG/KG		J	E07
REG	Mercury	.039	MG/KG	B	J	
REG	Nickel	19.2	MG/KG		=	
REG	Potassium	1670	MG/KG		J	F10
REG	Selenium	0.8	MG/KG		=	
REG	Silver	1.3	MG/KG	U	U	
REG	Sodium	46.4	MG/KG	B	J	
REG	Thallium	0.65	MG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-018 Initial Phase

RQLsd-018(p)-0028-SD 2.0 - 4.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Vanadium	22.4	MG/KG		=	
REG	Zinc	107	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.047	MG/KG	J	J	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.13	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	430	UG/KG	U	U	
REG	1,2-Dichlorobenzene	430	UG/KG	U	U	
REG	1,3-Dichlorobenzene	430	UG/KG	U	U	
REG	1,4-Dichlorobenzene	430	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	430	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	430	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	430	UG/KG	U	U	
REG	2,4-Dichlorophenol	430	UG/KG	U	U	
REG	2,4-Dimethylphenol	430	UG/KG	U	U	
REG	2,4-Dinitrophenol	1000	UG/KG	U	U	
REG	2,4-Dinitrotoluene	430	UG/KG	U	U	
REG	2,6-Dinitrotoluene	430	UG/KG	U	U	
REG	2-Chloronaphthalene	430	UG/KG	U	U	
REG	2-Chlorophenol	430	UG/KG	U	U	
REG	2-Methylnaphthalene	430	UG/KG	U	U	
REG	2-Methylphenol	430	UG/KG	U	U	
REG	2-Nitroaniline	1000	UG/KG	U	U	
REG	2-Nitrophenol	430	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	430	UG/KG	U	U	
REG	3-Nitroaniline	1000	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1000	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	430	UG/KG	U	U	
REG	4-Chloroaniline	430	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	430	UG/KG	U	U	
REG	4-Methylphenol	430	UG/KG	U	U	
REG	4-Nitroaniline	1000	UG/KG	U	U	
REG	4-Nitrophenol	1000	UG/KG	U	U	
REG	4-chloro-3-methylphenol	430	UG/KG	U	U	
REG	Acenaphthene	430	UG/KG	U	U	
REG	Acenaphthylene	430	UG/KG	U	U	
REG	Anthracene	430	UG/KG	U	U	
REG	Benzo(a)anthracene	430	UG/KG	U	U	
REG	Benzo(a)pyrene	430	UG/KG	U	U	
REG	Benzo(b)fluoranthene	430	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	430	UG/KG	U	U	
REG	Benzo(k)fluoranthene	430	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	430	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	430	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	430	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	430	UG/KG	U	U	
REG	Carbazole	430	UG/KG	U	U	
REG	Chrysene	430	UG/KG	U	U	
REG	Di-n-butyl Phthalate	430	UG/KG	U	U	
REG	Di-n-octyl Phthalate	430	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	430	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-018 Initial Phase

RQLsd-018(p)-0028-SD 2.0 - 4.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Dibenzofuran	430	UG/KG	U	U	
REG	Diethyl Phthalate	430	UG/KG	U	U	
REG	Dimethyl Phthalate	430	UG/KG	U	U	
REG	Fluoranthene	65	UG/KG	J	J	
REG	Fluorene	430	UG/KG	U	U	
REG	Hexachlorobenzene	430	UG/KG	U	U	
REG	Hexachlorobutadiene	430	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	430	UG/KG	U	U	
REG	Hexachloroethane	430	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	430	UG/KG	U	U	
REG	Isophorone	430	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	430	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	430	UG/KG	U	U	
REG	Naphthalene	430	UG/KG	U	U	
REG	Nitrobenzene	430	UG/KG	U	U	
REG	Pentachlorophenol	430	UG/KG	U	U	
REG	Phenanthrene	430	UG/KG	U	U	
REG	Phenol	430	UG/KG	U	U	
REG	Pyrene	58	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	6.5	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	6.5	UG/KG	U	U	
REG	1,1,2-Trichloroethane	6.5	UG/KG	U	U	
REG	1,1-Dichloroethane	6.5	UG/KG	U	U	
REG	1,1-Dichloroethene	6.5	UG/KG	U	U	
REG	1,2-Dichloroethane	6.5	UG/KG	U	U	
REG	1,2-Dichloroethene	6.5	UG/KG	U	U	
REG	1,2-Dichloropropane	6.5	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	6.5	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	6.5	UG/KG	U	U	
REG	2-Butanone	26	UG/KG	U	U	
REG	2-Hexanone	26	UG/KG	U	U	
REG	4-Methyl-2-pentanone	26	UG/KG	U	U	
REG	Acetone	7.6	UG/KG	J	J	C05
REG	Benzene	6.5	UG/KG	U	U	
REG	Bromodichloromethane	6.5	UG/KG	U	U	
REG	Bromoform	6.5	UG/KG	U	U	
REG	Bromomethane	13	UG/KG	U	U	
REG	Carbon Disulfide	6.5	UG/KG	U	U	
REG	Carbon Tetrachloride	6.5	UG/KG	U	U	
REG	Chlorobenzene	6.5	UG/KG	U	U	
REG	Chloroethane	13	UG/KG	U	U	
REG	Chloroform	6.5	UG/KG	U	U	
REG	Chloromethane	13	UG/KG	U	U	
REG	Dibromochloromethane	6.5	UG/KG	U	U	
REG	Ethylbenzene	6.5	UG/KG	U	U	
REG	Methylene Chloride	1.2	UG/KG	J	J	
REG	Styrene	6.5	UG/KG	U	U	
REG	Tetrachloroethene	6.5	UG/KG	U	U	
REG	Toluene	6.5	UG/KG	U	U	
REG	Trichloroethene	6.5	UG/KG	U	U	
REG	Vinyl Chloride	13	UG/KG	U	U	
REG	Xylenes, Total	6.5	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-019 Initial Phase

RQLsd-019(p)-0029-SD 0.0 - 0.5 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.54	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	5560	MG/KG		=	

Location: Ramsdell Quarry Landfill
Station : RQLsd-019 Initial Phase

RQLsd-019(p)-0029-SD 0.0 - 0.5 FT | Field Sample Type: Grab | Matrix: Sediment | Collected: 07/08/98

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Antimony	0.54	MG/KG	U	UJ	I02
REG	Arsenic	12.3	MG/KG		=	
REG	Barium	35.9	MG/KG		=	
REG	Beryllium	0.18	MG/KG	B	U	F06
REG	Cadmium	0.54	MG/KG	U	U	
REG	Calcium	614	MG/KG		J	I02
REG	Chromium	9	MG/KG		=	
REG	Cobalt	13.9	MG/KG		=	
REG	Copper	20.7	MG/KG		=	
REG	Iron	16800	MG/KG		=	
REG	Lead	26.7	MG/KG		=	
REG	Magnesium	1300	MG/KG		J	I03
REG	Manganese	189	MG/KG		J	E07
REG	Mercury	.033	MG/KG	B	J	
REG	Nickel	28.4	MG/KG		=	
REG	Potassium	447	MG/KG	B	J	F10
REG	Selenium	0.6	MG/KG		=	
REG	Silver	1.1	MG/KG	U	U	
REG	Sodium	540	MG/KG	U	U	
REG	Thallium	0.54	MG/KG	U	U	
REG	Vanadium	10.5	MG/KG		=	
REG	Zinc	124	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.047	MG/KG	J	J	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.13	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	360	UG/KG	U	U	
REG	1,2-Dichlorobenzene	360	UG/KG	U	U	
REG	1,3-Dichlorobenzene	360	UG/KG	U	U	
REG	1,4-Dichlorobenzene	360	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	360	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	360	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	360	UG/KG	U	U	
REG	2,4-Dichlorophenol	360	UG/KG	U	U	
REG	2,4-Dimethylphenol	360	UG/KG	U	U	
REG	2,4-Dinitrophenol	860	UG/KG	U	U	
REG	2,4-Dinitrotoluene	360	UG/KG	U	U	
REG	2,6-Dinitrotoluene	360	UG/KG	U	U	
REG	2-Chloronaphthalene	360	UG/KG	U	U	
REG	2-Chlorophenol	360	UG/KG	U	U	
REG	2-Methylnaphthalene	360	UG/KG	U	U	
REG	2-Methylphenol	360	UG/KG	U	U	
REG	2-Nitroaniline	860	UG/KG	U	U	
REG	2-Nitrophenol	360	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	360	UG/KG	U	U	
REG	3-Nitroaniline	860	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	860	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	360	UG/KG	U	U	
REG	4-Chloroaniline	360	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	360	UG/KG	U	U	
REG	4-Methylphenol	360	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-019 Initial Phase

RQLsd-019(p)-0029-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4-Nitroaniline	860	UG/KG	U	U	
REG	4-Nitrophenol	860	UG/KG	U	U	
REG	4-chloro-3-methylphenol	360	UG/KG	U	U	
REG	Acenaphthene	360	UG/KG	U	U	
REG	Acenaphthylene	360	UG/KG	U	U	
REG	Anthracene	360	UG/KG	U	U	
REG	Benzo(a)anthracene	360	UG/KG	U	U	
REG	Benzo(a)pyrene	360	UG/KG	U	U	
REG	Benzo(b)fluoranthene	360	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	360	UG/KG	U	U	
REG	Benzo(k)fluoranthene	360	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	360	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	360	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	360	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	360	UG/KG	U	U	
REG	Carbazole	360	UG/KG	U	U	
REG	Chrysene	360	UG/KG	U	U	
REG	Di-n-butyl Phthalate	360	UG/KG	U	U	
REG	Di-n-octyl Phthalate	360	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	360	UG/KG	U	U	
REG	Dibenzofuran	360	UG/KG	U	U	
REG	Diethyl Phthalate	360	UG/KG	U	U	
REG	Dimethyl Phthalate	360	UG/KG	U	U	
REG	Fluoranthene	67	UG/KG	J	J	
REG	Fluorene	360	UG/KG	U	U	
REG	Hexachlorobenzene	360	UG/KG	U	U	
REG	Hexachlorobutadiene	360	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	360	UG/KG	U	U	
REG	Hexachloroethane	360	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	360	UG/KG	U	U	
REG	Isophorone	360	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	360	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	360	UG/KG	U	U	
REG	Naphthalene	360	UG/KG	U	U	
REG	Nitrobenzene	360	UG/KG	U	U	
REG	Pentachlorophenol	360	UG/KG	U	U	
REG	Phenanthrene	360	UG/KG	U	U	
REG	Phenol	360	UG/KG	U	U	
REG	Pyrene	53	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5.4	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	5.4	UG/KG	U	U	
REG	1,1,2-Trichloroethane	5.4	UG/KG	U	U	
REG	1,1-Dichloroethane	5.4	UG/KG	U	U	
REG	1,1-Dichloroethene	5.4	UG/KG	U	U	
REG	1,2-Dichloroethane	5.4	UG/KG	U	U	
REG	1,2-Dichloroethene	5.4	UG/KG	U	U	
REG	1,2-Dichloropropane	5.4	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	5.4	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	5.4	UG/KG	U	U	
REG	2-Butanone	22	UG/KG	U	U	
REG	2-Hexanone	22	UG/KG	U	U	
REG	4-Methyl-2-pentanone	22	UG/KG	U	U	
REG	Acetone	22	UG/KG	U	U	
REG	Benzene	5.4	UG/KG	U	U	
REG	Bromodichloromethane	5.4	UG/KG	U	U	
REG	Bromoform	5.4	UG/KG	U	U	
REG	Bromomethane	11	UG/KG	U	U	
REG	Carbon Disulfide	5.4	UG/KG	U	U	
REG	Carbon Tetrachloride	5.4	UG/KG	U	U	
REG	Chlorobenzene	5.4	UG/KG	U	U	
REG	Chloroethane	11	UG/KG	U	U	
REG	Chloroform	5.4	UG/KG	U	U	
REG	Chloromethane	11	UG/KG	U	U	
REG	Dibromochloromethane	5.4	UG/KG	U	U	
REG	Ethylbenzene	5.4	UG/KG	U	U	
REG	Methylene Chloride	0.73	UG/KG	J	=	

Location: Ramsdell Quarry Landfill
Station : RQLsd-019 Initial Phase

RQLsd-019(p)-0029-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Styrene	5.4	UG/KG	U	U	
REG	Tetrachloroethene	5.4	UG/KG	U	U	
REG	Toluene	5.4	UG/KG	U	U	
REG	Trichloroethene	5.4	UG/KG	U	U	
REG	Vinyl Chloride	11	UG/KG	U	U	
REG	Xylenes, Total	5.4	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-022 Initial Phase

RQLsd-022(p)-0038-SD 0.0 - 0.5 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	1.1	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	12200	MG/KG		=	
REG	Antimony	1.1	MG/KG	U	UJ	I02
REG	Arsenic	32.5	MG/KG		=	
REG	Barium	145	MG/KG		=	
REG	Beryllium	.58	MG/KG	B	J	
REG	Cadmium	2.5	MG/KG		=	
REG	Calcium	46900	MG/KG		J	I02
REG	Chromium	30.9	MG/KG		=	
REG	Cobalt	33.6	MG/KG		=	
REG	Copper	124	MG/KG		=	
REG	Iron	41400	MG/KG		=	
REG	Lead	87.2	MG/KG		=	
REG	Magnesium	58000	MG/KG		J	I03
REG	Manganese	2590	MG/KG		J	E07
REG	Mercury	.11	MG/KG	B	J	
REG	Nickel	86.8	MG/KG		=	
REG	Potassium	1120	MG/KG		J	F10
REG	Selenium	1.1	MG/KG	U	U	
REG	Silver	2.2	MG/KG	U	U	
REG	Sodium	109	MG/KG	B	J	
REG	Thallium	1.9	MG/KG		=	
REG	Vanadium	23.4	MG/KG		=	
REG	Zinc	894	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.064	MG/KG	J	J	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.12	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	730	UG/KG	U	U	
REG	1,2-Dichlorobenzene	730	UG/KG	U	U	
REG	1,3-Dichlorobenzene	730	UG/KG	U	U	
REG	1,4-Dichlorobenzene	730	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	730	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-022 Initial Phase

RQLsd-022(p)-0038-SD 0.0 - 0.5 FT | Field Sample Type: Grab | Matrix: Sediment | Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2,4,5-Trichlorophenol	730	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	730	UG/KG	U	U	
REG	2,4-Dichlorophenol	730	UG/KG	U	U	
REG	2,4-Dimethylphenol	730	UG/KG	U	U	
REG	2,4-Dinitrophenol	1800	UG/KG	U	U	
REG	2,4-Dinitrotoluene	730	UG/KG	U	U	
REG	2,6-Dinitrotoluene	730	UG/KG	U	U	
REG	2-Chloronaphthalene	730	UG/KG	U	U	
REG	2-Chlorophenol	730	UG/KG	U	U	
REG	2-Methylnaphthalene	730	UG/KG	U	U	
REG	2-Methylphenol	730	UG/KG	U	U	
REG	2-Nitroaniline	1800	UG/KG	U	U	
REG	2-Nitrophenol	730	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	730	UG/KG	U	U	
REG	3-Nitroaniline	1800	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1800	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	730	UG/KG	U	U	
REG	4-Chloroaniline	730	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	730	UG/KG	U	U	
REG	4-Methylphenol	730	UG/KG	U	U	
REG	4-Nitroaniline	1800	UG/KG	U	U	
REG	4-Nitrophenol	1800	UG/KG	U	U	
REG	4-chloro-3-methylphenol	730	UG/KG	U	U	
REG	Acenaphthene	730	UG/KG	U	U	
REG	Acenaphthylene	730	UG/KG	U	U	
REG	Anthracene	730	UG/KG	U	U	
REG	Benzo(a)anthracene	730	UG/KG	U	U	
REG	Benzo(a)pyrene	730	UG/KG	U	U	
REG	Benzo(b)fluoranthene	730	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	730	UG/KG	U	U	
REG	Benzo(k)fluoranthene	730	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	730	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	730	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	730	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	730	UG/KG	U	U	
REG	Carbazole	730	UG/KG	U	U	
REG	Chrysene	730	UG/KG	U	U	
REG	Di-n-butyl Phthalate	730	UG/KG	U	U	
REG	Di-n-octyl Phthalate	730	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	730	UG/KG	U	U	
REG	Dibenzofuran	730	UG/KG	U	U	
REG	Diethyl Phthalate	730	UG/KG	U	U	
REG	Dimethyl Phthalate	730	UG/KG	U	U	
REG	Fluoranthene	730	UG/KG	U	U	
REG	Fluorene	730	UG/KG	U	U	
REG	Hexachlorobenzene	730	UG/KG	U	U	
REG	Hexachlorobutadiene	730	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	730	UG/KG	U	U	
REG	Hexachloroethane	730	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	730	UG/KG	U	U	
REG	Isophorone	730	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	730	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	730	UG/KG	U	U	
REG	Naphthalene	730	UG/KG	U	U	
REG	Nitrobenzene	730	UG/KG	U	U	
REG	Pentachlorophenol	730	UG/KG	U	U	
REG	Phenanthrene	730	UG/KG	U	U	
REG	Phenol	730	UG/KG	U	U	
REG	Pyrene	730	UG/KG	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	11	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	11	UG/KG	U	U	
REG	1,1,2-Trichloroethane	11	UG/KG	U	U	
REG	1,1-Dichloroethane	11	UG/KG	U	U	
REG	1,1-Dichloroethene	11	UG/KG	U	U	
REG	1,2-Dichloroethane	11	UG/KG	U	U	
REG	1,2-Dichloroethene	11	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-022 Initial Phase

RQLsd-022(p)-0038-SD 0.0 - 0.5 FT | Field Sample Type: Grab | Matrix: Sediment | Collected: 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2-Dichloropropane	11	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	11	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	11	UG/KG	U	U	
REG	2-Butanone	44	UG/KG	U	U	
REG	2-Hexanone	44	UG/KG	U	U	
REG	4-Methyl-2-pentanone	44	UG/KG	U	U	
REG	Acetone	12	UG/KG	J	J	C05
REG	Benzene	11	UG/KG	U	U	
REG	Bromodichloromethane	11	UG/KG	U	U	
REG	Bromoform	11	UG/KG	U	U	
REG	Bromomethane	22	UG/KG	U	U	
REG	Carbon Disulfide	11	UG/KG	U	U	
REG	Carbon Tetrachloride	11	UG/KG	U	U	
REG	Chlorobenzene	11	UG/KG	U	U	
REG	Chloroethane	22	UG/KG	U	U	
REG	Chloroform	11	UG/KG	U	U	
REG	Chloromethane	22	UG/KG	U	U	
REG	Dibromochloromethane	11	UG/KG	U	U	
REG	Ethylbenzene	11	UG/KG	U	U	
REG	Methylene Chloride	11	UG/KG	U	U	
REG	Styrene	11	UG/KG	U	U	
REG	Tetrachloroethene	11	UG/KG	U	U	
REG	Toluene	11	UG/KG	U	U	
REG	Trichloroethene	11	UG/KG	U	U	
REG	Vinyl Chloride	22	UG/KG	U	U	
REG	Xylenes, Total	11	UG/KG	U	U	

RQLsd-022(p)-0054-FD 0.0 - 0.0 FT | Field Sample Type: Field Duplicate | Matrix: Sediment | Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	1	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	8000	MG/KG		=	
REG	Antimony	1	MG/KG	U	UJ	I02
REG	Arsenic	25.3	MG/KG		=	
REG	Barium	112	MG/KG		=	
REG	Beryllium	0.39	MG/KG	B	U	F06
REG	Cadmium	1.8	MG/KG		=	
REG	Calcium	38800	MG/KG		J	I02
REG	Chromium	21.4	MG/KG		=	
REG	Cobalt	25.1	MG/KG		=	
REG	Copper	96.2	MG/KG		=	
REG	Iron	30600	MG/KG		=	
REG	Lead	63.9	MG/KG		=	
REG	Magnesium	44700	MG/KG		J	I03
REG	Manganese	2160	MG/KG		J	E07
REG	Mercury	.073	MG/KG	B	J	
REG	Nickel	64.7	MG/KG		=	
REG	Potassium	636	MG/KG	B	J	F10
REG	Selenium	1	MG/KG	U	U	
REG	Silver	2	MG/KG	U	U	
REG	Sodium	79.6	MG/KG	B	J	
REG	Thallium	1	MG/KG	U	U	
REG	Vanadium	16.7	MG/KG		=	
REG	Zinc	711	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.033	MG/KG	J	J	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-022 Initial Phase

RQLsd-022(p)-0054-FD 0.0 - 0.0 FT Field Sample Type: Field Duplicate Matrix: Sediment Collected: 07/08/98

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.13	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	670	UG/KG	U	U	
REG	1,2-Dichlorobenzene	670	UG/KG	U	U	
REG	1,3-Dichlorobenzene	670	UG/KG	U	U	
REG	1,4-Dichlorobenzene	670	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	670	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	670	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	670	UG/KG	U	U	
REG	2,4-Dichlorophenol	670	UG/KG	U	U	
REG	2,4-Dimethylphenol	670	UG/KG	U	U	
REG	2,4-Dinitrophenol	1600	UG/KG	U	U	
REG	2,4-Dinitrotoluene	670	UG/KG	U	U	
REG	2,6-Dinitrotoluene	670	UG/KG	U	U	
REG	2-Chloronaphthalene	670	UG/KG	U	U	
REG	2-Chlorophenol	670	UG/KG	U	U	
REG	2-Methylnaphthalene	670	UG/KG	U	U	
REG	2-Methylphenol	670	UG/KG	U	U	
REG	2-Nitroaniline	1600	UG/KG	U	U	
REG	2-Nitrophenol	670	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	670	UG/KG	U	U	
REG	3-Nitroaniline	1600	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1600	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	670	UG/KG	U	U	
REG	4-Chloroaniline	670	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	670	UG/KG	U	U	
REG	4-Methylphenol	670	UG/KG	U	U	
REG	4-Nitroaniline	1600	UG/KG	U	U	
REG	4-Nitrophenol	1600	UG/KG	U	U	
REG	4-chloro-3-methylphenol	670	UG/KG	U	U	
REG	Acenaphthene	670	UG/KG	U	U	
REG	Acenaphthylene	670	UG/KG	U	U	
REG	Anthracene	670	UG/KG	U	U	
REG	Benzo(a)anthracene	670	UG/KG	U	U	
REG	Benzo(a)pyrene	670	UG/KG	U	U	
REG	Benzo(b)fluoranthene	670	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	670	UG/KG	U	U	
REG	Benzo(k)fluoranthene	670	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	670	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	670	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	670	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	670	UG/KG	U	U	
REG	Carbazole	670	UG/KG	U	U	
REG	Chrysene	670	UG/KG	U	U	
REG	Di-n-butyl Phthalate	670	UG/KG	U	U	
REG	Di-n-octyl Phthalate	670	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	670	UG/KG	U	U	
REG	Dibenzofuran	670	UG/KG	U	U	
REG	Diethyl Phthalate	670	UG/KG	U	U	
REG	Dimethyl Phthalate	670	UG/KG	U	U	
REG	Fluoranthene	670	UG/KG	U	U	
REG	Fluorene	670	UG/KG	U	U	
REG	Hexachlorobenzene	670	UG/KG	U	U	
REG	Hexachlorobutadiene	670	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	670	UG/KG	U	U	
REG	Hexachloroethane	670	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	670	UG/KG	U	U	
REG	Isophorone	670	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	670	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	670	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-022 Initial Phase

RQLsd-022(p)-0054-FD 0.0 - 0.0 FT | Field Sample Type: Field Duplicate | Matrix: Sediment | Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Naphthalene	670	UG/KG	U	U	
REG	Nitrobenzene	670	UG/KG	U	U	
REG	Pentachlorophenol	670	UG/KG	U	U	
REG	Phenanthrene	670	UG/KG	U	U	
REG	Phenol	670	UG/KG	U	U	
REG	Pyrene	670	UG/KG	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	10	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	10	UG/KG	U	U	
REG	1,1,2-Trichloroethane	10	UG/KG	U	U	
REG	1,1-Dichloroethane	10	UG/KG	U	U	
REG	1,1-Dichloroethene	10	UG/KG	U	U	
REG	1,2-Dichloroethane	10	UG/KG	U	U	
REG	1,2-Dichloroethene	10	UG/KG	U	U	
REG	1,2-Dichloropropane	10	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	10	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	10	UG/KG	U	U	
REG	2-Butanone	9.5	UG/KG	J	J	C05
REG	2-Hexanone	40	UG/KG	U	U	
REG	4-Methyl-2-pentanone	40	UG/KG	U	U	
REG	Acetone	35	UG/KG	J	J	C05
REG	Benzene	10	UG/KG	U	U	
REG	Bromodichloromethane	10	UG/KG	U	U	
REG	Bromoform	10	UG/KG	U	U	
REG	Bromomethane	20	UG/KG	U	U	
REG	Carbon Disulfide	10	UG/KG	U	U	
REG	Carbon Tetrachloride	10	UG/KG	U	U	
REG	Chlorobenzene	10	UG/KG	U	U	
REG	Chloroethane	20	UG/KG	U	U	
REG	Chloroform	10	UG/KG	U	U	
REG	Chloromethane	20	UG/KG	U	U	
REG	Dibromochloromethane	10	UG/KG	U	U	
REG	Ethylbenzene	10	UG/KG	U	U	
REG	Methylene Chloride	10	UG/KG	U	U	
REG	Styrene	10	UG/KG	U	U	
REG	Tetrachloroethene	10	UG/KG	U	U	
REG	Toluene	10	UG/KG	U	U	
REG	Trichloroethene	10	UG/KG	U	U	
REG	Vinyl Chloride	20	UG/KG	U	U	
REG	Xylenes, Total	10	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-023 Initial Phase

RQLsd-023(p)-0041-SD 0.0 - 0.5 FT | Field Sample Type: Grab | Matrix: Sediment | Collected: 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	2.8	MG/KG		=	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	14700	MG/KG		=	
REG	Antimony	1	MG/KG	U	UJ	I02
REG	Arsenic	25.5	MG/KG		=	
REG	Barium	125	MG/KG		=	
REG	Beryllium	0.54	MG/KG	B	J	
REG	Cadmium	1.4	MG/KG		=	
REG	Calcium	28400	MG/KG		J	I02
REG	Chromium	26	MG/KG		=	
REG	Cobalt	19.4	MG/KG		=	
REG	Copper	80.5	MG/KG		=	
REG	Iron	40200	MG/KG		=	
REG	Lead	73.3	MG/KG		=	
REG	Magnesium	16000	MG/KG		J	I03
REG	Manganese	1820	MG/KG		J	E07

Location: Ramsdell Quarry Landfill
Station : RQLsd-023 Initial Phase

RQLsd-023(p)-0041-SD 0.0 - 0.5 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected:** 07/08/98

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Mercury	.12	MG/KG	B	J	
REG	Nickel	52.3	MG/KG		=	
REG	Potassium	1700	MG/KG		J	F10
REG	Selenium	1	MG/KG	U	U	
REG	Silver	2.1	MG/KG	U	U	
REG	Sodium	78.6	MG/KG	B	J	
REG	Thallium	1	MG/KG	U	U	
REG	Vanadium	27	MG/KG		=	
REG	Zinc	634	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.25	MG/KG	U	U	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.5	MG/KG	U	U	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	680	UG/KG	U	U	
REG	1,2-Dichlorobenzene	680	UG/KG	U	U	
REG	1,3-Dichlorobenzene	680	UG/KG	U	U	
REG	1,4-Dichlorobenzene	680	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	680	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	680	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	680	UG/KG	U	U	
REG	2,4-Dichlorophenol	680	UG/KG	U	U	
REG	2,4-Dimethylphenol	680	UG/KG	U	U	
REG	2,4-Dinitrophenol	1600	UG/KG	U	U	
REG	2,4-Dinitrotoluene	680	UG/KG	U	U	
REG	2,6-Dinitrotoluene	680	UG/KG	U	U	
REG	2-Chloronaphthalene	680	UG/KG	U	U	
REG	2-Chlorophenol	680	UG/KG	U	U	
REG	2-Methylnaphthalene	680	UG/KG	U	U	
REG	2-Methylphenol	680	UG/KG	U	U	
REG	2-Nitroaniline	1600	UG/KG	U	U	
REG	2-Nitrophenol	680	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	680	UG/KG	U	U	
REG	3-Nitroaniline	1600	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1600	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	680	UG/KG	U	U	
REG	4-Chloroaniline	680	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	680	UG/KG	U	U	
REG	4-Methylphenol	680	UG/KG	U	U	
REG	4-Nitroaniline	1600	UG/KG	U	U	
REG	4-Nitrophenol	1600	UG/KG	U	U	
REG	4-chloro-3-methylphenol	680	UG/KG	U	U	
REG	Acenaphthene	680	UG/KG	U	U	
REG	Acenaphthylene	680	UG/KG	U	U	
REG	Anthracene	680	UG/KG	U	U	
REG	Benzo(a)anthracene	680	UG/KG	U	U	
REG	Benzo(a)pyrene	680	UG/KG	U	U	
REG	Benzo(b)fluoranthene	680	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	680	UG/KG	U	U	
REG	Benzo(k)fluoranthene	680	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	680	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	680	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-023 Initial Phase

RQLsd-023(p)-0041-SD 0.0 - 0.5 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Bis(2-ethylhexyl)phthalate	680	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	680	UG/KG	U	U	
REG	Carbazole	680	UG/KG	U	U	
REG	Chrysene	680	UG/KG	U	U	
REG	Di-n-butyl Phthalate	680	UG/KG	U	U	
REG	Di-n-octyl Phthalate	680	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	680	UG/KG	U	U	
REG	Dibenzofuran	680	UG/KG	U	U	
REG	Diethyl Phthalate	680	UG/KG	U	U	
REG	Dimethyl Phthalate	680	UG/KG	U	U	
REG	Fluoranthene	82	UG/KG	J	J	
REG	Fluorene	680	UG/KG	U	U	
REG	Hexachlorobenzene	680	UG/KG	U	U	
REG	Hexachlorobutadiene	680	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	680	UG/KG	U	U	
REG	Hexachloroethane	680	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	680	UG/KG	U	U	
REG	Isophorone	680	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	680	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	680	UG/KG	U	U	
REG	Naphthalene	680	UG/KG	U	U	
REG	Nitrobenzene	680	UG/KG	U	U	
REG	Pentachlorophenol	680	UG/KG	U	U	
REG	Phenanthrene	680	UG/KG	U	U	
REG	Phenol	680	UG/KG	U	U	
REG	Pyrene	89	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	10	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	10	UG/KG	U	U	
REG	1,1,2-Trichloroethane	10	UG/KG	U	U	
REG	1,1-Dichloroethane	10	UG/KG	U	U	
REG	1,1-Dichloroethene	10	UG/KG	U	U	
REG	1,2-Dichloroethane	10	UG/KG	U	U	
REG	1,2-Dichloroethene	10	UG/KG	U	U	
REG	1,2-Dichloropropane	10	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	10	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	10	UG/KG	U	U	
REG	2-Butanone	9.6	UG/KG	J	J	C05
REG	2-Hexanone	41	UG/KG	U	U	
REG	4-Methyl-2-pentanone	41	UG/KG	U	U	
REG	Acetone	34	UG/KG	J	J	
REG	Benzene	10	UG/KG	U	U	
REG	Bromodichloromethane	10	UG/KG	U	U	
REG	Bromoform	10	UG/KG	U	U	
REG	Bromomethane	21	UG/KG	U	U	
REG	Carbon Disulfide	10	UG/KG	U	U	
REG	Carbon Tetrachloride	10	UG/KG	U	U	
REG	Chlorobenzene	10	UG/KG	U	U	
REG	Chloroethane	21	UG/KG	U	U	
REG	Chloroform	10	UG/KG	U	U	
REG	Chloromethane	21	UG/KG	U	U	
REG	Dibromochloromethane	10	UG/KG	U	U	
REG	Ethylbenzene	10	UG/KG	U	U	
REG	Methylene Chloride	10	UG/KG	U	U	
REG	Styrene	10	UG/KG	U	U	
REG	Tetrachloroethene	10	UG/KG	U	U	
REG	Toluene	10	UG/KG	U	U	
REG	Trichloroethene	10	UG/KG	U	U	
REG	Vinyl Chloride	21	UG/KG	U	U	
REG	Xylenes, Total	10	UG/KG	U	U	

RQLsd-023(p)-0042-SD 0.5 - 2.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.86	MG/KG	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	12300	MG/KG		=	
REG	Antimony	0.86	MG/KG	U	UJ	I02
REG	Arsenic	18.2	MG/KG		=	
REG	Barium	98.4	MG/KG		=	
REG	Beryllium	.56	MG/KG	B	J	
REG	Cadmium	0.86	MG/KG	U	U	
REG	Calcium	15700	MG/KG		J	I02
REG	Chromium	20.1	MG/KG		=	
REG	Cobalt	16.8	MG/KG		=	
REG	Copper	51.2	MG/KG		=	
REG	Iron	32200	MG/KG		=	
REG	Lead	48.4	MG/KG		=	
REG	Magnesium	12000	MG/KG		J	I03
REG	Manganese	894	MG/KG		J	E07
REG	Mercury	.13	MG/KG	B	J	
REG	Nickel	43.2	MG/KG		=	
REG	Potassium	1400	MG/KG		J	F10
REG	Selenium	0.86	MG/KG	U	U	
REG	Silver	1.7	MG/KG	U	U	
REG	Sodium	42.5	MG/KG	B	J	
REG	Thallium	0.86	MG/KG	U	U	
REG	Vanadium	21	MG/KG		=	
REG	Zinc	428	MG/KG	MBB	=	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.25	MG/KG	U	U	
REG	1,3-Dinitrobenzene	0.25	MG/KG	U	U	
REG	2,4,6-Trinitrotoluene	0.25	MG/KG	U	U	
REG	2,4-Dinitrotoluene	0.034	MG/KG	J	J	
REG	2,6-Dinitrotoluene	0.25	MG/KG	U	U	
REG	2-Nitrotoluene	0.25	MG/KG	U	U	
REG	3-Nitrotoluene	0.13	MG/KG	J	J	
REG	4-Nitrotoluene	0.25	MG/KG	U	U	
REG	HMX	0.13	MG/KG	J	J	
REG	Nitrobenzene	0.25	MG/KG	U	U	
REG	Nitrocellulose as N	2	MG/KG	U	U	
REG	Nitroglycerin	2.5	MG/KG	U	U	
REG	Nitroguanidine	0.25	MG/KG	U	U	
REG	RDX	0.5	MG/KG	U	U	
REG	Tetryl	0.65	MG/KG	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	570	UG/KG	U	U	
REG	1,2-Dichlorobenzene	570	UG/KG	U	U	
REG	1,3-Dichlorobenzene	570	UG/KG	U	U	
REG	1,4-Dichlorobenzene	570	UG/KG	U	U	
REG	2,2'-oxybis (1-chloropropane)	570	UG/KG	U	U	
REG	2,4,5-Trichlorophenol	570	UG/KG	U	U	
REG	2,4,6-Trichlorophenol	570	UG/KG	U	U	
REG	2,4-Dichlorophenol	570	UG/KG	U	U	
REG	2,4-Dimethylphenol	570	UG/KG	U	U	
REG	2,4-Dinitrophenol	1400	UG/KG	U	U	
REG	2,4-Dinitrotoluene	570	UG/KG	U	U	
REG	2,6-Dinitrotoluene	570	UG/KG	U	U	
REG	2-Chloronaphthalene	570	UG/KG	U	U	
REG	2-Chlorophenol	570	UG/KG	U	U	
REG	2-Methylnaphthalene	570	UG/KG	U	U	
REG	2-Methylphenol	570	UG/KG	U	U	
REG	2-Nitroaniline	1400	UG/KG	U	U	
REG	2-Nitrophenol	570	UG/KG	U	U	
REG	3,3'-Dichlorobenzidine	570	UG/KG	U	U	
REG	3-Nitroaniline	1400	UG/KG	U	U	
REG	4,6-Dinitro-o-Cresol	1400	UG/KG	U	U	
REG	4-Bromophenyl-phenyl Ether	570	UG/KG	U	U	
REG	4-Chloroaniline	570	UG/KG	U	U	
REG	4-Chlorophenyl-phenylether	570	UG/KG	U	U	
REG	4-Methylphenol	570	UG/KG	U	U	
REG	4-Nitroaniline	1400	UG/KG	U	U	
REG	4-Nitrophenol	1400	UG/KG	U	U	
REG	4-chloro-3-methylphenol	570	UG/KG	U	U	
REG	Acenaphthene	570	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-023 Initial Phase

RQLsd-023(p)-0042-SD 0.5 - 2.0 FT Field Sample Type: Grab Matrix: Sediment Collected: 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Acenaphthylene	570	UG/KG	U	U	
REG	Anthracene	570	UG/KG	U	U	
REG	Benzo(a)anthracene	570	UG/KG	U	U	
REG	Benzo(a)pyrene	570	UG/KG	U	U	
REG	Benzo(b)fluoranthene	570	UG/KG	U	U	
REG	Benzo(g,h,i)perylene	570	UG/KG	U	U	
REG	Benzo(k)fluoranthene	570	UG/KG	U	U	
REG	Bis(2-chloroethoxy)methane	570	UG/KG	U	U	
REG	Bis(2-chloroethyl)ether	570	UG/KG	U	U	
REG	Bis(2-ethylhexyl)phthalate	570	UG/KG	U	U	
REG	Butyl Benzyl Phthalate	570	UG/KG	U	U	
REG	Carbazole	570	UG/KG	U	U	
REG	Chrysene	570	UG/KG	U	U	
REG	Di-n-butyl Phthalate	570	UG/KG	U	U	
REG	Di-n-octyl Phthalate	570	UG/KG	U	U	
REG	Dibenzo(a,h)anthracene	570	UG/KG	U	U	
REG	Dibenzofuran	570	UG/KG	U	U	
REG	Diethyl Phthalate	570	UG/KG	U	U	
REG	Dimethyl Phthalate	570	UG/KG	U	U	
REG	Fluoranthene	81	UG/KG	J	J	
REG	Fluorene	570	UG/KG	U	U	
REG	Hexachlorobenzene	570	UG/KG	U	U	
REG	Hexachlorobutadiene	570	UG/KG	U	U	
REG	Hexachlorocyclopentadiene	570	UG/KG	U	U	
REG	Hexachloroethane	570	UG/KG	U	U	
REG	Indeno(1,2,3-cd)pyrene	570	UG/KG	U	U	
REG	Isophorone	570	UG/KG	U	U	
REG	N-Nitroso-di-n-propylamine	570	UG/KG	U	U	
REG	N-Nitrosodiphenylamine	570	UG/KG	U	U	
REG	Naphthalene	570	UG/KG	U	U	
REG	Nitrobenzene	570	UG/KG	U	U	
REG	Pentachlorophenol	570	UG/KG	U	U	
REG	Phenanthrene	570	UG/KG	U	U	
REG	Phenol	570	UG/KG	U	U	
REG	Pyrene	75	UG/KG	J	J	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	8.6	UG/KG	U	U	
REG	1,1,2,2-Tetrachloroethane	8.6	UG/KG	U	U	
REG	1,1,2-Trichloroethane	8.6	UG/KG	U	U	
REG	1,1-Dichloroethane	8.6	UG/KG	U	U	
REG	1,1-Dichloroethene	8.6	UG/KG	U	U	
REG	1,2-Dichloroethane	8.6	UG/KG	U	U	
REG	1,2-Dichloroethene	8.6	UG/KG	U	U	
REG	1,2-Dichloropropane	8.6	UG/KG	U	U	
REG	1,3-cis-Dichloropropene	8.6	UG/KG	U	U	
REG	1,3-trans-Dichloropropene	8.6	UG/KG	U	U	
REG	2-Butanone	6.8	UG/KG	J	J	C05
REG	2-Hexanone	35	UG/KG	U	U	
REG	4-Methyl-2-pentanone	35	UG/KG	U	U	
REG	Acetone	26	UG/KG	J	J	C05
REG	Benzene	8.6	UG/KG	U	U	
REG	Bromodichloromethane	8.6	UG/KG	U	U	
REG	Bromoform	8.6	UG/KG	U	U	
REG	Bromomethane	17	UG/KG	U	U	
REG	Carbon Disulfide	8.6	UG/KG	U	U	
REG	Carbon Tetrachloride	8.6	UG/KG	U	U	
REG	Chlorobenzene	8.6	UG/KG	U	U	
REG	Chloroethane	17	UG/KG	U	U	
REG	Chloroform	8.6	UG/KG	U	U	
REG	Chloromethane	17	UG/KG	U	U	
REG	Dibromochloromethane	8.6	UG/KG	U	U	
REG	Ethylbenzene	8.6	UG/KG	U	U	
REG	Methylene Chloride	8.6	UG/KG	U	U	
REG	Styrene	8.6	UG/KG	U	U	
REG	Tetrachloroethene	8.6	UG/KG	U	U	
REG	Toluene	8.6	UG/KG	U	U	
REG	Trichloroethene	8.6	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsd-023 Initial Phase

RQLsd-023(p)-0042-SD 0.5 - 2.0 FT **Field Sample Type: Grab** **Matrix: Sediment** **Collected: 07/08/98**

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Vinyl Chloride	17	UG/KG	U	U	
REG	Xylenes, Total	8.6	UG/KG	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-012 Initial Phase

RQLsw-012(p)-0018-S **Field Sample Type: Grab** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	49600	UG/L		=	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	39.3	UG/L		=	
REG	Barium	405	UG/L		=	
REG	Beryllium	1.3	UG/L	B	U	F06
REG	Cadmium	1.5	UG/L	B	J	
REG	Calcium	58300	UG/L		=	
REG	Chromium	64.7	UG/L		=	
REG	Cobalt	29.5	UG/L	B	J	
REG	Copper	160	UG/L		=	
REG	Iron	80200	UG/L		=	
REG	Lead	99.2	UG/L		=	
REG	Magnesium	202000	UG/L		=	
REG	Manganese	4630	UG/L		=	
REG	Mercury	0.26	UG/L		=	
REG	Nickel	67.9	UG/L		=	
REG	Potassium	9550	UG/L		J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	4460	UG/L	B	J	
REG	Thallium	1.7	UG/L	B,Wa	J	E03
REG	Vanadium	85.3	UG/L		=	
REG	Zinc	492	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	92.9	UG/L	B	J	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	10	UG/L	U	U	
REG	Barium	51.1	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	20200	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	51.5	UG/L	B	J	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	168000	UG/L		=	
REG	Manganese	316	UG/L		=	
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	1560	UG/L	B	J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	3220	UG/L	B	J	
REG	Thallium	2	UG/L	U,Wa	UJ	E03
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.42	UG/L	U	UJ	G02
REG	1,3-Dinitrobenzene	0.42	UG/L	U	UJ	G02
REG	2,4,6-Trinitrotoluene	0.42	UG/L	U	UJ	G02
REG	2,4-Dinitrotoluene	0.27	UG/L	U	UJ	G02
REG	2,6-Dinitrotoluene	0.27	UG/L	U	UJ	G02
REG	2-Nitrotoluene	0.42	UG/L	U	UJ	G02
REG	3-Nitrotoluene	0.42	UG/L	U	UJ	G02
REG	4-Nitrotoluene	0.42	UG/L	U	UJ	G02
REG	HMX	1	UG/L	U	UJ	G02
REG	Nitrobenzene	0.42	UG/L	U	UJ	G02
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	5.2	UG/L	U	UJ	G02

Location: Ramsdell Quarry Landfill
Station : RQLsw-012 Initial Phase

RQLsw-012(p)-0018-S **Field Sample Type: Grab** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	1	UG/L	U	UJ	G02
REG	Tetryl	0.42	UG/L	U	UJ	G02

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophencl	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-012 Initial Phase

RQLsw-012(p)-0018-S **Field Sample Type:** Grab **Matrix:** Surface Water **Collected:** 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

RQLsw-012(p)-0051-FD **Field Sample Type:** Field Duplicate **Matrix:** Surface Water **Collected:** 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	39400	UG/L		=	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	41.7	UG/L		=	
REG	Barium	406	UG/L		=	
REG	Beryllium	1.4	UG/L	B	U	F06
REG	Cadmium	2.1	UG/L	B	J	
REG	Calcium	63300	UG/L		=	
REG	Chromium	57.2	UG/L		=	
REG	Cobalt	32	UG/L	B	J	
REG	Copper	165	UG/L		=	
REG	Iron	84300	UG/L		=	
REG	Lead	110	UG/L		=	
REG	Magnesium	201000	UG/L		=	
REG	Manganese	5130	UG/L		=	
REG	Mercury	0.27	UG/L		=	
REG	Nickel	70.8	UG/L		=	
REG	Potassium	6440	UG/L		J	F10
REG	Selenium	4.2	UG/L	B	J	
REG	Silver	10	UG/L	U	U	
REG	Sodium	4450	UG/L	B	J	
REG	Thallium	2	UG/L	Wa	J	E03
REG	Vanadium	68.6	UG/L		=	

Location: Ramsdell Quarry Landfill
Station : RQLsw-012 Initial Phase

RQLsw-012(p)-0051-FD **Field Sample Type: Field Duplicate** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Zinc	531	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	84	UG/L	B	J	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	10	UG/L	U	U	
REG	Barium	45.8	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	19000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	100	UG/L	U	U	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	154000	UG/L		=	
REG	Manganese	273	UG/L		=	
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	1400	UG/L	B	J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	3160	UG/L	B	J	
REG	Thallium	2	UG/L	U,Wa	UJ	E03
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.45	UG/L	U	UJ	G02
REG	1,3-Dinitrobenzene	0.45	UG/L	U	UJ	G02
REG	2,4,6-Trinitrotoluene	0.45	UG/L	U	UJ	G02
REG	2,4-Dinitrotoluene	0.3	UG/L	U	UJ	G02
REG	2,6-Dinitrotoluene	0.3	UG/L	U	UJ	G02
REG	2-Nitrotoluene	0.45	UG/L	U	UJ	G02
REG	3-Nitrotoluene	0.45	UG/L	U	UJ	G02
REG	4-Nitrotoluene	0.45	UG/L	U	UJ	G02
REG	HMX	1.1	UG/L	U	UJ	G02
REG	Nitrobenzene	0.45	UG/L	U	UJ	G02
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	5.7	UG/L	U	UJ	G02
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	1.1	UG/L	U	UJ	G02
REG	Tetryl	0.45	UG/L	U	UJ	G02

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-012 Initial Phase

RQLsw-012(p)-0051-FD **Field Sample Type: Field Duplicate** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-012 Initial Phase

RQLsw-012(p)-0051-FD **Field Sample Type: Field Duplicate** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-013 Initial Phase

RQLsw-013(p)-0019-S **Field Sample Type: Grab** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	25500	UG/L		=	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	23	UG/L		=	
REG	Barium	175	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	15100	UG/L		=	
REG	Chromium	29.7	UG/L		=	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	44.9	UG/L		=	
REG	Iron	42700	UG/L		=	
REG	Lead	38.2	UG/L		=	
REG	Magnesium	73500	UG/L		=	
REG	Manganese	831	UG/L		=	
REG	Mercury	.15	UG/L	B	J	
REG	Nickel	35.1	UG/L	B	J	
REG	Potassium	4730	UG/L	B	J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	2450	UG/L	B	J	
REG	Thallium	1.8	UG/L	B,Wa	J	E03
REG	Vanadium	40.3	UG/L	B	J	
REG	Zinc	264	UG/L		=	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	72	UG/L	B	J	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	3.7	UG/L	B	J	
REG	Barium	15.2	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	12300	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	213	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	67600	UG/L		=	
REG	Manganese	22.3	UG/L		=	
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	1020	UG/L	B	J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-013 Initial Phase

RQLsw-013(p)-0019-S **Field Sample Type: Grab** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Sodium	2140	UG/L	B	J	
REG	Thallium	2	UG/L	U,Wa	UJ	E03
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.65	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.65	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.65	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.42	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.42	UG/L	U	U	
REG	2-Nitrotoluene	0.65	UG/L	U	U	
REG	3-Nitrotoluene	0.65	UG/L	U	U	
REG	4-Nitrotoluene	0.65	UG/L	U	U	
REG	HMX	1.6	UG/L	U	U	
REG	Nitrobenzene	0.65	UG/L	U	U	
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	8.1	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	1.6	UG/L	U	U	
REG	Tetryl	0.65	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-013 Initial Phase

RQLsw-013(p)-0019-S **Field Sample Type:** Grab **Matrix:** Surface Water **Collected:** 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-014 Initial Phase

RQLsw-014(p)-0020-S **Field Sample Type:** Grab **Matrix:** Surface Water **Collected:** 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5	UG/L	U	U	
REG	Barium	40.1	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	18000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	828	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	33000	UG/L		=	
REG	Manganese	67.2	UG/L		=	
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	1050	UG/L	B	J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	1490	UG/L	B	J	
REG	Thallium	2	UG/L	U	UJ	D05
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	10	UG/L	U	U	
REG	Barium	38.5	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	18000	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	169	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	33200	UG/L		=	
REG	Manganese	40.6	UG/L		=	
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	1060	UG/L	B	J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	1510	UG/L	B	J	
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-014 Initial Phase

RQLsw-014(p)-0020-S **Field Sample Type: Grab** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-014 Initial Phase

RQLsw-014(p)-0020-S **Field Sample Type:** Grab **Matrix:** Surface Water **Collected:** 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-015 Initial Phase

RQLsw-015(p)-0021-S **Field Sample Type:** Grab **Matrix:** Surface Water **Collected:** 07/08/98

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5	UG/L	U	U	
REG	Barium	31.4	UG/L	B	J	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	16800	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	377	UG/L		=	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	30800	UG/L		=	
REG	Manganese	72	UG/L		=	
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	1520	UG/L	B	J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	1570	UG/L	B	J	
REG	Thallium	2	UG/L	U,Wa	UJ	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	16.9	UG/L	B	J	

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	
REG	Antimony	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-015 Initial Phase

RQLsw-015(p)-0021-S **Field Sample Type: Grab** **Matrix: Surface Water** **Collected: 07/08/98**

Sample Type	Filtered Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Arsenic	10	UG/L	U	U	
REG	Barium	22.9	UG/L	B	J	
REG	Beryllium	5	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	14100	UG/L		=	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	78.2	UG/L	B	J	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	28900	UG/L		=	
REG	Manganese	8.8	UG/L	B	J	
REG	Mercury	0.2	UG/L	U	U	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	1690	UG/L	B	J	F10
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	1670	UG/L	B	J	
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.13	UG/L	U	U	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.02	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-015 Initial Phase

RQLsw-015(p)-0021-S **Field Sample Type:** Grab **Matrix:** Surface Water **Collected:** 07/08/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : RQLsw-015 Initial Phase

RQLsw-015(p)-0021-S **Field Sample Type:** Grab **Matrix:** Surface Water **Collected:** 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : QC Initial Phase

RQLqc-008-0049-SB **Field Sample Type: Source Water Blank** **Matrix: Quality Control** **Collected: 07/17/98**

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5	UG/L	U	U	
REG	Barium	200	UG/L	U	U	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	211	UG/L	B	J	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	25	UG/L	U	U	
REG	Iron	100	UG/L	U	U	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	5000	UG/L	U	U	
REG	Manganese	15	UG/L	U	U	
REG	Mercury	0.09	UG/L	B	J	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	5000	UG/L	U	U	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	358	UG/L	B	U	F01,F06
REG	Thallium	2	UG/L	U	U	
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	U	
REG	1,3-Dinitrobenzene	0.2	UG/L	U	U	
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	U	
REG	2,4-Dinitrotoluene	0.16	UG/L		=	
REG	2,6-Dinitrotoluene	0.13	UG/L	U	U	
REG	2-Nitrotoluene	0.2	UG/L	U	U	
REG	3-Nitrotoluene	0.2	UG/L	U	U	
REG	4-Nitrotoluene	0.2	UG/L	U	U	
REG	HMX	0.5	UG/L	U	U	
REG	Nitrobenzene	0.2	UG/L	U	U	
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	U	
REG	Tetryl	0.2	UG/L	U	U	

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : QC Initial Phase

RQLqc-008-0049-SB | Field Sample Type: Source Water Blank | Matrix: Quality Control | Collected: 07/17/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	10	UG/L	U	U	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : QC Initial Phase

RQLqc-008-0049-SB **Field Sample Type: Source Water Blank** **Matrix: Quality Control** **Collected: 07/17/98**

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	0.89	UG/L	J	J	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

RQLqc-009-0050-ER **Field Sample Type: Equipment Rinsate** **Matrix: Quality Control** **Collected: 07/17/98**

Sample Type	Cyanide	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Cyanide	0.01	MG/L	U	U	

Sample Type	Metals	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Aluminum	200	UG/L	U	U	I01
REG	Antimony	5	UG/L	U	U	
REG	Arsenic	5	UG/L	U	U	
REG	Barium	200	UG/L	U	U	
REG	Beryllium	4	UG/L	U	U	
REG	Cadmium	5	UG/L	U	U	
REG	Calcium	289	UG/L	B	J	
REG	Chromium	10	UG/L	U	U	
REG	Cobalt	50	UG/L	U	U	
REG	Copper	3.6	UG/L	B	J	
REG	Iron	53.7	UG/L	B	J	
REG	Lead	3	UG/L	U	U	
REG	Magnesium	5000	UG/L	U	U	
REG	Manganese	15	UG/L	U	U	
REG	Mercury	0.098	UG/L	B	J	
REG	Nickel	40	UG/L	U	U	
REG	Potassium	5000	UG/L	U	U	
REG	Selenium	5	UG/L	U	U	
REG	Silver	10	UG/L	U	U	
REG	Sodium	5000	UG/L	U	U	
REG	Thallium	2	UG/L	U	U	E03
REG	Vanadium	50	UG/L	U	U	
REG	Zinc	20	UG/L	U	U	

Sample Type	Explosives	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,3,5-Trinitrobenzene	0.2	UG/L	U	UJ	G06
REG	1,3-Dinitrobenzene	0.2	UG/L	U	UJ	G06
REG	2,4,6-Trinitrotoluene	0.2	UG/L	U	UJ	G06
REG	2,4-Dinitrotoluene	0.13	UG/L	U	UJ	G06
REG	2,6-Dinitrotoluene	0.13	UG/L	U	UJ	G06
REG	2-Nitrotoluene	0.2	UG/L	U	UJ	G06
REG	3-Nitrotoluene	0.2	UG/L	U	UJ	G06
REG	4-Nitrotoluene	0.2	UG/L	U	UJ	G06
REG	HMX	0.5	UG/L	U	UJ	G06
REG	Nitrobenzene	0.2	UG/L	U	UJ	G06
REG	Nitrocellulose as N	0.2	MG/L	U	U	
REG	Nitroglycerin	2.5	UG/L	U	U	
REG	Nitroguanidine	20	UG/L	U	U	
REG	RDX	0.5	UG/L	U	UJ	G06
REG	Tetryl	0.2	UG/L	U	UJ	G06

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2,4-Trichlorobenzene	10	UG/L	U	U	
REG	1,2-Dichlorobenzene	10	UG/L	U	U	
REG	1,3-Dichlorobenzene	10	UG/L	U	U	
REG	1,4-Dichlorobenzene	10	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : QC Initial Phase

RQLqc-009-0050-ER | Field Sample Type: Equipment Rinsate | Matrix: Quality Control | Collected: 07/17/98

Sample Type	Semi-Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	2,2'-oxybis (1-chloropropane)	10	UG/L	U	U	
REG	2,4,5-Trichlorophenol	25	UG/L	U	U	
REG	2,4,6-Trichlorophenol	10	UG/L	U	U	
REG	2,4-Dichlorophenol	10	UG/L	U	U	
REG	2,4-Dimethylphenol	10	UG/L	U	U	
REG	2,4-Dinitrophenol	25	UG/L	U	U	
REG	2,4-Dinitrotoluene	10	UG/L	U	U	
REG	2,6-Dinitrotoluene	10	UG/L	U	U	
REG	2-Chloronaphthalene	10	UG/L	U	U	
REG	2-Chlorophenol	10	UG/L	U	U	
REG	2-Methylnaphthalene	10	UG/L	U	U	
REG	2-Methylphenol	10	UG/L	U	U	
REG	2-Nitroaniline	25	UG/L	U	U	
REG	2-Nitrophenol	10	UG/L	U	U	
REG	3,3'-Dichlorobenzidine	10	UG/L	U	U	
REG	3-Nitroaniline	25	UG/L	U	U	
REG	4,6-Dinitro-o-Cresol	25	UG/L	U	U	
REG	4-Bromophenyl-phenyl Ether	10	UG/L	U	U	
REG	4-Chloroaniline	10	UG/L	U	U	
REG	4-Chlorophenyl-phenylether	10	UG/L	U	U	
REG	4-Methylphenol	10	UG/L	U	U	
REG	4-Nitroaniline	25	UG/L	U	U	
REG	4-Nitrophenol	25	UG/L	U	U	
REG	4-chloro-3-methylphenol	10	UG/L	U	U	
REG	Acenaphthene	10	UG/L	U	U	
REG	Acenaphthylene	10	UG/L	U	U	
REG	Anthracene	10	UG/L	U	U	
REG	Benzo(a)anthracene	10	UG/L	U	U	
REG	Benzo(a)pyrene	10	UG/L	U	U	
REG	Benzo(b)fluoranthene	10	UG/L	U	U	
REG	Benzo(g,h,i)perylene	10	UG/L	U	U	
REG	Benzo(k)fluoranthene	10	UG/L	U	U	
REG	Bis(2-chloroethoxy)methane	10	UG/L	U	U	
REG	Bis(2-chloroethyl)ether	10	UG/L	U	U	
REG	Bis(2-ethylhexyl)phthalate	40	UG/L		=	
REG	Butyl Benzyl Phthalate	10	UG/L	U	U	
REG	Carbazole	10	UG/L	U	U	
REG	Chrysene	10	UG/L	U	U	
REG	Di-n-butyl Phthalate	10	UG/L	U	U	
REG	Di-n-octyl Phthalate	10	UG/L	U	U	
REG	Dibenzo(a,h)anthracene	10	UG/L	U	U	
REG	Dibenzofuran	10	UG/L	U	U	
REG	Diethyl Phthalate	10	UG/L	U	U	
REG	Dimethyl Phthalate	10	UG/L	U	U	
REG	Fluoranthene	10	UG/L	U	U	
REG	Fluorene	10	UG/L	U	U	
REG	Hexachlorobenzene	10	UG/L	U	U	
REG	Hexachlorobutadiene	10	UG/L	U	U	
REG	Hexachlorocyclopentadiene	10	UG/L	U	U	
REG	Hexachloroethane	10	UG/L	U	U	
REG	Indeno(1,2,3-cd)pyrene	10	UG/L	U	U	
REG	Isophorone	10	UG/L	U	U	
REG	N-Nitroso-di-n-propylamine	10	UG/L	U	U	
REG	N-Nitrosodiphenylamine	10	UG/L	U	U	
REG	Naphthalene	10	UG/L	U	U	
REG	Nitrobenzene	10	UG/L	U	U	
REG	Pentachlorophenol	25	UG/L	U	U	
REG	Phenanthrene	10	UG/L	U	U	
REG	Phenol	10	UG/L	U	U	
REG	Pyrene	10	UG/L	U	U	

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	0.44	UG/L	J	J	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : QC Initial Phase

RQLqc-009-0050-ER | Field Sample Type: Equipment Rinsate | Matrix: Quality Control | Collected: 07/17/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	0.94	UG/L	J	J	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

RQLqc-001-0057-TB | Field Sample Type: Trip Blank | Matrix: Quality Control | Collected: 07/08/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	0.83	UG/L	J	J	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	6.9	UG/L	J	J	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

RQLqc-003-0059-TB | Field Sample Type: Trip Blank | Matrix: Quality Control | Collected: 07/13/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code

Location: Ramsdell Quarry Landfill
Station : QC Initial Phase

RQLqc-003-0059-TB | Field Sample Type: Trip Blank | Matrix: Quality Control | Collected: 07/13/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	8.3	UG/L	J	J	C02
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	5	UG/L	U	U	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

RQLqc-004-0060-TB | Field Sample Type: Trip Blank | Matrix: Quality Control | Collected: 07/22/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	U	
REG	1,1,2-Trichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	7.3	UG/L	J	J	C02
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	0.43	UG/L	J	J	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	5	UG/L	U	U	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	

Location: Ramsdell Quarry Landfill
Station : QC Initial Phase

RQLqc-004-0060-TB Field Sample Type: Trip Blank Matrix: Quality Control Collected: 07/22/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

RQLqc-005-0061-TB Field Sample Type: Trip Blank Matrix: Quality Control Collected: 07/25/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	U	
REG	1,1,2,2-Tetrachloroethane	1	UG/L		=	
REG	1,1,2-Trichloroethane	0.45	UG/L		=	
REG	1,1-Dichloroethane	5	UG/L	U	U	
REG	1,1-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloroethane	5	UG/L	U	U	
REG	1,2-Dichloroethene	5	UG/L	U	U	
REG	1,2-Dichloropropane	5	UG/L	U	U	
REG	1,3-cis-Dichloropropene	5	UG/L	U	U	
REG	1,3-trans-Dichloropropene	5	UG/L	U	U	
REG	2-Butanone	10	UG/L	U	U	
REG	2-Hexanone	10	UG/L	U	U	
REG	4-Methyl-2-pentanone	10	UG/L	U	U	
REG	Acetone	10	UG/L	U	U	
REG	Benzene	5	UG/L	U	U	
REG	Bromodichloromethane	5	UG/L	U	U	
REG	Bromoform	0.38	UG/L		=	
REG	Bromomethane	10	UG/L	U	U	
REG	Carbon Disulfide	5	UG/L	U	U	
REG	Carbon Tetrachloride	5	UG/L	U	U	
REG	Chlorobenzene	5	UG/L	U	U	
REG	Chloroethane	10	UG/L	U	U	
REG	Chloroform	5	UG/L	U	U	
REG	Chloromethane	10	UG/L	U	U	
REG	Dibromochloromethane	5	UG/L	U	U	
REG	Ethylbenzene	5	UG/L	U	U	
REG	Methylene Chloride	0.73	UG/L		=	
REG	Styrene	5	UG/L	U	U	
REG	Tetrachloroethene	5	UG/L	U	U	
REG	Toluene	5	UG/L	U	U	
REG	Trichloroethene	5	UG/L	U	U	
REG	Vinyl Chloride	10	UG/L	U	U	
REG	Xylenes, Total	5	UG/L	U	U	

RQLqc-007-0063-TB Field Sample Type: Trip Blank Matrix: Quality Control Collected: 07/27/98

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	1,1,1-Trichloroethane	5	UG/L	U	UJ	A05
REG	1,1,2,2-Tetrachloroethane	5	UG/L	U	UJ	A05
REG	1,1,2-Trichloroethane	5	UG/L	U	UJ	A05
REG	1,1-Dichloroethane	5	UG/L	U	UJ	A05
REG	1,1-Dichloroethene	5	UG/L	U	UJ	A05
REG	1,2-Dichloroethane	5	UG/L	U	UJ	A05
REG	1,2-Dichloroethene	5	UG/L	U	UJ	A05
REG	1,2-Dichloropropane	5	UG/L	U	UJ	A05
REG	1,3-cis-Dichloropropene	5	UG/L	U	UJ	A05
REG	1,3-trans-Dichloropropene	5	UG/L	U	UJ	A05
REG	2-Butanone	10	UG/L	U	UJ	A05
REG	2-Hexanone	10	UG/L	U	UJ	A05
REG	4-Methyl-2-pentanone	10	UG/L	U	UJ	A05
REG	Acetone	10	UG/L	U	UJ	A05
REG	Benzene	5	UG/L	U	UJ	A05
REG	Bromodichloromethane	5	UG/L	U	UJ	A05
REG	Bromoform	0.65	UG/L	J	J	A05
REG	Bromomethane	10	UG/L	U	UJ	A05
REG	Carbon Disulfide	5	UG/L	U	UJ	A05
REG	Carbon Tetrachloride	5	UG/L	U	UJ	A05
REG	Chlorobenzene	5	UG/L	U	UJ	A05
REG	Chloroethane	10	UG/L	U	UJ	A05
REG	Chloroform	5	UG/L	U	UJ	A05
REG	Chloromethane	10	UG/L	U	UJ	A05
REG	Dibromochloromethane	5	UG/L	U	UJ	A05

Location: Ramsdell Quarry Landfill
Station : QC Initial Phase

RQLqc-007-0063-TB **Field Sample Type: Trip Blank** **Matrix: Quality Control** **Collected: 07/27/98**

Sample Type	Volatile Organics	Result	Units	Qualifiers Lab	Qualifiers Data	Validation Code
REG	Ethylbenzene	5	UG/L	U	UJ	A05
REG	Methylene Chloride	0.78	UG/L	J	J	A05
REG	Styrene	5	UG/L	U	UJ	A05
REG	Tetrachloroethene	5	UG/L	U	UJ	A05
REG	Toluene	0.49	UG/L	J	J	A05
REG	Trichloroethene	5	UG/L	U	UJ	A05
REG	Vinyl Chloride	10	UG/L	U	UJ	A05
REG	Xylenes, Total	5	UG/L	U	UJ	A05

D3. CASE NARRATIVES AND CHAIN-OF-CUSTODY FORMS

CASE NARRATIVE

The following report contains the analytical results for seven water samples submitted to Quanterra-North Canton by Science Applications International Corporation from the Ravenna-Ramsdell Quarry Site, project number 01-0380-04-9558-156. The samples were received July 14, 1998, according to documented sample acceptance procedures.

Quanterra utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the Analytical Methods Summary page in accordance with the methods indicated.

Explosives and Propellants analyses were performed at Quanterra's Knoxville, TN and West Sacramento, CA facilities. (Because the CA laboratory operates on a different laboratory information [LIMS] system, the West Sacramento data is presented under a separate cover.)

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

Supplemental QC Information

SAMPLE RECEIVING

The coolers were received at the North Canton laboratory at temperatures of 3.1, 5.0, 5.8, 5.9 and 3.5°C.

GC/MS VOLATILES

No anomalies were encountered.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

Due to a laboratory error, all samples were initially extracted as Base/Neutrals rather than as full Base/Neutrals & Acids. As a result, all samples exhibited zero recoveries for acid surrogates. Upon re-extraction and re-analysis, all surrogates were within acceptance limits; however, the recommended sample holding time had expired. Both sets of data are reported.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

CASE NARRATIVE (continued)

HPLC - Explosives

A limited volume of sample was extracted due to high particulate levels in sample RQ0004. As a result the reporting limits were elevated.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

METALS

Matrix spike/matrix spike duplicate recoveries were outside the acceptance limits for some analytes. The acceptable laboratory control sample analysis data indicated that the analytical system was operating within control and this condition is most likely due to matrix interference. See the Matrix Spike Report for the affected analytes, which will be flagged with "N".

Matrix spike/spike duplicate relative percent difference (RPD) exceeded the acceptance limits for some analytes. The imprecision may be attributed to sample heterogeneity. See the Matrix Spike Report for the affected analytes which will be flagged with "*".

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which have been flagged with "NC, MSB".

Samples which contain results between the Method Detection Limit (MDL) and the Reporting Limit (RL) are flagged with "B". There is the possibility of false positive results at these quantitation levels. The acceptance criteria for ICB, CCB, and Method Blank is $\pm$ the RL.

GENERAL CHEMISTRY

No anomalies were encountered.

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Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4000

COC NO.: L010

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0388-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/ Vials:	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0001	7/14/98	0930	WA				X			X	9	MS/MSD
RQ0004	7/13/98	1635	↓			X			X	X	4	

REQUESTED PARAMETERS

D-173

7/14/98

TOTAL NUMBER OF CONTAINERS: 13

Cooler ID: E9

Cooler Temperature:

FEDEX NUMBER: NA

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/14/98 1500	Jason Umbaugh	7/14/98 1500
COMPANY NAME: SAIC		COMPANY NAME: Quanterra	
RECEIVED BY: Jason J Umbaugh	Date/Time 7/14/98	RELINQUISHED BY:	Date/Time 7-14-98 4:30
COMPANY NAME:		COMPANY NAME: Tami Stephens	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME: Quanterra	

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800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

COC NO.: L011

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0388-04-9558-158

PROJECT MANAGER: Steve Selecman

Sampler (Signature) Joseph J Wilson (Printed Name)

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/ Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0001	7/14/98	0930	WA	X	X				X		9	18 MS/MSD
RQ0059	7/13/98	0859		X							3	
RQ0005		1200		X							3	
RQ0047		1200		X							3	
RQ0003		1530		X					X		4	
RQ0004		1635		X			X				5	
RQ0002		1735		X							3	

D-174

7/14/98

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/14/98 1500	Jason Kimbrough	7/14/98 1500
COMPANY NAME: SAIC		COMPANY NAME: Quanterra	
RECEIVED BY: Jason Kimbrough	Date/Time 7/14/98	RELINQUISHED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY: Tami Stephens	Date/Time 7-14-98 4:30
COMPANY NAME:		COMPANY NAME: Quanterra	

TOTAL NUMBER OF CONTAINERS: 39

Cooler ID: H106

Cooler Temperature:

FEDEX NUMBER: NA

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4888

COC NO.: L012

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-9388-04-9558-156

PROJECT MANAGER: Steve Saleeman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0001	7/14/98	0930	WA			X		X			9	MS/MSD
RQ0004	7/13/98	1635			X			X			3	
RQ0047	↓	1200	↓			X					2	

D-175

RLW 7/14/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/14/98 1500	Jason Umbaugh	7/14/98 1500
COMPANY NAME: SAIC		COMPANY NAME: Quanterra	
RECEIVED BY: Jason Umbaugh	Date/Time 7/14/98	RELINQUISHED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY: Jami Stephens	Date/Time 7-14-98 4:30
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 14

Cooler ID: E8

Cooler Temperature:

FEDEX NUMBER: NA

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Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-6660

COC NO.: L013

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0388-04-9558-150

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): JOSEPH J WILSON

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide							No. of Bottles/ Vials
RQ0002	7/13/98	1735	WA		X	X	X	X	X	X							9
RQ0003	↓	1530	↓		X	X		X		X							6

REQUESTED PARAMETERS

D-176

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/14/98 1500	Jason Umbaugh	7/14/98 1500
COMPANY NAME: SAIC		COMPANY NAME: Quanterra	
RECEIVED BY: Jason Umbaugh	Date/Time 7/14/98	RELINQUISHED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY: Tami Stephens	Date/Time 7-14-98 4:30
COMPANY NAME:		COMPANY NAME: Quanterra	

TOTAL NUMBER OF CONTAINERS: 15

Cooler ID: B4

Cooler Temperature:

FEDEX NUMBER: NA

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

COC NO.: L 014

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0388-04-9558-158

PROJECT MANAGER: Steve Saleeman

Sampler (Signature): [signature] **(Printed Name):** Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	REQUESTED PARAMETERS: VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/ Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0003	7/13/98	1530	WA				X				2	
RQ0005	↓	1200	↓		X	X	X	X	X	X	9	
RQ0047	↓	1200	↓		X		X	X	X	X	7	

D-177

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time	TOTAL NUMBER OF CONTAINERS: 18	Cooler Temperature:
[signature]	7/14/98	[signature]	7/14/98	Cooler ID: G85	FEDEX NUMBER: NA
COMPANY NAME: SAIC	1500	COMPANY NAME: Quanterra	1500		
RECEIVED BY: [signature]	Date/Time 7/14/98	RELINQUISHED BY:	Date/Time		
COMPANY NAME:		COMPANY NAME:			
RELINQUISHED BY:	Date/Time	RECEIVED BY: Tami Stephens	Date/Time 7-14-98 4:30		
COMPANY NAME:		COMPANY NAME: Quanterra			

CASE NARRATIVE

The following report contains the analytical results for eight water samples submitted to Quanterra-North Canton by Science Applications International Corporation from the Ravenna-Ramsdell Quarry Site, project number 01-0380-04-9558-156. The samples were received October 19, 1998, according to documented sample acceptance procedures.

Quanterra utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the Analytical Methods Summary page in accordance with the methods indicated.

Explosives and Propellants analyses were performed at Quanterra's Knoxville, TN and West Sacramento, CA facilities.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

Supplemental QC Information

SAMPLE RECEIVING

The coolers were received at the North Canton laboratory at temperatures of 3.3, 0.8, 0.9, 3.0, 1.8, 1.4, and 1.6°C.

GC/MS VOLATILES

No anomalies were encountered.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

No anomalies were encountered.

CASE NARRATIVE (continued)

HPLC - Explosives

Surrogate recoveries for samples "RQ0096", "RQ0097", "RQ0098" and "RQ0099" were outside the acceptable QC limits, due to matrix interference.

Samples "RQ0096" and "RQ0099" were reported with elevated reporting limits for 2,4-DNT; in addition, "RQ0097" and "RQ0098" were reported with elevated reporting limits for 2,4-DNT and 3-Nitrotoluene due to sample matrix interference.

The matrix spike/matrix spike duplicate recoveries for sample "RQ0099" in batch 8295154 were acceptable for all analytes except RDX, nitrobenzene and 3-nitrotoluene. The laboratory control sample showed acceptable results indicating that the analysis was in control. The matrix spike/matrix spike duplicate results are, therefore, attributed to matrix effects.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

METALS

Serial dilution of a sample in this lot indicates that physical and chemical interferences are present. See the sample report pages for the affected analytes which will be flagged with "L".

Samples which contain results between the Method Detection Limit (MDL) and the Reporting Limit (RL) are flagged with "B". There is the possibility of false positive results at these quantitation levels. The acceptance criteria for ICB, CCB, and Method Blank is $\pm$ the RL.

Method blank contamination occurred.

- All affected analytes which were detected at a level less than 5% of the sample amount are flagged with "MBB".
- Where blank contamination was a common laboratory contaminant, and was less than two times the reporting limit, affected analytes are flagged with "MBD".

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes due to the sample concentration readings greater than four times the spike amount. See the Matrix Spike Report for the affected analytes, which will be flagged with "NC, MSB". Matrix spike/spike duplicate recovery was outside the acceptance limits for some analytes. The acceptable LCS analysis data indicated that the analytical system was operating within control and this condition is most likely due to matrix interference. See the Matrix Spike Report for the affected analyte, which will be flagged with "N".

Matrix spike/spike duplicate relative percent difference (RPD) exceeded the acceptance limits for some analytes. The imprecision may be attributed to sample heterogeneity. See the Matrix Spike Report for the affected analytes which will be flagged with "*".

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

No anomalies were encountered.

Quanterra

CASE NARRATIVE

QUANTERRA INCORPORATED PROJECT NUMBER 302250

PROPELLANTS

There were no anomalies associated with this report.

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4600

COC NO.: L025

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature) Joseph J Wilson (Printed Name) Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9782

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0086	10/19/98	1135	WA	X							1	
RQ0100	↓	1205	↓	X	X	X	X	X	X	X	12	
RQ0101		1345		X	X	X	X	X	X	X	12	
RQ0096		1530		X	X	X	X	X	X	X	12	
RQ0102	↓	1710		X	X	X	X	X	X	X	12	
RQ0097	10/20/98	0950		X	X	X	X	X	X	X	12	
RQ0098	↓	1245		X	X	X	X	X	X	X	12	
RQ0099	↓	1425	↓	X	X	X	X	X	X	X	36	MS/MSD Volume

D-183

10/21/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	10/21/98 1200	Greg Newman	10/21/98 130pm
COMPANY NAME: SAIC		COMPANY NAME: QUANTERRA	
RECEIVED BY:	Date/Time	RELINQUISHED BY: Greg Newman	10/21/98 245 pm
COMPANY NAME:		COMPANY NAME: QUANTERRA	
RELINQUISHED BY:	Date/Time	RECEIVED BY: Jami Stephens	10.21.98 2:45PM
COMPANY NAME:		COMPANY NAME: Quanterra	

TOTAL NUMBER OF CONTAINERS:

Cooler ID: A46, D27, 35C, 25C, J83, 076, G76

Cooler Temperature:

FEDEX NUMBER: NA

Courier service to lab

Samples in 7 coolers.

3 Empty Quanterra Coolers also here for return.

012

CASE NARRATIVE

The following report contains the analytical results for two water samples submitted to Quanterra-North Canton by Science Applications International Corporation from the Ravenna-Ramsdell Quarry Site, project number 01-0380-04-9558-156. The samples were received July 27, 1998, according to documented sample acceptance procedures.

Quanterra utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the Analytical Methods Summary page in accordance with the methods indicated.

Explosives and Propellants analyses were performed at Quanterra's Knoxville, TN and West Sacramento, CA facilities. (Because the CA laboratory operates on a different laboratory information [LIMS] system, the West Sacramento data is presented under a separate cover.)

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

Supplemental QC Information

SAMPLE RECEIVING

The cooler was received at the North Canton laboratory at a temperature of 4.4°C.

GC/MS VOLATILES

No anomalies were encountered.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

No anomalies were encountered.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

CASE NARRATIVE (continued)

HPLC - Explosives

No anomalies were encountered.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

METALS

Matrix spike/matrix spike duplicate recoveries were outside the acceptance limits for some analytes. The acceptable laboratory control sample analysis data indicated that the analytical system was operating within control and this condition is most likely due to matrix interference. See the Matrix Spike Report for the affected analytes, which will be flagged with "N".

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which have been flagged with "NC, MSB".

GENERAL CHEMISTRY

Matrix spike recovery and relative percent difference (RPD) data were not calculated for Total Cyanide due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which have been flagged with "NC, MSB".

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Science Applications International Corporation
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COC NO.: LØ18

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature) Joseph J Wilson (Printed Name) Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide								No. of Bottles/ Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQØØ61	7/25/98	Ø818	WA	X														3	
RQØØ15	↓	1055	↓	X	X	X	X	X	X	X								12	

D-187

JJW 7/26/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/27/98 0723	[signature]	7/27/98 723A
COMPANY NAME: SAIC		COMPANY NAME: Quanterra	
RECEIVED BY:	Date/Time	RELINQUISHED BY: [signature]	7/27 830A
COMPANY NAME:		COMPANY NAME: Quanterra	
RELINQUISHED BY:	Date/Time	RECEIVED BY: Tami Stephens	7/27/98 8:30A
COMPANY NAME:		COMPANY NAME: Quanterra	

TOTAL NUMBER OF CONTAINERS: 15

Cooler ID: B173

Cooler Temperature:

FEDEX NUMBER: NA

034

CASE NARRATIVE

The following report contains the analytical results for six water samples submitted to Quanterra-North Canton by Science Applications International Corporation from the Ravenna-Ramsdell Quarry Site, project number 01-0380-04-9558-156. The samples were received July 24, 1998, according to documented sample acceptance procedures.

Quanterra utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the Analytical Methods Summary page in accordance with the methods indicated.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

Supplemental QC Information

SAMPLE RECEIVING

The coolers were received at the North Canton laboratory at temperatures of 5.9, 6.0 and 5.8°C.

Samples RQ0011 and RQ0009 were further preserved for the Cyanide analyses.

GC/MS VOLATILES

The matrix spike/matrix spike duplicate associated with sample RQ0011 in batch 8210308 failed recovery criteria for 1,1-Dichloroethene. The laboratory control sample associated with this batch was in control. This is believed to be a matrix effect; therefore, no further corrective action was taken.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

No anomalies were encountered.

HPLC - Explosives

The surrogate recoveries for samples RQ0009 and RQ0050 were 0%. The surrogate has been masked by a coeluting peak.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

CASE NARRATIVE (continued)

METALS

Matrix spike/spike duplicate spike recoveries were outside the acceptance limits for some analytes. The acceptable laboratory control sample analysis data indicated that the analytical system was operating within control and this condition is most likely due to matrix interference. See the Matrix Spike Report for the affected analytes, which will be flagged with "N".

Matrix spike/spike duplicate relative percent difference (RPD) exceeded the acceptance limits for some analytes. The imprecision may be attributed to sample heterogeneity. See the Matrix Spike Report for the affected analytes which will be flagged with "*".

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which have been flagged with "NC, MSB".

Samples which contain results between the Method Detection Limit (MDL) and the Reporting Limit (RL) are flagged with "B". There is the possibility of false positive results at these quantitation levels. The acceptance criteria for ICB, CCB, and Method Blank is $\pm$ the RL.

GENERAL CHEMISTRY

Matrix spike/matrix spike duplicate RPD was outside the acceptance limit for Total Cyanide in batch 8211214. However, the acceptable laboratory control sample analysis data indicated that the analytical system was operating within control and this condition is most likely due to matrix interference.

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Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

COC NO.: L015

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-158

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson **(Printed Name):** Joseph J Wilson

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide							No. of Bottles/ Vials
RQ0050	7/23/98	0849	WA		X	X	X	X		X							8
RQ0049	↓	1251	↓		X	X	X	X		X							8

REQUESTED PARAMETERS

D-191

2nd 7/23/98

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/24/98 0800	Mary Newman	7/24/98 715 AM
COMPANY NAME: SAIC		COMPANY NAME: QUANTERRA	
RECEIVED BY:	Date/Time	RELINQUISHED BY: Mary Newman	Date/Time 7/24 840 AM
COMPANY NAME:		COMPANY NAME: QUANTERRA	
RELINQUISHED BY:	Date/Time	RECEIVED BY: Terry Burns	Date/Time 7-24-98
COMPANY NAME:		COMPANY NAME: QES	840

TOTAL NUMBER OF CONTAINERS: 16

Cooler ID: 214

Cooler Temperature:

FEDEX NUMBER: NA

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Science Applications International Corporation

800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

CHAIN OF CUSTODY RECORD

COC NO.: L016

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): [signature] (Printed Name): Joseph J Wilson

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide							No. of Bottles/ Vials
RQ0006	7/22/98	0951	WA	X													3
RQ0009		1351		X	X	X	X	X	X	X							12
RQ0011		1654		X													3
RQ0050	7/23/98	0849		X													3
RQ0049		1251		X													3
RQ0013		1433		X													3

D-192

7/24/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
[signature]	7/24/98	[signature]	7/24/98
COMPANY NAME: SAIC	0800	COMPANY NAME: QUANTERRA	715
RECEIVED BY:	Date/Time	RELINQUISHED BY: [signature]	Date/Time 7/24
COMPANY NAME:		COMPANY NAME: QUANTERRA	840
RELINQUISHED BY:	Date/Time	RECEIVED BY: [signature]	Date/Time 7/24/98
COMPANY NAME:		COMPANY NAME: QES	840

TOTAL NUMBER OF CONTAINERS: 27

Cooler ID: 5" H52

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS

Cooler Temperature:

FEDEX NUMBER: NA

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

COC NO.: L017

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

Sample ID	Date Collected	Time Collected	Matrix	REQUESTED PARAMETERS: VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide							No. of Bottles/ Vials
RQ0011	7/22/98	1654	WA		X	X	X	X	X	X							9
RQ0013	7/23/98	1433	↓		X	X	X	X	X	X							9

D-193

7/23/98

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS

RELINQUISHED BY: Joseph J Wilson	Date/Time 7/24/98 0800	RECEIVED BY: Greg Vernon	Date/Time 7/24/98 715	TOTAL NUMBER OF CONTAINERS: 18	Cooler Temperature:
COMPANY NAME: SAIC		COMPANY NAME: Quanterra		Cooler ID: RQL21	FEDEX NUMBER:
RECEIVED BY:	Date/Time	RELINQUISHED BY: Greg Vernon	Date/Time 7/24 840A		
COMPANY NAME:		COMPANY NAME: Quanterra			
RELINQUISHED BY:	Date/Time	RECEIVED BY: Terry Burns	Date/Time 7-24-98 840		
COMPANY NAME:		COMPANY NAME: QES			

CASE NARRATIVE

The following report contains the analytical results for nine water samples submitted to Quanterra-North Canton by Science Applications International Corporation from the Ravenna-Ramsdell Quarry Site, project number 01-0380-04-9558-156. The samples were received September 21, 1998, according to documented sample acceptance procedures.

Quanterra utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the Analytical Methods Summary page in accordance with the methods indicated.

Explosives and Propellants analyses were performed at Quanterra's Knoxville, TN and West Sacramento, CA facilities.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

Supplemental QC Information

SAMPLE RECEIVING

The coolers were received at the North Canton laboratory at temperatures of 10.8, 6.9, 7.2, 4.7, 3.8 and 3.7°C.

SAIC An Employee-Owned Company
Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

COC NO.: L023

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0084	9/19/98	0914	WA	X							3	
RQ0070	↓	0930	↓	X	X	X	X	X	X	X	36	MS/MSD
RQ0069		1325		X	X	X	X	X	X	X	12	
RQ0071		1535		X	X	X	X	X	X	X	12	
RQ0072	↓	1730		X	X	X	X	X	X	X	12	
RQ0068	9/20/98	1020		X	X	X	X	X	X	X	12	
RQ0074	↓	1020		X	X	X	X	X	X	X	12	
RQ0067		1400		X	X	X	X	X	X	X	12	Cyanide in WM. Amber
RQ0073	↓	1458	↓	X	X	X	X	X	X	X	12	

yc 9/20/98

D-196

	Date/Time		Date/Time	
RELINQUISHED BY: Joseph J Wilson	9/21/98 0723	RECEIVED BY: Mary Meunier	9/21/98 0723	TOTAL NUMBER OF CONTAINERS: 123
COMPANY NAME: SAIC		COMPANY NAME:		Cooler ID: 6 coolers #'s: J19, B120, 08C, B154, D57 & 1369
RECEIVED BY:	Date/Time	RELINQUISHED BY: Mary Meunier	Date/Time 9/21/98 0940	Cooler Temperature: 4°C
COMPANY NAME:		COMPANY NAME:		FEDEX NUMBER: NA
RELINQUISHED BY:	Date/Time	RECEIVED BY: Jami Stephens	Date/Time 9-21-98 9:40	
COMPANY NAME:		COMPANY NAME: Quanterra		

CASE NARRATIVE

The following report contains the analytical results for fifteen solid samples and six water samples submitted to Quanterra-North Canton by Science Applications International Corporation from the Ramsdell Quarry Landfill Groundwater Investigation. The samples were received July 10 & 11, 1998, according to documented sample acceptance procedures.

Quanterra utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the Analytical Methods Summary page in accordance with the methods indicated.

Explosives and Propellants analyses were performed at Quanterra's Knoxville, TN and West Sacramento, CA facilities. (Because the CA laboratory operates on a different laboratory information [LIMS] system, the West Sacramento data is presented under a separate cover.)

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

Supplemental QC Information

SAMPLE RECEIVING

The coolers were received at the North Canton laboratory at temperatures ranging from 2.1 to 6.0°C.

Sample RQ0018 was further preserved for the cyanide analysis.

Sample RQ0055 was received at the laboratory, but was not listed on the corresponding chain-of-custody. Per the client's instructions, the sample was shipped to CECM-QAL on July 10, 1998.

The volatiles containers for samples RQ0026, RQ0053 and RQ0023 were received on July 11, 1998.

GC/MS VOLATILES

The matrix spike/matrix spike duplicate associated with sample RQ0023 in QC batch 8204133 exhibited Toluene and Chlorobenzene recoveries outside acceptance limits. However, since the associated method blank and laboratory control sample were in control, no corrective action was necessary.

Due to a power failure, no matrix spike/matrix spike duplicate was analyzed for QC batch 8204131. The laboratory control sample met QC criteria, and the data was accepted.

GC/MS SEMIVOLATILES

The matrix spike/matrix spike duplicate associated with sample RQ0023 in QC batch 8194133 and the MS/MSD in batch 8195116 both exhibited recoveries outside acceptance limits. However, since the associated method blanks and laboratory control samples were in control, no corrective action was necessary for either batch.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES (Contd.)

Sample RQ0020 exhibited 2-Fluorobiphenyl recovery outside acceptance limits. However, since the recovery was greater than 10% and all associated quality control met acceptance criteria, no corrective action was taken.

HPLC

The matrix spike/matrix spike duplicate associated with sample RQ0023 in QC batch 8195125 exhibited Tetryl and 2,4,6-Trinitrotoluene recoveries outside acceptance limits. However, since the associated method blank and laboratory control sample were in control, no corrective action was necessary.

METALS

Method blank contamination occurred.

- All affected analytes which were detected at a level less than 5% of the sample amount are flagged with "MBB".
- Where blank contamination was a common laboratory contaminant, and was less than two times the reporting limit, affected analytes are flagged with "MBD".

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes due to the sample concentration readings greater than four times the spike amount. See the Matrix Spike Report for the affected analytes, which will be flagged with "NC, MSB".

Matrix spike/spike duplicate recovery was outside the acceptance limits for some analytes. The acceptable LCS analysis data indicated that the analytical system was operating within control and this condition is most likely due to matrix interference. See the Matrix Spike Report for the affected analyte, which will be flagged with "N".

Serial dilution of a sample in this lot indicates that physical and chemical interferences are present. See the sample report pages for the affected analytes which will be flagged with "L".

The Matrix Spike Sample Evaluation Report contained in the quality control report was generated as part of the laboratory quality control program requirements. These requirements include the analysis of an MS/MSD on a one in twenty basis. Therefore, the associated MS/MSD may not reflect the same compounds as those of the samples contained in the analytical report.

Post-digestion spike recoveries were outside the acceptance limits for some analytes. The low recoveries may be attributed to matrix interference. See the sample report pages for the affected analytes which will be flagged with "Wa".

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

Matrix spike/spike duplicate recovery was outside the acceptance limits for Cyanide. The acceptable LCS analysis data indicated that the analytical system was operating within control and this condition is most likely due to matrix interference. See the Matrix Spike Report for the affected analyte, which will be flagged with "N".

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800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4888

COC NO.: L001

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 81-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): JOSEPH J WILSON

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	TAL Metals + Cyanide	Metals, Filtered	Cyanide	No. of Bottles/Vials
RQ0023	7/8/98	0945	SD	X	X	X	X				4
RQ0053		0945		X	X	X	X				4
RQ0026		1045		X	X	X	X				4
RQ0027		1100		X	X	X	X				4
D-200 RQ0028		1115		X	X	X	X				4
D-200 RQ0029		1145		X	X	X	X				4
RQ0032		1335		X	X	X	X				4
RQ0033		1350		X	X	X	X				4
RQ0035		1450		X	X	X	X				4
RQ0038		1525		X	X	X	X				4
RQ0054		1525		X	X	X	X				4
RQ0041		1545		X	X	X	X				4
RQ0042		1555		X	X	X	X				4

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS: *

	Date/Time		Date/Time		
RELINQUISHED BY: Joseph J Wilson	7/10/98 0724	RECEIVED BY: [illegible]	7/10 724	TOTAL NUMBER OF CONTAINERS: 52	Cooler Temperature:
COMPANY NAME: SAIC		COMPANY NAME: Austin Texas		Cooler ID: G91	FEDEX NUMBER: NA
RECEIVED BY: Terry Burns	7-10-98 9:00 AM	RELINQUISHED BY:		2 COCs for this cooler	
COMPANY NAME: Quanterra		COMPANY NAME:			
RELINQUISHED BY:		RECEIVED BY:			
COMPANY NAME:		COMPANY NAME:			

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COC NO.: L002

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total & Cyanide	Metals, Filtered	Cyanide	No. of Bottles/ Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0044	7/8/98	1640	SD		X	X	X	X			4	
RQ0045	↓	1645	↓		X	X	X	X			4	
D-201												

REQUESTED PARAMETERS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/10/98	Meg Henderson	7/10
COMPANY NAME: SAIC	0724	COMPANY NAME:	724
RECEIVED BY: Terry Burns	Date/Time 7-10-98	RELINQUISHED BY:	Date/Time
COMPANY NAME: Quanterra	9:00AM	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 8

Cooler ID: G91

Cooler Temperature:

FEDEX NUMBER: NA

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800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

COC NO.: L003

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-158

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/ Vials
RQ0021	7/8/98	1616	WA		X	X	X	X	X	X	9
D-202											

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/10/98 0724	Greg Vernon	7/10 724
COMPANY NAME: SAIC		COMPANY NAME: Quanterra	
RECEIVED BY: Terry Burns	Date/Time 7-10-98 9130 Am	RELINQUISHED BY:	Date/Time
COMPANY NAME: Quanterra		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 9

Cooler ID: G16

Cooler Temperature:

FEDEX NUMBER: NA

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COC NO.: L004

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-8388-04-8558-158

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide								No. of Bottles/ Vials:	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0020	7/8/98	1440	WA		X	X	X	X	X	X								8	
D-203																			

REQUESTED PARAMETERS

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/10/98	[signature]	7/10
COMPANY NAME: SAIC	0724	COMPANY NAME: QUANTERRA	724
RECEIVED BY: Perry Burns	Date/Time 7-10-98	RELINQUISHED BY:	Date/Time
COMPANY NAME: Quanterra	0900 AM	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 8

Cooler ID: B122

Cooler Temperature:

FEDEX NUMBER: NA

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COC NO.: L005

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 61-0388-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9782

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	* TAL Metals + Cyanide	No. of Bottles/Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0057	7/8/98	0820	WA	X								2	
RQ0018		0915		X								2	
RQ0051		0915		X								2	
RQ0019		1330		X	X	X	X	X	X	X		11	
RQ0020		1440		X								2	
RQ0021		1610		X								2	
RQ0023		0945	SD	X								1	
RQ0053		0945		X								1	
RQ0026		1045		X								1	
RQ0027		1100		X								1	
RQ0028		1115		X								1	
RQ0029		1145		X								1	
RQ0032		1335		X								1	

D-204

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/8/98	Greg Klemm	7/8
COMPANY NAME: SAIC	0724	COMPANY NAME: Quanterra	724
RECEIVED BY: Terry Burns	Date/Time 7-10-98	RELINQUISHED BY:	Date/Time
COMPANY NAME: Quanterra	900AM	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 28

Cooler ID: 320

Cooler Temperature:

FEDEX NUMBER: NA

2 COCs for this cooler

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COC NO.: L006

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-158

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide							No. of Bottles/ Vials:	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0033	7/8/98	1350	SD	X													4	
RQ0035		1450		X													1	
RQ0038		1525		X													1	
RQ0054		1525		X													1	
RQ0041		1545		X													1	
RQ0042		1555		X													1	
RQ0044		1640		X													1	
RQ0045		1645		X													1	

D-205

7/9/98

REQUESTED PARAMETERS

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/10/98	Greg Moore	7/10
COMPANY NAME: SAIC	0724	COMPANY NAME: Quanterra	724
RECEIVED BY: Terry Burns	Date/Time 7/10/98	RELINQUISHED BY:	Date/Time
COMPANY NAME: Quanterra	9:00AM	COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 8

Cooler ID: 320

Cooler Temperature:

FEDEX NUMBER: NA

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Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4888

COC NO.: L008

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-158

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	REQUESTED PARAMETERS: VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/ Vials:	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0018	7/8/98	0915	WA		X	X	X	X	X	X	9	

D-206

7/8/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson	7/10/98	Greg Hamman	7/10
COMPANY NAME: SAIC	0724	COMPANY NAME: QUANTERRA	724
RELINQUISHED BY: Terry Burns	Date/Time 7/10/98 9:00 AM	RELINQUISHED BY:	Date/Time
COMPANY NAME: Quanterra		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 9

Cooler ID: B114

Cooler Temperature:

FEDEX NUMBER:

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CHAIN OF CUSTODY RECORD

COC NO.: L007

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-158

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (signature) (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW North Canton, OH 44720

PHONE NO: (330)966-9792

REQUESTED PARAMETERS

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide								No. of Bottles/Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0051	7/8/98	0915	WA		X	X	X	X	X	X								9	

D-207

JW 7/9/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
Joseph J Wilson (signature)	07/10/98 0724	(signature)	7/10 724
COMPANY NAME: SAIC		COMPANY NAME: QUANTERRA	

RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
Perry Burns (signature)	7-10-98 0930AM		
COMPANY NAME: Quanterra		COMPANY NAME:	

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 9

Cooler ID: FØ5

Cooler Temperature:

FEDEX NUMBER: NA

CASE NARRATIVE

The following report contains the analytical results for four water samples and two solid samples submitted to Quanterra-North Canton by Science Applications International Corporation from the Ravenna-Ramsdell Quarry Site, project number 01-0380-04-9558-156. The samples were received July 29, 1998, according to documented sample acceptance procedures.

Quanterra utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the Analytical Methods Summary page in accordance with the methods indicated.

Explosives and Propellants analyses were performed at Quanterra's Knoxville, TN and West Sacramento, CA facilities. (Because the CA laboratory operates on a different laboratory information [LIMS] system, the West Sacramento data is presented under a separate cover.)

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

Supplemental QC Information

SAMPLE RECEIVING

The coolers were received at the North Canton laboratory at temperatures of 6.8, 7.8 and 7.4°C.

GC/MS VOLATILES

No anomalies were encountered.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

GC/MS SEMIVOLATILES

The method blank associated with samples RQ0064 and RQ0065 had contamination in excess of the acceptance criteria. Upon re-extraction and re-analysis, all QC met acceptance criteria, however the holding time had been exceeded. Both sets of data are reported.

The matrix spike/matrix spike duplicates associated with batches 8215126 and 8228102 exhibited RPDs outside acceptance limits. However, since the associated method blank and laboratory control sample were in control, no corrective action was necessary.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

CASE NARRATIVE (continued)

HPLC - Explosives

The matrix spike/matrix spike duplicate associated with batch 8217164 failed recovery and RPD criteria. The laboratory control sample associated with this batch was in control. This is believed to be a matrix effect; therefore, no further corrective action was taken.

Sample(s) which contain results between the MDL and the RL are flagged with "J". There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

METALS

Matrix spike/matrix spike duplicate recoveries were outside the acceptance limits for some analytes. The acceptable laboratory control sample analysis data indicated that the analytical system was operating within control and this condition is most likely due to matrix interference. See the Matrix Spike Report for the affected analytes, which will be flagged with "N".

Matrix spike/spike duplicate relative percent difference (RPD) exceeded the acceptance limits for some analytes. The imprecision may be attributed to sample heterogeneity. See the Matrix Spike Report for the affected analytes which will be flagged with "*".

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which have been flagged with "NC, MSB".

GENERAL CHEMISTRY

No anomalies were encountered.

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COC.NO.: L020

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): [signature] **(Printed Name):** Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	TAL Metals + CN						No. of Bottles/Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0017	7/27/98	0839	WA		X	X											4	
RQ0047	↓	0839	↓		X	X	X										6	
RQ0064		0949	SD	X	X	X	X			X	X						5	
RQ0065		0949	↓	X	X	X	X				X						5	

D-211

7/28/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
[signature]	7/29/98	[signature]	7/29
COMPANY NAME: SAIC	0730	COMPANY NAME: QUANTERRA	7:30 AM
RECEIVED BY:	Date/Time	RELINQUISHED BY: [signature]	Date/Time 7/29
COMPANY NAME:		COMPANY NAME: QUANTERRA	850A
RELINQUISHED BY:	Date/Time	RECEIVED BY: Tami Stephens	Date/Time 7-29-98
COMPANY NAME:		COMPANY NAME: Quanterra	8:50A

TOTAL NUMBER OF CONTAINERS: 20

Cooler ID: 032

Cooler Temperature:

FEDEX NUMBER:

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800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

COC NO.: L021

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9550-158

PROJECT MANAGER: Steve Soleeman

Sampler (Signature): [signature] (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9782

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellants	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/Vials	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ8047	7/27/98	0839	WA					X	X	X	3	
RQ0017	↓	↓	↓				X	X	X	X	5	

REQUESTED PARAMETERS

D-212

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
[signature]	7/29/98	[signature]	7/29
COMPANY NAME: SAIC	0734	COMPANY NAME: QUANTERRA	730 M
RECEIVED BY:	Date/Time	RELINQUISHED BY: [signature]	Date/Time 7/29
COMPANY NAME:		COMPANY NAME: QUANTERRA	850 M
RELINQUISHED BY:	Date/Time	RECEIVED BY: Tami Stephens	Date/Time 7-29-98
COMPANY NAME:		COMPANY NAME: Quanterra	8:50 A

TOTAL NUMBER OF CONTAINERS: 8

Cooler ID: A53

Cooler Temperature:

FEDEX NUMBER:

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Science Applications International Corporation
800 Oak Ridge Turnpike, Oak Ridge, TN 37831 (423) 481-4800

COC NO.: L022

CHAIN OF CUSTODY RECORD

PROJECT NAME: RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

PROJECT NUMBER: 01-0380-04-9558-156

PROJECT MANAGER: Steve Selecman

Sampler (Signature): Joseph J Wilson (Printed Name): Joseph J Wilson

LABORATORY NAME: Quanterra Environmental

LABORATORY ADDRESS: 4101 Shuffel Dr. NW, North Canton, OH 44720

PHONE NO: (330)966-9792

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Explosives	Propellents	Metals, Total	Metals, Filtered	Cyanide	No. of Bottles/ Vials:	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
RQ0063	7/27/98	0730	WA	X							3	
RQ0017	↓	0839	↓	X							3	
RQ0047		0839		X							3	
RQ0007		1449		X	X	X	X	X	X	X	12	

REQUESTED PARAMETERS

D-213

7/28/98

RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME: SAIC		COMPANY NAME: QUANTERRA	7/29 0730
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:	

TOTAL NUMBER OF CONTAINERS: 21

Cooler ID: 95

Cooler Temperature:

FEDEX NUMBER:

APPENDIX E

GEOTECHNICAL DATA

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

Table E-1. Geotechnical Sample Locations and Depths

Geotechnical Sample ID	Sampling Location	Depth Interval (ft)
RQ0006	RQLmw-006	1 - 2
RQ0016	RQLmw-011	0.3 – 1.0
RQ0023	RQLsd-012	0 – 0.5
RQ0028	RQLsd-018	2 – 4
RQ0029	RQLsd-019	0 – 0.5
RQ0033	RQLsd-013	0.5 – 1.25
RQ0035	RQLsd-014	0 – 0.5
RQ0038	RQLsd-022	0 – 0.45
RQ0042	RQLsd-023	0.5 – 1.2
RQ0044	RQLsd-024	0 – 0.5

P.02

SUMMARY TABLE OF RESULTS FOR RAMSDELL QUARRY LANDFILL GROUNDWATER INVESTIGATION

SAMPLE NO.	MOISTURE CONTENT (%)	ATTERBERG LIMITS FINES CLASSIFICATION			
		LL	PL	PI	
RQ0023	44.4	35.5	18.7	16.8	CL
RQ0028	43.3	50.1	33.8	16.9	MH
RQ0029	22.3	NP			
RQ0033	64.9	NP			
RQ0035	89.9	34.7	21.7	13.0	CL
RQ0038	103.7	NP			
RQ0042	68.4	42.6	31.3	11.3	ML
RQ0044	97.1	55.0	45.8	9.2	MH
RQ0006	11.5	43.6	15.7	27.7	CL
RQ0016	4.2	NP			

SIEVE ANALSIS (% PASSING)											
3"	2"	1 1/2"	3/4"	3/8"	#4	#10	#20	#40	#60	#140	#200
100	100	100	100	74.9	59.8	47.0	40.2	35.0	26.1	3.5	0.5
100	100	100	100	100	97.3	88.3	78.7	68.4	52.7	9.9	0.9
100	100	100	94.3	81.7	73.2	67.8	60.9	54.4	43.2	7.1	0.4
100	100	100	100	96.1	76.7	61.3	55.6	52.2	46.6	3.4	0.3
100	100	100	100	98.4	92.5	77.9	68.4	58.5	46.7	9.5	0.3
100	100	100	90.8	63.8	50.3	42.8	37.8	33.7	28.3	3.5	0.3
100	100	100	100	100	93.2	77.5	69.9	65.9	60.3	9.8	0.6
100	100	100	100	83.0	74.5	64.7	55.0	46.6	37.4	7.5	0.5
100	100	100	100	100	91.4	72.9	48.8	33.9	20.6	4.8	0.4
100	100	100	93.3	60.7	40.5	33.0	29.8	27.9	25.4	2.8	0.4

SAMPLE NO.	UCS	
RQ0023	SC	GRAY CLAYEY SAND
RQ0028	MH	BROWNISH GRAY SILTY SOIL
RQ0029	SP	BROWN SAND W/ ORGANICS (ROOTS)
RQ0033	SP	BROWNISH GRAY SAND
RQ0035	SC	DARK BROWN GRAY CLAYEY SAND
RQ0038	SP	GRAY SAND
RQ0042	ML	BROWNISH GRAY SANDY SILT
RQ0044	MH	BROWNISH GRAY SILTY SOIL
RQ0006	SC	BROWN CLAYEY SAND
RQ0016	SP	YELLOW-ORANGE SAND W/ ROCKS

E4

CATLIN Engineers and Scientists
Geotechnical Laboratories

APPENDIX F

SURVEY DATA

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

Table F-1. 1997 Survey Data for RQL Monitoring Wells (USACE)

Well I.D.	Ground Surface Elevation (ft)	Top of Casing Elevation (ft)
MW-1	985.42	986.22
MW-2	982.73	985.05
MW-3	973.52	976.17
MW-4	990.66	992.06
MW-5	976.11	977.76

ACHW Project No. 98713.0
JOB: 987130-4.CRS TIME: 14:44 DATE: 08-10-1998
Ramsdell Quarry Landfill @ RAAP

Point	Northing	Easting	Elevation	Note
20	566551.954000	2375895.144000	963.240	LF 1
21	566751.960000	2375594.931000	986.130	MW-1
22	566857.393000	2376048.582000	982.140	MW-10
23	566819.656000	2376398.191000	976.570	MW-11
24	566257.860000	2376407.059000	981.920	MW-2
25	566750.378000	2376486.901000	975.570	MW-3
26	566160.412000	2376105.600000	991.800	MW-4
27	566840.247000	2376248.946000	977.600	MW-5
28	566091.259000	2375927.713000	995.390	MW-6
29	566544.355000	2375872.562000	965.910	MW-7
30	566327.945000	2376011.082000	966.080	MW-8
31	566351.199000	2376253.654000	964.580	MW-9
32	566867.009000	2376450.822000	973.420	RAV 8
101	566544.355000	2375872.562000	965.910	MW-7
102	566857.363000	2376048.566000	982.090	MW-10
103	566748.377000	2375936.989000	961.660	STAFF
104	566256.253000	2376331.608000	983.120	LF-1A
105	566415.990000	2376008.469000	959.020	RQL.SD.17
106	566557.971000	2376056.962000	961.130	19
107	566673.510000	2375987.889000	959.490	18
108	566404.695000	2376189.680000	957.300	20
109	566773.518000	2375937.998000	956.130	24
110	566729.317000	2375989.573000	956.080	23
111	566675.694000	2376077.227000	956.660	22
112	566602.688000	2376177.669000	956.810	21

APPENDIX G

UXO SURVEILLANCE REPORT

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

SUMMARY REPORT
RAVENNA ARMY AMMUNITION PLANT
RAVENNA, OHIO
RAMSDELL POND AND QUARRY AREA

EOD Technology, Inc. (EODT) was notified by Kathy Dominic and Steve Selecman of SAIC to mobilize one UXO technician on Monday, July 6, 1998, to the Ravenna, Ohio site. The project took two working days to complete with site work commencing July 7, 1998, and concluding July 8, 1998. The task was to conduct UXO avoidance in support of SAIC's soil-sampling activities in and around the Ramsdell Pond and Quarry. During the course of the project, no ordnance and explosives, unexploded ordnance, or ordnance related scrap were encountered.

In ensuring personnel safety, Billy Francis, the EODT UXO technician, assisted SAIC in the on-site training by discussing the types of UXO possibly present and their hazards. In addition, a Schonstedt 72 CD gradiometer and a Schonstedt MG 220 underwater/downhole magnetometer were used to clear access lanes and underwater sampling locations. The only metallic objects encountered were pipes, fittings, various pieces of scrap metal, channel steel, angle iron, culverts, cross ties, and an empty metal drum.

A total of four soil samples were taken in the quarry and four in the pond. The pond was two-to-four feet deep and the pond soil samples were taken from a Jon Boat.

The following personnel were on site at one time or another:

NAME	COMPANY
Steve Selecman	SAIC
Kathy Dominic	SAIC
Joe Wilson	SAIC
Heather Smith	SAIC
Paul Luct	SAIC
Mike Klidezys	SAIC
John Jent	USACE
Kenneth Henn	USACE
Billy Francis	EODT

Monday, July 6, 1998:
Mobilization - Billy Francis, the EODT UXO technician, mobilized to the Kent, Ohio Holiday Inn, with all necessary equipment and data forwarded to the Holiday Inn. Mr. Francis prepared the equipment and purchased marking material locally.

Tuesday, July 7, 1998:
The weather was very hot and humid. The day consisted of a briefing by Kathy Dominic and Joe Wilson prior to commencing site activities. Billy Francis reconnoitered the site and then cleared access lanes to and around the four quarry soil-sampling locations. The latter part of the day consisted of assisting SAIC in obtaining and checking equipment to include the Jon Boat.

Wednesday, July 8, 1998:
The weather was once again hot and humid. Billy Francis assisted SAIC in obtaining four quarry soil samples and cleared the four underwater soil-sampling locations in support of pond soil sampling.

Thursday, July 9, 1998
Billy Francis was released by SAIC and demobilized from the site.

A copy of the daily log is attached as requested.

MONDAY 6 JULY 1998

2900 Depart Owensboro, Ky. P.O.V.
Travel to Kent Ohio EOD Support
for S.A.I.C., Ravenna Army Ammo
plant Ravenna Ohio.
1815 arrive Kent ohio checked in Holiday
Inn.

Endorsed by Billy T. Francis July 6th 1998

TUESDAY 7th JULY 1992

0730 Reported To Kathy Dominic
Project Manager for SAIC. Scientific
applications Industrial Corporation
Ravenna Army Ammo plant
Ravenna, Ohio Introduced to Following
members of SAIC on Site.
Joe Wilson
Heather Smith
Paul Luct
Mike Klidzejs
Steve Selecman
Kathy Dominic
Representives from Army Corps of
Engineers Louisville, Ky. On Site
John Jent
Kenneth Henn.
1100 Safety and Work Plan by Kathy Dominic
and Joe Wilson for all On Site personnel
1200 Lunch
1300 Recon of Ramsdell Pond area
Clearance of access lanes and Four

TUESDAY 7 JULY 1998

Sampling Sites outside of Pond Area. Rest of afternoon Gathered all tools & Equipment plus 10' Jon Boat to Complete Soil Sampling Project.

Wednesday 8 July 1998

1800 Return to Motel

Ended Log Billy J. Parnell 7 July 1998

WEDNESDAY 8 JULY 1998

0730 REPORT TO BUILDING 1036 RAAP Ohio.

0745 Depart for Ramsdell Pond. & Complet Soil Sampling and EOD-Support for Joe Wilson & Paul Lucat Two Gathering Soil Samples from Pond. no evidence of any types of ordnance and no Scrap ordnance. all Scrap metal Consisted of Pipe, Pipe Fittings angle Steel Channel Steel metal Drum metal culverts and metal Fence post. no readings from Magnatometer at Soil Sampling Sites No readings for Under water Sites Sampled. Pond Depths from 1' to 4' maximum depth Completed all Eight (8) Soil Sampling Sites this Date 4 underwater & 4 outside perimeter of Pond. Marked on Pond map

1830 Return to Motel

End of Log Billy J Francis 8 July 98 — —

Thursday 9 July 1998

0600 Depart Akron Ohio Returning to Owensboro, Ky Completion of Project to SAIC, no EOD Support was requested by Project Manager Kathy Dominic for well drilling released after Two (2) days by Project Manager

Ending Billy T Pronas 9 July 1998

APPENDIX H

SEDIMENT SAMPLING LOGS

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

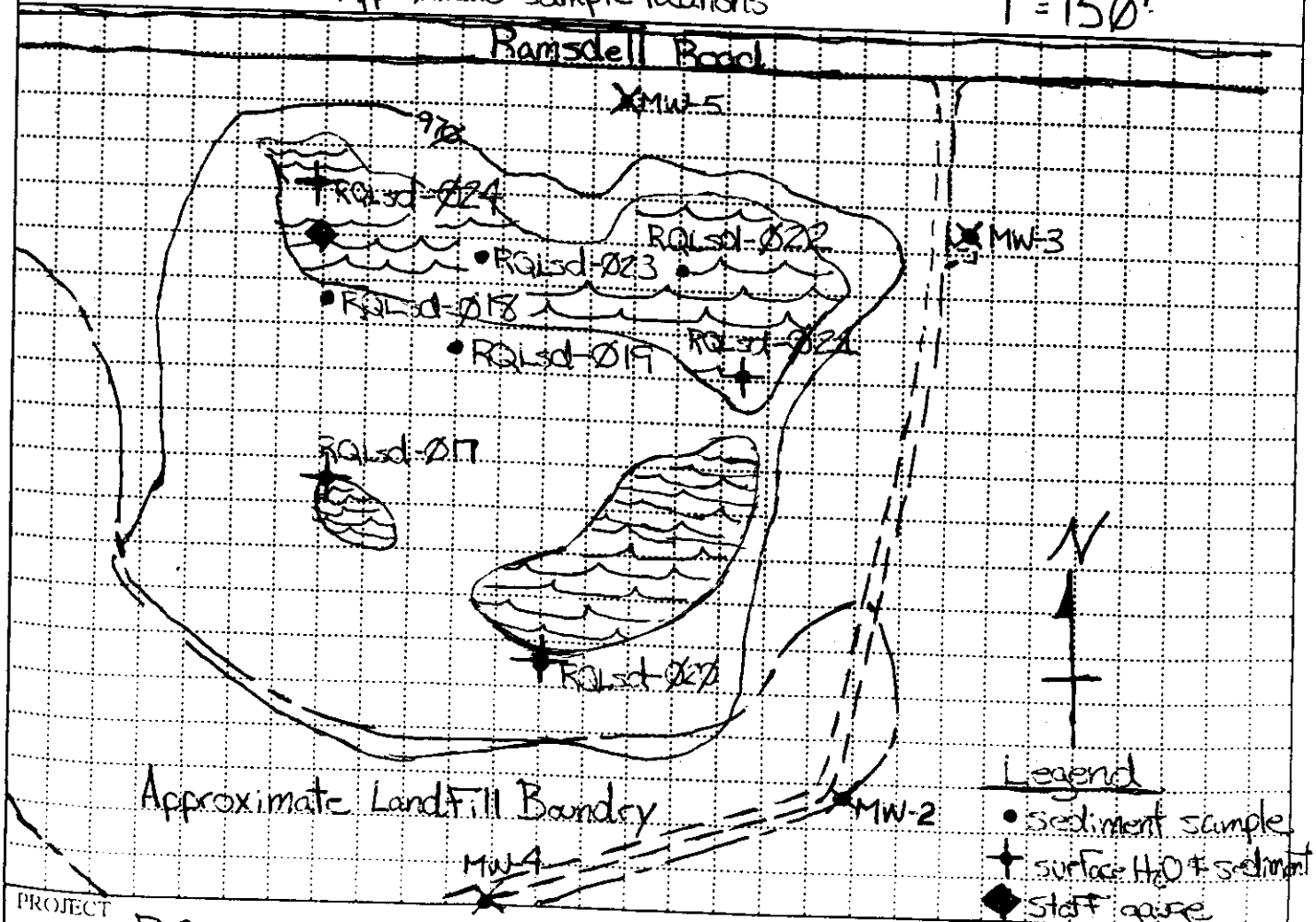
HTRW DRILLING LOG

1. COMPANY NAME: SAIC	DISTRICT: Louisville, KY	HOLE NUMBER: RQLsd-Ø17
3. PROJECT: Ramsdell Quarry LandFill	2. DRILL SUBCONTRACTOR: NA	SHEET 1 OF 1 SHEETS
5. NAME OF DRILLER: NA	4. LOCATION: Ramsdell Quarry LandFill	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 3" dia, Stainless steel bucket auger, stainless steel bowls and spoons	6. MANUFACTURERS DESIGNATION OF DRILL: NA	
	8. HOLE LOCATION: RQLsd-Ø17	
	9. SURFACE ELEVATION	
12. OVERBURDEN THICKNESS: Ø.6'	10. DATE STARTED: 7/8/98	11. DATE COMPLETED: 7/8/98
13. DEPTH DRILLED INTO ROCK	15. DEPTH GROUNDWATER ENCOUNTERED: NA	
14. TOTAL DEPTH OF HOLE: Ø.6'	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED ✓	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
RQØØ23			NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
RQØØ23/RQØØ53/RQØØ55	✓	TAL, CN-	SVOC	Explosives	Propellants	NA
22. DISPOSITION OF HOLE: NA	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR: Paul J. Luck		

LOCATION SKETCH/COMMENTS: Approximate sample locations — SCALE: 1" = 150'



PROJECT	HOLE NO.
RQL	RQLsd-Ø17

TASK TEAM ACTIVITY LOG SHEET Location: RQLsd-Ø17

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 7/8/98 Su M Tu (W) Th F Sa PAGE 1 OF 2

Task Team Members:

Paul Lucot

Joe Wilson

Bill Francais (EOD Technician)

Location: RQLsd-Ø17		
Sediment Sample #'s: ~~RQØØ18~~ PSL	RQØØ23	Ø.Ø'-Ø.5'
Duplicate #'s:	RQØØ53	Ø.Ø'-Ø.5'
Split #'s:	RQØØ55	Ø.Ø'-Ø.5'

Narrative (include time and location):

-sparse cat tails growing on surface ± Ø.5' of standing water

Ø85Ø: Leave building # 1Ø36

Ø915: Set-up to collect surface water sample ID RQØØ18 & split ID RQØØ52 & duplicate ID RQØØ51

Cond. = 1.17 ~~mS~~ µS/cm

Turb. = 73 NTU

D.O. = 1.91 mg/l

Temp. = 21° C

pH = 8.12 SU

Ø945: sediment is poorly sorted GRAVEL with traces of silt and sand, wet, dark gray, gravel is subangular to subrounded

Ø945 - Collect sediment sample ID RQØØ23, split ID RQØØ55 and duplicate ID RQØØ53 from Ø.Ø' - Ø.5' Headspace = 199 ppm

Daily Weather Conditions: A.M. Mid 7Ø's, overcast (~Ø.75" of rain overnight)

P.M. NA

Recorded By Paul G. Lucot QA Checked By [illegible]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 00**

Date (mm/dd/yy): 7/8/98 Su M Tu (W) Th F Sa PAGE 2 OF 2

Task Team Members:

Paul Lucot

Joe Wilson

Bill Francais (EQD Technician)

Narrative (include time and location):

1020: Refusal at 0.6' on sandstone bedrock.

~~Note: Split sample RQ0055~~

Note: Split sample RQ0055 arrived @ Omaha Labs above temperature. Will re-collect this sample and corresponding samples.

PSL 7/9/98

Daily Weather Conditions: A.M. Mid 80's & overcast (~0.75" of rain overnight)

P.M. NA

Recorded By Paul J. Lucot QA Checked By [illegible]

TASK TEAM ACTIVITY LOG SHEET Location: RQLsd-Ø18

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 7/8/98 Su M Tu (W) Th F Sa PAGE 1 OF 1

Task Team Members:

Paul Lucot
Joe Wilson
Bill Francais (EOD Tech)

Location: RQLsd-Ø18
Sediment Sample #'s: RQØØ26 Ø.Ø'-Ø.5'
RQØØ27 Ø.5'-2.Ø'
RQØØ28 2.Ø'-4.Ø'

Narrative (include time and location):

- Sample location is ~5' from south side of pond in thick cat tails
1Ø4Ø: Prepare to collect sediment sample ~~ID~~ from psl 7/13/98 RQLsd-Ø18
1Ø45: Collect sediment sample ID RQØØ26 from Ø.Ø'-Ø.5'
1.4Ø9 ppm - sediment is SILT with some organic debris and traces of sand and gravel, brown, wet
11ØØ: Collect sediment sample ID RQØØ27 from Ø.5'-2.Ø'
13Ø.9 ppm - sediment is SILT with some coarse sand to medium gravel, sand and gravel are angular to subangular sandstone and shale fragments, traces of organic debris
1115: Collect sediment sample ID RQØØ28 from 2.Ø'-4.Ø'
1.4Ø9 ppm - sediment is Silty CLAY with some poorly sorted, angular sand. CLAY is mottled.
- No refusal to 4.Ø'.

psl 7/13/98

Daily Weather Conditions: A.M. Mid 8Ø's overcast (~Ø.75" of rain overnight)

P.M. NA

Recorded By [signature] QA Checked By [signature]

TASK TEAM ACTIVITY LOG SHEET Location: RQLsd019

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 7/8/98 Su M Tu (W) Th F Sa PAGE 1 OF 1

Task Team Members:

Paul Lucot

Joe Wilson

Bill Francais (EOD Technician)

Location: RQLsd-019
Sediment Sample #'s: RQ0029

Narrative (include time and location):

- Native warm season grasses on surface of location

1140: Go to sample location RQLsd-019

1145: Collect sediment sample # RQ0029 From 0.0'-0.5'

- sediment is CLAY with some silt and traces of gravel and grass roots, light brown, moist P.I.D. = 0.0 ppm

Refusal @ 0.5' on sandstone bedrock

PSL
7/8/98

Daily Weather Conditions: A.M. NA

P.M. Mid 80's, overcast (~0.75" of rain last night)

Recorded By Paul Lucot QA Checked By

TASK TEAM ACTIVITY LOG SHEET Location: RQLsd-ØZØ

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 7/8/98 Su M Tu (W) Th F Sa PAGE 1 OF 1

Task Team Members:

Paul Lucot
Joe Wilson
Bill Francais (EOD Technician)

Location: RQLsd-ØZØ
Sediment
Sample #'s: RQØØ32 Ø.Ø'-Ø.5'
: RQØØ33 Ø.5'-1.25'

Narrative (include time and location):

-sample location has Ø.5' of standing water & dense cat tail growth
1315: Set-up at RQLsd-ØZØ
133Ø: Collect surface water sample ID# RQØØ19
pH = 8.94
Cond: Ø.516 mS/cm
Turb. >1000
D.O. = Ø.16 mg/l
Temp. = 25.8°C
1335: Collect sediment sample# RQØØ32 From Ø.Ø'-Ø.5'
61.7 ppm -Silty CLAY with organic debris and traces of very Fine sand, wet, light gray
135Ø: Collect sediment sample# RQØØ33 From Ø.5'-1.25'
48.3 ppm -sediment is SILT and poorly sorted Gravel with some organic debris, gravel is angular to subangular, gray, wet
Refusal at 1.25' on hard sandstone bedrock

Daily Weather Conditions: A.M. NA
P.M. Mid 8Ø's, overcast (~Ø.75" of rain overnight)

Recorded By Paul Lucot QA Checked By Joseph O'Neil

TASK TEAM ACTIVITY LOG SHEET Location: RQLsd-Ø21

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 7/8/98 Su M Tu (W) Th F Sa PAGE 1 OF 1

Task Team Members:

Paul Lucot
Joe Wilson
Bill Francais (EOD Technician)

Location: RQLsd-Ø21
Sediment Sample #: RQØØ35 Ø.Ø'-Ø.5'

Narrative (include time and location): Sediment Location: RQLsd-Ø21

1440: Collect surface water sample ID# RQØØ2Ø
- water is approximately 2.5' deep
pH = 7.91 su
Cond. = Ø.377 mS/cm
Turb. = 42 NTU
D.O. = 1.52 mg/l
Temp. = 24.Ø °C

1450: Collect sediment sample ID# RQØØ35 from Ø.Ø'-Ø.5'
PID = ppm
- sediment is SILT ~~and Organic~~ PSL 7/8/98 with Organic debris and traces of gravel, gravel is angular to subangular sandstone, black, wet

Refusal @ Ø.4' on hard surface

7/17/98

Daily Weather Conditions: A.M. NA
P.M. Mid 80's, overcast (Ø.75" of rain overnight)

Recorded By Paul G. Lucot QA Checked By George J. Wilson

TASK TEAM ACTIVITY LOG SHEET Location: RQL-sd-Ø22

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 7/8/98 Su M Tu (W) Th F Sa PAGE 1 OF 1

Task Team Members:

Paul Lucot
Joe Wilson
Bill Francais (EOD Technician)

Location: RQL-sd-Ø22
Sediment Sample #'s: RQØØ38 Ø.Ø'-Ø.45'
Duplicate #: RQØØ54 Ø.Ø'-Ø.45'

Narrative (include time and location): Sediment Location: RQL-sd-Ø22

1510: Load boat to sample at station RQL-sd-Ø22
1515: ~~Collect surface water sample # RQLØØ21~~ PJL 7/8/98 No water sample
PJL 7/8/98 - water is approximately 3.Ø' deep
~~1525~~: pH = 8.38 su
Cond. = Ø.356 mS/cm
Turb. = 16 NTU
D.O. = Ø.91 mg/l
Temp. = 24.6°C
1525: Collect sediment sample ID# RQØØ38 and duplicate sample ID# RQØØ54 From Ø.Ø'-Ø.45'
PID = ppm
- sediment is SILT with some gravel and sand, gravel is poorly sorted and angular, wet, black
Refusal @ Ø.45' on cobbles and boulders

Daily Weather Conditions: A.M. NA
P.M. Mid 80's & overcast, (Ø.75"

Recorded By Paul Lucot QA Checked By

TASK TEAM ACTIVITY LOG SHEET Location: RQL-sd-Ø23

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 7/8/98 Su M Tu (W) Th F Sa PAGE 1 OF 1

Task Team Members:

Paul Lucot
Joe Wilson
Bill Francais (EOD Technician)

Location: RQL-sd-Ø23
Sediment Sample #'s: RQØØ41 Ø.Ø'-Ø.5'
RQØØ42 Ø.5'-1.2'

Narrative (include time and location):

15PR 7/8/98

1545: Collect sediment sample I.D# RQØØ41 From Ø.Ø'-Ø.5' P.I.D.=1999

- sediment is SILT with some gravel, gravel is poorly sorted and angular to subangular, wet, dark gray

1555: Collect sediment sample ID# RQØØ42 From Ø.5'-2.Ø' P.I.D.=338

- sediment is SILT and CLAY with some gravel, gravel is poorly sorted and angular to subangular, dark gray, & wet

Refusal @ 1.2' on hard material

Water Quality @ RQL-sd-Ø23

pH = 8.19 su
Cond. = Ø.312 mS/cm
Turb. = 2 NTU
D.O. = 7.83 mg/l
Temp. = 24.2 °C

Daily Weather Conditions: A.M. NA

P.M. Mid 8Ø's & overcast (~Ø.75" of rain last night)

Recorded By Paul G. Lucot QA Checked By [illegible]

TASK TEAM ACTIVITY LOG SHEET Location: RQLsd-Ø24

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation **DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 7/8/98

Task Team Members: Su M Tu (W) Th F Sa PAGE 1 OF 1

Paul Lucot
Joe Wilson
Bill Francais (EOD Technician)

Location: RQLsd-Ø24
Sediment
Sample #'s: RQØØ44 Ø.Ø'-Ø.5'
: RQØØ45 Ø.5'-2.Ø'

Narrative (include time and location):

1600: Go to sediment location RQLsd-Ø24
1640: Collect sediment sample # RQØØ44 From Ø.Ø'-Ø.5'
PID-Ø.Ø - sediment is SILT and CLAY with traces of gravel, gravel is poorly sorted and angular, black, wet
1645: Collect sediment sample # RQØØ45 From Ø.5'-2.Ø'
PID-Ø.Ø - sediment is SILT and CLAY with traces of gravel, gravel is poorly sorted and angular, black, wet
Refusal @ 1.8' on hard material
-Also collected surfacewater, see surfacewater log

PSL
7/8/98

Daily Weather Conditions: A.M. NA
P.M. Mid 80's & overcast (Ø.75" of rain last night)

Recorded By Paul S. Lucot QA Checked By Joseph S. Wilson

APPENDIX I

DAILY QUALITY CONTROL REPORTS

INITIAL PHASE REPORT
GROUNDWATER INVESTIGATION
RAMSDELL QUARRY LANDFILL
RAVENNA ARMY AMMUNITION PLANT

DAILY QUALITY CONTROL REPORT

DATE 7 JULY 1998

DAY | S | M | T | W | TH | F | S |

WEATHER | Bright Sun | Clear | Overcast ✓ | Rain | Snow |

TEMP | To 32° | 32-30° | 30-70° | 70-85° | 85° up 85° |

WIND | Still ✓ | Moder. | High | Report No. 1 |

HUMIDITY | Dry | Moder. | Humid ✓ |

COE PROJECT MANAGER JOHN JENT

PROJECT RAMSDELL QUARRY LANDFILL G.W.

JOB NO. 003

CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE: BOWSER-MORNER (Drillers); EOD TECHNOLOGIES (UXO Support)

EQUIPMENT ON SITE: 1 Mobile Drill rig; 1 Support truck

WORK PERFORMED (INCLUDING SAMPLING): SAIC + B-M staff arrived 07:00 to 0720. EOD Tech's Bill Francis @ 0730. Mobilization, sampling equipment decontamination, staging of supplies and materials took place. Drill rig + crew arrived 1030. Site orientation / H+S pre-entry briefing was given by K. Dominic + J Wilson 11:00 – 11:50. Following a lunch break + supply run in Newton Falls, SAIC returned to Bldg 1036. Rig was inspected and deemed. S. Selecman + S Pack arrived @ 1336. All staff went to RQL to 1) scope out sediment / surface water sampling locations and water depths in RQL pond 2) select a location for pond data logger, 3) do UXO clearance of pond 4) select approach paths for drill rig to well locations at RQL. At 1430, drill rig arrived at RQL. Portage County Health Dept.'s Steve Vecke was present at RQL as well. J. Jent + K. Hess from USACE, Lynn Tait + Mark from (Metals screening subcontractor for Load Line 1). Instruments for H+S monitoring arrived @ 1450, so drilling commenced at RQLmw-006 (Upgradient well). Rain / thunderstorms threatened in late afternoon. Following reconnaissance of RQL Pond, Dominic, Selecman, Pack, Lucat, and Wilson (SAIC), left the site @ 1700. Klidjezs, Smith, and B/M + EODT personnel left @ 1800.

K Dominic 7/7/98

PROJECT RQL Groundwater Investigation REPORT NO. 1

JOB NO. _____ DATE: 7-7-98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS): Instruments arrived calibrated today. Mini-Rae SV was checked before use.

HEALTH AND SAFETY LEVELS AND ACTIVITIES: Level D - hard hats + ear protection required @ drill rig.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN: ① Need to address whether the 5 existing wells will be micropurged or conventionally purged for sampling. ② Pond is generally <3' deep - will need to build a platform for staff gauge + data logger setup to accommodate this. ③ Need to address how IDW drums staged at RQL will be moved to Bldg. 1036 staging area.

SPECIAL NOTES: Salvage contractor vandalized abandoned houses @ RVAAP over weekend. Project staff admonished to stay in RQL area only.

TOMORROW'S EXPECTATIONS: Sample surface water/seds. Reconsider design of staff gauge. Continue well drilling/installation.

By: _____ QA Check by: _____

(Signature and date) (Signature and date)

S-005MS-053095

DAILY QUALITY CONTROL REPORT

DATE 7.8.98

DAY: S | M | T | W ✓ | TH | F | S

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
			✓		
TEMP	To 32°	32-50°	50-70°	70-85°	85° up ✓
WIND	Still ✓	Moder.	High	Report No.	
HUMIDITY	Dry	Moder.	Humid ✓	2	

COE PROJECT MANAGER J. Jent

PROJECT RQL Groundwater Investigation

JOB NO. 003

CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE: Bowser-Morner (drillers); EOD Tech (UXO support)

EQUIPMENT ON SITE: Mobile drill rig; steam cleaner, support truck & barrel lifter truck.

WORK PERFORMED (INCLUDING SAMPLING): Surface water and sediment sampling at RQL pond was initiated + completed today. Filtering of water was postponed until tomorrow pending receipt of filters. Drilling resumed at RQLmw-006 - only 1 ft of water was present in the hole this a.m. Well borehole was drilled to approx 40 ft, and it was difficult to identify the aquifer - Water exists in fracture porosity that is difficult to spot in core. Therefore, the well was set with a 20' screen to compensate for the uncertainty about location of the saturated zones. K Dominic was participating in meetings throughout the day. Following collection + securing of pond samples, P. Lucot + J. Wilson left site @ 1730; Dominic @ 1800; H. Smith departed @ 1730; Klidjezs departed 1900 after well was grouted. Geotech soil samples were collected at the upgradient well, but there is very little unconsol. material for geotech. No UXO encountered in or around the pond during sample collection activities. EOD Tech completed work on site today.

95-005MS/053095

(Continuation Sheet)

PROJECT RQL Groundwater Investigation REPORT NO. 2

JOB NO. _____ DATE: 7.8.98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS): Mini-rae PIDs calibrated per M+TE log. No other instruments used.

L Dominic 7/8/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES: Level D - hearing protection req'd around drill rig. UXO support for sed/surface sampling.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN: (1) Difficulty identifying saturated zone in sandstone bedrock. This makes setting the well in "first water" difficult -- there is no "water table," per se, as assumed previously.

L Dominic 7/8/98

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS: Begin drilling @ RQL mw-007; prep and ship sediment/surface water samples. Begin construction of staff gauge.

By: L Dominic
(Signature and date)

QA Check by: _____ 7/21/98
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7-9-98

DAY: S M T W TH ✓ F S

WEATHER: Bright Sun | Clear ✓ | Overcast | Rain | Snow

TEMP: To 32° | 32-50° | 50-70° | 70-85° | 85° up ✓

WIND: Still | Moder. ✓ | High

HUMIDITY: Dry | Moder. ✓ | Humid

Report No. 3

COE PROJECT MANAGER J. Jent

PROJECT RQL Groundwater Investigation

JOB NO.

CONTRACT NO.

SUB-CONTRACTORS ON SITE: Bowser-Morner (driller)

EQUIPMENT ON SITE: Mobile drill rig; steam cleaner; support truck; barrel lifter truck.

WORK PERFORMED (INCLUDING SAMPLING): Drilling and well installation at RQLmw-~~00~~10. Conditions in subsurface very similar to those at RQLmw-006. WELL INSTALLED W/ BOTTOM AT 32.96 FT BGS; SCREEN SET FROM 32.46 - 12.46 FT BGS. 20 FT SCREEN USED TO INSURE THAT POTENTIOMETRIC SURFACE WAS INTERCEPTED BY WELL SCREEN.

J. Wilson & D. West work on sample management tasks. ~~[illegible]~~

7/14/98

7/14/98

95-005MS/053095

(Continuation Sheet)

PROJECT RAAP RDL GW INVEST. REPORT NO. 3

JOB NO. 003 DATE: 7/9/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

PIDs CALIBRATED (SEE MBTE CAL LOG)

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- HELD DAILY H&S TAILGATE MEETING
- ALL ACTIVITIES IN LEVEL D PPE

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

NONE

SPECIAL NOTES:

NONE

TOMORROW'S EXPECTATIONS:

- DRILL AND INSTALL MW RDL MW-11

By: _____ 7/9/98
(Signature and date)

QA Check by: _____ 7/10/98
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/10/98

DAY	S	M	T	W	TH	F	S
					X	

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
	X			

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
			X	

WIND	Still	Moder.	High	Report No.
	X		4

HUMIDITY	Dry	Moder.	Humid
	X	

COE PROJECT MANAGER JOHN JENT
PROJECT RAAP RQL GW INVEST
JOB NO. 0003
CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE:

BOWSER-MORNER

EQUIPMENT ON SITE: 1 MOBILE B-59, STEAM CLEANER, SUPPORT TRUCK, BARREL LIFT TRUCK

WORK PERFORMED (INCLUDING SAMPLING):

- DRILLED & INSTALLED MW RQLMW-11. BOTTOM OF WELL AT 32.4 FT BGS. WELL SCREEN: 32.4-12.4 FT BGS. WELL SET W/ 20 FT SCREEN TO INSURE WELL MADE WATER. BECAUSE WATER BEARING FRACTURES WERE PRESENT HIGH IN THE HOLE IT WAS DIFFICULT TO DETERMINE LOWER WATER BEARING FRACTURES. SCREEN ALSO PLACED TO NOT INTERCEPT HIGH (POSSIBLY PERCHED) WATER. THE UPPER WB. ZONE ~~@~~ MAY HAVE PRODUCED SUFFICIENT WATER FOR A ~~@~~ PRODUCTIVE WELL HOWEVER.

7/10/98

(Continuation Sheet)

PROJECT RAAP RQL GW INVEST. REPORT NO. 4

JOB NO. 003 DATE: 7/18/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

PID CALIBRATED (SEE MISTE LOG)

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- H&S DAILY H&S TAILGATE BRIEFING
- ALL ACTIVITIES IN LEVEL D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

- DRILL AND INSTALL MW RQL MW-7

By: _____ 7/21/98
(Signature and date)

QA Check by: _____ 7/21/98
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/11/98

DAY	S	M	T	W	TH	F	S
						X

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
	X				

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
				X	

WIND	Still	Moder.	High	Report No.
	X			5

HUMIDITY	Dry	Moder.	Humid
	X		

COE PROJECT MANAGER JOHN JENT

PROJECT RAAP RQL GW INVEST.

JOB NO. 0003

CONTRACT NO. DACA29-97-D-0025

SUB-CONTRACTORS ON SITE:

BOWSER MORNER

EQUIPMENT ON SITE: MOBILE B-59, STEAM CLEANER, SUPPORT TRUCK, BARREL LIFT TRUCK

WORK PERFORMED (INCLUDING SAMPLING): DRILLED & INSTALLED MW RQLMW-7 W/ BOTTOM AT 16.15 FT BGS, SCREEN 15.95-5.95. DRILLED AND INSTALLED RQLMW-8 WITH BOTTOM AT 16.2, SCREEN FROM 16.0-6.0 J. Wilson & D. Lucot work on stuff gauge construction.

7/11/98

(Continuation Sheet)

PROJECT RAAP RQL GW INVEST. REPORT NO. 5

JOB NO. 003 DATE: 7/11/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

CALIBRATED 2 PIDs & 1 HORIBA (SEE MBTE LOG)

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- HELD DAILY H&S TAILGATE BRIEFING
- ALL ACTIVITIES IN LEVEL D.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

DRILL & INSTALL RQLMW-9

By: _____ 7/11/98
(Signature and date)

QA Check by: _____ 7/21/98
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/12/98

DAY	S	M	T	W	TH	F	S
	X						

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
	X				

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
				X	

WIND	Still	Moder.	High	Report No.
	X	X		6

HUMIDITY	Dry	Moder.	Humid
		X	

COE PROJECT MANAGER John Jent
PROJECT RVAAP RQL GW INVESTIGATION
JOB NO. 003
CONTRACT NO. DACA21-97-D-0025

SUB-CONTRACTORS ON SITE:

ROUTER MARINER

EQUIPMENT ON SITE: MOBILE B59, STEAM CLEANER, SUPPORT TRUCK, BARREL-LIFT TRUCK

WORK PERFORMED (INCLUDING SAMPLING):

- RQLMW-9 SET W/ BOTTOM AT 16.4 FT BGS, SCREEN FROM 15.9 - 5.9 FT BGS
- INITIATED DEVELOPMENT OF RQLMW-6. WELL IS PRODUCING SLOWLY. ~DRY AFTER EVERY 4-5 GALS. REMOVED
- J. Wilson & D. Lucot work on sump, well development and monument installation @ WB6 under different task.

JW 7/21/98

PROJECT RAAP RQL GW INVEST REPORT NO. 6

JOB NO. 063 DATE: 7/12/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

CALIBRATED PIDs & HORIBAS (SEE MSTE LOG)

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- HELD DAILY H&S TAILGATE BRIEFING
- ALL ACTIVITIES IN LEVEL D PPE

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

QC 7/21/98

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

- CONTINUE DEVELOPMENT OF NEW WELLS

By: [signature] 7/12/98
(Signature and date)

QA Check by: [signature] 7/12/98
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/13/98

DAY	S	M	T	W	TH	F	S
		X					

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
		X			

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
				X	

WIND	Still	Moder.	High	Report No.
		X		7

HUMIDITY	Dry	Moder.	Humid
		X	

COE PROJECT MANAGER JOHN JENT
PROJECT RAAP RQL GW INVEST
JOB NO. ~~DACA27-5~~ 0003
CONTRACT NO. DACA 27-97-D-0025

SUB-CONTRACTORS ON SITE:

BOWSER MORNER

EQUIPMENT ON SITE: MOBILE B-59, STEAM CLEANER, SUPPORT TRUCK, BARREL LIFT TRUCK

WORK PERFORMED (INCLUDING SAMPLING):

- DRILL RIG AND TOOLS DECONED FOR DE-MOB.
- RQLMW-10 DEVELOPMENT INITIATED & COMPLETED
- J. Wilson & P. Lutz began sampling of existing wells.

MW 7/13/98

PROJECT RAAP RQL GW INVEST REPORT NO. 7
JOB NO. _____ DATE: 7/13/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

CALIBRATED 2 MINIRAES (PID) & 2 HORIBAS (SEE MBTE LOG)

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- HELD DAILY H&S TAILGATE MEETINGS
- ALL ACTIVITIES IN LEVEL D PPE

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

7/21/98 JW

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

- CONTINUE DEVELOPMENT OF NEW WELLS

By: _____ 7/13/98
(Signature and date)

QA Check by: _____ 7/21/98
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/14/98

DAY	S	M	T	W	TH	F	S
			X				

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
	X				

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
				X	

WIND	Still	Moder.	High	Report No.
		X		8

HUMIDITY	Dry	Moist.	Humid
		X	

COE PROJECT MANAGER JOHN JENT
PROJECT RAAP RQL GW INVEST.
JOB NO. 0003
CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE: BOWSER MORNER, CREW EXCEPT TED KEEN DEMOBED AT ~10:30

EQUIPMENT ON SITE: BARREL-LIFT TRUCK

WORK PERFORMED (INCLUDING SAMPLING):

- INITIATED & COMPLETED DEVELOPMENT OF RQLMW-7, -8, -9, AND -11.
- ALL RQL INVESTIGATION DAMS STAGED AT WESTERN ENTRANCE TO RQL.
- J. Wilson & P. Lucot complete sampling of existing wells then work on sample management.

7/14/98

(Continuation Sheet)

PROJECT RQ2 GW INVEST REPORT NO. 8

JOB NO. _____ DATE: 7/14/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

- CALIBRATED 1 HORIBA

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- HELD DAILY H&S TAILGATE MEETING
- ALL ACTIVITIES IN LEVEL D PPE

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

- OBTAIN 24-HR AFTER DEVELOPMENT WATER LEVELS

By: _____ 7/14/98
(Signature and date)

QA Check by: _____ 7/21/98
(Signature and date)

95-005MIS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/15/98

DAY	S	M	T	W	TH	F	S
				X			

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
			X		

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
				X	

WIND	Still	Moder.	High	Report No.
		X		9

HUMIDITY	Dry	Moder.	Humid
		X	

COE PROJECT MANAGER JOHN JENT
PROJECT RAAP RQL GW INVEST
JOB NO. 003
CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE:

BOUYER MARNER (TEOKEEN) DEMOBS AT ~0830

EQUIPMENT ON SITE: NONE

WORK PERFORMED (INCLUDING SAMPLING):

- OBTAIN 24 HR AFTER DEVELOPMENT WATER LEVELS ON ALL NEW WELLS EXCEPT RQLMW-6.
- INSTALLED ~~PRE~~ TROLLS (PRESSURE TRANSDUCERS) IN ALL EXISTING RQL WELLS EXCEPT MW-002.
- clean up.

7/15/98

(Continuation Sheet)

PROJECT RAAP RQL GW INVEST. REPORT NO. 9

JOB NO. _____ DATE: 7/15/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

CALIBRATED 1 HORIBA (SEE MISTIE LOG)

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- HSO HAS BRIEFING
- ALL ACTIVITIES IN LEVEL D PPE

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

Notified that the QA split sample PROCESS around @ Omaha lab w/ temperature > 4°C ± 2°C. Will re-ship this sample along w/ regular sample as per John Jents request.

JJ 7/15/98

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS: NONE - LAST DAY OF WORK CYCLE

By: _____ 7/15/98
(Signature and date)

QA Check by: _____ 7/21/98
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 07/21/98

DAY	S	M	T	W	TH	F	S
			X				

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
				X	

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
				X	

WIND	Still	Moder.	High	Report No.
	X			

HUMIDITY	Dry	Moder.	Humid	10
		X		

COE PROJECT MANAGER John Jent
PROJECT RVAAP RQL GW Investigation
JOB NO. 003
CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE: SAIC - Joe Wilson, Heather Smith
Adams-Craft-Herre & Walker (ACHW) - Chester Midkiff & James Phillips

EQUIPMENT ON SITE: Minivan, sampling equipment

WORK PERFORMED (INCLUDING SAMPLING):

0800- Arrive on-site, Heather Smith putting together QED pumps
0845- J. Wilson takes ACHW to points that need to be surveyed
~~900- J Wilson and H Smith go to RQL to write levels~~ GW
1100- J. Wilson, H. Smith prep vans for gw. sampling
1200- off-site for lunch.
1300- Return from lunch. Go to RQL to set pumps, slugs and get water levels
1500- Return to field office. Unable to install 1¼" slugs in 2" well due to cables of pressure transducer. Will construct smaller slugs out of PVC this evening. Move office supplies away from paint booth to allow room for paint booth demolition team. Continue prep for gw sampling.
1700- All off-site.

GW
7/21/98

(Continuation Sheet)

PROJECT RVAAP RCL GW Investigation
REPORT NO. 10
JOB NO. 0653
DATE: 7/21/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

Calibration of MiniRAE PID

7/21/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Level D+ Tailgate H&S meeting

7/21/98

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

Slugs brought to perform In-situ Permeability Testing don't fit smoothly in wells due to pressure transducer cables. Will construct slugs of 1" PVC 3 ft in length tonight.

7/21/98

SPECIAL NOTES: NA

7/21/98

TOMORROW'S EXPECTATIONS:

Groundwater sampling begins. Set slugs in formerly installed wells

7/21/98

By: [signature] 7/21/98
(Signature and date)

QA Check by: _____
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/22/98

DAY	S	M	T	W	TH	F	S
			X			

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
		X		

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
				X	

WIND	Still	Moder.	High	Report No.
	X			11

HUMIDITY	Dry	Moder.	Humid
	X		

COE PROJECT MANAGER John Jent

PROJECT RVAAP RQL G.W. INVESTIGATION

JOB NO. 003

CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE: SAIC - Joe Wilson Heather Smith

ACHW - Chester Medley & James Phillip

EQUIPMENT ON SITE: Min- Van, sampling equipment

WORK PERFORMED (INCLUDING SAMPLING):

0745 - Arrive @ Bldg 1036 Field Office

0800 - Hold H&S Tailgate. Awaiting delivery of 1-L poly wide mouth bottles for Quanterra Labs.

- Collect gw samples from monitoring wells RQLmw-007 and RQLmw-008. Install slugs in 2 of the existing monitoring wells (MW-3 and MW-5). Also install small section of 2" PVC on top of staff gauge data logger 6" PVC riser. This is to allow for the transducer to be hung correctly.

*
7/22/98

(Continuation Sheet)

PROJECT RVAAP RQL GW INVESTIGATION REPORT NO. 11

JOB NO. 003 DATE: 7/22/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

Calibration of Micropurge Well Wizard, MiniRAE PID and Horiba U-10

7/22/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Tailgate Meeting, level D+

7/22/98

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

7/22/98

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

Continue w/ gw sampling and perform slug testing

By: [signature] 7/22/98
(Signature and date)

QA Check by: ____________________
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/23/98

DAY | S | M | T | W | TH X | F | S |

WEATHER | Bright Sun | Clear | Overcast | Rain | Snow |
| | | X | X | |

TEMP | To 32° | 32-50° | 50-70° | 70-85° | 85° up |
| | | | | X |

WIND | Still | Moder. | High | Report No. |
| X | | | 12 |

HUMIDITY | Dry | Moder. | Humid |
| | X | |

COE PROJECT MANAGER John Jack

PROJECT RVAAP RQL GW Investigation

JOB NO. 0003

CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE:

SAIC - Jon Wilson & Heather Smith

ACHW - Chester Medley & James Phillips

EQUIPMENT ON SITE:

Minivan and sampling equipment

WORK PERFORMED (INCLUDING SAMPLING):

0730 - Arrive on-site.

0750 - Hold Tailgate

- Due to light rain, and risk of getting van stuck @ RQL collect QC Equipment Rinsate # RQ0050. Pull Grundfos pump in RQMW-016.
- Perform slug tests on existing wells MW-0003 and MW-0005.
- Install slugs in existing wells MW-0001, MW-0002 and MW-0004.
- Collect QC source water blank # RQ0049 on DI ASTM H_2O lot # 1806024 Ricca Chemical Corporation, expires 5/99.
- Collect gw sample # RQ0013 from RQMW-009.
- Pack all samples for A.M. courier service.

1800 - Off-Site.

2
7/23/98

(Continuation Sheet)

PROJECT RVAAP RCL GW Investigation REPORT NO. 12

JOB NO. 0003 DATE: 7/23/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

- Calibration of MiniRAE PID, Horiba U-10 water quality meter, and QED Well Wizard water quality meter
- Collect equipment rinsate on bladder pump, sample # RQ0050
- Collect source water blank on DI water, sample # RQ0049.

JW 7/23/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

D+, H&S tailgate

JW 7/23/98

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

JW 7/23/98

SPECIAL NOTES: All slugs installed in existing wells have displaced <0.25 ft of water. The slugs 3.3 ft, 1¼" PVC should displace ~1.25 ft of water in a 2" well. Through calculations, we determined these wells respond as a 6" well should (~0.22 ft displaced), Suggesting no seal above the filter.

TOMORROW'S EXPECTATIONS:

will not sample due to lab. constraints w/ holding times. Therefore, will perform slug tests, install and build pumps, install transducer in staff gauge and prep. for saturdays sampling.

By: [signature] 7/23/98
(Signature and date)

QA Check by: _____
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/24/98

DAY	S	M	T	W	TH	F	S
						X	

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
		X			

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
					X

WIND	Still	Moder.	High	Report No.
		X		

HUMIDITY	Dry	Moder.	Humid	
		X		13

COE PROJECT MANAGER John Jent
PROJECT RVAAP RQL GW INVESTIGATION
JOB NO. 0003
CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE:

SAIC - Heather Smith, Joe Wilber
ACHW - Chuck Melley, James Phillips

EQUIPMENT ON SITE:

Mini Ram, Sampling equipment, etc

WORK PERFORMED (INCLUDING SAMPLING):

- Slug tests on the following wells
  - RQLmw-0001
  - RQLmw-0002
  - RQLmw-0004
  - RQLmw-0007
  - RQLmw-0008
- Decon and place bladder pump in RQLmw-011
- Install 6 ft. to 10.00' section in staff gauge.
- Prep for sampling of RQLmw-010 on Saturday.
- Complete development of RQLmw-006

JZ
7/24/98

(Continuation Sheet)

PROJECT RVAAP - REM GW INVESTIGATION

REPORT NO. 13

JOB NO. 003

DATE: 7/24/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

- Calibration of MiniRae PID, Horiba U-10 and Geo Well Wizard

JW 7/24/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

D^T and H&S Info

JW 7/24/98

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

JW 7/24/98

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

Sample RGLMW-10 and hopefully RGLMW-006.

Slug test RGLMW-009

By: JW 7/24/98
(Signature and date)

QA Check by: _____
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/25/98

DAY	S	M	T	W	TH	F	S
							X

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
		X			
TEMP	To 32°	32-50°	50-70°	70-85°	85° up
					X
WIND	Still	Moder.	High	Report No.	
	X				
HUMIDITY	Dry	Moder.	Humid	14	
		\			

COE PROJECT MANAGER [illegible]

PROJECT [illegible]

JOB NO. [illegible]

CONTRACT NO. [illegible]

SUB-CONTRACTORS ON SITE:

[illegible] Health [illegible]

EQUIPMENT ON SITE:

[illegible] sampling equipment [illegible]

WORK PERFORMED (INCLUDING SAMPLING):

[illegible] - Arrive on site, Held H&S Tailgate.
- Re-set slugs in the following:
  - RQLmw-002
  - RQLmw-003

  These test results may have been altered by slug getting caught on transducer cables. Will allow to set a min. of 6 hrs and re-test.
- Sample RQLmw-010, sample # RQ0015.
- Decon pump from RQLmw-010 and hang in RQLmw-006
- Place slug w/ transducer in RQLmw-010.
- Perform slug tests on the following:
  - RQLmw-009
  - RQLmw-002
  - RQLmw-003
- Set transducer in standpipe associated w/ staff gauge.
- Hang transducer in the following:
  - RQLmw-007
  - RQLmw-008

  synchronize time in each to J. Wilson's laptop.

1800 - off-site.

7/25/98

(Continuation Sheet)

PROJECT KVAAP RQL GW INVESTIGATION REPORT NO. 14

JOB NO. 603 DATE: 7/25/96

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

Calibration of MiniRAE PID, Horiba U-10 and QED Well Wizard Flow C.U.

gw
7/25/96

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

D+, Health and Safety Tailgate

gw
7/25/96

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

gw
7/25/96

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

Collect gw samples from RQLmw-011 and RQLmw-006 w/ QC dupe & QA split from one of them. Slug test RQLmw-010. Hang Transducers and slugs in RQLmw-011 and RQLmw-006. Collect sediment sample w/ QC duplicate and QA split from location that these were originally collected from prior to mix up @ lab.

By: Joseph J Wilson 7/25/96
(Signature and date)

QA Check by: _____
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 7/26/98

DAY

S	M	T	W	TH	F	S
X						

WEATHER

Bright Sun	Clear	Overcast	Rain	Snow
X				

TEMP

To 32°	32-30°	30-70°	70-85°	85° up
			X	

WIND

Still	Moder.	High	Report No.
X			15

HUMIDITY

Dry	Moder.	Humid
X		

COE PROJECT MANAGER John Jent
PROJECT RVAAP RQL GW INVESTIGATION
JOB NO. 003
CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE:

SAIC - Joe Wilson, Heather Smith

EQUIPMENT ON SITE:

Mini-van, sampling equipment, etc

WORK PERFORMED (INCLUDING SAMPLING):

- 0700 - Arrive on-site. Hold H&S tailgate
  - Encounter problem w/ GRD system. See following page.
  - Slug test RQLmw-010
  - QA logbooks
  - Prep. for tomorrow's sampling
- 1600 - off site. End of day.

95-005MS/053095

(Continuation Sheet)

PROJECT RVAAP RQL GW INVESTIGATION REPORT NO. 15

JOB NO. 003 DATE: 7/26/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

- Calibration of MiniRAE PID, Horiba U10, QED Well Wizard Flow Cell
- ~~Collection of gw QC sample~~ [illegible] 7/26/98
- ~~Collection of gw QA sample~~ [illegible] 7/26/98

[illegible] 7/26/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

D+, H&S Tailgate

[illegible] 7/26/98

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- while set up w/ QED Micropurge system @ RQLmw-011, pump control box failed and gave error message of no air incoming to the unit. Examination of the compressor showed that it was working and air was in the line and could be manually released at the quick-connect. QED support was called and they reasoned that the computer inside the unit must have failed. They agreed to ship us a replacement part. K. Domine and S. Sleiman were notified. Later in the day, H. Smith (SAIC) found something out of line w/ the compressor, after adjustment psi were increased and unit worked. No samples were collected due to time of day when problem solved. [illegible]. K. Domine and S. Sleiman were notified.

SPECIAL NOTES:

[illegible] 7/26/98

TOMORROW'S EXPECTATIONS:

- Same as yesterday, sample RQLmw-006, RQLmw-009 and re-sample RQLmw-017.

By: [signature] 7/26/98
(Signature and date)

QA Check by: ____________________
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 07/27/98

DAY	S	M	T	W	TH	F	S
	X					

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
	X			

TEMP	To 32°	32-30°	30-70°	70-85° 85° up
			X

WIND	Still	Moder.	High	Report No.
	X		

HUMIDITY	Dry	Moder.	Humid
	X	

COE PROJECT MANAGER John Jent

PROJECT RVAAP RQL Char Investigation

JOB NO. 003

CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE:

SAIC - Joe Dominic, Heather Smith

EQUIPMENT ON SITE:

Misc. H&S monitoring equipment, etc

WORK PERFORMED (INCLUDING SAMPLING):

0700 - Arrive on-site, perform H&S tailgate.
- Collect gw sample # RQ0017 from sta. # RQLmw-011
- Collect QA sample # RQ0048 from sta. # RQLmw-011
- Collect QC sample # RQ0047 from sta # RQLmw-011
- Collect sediment sample # RQ0064 from sta # RQLsd-017
- Collect sed. QC sample # RQ0065 from sta # RQLsd-017
- Collect sed QA sample # RQ0066 from sta # RQLsd-017

0958 - M. Patterson steps by RQL to see how we are doing.

1015 - M. Patterson leaves location.
- Back-up QA-MMRD lab samples and ship via FedEx to lab.
- Collect gw sample # RQ0007 from sta. # RQLmw-006.
- Set slugs and transducers in RQLmw-006 and RQLmw-011.

1630 - K. Dominic arrives @ site. J. Jent and M. Patterson arrive a little later.

1745 - J. Jent and M. Patterson off-site.

1800 - All off-site.

7/27/98

(Continuation Sheet)

PROJECT: RVAAP RQL GW Investigation
JOB NO.: 023

REPORT NO.: 16
DATE: 7/27/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

- Calibration of mini RAE PID, QED Flow cell and Horiba U-10
- Collect gw QA/QC samples
- Re-collect sediment QA/QC samples

7/27/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Tailgate

7/27/98

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

7/27/98

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

- Slug test RQLmw-006 and RQLmw-011, Set transducers in all new wells and ~~slug tests~~ staff guage for long term water level monitoring.

By: Joseph J W... 7/27/98
(Signature and date)

QA Check by:
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 07/28/98

DAY	S	M	T	W	TH	F	S
			X				

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
		X			

TEMP	To 32°	32-30°	30-70°	70-85°	85° up
				X	

WIND	Still	Moder.	High	Report No.
	X			17

HUMIDITY	Dry	Moder.	Humid
		X	

COE PROJECT MANAGER John Jent
PROJECT RVAAP RQL GW INVESTIGATION
JOB NO. 003
CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE:

SAIC - Jo Wilson, Heather Smith, Kathy Dennis

EQUIPMENT ON SITE:

Mini-van, Cargo Van, sampling equipment, etc.

WORK PERFORMED (INCLUDING SAMPLING):

0700 - Arrive on-site, perform H&S Tailgate.
- Slug test RQLmw-006
- Slug test RQLmw-011
- Pack up Oak Ridge supplies to go back w/ H. Smith
- Pick up Dayton supplies to go w/ K. Dennis
- Rent local storage space for storing long term monitoring supplies.

1800 - OFF S.t.

RJ 7/28/98

(Continuation Sheet)

PROJECT RVAAP RQL GW INVESTIGATION

JOB NO. 003

REPORT NO. 17

DATE: 07/28/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

7/28/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

D+ Tailgate H+S Meeting

7/28/98

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

7/28/98

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

Set Transducers for long term monitoring

By: 7/28/98
(Signature and date)

QA Check by: _____
(Signature and date)

95-005MS/053095

DAILY QUALITY CONTROL REPORT

DATE 07/29/98

DAY | S | M | T | W | TH | F | S | (W: X)

WEATHER | Bright Sun | Clear | Overcast | Rain | Snow | (Clear: X)

TEMP | To 32° | 32-30° | 30-70° | 70-85° 85° up | (70-85° 85° up: X)

WIND | Still | Moder. | High | Report No. | (Still: X; Report No.: 18)

HUMIDITY | Dry | Moder. | Humid | (Moder.: X)

COE PROJECT MANAGER John Jent

PROJECT RVAAP RQL GW INVESTIGATION

JOB NO. 003

CONTRACT NO. DACA27-97-D-0025

SUB-CONTRACTORS ON SITE:

SAIC - Jim Wilson, Heather Smith

EQUIPMENT ON SITE:

Mini-van, laptop computer, etc

WORK PERFORMED (INCLUDING SAMPLING):

0700 - Arrive on site.

- Set transducers in each of the 6 new wells and at the staff gauge to begin taking water levels every 2 hrs beginning at 10:00 hrs today.
- Finish TO-mob.
- Stop by to tell M. Patterson we will be off-site.

1030 - OFF-site.

7/30/98

PROJECT RVAAP RQL GW Investigation
JOB NO. 003

REPORT NO. 18
DATE: 07/29/98

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

GW 7/29/98

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

D+

GW 7/29/98

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

GW 7/29/98

SPECIAL NOTES:

TOMORROW'S EXPECTATIONS:

Monthly monitoring (downloading) of water levels and quarterly sampling.

By: [signature] 7/29/98
(Signature and date)

QA Check by: _____
(Signature and date)

95-005MS/053095

CONTACT REPORT

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

INDIVIDUAL CONTACTED, TITLE, PHONE:	ORIGINATOR:
ERIC ADAMS ~~& JARNAL SINGH~~	MIKE KLIDEES (SAIC)
ORGANIZATION:	**DATE CONTACTED:**
OHIO EPA	
ADDRESS: CITY: STATE: ZIP:	Telecon: ☐ Visit: ☒

SUBJECT: MODIFIED, FROST-HEAVE RESISTANT ~~OES~~ CONSTRUCTION DESIGN FOR RAMSDELL QUARRY MONITORING WELLS MW7, -8, -9

DISCUSSION:

MIKE KLIDEES (SAIC, GEOLOGIST) SUGGESTED THAT A FROST-HEAVE RESISTANT CONSTRUCTION FOR RAMSDELL QUARRY LANDFILL WELLS MW-7, -8, AND -9 WOULD BE APPROPRIATE DUE TO SITE CONDITIONS. BECAUSE THE WELLS ARE IN CLOSE PROXIMITY TO THE QUARRY POND AND THE POTENTIAL EXISTS FOR THE POND WATER LEVEL TO REACH THE SURFACE ELEVATION OF THE PROPOSED WELLS, SIGNIFICANT RISK OF FROST HEAVING EXISTS.

THE PROPOSED CONSTRUCTION WAS PRESENTED. THE MODIFIED DESIGN INCLUDES THE PLACEMENT OF A SONO TUBE OUTSIDE OF THE PROTECTIVE CASING, WITH THE WELL PAD CONSTRUCTED AROUND (OUTSIDE OF) THE SONO TUBE. THIS CONSTRUCTION ALLOWS THE WELL PAD TO HEAVE WITHOUT AFFECTING THE PROTECTIVE CASING OR WELL RISER/SCREEN STRING.

BOTH ERIC AND JARNAL APPROVED THIS MODIFIED CONSTRUCTION FOR WELLS MW-7, -8, AND -9. MIKE KLIDEES INDICATED THAT AN FCO WOULD BE WRITTEN TO ALLOW FOR THIS MODIFICATION TO THE FACILITY-WIDE SAMPLING AND ANALYSIS PLAN.

COMMENTS, ACTION, DATES

CONTACT REPORT

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation | **DELIVERY ORDER NO: 003**

INDIVIDUAL CONTACTED, TITLE, PHONE:
ERIC ADAMS, JARNAL SINGH (OEPA)

ORIGINATOR:
OEPA

ORGANIZATION:
OEPA

DATE CONTACTED:

ADDRESS: CITY: STATE: ZIP:

Telecon: ☐ Visit: ☒

SUBJECT: RAAP RQL MW INSTALLATION

DISCUSSION:

ERIC & JARNAL VISITED THE SITE AT ~09:30 ON 7/15/98 TO INSPECT THE FINAL COMPLETIONS OF MONITORING WELLS INSTALLED AT RAMSDELL QUARRY. GENERALLY, STATED SATISFACTION IN THE CONSTRUCTION, INCLUDING WELLS MW-7, -8, AND -9, BUILT W/ SAND TUBES. JARNAL ALSO WERE PLEASED THAT WELLS COULD BE INSTALLED IN PLANNED LOCATIONS.

JARNAL TOOK SEVERAL PHOTOGRAPHS OF THE WELLS.

COMMENTS, ACTION, DATES