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Final Report

Quarterly Monitoring Event 4 - November 1995
Site 9: Neptune Drive Disposal Site
Naval Air Station, Brunswick, Maine

Contract No. N62472-92-D-1296
Contract Task Order No. 0047

Prepared for

Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Mail Stop No. 82
Lester, Pennsylvania 19113-2090

Prepared by

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EA Project Manager: Michael S. Battle, P.G.

In compliance with EA's Policy and Procedures for review of deliverables, this final deliverable has been reviewed for quality by the undersigned Senior Technical Reviewer(s). The information presented in this report/deliverable has been prepared in accordance with the approved scope of services for the project and reflects a proper presentation of the data and/or the conclusions drawn and/or the analyses or design completed during the conduct of the work. This statement is based upon the standards identified in the contract and/or the standard of care existing at the time of preparation.

Senior Technical Reviewer(s)

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1. PROJECT DESCRIPTION

1.1 INTRODUCTION

Under Contract No. N62472-92-D-1296, Contract Task Order (CTO) No. 0047, Northern Division, Naval Facilities Engineering Command contracted with EA Engineering, Science, and Technology to perform long-term monitoring at Site 9 at Naval Air Station (NAS), Brunswick, Maine. NAS Brunswick is located south of the Androscoggin River between Brunswick and Bath, Maine (Figure 1). The layout of Site 9 is provided on Figure 2.

NAS Brunswick is an active base owned and operated by the federal government through the Department of the Navy. In 1987, NAS Brunswick was placed on the National Priorities List by the U.S. Environmental Protection Agency (EPA) and is currently participating in the Navy's Installation Restoration Program. At Site 9, the Navy is required to perform long-term monitoring, maintenance, and corrective measures as part of the long-term remedial actions required by the Interim Groundwater Record of Decision dated September 1994 (ABB Environmental Services [ABB-ES] 1994). A Long-Term Monitoring Plan (LTMP) was established pursuant to the Interim Groundwater Record of Decision (ABB-ES 1995). Approval of the Method Detection Limit Study for EPA Method 8260 was received from EPA Region I on 10 May 1995. Approval of the use of trace inductively coupled plasma methodologies for Target Analyte List (TAL) metals, except mercury and cyanide, was obtained from EPA Region I on 25 August 1995.

The LTMP document, which is comprised of a long-term monitoring program; an addendum to the Quality Assurance Project Plan contained in the LTMP for Building 95, Sites 1 and 3, and Eastern Plume (ABB-ES 1994); and technical review comments, establishes the requirement for monitoring/sampling of ground water, surface water, sediment, and leachate to be conducted on a quarterly basis, along with the implementation of institutional controls to prevent human contact with ground water in the area. Implementation of the monitoring program will enable the Navy to collect data in order to conduct a 5-year review, which is an analysis of newly promulgated or modified federal and state regulations to determine if they are applicable or relevant and appropriate requirements and to determine if they challenge the protectiveness of the implemented remedial strategy. It is anticipated that monitoring will continue until a review is completed which suggests that no further action, or an alternate remedial action (i.e., other than natural attenuation), should be selected. These reviews will occur a minimum of once every 5 years.

1.2 BACKGROUND

The Neptune Drive Disposal Site (Site 9) is an area north of Neptune Drive containing a former incinerator and an abandoned ash landfill/dump area, and an area south of Neptune Drive where hazardous materials disposal activities allegedly occurred. The results of previous investigations identified the presence of volatile organic compounds (VOC), semivolatile organic compounds

(SVOC) (including polycyclic aromatic hydrocarbons [PAH]), pesticides, and inorganics in various media. Media impacted by varying contaminants include soil, ground water, surface water, and sediment. No remedial actions have been performed at the site because the investigations previously conducted have not defined a specific source for the impacts. Long-term monitoring will, therefore, be instituted while additional investigations are conducted.

1.3 PROGRAM OBJECTIVES

The objectives of the LTMP are to obtain data necessary to monitor the long-term effectiveness of the remedial action (i.e., natural attenuation) conducted at Site 9. Monitoring and sampling data collected during the performance of long-term monitoring will be used to:

- Establish a baseline for assessing ground-water, surface water, and leachate seeps and sediment quality conditions.
- Assess the potential for adverse environmental impacts by monitoring for evidence of stressed vegetation and additional leachate seeps.
- Evaluate the integrity of the ground-water monitoring well network by inspecting the conditions of well casings and seals and ensuring the wells are labeled and locked.

2. LONG-TERM MONITORING PROGRAM

2.1 MEASUREMENT OF WATER LEVEL ELEVATIONS

Water level measurements were obtained on 2 November 1995 at the 13 ground-water monitoring wells indicated in Table 1. The locations of the wells are provided on Figure 2. Well gauging was conducted over a several-hour period for purposes of assessing water table elevation. Upon opening each well, a Century Foxboro Model 128 organic vapor analyzer/flame ionization detector was used to monitor the presence of VOC at the mouth of the well and in the breathing zone. Following safety and health clearance monitoring, well gauging was conducted using a Slope Indicator Model 51453 water level indicator, capable of measuring depth to water to an accuracy of 0.01 ft. Well gauging was completed by lowering the electronic water level sensing probe down the well and measuring depth to water from the existing notch/indelible marking on the top of the well polyvinyl chloride riser. The gauging instrument was decontaminated according to the procedure specified in the LTMP (ABB-ES 1994).

2.2 GROUND-WATER MONITORING, SAMPLING, AND ANALYSIS

The ground-water sampling program was performed on 13-14 November 1995, in accordance with the general methodologies established in the LTMP (ABB-ES 1994). Previously installed dedicated Grundfos Redi-Flo2 stainless steel and Teflon® submersible pumping systems were utilized for sample collection. Ground-water samples were collected from 9 wells during the November 1995 sampling event using the low flow sampling technique. Table 1 provides a summary of the wells included in the ground-water sampling program. Appendix A provides a detailed summary of the protocol followed during the November 1995 sampling event. Figure 3 provides a schematic of a typical dedicated submersible pump installed in a monitoring well.

An attempt was made to obtain ground-water samples from each well immediately upon reaching stabilization of the following water quality indicator parameters: pH, conductivity, temperature, and turbidity. Water quality indicator parameters were measured using a Grant/YSI Model 3800 multiparameter water quality meter with flow-through cell calibrated according to the manufacturer's instructions. Stabilization of water quality indicator parameters is observed when measurements agree within approximately 10 percent on three successive readings. This method can be utilized for all water quality parameters, including turbidity. The Quality Assurance Project Plan contained within the LTMP (ABB-ES 1994) also defines stabilization for turbidity as the point at which turbidity is reduced to below 10 nephelometric turbidity units (NTU). During this sampling event, this protocol was impeded by slow recharging monitoring wells. Slowly recharging wells were purged at the lowest flow rate obtainable with the submersible pump (i.e., 0.1-0.3 L/minute). At MW-NASB-071, the lowest purge rate obtainable was 2.0 L/minute. All 9 wells reached equilibrium of the water quality indicator parameters prior to sampling, although turbidity was measured in excess of 10 NTU at 3 wells (MW-NASB-069, MW-NASB-071, and MW-NASB-074).

All ground-water samples were collected for analysis of Target Compound List (TCL) VOC plus a library search of 15 tentatively identified compounds by EPA Method 8260. Five of 9 ground-water samples (Table 1) were also collected for analysis of TAL elements, including metals by trace inductively coupled plasma (EPA Method 6010), mercury by cold vapor atomic adsorption (EPA Method 7470), and cyanide by EPA Method 9010. Samples were analyzed by Katahdin Analytical Services, Inc. (formerly Pace Incorporated) of Westbrook, Maine.

2.3 SURFACE WATER, SEDIMENT, AND LEACHATE SEEP/SEDIMENT SAMPLING AND ANALYSIS

The surface water, sediment, and leachate seep/sediment sampling program at Site 9 was performed on 11 November 1995, in accordance with the general methodologies established in the LTMP (ABB-ES 1994). Surface water and sediment samples were collected from 6 stations located along the streams south of Site 9. The leachate seep and sediment samples were collected at the foot of the former drain located south of Site 9 (Figure 2). The locations of these sample stations are marked with orange-flagged, steel fence posts, which were driven into the unconsolidated sediment. Table 1 provides a summary of the stations included in the surface water, sediment, and leachate seep/sediment sampling program. Appendix A provides a detailed summary of the protocols followed during the November 1995 sampling event.

All surface water, sediment, and seep samples were collected for analysis of TCL VOC plus a library search of 15 tentatively identified compounds by EPA Method 8260. Leachate seep and sediment samples were also collected for analysis of TAL elements by trace inductively coupled plasma (EPA Method 6010), mercury by EPA Method 7470, and cyanide by EPA Method 9010. Five of 6 sediment samples (Table 1) were further analyzed for the presence of TCL SVOC plus a library search of 20 tentatively identified compounds by EPA Method 8270. Samples were analyzed by Katahdin Analytical Services, Inc.

2.4 VISUAL INSPECTION

Site inspection activities were completed on 1-2 November 1995 by a civil engineer in accordance with the LTMP (ABB-ES 1994). Site inspection activities included the following:

- Inspection of the ground surface for evidence of stressed vegetation.
- Inspection and maintenance of the site ground-water monitoring wells.
- Inspection of the stream channel for evidence of additional seeps.

The site inspection indicated no evidence of stressed vegetation in the vicinity of the site. Iron staining was observed in the vicinity of MW-NASB-071 and leachate sample station LT-901, and along the southern unnamed creek from the point of exit from the drain to the confluence with the northern unnamed creek. No physical evidence of tampering of site wells was evident. All wells were observed to be locked, with the exception of MW-NASB-069, which was observed to have a broken latch and bent protective casing). Four of 13 wells (MW-NASB-069, MW-NASB-075, MW-NASB-077, and MW-NASB-078) were not labeled. No other observations were noted.

3. DATA MANAGEMENT

3.1 QUALITY ASSURANCE/QUALITY CONTROL

A rigorous quality assurance/quality control program is required by the LTMP to meet the data quality objectives of the aqueous and sediment sampling program, as outlined in the Quality Assurance Project Plan associated with the LTMP (ABB-ES 1995). The data obtained during the November 1995 sampling event were determined to be of sufficient quality to be used to evaluate the long-term effectiveness of the remedial action (i.e., natural attenuation) by establishing a baseline on ground-water, surface water, sediment, and seep quality.

To meet the data quality objectives, chain-of-custody, sampling handling practices, and documentation were maintained in the field in accordance with the LTMP (ABB-ES 1995). A revised sample tracking system was employed during the November sampling event to improve the data quality review process. Sample data were noted both in field logbooks and on the field record forms contained in Appendix B.

Field quality control was documented through the submission of field quality control samples for analysis, including:

- **Trip Blanks**—Trip blanks were submitted with each sample shipment to assess the potential for aqueous sample contamination during sample shipment. The trip blanks consisted of deionized water in a volatile organic analysis vial shipped together with the volatile organic analysis samples in order to detect the possible introduction of contaminants during sample shipment.

- **Field Duplicates**—Field duplicates were collected to assess the homogeneity of the sampled media and the precision of the sampling protocol. Aqueous field duplicates were collected by obtaining an equal volume of sample into two sets of sample containers. Sediment field duplicates were prepared by homogenizing, or mixing, a large portion of a sample and placing equal amounts of a sample into two sets of containers (except for analysis of VOC, in which case grab samples were taken). Field duplicates were collected and submitted for analysis at a rate of 10 percent of each sample delivery group, or a minimum of one per sample event.

- **Equipment Blanks**—Equipment (rinsate) blanks were collected for each sample event requiring the use of non-dedicated sampling equipment (e.g., hand auger) to assess the completeness of the decontamination procedure. Equipment blank samples were collected at a minimum frequency of one per day per media sampled.

- **Source Water Blanks**—A sample of the source water used for decontamination of sampling equipment was collected and analyzed for TCL VOC, TCL SVOC, and TAL elements. Deionized source water is supplied by the laboratory. Source water blanks are used to assess the potential for sample contamination as a result of using equipment contaminated by source water.

- **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples**—As required by EPA analytical methods specified in SW-846, MS/MSD samples were collected at a minimum frequency of 5 percent for each sample delivery group. MS/MSD sample analyses are used to evaluate the effect of the sample matrix on the accuracy and precision of the laboratory methods and are prepared in the field by purging/collecting an equal volume of sample into three sets of sample containers.

3.2 ANALYTICAL DATA QUALITY REVIEW

Katahdin Analytical Services, Inc. provided data packages consisting of Level III (as defined by EPA data quality objectives guidance) deliverables, including sample analysis data, blank analysis data, duplicate sample results, surrogate recoveries, MS recoveries, and laboratory control sample recoveries. The level of data quality required by the LTMP does not require validation and documentation of EPA Contract Laboratory Program procedures, though the data packages prepared by Katahdin Analytical Services, Inc. for VOC analyses are similar in content.

As required by the LTMP (ABB-ES 1995), review of laboratory data was performed on selected quality control parameters to evaluate precision, accuracy, and completeness and data quality objective requirements. The following parameters were evaluated in each data deliverable package:

- Chain-of-custody documentation
- Sample holding times
- Laboratory method, trip, source water, and equipment rinse blanks
- Field duplicate sample results
- MS/MSD results
- MS recoveries
- Laboratory control sample recoveries
- Compound/analyte quantitation limits.

A summary of the analytical data quality review for data generated by Katahdin Analytical Services, Inc. is provided in Appendix C. With the exceptions discussed in Appendix C, the data represented in this report were found to meet specified acceptance criteria and, therefore, represent data in general compliance with the QAPP contained in the LTMP (ABB-ES 1994).

4. WATER LEVEL GAUGING PROGRAM RESULTS

Ground-water potentiometric elevations measured on 2 November 1995 during the fourth quarterly monitoring event at Site 9 are provided in Table 2. The Field Record of Well Gauging form completed during the well gauging event is provided in Appendix B. All 13 site wells were gauged on 2 November 1995 in accordance with the LTMP (ABB-ES 1995). Depth to ground water at Site 9 ranged from 3.03 ft below top of well riser (MW-NASB-071) to 17.78 ft below top of well riser (MW-NASB-077). Water table elevations recorded on 2 November 1995 in site wells ranged from 40.88 ft above mean sea level (MW-NASB-076) to 52.82 ft above mean sea level (MW-NASB-079), and have increased an average of 1.03 ft since the 2 August 1995 gauging event.

Based on the water table elevation data, shallow overburden ground-water flow reflects land surface topography of the site area. In general, the dominant direction of ground-water flow beneath the site is to the south-southeast; although significant variations occur in the vicinity of the streams located south of Neptune Drive (i.e., wells MW-NASB-072 through MW-NASB-078). Figure 4 provides the interpreted ground-water flow direction for the subject site.

The average hydraulic gradient across the subject site was calculated according to the following equation (Driscoll 1986):

$$I = (h_1 - h_2)/L$$

where

I	=	Hydraulic gradient (ft/ft)
$h_1 - h_2$	=	Difference in hydraulic head between locations h_1 and h_2 (ft)
L	=	Distance along flowpath between locations h_1 and h_2 (ft).

The hydraulic gradient across the subject site is characterized as shallow at 1.6 percent (0.016 ft per ft), with a vertical decrease of 8.97 ft in the water table elevation between wells MW-NASB-081 and MW-NASB-076 occurring over a normalized horizontal distance of 570 ft (i.e., as measured parallel to the direction of ground-water flow).

5. ANALYTICAL RESULTS

5.1 WATER QUALITY INDICATOR PARAMETERS

Water quality indicator parameters were measured during the collection of ground-water, surface water, and leachate seep samples according to the methods specified in the LTMP (ABB-ES 1995). The results of water quality indicator parameter monitoring at the time samples were collected are summarized in Tables 3 and 4 for ground-water samples, and surface water and leachate seep samples, respectively.

In general, the pH of ground water was fairly consistent across Site 9, regardless of the screened depth at which samples were collected. Ground-water pH ranged from 6.03 units (MW-NASB-072) to 6.88 units (MW-NASB-079), with pH measurements averaging 6.36 units. Conductivity measurements ranged from 184 μmhos/cm (MW-NASB-079) to 980 μmhos/cm (MW-NASB-081); however, 6 of 9 conductivity measurements ranged from 184 μmhos/cm to 394 μmhos/cm. Dissolved oxygen concentrations ranged from 0.80 mg/L (MW-NASB-071) to 4.89 mg/L (MW-NASB-072). Turbidity measured in ground water purged at Site 9 ranged from 1 NTU (MW-NASB-081) to 78 NTU (MW-NASB-074). With the exception of MW-NASB-069 (30 NTU), MW-NASB-071 (18 NTU), and MW-NASB-074(78 NTU), turbidity did not exceed 10 NTU in any other wells. As anticipated due to the varying depths from which the wells were sampled, temperature varied moderately (Table 3).

Surface water and leachate seep sample pH measurements ranged from 6.35 units (LT-901) to 7.13 units (SW-011), with pH measurements averaging 6.79 units. Turbidity measurements in surface water samples were found consistently at or below 10 NTU at all locations, and ranged from 0 NTU (SW-010) to 10 NTU (SW-011). Turbidity of the leachate seep (LT-901) was recorded at 97 NTU. Temperature, conductivity, and dissolved oxygen measurements at surface water sampling stations along the unnamed streams were observed to be fairly consistent across the site (Table 4).

5.2 GROUND WATER

Table 5 provides a summary of the VOC and TAL elements reported in ground-water samples collected at Site 9. Appendix D provides a summary of the tentatively identified compounds reported during this sampling event. Appendix E contains the summary tables for the analyses performed.

Data generated as a result of the fourth quarterly sampling event indicate that 19 VOC were detected at reportable concentrations in the samples. Methylene chloride was reported in 8 of 9 ground-water samples and trip blanks; however, this compound was also detected in the associated method blanks and is considered a laboratory artifact.

With the exception of methylene chloride, VOC were reported in 8 of 9 monitoring wells sampled during the November 1995 sampling event. No reportable concentrations of VOC were detected in MW-NASB-069. Detected VOC in remaining samples ranged from a single compound (MW-NASB-076 and MW-NASB-079) to 14 VOC (MW-NASB-071).

Ethylbenzene was reported in 4 of 9 ground-water samples and both trip blanks at concentrations ranging from 1J μg/L (MW-NASB-072, MW-NASB-075, and MW-NASB-080; and both trip blanks) to 8 μg/L (MW-NASB-071). Ethylbenzene was also reported in the method blanks associated with several of these samples; therefore, the presence of this compound may be a laboratory contaminant. Total xylenes were reported in 5 of 9 ground-water samples and the trip blank at low concentrations, and the method blank corresponding to several samples. The presence of total xylenes may be due to laboratory contamination. Eight additional VOC were reported in the trip blanks at concentrations below the Contract Required Quantification Limit. The detection of these compounds may be related to sample transportation, or contaminant carryover in the laboratory.

TAL elements were reported in all 5 of the ground-water samples collected for these analyses at Site 9 (Table 5). MW-NASB-069 and MW-NASB-074 through MW-NASB-076 do not require analysis of TAL elements as part of this LTMP. A total of 21 TAL elements were detected in the 5 ground-water samples. Cyanide was reported in MW-NASB-081 at a concentration of 8 μg/L and the duplicate sample collected at MW-NASB-071 of 1.5B* μg/L. Twenty metals were reported in the 5 ground-water samples, including 3 analytes of concern (cadmium, chromium, and manganese).

5.3 SURFACE WATER

Table 6 provides a summary of the VOC detected in surface water samples collected at Site 9. No tentatively identified compounds were reported in surface water samples (Appendix D). Appendix E contains the summary tables for the analyses performed.

Data generated as a result of the fourth quarterly sampling event indicate that 10 VOC were detected in the samples. No VOC were reported in the surface water samples at a concentration greater than 4 μg/L. Three of the 10 VOC (methylene chloride, trichloroethene, and total xylenes) reported in several surface water samples and trip blanks were also reported in the associated method blanks and are considered laboratory artifacts (methylene chloride) or laboratory contaminants (trichloroethene and total xylenes). One VOC (1,4-dichlorobenzene) was reported at a trace concentration in the equipment rinse blanks; however, this compound was not reported in any of the surface water samples. Two VOC (acetone and tetrachloroethane) were reported at trace to low concentrations in 5 of the surface water samples and the source water blank; tetrachloroethene was also reported in the equipment rinse blank. The remaining 5 VOC reported in the surface water samples included fuel related hydrocarbons (toluene, ethylbenzene, and benzene), total 1,2-dichloroethene, and 1,1,2,2-tetrachloroethane.

5.4 SEDIMENT

Table 7 provides a summary of the constituents detected in sediment samples collected at Site 9. Appendix D provides a summary of the tentatively identified compounds reported in sediment samples. Appendix E contains the summary tables for the analyses performed. Sample locations are provided on Figure 2.

Data generated as a result of the fourth quarterly sampling event indicate that 20 VOC were detected in the 6 sediment samples, though 9 of 20 VOC were reported in corresponding method blanks and are suspected laboratory contaminants. Methylene chloride and acetone were reported in the 6 sediment samples, trip blank, equipment rinse blank, and the source water blank; however, these compounds were reported in the associated method blanks and are laboratory artifacts. Chloroform was reported in all 6 samples and 2-butanone was reported in 5 of 6 samples, however, these compounds were also reported in the associated method blanks. Tetrachloroethene was reported at low concentrations in the 6 sediment samples and the corresponding source water blank; however, this compound was also reported in the method blank corresponding to 4 of 6 sediment samples. Total xylenes were reported at trace concentrations (below Contract Required Quantification Limit) in 5 of 6 sediment samples, the trip blank, and the source water blank; however, total xylenes were also reported in the method blank corresponding to several of these samples. 1,2-Dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were reported at trace concentrations in several sediment samples; however, these compounds were reported in the corresponding method blanks for several of the samples. All of these compounds reported in associated method blanks may be laboratory contaminants. The remaining 15 VOC were reported at trace or low concentrations in the 6 samples.

Analyses completed for the presence of SVOC indicate reportable concentrations of 20 SVOC in the sediment samples (Table 7). Of the detected SVOC, a majority of the compounds (18) were PAH. The highest concentrations of PAH were detected at SED-012 (15,162 μg/kg). Concentrations of PAH in the remaining 4 sediment samples ranged from 69J μg/kg (SED-011) to 11,321 μg/kg (SED-010). Carbazole was reported in 3 of 5 samples (SED-010, SED-012, and SED-915), ranging in concentration from 110J μg/kg (SED-010) to 250J μg/kg (SED-012). Dibenzofuran was reported in 3 of 5 sediment samples (SED-012, SED-915, and SED-919) at trace concentrations ranging from 43J μg/kg (SED-919) to 170J μg/kg (SED-012). Di-n-butyl-phthalate was reported in 1 of 5 sediment samples (SED-919) at a concentration of 61JB μg/kg; however, di-n-butyl-phthalate was also reported in the method blank associated with this sample. Bis(2-ethylhexyl)phthalate was reported in 4 of 5 sediment samples at concentrations ranging from 120JB μg/kg (SED-915) to 230JB μg/kg (SED-919); however this compound was also reported in the method blanks associated with these samples.

5.5 LEACHATE SEEP AND SEDIMENT

Table 8 provides a summary of the constituents detected in leachate seep and sediment samples collected at Site 9. Appendix D provides a summary of the tentatively identified compounds reported in leachate seep and sediment samples. Appendix E contains the summary tables for the analyses performed on leachate samples. Sample locations are provided in Figure 2.

Data generated as a result of the fourth quarterly sampling event indicate that 3 VOC were reported in the leachate seep sample and 17 VOC were reported in the sediment sample. Methylene chloride was reported at low concentrations in the leachate seep and sediment samples, the trip blank, equipment rinse blank, and source water blank; this compound was also detected in the associated method blanks and is a common laboratory artifact. Acetone was reported at low concentrations in the leachate seep and sediment samples, and the source water blank; however, this compound was also reported in the associated method blank and is a common laboratory artifact. Total xylenes were reported at trace concentrations in the sediment sample and trip, rinse, and source water blanks; however, this compound was detected in a corresponding method blank and may be a laboratory contaminant. Toluene, 2-butanone, tetrachloroethene, chloroform, and 1,2-dichlorobenzene were also reported at trace concentrations in the leachate seep and sediment samples; however, these compounds were also reported in the corresponding method blanks and may be laboratory contaminants. The remaining 9 VOC were reported at trace concentrations in the leachate seep and sediment samples.

Nineteen TAL elements were reported at varying concentrations in the leachate seep and sediment samples (Table 8). Cyanide was not reported in the leachate seep and sediment samples. The three contaminants of concern (arsenic, lead, and chromium) were reported in the leachate station sediment samples. Elevated concentrations of several analytes, including aluminum, calcium, iron, lead, magnesium, manganese, potassium, sodium, and zinc were reported in the leachate seep and sediment samples. Six metals were reported in the equipment rinse blank associated with the leachate seep sample at concentrations below the Contract Required Detection Limit. Seven metals were reported in the equipment rinse blank associated with the leachate station sediment sample at concentrations below the Contract Required Detection Limit. Barium, iron, lead, and zinc were reported in the source water used in the decontamination sequence at concentrations below the Contract Required Detection Limit.

6. SUMMARY AND CONCLUSIONS

Long-term monitoring activities were conducted during the fourth quarterly monitoring event as specified in the LTMP (ABB-ES 1995), including gauging of water levels in site monitoring wells; ground-water sampling at specified monitoring wells; surface water, sediment, and leachate seep/sediment sampling; and visual inspection of the site.

Visual inspection of the site indicated no evidence of stressed vegetation, animal burrowing, or physical tampering at monitoring wells. All wells were found to be locked upon inspection, with the exception of MW-NASB-069, which has a broken lock latch and an un-level riser pipe. Iron staining was observed in the vicinity of MW-NASB-071 and leachate sample station LT-901, and along the southern unnamed creek from the point of exit from the drain to the confluence with the northern unnamed creek. Additionally, 4 of the 13 wells were not labeled, including MW-NASB-069, MW-NASB-075, MW-NASB-077, and MW-NASB-078. No other observations were noted.

Depth to water in the 13 site wells gauged on 2 November 1995 ranged from 3.03 ft below top of well riser (MW-NASB-071) to 17.78 ft below top of well riser (MW-NASB-077). Depth to water in remaining wells ranged from 8.03 ft below top of well riser (MW-NASB-072) to 12.86 ft below top of well riser (MW-NASB-070). Water table elevations have increased an average of 1.03 ft since the 2 August 1995 gauging event.

Data generated during the fourth quarterly event indicate that 19 VOC were detected in site ground water. With the exception of low concentrations of methylene chloride, which was reported in the associated laboratory method blanks, no VOC were reported in the ground-water sample collected from MW-NASB-069. Reported concentrations of VOC were low at the remaining 8 wells. The six contaminants of concern (1,1-dichloroethane, total dichloroethene, ethylbenzene, toluene, vinyl chloride, and total xylenes) were reported as follows:

- 1,1-Dichloroethane was reported in 3 of 9 ground-water samples (MW-NASB-071, MW-NASB-075, and MW-NASB-080) at a concentration of 1J μg/L.

- Total dichloroethene was reported in ground-water samples MW-NASB-074 and MW-NASB-075 at concentrations of 12 μg/L and 1J μg/L, respectively.

- Ethylbenzene was reported in 4 of 9 ground-water samples at concentrations ranging from 1J μg/L (MW-NASB-072, MW-NASB-075, and MW-NASB-080) to 8 μg/L (MW-NASB-071).

- Toluene was reported in ground-water sample MW-NASB-071 at a concentration of 1J μg/L.

- Vinyl chloride was reported in 3 of 9 ground-water samples at concentrations ranging from 1J μg/L (MW-NASB-071) to 10 μg/L (MW-NASB-075). Concentrations of vinyl chloride were reported above the State Maximum Exposure Guideline of 0.15 μg/L and Federal Maximum Contaminant Level of 2 μg/L in 2 of 9 samples.

- Total xylenes were reported in 5 of 9 ground-water samples ranging in concentrations from 1J μg/L (MW-NASB-071 and MW-NASB-079 through MW-NASB-081) to 18B μg/L (MW-NASB-069).

TAL metals were reported in each of the 5 ground-water samples collected for these analyses. Elevated concentrations of calcium, iron, magnesium, manganese, potassium, and sodium were reported in a majority of these samples. The three contaminants of concern (cadmium, chromium, and manganese) were reported in the samples as follows:

- Cadmium was reported in ground-water sample MW-NASB-081 at a concentration of 1.9B* μg/L.

- Chromium was reported in the 5 ground-water samples at concentrations ranging from 0.74B* μg/L (MW-NASB-081) to 11.4 μg/L (MW-NASB-080).

- Manganese was reported in the 5 ground-water samples at concentrations ranging from 54.5 μg/L (MW-NASB-079 duplicate sample) to 9,930 μg/L (MW-NASB-081). This contaminant of concern was reported above the secondary Federal Maximum Contaminant Level of 50 μg/L in the 5 wells, and above the State Maximum Exposure Guideline of 200 μg/L in wells MW-NASB-071 (412 μg/L), MW-NASB-080 (276 μg/L), and MW-NASB-081 (9,930 μg/L).

VOC analysis of the 6 surface water samples indicated the presence of 10 VOC, though 3 of the VOC (methylene chloride, trichloroethene, and total xylenes) were reported in associated method blanks. The 7 remaining VOC were reported at trace or low concentrations in the surface water samples.

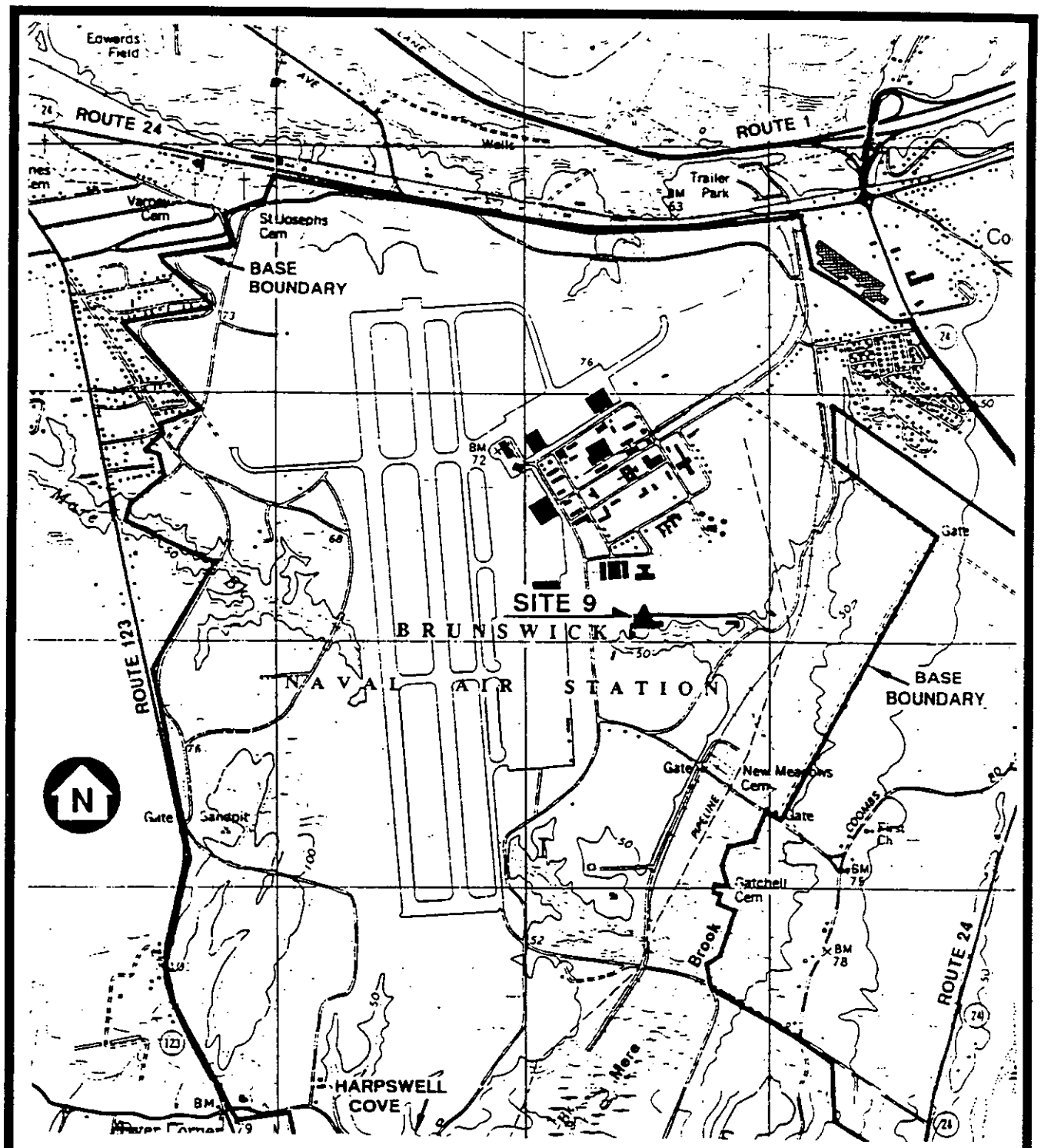
Analysis of sediment samples reported the presence of 20 VOC in the 6 sediment samples. Methylene chloride and acetone were reported in all 6 samples and the trip blank, equipment rinse blank, and source water blank, but are considered laboratory artifacts based on their presence in corresponding method blanks. Chloroform was reported in all 6 samples and 2-butanone was reported in 5 of 6 samples, however, these compounds were also reported in associated method blanks. Remaining VOC were reported at low concentrations in 6 sediment samples.

Twenty SVOC were reported in the sediment samples (Table 7). A majority of the compounds (18 of 20) were PAH. The highest concentration of PAH was reported at SED-012 (15,162 μg/kg). Concentrations of PAH in the remaining sediment samples ranged from 69J μg/kg (SED-011) to 11,321 μg/kg (SED-010).

Analysis of the leachate seep sample (LT-901) confirmed the presence of 3 VOC, though 2 VOC (methylene chloride and acetone) were attributed to laboratory or field contamination. The third VOC, 1,2-dichlorobenzene, was reported at a concentration of 1J μg/L; however, this compound was also reported in the associated method blank and may be a laboratory contaminant. Eighteen TAL elements were reported in the leachate seep sample, including aluminum, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, sodium, vanadium, and zinc.

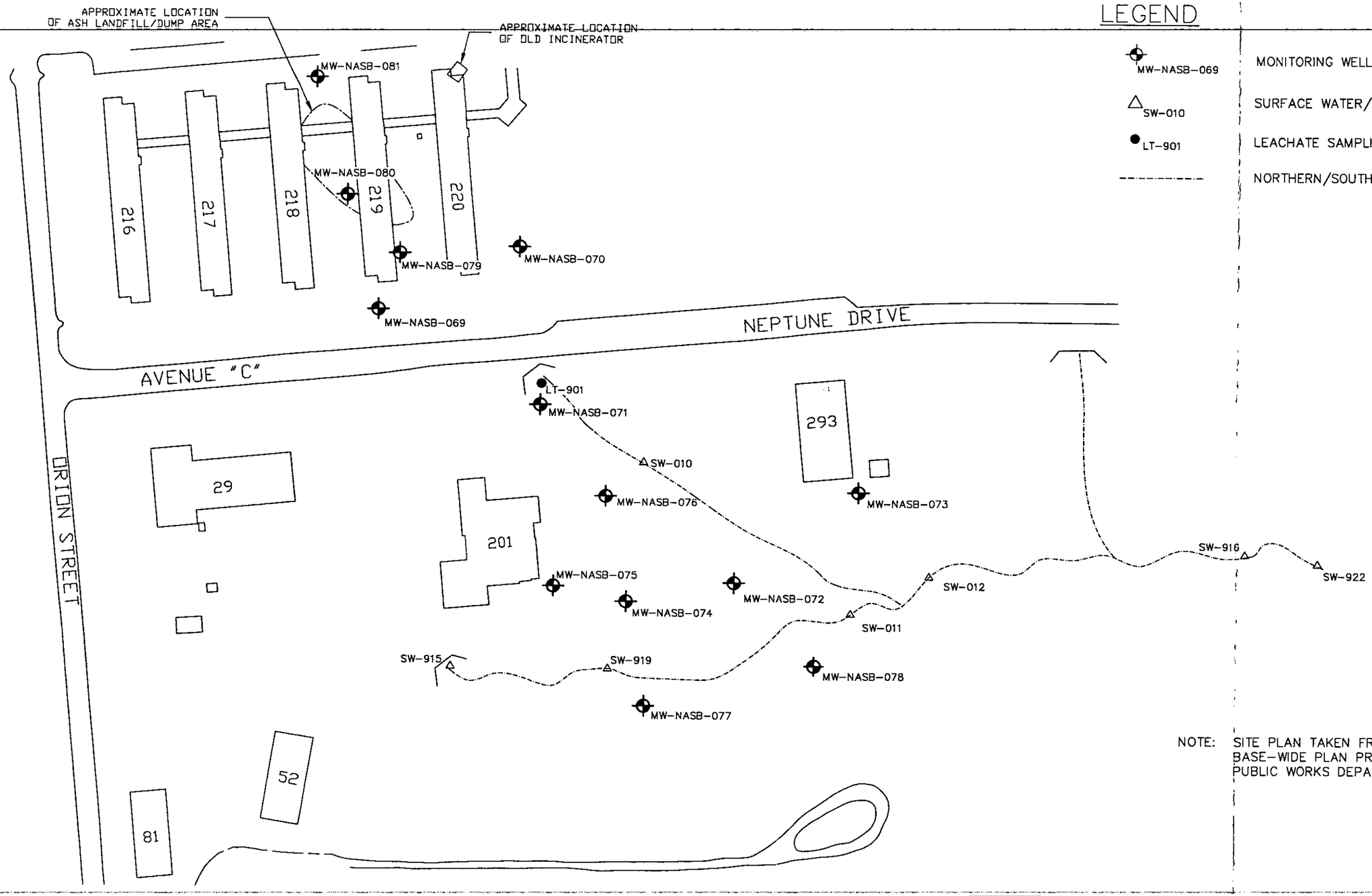
Analysis of the leachate sediment sample at sampling station LT-901 confirmed the presence of 17 VOC, though 2 VOC (methylene chloride and acetone) were attributed to laboratory contamination. The remaining VOC were reported at low concentrations in the sediment sample collected at LT-901.

Nineteen TAL elements were reported in the leachate sediment samples, including aluminum, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, vanadium, and zinc.



Source: USGS 7.5-minute series topographic maps: Brunswick, Maine, Quadrangles (1980); and Orrs Island, Maine, 1978. Scale 1:24,000.

Figure 1. Site location map for Site 9, Naval Air Station, Brunswick, Maine.



LEGEND

MW-NASB-069	MONITORING WELL
SW-010	SURFACE WATER/SEDIMENT SAMPLING LOCATION
LT-901	LEACHATE SAMPLING STATION
----------	NORTHERN/SOUTHERN UNNAMED STREAM PROFILE

NOTE: SITE PLAN TAKEN FROM THE INTEGRAPH VERSION 5 BASE-WIDE PLAN PROVIDED BY NAS BRUNSWICK PUBLIC WORKS DEPARTMENT ON 13 OCTOBER 1995.

120' 0 120'

APPROXIMATE SCALE

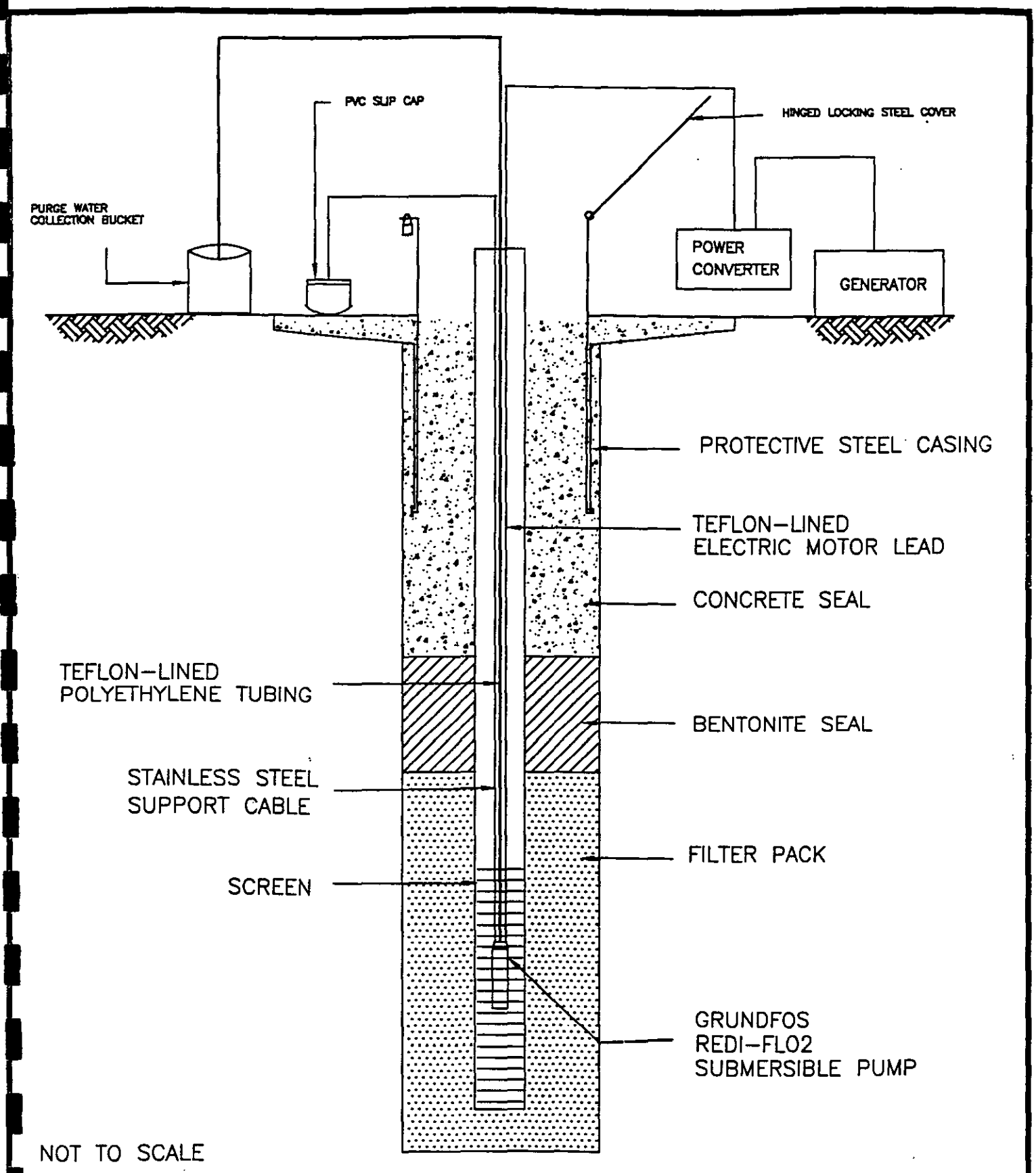
DWG. FILE No. F:\CAD\29600\47\S9EV2

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

SITE 9
(NEPTUNE DRIVE DISPOSAL SITE)
NAVAL AIR STATION
BRUNSWICK, MAINE

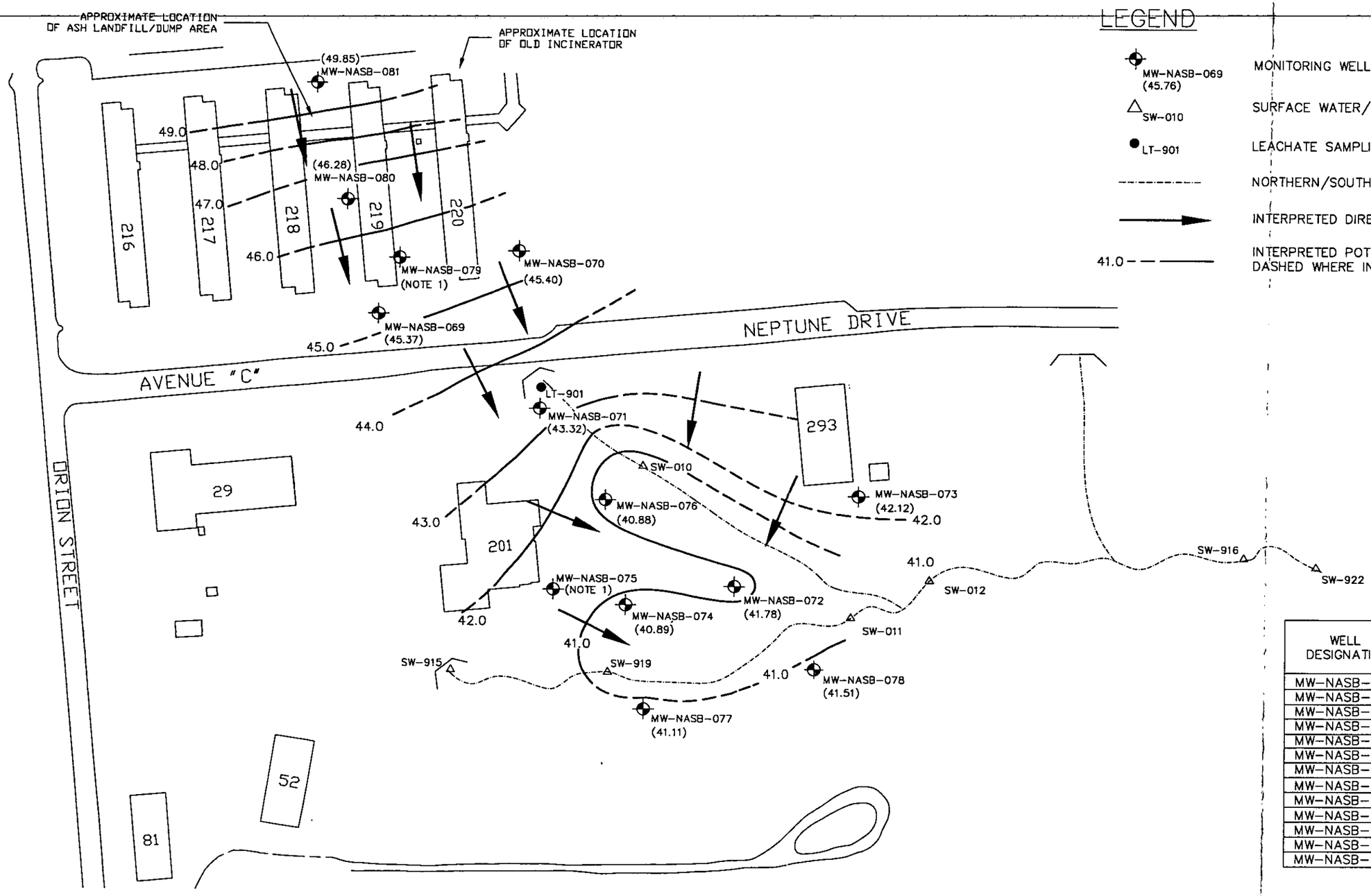
FIGURE 2
SITE PLAN

PROJECT MGR	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	DATE	PROJECT NO	FILE No.
MSB		SY	MSB	1"=120'	8 DEC 95	29600.47	S9EV2



DWG. FILE No. F:\CAD\AGWELL

EA ENGINEERING, SCIENCE, AND TECHNOLOGY			SCHEMATIC OF GENERALIZED INSTALLATION OF DEDICATED SUBMERSIBLE PUMP SYSTEM IN A MONITORING WELL			FIGURE 3	
PROJECT MGR	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	DATE	PROJECT NO	FILE No.
MSB		SY		N.T.S.	26 JUNE 1995	29600.47	PUMP



LEGEND

MW-NASB-069 (45.76)	MONITORING WELL (WATER TABLE ELEVATION, FT. MSL.)
SW-010	SURFACE WATER/SEDIMENT SAMPLING LOCATION
LT-901	LEACHATE SAMPLING STATION
	NORTHERN/SOUTHERN UNNAMED STREAM PROFILE
	INTERPRETED DIRECTION OF GROUND-WATER FLOW
41.0	INTERPRETED POTENTIOMETRIC SURFACE DASHED WHERE INFERRED (CONTOUR INTERVAL = 1.0 FT)

WELL DESIGNATION	WELL RISER ELEVATION (ft MSL)
MW-NASB-069	57.30
MW-NASB-070	58.26
MW-NASB-071	46.25
MW-NASB-072	49.81
MW-NASB-073	51.71
MW-NASB-074	51.68
MW-NASB-075	54.91
MW-NASB-076	52.79
MW-NASB-077	58.89
MW-NASB-078	53.74
MW-NASB-079	58.15
MW-NASB-080	58.51
MW-NASB-081	58.22

NOTE
1. WATER LEVEL DATA NOT USED IN DEVELOPMENT OF THE CONTOUR MAP. (DATA NOT CONSISTENT WITH HISTORIC WELL GAUGING DATA).

120' 0 120'
APPROXIMATE SCALE

DWG. FILE No. F:\CAD\29600\47\S9EV2

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

SITE 9
(NEPTUNE DRIVE DISPOSAL SITE)
NAVAL AIR STATION
BRUNSWICK, MAINE

FIGURE 4
INTERPRETED WATER TABLE ELEVATIONS, 2 NOVEMBER 1995 WELL GAUGING DATA

PROJECT MGR	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	DATE	PROJECT NO	FILE No.
MSB		SY	MSB	1"=120'	22 JAN 96	29600.47	S9EV4

TABLE 1 SUMMARY OF LONG-TERM MONITORING PROGRAM AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Sample Type/Location	Monitoring Frequency	Sample Parameters			
		TCL VOC	TCL SVOC	TAL Elements	Field Parameters[a]
Monitoring Wells					
MW-901	Quarterly	X			X
MW-902	Quarterly				X[b]
MW-903	Quarterly	X		X	X
MW-904	Quarterly	X		X	X
MW-905	Quarterly				X[b]
MW-906	Quarterly	X			X
MW-907	Quarterly	X			X
MW-908	Quarterly	X			X
MW-909	Annually	X			X
MW-910	Annually	X			X
MW-914	Quarterly	X		X	X
MW-915	Quarterly	X		X	X
MW-916	Quarterly	X		X	X
Leachate[c]					
LT-901	Quarterly	X		X	X
Surface Water					
SW-010	Quarterly	X			X
SW-011	Quarterly	X			X
SW-012	Quarterly	X			X
SW-915	Quarterly	X			X
SW-916	Annually	X			X
SW-919	Quarterly	X			X
SW-922	Quarterly	X			X

(a) Determination of field parameters in accordance with EPA/600/4-79/020 including: pH (Method 150.1), temperature (Method 170.1), specific conductance (Method 180.1), and dissolved oxygen (Method 360.1). Includes water level measurement.
(b) Indicates water level measurement only.
(c) Sampling will occur if sufficient flow is available.

NOTE: SVOC = Semivolatile organic compounds; TAL = Target Analyte List; TCL = Target Compound List; VOC = Volatile organic compounds (EPA SW-846).

Sample Type/Location	Monitoring Frequency	Sample Parameters			
		TCL VOC	TCL SVOC	TAL Elements	Field Parameters[a]
Sediment					
SED-010	Quarterly	X	X		
SED-011	Quarterly	X	X		
SED-012	Quarterly	X	X		
SED-915	Quarterly	X	X		
SED-916	Annually	X			
SED-919	Quarterly	X	X		
SED-922	Quarterly	X			
LT-901	Quarterly	X		X	

TABLE 2 MONITORING WELL GAUGING SUMMARY SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Well Designation	Previous Well Designation	Well Riser Elevation (ft MSL)	Gauging Data (2 November 1995)		
			Depth to Well Bottom (ft below top of PVC well riser)	Depth to Water (ft below top of PVC well riser)	Water Table Elevation (ft MSL)
Monitoring Wells					
MW-NASB-069	MW-901	57.30	42.42	11.93	45.37
MW-NASB-070	MW-902	58.26	27.32	12.86	45.40
MW-NASB-071	MW-903	46.25	21.54	3.03	43.22
MW-NASB-072	MW-904	49.81	14.63	8.03	41.78
MW-NASB-073	MW-905	51.71	32.12	9.59	42.12
MW-NASB-074	MW-906	51.68	27.12	10.79	40.89
MW-NASB-075	MW-907	54.91	21.22	8.70	46.21
MW-NASB-076	MW-908	52.79	19.94	11.91	40.88
MW-NASB-077	MW-909	58.89	37.29	17.78	41.11
MW-NASB-078	MW-910	53.74	14.93	12.23	41.51
MW-NASB-079	MW-914	58.15	18.92	5.33	52.82
MW-NASB-080	MW-915	58.51	19.04	12.23	46.28
MW-NASB-081	MW-916	58.22	18.85	8.37	49.85

NOTE: MSL = Mean sea level.

TABLE 3 SUMMARY OF WATER QUALITY INDICATOR PARAMETERS MEASURED IN GROUND-WATER SAMPLES COLLECTED ON 13 AND 14 NOVEMBER 1995 AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Well Designation	Previous Well Designation	pH	Temperature (°C)	Conductivity (μmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
Monitoring Wells						
MW-NASB-069	MW-901	6.21	14.7	252	2.12	30
MW-NASB-071	MW-903	6.06	13.0	328	0.80	18
MW-NASB-072	MW-904	6.03	12.4	206	4.89	4
MW-NASB-074	MW-906	6.33	13.1	300	0.64	78
MW-NASB-075	MW-907	6.31	16.9	394	2.96	9
MW-NASB-076	MW-908	6.08	18.0	258	3.19	3
MW-NASB-079	MW-914	6.88	16.9	184	2.48	9
MW-NASB-080	MW-915	6.67	15.9	552	1.09	4
MW-NASB-081	MW-916	6.67	18.2	980	2.08	1

NOTE: NTU = Nephelometric turbidity unit.

TABLE 4 SUMMARY OF WATER QUALITY INDICATOR PARAMETERS MEASURED IN SURFACE WATER AND LEACHATE SEEP SAMPLES COLLECTED ON 11 NOVEMBER 1995 AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Sample Designation	pH	Temperature (°C)	Conductivity (μmhos/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
Surface Water					
SW- 010	6.36	10.3	302	6.11	0
SW-011	7.13	11.9	244	9.30	10
SW-012	7.08	11.8	248	9.46	3
SW-915	6.93	12.6	258	9.04	3
SW-919	7.00	12.2	200	9.02	2
SW-922	6.70	10.9	242	9.79	2
Leachate Seep					
LT-901	6.35	11.7	444	1.86	97

NOTE: NTU = Nephelometric turbidity unit.

TABLE 5 SUMMARY OF ANALYTICAL RESULTS FOR GROUND-WATER SAMPLES COLLECTED ON 13-14 NOVEMBER 1995 AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Analyte	CRQL[a]/ CRDL	MW-NASB -069 MW-901	MW-NASB -071 MW-903	MW-NASB-071 DUP MW-903 DUP	MW-NASB -072 MW-904	MW-NASB -074 MW-906	MW-NASB -075 MW-907	MW-NASB -076 MW-908	MW-NASB -079 MW-914	MW-NASB-079 DUP MW-914 DUP	MW-NASB -080 MW-915	MW-NASB -081 MW-916	QT-007	QT-008	MEG[b]	MCL[c]
VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260 (µg/L)																
Methylene chloride	3.0	1JBX	1JBX	1JBX	2JBX	1JBX	1JBX	1JBX	1JBX	1JBX	1JBX	(<3U)	2JB	2JB	---	5
Total 1,2-Dichloroethene	2.0	(<2U)	(<2U)	(<2U)	(<2U)	12	1J	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	70	70
Vinyl chloride	2.0	(<2U)	1J	(<2U)	(<2U)	**3**	**10**	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	0.15	2
1,1-Dichloroethane	2.0	(<2U)	1J	(<2U)	(<2U)	(<2U)	1J	(<2U)	(<2U)	(<2U)	1J	(<2U)	(<2U)	(<2U)	70	---
Ethylbenzene	2.0	(<2U)	8X	1JBX	1JX	(<2U)	1JX	(<2U)	(<2U)	(<2U)	1JBX	(<2U)	1JB	1JB	700	700
Total xylenes	2.0	(<2U)	18BX	1JX	1JBX	(<2U)	(<2U)	(<2U)	1JX	(<2U)	1JX	1JBX	3	2J	600	10,000
Toluene	2.0	(<2U)	1JX	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	1,400	1,000
Trichloroethene	2.5	(<2.5U)	1JX	(<2.5U)	(<2.5U)	1JX	(<2.5U)	(<2.5U)	(<2.5U)	(<2.5U)	(<2.5U)	(<2.5U)	1J	1J	5	5
Chloroform	5.0	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	1JX	1JB	(<5U)	---	100
1,2-Dichlorobenzene	2.0	(<2U)	1JX	(<2U)	(<2U)	1JX	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	1J	1J	600	600
1,3-Dichlorobenzene	2.0	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	1JX	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	600	600
1,4-Dichlorobenzene	2.0	(<2U)	1JX	(<2U)	1JX	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	1JX	1JX	1J	1J	27	75
Benzene	2.0	(<2U)	1JX	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	5	5
1,1,1-Trichloroethane	2.0	(<2U)	1J	(<2U)	(<2U)	(<2U)	(<2U)	1J	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	200	20
Carbon Tetrachloride	5.0	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	1J	(<5U)	3	5
1,1-Dichloroethene	1.0	(<1U)	1J	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	7	7
Tetrachloroethene	2.0	(<2U)	1JX	(<2U)	(<2U)	1JX	1JX	(<2U)	(<2U)	(<2U)	1JX	(<2U)	1J	1J	3	5
Chlorobenzene	5.0	(<5U)	1JX	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	1JX	(<5U)	1J	1J	47	100
Styrene	2.0	(<2U)	1JX	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	1J	(<2U)	5	100
1,1,2,2-Tetrachloroethane	5.0	(<5U)	(<5U)	(<5U)	1J	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	---	---

(a) CRDL (Contract Required Quantification Limit) is representative of Practical Quantitation Level. CRDL = Contract Required Detection Limit.
(b) MEG (Maximum Exposure Guideline) obtained from State of Maine Department of Human Services Maximum Exposure Guidelines, memorandum dated 23 October 1992. Dashes (—) indicate no MEG applicable.
(c) MCL (Maximum Contaminant Level) obtained from 40 CFR Parts 141 and 142 (U.S. EPA 1994). Dashes (---) indicate no MCL applicable.

NOTE:
U = Not detected. Sample quantitation limits are shown as (<____U).
J = Estimated concentration below detection limit.
B = Compound detected in associated method blank.
NR = Analysis not required.
B* = Analyte concentration is between the instrument detection limit and the CRDL.
QT = Trip blank.
X = Analyte detected in associated trip blank.
Only those analytes detected in at least one of the samples and the contaminants of concern listed in the LTMP (ABB-ES 1995) are shown on this table.
Concentrations in bold denote exceedance of MEG or MCL (primary levels).

Analyte	CRQL[a]/ CRDL	MW-NASB -069 / MW-901	MW-NASB -071 / MW-903	MW-NASB-071 DUP / MW-903 DUP	MW-NASB -072 / MW-904	MW-NASB -074 / MW-906	MW-NASB -075 / MW-907	MW-NASB -076 / MW-908	MW-NASB -079 / MW-914	MW-NASB-079 DUP / MW-914 DUP	MW-NASB -080 / MW-915	MW-NASB -081 / MW-916	QT-007	QT-008	MEG[b]	MCL[c]
TARGET ANALYTE LIST ELEMENTS BY EPA SW 846 6000/7000/9000 SERIES METHODS (µg/L)																
Aluminum	200.0	NR	(<14.5U)	(<14.5U)	(<14.5U)	NR	NR	NR	48.9B*	41.2B*	249	17.2B*	NR	NR	1,430	50-200[d]
Antimony	60.0	NR	2.8B*	(<2.6U)	(<2.6U)	NR	NR	NR	(<2.6U)	(<2.6U)	(<2.6U)	(<2.6U)	NR	NR	2.8	6
Barium	200.0	NR	10B*	10.1B*	8.5B*	NR	NR	NR	172B*	107B*	1,270	111B*	NR	NR	1,500	2,000
Berylium	5.0	NR	(<0.12U)	0.23B*	0.25B*	NR	NR	NR	(<0.12U)	0.14B*	(<0.12U)	(<0.12U)	NR	NR	---	4
Cadmium	5.0	NR	(<0.24U)	(<0.24U)	(<0.24U)	NR	NR	NR	(<0.24U)	(<0.24U)	(<0.24U)	1.9B*	NR	NR	5	5
Calcium	5,000.0	NR	14,000	14,000	20,900	NR	NR	NR	20,800	15,500	95,100	65,900	NR	NR	---	---
Chromium	10.0	NR	0.79B*	(<0.54U)	1.6B*	NR	NR	NR	6.0B*	3.6B*	11.4	0.74B*	NR	NR	100	100
Cobalt	50.0	NR	1.5B*	1.1B*	1.5B*	NR	NR	NR	0.80B*	0.92B*	(<0.61U)	3.5B*	NR	NR	—	—
Copper	25.0	NR	(<1.1U)	(<1.1U)	(<1.1U)	NR	NR	NR	(<1.1U)	(<1.1U)	1.5B*	5.8B*	NR	NR	---	1,300[e]
Iron	100.0	NR	6,060	6,030	(<14.3U)	NR	NR	NR	12,600	7,630	4,580	43.8B*	NR	NR	—	300[d]
Lead	3.0	NR	1.7B*	(<1.6U)	(<1.6U)	NR	NR	NR	(<1.6U)	(<1.6U)	1.7B*	(<1.6U)	NR	NR	---	15[e]
Magnesium	5,000.0	NR	6,320	6,300	5,630	NR	NR	NR	1,290B*	1,040B*	6,140	4,580B*	NR	NR	---	---
Manganese	15.0	NR	**412**	**412**	151	NR	NR	NR	76.6	54.5	**276**	**9,930**	NR	NR	200	50[d]
Nickel	40.0	NR	3.1B*	3.1B*	1.3B*	NR	NR	NR	4.9B*	3.6B*	9.1B*	2.0B*	NR	NR	100	100
Potassium	5,000.0	NR	1,870B*	1,720B*	804B*	NR	NR	NR	2,330B*	2,080B*	9,250	9,240	NR	NR	---	---
Selenium	10.0	NR	(<3.7U)	(<3.7U)	(<3.7U)	NR	NR	NR	(3.7U)	(<3.7U)	(<3.7U)	8.9	NR	NR	10	50
Silver	5.0	NR	(<0.67U)	(<0.67U)	(<0.67U)	NR	NR	NR	(<0.67U)	(<0.67U)	0.80B*	(<0.67U)	NR	NR	50	100[d]
Sodium	5,000.0	NR	31,600	32,800	6,120	NR	NR	NR	3,950B*	2,680B*	22,000	105,000	NR	NR	—	---
Vanadium	50.0	NR	(<0.48U)	(<0.48U)	(<0.48U)	NR	NR	NR	(<0.48U)	(<0.48U)	1.4B*	(<0.48U)	NR	NR	---	---
Zinc	20.0	NR	6.2B*	4.5B*	7.9B*	NR	NR	NR	7.8B*	4.7B*	17.4B*	5.2B*	NR	NR	—	5,000[d]
Cyanide	10.0	NR	(<1.3U)	1.5B*	(<1.3U)	NR	NR	NR	(<1.3U)	(<1.3U)	(<1.3U)	8.0	NR	NR	154	200

(d) Secondary MCL, based on taste, odor, or color.
(e) Action level.

TABLE 6 SUMMARY OF ANALYTICAL RESULTS FOR SURFACE WATER SAMPLES COLLECTED ON 11 NOVEMBER 1995 AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Compound	CRQL[a]	SW-010	SW-011	SW-012	SW-012 DUP	SW-915	SW-919	SW-922	QT-006	QS-002	QD-001
VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260 (μg/L)											
Acetone	5.0	(<5U)	4JZ	4JZ	(<5U)	(<5U)	2JZ	(<5U)	(<5U)	(<5U)	4J
Methylene chloride	3.0	2JBXYZ	2JBXYZ	2JBXYZ	2JBXYZ	2JBXY	2JBXYZ	2JBXYZ	3JB	7B	5B
Toluene	2.0	(<2U)	1J	1J	1J	2J	1J	(<2U)	(<2U)	(<2U)	(<2U)
Trichloroethene	2.5	(<2.5U)	1JB	1JB	(<2.5U)	1JB	1JB	1JB	(<2.5U)	(<2.5U)	(<2.5U)
Total 1,2-Dichloroethene	2.0	1J	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Total Xylenes	2.0	(<2U)	1JBXYZ	1JBXYZ	(<2U)	3BXYZ	2JBXYZ	1JBXYZ	1JB	1JB	1JB
1,1,2,2-Tetrachloroethane	5.0	(<5U)	(<5U)	1J	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)	(<5U)
Tetrachloroethane	2.0	1JYZ	1JYZ	(<2U)	2JYZ	1JYZ	1JYZ	(<2U)	(<2U)	1J	1J
Benzene	2.0	(<2U)	(<2U)	(<2U)	(<2U)	1J	1J	(<2U)	(<2U)	(<2U)	(<2U)
Ethylbenzene	2.0	(<2U)	(<2U)	(<2U)	(<2U)	1J	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
1,4-Dichlorobenzene	2.0	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	1J	(<2U)

(a) CRQL (Contract Required Quantification Limit) is representative of Practical Quantitation Level.

NOTE: Only those analytes detected in at least one of the samples and the contaminants of concern listed in the LTMP (ABB-ES 1995) are shown on this table.

- U = Not detected. Sample quantitation limits are shown as (<____U).
- B = Compound detected in associated method blank.
- J = Estimated concentration below the detection limit.
- QT = Trip blank.
- QS = Equipment rinsate blank.
- QD = Source water blank.
- X = Analyte detected in associated trip blank.
- Y = Analyte detected in associated equipment rinsate blank.
- Z = Analyte detected in associated source water blank.

TABLE 7 SUMMARY OF ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED ON 11 NOVEMBER 1995 AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Compound	CRQL[a]	SED-010	SED-011	SED-012[b]	SED-012 DUP	SED-915	SED-919	SED-922	QT-006 (μg/L)	QS-001 (μg/L)	QD-001 (μg/L)
VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260 (μg/kg)											
Acetone	5.0	14BZ	130BZ	1JBZ	22BZ	3JBZ	1JBZ	43BZ	(<5U)	(<5U)	4J
Methylene chloride	3.0	5BXYZ	20BXYZ	9BXYZ	17BXYZ	16BXYZ	6BXYZ	16BX	3JB	6B	5B
2-Butanone	5.0	4JB	32B	(<6U)	1JB	1JB	1JB	8JB	(<5U)	(<5U)	(<5U)
Tetrachloroethene	2.0	1JZ	2JBZ	1JBZ	1JBZ	2JBZ	1JZ	3JBZ	(<2U)	(<2U)	1J
1,1,2,2-Tetrachloroethane	5.0	1J	(<9U)	(<6U)	(<6U)	(<6U)	(<6U)	2J	(<5U)	(<5U)	(<5U)
Vinyl chloride	2.0	1J	(<3U)	(<2U)	(<2U)	(<2U)	(<2U)	(<3U)	(<2U)	(<2U)	(<2U)
Total 1,2-Dichloroethene	2.0	9	(<3U)	(<2U)	(<2U)	(<2U)	(<2U)	1J	(<2U)	(<2U)	(<2U)
Trichloroethene	2.5	2J	(<4U)	(<3U)	(<3U)	1J	(<3U)	1J	(<2.5U)	(<2.5U)	(<2.5U)
Toluene	2.0	(<3U)	1J	(<2U)	(<2U)	(<2U)	(<2U)	1J	(<2U)	(<2U)	(<2U)
Total xylenes	2.0	1JBXZ	1JXZ	(<2U)	1JXZ	1JXZ	1JBXZ	2JXZ	1JB	(<2U)	1JB
Chloroform	5.0	1JB	1JB	1JB	1JB	1JB	1JB	1JB	(<5U)	(<5U)	(<5U)
Carbon disulfide	5.0	1J	2J	1J	1J	1J	(<6U)	1J	(<5U)	(<5U)	(<5U)
1,1-Dichloroethane	2.0	(<3U)	1J	(<2U)	(<2U)	(<2U)	(<2U)	(<3U)	(<2U)	(<2U)	(<2U)
1,2-Dichlorobenzene	2.0	1JB	3J	(<2U)	(<2U)	(<2U)	(<2U)	2J	(<2U)	(<2U)	(<2U)

(a) CRQL (Contract Required Quantification Limit) is representative of Practical Quantitation Level.
(b) Reanalysis conducted on samples due to low surrogate recoveries.

NOTE: Only those analytes detected in at least one of the samples and the contaminants of concern listed in the LTMP (ABB-ES 1995) are shown on this table.

- U = Not detected. Sample quantitation limits are shown as (<____U).
- B = Compound detected in associated method blank.
- J = Estimated concentration below concentration limit.
- NR = Analysis not required.
- RB = Equipment rinsate blank; samples associated with QS-001 were analyzed under a separate sample delivery group shipped the same day.
- QD = Source water blank.
- QS = Equipment rinse blank.
- QT = Trip blank; samples associated with QT-006 were analyzed under a separate sample delivery group shipped the same day.
- X = Analyte detected in associated trip blank.
- Y = Analyte detected in associated equipment rinsate blank.
- Z = Analyte detected in associated source water blank.

Compound	CRQL[a]	SED-010	SED-011	SED-012[b]	SED-012 DUP	SED-915	SED-919	SED-922	QT-006 (μg/L)	QS-001 (μg/L)	QD-001 (μg/L)
1,3-Dichlorobenzene	2.0	1JB	1J	(<2U)	(<2U)	(<2U)	(<2U)	2J	(<2U)	(<2U)	(<2U)
1,4-Dichlorobenzene	2.0	1JB	1J	(<2U)	(<2U)	1J	(<2U)	2J	(<2U)	(<2U)	(<2U)
Chlorobenzene	5.0	(<7U)	(<9U)	(<6U)	(<6U)	(<6U)	(<6U)	1J	(<5U)	(<5U)	(<5U)
Ethylbenzene	2.0	(<3U)	(<3U)	(<2U)	1J	1J	(<2U)	1J	(<2U)	(<2U)	(<2U)
1,1-Dichloroethene	1.0	1J	(<2U)	(<1U)	(<1U)	(<1U)	(<1U)	1J	(<5U)	(<5U)	(<5U)
1,1,1-Trichloroethane	2.0	1J	(<3U)	(<2U)	(<2U)	(<2U)	(<2U)	(<3U)	(<2U)	(<2U)	(<2U)
SEMIVOLATILE ORGANIC COMPOUNDS BY EPA METHODS 8270 (μg/kg)											
Naphthalene	330	28J	(<560U)	170J	56J	110J	(<400U)	NR	NR	(<10U)	NR
Acenaphthene	330	88J	69J	240J	290J	160J	52J	NR	NR	(<10U)	NR
Dibenzofuran	330	(<430U)	(<560U)	170J	170J	78J	43J	NR	NR	(<10U)	NR
Fluorene	330	75J	(<560U)	310J	310J	130J	150J	NR	NR	(<10U)	NR
Phenanthrene	330	620	(<560U)	2,300	2,400	1,100	1,400	NR	NR	(<10U)	NR
Anthracene	330	160J	(<560U)	280J	440	280J	220J	NR	NR	(<10U)	NR
Carbazole	330	110J	(<560U)	250J	320J	130J	(<400U)	NR	NR	(<10U)	NR
Di-n-butylphthalate	330	(<430U)	(<560U)	(<400U)	(<400U)	(<400U)	61JB	NR	NR	(<10U)	NR
Fluoranthene	330	2,000	(<560U)	3,000	2,500	1,500	1,900	NR	NR	(<10U)	NR
Pyrene	330	1,600	(<560U)	2,500	2,200	1,300	1,800	NR	NR	(<10U)	NR
Benzo(a)anthracene	330	870	(<560U)	1,200	1,000	680	1,000	NR	NR	(<10U)	NR
Chrysene	330	1,300	(<560U)	1,100	1,100	660	960	NR	NR	(<10U)	NR
Bis(2-ethylhexyl)phthalate	330	190JB	(<560U)	190JB	130JB	120JB	230JB	NR	NR	(<10U)	NR
Benzo(b)fluoranthene	330	1,800	(<560U)	1,400	1,300	810	980	NR	NR	(<10U)	NR
Benzo(k)fluoroethane	330	570	(<560U)	410	430	270J	320J	NR	NR	(<10U)	NR
Benzo(a)pyrene	330	880	(<560U)	880	870	560	760	NR	NR	(<10U)	NR
Indeno(1,2,3-c,d)pyrene	330	510	(<560U)	530	440	320J	420	NR	NR	(<10U)	NR
Dibenzo(a,h)anthracene	330	200J	(<560U)	(<400U)	140J	(<400U)	140J	NR	NR	(<10U)	NR
Benzo(g,h,i)perylene	330	620	(<560U)	590	480	350J	470	NR	NR	(<10U)	NR
2-Methyl naphthalene	330	(<430U)	(<560U)	82J	37J	36J	36J	NR	NR	(<10U)	NR
Acenaphthylene	330	(<430U)	(<560U)	(<400U)	(<400U)	(<400U)	(<400U)	NR	NR	(<10U)	NR

TABLE 8 SUMMARY OF ANALYTICAL RESULTS FOR THE LEACHATE SEEP AND SEDIMENT SAMPLES COLLECTED ON 11 NOVEMBER 1995 AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Analyte	CRQL[a] /CRDL	LT-901 (SEEP) (μg/L)	LT-901 (SED) (mg/kg)	LT-901 (SED)[b] DUP (mg/kg)	QT-006 (μg/L)	QS-001 (SED) (μg/L)	QS-002 (SEEP) (μg/L)	QD-001 (μg/L)
VOLATILE ORGANIC COMPOUNDS BY EPA METHOD SW-8260								
Methylene chloride	3.0	2JBXYZ	8BXYZ	7BXYZ	3JB	6B	7B	5B
Acetone	5.0	3JZ	14BZ	18BZ	(<2U)	(<5U)	(<5U)	4J
Bromodichloromethane	5.0	(<5U)	1J	(<7U)	(<5U)	(<5U)	(<5U)	(<5U)
2-Butanone	5.0	(<5U)	5JB	8	(<5U)	(<5U)	(<5U)	(<5U)
Benzene	2.0	(<2U)	1J	(<2.8U)	(<2U)	(<2U)	(<2U)	(<2U)
Total xylenes	2.0	(<2U)	1JXZ	1JBXZ	1JB	(<2U)	1JB	1JB
1,1-Dichloroethene	1.0	(<2U)	1J	(<1.4U)	(<2U)	(<2U)	(<2U)	(<2U)
Carbon disulfide	5.0	(<5U)	1J	1J	(<2U)	(<5U)	(<5U)	(<5U)
Ethylbenzene	2.0	(<2U)	1J	(<2.8U)	(<2U)	(<2U)	(<2U)	(<2U)
Total 1,2-Dichloroethene	2.0	(<2U)	1J	(<2.8U)	(<2U)	(<2U)	(<2U)	(<2U)
Toluene	2.0	(<2U)	1J	1JB	(<2U)	(<2U)	(<2U)	(<2U)
Chlorobenzene	5.0	(<5U)	1J	(<7U)	(<5U)	(<5U)	(<5U)	(<5U)
Tetrachloroethene	2.0	(<2U)	1JBZ	1JBZ	(<2U)	(<2U)	1J	1J
Chloroform	5.0	(<5U)	1JB	1JB	(<5U)	(<5U)	(<5U)	(<5U)
1,2-Dichlorobenzene	2.0	1JB	1J	(<2.8U)	(<2U)	(<2U)	(<2U)	(<2U)
1,3-Dichlorobenzene	2.0	(<2U)	1J	(<2.8U)	(<2U)	(<2U)	(<2U)	(<2U)
1,4-Dichlorobenzene	2.0	(<2U)	1J	(<2.8U)	(<2U)	(<2U)	1J	(<2U)

(a) CRQL (Contract Required Quantitation Limit) is representative of Practical Quantitation Level.
CRDL = Contract Required Detection Limit. The CRDLs for TAL elements listed are for aqueous matrices. To obtain CRDLs for solid matrices, multiply the aqueous matrices CRDL by a factor of 0.2.
(b) Reanalysis conducted due to low surrogate recovery.

NOTE:
- U = Not detected. Sample quantitation limits are shown as (<___U).
- B = Compound detected in assocated method blank.
- NR = Analysis not required.
- B* = Analyte concentration is between the instrument detection limit and the CRDL.
- QS = Equipment rinsate blank. Equipment rinsate blank associated with leachate sediment samples was analyzed under a separate sample delivery group shipped the same day.
- QT = Trip blank. Trip blank associated with leachate seep and sediment samples were analyzed under a separate sample delivery group shipped the same day.
- QD = Source water blank.
- X = Analyte detected in associated trip blank.
- Y = Analyte detected in associated equipment rinsate blank.
- Z = Analyte detected in associated source water blank.

Only those analytes detected in at least one of the samples and the contaminants of concern listed in the LTMP (ABB-ES 1995) are shown on this table.

Analyte	CRQL[a] /CRDL	LT-901 (SEEP) (μg/L)	LT-901 (SED) (mg/kg)	LT-901 (SED)[b] DUP (mg/kg)	QT-006 (μg/L)	QS-001 (SED) (μg/L)	QS-002 (SEEP) (μg/L)	QD-001 (μg/L)
TARGET ANALYTE LIST ELEMENTS BY EPA SW-846 6000/7000/9000 SERIES METHODS								
Aluminum	200.0	1,740Y	3,230Y	4,890Y	NR	44.0B*	34.3B*	(<14.5U)
Arsenic	10.0	3.5B*	2.1	3.5	NR	(<2.8U)	(<2.8U)	(<2.8U)
Barium	200.0	61.9YZ	12.9B*YZ	18.5B*YZ	NR	2.1B*	2.1B*	1.1B*
Beryllium	5.0	0.12B*Y	0.20B*Y	0.22B*Y	NR	0.15B*	0.13B*	(<0.12U)
Cadmium	5.0	0.32B*	0.09B*	0.18B*	NR	(<0.24U)	(<0.24U)	(<0.24U)
Calcium	5,000.0	29,600	971	1,110	NR	(<9.3U)	(<9.3U)	(<9.3U)
Chromium	10.0	5.3B*	6.5	12.3	NR	(<0.54U)	(<0.54U)	(<0.54U)
Cobalt	50.0	1.8B*	2.7B*	3.9B*	NR	(<0.61U)	(<0.61U)	(<0.61U)
Copper	25.0	9.3B*	6.6	8.5	NR	(<1.1U)	(<1.1U)	(<1.1U)
Iron	100.0	34,500YZ	5,750YZ	8,530YZ	NR	68.4B*	23.9B*	23.2B*
Lead	3.0	35.9B*Z	41.4Z	50.4Z	NR	(<1.6U)	(<1.6U)	2.8B*
Magnesium	5,000.0	3,370	985	2,380	NR	(<11.0U)	(<11.0U)	(<11.0U)
Manganese	15.0	247Y	57.1Y	87.9Y	NR	0.59B*	0.31B*	(<2.0U)
Mercury	0.2	(<0.10U)	(<0.05U)	0.06B*	NR	(<0.10U)	(<0.10U)	(<0.10U)
Nickel	40.0	3.2B*	6.1	10.4	NR	(<1.0U)	(<1.0U)	(<1.0U)
Potassium	5,000.0	4,030B*	422B*Y	597B*Y	NR	690B*	(<331U)	(<331U)
Sodium	5,000.0	45,500	106B*	123B*	NR	(<54.8U)	(<54.8U)	(<54.8U)
Vanadium	50.0	9.3B*	11.7	16.0	NR	(<0.48U)	(<0.48U)	(<0.48U)
Zinc	20.0	64.2YZ	29.0YZ	42.8YZ	NR	5.9B*	3.4B*	4.2B*

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Appendix A

Standard Operating Procedures for Field Sampling

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APPENDIX A

STANDARD OPERATING PROCEDURES FOR FIELD SAMPLING

A.1 STANDARD OPERATING PROCEDURE NO. 1 - GROUND-WATER SAMPLING BY LOW-FLOW PURGE AND SAMPLING METHOD USING DEDICATED PUMPS

A.1.1 Scope of Application

The purpose of this Standard Operating Procedure (SOP) is to establish the protocol for collecting ground-water samples using dedicated pump systems. The procedure is designed to permit the collection of ground-water samples with minimum turbidity, and is intended to be used in conjunction with the analyses for the most common types of ground-water contaminants (volatile organic compounds [VOC] and semivolatile organic compounds [SVOC], pesticides, polychlorinated biphenyls [PCB], metals, and inorganic compounds). This SOP was prepared based on draft guidance prepared by U.S. Environmental Protection Agency (EPA) Region I and conforms with the procedures described in the long-term monitoring plan (LTMP) (ABB-ES 1994).

A.1.2 Equipment/Materials

- LTMP.
- Well construction data, location map, field data from last sampling event.
- Field logbook and Field Record of Well Gauging, Purging, and Sampling forms (Figure A-1).
- Water level measuring device, 0.01 ft accuracy (electronic preferred) for monitoring water level during pumping operations.
- Pumps: adjustable rate, variable displacement submersible centrifugal pumps constructed of stainless steel and Teflon®.
- Tubing: Teflon or Teflon-lined polyethylene must be used to collect samples for organic analysis. For samples collected for inorganics analysis, Teflon or Teflon-lined polyethylene, polyvinyl chloride (PVC), Tygon, or polyethylene tubing may be used.
- Flow measurement supplies (e.g., graduated cylinder and stop watch).
- Power source (generator, etc.).

- Water quality indicator parameter monitoring instruments—pH, turbidity, specific conductances, and temperature. Optional indicators—Eh and dissolved oxygen. Water quality indicator parameters will be measured in the field in accordance with EPA-600/4-79-020 (1983) using the following methods: temperature (Method 170.1), pH (Method 150.1), turbidity (Method 180.1), specific conductance (Method 120.1), and dissolved oxygen (Method 360.1).

- Decontamination supplies (for monitoring instrumentation).

- Sample bottles and sample preservation supplies (as required by the analytical methods).

- Sample tags or labels.

A.1.3 Preliminary Site Activities

The following site activities are required prior to performing well purging and ground-water sampling. Field logbooks and sampling forms should be filled out as the procedure is being performed, as noted:

- Enter the following information in the field logbook and sampling form, as appropriate: site name, project number, field personnel, well identification, weather conditions, date and time, equipment used, and quality assurance/quality control data for field instrumentation.

- Check well for damage or evidence of tampering, record pertinent observations in field logbook and sampling form.

- Lay out sheet of polyethylene for monitoring and sampling equipment.

- Unlock well and remove well cap (if applicable).

- Measure VOC with a flame ionization detector instrument at the rim of the well and in the breathing zone, and record the readings in the field logbook and the sampling form.

- If the well casing does not have a reference point (usually a v-cut or indelible mark in the well casing), make one.

- Measure and record the height of protective casing above the concrete pad or ground surface, as appropriate. This reading is compared to that recorded during well installation as an indication of possible well damage or settling that may have occurred.

- Measure and record the depth to water (to 0.01 ft) in each well to be sampled before purging begins. Care should be taken to minimize disturbance of any particulate attached to the sides or at the bottom of the well. The depth to well bottom should not be measured because of the potential to stir up sediment at the bottom of the well.

A.1.4 Sampling Procedure

The following general procedure should be followed to obtain representative ground-water samples. Field logbooks and sampling forms should be filled out as the procedure is being performed, as noted.

- Enter the following information in the field logbook and sampling form, as appropriate, prior to purging: purge date and time, purge method, and total well depth.

- Prepare the pump by checking electrical connections, discharge tubing, and motor (Grundfos Redi-Flo2). Locate the generator (if applicable) downwind of the well; connect the power converter to the generator.

- Connect the instrumentation header to the pump discharge and begin purging the well at 0.2-0.5 L/min, unless a different purge rate has been previously established for that well. Measure and record the water level and time with the pump in well before starting the pump. Continue pumping the well at 0.2-0.5 L/min.

- Establish that the water level has not dropped significantly such that the pump is dry (bubbles in discharge) or water is heard cascading down the inside of the well. This may be accomplished by setting the sensor of the water level meter approximately 3-6 in. below the static water level and monitoring for a continuous audible alarm, which indicates the sensor is in water and the level has not dropped more than 6 in. Ideally, the pump rate should cause little or no water level drawdown in the well (>0.5 ft and the water level should stabilize). The water level should be monitored every 3-5 minutes (or as appropriate) during pumping. Care should be taken not to cause entrainment of air in the pump system. Record pumping rate adjustments and depths to water. Pumping rates should, if needed, be reduced to the minimum capabilities of the pump (e.g., 0.1-0.2 L/min) to avoid pumping the well dry and/or to ensure stabilization of indicator parameters. If the recharge rate of the well is very low and the well is purged dry, then sampling will commence as soon as the well has recharged to a sufficient level to collect the appropriate volume of samples with the pump.

- During purging of the well, monitor the water quality indicator parameters (turbidity, temperature, specific conductance, pH, etc.) every 3-5 minutes (or as appropriate). Record pumping rate, drawdown, water quality indicator parameters values, and clock time at 3- to 5-minute intervals in field logbook and sampling record. Purging of the standing well water is considered complete when three consecutive readings of the water quality indicator parameters agree within approximately 10 percent. Turbidity readings consistently below 10 nephelometric turbidity units (NTU) are considered to represent stabilization of discharge water for this parameter. If the parameters have stabilized, but the turbidity is not in the range of the 10 NTU goal, the pump flow rate should be decreased and measurement of the parameters should continue every 3-5 minutes. Measurements should be obtained using a flow through cell (preferred method) or taken in a clean container (a glass beaker is ideal).

- Reduce the pump flow rate to the lowest practical setting, usually about 0.1 L/min. Remove the in-line sensor, if applicable. If the water discharged by the pump is silty, wait for the water to clear before sampling. Ensure that bubbles are not observed in the discharge tubing. Record pertinent observations in field logbook and sampling records.

- Begin filling sample containers from the pump discharge, allowing the water to fill the containers by allowing the pump discharge to flow gently down the inside of the container with as little agitation or aeration as possible. Collect the samples in the order below, as applicable:

  — VOC
  — SVOC (pesticides and PCB)
  — Inorganics.

- VOC samples requiring pH adjustment will have their pH checked to assure that the proper pH has been obtained. This will require that a test sample be collected to determine the amount of preservative that needs to be added to the sample containers prior to sampling. Details on sample preservation are discussed in Section A.1.5.

- Label each sample as collected. Those samples (VOC, etc.) requiring cooling will be placed into an ice cooler for delivery to the laboratory. Metal samples, after preservation, do not need to be cooled.

- After collection of the samples, restore the dedicated pumping assembly to the well by hanging the tube, electric line, and support cable inside the well by the specially-designed PVC well cap assembly. Lock well.

- Complete remaining portions of Field Record of Well Gauging, Purging, and Sampling form (Figure A-1) after each well is sampled, including sample team members, sample date and time, total quantity of water removed, well sampling sequence and time of sample collection, types of sample bottles used, sample identification numbers, preservatives used, parameters requested for analysis, and field observations of sampling event.

A.1.5 Sample Preservation

The following preservation procedures are examples of typical preservation protocols specific to the indicated analyses. Minimum sample preservation requirements for each parameter group are summarized below:

- **VOC**—Aqueous VOC samples must be collected as specified below. Each VOC sample is taken in duplicate:

  — Uncap the sample bottle, taking care not to touch the Teflon-faced septum. If the septum is contaminated in any way, it should be replaced.

  — Fill a sample bottle, preserve with HC1, and check the pH. Adjust the volume of HCl to assure pH<2.

  — Add the amount of HC1 determined in the above step, and fill the sample vial slowly from the tubing, minimizing air entrainment, until the vial slightly overflows.

  — Place the Teflon-faced silicon rubber septum on the convex meniscus, Teflon side (shiny side) down and screw cap on.

  — Invert the bottle, tap lightly, and check for air bubbles.

  — If air bubbles are present, open the bottle, add sample to eliminate air bubbles, and reseal. Repeat this procedure until the bottle is filled and no air bubbles are detected.

  — Place samples on ice until shipment.

- **SVOC**—Fill the sample bottle, seal with a Teflon-lined cap, and place on ice for shipment.

- **Metals**—Fill the sample bottle, preserve the sample to pH<2 with nitric acid (HNO_3), seal container, and place sample on ice for shipment.

Disposable pipettes should be used to introduce chemicals into the samples. Chemicals used for preserving should be poured into a 150-ml beaker. They should not be drawn directly from the preservative bottles because the bottle may become contaminated. Measurements for pH and temperature should not be taken from the sample containers. When preserving samples to a required pH, pH paper should be used to check the resultant pH. The sample should be poured across the pH paper. Never place pH paper directly into sample.

NOTE: Shipping regulations limit the amount of preservative which can be added. For a 1-L sample, this is generally 1.5 ml of acid preservative.

A.1.6 Field Quality Control

Quality control samples are required to verify that the sample collection and handling process has not affected the quality of the ground-water samples. All field quality control samples must be prepared exactly as regular investigation samples with regard to sample volume, containers, and preservation. The following quality control samples will be collected for each sample delivery group (SDG) (an SDG may not exceed 20 samples) at the frequency noted.

- Field Duplicate—Required at a frequency of 10 percent per SDG.
- Matrix Spike/Matrix Spike Duplicate—Required at a frequency of 5 percent.
- Equipment Blank—Required once prior to installation of dedicated pump systems.
- Source Water Blank—Required at a frequency of once per sampling event.
- Trip Blank—Required for VOC samples at a frequency of one per sample shipment.

A.1.7 Decontamination

Non-dedicated sampling equipment and field monitoring equipment will be decontaminated prior to use and following sampling of each well. This equipment will be decontaminated by the procedure listed below. Alternative procedures must be approved by the Quality Assurance Officer prior to sampling event.

Procedure

The following decontamination procedure will be used:

- Flush the equipment with potable water
- Flush with non-phosphate detergent solution
- Flush with tap water to remove all of the detergent solution

- Flush with distilled/deionized water
- Flush with isopropyl alcohol
- Flush with distilled/deionized water.

It is recommended that the detergent and isopropyl alcohol used in the above sequence be used sparingly.

A.2 STANDARD OPERATING PROCEDURE NO. 2 - SURFACE WATER AND LEACHATE SEEP SAMPLING PROCEDURE

A.2.1 Scope of Application

The purpose of this SOP is to establish the protocol for collecting surface water and leachate seep samples. The procedure is designed to permit the collection of representative surface water and leachate seep samples, and has been adapted from the procedure outlined in the LTMP (ABB-ES 1994). This SOP is suitable for collecting surface water and seep samples requiring analyses for the most common types of surface water contaminants (VOC, SVOC, pesticides, PCB, metals, and inorganic compounds).

A.2.2 Equipment and Materials

- LTMP.
- Location map, field data from last sampling event.
- Field logbook and Field Record of Surface Water and Sediment Sampling forms (Figure A-2).
- Water quality indicator parameter monitoring instruments—pH, turbidity, specific conductances, and temperature. Optional indicators—Eh and dissolved oxygen.
- Decontamination supplies (for monitoring instrumentation).
- Dedicated, pre-cleaned 1-L wide-mouth sample container (for sample collection).
- Sample bottles and sample preservation supplies (as required by the analytical methods).
- Sample tags or labels.

A.2.3 Preliminary Site Activities

The following site activities are required prior to performing surface water or leachate seep sampling. Field logbooks and sampling forms should be filled out as the procedure is being performed, as noted.

- Enter the following information in the field logbook and sampling form, as appropriate: site name, project number, field personnel, sample station identification, weather conditions, date and time, equipment used, and quality assurance/quality control data for field instrumentation.

- Visually inspect sample station for evidence of changes in physical condition; record pertinent observations in field logbook and sampling form.

- Lay out sheet of polyethylene for monitoring and sampling equipment.

- Measure VOC with a flame ionization detector instrument in the breathing zone and record the reading in the field logbook and sampling form.

A.2.4 Sampling Procedure

The technique for surface water and leachate seep sampling must be selected after addressing such items as:

- Depth of waterbody
- Flow rate
- Stratification
- Specific gravity/solubility of anticipated analytical parameters
- Seasonal variations
- Analytical parameters of interest.

The following general procedure should be used to obtain representative surface water and leachate seep samples. Field logbooks and sampling forms should be filled out as the procedure is being performed, as noted:

- Enter the following information in the field logbook and sampling form, as appropriate, prior to sampling: date and time, sample method, and sample depth.

- Collect the sample from the surface water by immersing a pre-cleaned dedicated 1-L glass sample container into the waterbody. If a stream is being sampled, collect the sample upstream of the sampler with the opening of the sampling device oriented upstream but avoiding floating debris.

- Directly fill the appropriate sample containers from the 1-L sampling device. Collect the samples in the order below, as applicable:

  — VOC
  — SVOC (pesticides and PCB)
  — Inorganics.

- Water sample containers are generally filled directly from the source or sampler without special considerations. The exception is the collection of aqueous VOC samples requiring pH adjustment. VOC samples will have their pH checked to assure that the proper pH has been obtained. This will require that a test sample be collected to determine the amount of preservative that needs to be added to the sample containers prior to sampling. Details on sample preservation methods are discussed in Section A.2.5.

- Label each sample as collected. Those samples (VOC, etc.) requiring cooling will be placed into an ice cooler for delivery to the laboratory. Metal samples, after preservation, do not need to be cooled.

- Measure water quality indicator parameters, if possible, by direct immersion of instrument probes into the waterbody immediately following sample collection in accordance with EPA-600/4-79-020 (1983) using the following methods: temperature (Method 170.1), pH (Method 150.1), turbidity (Method 180.1), specific conductance (Method 120.1), and dissolved oxygen (Method 360.1). If direct measurement is not possible, measure these parameters from water remaining in the sampling device or another sample bottle. Record this information in the field logbook and sample data record.

- Complete remaining portions of the Field Record of Surface Water and Sediment Sampling form (Figure A-2) after each station is sampled, including time of sample collection, types of sample bottles used, sample identification numbers, preservatives used, parameters requested for analysis, and field observations of sampling event.

A.2.5 Sample Preservation

The following preservation procedures are examples of typical preservation protocols specific to the indicated analyses. Minimum sample preservation requirements for each parameter group are summarized below:

- **VOC**—Aqueous VOC samples must be collected as specified below. Each sample is taken in duplicate:

  — Uncap the sample bottle, taking care not to touch the Teflon-faced septum. If the septum is contaminated in any way, it should be replaced.

  — Fill a sample bottle, preserve with HC1, and check the pH. Adjust the volume of HCl to assure pH<2.

— Add the amount of HC1 determined in the above step, and fill the sample vial slowly from the 1-L container, minimizing air entrainment, until the vial slightly overflows.

— Place the Teflon-faced silicon rubber septum on the convex meniscus, Teflon side (shiny side) down and screw cap on.

— Invert the bottle, tap lightly, and check for air bubbles.

— If air bubbles are present, open the bottle, add sample to eliminate air bubbles, and reseal. Repeat this procedure until the bottle is filled and no air bubbles are detected.

— Place samples on ice until shipment.

- **SVOC**—Fill the sample bottle, seal with a Teflon-lined cap, and place on ice for shipment.

- **Metals**—Fill the sample bottle, preserve the sample to pH<2 with nitric acid (HNO_3), seal container, and place sample on ice for shipment.

Disposable pipettes should be used to introduce chemicals into the samples. Chemicals used for preserving should be poured into a 150-ml beaker. They should not be drawn directly from the preservative bottles because the bottle may become contaminated. Measurements for pH and temperature should not be taken from the sample containers. When preserving samples to a required pH, pH paper should be used to check the resultant pH. The sample should be poured across the pH paper. Never place pH paper directly into sample.

NOTE: Shipping regulations limit the amount of preservative which can be added. For a 1-L sample, this is generally 1.5 ml of acid preservative.

A.2.6 Field Quality Control

Quality control samples are required to verify that the sample collection and handling process has not affected the quality of the surface water and leachate seep samples. All field quality control samples must be prepared exactly as regular investigation samples with regard to sample volume, containers, and preservation. The following quality control samples will be collected for each SDG (an SDG may not exceed 20 samples) at the frequency noted:

- Field Duplicate—Required at a frequency of 10 percent per SDG.
- Matrix Spike/Matrix Spike Duplicate—Required at a frequency of 5 percent.
- Source Water Blank—Required at a frequency of once per sampling event.
- Trip Blank—Required for VOC samples at a frequency of one per sample shipment.

A.2.7 Decontamination

Field monitoring equipment will be decontaminated prior to use and following sampling of each station by the procedure listed below. Laboratory pre-cleaned, dedicated 1-L glass sample collection containers are used once and discarded and, therefore, do not undergo any decontamination.

Procedure

The following decontamination procedure will be used:

- Flush the equipment with potable water
- Flush with non-phosphate detergent solution
- Flush with tap water to remove all of the detergent solution
- Flush with distilled/deionized water
- Flush with isopropyl alcohol
- Flush with distilled/deionized water.

It is recommended that the detergent and isopropyl alcohol used in the above sequence be used sparingly.

A.3 STANDARD OPERATING PROCEDURE NO. 3 - SEDIMENT SAMPLING PROCEDURE

A.3.1 Scope of Application

The purpose of this SOP is to establish the protocol for collecting sediment samples. The procedure is designed to permit the collection of representative sediment samples, and has been adapted from the procedure outlined in the LTMP (ABB-ES 1994). This SOP is suitable for collecting sediment samples requiring analyses for most various types of contaminants (VOC, SVOC, pesticides, PCB, metals, and inorganic compounds).

A.3.2 Equipment and Materials

- LTMP.
- Location map, field data from last sampling event.
- Field logbook and Field Record of Surface Water and Sediment Sampling forms (Figure A-2).
- Decontamination supplies (for sampling equipment and monitoring instrumentation).
- Stainless steel hand trowel and mixing bowls (for sample collection).
- Sample bottles and sample tags or labels.

A.3.3 Preliminary Site Activities

The following site activities are required prior to performing sediment sampling. Field logbooks and sampling forms should be filled out as the procedure is being performed, as noted.

- Enter the following information in the field logbook and sampling form, as appropriate: site name, project number, field personnel, sample station identification, weather conditions, date and time, equipment used, and quality assurance/quality control data for field instrumentation.
- Visually inspect sample station for evidence of changes in physical condition; record pertinent observations in field logbook and sampling form.
- Lay out sheet of polyethylene for monitoring and sampling equipment.

- Measure VOC with a flame ionization detector instrument in the breathing zone and record the reading in the field logbook.

- Clear sample area of detritus (seasonally).

A.3.4 Sampling Procedure

Sediment samples are usually taken in conjunction with surface water and/or leachate seep samples. If both surface water and sediment samples are to be collected at a given sampling location, the water samples will be collected prior to the sediment sample. The sediment samples will be collected in the following manner:

- The sampler will locate the sample station as indicated on the site map and flagged with a stake (unless previously flagged).

- The sampler will photograph the sample location (optional), complete the required records, and initiate chain-of-custody procedures.

The recommended sediment collection devices are Teflon® or stainless steel spatulas, hand trowels, or core tubes for shallow wadeable water. In shallow, wadeable waters, the direct use of a core liner or tube (5 in.) is recommended. The tube is pushed into the substrata until approximately 1 in. (2.5 cm) or less of the tube is above the sediment water interface. When hard or coarse substrates are sampled, a gentle rotation of the tube while it is pushed will facilitate greater penetration and reduce core compaction. The tube is then capped with a Teflon plug or a sheet of Teflon held in place by a rubber stopper or cork. After capping, the tube is slowly extracted, the negative pressure and adherence of the sediment keeping the sample in the tube. Caution should be exercised not to disturb the area to be sampled. The sampler should always stand downstream from the sample location when wading in shallow water.

To help prevent contamination from direct contact between the sampler's gloves and the upper part of the tube, a collar-type device can be constructed of wood and should have a circular recess to accept the top of the tube. The recess should have a hole in it to allow water to pass through when the tube is pushed in, and should be lined with sheet Teflon. Handles should be attached to the side of the collar. After the tube is driven in, one should use a wide circular motion to help loosen the core for easy removal, take off the collar device, and cap the top of the tube (as described above) and pull it up out of the sediment layer.

Sediment samples must contain greater than 30 percent solids to be acceptable. A minimum of 100 g of sediment should be collected at each sample station. Therefore, one tube with a 4-in. long core, outer diameter of 2 in., and wall thickness of 0.125-in. is adequate for one sample (the volume of each core would be approximately 0.75 qt or 750 ml). For other tube sizes and core lengths, the number of tubes necessary can be calculated by using the formula for the volume of a cylinder. Additional material may be required if duplicate analyses are performed on individual samples.

When the sediment material is difficult to penetrate with a Teflon or glass tube, a commercially available hand coring device can be used. These devices are equipped with a metal barrel, a handle, and a core liner. The liner is inserted and then held in place by a screw-on core cutter, usually manufactured of stainless steel. The core cutter, along with the handle attached to the core barrel, increases the efficiency of sediment penetration. After the sample has been obtained, the cutting head is removed and the liner is carefully withdrawn and immediately capped, as previously described. When coarse grain deposits such as sand are sampled, the use of a core retainer will increase the efficiency of sample retention. Only retainers manufactured of stainless steel should be used in order to minimize the risk of trace metals contamination and eliminate corrosion. When several samples are to be obtained, it is advisable to carry extra core liners to the sample site. This eliminates the need for time-consuming extensions and permits the use of the core liners as sample containers for shipment to the laboratory.

- Directly fill the appropriate sample containers from the sampling device. Collect the samples in the order below, as applicable:

  — VOC
  — SVOC
  — Pesticides and PCB
  — Inorganics.

- Label each sample as collected. Those samples (VOC, etc.) requiring cooling will be placed into an ice cooler for delivery to the laboratory.

- Complete remaining portions of the Field Record of Surface Water and Sediment Sampling form (Figure A-2) as each sample is collected, including time sample collected, type of sample collected, sediment type, sample odor and color, equipment used for sample collection, decontamination fluids used, types of sample bottles used, sample identification numbers, parameters requested for analysis, and field observations of sampling event.

A.3.5 Field Quality Control

Quality control samples are required to verify that the sample collection and handling process has not affected the quality of the surface water and leachate seep samples. All field quality control samples must be prepared exactly as regular investigation samples with regard to sample volume, containers, and preservation. The following quality control samples will be collected for each SDG (an SDG may not exceed 20 samples) at the frequency noted.

- Field Duplicate—Required at a frequency of 10 percent per SDG.
- Matrix Spike/Matrix Spike Duplicate—Required at a frequency of 5 percent.
- Equipment (Rinsate) Blank—Required once per day per media sampled.
- Source Water Blank—Required at a frequency of once per sampling event.
- Trip Blank—Required for VOC samples at a frequency of one per sample shipment.

A.3.6 Decontamination

Field monitoring and sampling equipment will be decontaminated prior to use and following sampling of each station by the procedure listed below.

Procedure

The following decontamination procedure will be used:

- Flush the equipment with potable water
- Flush with non-phosphate detergent solution
- Flush with tap water to remove all of the detergent solution
- Flush with distilled/deionized water
- Flush with isopropyl alcohol
- Flush with distilled/deionized water.

It is recommended that the detergent and isopropyl alcohol used in the above sequence be used sparingly.

Appendix B

Field Monitoring and Sampling Forms

B.1 Field Record of Well Gauging Form
B.2 Field Record of Well Gauging, Purging, and Sampling Forms
B.3 Field Record of Surface Water and Sediment Sampling Forms

Appendix B.1

Field Record of Well Gauging Form

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF WELL GAUGING

Project Name: NAS Brunswick / Site 9	Project No: 29600.47 7200	Date: 13-14 Nov 1995
Weather/Temperature: Sunny to Overcast, Cold		
EA Personnel: KI, KR, TC	Equipment: OVA 123 / Slope indicator	

Well No.	Labeled/ Capped	Well Locked	VOCs Concentration (ppm)		Casing/Seal Condition	Protective Casing Elevation (ft)	PVC Casing Elevation (ft)	Depth to Water (ft)	Measured Well Depth (ft)	Water Table Elevation (ft)
			Air Ambient	Well Mouth						
MW901	Y/Y	N	0, 0	0, 0	Bentover	57.55	57.30	11.40	42.42	45.90
MW903	Y/Y	Y	0, 0	0, 0	good	46.93	46.25	2.73	21.54	43.52
MW904	Y/Y	Y	0, 0	0, 0	good	50.03	49.81	9.66	14.63	40.15
MW906	Y/Y	Y	0, 0	0, 0	good	51.85	51.68	10.40	27.12	41.28
MW907	Y/Y	Y	0, 0	0, 0	good	55.00	54.91	13.99	21.22	40.92
MW908	Y/Y	Y	0, 0	0, 0	good	52.98	52.79	11.51	19.94	41.28
MW914	Y/Y	Y	0, 0	0, 0	good			12.00	18.92	
MW915	Y/Y	Y	10*, 0	150, 12	good			11.44	19.04	
MW916	Y/Y	Y	0, 0	0, 0	good			11.19	18.85	

NOTE: All measurements in feet mean sea level (MSL).

* allowed breathing zone to clear to 0ppm prior to purging.

f:\wp\29600\47 Data transcribed from field data sheets by Brian Andersen

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF WELL GAUGING

Project Name: NAS BRUNSWICK / Site 9		Project No: 29600.47 7200	Date: 11/2/95
Weather/Temperature: Rainy, Cold 45°F			
EA Personnel: CJV & UI		Equipment: ~~QED~~ Slope Indicator / OVA 123	

Well No.	Labeled/ Capped	Well Locked	VOCs Concentration (ppm) Air Ambient	VOCs Concentration (ppm) Well Mouth	Casing/Seal Condition	Protective Casing Elevation (ft)	PVC Casing Elevation (ft)	Depth to Water (ft)	Measured Well Depth (ft)	Water Table Elevation (ft)
MW-901	Y	N	0	0	BENTONEE	57.55	57.30	11.93	42.42	45.37
MW-902	Y	Y	0	0	good	58.28	58.18	12.86	27.32	45.32
MW-903	Y	Y	0	0	good	46.93	46.25	3.03	21.54	43.22
MW-904	Y	Y	0	0	good	50.03	49.81	8.03	14.63	41.78
MW-905	Y	Y	0	0	good	51.90	51.71	9.59	32.12	42.12
MW-906	Y	Y	0	0	good	51.85	51.68	10.79	27.12	40.89
MW-907	Y	Y	0	0	good	55.00	54.91	8.70	21.22	46.21
MW-908	Y	Y	0	0	good	52.98	52.79	11.91	19.94	40.88
* MW-~~77~~ 909	Not labeled	Y	0	0	good			17.78	37.29	
* MW-~~78~~ 910	Not labeled	Y	0	0	good			12.23	14.93	
MW-914	Y	Y	0	0	good			5.33	18.92	
MW-915	Y	Y	0	0	good			12.23	19.04	
MW-916	Y	Y	0	0	good.			8.37	18.85	

NOTE: All measurements in feet mean sea level (MSL).

New well Near 915	No label	Y	0	0				12.68		

f:\wp\29600\47

*Should [illegible]

Appendix B.2

Field Record of Well Gauging, Purging, and Sampling Forms

EA

FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME:	Site 9	PROJECT NUMBER:	29600.47/7200
WELL I.D.:	MW 401	WELL LOCK STATUS:	no lock, not locked
WELL CONDITION:	creeped, rom. 221	WEATHER:	overcast, cold, 35°F
GAUGE DATE:	11/13/95	GAUGE TIME:	1438
SOUNDING METHOD:	slope indicator	MEASUREMENT REF:	top of pipe
STICK UP/DOWN (ft):	2.45'	WELL DIAMETER (in.):	2"
PURGE DATE:	11/13/95	PURGE TIME:	1440
PURGE METHOD:	low flow	FIELD TECHNICIAN:	KR, KI
AMBIENT AIR VOCs (ppm)	Start: 0 End: 0	WELL MOUTH VOCs (ppm):	Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft):	42.42	D. WELL VOLUME/FT (L):	0.605
B. DEPTH TO WATER (ft):	11.40'	E. WELL VOLUME (L) (C*D):	18.71
C. LIQUID DEPTH (ft) (A-B):	31.02	F. THREE WELL VOLUMES (L) (E*3):	56.31

	BEGINNING	Number of Well Volumes Purged 1	2	3	4	5	6
TIME (min)	1445	1448	1451	1454	1457	1501	1504
DEPTH TO WATER (ft)	11.43	11.42	11.41	11.39	11.47	11.45	11.43
PURGE RATE (l/min)	.3L	.3L	.3L	.3L	.3L	.3L	.3L
VOLUME PURGED (L)	1.5L	2.4L	3.3L	4.2L	5.1L	6.3L	7.2L
pH	6.32	6.32	6.31	6.30	6.30	6.28	6.24
TEMPERATURE (C)	12.7	12.8	13.0	12.9	13.8	14.8	14.4
CONDUCTIVITY (µmhos/cm)	0.274	0.248	0.264	0.260	0.262	0.258	0.250
DISSOLVED OXYGEN (mg/L)	0.92	1.09	1.19	1.42	1.44	1.70	2.14
~~eh (mv)~~							
TURBIDITY (NTU)	63	61	49	47	34	32	27

TOTAL QUANTITY OF WATER REMOVED (L): 11.7L

SAMPLERS:	KR, KI	SAMPLING TIME (START/END):	1517/1519
SAMPLING DATE:	11/13/95	DECONTAMINATION FLUIDS USED:	none
SAMPLE TYPE:	Grab	SAMPLE PRESERVATIVES:	1:1 HCl

SAMPLE BOTTLE IDs: BN-04-S9-MW007

SAMPLE PARAMETERS: VOAs

COMMENTS AND OBSERVATIONS:

EA

FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

2-32

SITE NAME: Site 9
WELL I.D.: MW-401
WELL CONDITION: Cracked, hit (ran over)

PROJECT NUMBER: 29600.47/7200
WELL LOCK STATUS: no lock, not locked
WEATHER: Sunny, cold, 35°F

GAUGE DATE: 11/13/95
SOUNDING METHOD: Slope indicator
STICK UP/DOWN (ft): 2.45'

GAUGE TIME: 1438
MEASUREMENT REF: top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: 1440
FIELD TECHNICIAN: KR, KI
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 42.42'
B. DEPTH TO WATER (ft): 11.40'
C. LIQUID DEPTH (ft) (A-B): 31.02'

D. WELL VOLUME/FT (L): 0.605
E. WELL VOLUME (L) (C*D): 18.77
F. THREE WELL VOLUMES (L) (E*3): 56.31

	BEGINNING 7	Number of Well Volumes Purged				
		~~1~~ 8	~~2~~ 9	3	4	5
TIME (min)	1507	1511	1514			
DEPTH TO WATER (ft)	11.45	11.44	11.44			
PURGE RATE (l/min)	.3L	.3L	.3L			
VOLUME PURGED (L)	8.1L	9.3L	10.2L			
pH	6.26	6.22	6.21			
TEMPERATURE (C)	14.9	14.9	14.7			
CONDUCTIVITY (µmhos/cm)	0.254	0.254	0.252			
DISSOLVED OXYGEN (mg/L)	1.93	2.06	2.12			
~~eh (mv)~~						
TURBIDITY (NTU)	30	30	30			

TOTAL QUANTITY OF WATER REMOVED (L): ~~11.4L~~ 11.7

SAMPLERS: KR, KI
SAMPLING TIME (START/END): 1517/1519
SAMPLING DATE: 11/16
DECONTAMINATION FLUIDS USED: none
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: 1:1 HCl
SAMPLE BOTTLE IDs: BN-04-S9-MW007
SAMPLE PARAMETERS: VOAS

COMMENTS AND OBSERVATIONS:

FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: MW 903
WELL CONDITION: good

PROJECT NUMBER: 29600.47/220
WELL LOCK STATUS: locked
WEATHER: Sunny, cold, 30°F

GAUGE DATE: 11/13/95
SOUNDING METHOD: Slope indicator
STICK UP/DOWN (ft): 2.80'

GAUGE TIME: 1010
MEASUREMENT REF: top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: 1015
FIELD TECHNICIAN: KR, KI
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 21.54'
B. DEPTH TO WATER (ft): 2.73'
C. LIQUID DEPTH (ft) (A-B): 18.81

D. WELL VOLUME/FT (L): 0.605
E. WELL VOLUME (L) (C*D): 11.38
F. THREE WELL VOLUMES (L) (E*3): 34.14

	BEGINNING	Number of Well Volumes Purged				
		1	2	3	4	5
TIME (min)	1017	1020	1023	1024	1029	1032
DEPTH TO WATER (ft)	3.41	3.47	3.45	3.48	3.49	3.50
PURGE RATE (l/min)	2.2L	2.0L	2.0L	2.0L	2.0L	2.0L
VOLUME PURGED (L)	4.4L	10.4L	16.4L	22.4L	28.4L	34.4L
pH	6.39	6.16	6.10	6.09	6.06	6.06
TEMPERATURE (C)	12.8	13.0	13.0	13.0	13.0	13.0
CONDUCTIVITY (µmhos/cm)	0.324	0.310	0.318	0.324	0.326	0.328
DISSOLVED OXYGEN (mg/L)	1.01	1.00	0.97	0.90	0.86	0.80
~~eh (mv)~~						
TURBIDITY (NTU)	24	18	14	13	16	18

TOTAL QUANTITY OF WATER REMOVED (L): 58.4 L

SAMPLERS: KR, KI
SAMPLING TIME (START/END): 1034 / 1044
SAMPLING DATE: 11/13/95
DECONTAMINATION FLUIDS USED: none
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: 1:1 HCl, NaOH, HNO_3
SAMPLE BOTTLE IDs: BN-04-S9-MW002
SAMPLE PARAMETERS: VOAs, Cyanide, Total Elements
COMMENTS AND OBSERVATIONS: Duplicate done here (BN-04-S9-MWXD1)

FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME:	Site 9	PROJECT NUMBER:	29600.47 1200
WELL I.D.:	MW 904	WELL LOCK STATUS:	Present
WELL CONDITION:	Good	WEATHER:	Partly Cloudy 35°
GAUGE DATE:	11/13/95	GAUGE TIME:	1130
SOUNDING METHOD:	Slope indicator	MEASUREMENT REF:	Top of pipe
STICK UP/DOWN (ft):	2.25	WELL DIAMETER (in.):	2"
PURGE DATE:	11/13/95	PURGE TIME:	1139
PURGE METHOD:	low flow	FIELD TECHNICIAN:	TC KR KJ
AMBIENT AIR VOCs (ppm)	Start: 0 End: 0	WELL MOUTH VOCs (ppm):	Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft):	14.63	D. WELL VOLUME/FT (L):	.605
B. DEPTH TO WATER (ft):	9.66	E. WELL VOLUME (L) (C*D):	3.01
C. LIQUID DEPTH (ft) (A-B):	4.97	F. THREE WELL VOLUMES (L) (E*3):	9.02

	BEGINNING	Number of Well Volumes Purged				
		1	2	3	4	5
TIME (min)	1145	1146	1149	1152	1155	
DEPTH TO WATER (ft)	9.76	9.76	9.76	9.76	9.76	
PURGE RATE (l/min)	.1	.1	.1	.1	.1	
VOLUME PURGED (L)	.4	.7	1.0	1.3	1.6	
pH	6.17	5.95	5.97	6.01	6.03	
TEMPERATURE (C)	9.4	10.0	11.2	12.0	12.4	
CONDUCTIVITY (μmhos/cm)	0.178	0.178	0.188	0.198	0.206	
DISSOLVED OXYGEN (μg/L)	5.68	5.67	5.35	5.01	4.89	
eh (mv)						
TURBIDITY (NTU)	9	4	3	4	4	

TOTAL QUANTITY OF WATER REMOVED (L): 2.6

SAMPLERS:	TC KR KJ	SAMPLING TIME (START/END) :	1157/1205
SAMPLING DATE:	11/13/95	DECONTAMINATION FLUIDS USED:	None
SAMPLE TYPE:	Grab	SAMPLE PRESERVATIVES:	HCl NaOH HNO3

SAMPLE BOTTLE IDs: BN-04-59-MW 004

SAMPLE PARAMETERS: VOC, Cyanide, Total Elements

COMMENTS AND OBSERVATIONS:

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FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: MW906
WELL CONDITION: good

PROJECT NUMBER: 29600.47/7280
WELL LOCK STATUS: locked
WEATHER: sunny, cold, 30°F

GAUGE DATE: 11/13/95
SOUNDING METHOD: singe indicator
STICK UP/DOWN (ft): 1.90'

GAUGE TIME: 1135
MEASUREMENT REF: top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: ~~KR, KI~~ 1140
FIELD TECHNICIAN: KR, KI
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 27.12'
B. DEPTH TO WATER (ft): 10.40'
C. LIQUID DEPTH (ft) (A-B): 16.72

D. WELL VOLUME/FT (L): 0.605
E. WELL VOLUME (L) (C*D): 10.12
F. THREE WELL VOLUMES (L) (E*3): 30.36

	BEGINNING	Number of Well Volumes Purged 1	2	3	4	5	6
TIME (min)	1144	1147	1150	1153	1156	1159	1202
DEPTH TO WATER (ft)	10.50	10.70	10.70	10.73	10.72	10.71	10.74
PURGE RATE (l/min)	.3L	.3L	.3L	.3L	.3L	.3L	.3L
VOLUME PURGED (L)	1.2L	2.1L	3.0L	3.9L	4.8L	5.7L	6.6L
pH	6.29	6.31	6.32	6.32	6.32	6.33	6.3
TEMPERATURE (C)	11.9	12.7	12.9	13.0	12.9	12.9	12.9
CONDUCTIVITY (µmhos/cm)	0.300	0.292	0.290	0.298	0.298	0.288	0.296
DISSOLVED OXYGEN (µg/L)	3.03	2.01	1.75	1.61	1.33	1.32	1.19
~~eh (mv)~~							
TURBIDITY (NTU)	231	166	120	111	96	89	83

TOTAL QUANTITY OF WATER REMOVED (L): 15.6L

SAMPLERS: KR, KI
SAMPLING TIME (START/END): 1230/1232
SAMPLING DATE: 11/13/95
DECONTAMINATION FLUIDS USED: none
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: 1:1 HCl
SAMPLE BOTTLE IDs: BN-04-S9-MW005
SAMPLE PARAMETERS: VOAs

COMMENTS AND OBSERVATIONS:

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FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: mw 906
WELL CONDITION: good

PROJECT NUMBER: 29600.47/7280
WELL LOCK STATUS: locked
WEATHER: Sunny, cold, 30°F

GAUGE DATE: 11/13/95
SOUNDING METHOD: Slope indicator
STICK UP/DOWN (ft): 1.90'

GAUGE TIME: 1135
MEASUREMENT REF: top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: 1140
FIELD TECHNICIAN: KR, KI
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 27.12'
B. DEPTH TO WATER (ft): 10.40'
C. LIQUID DEPTH (ft) (A-B): 16.72

D. WELL VOLUME/FT (L): 0.605
E. WELL VOLUME (L) (C*D): 10.12
F. THREE WELL VOLUMES (L) (E*3): 30.36

	BEGINNING	Number of Well Volumes Purged					
		1-8	2-9	3-10	4-11	5-12	13
TIME (min)	1205	1208	1211	1214	1217	1220	1223
DEPTH TO WATER (ft)	10.74	10.74	10.74	10.75	10.76	10.76	10.76
PURGE RATE (l/min)	.3L	.3L	.3L	.3L	.3L	.3L	.3L
VOLUME PURGED (L)	7.5L	8.4L	9.3L	10.2L	11.1L	12.0L	12.9L
pH	6.32	6.32	6.32	6.32	6.32	6.32	6.32
TEMPERATURE (C)	13.0	12.9	13.1	13.1	13.1	13.1	13.1
CONDUCTIVITY (µmhos/cm)	0.298	0.300	0.294	0.296	0.302	0.300	0.298
DISSOLVED OXYGEN (mg/L)	1.04	0.98	0.90	0.82	0.77	0.72	0.67
~~eh (mv)~~							
TURBIDITY (NTU)	81	82	81	80	79	78	78

TOTAL QUANTITY OF WATER REMOVED (L): 15.6L

SAMPLERS: KR, KI
SAMPLING TIME (START/END): 1230/1232
SAMPLING DATE: 11/13/95
DECONTAMINATION FLUIDS USED: none
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: 1:1 HCl
SAMPLE BOTTLE IDs: BN-04-S9-MW005
SAMPLE PARAMETERS: VOAs

COMMENTS AND OBSERVATIONS:

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FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: MW406
WELL CONDITION: good

PROJECT NUMBER: 29600.47/7200
WELL LOCK STATUS: locked
WEATHER: Sunny, cold, 30°F

GAUGE DATE: 11/13/95
SOUNDING METHOD: Slope indicator
STICK UP/DOWN (ft):

GAUGE TIME: 1135
MEASUREMENT REF: top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: 1140
FIELD TECHNICIAN: KL, KI
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 27.12'
B. DEPTH TO WATER (ft): 10.40'
C. LIQUID DEPTH (ft) (A-B): 16.72'
D. WELL VOLUME/FT (L): 0.605
E. WELL VOLUME (L) (C*D): 10.12
F. THREE WELL VOLUMES (L) (E*3): 30.36'

	BEGINNING 14	Number of Well Volumes Purged				
		1.5	2	3	4	5
TIME (min)	1226	1229				
DEPTH TO WATER (ft)	10.75	10.74				
PURGE RATE (l/min)	.3L	.3L				
VOLUME PURGED (L)	13.8L	14.7L				
pH	6.32	6.33				
TEMPERATURE (C)	13.1	13.1				
CONDUCTIVITY (μmhos/cm)	0.300	0.300				
DISSOLVED OXYGEN (mg/L)	0.63	0.64				
~~eh (mv)~~						
TURBIDITY (NTU)	78	78				

TOTAL QUANTITY OF WATER REMOVED (L): 15.6L

SAMPLERS: KR, KI
SAMPLING TIME (START/END): 1230/1232
SAMPLING DATE: 11/13/95
DECONTAMINATION FLUIDS USED: none
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: 1:1 HCl
SAMPLE BOTTLE IDs: BN-04-S9-MW005
SAMPLE PARAMETERS: VOAS

COMMENTS AND OBSERVATIONS:

FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: MW 907
WELL CONDITION: Good

PROJECT NUMBER: 29600.47 7200
WELL LOCK STATUS: present
WEATHER: partly Cloudy 35°

GAUGE DATE: 11/13/95
SOUNDING METHOD: Slope indicator
STICK UP/DOWN (ft): 2.00

GAUGE TIME: 1224
MEASUREMENT REF: top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: 1225
FIELD TECHNICIAN: TC RR
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 21.22
B. DEPTH TO WATER (ft): 13.97
C. LIQUID DEPTH (ft) (A-B): 7.25

D. WELL VOLUME/FT (L): .605
E. WELL VOLUME (L) (C*D): 4.37
F. THREE WELL VOLUMES (L) (E*3): 13.12

	BEGINNING	Number of Well Volumes Purged				
		1	2	3	4	5
TIME (min)	1233	1236	1239	1242	1245	
DEPTH TO WATER (ft)	14.14	14.14	14.14	14.14	14.14	
PURGE RATE (l/min)	.2	.2	.2	.2	.2	TC
VOLUME PURGED (L)	1.6	2.2	2.8	3.4	4.0	
pH	6.35	6.31	6.30	6.31	6.31	
TEMPERATURE (C)	13.7	14.6	16.0	16.6	16.9	
CONDUCTIVITY (μmhos/cm)	0.382	0.382	0.392	0.394	0.394	
DISSOLVED OXYGEN (μg/L)	3.65	3.60	3.26	3.14	2.96	
eh (mv)						
TURBIDITY (NTU)	9	8	7	9	9	

TOTAL QUANTITY OF WATER REMOVED (L): 4.6

SAMPLERS: TC
SAMPLING TIME (START/END): 1246/1248
SAMPLING DATE: 11/13/95
DECONTAMINATION FLUIDS USED: None
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: HCl
SAMPLE BOTTLE IDs: BN-04-59-MW006
SAMPLE PARAMETERS: VOC

COMMENTS AND OBSERVATIONS:

FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: MW908
WELL CONDITION: good

PROJECT NUMBER: 29600.47/7200
WELL LOCK STATUS: locked
WEATHER: Sunny cold, 30°F

GAUGE DATE: 11/13/95
SOUNDING METHOD: Slope indicator
STICK UP/DOWN (ft): 2.00'

GAUGE TIME: 1100
MEASUREMENT REF: Top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: 1105
FIELD TECHNICIAN: KR, KE
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 19.94'
B. DEPTH TO WATER (ft): 11.51
C. LIQUID DEPTH (ft) (A-B): 8.43'

D. WELL VOLUME/FT (L): 0.605
E. WELL VOLUME (L) (C*D): 5.10
F. THREE WELL VOLUMES (L) (E*3): 15.30'

	BEGINNING	Number of Well Volumes Purged				
		1	2	3	4	5
TIME (min)	1109	1112	1115	1118	1121	1124
DEPTH TO WATER (ft)	11.58	11.58	11.56	11.58	11.57	11.56
PURGE RATE (l/min)	.3L	.3L	.3L	.3L	.3L	.3L
VOLUME PURGED (L)	1.2L	2.1L	3.0L	3.9L	4.8L	5.7L
pH	6.06	6.05	6.07	6.07	6.07	6.08
TEMPERATURE (C)	13.6	14.5	16.8	17.4	17.7	18.0
CONDUCTIVITY (µmhos/cm)	0.260	0.252	0.256	0.254	0.258	0.258
DISSOLVED OXYGEN (mg/L)	3.77	3.76	3.51	3.46	3.32	3.19
~~eh (mv)~~						
TURBIDITY (NTU)	7	6	4	3	3	3

TOTAL QUANTITY OF WATER REMOVED (L): ~~6.8L~~ 6.3L

SAMPLERS: KR, KE
SAMPLING TIME (START/END): 1125/1126
SAMPLING DATE: 11/13/95
DECONTAMINATION FLUIDS USED: none
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: 1:1 HCl
SAMPLE BOTTLE IDs: BN-04-S9-MW003
SAMPLE PARAMETERS: VOAS

COMMENTS AND OBSERVATIONS:

FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: MW 914
WELL CONDITION: Good

PROJECT NUMBER: 29600.477200
WELL LOCK STATUS: present
WEATHER: Cloudy 35°

GAUGE DATE: 11/13/95
SOUNDING METHOD: Slope indicator
STICK UP/DOWN (ft): 2.20

GAUGE TIME: 1500
MEASUREMENT REF: top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: Low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: 1521
FIELD TECHNICIAN: KR KI Te
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 18.92
B. DEPTH TO WATER (ft): 12.00
C. LIQUID DEPTH (ft) (A-B): 6.92

D. WELL VOLUME/FT (L): .605
E. WELL VOLUME (L) (C*D): 4.19
F. THREE WELL VOLUMES (L) (E*3): 12.56

	BEGINNING	Number of Well Volumes Purged 1	2	3	4	5	6
TIME (min)	1533	1536	1539	1542	1545	1547	1550
DEPTH TO WATER (ft)	12.00	12.00	12.00	12.00	12.00	12.00	12.00
PURGE RATE (l/min)	.3L	.3L	.3L	.3L	.3L	.3L	.3L
VOLUME PURGED (L)	2.1L	3.0L	3.9L	4.8L	5.7L	6.8L	7.2L
pH	6.69	6.80	6.84	6.87	6.88	6.88	6.88
TEMPERATURE (C)	16.2	16.5	17.1	17.3	16.5	16.6	16.9
CONDUCTIVITY (µmhos/cm)	0.170	0.180	0.182	0.182	0.182	0.184	0.184
DISSOLVED OXYGEN (mg/L)	2.19	2.31	2.25	2.23	2.35	2.30	2.48
eh (mv)							
TURBIDITY (NTU)	13	11	10	10	9	9	9

TOTAL QUANTITY OF WATER REMOVED (L): ~~28.3L~~ ~~[illegible]~~ 19.2L

SAMPLERS: KR KI Te
SAMPLING TIME (START/END): 1552/1630
SAMPLING DATE: 11/13/95
DECONTAMINATION FLUIDS USED: None
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: HCl HNO3 NaOH
SAMPLE BOTTLE IDs: BN-04-59-MW008
SAMPLE PARAMETERS: VOAs, TAL Elements, Cyanide
COMMENTS AND OBSERVATIONS: Duplicate BN-04-59-MWXD2

EA

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FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: MW 9/5
WELL CONDITION: good

PROJECT NUMBER: 29600.47/7200
WELL LOCK STATUS: locked
WEATHER: overcast, cool, 40°F

GAUGE DATE: 11/14/95
SOUNDING METHOD: Slope indicator
STICK UP/DOWN (ft): 2.05'

GAUGE TIME: 0805
MEASUREMENT REF: TOC @ Pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/14/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 10 End: 0

PURGE TIME: 0820
FIELD TECHNICIAN: KR, KI
WELL MOUTH VOCs (ppm): Start: 150 End: 12

WELL VOLUME

A. WELL DEPTH (ft): 19.04
B. DEPTH TO WATER (ft): 11.44
C. LIQUID DEPTH (ft) (A-B): 7.60

D. WELL VOLUME/FT (L): 0.605
E. WELL VOLUME (L) (C*D): 4.60
F. THREE WELL VOLUMES (L) (E*3): 13.80

	BEGINNING	Number of Well Volumes Purged 1	2	3	4	5	6
TIME (min)	0822	0825	0828	0831	0834	0837	0841
DEPTH TO WATER (ft)	11.51	11.49	11.49	11.46	11.45	11.51	11.58
PURGE RATE (l/min)	.2L	.2L	.2L	.2L	.2L	.2L	.2L
VOLUME PURGED (L)	0.4L	1.0L	1.6L	2.2L	2.8L	3.4L	4.2
pH	6.39	6.49	6.51	6.54	6.55	6.66	6.65
TEMPERATURE (C)	13.2	14.0	15.1	16.0	18.4	19.6	16.8
CONDUCTIVITY (µmhos/cm)	0.494	0.538	0.546	0.550	0.552	0.550	0.54
DISSOLVED OXYGEN (mg/L)	2.23	2.34	2.32	2.26	1.81	1.60	0.72
~~eh (mv)~~							
TURBIDITY (NTU)	40	17	14	12	11	13	5

TOTAL QUANTITY OF WATER REMOVED (L): 9.8L

SAMPLERS: KR, KI
SAMPLING TIME (START/END): 0855/0909
SAMPLING DATE: 11/14/95
DECONTAMINATION FLUIDS USED: none
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: 1:1 HCl, HNO_3, NaOH
SAMPLE BOTTLE IDs: 3N04-S9-MW1009
SAMPLE PARAMETERS: VOAs, Tal Elements, Cyanide

COMMENTS AND OBSERVATIONS: Waited to purge until breathing zone w/ 0 ppm
Pump was purging ~~[illegible]~~ K while ~~[illegible]~~ sampling

f:\wp\29600\47

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FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME:	Site 9	PROJECT NUMBER:	29600.47/726
WELL I.D.:	MW 9/5	WELL LOCK STATUS:	locked
WELL CONDITION:	good	WEATHER:	overcast, cool, 40°
GAUGE DATE:	11/14/95	GAUGE TIME:	0805
SOUNDING METHOD:	Sliquid indicator	MEASUREMENT REF:	TOC PVC pipe
STICK UP/DOWN (ft):	2.05'	WELL DIAMETER (in.):	2"
PURGE DATE:	11/14/95	PURGE TIME:	0820
PURGE METHOD:	IW + CW	FIELD TECHNICIAN:	KR, KI
AMBIENT AIR VOCs (ppm)	Start: 10 End: 0	WELL MOUTH VOCs (ppm):	Start: 150 End: 12

WELL VOLUME

A. WELL DEPTH (ft):	19.04	D. WELL VOLUME/FT (L):	0.605
B. DEPTH TO WATER (ft):	11.44	E. WELL VOLUME (L) (C*D):	4.60
C. LIQUID DEPTH (ft) (A-B):	7.60	F. THREE WELL VOLUMES (L) (E*3):	13.80

	~~1~~ 7 BEGINNING	Number of Well Volumes Purged ~~1~~ 8	2	3	4	5
TIME (min)	0844	0847	0850	0853		
DEPTH TO WATER (ft)	11.61	11.34	11.33	11.33		
PURGE RATE (l/min)	.2L	.2L	.2L	.2L		
VOLUME PURGED (L)	4.8L	5.4L	6.0L	6.6L		
pH	6.67	6.67	6.67	6.67		
TEMPERATURE (C)	17.3	16.8	16.4	15.9		
CONDUCTIVITY (µmhos/cm)	0.552	0.556	0.548	0.552		
DISSOLVED OXYGEN (µg/L)	0.90	0.98	1.01	1.09		
~~eh (mv)~~						
TURBIDITY (NTU)	6	4	4	4		

TOTAL QUANTITY OF WATER REMOVED (L): 9.8L

SAMPLERS:	KR, KI	SAMPLING TIME (START/END):	0855/0909
SAMPLING DATE:	11/14/95	DECONTAMINATION FLUIDS USED:	none
SAMPLE TYPE:	Grab	SAMPLE PRESERVATIVES:	1:1 HCl, HNO_3, NaOH
SAMPLE BOTTLE IDs:	BN-04-S9-MW009		
SAMPLE PARAMETERS:	VOAs, Total Elements, Cyanide		

COMMENTS AND OBSERVATIONS: Waited to purge until breathing zone was approx. Pump used during both purging and sampling

FIELD RECORD OF WELL GAUGING, PURGING, AND SAMPLING

SITE NAME: Site 9
WELL I.D.: mw 911o
WELL CONDITION: good

PROJECT NUMBER: 29600.47/7200
WELL LOCK STATUS: locked
WEATHER: sunny, clear, 30°F

GAUGE DATE: 11/13/95
SOUNDING METHOD: slope indicator
STICK UP/DOWN (ft): 1.91'

GAUGE TIME: 0920
MEASUREMENT REF: top of pipe
WELL DIAMETER (in.): 2"

PURGE DATE: 11/13/95
PURGE METHOD: low flow
AMBIENT AIR VOCs (ppm) Start: 0 End: 0

PURGE TIME: 0925
FIELD TECHNICIAN: KR, KI
WELL MOUTH VOCs (ppm): Start: 0 End: 0

WELL VOLUME

A. WELL DEPTH (ft): 18.85'
B. DEPTH TO WATER (ft): 11.19'
C. LIQUID DEPTH (ft) (A-B): 7.66'

D. WELL VOLUME/FT (L): .605
E. WELL VOLUME (L) (C*D): 4.63
F. THREE WELL VOLUMES (L) (E*3): 13.89

	BEGINNING	Number of Well Volumes Purged				
		1	2	3	4	5
TIME (min)	0927	0930	0934	0937	0940	0943
DEPTH TO WATER (ft)	11.32	11.32	11.32	11.32	11.32	11.34
PURGE RATE (l/min)	.3L	.3L	.3L	.3L	.3L	.3L
VOLUME PURGED (L)	0.6L	1.5L	2.7L	3.6L	4.5L	5.4L
pH	6.49	6.65	6.70	6.69	6.68	6.67
TEMPERATURE (C)	13.7	15.5	17.1	17.7	18.2	18.2
CONDUCTIVITY (µmhos/cm)	0.942	0.964	0.974	0.984	0.980	0.980
DISSOLVED OXYGEN (mg/L)	3.18	2.90	2.49	2.26	2.22	2.08
~~eh (mv)~~						
TURBIDITY (NTU)	6	2	1	1	1	1

TOTAL QUANTITY OF WATER REMOVED (L): 10.2L

SAMPLERS: KR, KI
SAMPLING TIME (START/END): 0945/0959
SAMPLING DATE: 11/13/95
DECONTAMINATION FLUIDS USED: none
SAMPLE TYPE: Grab
SAMPLE PRESERVATIVES: 1:1 HCl, NaOH, HNO_3
SAMPLE BOTTLE IDs: BN-04-S9-MW001
SAMPLE PARAMETERS: VOAs, Total Elements, Cyanide
COMMENTS AND OBSERVATIONS: MS/MSD done here.

Appendix B.3

Field Record of Surface Water and Sediment Sampling Forms

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF SURFACE WATER AND SEDIMENT SAMPLING

Project: BNAS	Site: Site 9
Project Number: 29600.47/7200	Date: 11/11/95
Sample Location ID: SW/SD 010	Sample Team Members: KR, KI, BA, TC
Time: 1135, 1140 ~~Start:~~ ~~End:~~	Signature of Sampler: [illegible]

SURFACE WATER INFORMATION BN-04-S9-SW006

Water Depth and Sample Location 0.2' (ft)

Depth of Sample from Top of Water 0.10' (ft)

Type of Surface Water:
- (X) Stream
- ( ) River
- ( ) Pond/Lake
- ( ) Seep

Equipment Used for Collection:
- ( ) None, Grab into Bottle
- ( ) Bomb Sampler
- ( ) Pump _____
- X dedicated jar

Decontamination Fluids Used:
- ( ) Isopropyl Alcohol
- ( ) ASTM Type II Water
- ( ) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- (X) None

Velocity Measurements Obtained? (X) No ( ) Yes, See Flow Measurement Data Record _____

Temperature 10.3 Degree C. Specific Conductivity 0.302 µmhos/cm pH 6.36 Units Dissolved Oxygen 6.11 ppm Turb 0 NTU

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X none

Sample Location Sketch:
- ( ) Yes
- (X) No

Method Used:
- ( ) Winkler
- (X) Probe

SEDIMENT INFORMATION BN-04-S9-SD006

Type of Sample Collected:
- (X) Discrete
- ( ) Composite

Sediment Type:
- ( ) Clay
- (X) Sand
- ( ) Organic
- (X) Gravel

Equipment Used for Collection:
- (X) Gravity Corer
- ( ) Stainless Steel Split Spoon
- ( ) Dredge
- ( ) Hand Spoon/Trowel
- ( ) Aluminum Pans
- ( ) Stainless Steel Bucket
- ( ) _____

Decontamination Fluids Used:
- (X) Isopropyl Alcohol
- ( ) ASTM Type II Water
- (X) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- ( ) None

Sample Observations:
- (X) Odor none
- (X) Color brown
- ( ) _____

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X none

SAMPLES COLLECTED

Check if Required at this Location	Matrix: Surface Water	Matrix: Sediment	Check if Preserved with Acid/Base	Volume Required	Check if Sample Collected	Sample Bottle IDs
✓	✓		✓	40mL	✓	BN-04-S9-SW006
✓		✓	none	4g	✓	BN-04-S9-SD006

NOTES/SKETCH

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF SURFACE WATER AND SEDIMENT SAMPLING

Project: BNAS	Site: Site 9
Project Number: 29600.47/7200	Date: 11/11/95
Sample Location ID: SW/SD 011	Sample Team Members: KR, KI, TC, BA
Time: 1035, 1050 ~~Start:~~ ~~End:~~	Signature of Sampler: [illegible]

SURFACE WATER INFORMATION

Water Depth and Sample Location 0.2 (ft)

Depth of Sample from Top of Water 0.10 (ft)

Type of Surface Water:
(X) Stream ( ) River
( ) Pond/Lake ( ) Seep

Equipment Used for Collection:
( ) None, Grab into Bottle
( ) Bomb Sampler
( ) Pump _____
X accidental jar

Decontamination Fluids Used:
( ) Isopropyl Alcohol
( ) ASTM Type II Water
( ) Deionized Water
( ) Liquinox Solution
( ) Hexane
( ) HNO_3 Solution
( ) Potable Water
(X) None

Velocity Measurements Obtained? ( ) No ( ) Yes, See Flow Measurement Data Record _____

Temperature 11.9 Degree C. Specific Conductivity 0.244 µmhos/cm pH 7.13 Units Dissolved Oxygen 9.30 ppm turb 10 NTU

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X none

Sample Location Sketch:
( ) Yes
(X) No

Method Used:
( ) Winkler
(X) Probe

SEDIMENT INFORMATION

Type of Sample Collected:
(X) Discrete
( ) Composite

Sediment Type:
( ) Clay
(X) Sand
(X) Organic
( ) Gravel

Equipment Used for Collection:
(X) Gravity Corer
( ) Stainless Steel Split Spoon
( ) Dredge
( ) Hand Spoon/Trowel
( ) Aluminum Pans
( ) Stainless Steel Bucket
( ) _____

Decontamination Fluids Used:
(X) Isopropyl Alcohol
( ) ASTM Type II Water
(X) Deionized Water
( ) Liquinox Solution
( ) Hexane
( ) HNO_3 Solution
( ) Potable Water
( ) None

Sample Observations:
(X) Odor none
(X) Color brown
( ) _____

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X ~~none~~ X MS/MSD

SAMPLES COLLECTED

Check if Required at this Location	Matrix: Surface Water	Matrix: Sediment	Check if Preserved with Acid/Base	Volume Required	Check if Sample Collected	Sample Bottle IDs
✓	✓		✓	40mL	✓	BN-04-S9-SW003
✓		✓	none	4oz	✓	BN-04-S9-SD003

NOTES/SKETCH

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF SURFACE WATER AND SEDIMENT SAMPLING

Project: BNAS			Site: Site 9
Project Number: 29600.47/7200			Date: 11/11/95
Sample Location ID: SW/SD 012			Sample Team Members: BA, TC, KI, KR
Time: 1005, 1015	Start:	End:	Signature of Sampler: [illegible]

SURFACE WATER INFORMATION

Water Depth and Sample Location 0.9 (ft)

Depth of Sample from Top of Water 0.10 (ft)

Type of Surface Water:
- (X) Stream
- ( ) River
- ( ) Pond/Lake
- ( ) Seep

Equipment Used for Collection:
- ( ) None, Grab into Bottle
- ( ) Bomb Sampler
- ( ) Pump
- (X) Collected jar

Decontamination Fluids Used:
- ( ) Isopropyl Alcohol
- ( ) ASTM Type II Water
- ( ) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- (X) None

Velocity Measurements Obtained? (X) No ( ) Yes, See Flow Measurement Data Record

Temperature 11.8 Degree C. Specific Conductivity 0.248 µmhos/cm pH 7.08 Units Dissolved Oxygen 9.46 ppm Turb 3 NTU

Field QC Data: ( ) Field Duplicate Collected
(X) Duplicate ID BN-04-S9-SWXD1

Sample Location Sketch: ( ) Yes (X) No

Method Used:
- ( ) Winkler
- (X) Probe

SEDIMENT INFORMATION

Type of Sample Collected:
- (X) Discrete
- ( ) Composite

Sediment Type:
- ( ) Clay
- (X) Sand
- ( ) Organic
- ( ) Gravel

Equipment Used for Collection:
- (X) Gravity Corer
- ( ) Stainless Steel Split Spoon
- ( ) Dredge
- ( ) Hand Spoon/Trowel
- ( ) Aluminum Pans
- ( ) Stainless Steel Bucket
- ( ) _____

Decontamination Fluids Used:
- (X) Isopropyl Alcohol
- ( ) ASTM Type II Water
- (X) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- ( ) None

Sample Observations:
- (X) Odor none
- (X) Color brown
- ( ) _____

Field QC Data: ( ) Field Duplicate Collected
(X) Duplicate ID BN-04-S9-SDXD1

SAMPLES COLLECTED

Check if Required at this Location	Matrix: Surface Water	Matrix: Sediment	Check if Preserved with Acid/Base	Volume Required	Check if Sample Collected	Sample Bottle IDs
✓	✓		✓	40mL	✓	BN-04-S9-SW002
✓		✓	none	4g	✓	BN-04-S9-SD002

NOTES/SKETCH

Chunks of coal in sediment.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF SURFACE WATER AND SEDIMENT SAMPLING

Project: BNAS			Site: Site 9
Project Number: 29600.47/7200			Date: 11/11/95
Sample Location ID: SW/SD 915			Sample Team Members: KR, KI, TC, BA
Time: 1116, 1121	Start:	End:	Signature of Sampler: [illegible]

KR

SURFACE WATER INFORMATION

Water Depth and Sample Location 0.4' (ft)

Depth of Sample from Top of Water 0.10' (ft)

Type of Surface Water:
- (X) Stream
- ( ) River
- ( ) Pond/Lake
- ( ) Seep

Equipment Used for Collection:
- ( ) None, Grab into Bottle
- ( ) Bomb Sampler
- ( ) Pump
- X dedicated tu

Decontamination Fluids Used:
- ( ) Isopropyl Alcohol
- ( ) ASTM Type II Water
- ( ) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- (X) None

Velocity Measurements Obtained? (X) No ( ) Yes, See Flow Measurement Data Record _____

Temperature 13.6 Degree C. Specific Conductivity 0.258 µmhos/cm pH 6.93 Units Dissolved Oxygen 9.04 ppm ~~turb~~ 3 NTU

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X none

Sample Location Sketch:
- ( ) Yes
- (X) No

Method Used:
- ( ) Winkler
- (X) Probe

SEDIMENT INFORMATION

Type of Sample Collected:
- (X) Discrete
- ( ) Composite

Sediment Type:
- ( ) Clay
- (X) Sand
- (X) Organic
- ( ) Gravel

Equipment Used for Collection:
- (X) Gravity Corer
- ( ) Stainless Steel Split Spoon
- ( ) Dredge
- ( ) Hand Spoon/Trowel
- ( ) Aluminum Pans
- ( ) Stainless Steel Bucket
- ( ) _____

Decontamination Fluids Used:
- (X) Isopropyl Alcohol
- ( ) ASTM Type II Water
- (X) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- ( ) None

Sample Observations:
- (X) Odor H_2S
- (X) Color Orange (iron)
- ( ) _____

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X none

SAMPLES COLLECTED

Check if Required at this Location	Matrix: Surface Water	Matrix: Sediment	Check if Preserved with Acid/Base	Volume Required	Check if Sample Collected	Sample Bottle IDs
✓	✓		✓	40mL	✓	BN-04-S9-SW005
✓		✓	none	4oz	✓	BN-04-S9-SD005

NOTES/SKETCH

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF SURFACE WATER AND SEDIMENT SAMPLING

Project: BNAS			Site: Site 9
Project Number: 29600.47/7200			Date: 11/11/95
Sample Location ID: SW/SD 919			Sample Team Members: KR, TC, BA, KI
Time: 1058, 1111	Start:	End:	Signature of Sampler: [illegible]

SURFACE WATER INFORMATION

Water Depth and Sample Location 0.4' (ft)

Depth of Sample from Top of Water 0.1' (ft)

Type of Surface Water:
- (X) Stream
- ( ) River
- ( ) Pond/Lake
- ( ) Seep

Equipment Used for Collection:
- ( ) None, Grab into Bottle
- ( ) Bomb Sampler
- ( ) Pump _____
- X decicated jar

Decontamination Fluids Used:
- ( ) Isopropyl Alcohol
- ( ) ASTM Type II Water
- ( ) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- (X) None

Velocity Measurements Obtained? (X) No ( ) Yes, See Flow Measurement Data Record _____

Temperature 12.2 Degree C. Specific Conductivity 0.200 umhos/cm pH 7.00 Units Dissolved Oxygen 9.02 ppm Turb 2 NTU

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X none

Sample Location Sketch:
- ( ) Yes
- (X) No

Method Used:
- ( ) Winkler
- (X) Probe

SEDIMENT INFORMATION

Type of Sample Collected:
- (X) Discrete
- ( ) Composite

Sediment Type:
- ( ) Clay
- (X) Sand
- ( ) Organic
- ( ) Gravel

Equipment Used for Collection:
- (X) Gravity Corer
- ( ) Stainless Steel Split Spoon
- ( ) Dredge
- ( ) Hand Spoon/Trowel
- ( ) Aluminum Pans
- ( ) Stainless Steel Bucket
- ( ) _____

Decontamination Fluids Used:
- (X) Isopropyl Alcohol
- ( ) ASTM Type II Water
- (X) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- ( ) None

Sample Observations:
- (X) Odor none
- (X) Color brown
- ( ) _____

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X none

SAMPLES COLLECTED

Check if Required at this Location	Matrix: Surface Water	Matrix: Sediment	Check if Preserved with Acid/Base	Volume Required	Check if Sample Collected	Sample Bottle IDs
✓	✓		✓	40mL	✓	BN-04-S9-SW004
✓		✓	none	4oz	✓	BN-04-S9-SD004

NOTES/SKETCH

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF SURFACE WATER AND SEDIMENT SAMPLING

Project: BNAS			Site: Site 9
Project Number: 29600.47 17200			Date: 11/11/95
SD 922 Sample Location ID: ~~BN-04-S9-SW001, BN-04-S9-SD001~~			Sample Team Members: KR, KI, JC, BA
Time: 0930, 0940	Start: ~~End:~~ KL		Signature of Sampler: [illegible]

SURFACE WATER INFORMATION

Water Depth and Sample Location 0.4 (ft)

Depth of Sample from Top of Water 0.10 (ft)

Type of Surface Water:
- (X) Stream
- ( ) Pond/Lake
- ( ) River
- ( ) Seep

Equipment Used for Collection:
- ( ) None, Grab into Bottle
- ( ) Bomb Sampler
- ( ) Pump
- X Cuticaster jar

Decontamination Fluids Used:
- ( ) Isopropyl Alcohol
- ( ) ASTM Type II Water
- ( ) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- (X) None

Velocity Measurements Obtained? (X) No ( ) Yes, See Flow Measurement Data Record _____

Temperature 10.9 Degree C. Specific Conductivity 0.242 µmhos/cm pH 6.70 Units Dissolved Oxygen 9.79 ppm turb 2NTU

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID _____
X MS/MSD BA

Sample Location Sketch:
- ( ) Yes
- (X) No

Method Used:
- ( ) Winkler
- (X) Probe

SEDIMENT INFORMATION

Type of Sample Collected:
- (X) Discrete
- ( ) Composite

Sediment Type:
- ( ) Clay
- (X) Sand - bottom
- (X) Organic - top
- ( ) Gravel

Equipment Used for Collection:
- (X) Gravity Corer
- ( ) Stainless Steel Split Spoon
- ( ) Dredge
- ( ) Hand Spoon/Trowel
- ( ) Aluminum Pans
- ( ) Stainless Steel Bucket
- ( ) _____

Decontamination Fluids Used:
- (X) Isopropyl Alcohol
- ( ) ASTM Type II Water
- (X) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- ( ) None

Sample Observations:
- (X) Odor hydrocarbon
- (X) Color dark brown
- ( ) _____

Field QC Data: ( ) Field Duplicate Collected
(X) Duplicate ID ~~MS/MSD~~ KL

SAMPLES COLLECTED

Check if Required at this Location	Matrix: Surface Water	Matrix: Sediment	Check if Preserved with Acid/Base	Volume Required	Check if Sample Collected	Sample Bottle IDs
✓	✓		✓	40mL	✓	BN-04-S9-SW001
✓		✓	none	4oz	✓	BN-04-S9-SD001

NOTES/SKETCH

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

FIELD RECORD OF SURFACE WATER AND SEDIMENT SAMPLING

Project: BNAS	Site: Site 9
Project Number: 29400.4717200	Date: 11/11/95
Sample Location ID: LT901	Sample Team Members: KR, KI, BA, TC
Time: 1154, 1155 Start: ~~End:~~	Signature of Sampler: [illegible]

SURFACE WATER INFORMATION

BN-04-S9-LTSW1

Type of Surface Water:
- (X) Stream
- ( ) River
- ( ) Pond/Lake
- ( ) Seep

Decontamination Fluids Used:
- ( ) Isopropyl Alcohol
- ( ) ASTM Type II Water
- ( ) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- (X) None

Water Depth and Sample Location 0.10 (ft)

Depth of Sample from Top of Water 0.05' (ft)

Equipment Used for Collection:
- ( ) None, Grab into Bottle
- ( ) Bomb Sampler
- ( ) Pump
- X delicata jar

Velocity Measurements Obtained? ( ) No ( ) Yes, See Flow Measurement Data Record

Temperature 11.7 Degree C. Specific Conductivity 0.444 µmhos/cm pH 6.35 Units Dissolved Oxygen 1.8 ppm Turb 97 NTU

Field QC Data: ( ) Field Duplicate Collected
Duplicate ID
X MS/MSD

Sample Location Sketch:
- ( ) Yes
- (X) No

Method Used:
- ( ) Winkler
- (X) Probe

SEDIMENT INFORMATION BN-04-S9-LTSD1

Type of Sample Collected:
- (X) Discrete
- ( ) Composite

Sediment Type:
- ( ) Clay
- (X) Sand
- (X) Organic
- ( ) Gravel

Equipment Used for Collection:
- (X) Gravity Corer
- ( ) Stainless Steel Split Spoon
- ( ) Dredge
- ( ) Hand Spoon/Trowel
- ( ) Aluminum Pans
- ( ) Stainless Steel Bucket
- ( ) _____

Decontamination Fluids Used:
- ( ) Isopropyl Alcohol
- ( ) ASTM Type II Water
- (X) Deionized Water
- ( ) Liquinox Solution
- ( ) Hexane
- ( ) HNO_3 Solution
- ( ) Potable Water
- ( ) None

Sample Observations:
- (X) Odor None
- (X) Color Brown
- ( ) _____

Field QC Data: (X) Field Duplicate Collected
Duplicate ID BN-04-S9-SDXD2
X MS/MSD

SAMPLES COLLECTED

Check if Required at this Location	Matrix: Surface Water	Matrix: Sediment	Check if Preserved with Acid/Base	Volume Required	Check if Sample Collected	Sample Bottle IDs
✓	✓		✓	40mL	✓	BN-04-S9-LTSW1
✓		✓	none	4oz	✓	BN-04-S9-LTSD1

NOTES/SKETCH

Appendix C

Analytical Data Quality Review

APPENDIX C

REVIEW OF ANALYTICAL QUALITY CONTROL

C.1 INTRODUCTION

This investigation utilized both field quality control measures and analytical laboratory quality control measures to ensure that the data quality objectives presented in the project-specific Quality Assurance Project Plan (QAPP) contained in the Long-Term Monitoring Plan (ABB-ES 1994) were met.

The sampling program consisted of 16 aqueous samples (ground water, surface water, and leachate seep) and 7 sediment samples collected from Site 9. For the combined analyses for this site, 2 aqueous Sample Delivery Groups (SDGs) and 2 sediment SDGs were provided to the laboratory. Sample duplicates, rinsate blanks, and trip blanks were collected at the frequency required by the QAPP.

Analytical quality control was reviewed for compliance with the data quality objectives of precision and accuracy for each sample and analysis type, including field quality control blanks (trip, rinsate, and source water blanks) and field sample duplication. Analytical precision was based upon the mean relative percent difference (RPD) values from the matrix spike/matrix spike duplicates (MS/MSD). Accuracy was based upon the reported spike recoveries for the MS/MSD and surrogate (system monitoring compound) recoveries for the samples. Completeness was quantified by reviewing the number of usable results to the number of samples scheduled for collection.

MS/MSD measure the effect of the sample matrix on the digestion and measurement methodology. Known quantities of target compounds are spiked into the sample matrix and recoveries are used to measure potential bias due to matrix effects. Surrogates measure the ability of the laboratory to extract the targeted analytes by evaluating the recovery of indicator compounds which are structurally similar to some of the targeted analytes. These are used as indicators for all of the analytes.

The following sections summarize the results of this program.

C.1.1 Field Sampling Program Quality Control

Field duplicate samples were collected for each matrix (i.e., sediment and water) and analyzed for the same parameters as the original environmental samples to determine field sampling precision. The potential for cross-contamination of volatile organics during sample storage and shipment was monitored by trip blanks which were shipped with each sample cooler containing aqueous samples. The trip blank was analyzed for volatile organic compounds (VOC) by U.S. Environmental Protection Agency (EPA) Method 8260. To document the effectiveness of

decontamination protocols, rinse blank samples were taken by running de-ionized water through decontaminated sampling equipment and into the appropriate sample containers and analyzing for the same parameters as the matrix samples. In addition, a source water blank was analyzed to assess the chemical quality of the water used in the decontamination sequence. The source water blank was also associated with Sites 1 and 3 and Eastern Plume.

C.1.2 Laboratory Analytical Quality Control Program

Sediment and water samples collected from the monitoring sites were analyzed for Target Compound List (TCL) VOC by EPA Method 8260, TCL semivolatile organic compounds (SVOC) by EPA Method 8270, Target Analyte List (TAL) metals by EPA Method 6010, cyanide by EPA Method 9010, and mercury by EPA Method 7470. The quality control measures specified in the methods, as well as those in the QAPP, were used by the laboratory to establish proper analytical quality control.

Analytical quality control results were reviewed for compliance with the data quality objectives of precision, accuracy, and completeness for each sample and analysis type. Analytical precision was based upon the mean RPD values from the MS/MSD. Accuracy was based upon the reported spike recoveries for the MS/MSD, laboratory control sample (LCS), and surrogate (system monitoring compound) recoveries for the samples. Completeness was quantified by reviewing the number of samples taken to the number of samples scheduled for collection. The range of results for the data quality objective parameters are discussed for each sample matrix below.

C.2 SAMPLE HOLDING TIMES

The holding times from dates of sample collection to processing were compared against the maximum holding times identified in the quality control requirements of the referenced analytical methods. The holding times were met for all methods and sample matrixes.

C.3 PRECISION

C.3.1 Volatile Organic Compounds

Five VOC are used to quantify the MS/MSD RPD. The control limits identified in the QAPP were the same as those reported by the laboratory.

The surface water, leachate seep, and monitoring well aqueous samples MS/MSD RPD were within the control limits established in the QAPP, with the exception of 1,1-dichloroethene (17 percent) in sample S9MW001 (MW-NASB-081). However, as both the MS and MSD recoveries were within the established control limits, usability of the data is not affected. No actions are required according to EPA Region I data validation criteria. The results are usable as reported.

The sediment sample MS/MSD RPD was within the control limits established in the QAPP. The results are usable as reported.

C.3.2 Semivolatile Organic Compounds

Eleven compounds are used to quantify the MS/MSD RPD. The control limits identified in the QAPP for soil and water were the same as those reported by the laboratory.

The sediment sample MS/MSD RPD was within the laboratory established control limits with the exception of 4-chloro-3-methylphenol (38 percent) and 4-nitrophenol (54 percent) in sample S9SD003 (SED-011). However, as both the MS and MSD recoveries were within the established control limits, usability of the data is not affected. No actions are required according to EPA Region I data validation criteria. The results are usable as reported.

C.3.3 Metals Target Analyte List (Including Cyanide)

All 24 analytes are used to quantify the MS/MSD RPD. There were no control limits identified in the QAPP for soil and water RPD as MSD are not required for TAL metals analyses.

The monitoring well aqueous samples and leachate seep sample MS/MSD RPD fell within the acceptable RPD (standard measure) of 35 percent. The results are usable as reported.

The sediment samples MS/MSD RPD fell within the standard measure of 35 percent RPD, with the exception of cyanide (41 percent) and mercury (71 percent). EPA Region I does not take usability actions for RPD of MSD for metal analyses and, therefore, all results should be considered usable.

C.4 ACCURACY

C.4.1 Volatile Organic Compounds

Three system monitoring compounds are used to measure the ability of the laboratory to extract the target analytes by evaluating the recovery of indicator compounds which are structurally similar to targeted analytes as indicators for all of the analytes. The control limits for sediment samples identified in the QAPP and reported by the laboratory were different for all three system monitoring compounds. The QAPP limits for 1,2-dichloroethane were 70-121 percent, while the laboratory used 80-120 percent. The QAPP limits for bromofluorobenzene were 59-113 percent, while the laboratory used 74-121 percent. The QAPP limits for toluene were 84-138 percent, while the laboratory used 81-117 percent. The quality control results were reviewed against both sets of control limits.

The surface water, leachate seep, and monitoring well aqueous sample system monitoring compound recoveries were within the laboratory established control limits and the control limits identified in the QAPP. The results are usable as reported.

The sediment sample system monitoring compound recoveries were within the laboratory established control limits and the control limits identified in the QAPP, with the following exceptions: bromofluorobenzene was below the lower control limit identified by the laboratory in S9SD003MS (SED-011), S9SD001 (SED-922), and S9SD001RE. However, only samples S9SD001 and S9SD001RE were reported below the lower control limit identified in the QAPP. The surrogate recovery for toluene-d8 was below the lower control limit identified by the laboratory and the QAPP in one sample (S9SD002 [SED-012]). No actions are required according to EPA Region I data validation criteria. The results are usable as reported.

Five VOC are used to quantify the MS/MSD recoveries against laboratory established control limits for each spiking analyte. The recovery limits reported by the laboratory were the same as those identified in the QAPP. An MS/MSD was analyzed at the correct frequency for each matrix.

The surface water, leachate seep, and monitoring well aqueous sample MS/MSD recoveries were within control limits identified in the QAPP. The results are usable as reported.

The sediment sample MS/MSD recoveries were within control limits identified in the QAPP. The results are usable as reported.

Five VOC are used to quantify the LCS recoveries against laboratory established control limits for each spiking analyte. All aqueous and sediment samples had LCS recoveries within laboratory established control limits. No LCS recovery limits are stated in the QAPP. The results are usable as reported.

C.4.2 Semivolatile Organic Compounds

Eight system monitoring compounds were used to measure the ability of the laboratory to extract the target analytes by evaluating the recovery of indicator compounds which are structurally similar to the targeted analytes as indicators for all of the analytes. The aqueous and sediment surrogate recoveries were within the laboratory established control limits. The results are usable as reported.

Eleven compounds are used to quantify the MS/MSD recoveries with laboratory established control limits for each spiking compound. The control limits established in the QAPP were the same as those reported by the laboratory. An MS/MSD was analyzed at the correct frequency for each matrix.

The sediment samples MS/MSD recoveries were within the control limits identified in the QAPP. No usability actions are taken for MS/MSD as per EPA Region I data validation criteria. The results are usable as reported.

Eleven SVOC are used to quantify the LCS recoveries against laboratory established control limits for each spiking analyte. The sediment LCS recoveries were within laboratory established control limits. No LCS recovery limits are stated in the QAPP. The results are usable as reported.

C.4.3 Metals Target Analyte List (Including Cyanide)

All 24 analytes are used to quantify MS/MSD recoveries against laboratory established control limits. All of the MS recoveries were analyzed at the correct frequency.

The monitoring well aqueous sample MS/MSD recoveries were within both the laboratory and the QAPP established control limits of 75-125 percent. The results are usable as reported.

The ground-water and leachate seep aqueous sample MS/MSD recoveries for sample S9LTSW1 (LT-901) were within both the laboratory established control limits and the control limits identified in the QAPP, with the following exceptions: silver (66.5 percent) and cyanide (65 percent), which were reported below the lower control limit for MS indicating a possible low bias. According to EPA Region I data validation criteria, the following data usability actions are noted. Silver and cyanide concentrations are estimated biased low in the following samples: S9SLTSW1 (LT-901), S9SW001 (SW-922), S9SW002 (SW-012), S9SWXD1 (SW-012 Dup), S9SW003 (SW-011), S9SW004 (SW-919), S9SW005 (SW-915), and S9SW006 (SW-010).

The sediment sample MS/MSD recoveries for sample S9LTSD01 (LT-901) were within both the laboratory established control limits and the control limits identified in the QAPP, with the following exceptions: copper (209.2 percent), mercury (195.5 percent), and cyanide (69 percent). The MSD percent recovery for mercury was reported above the upper control limit. These results are indicative of high bias, however, no actions were taken according to EPA Region I data validation guidelines as MSD is typically not run for metals. The MS recovery for cyanide was reported below the lower control limits, indicating a possible low bias in samples S9LTSD1 (LT-901) and S9SDXD2 (LT-901 Dup). The MS recovery for copper was reported above the upper control limit, indicating a possible high bias in samples S9LTSD1 and S9SDXD2.

All 24 TAL metals are used to quantify the LCS recoveries against laboratory established control limits for each spiking analyte. The monitoring well and leachate seep aqueous LCS recoveries were within laboratory established control limits. The results were usable as reported. The sediment LCS recoveries were within laboratory established control limits. The results are usable as reported.

C.5 COMPLETENESS

All of the planned samples and the corresponding trip, rinsate, and source water blanks were collected. One trip blank was collected in SDG S9SW001, and 2 trip blanks were collected in SDG S9MW001. Two rinsate blanks were collected in the surface water aqueous SDG

S9SW001. Rinsate blanks were not required for the ground-water aqueous SDG since dedicated pumping systems were used to obtain the samples. One source water blank sample was collected under a separate SDG.

C.6 FIELD QUALITY CONTROL BLANKS

The field quality control blanks collected for this site included 3 trip blanks and 2 equipment rinsate blanks. All 3 trip blanks associated with Site 9 contained contaminants. Methylene chloride was reported in the method blanks associated with these samples. This compound is a common laboratory contaminant and was likely introduced in the laboratory.

The results of the 3 trip blanks are shown in the following table:

Analyte	Units	S9QT006	S9QT007	S9QT008
Methylene chloride	μg/L	3JB	2JB	2JB
Ethylbenzene	μg/L	(<2U)	1JB	1JB
Total xylenes	μg/L	1JB	3	2J
Trichloroethene	μg/L	(<2.5U)	1J	1J
Chloroform	μg/L	(<5U)	1JB	(<5U)
1,2-Dichlorobenzene	μg/L	(<2U)	1J	1J
1,4-Dichlorobenzene	μg/L	(<2U)	1J	1J
Carbon tetrachloride	μg/L	(<5U)	1J	(<5U)
Tetrachloroethene	μg/L	(<2U)	1J	1J
Chlorobenzene	μg/L	(<5U)	1J	1J
Styrene	μg/L	(<2U)	1J	(<2U)

The concentration levels of ethylbenzene, total xylenes, trichloroethene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, carbon tetrachloride, tetrachloroethene, chlorobenzene, and styrene indicate little or no cross contamination occurred during the storage or shipment of the environmental samples.

The equipment rinse blanks associated with the surface water samples collected at Site 9 were analyzed for VOC and TAL analyte contaminants. The results of the 2 rinse blanks and the associated source water blank are shown in the following table:

Analyte	Units	QS-001	QS-002	QD-001
Methylene chloride	μg/L	6B	7B	5B
Total xylenes	μg/L	(<2U)	1JB	1JB
Tetrachloroethene	μg/L	(<2U)	1J	1J
1,4-Dichlorobenzene	μg/L	(<2U)	1J	(<2U)
Acetone	μg/L	(<5U)	(<5U)	4J
Aluminum	μg/L	44B*	34.3B*	(<14.5U)
Barium	μg/L	2.1B*	2.1B*	1.1B*
Beryllium	μg/L	0.15B*	0.13B*	(<0.12U)
Iron	μg/L	68.4B*	23.9B*	23.2B*
Lead	μg/L	(<1.6U)	(<1.6U)	2.8B*
Manganese	μg/L	0.59B*	0.31B*	(<2.0U)
Potassium	μg/L	690B*	(<331U)	(<331U)
Zinc	μg/L	5.9B*	3.4B*	4.2B*

The results of the equipment rinse blanks were not significantly above the background concentrations determined in the source water blank. This indicates that no significant contamination was introduced in the field.

C.7 DUPLICATE FIELD SAMPLES

Field duplicate samples were not identified to the laboratory. Duplicate field samples were collected during the monitoring well ground-water sampling program, the surface water/leachate seep sampling program, and the sediment sampling program. Sample duplication was evaluated using the RPD between the original and duplicated results.

The RPD results from the 2 duplicated monitoring well samples, 1 duplicated surface water sample, 1 duplicated sediment sample, and 1 duplicated leachate seep sample are shown in the tables below.

The following table shows the duplicate sample results associated with SDG S9SMW001:

Analyte	Units	MW-NASB-071	MW-NASB-071 Dup	RPD%
Methylene chloride	µg/L	1JB	1JB	0
Vinyl chloride	µg/L	1J	(<2U)	200
1,1-Dichloroethane	µg/L	1J	(<2.5U)	200
Ethylbenzene	µg/L	8	1JB	155
Total xylenes	µg/L	18B	1J	179
Toluene	µg/L	1J	(<2U)	200
Trichloroethene	µg/L	1J	(<2.5U)	200
1,2-Dichlorobenzene	µg/L	1J	(<2U)	200
1,4-Dichlorobenzene	µg/L	1J	(<2U)	200
Benzene	µg/L	1J	(<2U)	200
1,1,1-Trichloroethane	µg/L	1J	(<2U)	200
1,1-Dichloroethene	µg/L	1J	(<1U)	200
Tetrachloroethene	µg/L	1J	(<2U)	200
Chlorobenzene	µg/L	1J	(<5U)	200
Styrene	µg/L	1J	(<2U)	200
Antimony	µg/L	2.8B*	(<2.6U)	200
Barium	µg/L	10B*	10.1B*	0.9
Beryllium	µg/L	(<0.12)	0.23B*	200
Calcium	µg/L	14,000	14,000	0
Chromium	µg/L	0.79B*	(<0.54U)	200
Cobalt	µg/L	1.5B*	1.1B*	30.7
Iron	µg/L	6,060	6,030	0.5
Lead	µg/L	1.7B*	(<1.6U)	200
Magnesium	µg/L	6,320	6,300	0.3
Manganese	µg/L	412	412	0
Nickel	µg/L	3.1B*	3.1B*	0
Potassium	µg/L	1,870B*	1,720B*	8.3
Sodium	µg/L	31,600	32,800	3.7
Zinc	µg/L	6.2B*	4.5B*	26.0
Cyanide	µg/L	(<1.3U)	1.5B*	200

The RPD discrepancies for all VOC and TAL analytes are in reasonable agreement between the two analyses, with the following exceptions: vinyl chloride, 1,1-dichloroethane, ethylbenzene, total xylenes, toluene, trichloroethene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, benzene, 1,1,1-trichloroethane, 1,1-dichloroethene, tetrachloroethene, chlorobenzene, styrene, antimony, beryllium, chromium, lead, and cyanide. The results for ethylbenzene and total xylenes in both the sample (MW-NASB-071) and the duplicate should be considered estimated due to a large RPD difference between the two analyses. The RPD discrepancies are not considered to be significant for the remaining VOC results because results were reported as not detected or were below the Contract Required Quantitation Limit where analytical measurement error is anticipated. The RPD discrepancies for the inorganic RPDs are not considered to be significant because results were reported as not detected or were below the Contract Required Detection Limit, where analytical measurement error is anticipated.

The following table shows the second set of sample results associated with SDG S9SMW001:

Analyte	Units	MW-NASB-079	MW-NASB-079 Dup	RPD %
Methylene chloride	μg/L	1JB	1JB	0
Total xylenes	μg/L	1J	(<2U)	200
Aluminum	μg/L	48.9B*	41.2B*	17.1
Barium	μg/L	172B*	107B*	46.6
Beryllium	μg/L	(<0.12U)	0.14B*	200
Calcium	μg/L	20,800	15,500	29.2
Chromium	μg/L	6.0B*	3.6B*	50.0
Cobalt	μg/L	0.80B*	0.92B*	14
Magnesium	μg/L	1,290B*	1,040B*	21.5
Manganese	μg/L	76.6	54.5	34.0
Nickel	μg/L	4.9B*	3.6B*	30.6
Potassium	μg/L	2,330B*	2,080B*	11.3
Sodium	μg/L	3,950B	2,680B	38.3
Iron	μg/L	12,600	7,630	49.1
Zinc	μg/L	7.8B*	4.7B*	49.6

The reported RPD results for both VOC and TAL metals were within reasonable agreement between the 2 analyses with the exception of total xylenes and beryllium. The discrepancy for total xylenes and beryllium are not considered significant in sample MW-NASB-079 because results were reported below the Contract Required Quantitation Limit where analytical measurement error is anticipated, and because total xylenes were not detected in the duplicate.

The following table shows the sample results associated with surface water SDG S9SW001:

Analyte	Units	SW-012	SW-012 Dup	RPD %
Acetone	μg/L	4J	(<5U)	200
Methylene chloride	μg/L	2JB	2JB	0
Toluene	μg/L	1J	1J	0
Trichloroethene	μg/L	1JB	(<2.5U)	200
Total xylenes	μg/L	1JB	(<2U)	200
1,1,2,2-Tetrachloroethane	μg/L	1J	(<5U)	200
Tetrachloroethane	μg/L	(<2U)	2J	200

The RPD for methylene chloride and toluene are in agreement between the two analyses. The RPD discrepancies for acetone, trichloroethene, total xylenes, 1,1,2,2-tetrachloroethane, and tetrachloroethane are not considered to be significant because the sample (SW-012) results were reported as not detected or were below the Contract Required Quantitation Limit, where analytical measurement error is anticipated.

The following table shows the sample results associated with sediment SDG S9SD001:

Analyte	Units	SED-012	SED-012 Dup	RPD %
Acetone	μg/kg	1JB	22B	182.6
Methylene chloride	μg/kg	9B	17B	61.5
2-Butanone	μg/kg	(<6U)	1JB	200
Tetrachloroethene	μg/kg	1JB	1JB	0
Total xylenes	μg/kg	(<2U)	1J	200
Chloroform	μg/kg	1JB	1JB	0
Carbon disulfide	μg/kg	1J	1J	0
Ethylbenzene	μg/kg	(<2U)	1J	200
Naphthalene	μg/kg	170J	56J	100.9
Acenaphthene	μg/kg	240J	290J	18.9
Dibenzofuran	μg/kg	170J	170J	0
Fluorene	μg/kg	310J	310J	0

Analyte	Units	SED-012	SED-012 Dup	RPD %
Phenanthrene	μg/kg	2,300	2,400	4.3
Anthracene	μg/kg	280J	440	44.4
Carbazole	μg/kg	250J	320J	24.6
Fluoranthene	μg/kg	3,000	2,500	18.2
Pyrene	μg/kg	2,500	2,200	12.8
Benzo(a)anthracene	μg/kg	1,200	1,000	18.2
Chrysene	μg/kg	1,100	1,100	0
Bis(2-ethylhexyl)phthalate	μg/kg	190JB	130JB	37.5
Benzo(b)fluoranthene	μg/kg	1,400	1,300	7.4
Benzo(k)fluoroethane	μg/kg	410	430	4.8
Benzo(a)pyrene	μg/kg	880	870	1.1
Indeno(1,2,3-c,d)pyrene	μg/kg	530	440	18.6
Dibenzo(a,h)anthracene	μg/kg	(<400U)	140J	200
Benzo(g,h,i)perylene	μg/kg	590	480	20.7
2-Methyl naphthalene	μg/kg	82J	37J	75.6

The RPD for all compounds are within reasonable agreement between the two analyses with the following exceptions: acetone, methylene chloride, 2-butanone, total xylenes, ethylbenzene, naphthalene, dibenzo(a,h)anthracene, and 2-methyl naphthalene. The results for naphthalene and 2-methyl naphthalene in both the original sample and the duplicate sample should be considered estimated due to the large RPD between the two analyses. Acetone and methylene chloride are common laboratory contaminants and were also detected in the method blanks, therefore, it is likely that they were introduced in the laboratory and the RPD discrepancy is not representative of poor field precision. The RPD discrepancy for 2-butanone, total xylenes, ethylbenzene, and dibenzo(a,h)anthracene should not be considered significant because the results were reported as not detected or were below the Contract Required Quantitation Limit, where analytical measurement error is anticipated.

The following table shows the sample results associated with leachate station sediment SDG S9LTSD1:

Analyte	Units	LT-901	LT-901 Dup	RPD %
Methylene chloride	mg/kg	8B	7B	13.3
Acetone	mg/kg	14B	18B	25
Bromodichloromethane	mg/kg	1J	(<7U)	200
2-Butanone	mg/kg	5JB	8	46.1
Benzene	mg/kg	1J	(<2.8U)	200
Total xylenes	mg/kg	1J	1JB	0
1,1-Dichloroethene	mg/kg	1J	(<1.4U)	200
Carbon disulfide	mg/kg	1J	1J	0
Ethylbenzene	mg/kg	1J	(<2.8U)	200
Total 1,2-Dichloroethene	mg/kg	1J	(<2.8U)	200
Toluene	mg/kg	1J	1JB	0
Chlorobenzene	mg/kg	1J	(<7U)	200
Tetrachloroethene	mg/kg	1JB	1JB	0
Chloroform	mg/kg	1JB	1JB	0
1,2-Dichlorobenzene	mg/kg	1J	(<2.8U)	200
1,3-Dichlorobenzene	mg/kg	1J	(<2.8U)	200
1,4-Dichlorobenzene	mg/kg	1J	(<2.8U)	200
Aluminum	mg/kg	3,230	4,890	40.9
Arsenic	mg/kg	2.1	3.5	50
Barium	mg/kg	12.9B*	18.5B*	35.7
Beryllium	mg/kg	0.20B*	0.22B*	9.5
Cadmium	mg/kg	0.09B*	0.18B*	66.7
Calcium	mg/kg	971	1,110	13.4
Chromium	mg/kg	6.5	12.3	61.7
Cobalt	mg/kg	2.7B*	3.9B*	36.4
Copper	mg/kg	6.6	8.5	25.2
Iron	mg/kg	5,750	8,530	38.9
Lead	mg/kg	41.4	50.4	19.6
Magnesium	mg/kg	985	2,380	82.9
Manganese	mg/kg	57.1	87.9	42.5
Mercury	mg/kg	(<0.05U)	0.06B*	200
Nickel	mg/kg	6.1	10.4	52.1
Potassium	mg/kg	422B*	597B*	34.4
Sodium	mg/kg	106B*	123B*	14.9
Vanadium	mg/kg	11.7	16.0	31.1
Zinc	mg/kg	29.0	42.8	38.4

The RPD for all VOC and TAL metals were within reasonable agreement between the two analyses, with the exception of the following: bromodichloromethane, benzene, 1,1-dichloroethene, ethylbenzene, total 1,2-dichloroethene, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, cadmium, chromium, magnesium, mercury, and nickel. The RPD discrepancies for bromodichloromethane, benzene, 1,1-dichloroethene, ethylbenzene, total 1,2-dichloroethene, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene should not be considered significant in sample LT-901 because the results were reported as not detected or were below the Contract Required Quantitation Limit, where analytical measurement error is anticipated. The RPD discrepancy for mercury and cadmium should not be considered as significant because duplicate results were reported below the Contract Required Detection Limit. The results for chromium, magnesium, and nickel in both the sample and duplicate sample should be considered estimated due to a large RPD discrepancy, which should be considered significant.

Appendix D

Summary Tables for Analyses of Tentatively Identified Compounds

TABLE D-1 SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS REPORTED IN GROUND-WATER SAMPLES COLLECTED ON 13 AND 14 NOVEMBER 1995 AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Analyte	Retention Time (min)	MW-NASB-069 / MW-901	MW-NASB-071 / MW-903	MW-NASB-071 DUP / MW-903 DUP	MW-NASB-072 / MW-904	MW-NASB-074 / MW-906	MW-NASB-075 / MW-907	MW-NASB-076 / MW-908	MW-NASB-079 / MW-914	MW-NASB-079 DUP / MW-914 DUP	MW-NASB-080 / MW-915	MW-NASB-081 / MW-916	QT-007	QT-008
VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260 (μg/L)														
Alkane	22.41		7J											
Alkane	23.88		16J											

NOTE: Only those analytes detected in at least one of the samples are shown in this table.
J = Estimated concentration below detection limit.
QT = Trip blank.

TABLE D-2 SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS REPORTED IN SEDIMENT SAMPLES COLLECTED ON 11 NOVEMBER 1995 AT SITE 9 NAVAL AIR STATION, BRUNSWICK, MAINE

Compound	Retention Time (min)	SED-010	SED-011	SED-012[a]	SED-012 DUP	SED-915	SED-919	SED-922	QT-006	QS-001	QD-001
VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260 (μg/kg)											
Alkane	21.58				1J						
Alkane	21.64	19J									
Alkane	23.79										
Alkane	24.16	8J									
Unknown	24.64	23J									
Diethylbenzene Isomer	24.03		32J								
C10H14 Isomer	24.68		79J								
C11H16 Isomer	25.42		76J								
C11H16 Isomer	25.58		33J								
Naphthalene, decahydro-2-methyl	25.63						100J				
C10H14 Isomer	25.81		77J								
Alkane	25.85							53J			
Naphthalene, decahydro-2-methyl	26.07							38JN			
Unknown	26.11						84J				
C11H16 Isomer	26.29		71J								
Alkane	26.38						68J				
C10H12 Isomer	26.73		51J								
Alkane	26.74						76J				
C12H16 Isomer	26.91			7J							
Naphthalene,1,2,3,4-tetrahydro-5,7	26.92										
C10H14 Isomer	26.94		50J								
Unknown	26.97							67J			
Alkane	26.99						96J				
C10H14 Isomer	27.08		230J								
C11H16 Isomer	27.17		46J								
Alkane	27.23							47J			
Alkane	27.25						150J				
Alkane	27.43				7J						
Alkane	27.46						65J				
Alkane	27.47	20J									

(a) Reanalysis conducted on sample due to low recovery of surrogates.

NOTE: Only those analytes detected in at least one of the samples are shown on this table.
JN = Presumptive identification, estimated values.
J = Estimated concentration below concentration limit.
RB = Equipment rinsate blank.
FB = Source water blank.

Compound	Retention Time (min)	SED-010	SED-011	SED-012[a]	SED-012 DUP	SED-915	SED-919	SED-922	QT-006	QS-001	QD-001
VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260 (μg/kg) (Continued)											
Alkane	27.56						69J				
Decahydro-4,4,8,9,10-pentamethylnap	27.72	12JN									
Alkane	27.85										
C10H14 Isomer	27.86		45J								
Cyclohexane,2-butyl-1,1,3-trimethyl	28.10							54JN			
Cyclohexane, 2-butyl-1,1,3-trimethyl	28.13						65J				
Unknown	28.37							43J			
Unknown	28.41						76J				
Alkane	28.71						90J				
Unknown	28.34	20J									
Alkane	28.50							110J			
Unknown	28.67							59J			
Unknown	28.89							38J			
Alkane	28.99										
Unknown	29.01	12J									
Unknown	29.06							44J			
Unknown	29.28							52J			
Alkane	29.31						71J				
SEMIVOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260 (μg/kg)											
Hexene-2.5dione	8.16	420J	310J	220J	320J	240J	310J				
Alkane	10.23			230J							
Alkane	15.82		260J				300J				
Phenol,4-(2,2,3,3-tetramethyl butyl)	18.58		490J								
Alkane	19.72						510J				
PAH, MW=192	22.23						270J				
PAH, MW=192	22.30			210J	210J		320J				
4H-Cyclopenta[def]phenanthrene	22.49			410J	420J	220J					
PAH, MW=192	22.49						420J				
2-Phenylnaphthalene	23.04						290J				
9,10-Anthracenedione	23.04			270J							
Dimethyl Phenthrene Isomer	23.67						240J				
PAH,MW=216	25.48			300J	380J		410J				
PAH, MW=216	25.67				260J						
Unknown	26.60	880J									
Unknown	27.15		960J								
Unknown	27.17	1,600									
Unknown	27.54		3,200J								
PAH, MW=242	28.73						230J				

Compound	Retention Time (min)	SED-010	SED-011	SED-012[a]	SED-012 DUP	SED-915	SED-919	SED-922	QT-006	QS-001	QD-001
SEMIVOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260 (μg/kg) (Continued)											
C19H14 Isomer	28.73					320J					
Alkane	28.81					350J					
Unknown, Phthalate ester	28.92			230J	210J						
Alkane	28.95					670J					
Unknown	29.02					250J					
Alkane	29.28		760J			1,000					
Alkane	29.29	470J									
Alkane	29.70			440J	490J	2,400	660J				
Alkane	30.78		1,200J								
Unknown	34.72		6200J								
Unknown	34.85		1,200J								
Unknown	34.96		1,600J								
.beta-.Amyrin	35.34		2,700J								
Unknown	35.53		5,800J								
Unknown	35.93		11,00								

TABLE D-3 SUMMARY OF TENTATIVELY IDENTIFIEDCOMPOUNDS REPORTED IN LEACHATE SEEP AND SEDIMENT SAMPLES COLLECTED ON 11 NOVEMBER 1995 AT SITE 9, NAVAL AIR STATION, BRUNSWICK, MAINE

Analyte	Retention Time (min)	LT-901 (SEEP) (μg/L)	LT-901 (SED) (μg/kg)	LT-901 (SED)[a] DUP	QT-006 (μg/L)	QS-001 (SED) (μg/L)	QS-002 (SEEP) (μg/L)	QD-001 (μg/L)
VOLATILE ORGANIC COMPOUNDS BY EPA METHOD SW-8260								
.alpha.-Pinene	20.10			11JN				
.alpha.-Pinene	20.11							
.alpha.-Pinene	20.12		50J					
Alkane	21.58			17J				
Alkane	21.61		28J					
.beta.-Pinene	21.70		25J					
Unknown	22.01			9J				
3-Carene	22.53		13J					
Unknown	24.57			21J				
Unknown	24.59		33J					
Unknown	26.91		12J					
Unknown	27.41							
Alkane	27.44		29J	13J				
Unknown	27.68			30J				
Unknown	27.69		46J					
Unknown	28.12			9J				
Unknown	28.14		14J					
Unknown	28.27							
Unknown	28.97		24J	15J				
Unknown	29.26			23J				
Unknown	29.27		34J					

(a) Reanalysis conducted due to low surrogate recovery.

NOTE: Only those analytes detected in at least one of the samples are shown on this table.
J = Estimated concentration below detection limit.
QS = Equipment rinsate blank. Equipment rinsate blank associated with leachate sediment samples was analyzed under a separate sample delivery group shipped the same day.
QT = Trip blank. Trip blank associated with leachate seep and sediment samples were analyzed under a separate sample delivery group shipped the same day.
QD = Source water blank.

Appendix E

Analytical Report Data Tables

Appendix E.1 Ground-Water Samples Site 9
Appendix E.2 Surface Water Samples Site 9
Appendix E.3 Sediment Samples Site 9
Appendix E.4 Leachate Seep and Sediment Samples Site 9

Appendix E.1

Ground-Water Samples
Site 9

APPENDIX E.1

SAMPLE KEY - SITE 9
NAVAL AIR STATION, BRUNSWICK, MAINE

Sample Designation	Sample Station
Monitoring Wells	
S9-MW007	MW-901
S9-MW002	MW-903
S9-MWXD1	MW-903 (DUP)
S9-MW004	MW-904
S9-MW005	MW-906
S9-MW006	MW-907
S9-MW003	MW-908
S9-MW008	MW-914
S9-MWXD2	MW-914 (DUP)
S9-MW009	MW-915
S9-MW001	MW-916

pace INCORPORATED
'IRONMENTAL LABORATORIES

WL1866

299098

CHAIN-OF-CUSTODY RECORD
Analytical Request

nt EA Engineering
ess Old Gurnet Road
Brunswick, Me 04011-5000
ne (207) 798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference
Project Name / No. BNAS 29600.47/7200

Pace Client No.
Pace Project Manager
Pace Project No.
Requested Due Date:

pled By (PRINT): Karen Ruszczyk 11/13/95
pler Signature: Karen Ruszczyk
Date Sampled: 11/13/95

M	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	-NaOH	ANALYSES REQUEST: VOCs	Cyanide	Tal Elements	REMARKS
	BN-04-59-mw001 ms/msD	0945	H_2O		6				X		X			VOAs by 8260, plus library search Tal Elements and Cyanide reqd to Table 7-1 in QAPP
	BN-04-59-mw001 ms	0945	H_2O		4			X		X		X	X	
	BN-04-59-mw002	1034	H_2O		4			X	X	X	X	X	X	
	BN-04-59-mw003	1125	H_2O		2				X		X			
	BN-04-59-mw004	1157	H_2O		4			X	X	X	X	X	X	
	BN-04-59-mw005	1230	H_2O		2				X		X			
	BN-04-59-mw006	1244	H_2O		2				X		X			
	BN-04-59-mwXD1	—	H_2O		4			X	X	X	X	X	X	

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					EA	LaLauzon / PACE ME	11-14-95 11/14/95	05:25 0920

itional Comments
imp blank included in cooler.
OG starts with # BN-04-59-mw001 (New)
Cooler temps 3°, 4°C

SEE REVERSE SIDE FOR INSTRUCTIONS

8000008

PACE INCORPORATED
IRONMENTAL LABORATORIES

299079

WL1866

CHAIN-OF-CUSTODY RECORD
Analytical Request

EA Engineering
Old Gurnet Road
Brunswick, Me 04011-5000
(207) 798-5977

Report To: Mike Battle
Bill To: Ed Newburgh
P.O. # / Billing Reference
Project Name / No. BNAS 29600.47/200

Pace Client No.
Pace Project Manager
Pace Project No.
*Requested Due Date:

Sampled By (PRINT): Karen Ruszczyk 11/13/95
Sampler Signature: Karen Ruszczyk Date Sampled: 11/13/95

SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA-HCl	Mach		VOCs	Tal Elements	Cyanide	REMARKS
BN-04-S9-QT007	~~1525~~ 0945	H_2O		2				X			X			VOAs by 8260, plus library search. Tal Elements and Cyanide refer to 7-1 in QAPP.
BN-04-S9-MW007	1517	H_2O		2				X			X			
BN-04-S9-MW008	1552	H_2O		4			X	X	X		X	X	X	
BN-04-S9-MW~~X~~D2	—	H_2O		4			X	X	X		X	X	X	

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	SHIPMENT METHOD RETURNED/DATE

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
	Thomas Kling EA	Karen Ruszczyk Pace ME	11-14-95 11/14/95	0825 0920

ional Comments
mp. blank included in cooler.
G Starts with #BN-04-S9-MW001 (New)

SEE REVERSE SIDE FOR INSTRUCTIONS

299388

pace INCORPORATED
/IRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

nt EA Engineering
ress Old Gurnet Road
Brunswick, Me 04011-5000
ne (207) 798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference
Project Name / No. BNAS 29602.47/7200

Pace Client No.
Pace Project Manager
Pace Project No. WL 1882
*Requested Due Date:

pled By (PRINT): Karen Ruszczyk 11/14/95
pler Signature: Karen Ruszczyk Date Sampled: 11/14/95

M P.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA-HCl	NaOH		VOCs	Tot Elements	Cyanide	REMARKS
	BN-04-S9-MW009	0855	H_2O		4			X	X	X		X	X	X	VOAs by 8260, plus library search. Tot Elements and Cyanide refer to Table 7-1 in QAPP
	BN-04-S9-QT008	0855	H_2O		2				X			X			

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					[illegible] EA	[illegible]	11-15-95	0850
						[illegible]	11/15/95	1000

itional Comments
rip blank included in cooler
mple BN-04-S9-QT008 ends
DG # BN-04-S9-MW001.
Cooler temp okay 2-6°C

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

0000010

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-11
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW007	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	1,2
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-11
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW007	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-11
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW007	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	95.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW007

Lab Name	PACE, INC.	SDG No.:	S9MW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1866-~~10~~-11
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2744
Level: (low/med)	low	Date Received:	11/14/95
% Moisture: not dec.	N/A	Date Analyzed:	11/17/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-2
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW002	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	J1	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-2
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW002	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	J1	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-2
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW002	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	J1	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	8.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	B18	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	105.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	99.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	94.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW002

Lab Name: PACE, INC.

SDG No.: S9MW001

Matrix (soil/water): Water

Lab Sample ID: WL1866-2

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2729

Level: (low/med) low

Date Received: 11/14/95

% Moisture: not dec. N/A

Date Analyzed: 11/17/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 2

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Alkane	22.41	7	J
2.	Alkane	23.88	16	J
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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9MW002

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9MW00

Matrix (soil/water): WATER Lab Sample ID: WL1866-2

Level (low/med): LOW__ Date Received: 11/14/95

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.5	U		P
7440-36-0	Antimony	2.8	B		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	10	B		P
7440-41-7	Beryllium	0.12	U		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	14000			P
7440-47-3	Chromium	0.79	B		P
7440-48-4	Cobalt	1.5	B		P
7440-50-8	Copper	1.1	U		P
7439-89-6	Iron	6060			P
7439-92-1	Lead	1.7	B		P
7439-95-4	Magnesium	6320			P
7439-96-5	Manganese	412			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.1	B		P
7440-09-7	Potassium	1870	B		P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	0.67	U		P
7440-23-5	Sodium	31600			P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	0.48	U		P
7440-66-6	Zinc	6.2	B		P
5712-5	Cyanide	1.3	U		C

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-4
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MWXD1	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Volatile Organics by EPA 8260								
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' value
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-4
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MWXD1	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-4
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MWXD1	Aqueous	K.RUSCZYK	11/13/95	11/14/

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	JB1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	105.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	103.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	100.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MWXD1

Lab Name	PACE, INC.	SDG No.:	S9MW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1866-4
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2737
Level: (low/med)	low	Date Received:	11/14/95
% Moisture: not dec.	N/A	Date Analyzed:	11/17/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9MWXD1

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9MW00

Matrix (soil/water): WATER Lab Sample ID: WL1866-4

Level (low/med): LOW Date Received: 11/14/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.5	U		P
7440-36-0	Antimony	2.6	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	10.1	B		P
7440-41-7	Beryllium	0.23	B		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	14000			P
7440-47-3	Chromium	0.54	U		P
7440-48-4	Cobalt	1.1	B		P
7440-50-8	Copper	1.1	U		P
7439-89-6	Iron	6030			P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	6300			P
7439-96-5	Manganese	412			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.1	B		P
7440-09-7	Potassium	1720	B		P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	0.67	U		P
7440-23-5	Sodium	32800			P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	0.48	U		P
7440-66-6	Zinc	4.5	B		P
5712-5	Cyanide	1.5	B		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-3
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW004	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-3
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW004	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	J1	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-3
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW004	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	100.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	99.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	91.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

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Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW004

Lab Name	PACE, INC.	SDG No.:	S9MW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1866-3
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2730
Level: (low/med)	low	Date Received:	11/14/95
% Moisture: not dec.	N/A	Date Analyzed:	11/17/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9MW004

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9MW00

Matrix (soil/water): WATER Lab Sample ID: WL1866-3

Level (low/med): LOW Date Received: 11/14/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.5	U		P
7440-36-0	Antimony	2.6	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	8.5	B		P
7440-41-7	Beryllium	0.25	B		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	20900			P
7440-47-3	Chromium	1.6	B		P
7440-48-4	Cobalt	1.5	B		P
7440-50-8	Copper	1.1	U		P
7439-89-6	Iron	14.3	U		P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	5630			P
7439-96-5	Manganese	151			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	B		P
7440-09-7	Potassium	804	B		P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	0.67	U		P
7440-23-5	Sodium	6120			P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	0.48	U		P
7440-66-6	Zinc	7.9	B		P
5712-5	Cyanide	1.3	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-8
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW005	Aqueous	K.RUSCZYK	11/13/95	11/14/9

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	3.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	12.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-8
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW005	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	J1	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-8
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW005	Aqueous	K.RUSCZYK	11/13/95	11/14/

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	106.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	101.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	89.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbclm(dw)/kwh/tjg
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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW005

Lab Name	PACE, INC.	SDG No.:	S9MW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1866-8
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2741
Level: (low/med)	low	Date Received:	11/14/95
% Moisture: not dec.	N/A	Date Analyzed:	11/17/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-9
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW006	Aqueous	K.RUSCZYK	11/13/95	11/14/9

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	10.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-9
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
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Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW006	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

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12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-9
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW006	Aqueous	K.RUSCZYK	11/13/95	11/14/

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	104.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	101.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	95.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbclm(dw)/kwh/tjg
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW006

Lab Name: PACE, INC.
SDG No.: S9MW001
Matrix (soil/water): Water
Lab Sample ID: WL1866-9
Sample wt/vol: 5 (g/ml) ml
Lab File ID: Y2742
Level: (low/med) low
Date Received: 11/14/95
% Moisture: not dec. N/A
Date Analyzed: 11/17/95
GC Column: RTX-624 ID: 0.53
Dilution Factor: 1.0
Soil Extract Volume: 0 (ul)
Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 1
CONCENTRATION UNITS (ug/L or ug/KG) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124389	Carbon Dioxide	1.91	6	JN
2.					
3.					
4.					
5.					
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7.					
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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-7
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW003	Aqueous	K.RUSCZYK	11/13/95	11/14/9

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

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12/11/95

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
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Newburgh, New York 12550

Lab Number : WL-1866-7
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW003	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

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12/11/95

LJO/jcbclm(dw)/kwh/tjg
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Lab Number : WL-1866-7
Report Date: 12/11/95
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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW003	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	104.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	90.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

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LK17VLW2

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW003

Lab Name: PACE, INC.
SDG No.: S9MW001
Matrix (soil/water): Water
Lab Sample ID: WL1866-7
Sample wt/vol: 5 (g/ml) ml
Lab File ID: Y2740
Level: (low/med) low
Date Received: 11/14/95
% Moisture: not dec. N/A
Date Analyzed: 11/17/95
GC Column: RTX-624 ID: 0.53
Dilution Factor: 1.0
Soil Extract Volume: 0 (ul)
Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0
CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-5
Report Date: 12/11/95
PO No. : 802LSQA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW008	Aqueous	K.RUSCZYK	11/13/95	11/14/9

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-5
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW008	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE.
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-5
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW008	Aqueous	K.RUSCZYK	11/13/95	11/14/

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	103.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	95.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' valu

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW008

Lab Name	PACE, INC.	SDG No.:	S9MW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1866-5
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2738
Level: (low/med)	low	Date Received:	11/14/95
% Moisture: not dec.	N/A	Date Analyzed:	11/17/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9MW008

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9MW00

Matrix (soil/water): WATER Lab Sample ID: WL1866-5

Level (low/med): LOW__ Date Received: 11/14/95

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	48.9	B		P
7440-36-0	Antimony_	2.6	U		P
7440-38-2	Arsenic__	2.8	U		P
7440-39-3	Barium___	172	B		P
7440-41-7	Beryllium	0.12	U		P
7440-43-9	Cadmium__	0.24	U		P
7440-70-2	Calcium__	20800			P
7440-47-3	Chromium_	6.0	B		P
7440-48-4	Cobalt___	0.80	B		P
7440-50-8	Copper___	1.1	U		P
7439-89-6	Iron____	12600			P
7439-92-1	Lead____	1.6	U		P
7439-95-4	Magnesium	1290	B		P
7439-96-5	Manganese	76.6			P
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	4.9	B		P
7440-09-7	Potassium	2330	B		P
7782-49-2	Selenium_	3.7	U		P
7440-22-4	Silver___	0.67	U		P
7440-23-5	Sodium___	3950	B		P
7440-28-0	Thallium_	5.5	U		P
7440-62-2	Vanadium_	0.48	U		P
7440-66-6	Zinc____	7.8	B		P
5712-5___	Cyanide__	1.3	U		C

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-6
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MWXD2	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-6
Report Date: 12/11/95
PO No. : 802LSQA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MWXD2	Aqueous	K.RUSCZYK	11/13/95	11/14/9

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sampl specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-6
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MWXD2	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	100.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MWXD2

Lab Name	PACE, INC.	SDG No.:	S9MW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1866-6
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2739
Level: (low/med)	low	Date Received:	11/14/95
% Moisture: not dec.	N/A	Date Analyzed:	11/17/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9MWXD2

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9MW00

Matrix (soil/water): WATER Lab Sample ID: WL1866-6

Level (low/med): LOW__ Date Received: 11/14/95

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	41.2	B		P_
7440-36-0	Antimony_	2.6	U		P_
7440-38-2	Arsenic__	2.8	U		P_
7440-39-3	Barium__	107	B		P_
7440-41-7	Beryllium	0.14	B		P_
7440-43-9	Cadmium__	0.24	U		P_
7440-70-2	Calcium__	15500			P_
7440-47-3	Chromium_	3.6	B		P_
7440-48-4	Cobalt___	0.92	B		P_
7440-50-8	Copper___	1.1	U		P_
7439-89-6	Iron____	7630			P_
7439-92-1	Lead____	1.6	U		P_
7439-95-4	Magnesium	1040	B		P_
7439-96-5	Manganese	54.5			P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	3.6	B		P_
7440-09-7	Potassium	2080	B		P_
7782-49-2	Selenium_	3.7	U		P_
7440-22-4	Silver___	0.67	U		P_
7440-23-5	Sodium___	2680	B		P_
7440-28-0	Thallium_	5.5	U		P_
7440-62-2	Vanadium_	0.48	U		P_
7440-66-6	Zinc____	4.7	B		P_
5712-5___	Cyanide__	1.3	U		C_

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1882-1
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW009	Aqueous	K.RUSCZYK	11/14/95	11/15/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	3.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB1	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbghp(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1882-1
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW009	Aqueous	K.RUSCZYK	11/14/95	11/15/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1882-1
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW009	Aqueous	K.RUSCZYK	11/14/95	11/15/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	J1	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	JB1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	97.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW009

Lab Name: PACE, INC.

SDG No.: S9MW001

Matrix (soil/water): Water

Lab Sample ID: WL1882-1

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2745

Level: (low/med) low

Date Received: 11/15/95

% Moisture: not dec. N/A

Date Analyzed: 11/17/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 1

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124389	Carbon Dioxide	1.92	6	JNB
2.				
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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9MW009

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9MW00

Matrix (soil/water): WATER Lab Sample ID: WL1882-1

Level (low/med): LOW Date Received: 11/15/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	249			P
7440-36-0	Antimony	2.6	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	1270			P
7440-41-7	Beryllium	0.12	U		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	95100			P
7440-47-3	Chromium	11.4			P
7440-48-4	Cobalt	0.61	U		P
7440-50-8	Copper	1.5	B		P
7439-89-6	Iron	4580			P
7439-92-1	Lead	1.7	B		P
7439-95-4	Magnesium	6140			P
7439-96-5	Manganese	276			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	9.1	B		P
7440-09-7	Potassium	9250			P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	0.80	B		P
7440-23-5	Sodium	22000			P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	1.4	B		P
7440-66-6	Zinc	17.4	B		P
5712-5	Cyanide	1.3	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-1
Report Date: 12/11/95
PO No. : 802LSQA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW001	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	J1	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

340 County Road, Westbrook, ME 04092
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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-1
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW001	Aqueous	K.RUSCZYK	11/13/95	11/14/9

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-1
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9MW001	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	101.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	98.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	93.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW1

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9MW001

Lab Name	PACE, INC.	SDG No.:	S9MW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1866-1
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2726
Level: (low/med)	low	Date Received:	11/14/95
% Moisture: not dec.	N/A	Date Analyzed:	11/17/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9MW001

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9MW00

Matrix (soil/water): WATER Lab Sample ID: WL1866-1

Level (low/med): LOW__ Date Received: 11/14/95

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	17.2	B		P
7440-36-0	Antimony_	2.6	U		P
7440-38-2	Arsenic__	2.8	U		P
7440-39-3	Barium___	111	B		P
7440-41-7	Beryllium	0.12	U		P
7440-43-9	Cadmium__	1.9	B		P
7440-70-2	Calcium__	65900			P
7440-47-3	Chromium_	0.74	B		P
7440-48-4	Cobalt___	3.5	B		P
7440-50-8	Copper___	5.8	B		P
7439-89-6	Iron____	43.8	B		P
7439-92-1	Lead____	1.6	U		P
7439-95-4	Magnesium	4580	B		P
7439-96-5	Manganese	9930			P
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	2.0	B		P
7440-09-7	Potassium	9240			P
7782-49-2	Selenium_	8.9			P
7440-22-4	Silver___	0.67	U		P
7440-23-5	Sodium___	105000			P
7440-28-0	Thallium_	5.5	U		P
7440-62-2	Vanadium_	0.48	U		P
7440-66-6	Zinc____	5.2	B		P
5712-5___	Cyanide__	8.0			C

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1866-10
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT007	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	JB1	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1866-10
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT007	Aqueous	K.RUSCZYK	11/13/95	11/14/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	J1	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	J1	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

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Lab Number : WL-1866-10
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT007	Aqueous	K.RUSCZYK	11/13/95	11/14/9

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOT
Chlorobenzene	J1	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	JB1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	3.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	105.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	103.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	97.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' value.

12/11/95

LJO/jcbclm(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9QT007

Lab Name: PACE, INC.

SDG No.: S9MW001

Matrix (soil/water): Water

Lab Sample ID: WL1866-~~11~~-10 cs-12/6/95

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2743

Level: (low/med) low

Date Received: 11/14/95

% Moisture: not dec. N/A

Date Analyzed: 11/17/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1882-2
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT008	Aqueous	K.RUSCZYK	11/14/95	11/15/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/17/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbejn/gbp(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1882-2
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT008	Aqueous	K.RUSCZYK	11/14/95	11/15/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Trichloroethene	J1	µg/L	1.0	2.5	EPA 8260	11/17/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/17/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/17/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbejn/gbp(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1882-2
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT008	Aqueous	K.RUSCZYK	11/14/95	11/15/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	J1	µg/L	1.0	5.0	EPA 8260	11/17/95	DW	
Ethylbenzene	JB1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Total Xylenes	J2	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
Dibromofluoromethane (Surr.)	103.	%	1.0		EPA 8260	11/17/95	DW	
Toluene-d8 (Surr.)	106.	%	1.0		EPA 8260	11/17/95	DW	
p-Bromofluorobenzene (Surr.)	102.	%	1.0		EPA 8260	11/17/95	DW	
1,2-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	
1,4-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/17/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbejn/gtp(dw)/kwh/tjg
LK17VLW2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9QT008

Lab Name: PACE, INC.

SDG No.: S9MW001

Matrix (soil/water): Water

Lab Sample ID: WL1882-2

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2746

Level: (low/med) low

Date Received: 11/15/95

% Moisture: not dec. N/A

Date Analyzed: 11/17/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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Appendix E.2

Surface Water Samples
Site 9

APPENDIX E.2

SAMPLE KEY - SITE 9
NAVAL AIR STATION, BRUNSWICK, MAINE

Sample Designation	Sample Station
Surface Water Samples	
S9-SW006	SW-010
S9-SW003	SW-011
S9-SW002	SW-012
S9-SWXD1	SW-012 (DUP)
S9-SW005	SW-915
S9-SW004	SW-919
S9-SW001	SW-922

299099

PACE INCORPORATED
IRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

EA Engineering
Old Gurnet Road
Brunswick, Me 04011-5000
(207)798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference
Project Name / No. BNAS 29600.47 / 7200

Pace Client No.
Pace Project Manager
Pace Project No. 111840
*Requested Due Date:

Sampled By (PRINT): KURT ILKER 11/11/95
Sampler Signature: [signature] Date Sampled: 11/11/95

SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	Metals	ANALYSES REQUEST: VOCs	Total Cyanide	Cyanide	REMARKS
BN-04-S9-SW001 MS/MSD	0930	H_2O		2				X		X			VOAs by 8260, plus library Search. Total Elements and Cyanide refer to 7-1 in QAPP.
BN-04-S9-SW002	1005	H_2O		2				X		X			
BN-04-S9-SW003	1035	H_2O		2				X		X			
BN-04-S9-SW004	1058	H_2O		2				X		X			
BN-04-S9-SW005	1116	H_2O		2				X		X			
BN-04-S9-SW006	1135	H_2O		2				X		X			
BN-04-S9-LTSW Ins MSD	1154	H_2O		6				X		X			
BN-04-S9-SW XD1	—	H_2O		2				X		X			

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					[signature] EA	[signature]	11/13/95	1025

Additional Comments
Temp blank included in cooler.
BN-04-S9-SW001 starts SDG (SDG # BN-04-S9-SW001)
MS included in cooler with Trip BN-04-S9-QT006.

ORIGINAL

SEE REVERSE SIDE FOR INSTRUCTIONS

29102

PACE INCORPORATED
IRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

t: EA Engineering
ess: Old Gurnet Road
Brunswick, Me 04011-5000
e: (207) 798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference
Project Name / No. BNAS 29600.47172000

Pace Client No.
Pace Project Manager
Pace Project No.
*Requested Due Date:

pled By (PRINT): Brian D. Anderson
pler Signature: Brian D. Anderson
Date Sampled: 11/11/95 11/11/95

SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	NaOH	ANALYSES REQUEST: VOCs	Total Elements	Cyanide	SVOC	REMARKS
BN-04-59-LTSW1MS	1154	H_2O		4			X		X		X	X		VOAs by 8260, plus library search. Total Elements and Cyanide refer to 7-1 in QAPP.
BN-04-59-QS001	0900	H_2O		5			X	X	X	X	X	X	X	
BN-04-59-QS002	0815	H_2O		4			X	X	X	X	X	X		
BN-04-59-QT004	0900	H_2O		2				X		X				

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT DATE	RETURNED DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					[illegible] EA	[illegible]	111345	0815

ional Comments
Temp. blank included in cooler.

SAMPLE BN-04-59-QT 006 ends
SDG # BN-04-59-SW001.

Contact [illegible] 7-02

ORIGINAL

SEE REVERSE SIDE FOR INSTRUCTIONS

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-7
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total 1,2-Dichloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-7
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/16/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-7
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Dibromofluoromethane (Surr.)	100.	%	1.0		EPA 8260	11/16/95	DW	
Toluene-d8 (Surr.)	100.	%	1.0		EPA 8260	11/16/95	DW	
p-Bromofluorobenzene (Surr.)	94.	%	1.0		EPA 8260	11/16/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SW006

Lab Name	PACE, INC.	SDG No.:	S9SW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1840-7
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2685
Level: (low/med)	low	Date Received:	11/13/95
% Moisture: not dec.	N/A	Date Analyzed:	11/16/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-4
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW003	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
Acetone	J4	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

340 County Road, Westbrook, ME 04092
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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-4
Report Date: 12/11/95
PO No. : 802LSQA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW003	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Trichloroethene	JB1	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/13/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Toluene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgkp(dw)/kwh/tjg
LK13VLW1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-4
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW003	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Dibromofluoromethane (Surr.)	112.	%	1.0		EPA 8260	11/13/95	DW	
Toluene-d8 (Surr.)	101.	%	1.0		EPA 8260	11/13/95	DW	
p-Bromofluorobenzene (Surr.)	91.	%	1.0		EPA 8260	11/13/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SW003

Lab Name	PACE, INC.	SDG No.:	S9SW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1840-4
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2619
Level: (low/med)	low	Date Received:	11/13/95
% Moisture: not dec.	N/A	Date Analyzed:	11/13/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-3
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
Acetone	J4	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-3
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Trichloroethene	JB1	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/13/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,1,2,2-Tetrachloroethane	J1	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Toluene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-3
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Dibromofluoromethane (Surr.)	107.	%	1.0		EPA 8260	11/13/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/13/95	DW	
p-Bromofluorobenzene (Surr.)	90.	%	1.0		EPA 8260	11/13/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S19SW002

Lab Name: PACE, INC.

SDG No.: S9SW001

Matrix (soil/water): Water

Lab Sample ID: WL1840-3

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2618

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. N/A

Date Analyzed: 11/13/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-8
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SWXD1	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-8
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SWXD1	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/16/95	DW	
Tetrachloroethene	J2	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Toluene	J1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

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el: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-8
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SWXD1	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Dibromofluoromethane (Surr.)	101.	%	1.0		EPA 8260	11/16/95	DW	
Toluene-d8 (Surr.)	101.	%	1.0		EPA 8260	11/16/95	DW	
p-Bromofluorobenzene (Surr.)	103.	%	1.0		EPA 8260	11/16/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SWXD1

Lab Name	PACE, INC.	SDG No.:	S9SW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1840-8
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2686
Level: (low/med)	low	Date Received:	11/13/95
% Moisture: not dec.	N/A	Date Analyzed:	11/16/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-6
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW005	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-6
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW005	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Trichloroethene	JB1	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Benzene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/13/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Toluene	J2	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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: ([illegible]7) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-6
Report Date: 12/11/95
PO No. : 802LSQA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW005	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Ethylbenzene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Styrene	<2	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total Xylenes	B3	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Dibromofluoromethane (Surr.)	108.	%	1.0		EPA 8260	11/13/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/13/95	DW	
p-Bromofluorobenzene (Surr.)	87.	%	1.0		EPA 8260	11/13/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SW005

Lab Name	PACE, INC.	SDG No.:	S9SW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1840-6
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2621
Level: (low/med)	low	Date Received:	11/13/95
% Moisture: not dec.	N/A	Date Analyzed:	11/13/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-5
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW004	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
Acetone	J2	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-5
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW004	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Trichloroethene	JB1	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Benzene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/13/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Toluene	J1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-5
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW004	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total Xylenes	JB2	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Dibromofluoromethane (Surr.)	109.	%	1.0		EPA 8260	11/13/95	DW	
Toluene-d8 (Surr.)	103.	%	1.0		EPA 8260	11/13/95	DW	
p-Bromofluorobenzene (Surr.)	95.	%	1.0		EPA 8260	11/13/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SW004

Lab Name	PACE, INC.	SDG No.:	S9SW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1840-5
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2620
Level: (low/med)	low	Date Received:	11/13/95
% Moisture: not dec.	N/A	Date Analyzed:	11/13/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-2
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW001	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/13/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-2
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW001	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Trichloroethene	JB1	µg/L	1.0	2.5	EPA 8260	11/13/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/13/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/13/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-2
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SW001	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/13/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
Dibromofluoromethane (Surr.)	108.	%	1.0		EPA 8260	11/13/95	DW	
Toluene-d8 (Surr.)	103.	%	1.0		EPA 8260	11/13/95	DW	
p-Bromofluorobenzene (Surr.)	98.	%	1.0		EPA 8260	11/13/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/13/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK13VLW1

340 County Road, Westbrook, ME 04092
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S19SW001

Lab Name	PACE, INC.	SDG No.:	S9SW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1840-2
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2617
Level: (low/med)	low	Date Received:	11/13/95
% Moisture: not dec.	N/A	Date Analyzed:	11/13/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-9
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Methylene chloride	JB3	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgtp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-9
Report Date: 12/11/95
PO No. : 802LSQA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/16/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-9
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Dibromofluoromethane (Surr.)	100.	%	1.0		EPA 8260	11/16/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/16/95	DW	
p-Bromofluorobenzene (Surr.)	98.	%	1.0		EPA 8260	11/16/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9QT006

Lab Name	PACE, INC.	SDG No.:	S9SW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1840-9
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2687
Level: (low/med)	low	Date Received:	11/13/95
% Moisture: not dec.	N/A	Date Analyzed:	11/16/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	0	CONCENTRATION UNITS (ug/L or ug/KG)	ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-11
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Methylene chloride	B7	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-11
Report Date: 12/11/95
PO No. : 802LSQA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/16/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

240 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-11
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Dibromofluoromethane (Surr.)	102.	%	1.0		EPA 8260	11/16/95	DW	
Toluene-d8 (Surr.)	101.	%	1.0		EPA 8260	11/16/95	DW	
p-Bromofluorobenzene (Surr.)	103.	%	1.0		EPA 8260	11/16/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,4-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9QS002

Lab Name: PACE, INC.

SDG No.: S9SW001

Matrix (soil/water): Water

Lab Sample ID: WL1840-11

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2689

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. N/A

Date Analyzed: 11/16/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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pace INCORPORATED
ENVIRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: EA Engineering
Address: Old Gurnet Road
Brunswick, Me 04011-5000
Phone: (207) 798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference:
Project Name / No.: BNAS 29600.47 / 7200

Pace Client No.:
Pace Project Manager:
Pace Project No.: 41840
*Requested Due Date:

Sampled By (PRINT): KURT ILKER 11/11/95
Sampler Signature: [signature]
Date Sampled: 11/11/95

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	~~NaOH~~	VOCs	~~TCL Semivolatile~~	~~Cyanide~~	REMARKS
1	BN-04-S9-SW001 MS/MSD	0930	H_2O		2				X		X			VOAs by 8260, plus library search. Total Elements and Cyanide refer to 7-1 in QAPP.
2	BN-04-S9-SW002	1005	H_2O		2				X		X			
3	BN-04-S9-SW003	1035	H_2O		2				X		X			
4	BN-04-S9-SW004	1058	H_2O		2				X		X			
5	BN-04-S9-SW005	1116	H_2O		2				X		X			
6	BN-04-S9-SW006	1135	H_2O		2				X		X			
7	BN-04-S9-LTSW1 MS/MSD	1154	H_2O		6				X		X			
8	BN-04-S9-SW XD1	—	H_2O		2				X		X			

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT DATE	RETURNED DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					[signature] EA	[signature]	11/13/95	1565

Additional Comments:
Temp. blank included in cooler.
BN-04-S9-SW001 starts SDG (SDG # BN-04-S9-SW001)
VOAs included in cooler with Trip BN-04-S9-QT006.

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

pace

ENVIRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: EA Engineering
Address: Old Gurnet Road
Brunswick, Me 04011-5000
Phone: (207) 798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference
Project Name / No.: BNAS 29600.47172000

Pace Client No.
Pace Project Manager
Pace Project No.
*Requested Due Date:

Sampled By (PRINT): Brian D. Anderson
Sampler Signature: Brian D. Anderson
Date Sampled: 11/11/95 (11/11/95)

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	NaOH		VOCs	Tot Elements	Cyanide	SVOC	REMARKS
1	BN-04-S9-LTSW1MS	1154	H_2O		4			X		X		X	X			VOAs by 8260, plus library search. Tot Elements and Cyanide refer to 7-1 in QAPP.
2	BN-04-S9-QS001	0900	H_2O		5			X	X	X		X	X	X	X	
3	BN-04-S9-QS002	0815	H_2O		4			X	X	X		X	X	X		
4	BN-04-S9-QT004	0900	H_2O		2				X			X				
5																
6																
7																
8																

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT DATE	RETURNED DATE

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] EA	[signature]	111295	0815

Additional Comments
- Temp. blank included in cooler.
- Sample BN-04-S9-QT 006 ends SDG # BN-04-S9-SW001.

Cooler Temps: 2, 2°C

ORIGINAL

SEE REVERSE SIDE FOR INSTRUCTIONS

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1767-10
Report Date: 12/08/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S1QD001	Aqueous	B. ANDERSEN	11/02/95	11/03/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Methylene chloride	B5	µg/L	1.0	3.0	EPA 8260	11/07/95	DW	
Acetone	J4	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/07/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/08/95

LJO/jcbeaw/kwh/ljo(dw)
LK07VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1767-10
Report Date: 12/08/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S1QD001	Aqueous	B. ANDERSEN	11/02/95	11/03/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/07/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/07/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/07/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/07/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/08/95

LJO/jcbeaw/kwh/ljo(dw)
LK07VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1767-10
Report Date: 12/08/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S1QD001	Aqueous	B. ANDERSEN	11/02/95	11/03/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Dibromofluoromethane (Surr.)	113.	%	1.0		EPA 8260	11/07/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/07/95	DW	
p-Bromofluorobenzene (Surr.)	97.	%	1.0		EPA 8260	11/07/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/08/95

LJO/jcbeaw/kwh/ljo(dw)
LK07VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S1QD001

Lab Name	PACE, INC.	SDG No.:	S1SW001
Matrix (soil/water)	Water	Lab Sample ID:	WL1767-10
Sample wt/vol:	5 (g/ml) ml	Lab File ID:	Y2510
Level: (low/med)	low	Date Received:	11/3/95
% Moisture: not dec.	N/A	Date Analyzed:	11/7/95
GC Column:	RTX-624 ID: 0.53	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.		Q
1.					
2.					
3.					
4.					
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Appendix E.3

Sediment Samples
Site 9

APPENDIX E.3

SAMPLE KEY - SITE 9
NAVAL AIR STATION, BRUNSWICK, MAINE

Sample Designation	Sample Station
Sediment Samples	
S9-SD006	SED-010
S9-SD003	SED-011
S9-SD002	SED-012
S9-SDXD1	SED-012 (DUP)
S9-SD005	SED-915
S9-SD004	SED-919
S9-SD001	SED-922

pace INCORPORATED
ENVIRONMENTAL LABORATORIES

299105

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: EA
Address: Old Gurnet Road
Brunswick, ME 04011-5000
Phone: (207) 798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference:
Project Name / No.: BNAS 29600.47/7200

Pace Client No.:
Pace Project Manager:
Pace Project No.: 441841
*Requested Due Date:

Sampled By (PRINT): Thomas R Carey II
Sampler Signature: [signature]
Date Sampled: 11/11/95

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	UNPRESERVED	H_2SO_4	HNO_3	VOA			VOC	SVOC	REMARKS
1	BN-04-59-SD 001	0940	Soil	7	3	X						X	X — NO SVOAs per T. Carey 11/13/95	VOAs by 8260 plus Library search TAL Elements and Cyanide refer to Table 7-1 in QAPP
2	BN-04-59-SD002	1015	Soil	2	3	X						X	X	
3	BN-04-59-SD003 MS/MSD	1050	Soil	1	9	X						X	X	
4	BN-04-59-SD004	1111	Soil	3	3	X						X	X	
5	BN-04-59-SD 005	1121	Soil	4	3	X						X	X	
6	BN-04-59-SD 006	1140	Soil	5	3	X						X	X	
7														
8	BN-04-59-SDX01	—	Soil	6	3	X						X	X	

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					Thomas R Carey II EA [signature]		11/13/95	0845

Additional Comments
Temp blank included in cooler
VOA samples included in cooler with Trip BN-04-59-QT006.
BN-04-59-SD001 starts SD6 and sample BN-04-59-SDXD1 ends SD6.
cooler temp: 2°

SEE REVERSE SIDE FOR INSTRUCTIONS

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-5
Report Date: 12/14/95
PO No. : 802SLQA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Bromomethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Vinyl chloride	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
Chloroethane	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
Methylene chloride	B5	µg/kgdrywt	1.3	3.0	EPA 8260	11/15/95	LG	
Acetone	B14	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Carbon disulfide	J1	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethene	J1	µg/kgdrywt	1.3	1.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethane	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
Total 1,2-Dichloroethene	9.	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
Chloroform	JB1	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloroethane	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
2-Butanone	JB4	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
1,1,1-Trichloroethane	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1841-5
Report Date: 12/14/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Bromodichloromethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloropropane	<3.	µg/kgdrywt	1.3	2.5	EPA 8260	11/15/95	LG	
cis-1,3-Dichloropropene	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Trichloroethene	J2	µg/kgdrywt	1.3	2.5	EPA 8260	11/15/95	LG	
Dibromochloromethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
1,1,2-Trichloroethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Benzene	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
trans-1,3-Dichloropropene	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Bromoform	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
4-Methyl-2-pentanone	<4.	µg/kgdrywt	1.3	3.0	EPA 8260	11/15/95	LG	
2-Hexanone	<5.	µg/kgdrywt	1.3	4.0	EPA 8260	11/15/95	LG	
Tetrachloroethene	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
1,1,2,2-Tetrachloroethane	J1	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Toluene	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-5
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/15/95	LG	
Ethylbenzene	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
Styrene	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
Total Xylenes	JB1	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
Dibromofluoromethane (Surr.)	114.	%	1.3		EPA 8260	11/15/95	LG	
Toluene-d8 (Surr.)	103.	%	1.3		EPA 8260	11/15/95	LG	
p-Bromofluorobenzene (Surr.)	75.	%	1.3		EPA 8260	11/15/95	LG	
1,2-Dichlorobenzene	JB1	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
1,3-Dichlorobenzene	JB1	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	
1,4-Dichlorobenzene	JB1	µg/kgdrywt	1.3	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD006

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-5

Sample wt/vol: 5 (g/ml) g

Lab File ID: F4080.D

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 22

Date Analyzed: 11/15/95

GC Column: RTX-624 ID: 0.18

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 7

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Alkane	21.64	19	J
2.	Alkane	24.16	8	J
3.	Unknown	24.64	23	J
4.	Alkane	27.47	20	J
5. 000000-00-0	Decahydro-4,4,8,9,10-pentamethylnap	27.72	12	JN
6.	Unknown	28.34	20	J
7.	Unknown	29.01	12	J
8.				
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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-5
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270B								1,2,3
Phenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethyl)ether	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2-Chlorophenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
1,3-Dichlorobenzene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
1,4-Dichlorobenzene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
1,2-Dichlorobenzene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2-Methylphenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroisopropyl) ether	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
4-Methylphenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
n-Nitroso-dipropylamine	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Hexachloroethane	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Nitrobenzene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample Preparation on 11/18/95 by NEN using EPA 3550A
(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-5
Report Date: 12/18/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2-Nitrophenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2,4-Dimethylphenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethoxy)methane	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2,4-Dichlorophenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
1,2,4-Trichlorobenzene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Naphthalene	J28	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
4-Chloroaniline	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Hexachlorobutadiene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
4-Chloro-3-methylphenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2-Methylnaphthalene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Hexachlorocyclopentadiene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2,4,6-Trichlorophenol	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2,4,5-Trichlorophenol	<1100.	µg/kgdrywt	1.3	820	EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18ENS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-5
Report Date: 12/18/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Chloronaphthalene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2-Nitroaniline	<1100.	µg/kgdrywt	1.3	820	EPA 8270B	11/21/95	JC	
Dimethylphthalate	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Acenaphthylene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2,6-Dinitrotoluene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
3-Nitroaniline	<1100.	µg/kgdrywt	1.3	820	EPA 8270B	11/21/95	JC	
Acenaphthene	J88	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrophenol	<1100.	µg/kgdrywt	1.3	820	EPA 8270B	11/21/95	JC	
4-Nitrophenol	<1100.	µg/kgdrywt	1.3	820	EPA 8270B	11/21/95	JC	
Dibenzofuran	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrotoluene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Diethylphthalate	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
4-Chlorophenyl phenyl ether	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Fluorene	J75	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

340 County Road, Westbrook, ME 04092
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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-5
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Nitroaniline	<1100.	µg/kgdrywt	1.3	820	EPA 8270B	11/21/95	JC	
4,6-Dinitro-2-methylphenol	<1100.	µg/kgdrywt	1.3	820	EPA 8270B	11/21/95	JC	
n-Nitrosodiphenylamine	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
4-Bromophenyl phenyl ether	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Hexachlorobenzene	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Pentachlorophenol	<1100.	µg/kgdrywt	1.3	820	EPA 8270B	11/21/95	JC	
Phenanthrene	620.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Anthracene	J160	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Carbazole	J110	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Di-n-butylphthalate	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Fluoranthene	2000.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Pyrene	1600.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Butyl benzylphthalate	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
3,3'-Dichlorobenzidine	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-5
Report Date: 12/18/95
PO No. : 802SLQA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo(a)anthracene	870.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Chrysene	1300.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
bis(2-Ethylhexyl)phthalate	JB190	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Di-n-octylphthalate	<430.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Benzo(b)fluoranthene	1800.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Benzo(k)fluoranthene	570.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Benzo(a)pyrene	880.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Indeno(1,2,3-cd)pyrene	510.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Dibenzo(a,h)anthracene	J200	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
Benzo(g,h,i)perylene	620.	µg/kgdrywt	1.3	330	EPA 8270B	11/21/95	JC	
2-Fluorophenol(Surr.)	66.	%	1.3		EPA 8270B	11/21/95	JC	
Phenol-d5(Surr.)	67.	%	1.3		EPA 8270B	11/21/95	JC	
Nitrobenzene-d5(Surr.)	61.	%	1.3		EPA 8270B	11/21/95	JC	
2-Fluorobiphenyl(Surr.)	63.	%	1.3		EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-5
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD006	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,6-Tribromophenol (Surr.)	64.	%	1.3		EPA 8270B	11/21/95	JC	
Terphenyl-d14 (Surr.)	70.	%	1.3		EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp (dw) /kwh
LK18BNS1

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD006

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-5

Sample wt/vol: 30 (g/ml) g

Lab File ID: Z9026

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 22 N (Y/N) Decanted

Date Extracted: 11/18/95

Concentrated Extract Volume 1000 (ul)

Date Analyzed: 11/21/95

Injection Volume 1.0 (ul)

Dilution Factor: 1.0

GPC Cleanup: N (Y/N)

Soil Aliquot Volume: 0 (ul)

pH: N/A

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

Number of TIC's: 7

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	5.48	3800	JB
2.	123422	2-Pentanone, 4-hydroxy-4-methyl-	6.13	93000	JNAB
3.		Unknown	7.53	1200	JB
4.		Unknown	8.16	420	J
5.		Unknown	26.60	880	J
6.		Unknown	27.17	1600	J
7.		Alkane	29.29	470	J
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-1
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD003	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Bromomethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Vinyl chloride	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
Chloroethane	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
Methylene chloride	B20	µg/kgdrywt	1.7	3.0	EPA 8260	11/15/95	LG	
Acetone	B130	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Carbon disulfide	J2	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethene	<2.	µg/kgdrywt	1.7	1.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethane	J1	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
Total 1,2-Dichloroethene	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
Chloroform	JB1	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloroethane	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
2-Butanone	B32	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
1,1,1-Trichloroethane	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-1
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD003	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Bromodichloromethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloropropane	<4.	µg/kgdrywt	1.7	2.5	EPA 8260	11/15/95	LG	
cis-1,3-Dichloropropene	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Trichloroethene	<4.	µg/kgdrywt	1.7	2.5	EPA 8260	11/15/95	LG	
Dibromochloromethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
1,1,2-Trichloroethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Benzene	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
trans-1,3-Dichloropropene	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Bromoform	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
4-Methyl-2-pentanone	<5.	µg/kgdrywt	1.7	3.0	EPA 8260	11/15/95	LG	
2-Hexanone	<7.	µg/kgdrywt	1.7	4.0	EPA 8260	11/15/95	LG	
Tetrachloroethene	JB2	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
1,1,2,2-Tetrachloroethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Toluene	J1	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	

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12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-1
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD003	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/15/95	LG	
Ethylbenzene	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
Styrene	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
Total Xylenes	J1	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
Dibromofluoromethane (Surr.)	113.	%	1.7		EPA 8260	11/15/95	LG	
Toluene-d8 (Surr.)	96.	%	1.7		EPA 8260	11/15/95	LG	
p-Bromofluorobenzene (Surr.)	79.	%	1.7		EPA 8260	11/15/95	LG	
1,2-Dichlorobenzene	J3	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
1,3-Dichlorobenzene	J1	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	
1,4-Dichlorobenzene	J1	µg/kgdrywt	1.7	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD003

Lab Name: PACE, INC.
SDG No.: S9SD001
Matrix (soil/water): Soil
Lab Sample ID: WL1841-1
Sample wt/vol: 5 (g/ml) g
Lab File ID: F4100.D
Level: (low/med) low
Date Received: 11/13/95
% Moisture: not dec. 41
Date Analyzed: 11/15/95
GC Column: RTX-624 ID: 0.18
Dilution Factor: 1.0
Soil Extract Volume: 0 (ul)
Soil Aliquot Volume: 0 (ul)
Number of TIC's Found: 11
CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Diethylbenzene Isomer	24.03	32	J
2.	C10H14 Isomer	24.68	79	J
3.	C11H16 Isomer	25.42	76	J
4.	C11H16 Isomer	25.58	33	J
5.	C10H14 Isomer	25.81	77	J
6.	C11H16 Isomer	26.29	71	J
7.	C10H12 Isomer	26.73	51	J
8.	C10H14 Isomer	26.94	50	J
9.	C10H14 Isomer	27.08	230	J
10.	C11H16 Isomer	27.17	46	J
11.	C10H14 Isomer	27.86	45	J
12.				
13.				
14.				
15.				
16.				
17.				
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30.				

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-1
Report Date: 12/18/95
PO No. : 802SLQA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD003	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270B								1,2
Phenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethyl)ether	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2-Chlorophenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
1,3-Dichlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
1,4-Dichlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
1,2-Dichlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2-Methylphenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroisopropyl) ether	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
4-Methylphenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
n-Nitroso-dipropylamine	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Hexachloroethane	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Nitrobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Isophorone	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample Preparation on 11/18/95 by NEN using EPA 3550A
(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-1
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD003	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2,4-Dimethylphenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethoxy)methane	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2,4-Dichlorophenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
1,2,4-Trichlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Naphthalene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
4-Chloroaniline	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Hexachlorobutadiene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
4-Chloro-3-methylphenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2-Methylnaphthalene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Hexachlorocyclopentadiene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2,4,6-Trichlorophenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2,4,5-Trichlorophenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	11/21/95	JC	
2-Chloronaphthalene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2-Nitroaniline	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18ENS1

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Katahdin ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-1
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD003	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dimethylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Acenaphthylene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2,6-Dinitrotoluene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
3-Nitroaniline	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	11/21/95	JC	
Acenaphthene	J69	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrophenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	11/21/95	JC	
4-Nitrophenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	11/21/95	JC	
Dibenzofuran	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrotoluene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Diethylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
4-Chlorophenyl phenyl ether	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Fluorene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
4-Nitroaniline	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	11/21/95	JC	
4,6-Dinitro-2-methylphenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	11/21/95	JC	
n-Nitrosodiphenylamine	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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ANALYTICAL SERVICES

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Report Date: 12/18/95
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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD003	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Bromophenyl phenyl ether	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Hexachlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Pentachlorophenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	11/21/95	JC	
Phenanthrene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Anthracene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Carbazole	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Di-n-butylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Fluoranthene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Pyrene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Butyl benzylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
3,3'-Dichlorobenzidine	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Benzo(a)anthracene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Chrysene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
bis(2-Ethylhexyl)phthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Di-n-octylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

340 County Road, Westbrook, ME 04092
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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-1
Report Date: 12/18/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD003	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo(b)fluoranthene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Benzo(k)fluoranthene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Benzo(a)pyrene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Indeno(1,2,3-cd)pyrene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Dibenzo(a,h)anthracene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
Benzo(g,h,i)perylene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	11/21/95	JC	
2-Fluorophenol(Surr.)	44.	%	1.7		EPA 8270B	11/21/95	JC	
Phenol-d5(Surr.)	48.	%	1.7		EPA 8270B	11/21/95	JC	
Nitrobenzene-d5(Surr.)	40.	%	1.7		EPA 8270B	11/21/95	JC	
2-Fluorobiphenyl(Surr.)	48.	%	1.7		EPA 8270B	11/21/95	JC	
2,4,6-Tribromophenol(Surr.)	41.	%	1.7		EPA 8270B	11/21/95	JC	
Terphenyl-d14(Surr.)	39.	%	1.7		EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD003

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-1

Sample wt/vol: 30 (g/ml) g

Lab File ID: Z9022

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 41 N (Y/N) Decanted

Date Extracted: 11/18/95

Concentrated Extract Volume 1000 (ul)

Date Analyzed: 11/21/95

Injection Volume 1.0 (ul)

Dilution Factor: 1.0

GPC Cleanup: N (Y/N)

Soil Aliquot Volume: 0 (ul)

pH: N/A

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

Number of TIC's: 17

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	5.48	2500	JB
2.	123422	2-Pentanone, 4-hydroxy-4-methyl-	6.10	73000	JNAB
3.		Unknown	7.53	830	JB
4.	4436753	Hexene-2, 5-dione	8.16	310	JN
5.		Alkane	15.82	260	J
6.	74381401	Propanoic acid, 2-methyl-, 1-(1,1-dimethyl	18.36	280	JNB
7.	54932784	Phenol, 4-(2,2,3,3-tetramethylbutyl)-	18.58	490	JN
8.		Unknown	27.15	960	J
9.		Unknown	27.54	3200	J
10.		Alkane	29.28	760	J
11.		Alkane	30.78	1200	J
12.		Unknown	34.72	6200	J
13.		Unknown	34.85	1200	J
14.		Unknown	34.96	1600	J
15.	559706	.beta.-Amyrin	35.34	2700	JN
16.		Unknown	35.53	5800	J
17.		Unknown	35.93	11000	J
18.					
19.					
20.					
21.					
22.					

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-2
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2,3
Chloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromomethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Vinyl chloride	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Methylene chloride	B4	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
Acetone	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Carbon disulfide	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethene	<1.	µg/kgdrywt	1.2	1.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total 1,2-Dichloroethene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroform	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
2-Butanone	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.
(3) "$" flag denotes surrogate compound recovery is out of criteria. Re-extraction or re-analysis confirmed matrix interference.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-2
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,1,1-Trichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Carbon tetrachloride	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromodichloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloropropane	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
cis-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Trichloroethene	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
Dibromochloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,2-Trichloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Benzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
trans-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromoform	J1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
4-Methyl-2-pentanone	J2	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
2-Hexanone	J2	µg/kgdrywt	1.2	4.0	EPA 8260	11/15/95	LG	
Tetrachloroethene	J1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS1

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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1841-2
Report Date: 12/14/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,1,2,2-Tetrachloroethane	J1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Toluene	J1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chlorobenzene	J1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Ethylbenzene	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Styrene	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total Xylenes	B4	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Dibromofluoromethane (Surr.)	112.	%	1.2		EPA 8260	11/15/95	LG	
Toluene-d8 (Surr.)	71$	%	1.2		EPA 8260	11/15/95	LG	
p-Bromofluorobenzene (Surr.)	87.	%	1.2		EPA 8260	11/15/95	LG	
1,2-Dichlorobenzene	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,3-Dichlorobenzene	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,4-Dichlorobenzene	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbgkp(dw)/kwh/lag
LK15VLS1

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD002

Lab Name	PACE, INC.	SDG No.:	S9SD001
Matrix (soil/water)	Soil	Lab Sample ID:	WL1841-2
Sample wt/vol:	5 (g/ml) g	Lab File ID:	F4077.D
Level: (low/med)	low	Date Received:	11/13/95
% Moisture: not dec.	18	Date Analyzed:	11/15/95
GC Column:	RTX-624 ID: 0.18	Dilution Factor:	1.0
Soil Extract Volume:	0 (ul)	Soil Aliquot Volume:	0 (ul)
Number of TIC's Found:	4	CONCENTRATION UNITS (ug/L or ug/Kg)	ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Alkane	23.79	10	J
2.	021693-54-9	Naphthalene, 1,2,3,4-tetrahydro-5,7	26.92	6	JN
3.		Alkane	27.46	9	J
4.		Alkane	28.99	11	J
5.					
6.					
7.					
8.					
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29.					
30.					

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1841-2
Report Date: 12/14/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2,3
Reanalysis								
Chloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromomethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Vinyl chloride	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Methylene chloride	B9	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
Acetone	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Carbon disulfide	J1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethene	<1.	µg/kgdrywt	1.2	1.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total 1,2-Dichloroethene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroform	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,2-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.
(3) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

12/14/95

LJO/jcbkwh/mjd(dw)
LK15VLS2

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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1841-2
Report Date: 12/14/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Butanone	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,1-Trichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Carbon tetrachloride	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromodichloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloropropane	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
cis-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Trichloroethene	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
Dibromochloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,2-Trichloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Benzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
trans-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromoform	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
4-Methyl-2-pentanone	<4.	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
2-Hexanone	<5.	µg/kgdrywt	1.2	4.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbkwh/mjd(dw)
LK15VLS2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1841-2
Report Date: 12/14/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Tetrachloroethene	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,1,2,2-Tetrachloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Toluene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chlorobenzene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Ethylbenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Styrene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total Xylenes	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Dibromofluoromethane (Surr.)	110.	%	1.2		EPA 8260	11/15/95	LG	
Toluene-d8 (Surr.)	82.	%	1.2		EPA 8260	11/15/95	LG	
p-Bromofluorobenzene (Surr.)	99.	%	1.2		EPA 8260	11/15/95	LG	
1,2-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,3-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,4-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbkwh/mjd(dw)
LK15VLS2

340 County Road, Westbrook, ME 04092
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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD002RE

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-2RE

Sample wt/vol: 5 (g/ml) g

Lab File ID: F4101.D

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 18

Date Analyzed: 11/15/95

GC Column: RTX-624 ID: 0.18

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 1

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	C12H16 Isomer	26.91	7	J
2.				
3.				
4.				
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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-2
Report Date: 12/18/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270B								1,2,3
Phenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethyl)ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Chlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,3-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,4-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,2-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroisopropyl) ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
n-Nitroso-dipropylamine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachloroethane	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Nitrobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample Preparation on 11/18/95 by NEN using EPA 3550A
(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/18/95

LJO/jcbghp(dw)/kwh
LK18BNS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-2
Report Date: 12/18/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Nitrophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dimethylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethoxy)methane	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dichlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,2,4-Trichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Naphthalene	J170	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chloroaniline	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorobutadiene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chloro-3-methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Methylnaphthalene	J82	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorocyclopentadiene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4,6-Trichlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4,5-Trichlorophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18ENS1

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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-2
Report Date: 12/18/95
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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Chloronaphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Dimethylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Acenaphthylene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,6-Dinitrotoluene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
3-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Acenaphthene	J240	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
4-Nitrophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Dibenzofuran	J170	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrotoluene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Diethylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chlorophenyl phenyl ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Fluorene	J310	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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ANALYTICAL SERVICES

A WBE Laboratory

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EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-2
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
4,6-Dinitro-2-methylphenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
n-Nitrosodiphenylamine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Bromophenyl phenyl ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Pentachlorophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Phenanthrene	2300.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Anthracene	J280	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Carbazole	J250	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Di-n-butylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Fluoranthene	3000.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Pyrene	2500.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Butyl benzylphthalate	<400	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
3,3'-Dichlorobenzidine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgtp(dw)/kwh
LK18ENS1

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ANALYTICAL SERVICES

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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo(a)anthracene	1200.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Chrysene	1100.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Ethylhexyl)phthalate	JB190	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Di-n-octylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(b)fluoranthene	1400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(k)fluoranthene	410.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(a)pyrene	880.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Indeno(1,2,3-cd)pyrene	530.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Dibenzo(a,h)anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(g,h,i)perylene	590.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Fluorophenol(Surr.)	49.	%	1.2		EPA 8270B	11/21/95	JC	
Phenol-d5(Surr.)	53.	%	1.2		EPA 8270B	11/21/95	JC	
Nitrobenzene-d5(Surr.)	47.	%	1.2		EPA 8270B	11/21/95	JC	
2-Fluorobiphenyl(Surr.)	56.	%	1.2		EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LKL8BNS1

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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-2
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD002	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,6-Tribromophenol (Surr.)	48.	%	1.2		EPA 8270B	11/21/95	JC	
Terphenyl-d14 (Surr.)	60.	%	1.2		EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp (dw) /kwh
LK18BNS1

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD002

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-2

Sample wt/vol: 30 (g/ml) g

Lab File ID: Z9023

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 18 N (Y/N) Decanted

Date Extracted: 11/18/95

Concentrated Extract Volume 1000 (ul)

Date Analyzed: 11/21/95

Injection Volume 1.0 (ul)

Dilution Factor: 1.0

GPC Cleanup: N (Y/N)

Soil Aliquot Volume: 0 (ul)

pH: N/A

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

Number of TIC's: 13

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	5.49	2100	JB
2.	123422	2-Pentanone, 4-hydroxy-4-methyl-	6.11	57000	JNAB
3.		Unknown	7.54	670	JB
4.		Unknown	8.16	220	J
5.		Alkane	10.23	230	J
6.	74381401	Propanoic acid, 2-methyl-, 1-(1,1-dimethyl	18.36	210	JNB
7.		PAH, MW=192	22.30	210	J
8.	203645	4H-Cyclopenta[def]phenanthrene	22.49	410	JN
9.	84651	9,10-Anthracenedione	23.04	270	JN
10.		PAH, MW=216	25.48	300	J
11.		Unknown, Phthalate ester	28.92	230	J
12.		Alkane	29.70	440	J
13.	205823	Benzo[j]fluoranthene	30.86	310	JN
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1841-6
Report Date: 12/14/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromomethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Vinyl chloride	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Methylene chloride	B17	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
Acetone	B22	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Carbon disulfide	J1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethene	<1.	µg/kgdrywt	1.2	1.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total 1,2-Dichloroethene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroform	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
2-Butanone	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,1-Trichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

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(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

340 County Road, Westbrook, ME 04092
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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-6
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromodichloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloropropane	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
cis-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Trichloroethene	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
Dibromochloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,2-Trichloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Benzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
trans-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromoform	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
4-Methyl-2-pentanone	<4.	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
2-Hexanone	<5.	µg/kgdrywt	1.2	4.0	EPA 8260	11/15/95	LG	
Tetrachloroethene	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,1,2,2-Tetrachloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Toluene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

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12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-6
Report Date: 12/14/95
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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Ethylbenzene	J1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Styrene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total Xylenes	J1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Dibromofluoromethane (Surr.)	111.	%	1.2		EPA 8260	11/15/95	LG	
Toluene-d8 (Surr.)	86.	%	1.2		EPA 8260	11/15/95	LG	
p-Bromofluorobenzene (Surr.)	101.	%	1.2		EPA 8260	11/15/95	LG	
1,2-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,3-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,4-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

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12/14/95

LJO/jcbgbp (dw) /kwh/lag
LK15VLS2

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Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SDXD1

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-6

Sample wt/vol: 5 (g/ml) g

Lab File ID: F4103.D

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 22

Date Analyzed: 11/15/95

GC Column: RTX-624 ID: 0.18

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 2

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Alkane	21.58	9	J
2.	Alkane	27.43	7	J
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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-6
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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270B								1,2,3
Phenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethyl)ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Chlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,3-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,4-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,2-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroisopropyl) ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
n-Nitroso-dipropylamine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachloroethane	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Nitrobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample Preparation on 11/18/95 by NEN using EPA 3550A
(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
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12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-6
Report Date: 12/18/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Nitrophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dimethylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethoxy)methane	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dichlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,2,4-Trichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Naphthalene	J56	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chloroaniline	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorobutadiene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chloro-3-methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Methylnaphthalene	J37	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorocyclopentadiene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4,6-Trichlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4,5-Trichlorophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values

12/18/95

LJO/jcbgbp(dw)/kwh
LK18ENS1

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Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Chloronaphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Dimethylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Acenaphthylene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,6-Dinitrotoluene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
3-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Acenaphthene	J290	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
4-Nitrophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Dibenzofuran	J170	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrotoluene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Diethylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chlorophenyl phenyl ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Fluorene	J310	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-6
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
4,6-Dinitro-2-methylphenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
n-Nitrosodiphenylamine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Bromophenyl phenyl ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Pentachlorophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Phenanthrene	2400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Anthracene	440.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Carbazole	J320	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Di-n-butylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Fluoranthene	2500.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Pyrene	2200.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Butyl benzylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
3,3'-Dichlorobenzidine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18ENS1

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Newburgh, New York 12550

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PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo(a)anthracene	1000.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Chrysene	1100.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Ethylhexyl)phthalate	JB130	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Di-n-octylphthalate	<400	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(b)fluoranthene	1300.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(k)fluoranthene	430.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(a)pyrene	870.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Indeno(1,2,3-cd)pyrene	440.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Dibenzo(a,h)anthracene	J140	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(g,h,i)perylene	480.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Fluorophenol(Surr.)	54.	%	1.2		EPA 8270B	11/21/95	JC	
Phenol-d5(Surr.)	57.	%	1.2		EPA 8270B	11/21/95	JC	
Nitrobenzene-d5(Surr.)	53.	%	1.2		EPA 8270B	11/21/95	JC	
2-Fluorobiphenyl(Surr.)	60.	%	1.2		EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18ENS1

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A WBE Laboratory

Lab Number : WL-1841-6
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PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD1	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,6-Tribromophenol (Surr.)	44.	%	1.2		EPA 8270B	11/21/95	JC	
Terphenyl-d14 (Surr.)	43.	%	1.2		EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp (dw) /kwh
LK18BNS1

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SDXD1

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-6

Sample wt/vol: 30 (g/ml) g

Lab File ID: Z9027

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 16 N (Y/N) Decanted

Date Extracted: 11/18/95

Concentrated Extract Volume 1000 (ul)

Date Analyzed: 11/21/95

Injection Volume 1.0 (ul)

Dilution Factor: 1.0

GPC Cleanup: N (Y/N)

Soil Aliquot Volume: 0 (ul)

pH: N/A

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

Number of TIC's: 13

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	5.49	2400	JB
2.	123422	2-Pentanone, 4-hydroxy-4-methyl-	6.13	60000	JNAB
3.		Unknown	7.54	730	JB
4.		Unknown	8.16	320	J
5.	74381401	Propanoic acid, 2-methyl-, 1-(1,1-dimethyl	18.37	250	JNB
6.		PAH, MW=192	22.31	210	J
7.		PAH, MW=190	22.49	420	J
8.	35465715	2-Phenylnaphthalene	23.04	270	JN
9.		PAH, MW=216	25.49	380	J
10.		PAH, MW=216	25.67	260	J
11.		Unknown, Phthalate ester	28.93	210	J
12.		Alkane	29.70	490	J
13.	192972	Benzo[e]pyrene	30.87	470	JN
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-4
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromomethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Vinyl chloride	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Methylene chloride	B16	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
Acetone	JB3	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Carbon disulfide	J1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethene	<1.	µg/kgdrywt	1.2	1.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total 1,2-Dichloroethene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroform	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
2-Butanone	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,1-Trichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

340 County Road, Westbrook, ME 04092
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Katahdin
ANALYTICAL SERVICES

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EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-4
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromodichloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloropropane	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
cis-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Trichloroethene	J1	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
Dibromochloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,2-Trichloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Benzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
trans-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromoform	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
4-Methyl-2-pentanone	<4.	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
2-Hexanone	<5.	µg/kgdrywt	1.2	4.0	EPA 8260	11/15/95	LG	
Tetrachloroethene	JB2	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,1,2,2-Tetrachloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Toluene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

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12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-4
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Ethylbenzene	J1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Styrene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total Xylenes	J1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Dibromofluoromethane (Surr.)	112.	%	1.2		EPA 8260	11/15/95	LG	
Toluene-d8 (Surr.)	82.	%	1.2		EPA 8260	11/15/95	LG	
p-Bromofluorobenzene (Surr.)	82.	%	1.2		EPA 8260	11/15/95	LG	
1,2-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,3-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,4-Dichlorobenzene	J1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

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12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

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Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD005

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-4

Sample wt/vol: 5 (g/ml) g

Lab File ID: F4102.D

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 19

Date Analyzed: 11/15/95

GC Column: RTX-624 ID: 0.18

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-4
Report Date: 12/18/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270B								1,2,3
Phenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethyl)ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Chlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,3-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,4-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,2-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroisopropyl) ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
n-Nitroso-dipropylamine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachloroethane	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Nitrobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample Preparation on 11/18/95 by NEN using EPA 3550A
(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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Katahdin
ANALYTICAL SERVICES

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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Nitrophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dimethylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethoxy)methane	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dichlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,2,4-Trichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Naphthalene	J110	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chloroaniline	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorobutadiene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chloro-3-methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Methylnaphthalene	J36	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorocyclopentadiene	<400	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4,6-Trichlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4,5-Trichlorophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-4
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Chloronaphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Dimethylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Acenaphthylene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,6-Dinitrotoluene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
3-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Acenaphthene	J160	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
4-Nitrophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Dibenzofuran	J78	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrotoluene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Diethylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chlorophenyl phenyl ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Fluorene	J130	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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Katahdin ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-4
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
4,6-Dinitro-2-methylphenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
n-Nitrosodiphenylamine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Bromophenyl phenyl ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Pentachlorophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Phenanthrene	1100.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Anthracene	J280	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Carbazole	J130	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Di-n-butylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Fluoranthene	1500.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Pyrene	1300.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Butyl benzylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
3,3'-Dichlorobenzidine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo(a)anthracene	680.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Chrysene	660.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Ethylhexyl)phthalate	JB120	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Di-n-octylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(b)fluoranthene	810.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(k)fluoranthene	J270	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(a)pyrene	560.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Indeno(1,2,3-cd)pyrene	J320	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Dibenzo(a,h)anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(g,h,i)perylene	J350	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Fluorophenol(Surr.)	42.	%	1.2		EPA 8270B	11/21/95	JC	
Phenol-d5(Surr.)	46.	%	1.2		EPA 8270B	11/21/95	JC	
Nitrobenzene-d5(Surr.)	41.	%	1.2		EPA 8270B	11/21/95	JC	
2-Fluorobiphenyl(Surr.)	46.	%	1.2		EPA 8270B	11/21/95	JC	

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12/18/95

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LK18ENS1

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CLIENT: Data Management
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Newburgh, New York 12550

Lab Number : WL-1841-4
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD005	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,6-Tribromophenol (Surr.)	41.	%	1.2		EPA 8270B	11/21/95	JC	
Terphenyl-d14 (Surr.)	45.	%	1.2		EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp (dw) /kwh
LK18BNS1

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD005

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-4

Sample wt/vol: 30 (g/ml) g

Lab File ID: Z9025

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 19 N (Y/N) Decanted

Date Extracted: 11/18/95

Concentrated Extract Volume 1000 (ul)

Date Analyzed: 11/21/95

Injection Volume 1.0 (ul)

Dilution Factor: 1.0

GPC Cleanup: N (Y/N)

Soil Aliquot Volume: 0 (ul)

pH: N/A

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

Number of TIC's: 13

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	5.50	2000	JB
2.	123422	2-Pentanone, 4-hydroxy-4-methyl-	6.14	54000	JNAB
3.		Unknown	7.54	640	JB
4.		Unknown	8.16	240	J
5.	74381401	Propanoic acid, 2-methyl-, 1-(1,1-dimethyl	18.37	18.37	JNB
6.	203645	4H-Cyclopenta[def]phenanthrene	22.50	220	JN
7.		C19H14 Isomer	28.73	320	J
8.		Alkane	28.81	350	J
9.		Alkane	28.95	670	J
10.		Unknown	29.02	250	J
11.		Alkane	29.29	1000	J
12.		Alkane	29.70	2400	J
13.	205823	Benzo[j]fluoranthene	30.86	420	JN
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-3
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromomethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Vinyl chloride	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Methylene chloride	B6	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
Acetone	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Carbon disulfide	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethene	<1.	µg/kgdrywt	1.2	1.0	EPA 8260	11/15/95	LG	
1,1-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total 1,2-Dichloroethene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Chloroform	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
2-Butanone	JB1	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,1-Trichloroethane	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS1

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Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-3
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromodichloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,2-Dichloropropane	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
cis-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Trichloroethene	<3.	µg/kgdrywt	1.2	2.5	EPA 8260	11/15/95	LG	
Dibromochloromethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
1,1,2-Trichloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Benzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
trans-1,3-Dichloropropene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Bromoform	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
4-Methyl-2-pentanone	<4.	µg/kgdrywt	1.2	3.0	EPA 8260	11/15/95	LG	
2-Hexanone	<5.	µg/kgdrywt	1.2	4.0	EPA 8260	11/15/95	LG	
Tetrachloroethene	J1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,1,2,2-Tetrachloroethane	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Toluene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

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12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS1

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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1841-3
Report Date: 12/14/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<6.	µg/kgdrywt	1.2	5.0	EPA 8260	11/15/95	LG	
Ethylbenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Styrene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Total Xylenes	JB1	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
Dibromofluoromethane (Surr.)	112.	%	1.2		EPA 8260	11/15/95	LG	
Toluene-d8 (Surr.)	84.	%	1.2		EPA 8260	11/15/95	LG	
p-Bromofluorobenzene (Surr.)	84.	%	1.2		EPA 8260	11/15/95	LG	
1,2-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,3-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	
1,4-Dichlorobenzene	<2.	µg/kgdrywt	1.2	2.0	EPA 8260	11/15/95	LG	

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12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS1

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD004

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-3

Sample wt/vol: 5 (g/ml) g

Lab File ID: F4078.D

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 14

Date Analyzed: 11/15/95

GC Column: RTX-624 ID: 0.18

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 12

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	002958-76-1	Naphthalene, decahydro-2-methyl-	25.63	100	JN
2.		Unknown	26.11	84	J
3.		Alkane	26.38	68	J
4.		Alkane	26.74	76	J
5.		Alkane	26.99	96	J
6.		Alkane	27.25	150	J
7.		Alkane	27.46	65	J
8.		Alkane	27.56	69	J
9.	054676-39-0	Cyclohexane, 2-butyl-1,1,3-trimethy	28.13	65	JN
10.		Unknown	28.41	76	J
11.		Alkane	28.71	90	J
12.		Alkane	29.31	71	J
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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1841-3
Report Date: 12/18/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270B								1,2,3
Phenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethyl)ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Chlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,3-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,4-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,2-Dichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroisopropyl) ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
n-Nitroso-dipropylamine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachloroethane	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Nitrobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

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(1) Sample Preparation on 11/18/95 by NEN using EPA 3550A
(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Nitrophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dimethylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Chloroethoxy)methane	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dichlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
1,2,4-Trichlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Naphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chloroaniline	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorobutadiene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chloro-3-methylphenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Methylnaphthalene	J36	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorocyclopentadiene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4,6-Trichlorophenol	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4,5-Trichlorophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgtp(dw)/kwh
LK18ENS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-3
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Chloronaphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Dimethylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Acenaphthylene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,6-Dinitrotoluene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
3-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Acenaphthene	J52	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
4-Nitrophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Dibenzofuran	J43	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2,4-Dinitrotoluene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Diethylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Chlorophenyl phenyl ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Fluorene	J150	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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Katahdin ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-3
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Nitroaniline	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
4,6-Dinitro-2-methylphenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
n-Nitrosodiphenylamine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
4-Bromophenyl phenyl ether	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Hexachlorobenzene	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Pentachlorophenol	<980.	µg/kgdrywt	1.2	820	EPA 8270B	11/21/95	JC	
Phenanthrene	1400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Anthracene	J220	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Carbazole	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Di-n-butylphthalate	JB61	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Fluoranthene	1900.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Pyrene	1800.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Butyl benzylphthalate	<400	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
3,3'-Dichlorobenzidine	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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ANALYTICAL SERVICES

A WBE Laboratory

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CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo(a)anthracene	1000.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Chrysene	960.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
bis(2-Ethylhexyl)phthalate	JB230	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Di-n-octylphthalate	<400.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(b)fluoranthene	980.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(k)fluoranthene	J320	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(a)pyrene	760.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Indeno(1,2,3-cd)pyrene	420.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Dibenzo(a,h)anthracene	J140	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
Benzo(g,h,i)perylene	470.	µg/kgdrywt	1.2	330	EPA 8270B	11/21/95	JC	
2-Fluorophenol(Surr.)	57.	%	1.2		EPA 8270B	11/21/95	JC	
Phenol-d5(Surr.)	62.	%	1.2		EPA 8270B	11/21/95	JC	
Nitrobenzene-d5(Surr.)	55.	%	1.2		EPA 8270B	11/21/95	JC	
2-Fluorobiphenyl(Surr.)	66.	%	1.2		EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

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Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-3
Report Date: 12/18/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD004	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,6-Tribromophenol(Surr.)	60.	%	1.2		EPA 8270B	11/21/95	JC	
Terphenyl-d14(Surr.)	59.	%	1.2		EPA 8270B	11/21/95	JC	

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12/18/95

LJO/jcbgbp(dw)/kwh
LK18BNS1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD004

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-3

Sample wt/vol: 30 (g/ml) g

Lab File ID: Z9024

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 14 N (Y/N) Decanted

Date Extracted: 11/18/95

Concentrated Extract Volume 1000 (ul)

Date Analyzed: 11/21/95

Injection Volume 1.0 (ul)

Dilution Factor: 1.0

GPC Cleanup: N (Y/N)

Soil Aliquot Volume: 0 (ul)

pH: N/A

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

Number of TIC's: 16

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	5.51	2400	JB
2.	123422	2-Pentanone, 4-hydroxy-4-methyl-	6.14	61000	JNAB
3.		Unknown	7.55	740	JB
4.		Unknown	8.16	310	J
5.		Alkane	15.82	300	J
6.	74381401	Propanoic acid, 2-methyl-, 1-(1,1-dimethyl	18.37	260	JNB
7.		Alkane	19.72	510	J
8.		PAH, MW=192	22.23	270	J
9.		PAH, MW=192	22.31	320	J
10.		PAH, MW=192	22.49	420	J
11.	35465715	2-Phenylnaphthalene	23.04	290	JN
12.		Dimethyl Phenanthrene Isomer	23.67	240	J
13.		PAH, MW=216	25.48	410	J
14.		PAH, MW=242	28.73	230	J
15.		Alkane	29.69	660	J
16.	207089	Benzo[j]fluoranthene	30.86	410	JN
17.					
18.					
19.					
20.					
21.					
22.					

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1841-7
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD001	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2,3,4
Chloromethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Bromomethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Vinyl chloride	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Chloroethane	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Methylene chloride	B16	µg/kgdrywt	1.7	3.0	EPA 8260	11/16/95	LG	
Acetone	B43	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Carbon disulfide	J1	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
1,1-Dichloroethene	J1	µg/kgdrywt	1.7	1.0	EPA 8260	11/16/95	LG	
1,1-Dichloroethane	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Total 1,2-Dichloroethene	J1	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Chloroform	JB1	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
1,2-Dichloroethane	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

(3) "$" flag denotes surrogate compound recovery is out of criteria. Re-extraction or re-analysis confirmed matrix interference.

(4) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1841-7
Report Date: 12/14/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD001	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Butanone	JB8	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
1,1,1-Trichloroethane	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Carbon tetrachloride	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Bromodichloromethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
1,2-Dichloropropane	<4.	µg/kgdrywt	1.7	2.5	EPA 8260	11/16/95	LG	
cis-1,3-Dichloropropene	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Trichloroethene	J1	µg/kgdrywt	1.7	2.5	EPA 8260	11/16/95	LG	
Dibromochloromethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
1,1,2-Trichloroethane	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Benzene	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
trans-1,3-Dichloropropene	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Bromoform	<9.	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
4-Methyl-2-pentanone	<5.	µg/kgdrywt	1.7	3.0	EPA 8260	11/16/95	LG	

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12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

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REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD001	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Hexanone	<7.	µg/kgdrywt	1.7	4.0	EPA 8260	11/16/95	LG	
Tetrachloroethene	JB3	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
1,1,2,2-Tetrachloroethane	J2	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Toluene	J1	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Chlorobenzene	J1	µg/kgdrywt	1.7	5.0	EPA 8260	11/16/95	LG	
Ethylbenzene	J1	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Styrene	<3.	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Total Xylenes	J2	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
Dibromofluoromethane (Surr.)	113.	%	1.7		EPA 8260	11/16/95	LG	
Toluene-d8 (Surr.)	83.	%	1.7		EPA 8260	11/16/95	LG	
p-Bromofluorobenzene (Surr.)	56$	%	1.7		EPA 8260	11/16/95	LG	
1,2-Dichlorobenzene	J2	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	
1,3-Dichlorobenzene	J2	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

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Lab Number : WL-1841-7
Report Date: 12/14/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SD001	Solid	T. CAREY	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,4-Dichlorobenzene	J2	µg/kgdrywt	1.7	2.0	EPA 8260	11/16/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/14/95

LJO/jcbgbp(dw)/kwh/lag
LK15VLS2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SD001

Lab Name: PACE, INC.

SDG No.: S9SD001

Matrix (soil/water): Soil

Lab Sample ID: WL1841-7

Sample wt/vol: 5 (g/ml) g

Lab File ID: F4104.D

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 40

Date Analyzed: 11/16/95

GC Column: RTX-624 ID: 0.18

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 11

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Alkane	25.85	53	J
2. 002958-76-1	Naphthalene, decahydro-2-methyl-	26.07	38	JN
3.	Unknown	26.97	67	J
4.	Alkane	27.23	47	J
5. 054676-39-0	Cyclohexane, 2-butyl-1,1,3-trimethy	28.10	54	JN
6.	Unknown	28.37	43	J
7.	Alkane	28.50	110	J
8.	Unknown	28.67	59	J
9.	Unknown	28.89	38	J
10.	Unknown	29.06	44	J
11.	Unknown	29.28	52	J
12.				
13.				
14.				
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Appendix E.4

Leachate Seep and Sediment Samples
Site 9

APPENDIX E.4

SAMPLE KEY - SITE 9
NAVAL AIR STATION, BRUNSWICK, MAINE

Sample Designation	Sample Station
Leachate Seep Sample	
S9-LTSW1	LT-901
Leachate Sediment Sample	
S9-LTSD1	LT-901
S9-SDXD2	LT-901 (DUP)

299099

pace INCORPORATED
IRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

EA Engineering
Old Gurnet Road
Brunswick, Me 04011-5000
(207)798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference
Project Name / No. BNAS 29600.47/7200

Pace Client No.
Pace Project Manager
Pace Project No. 41840
*Requested Due Date:

Sampled By (PRINT): KURT ILKER 11/11/95
Sampler Signature: [signature] Date Sampled: 11/11/95

SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	~~Nitric~~	ANALYSES REQUEST: VOCs	~~Total Elements~~	~~Cyanide~~	REMARKS
BN-04-S9-SW001 MS/MSD	0930	H_2O		2				X		X			VOAs by 8260, plus library search. Total Elements and Cyanide refer to 7-1 in QAPP.
BN-04-S9-SW002	1005	H_2O		2				X		X			
BN-04-S9-SW003	1035	H_2O		2				X		X			
BN-04-S9-SW004	1058	H_2O		2				X		X			
BN-04-S9-SW005	1116	H_2O		2				X		X			
BN-04-S9-SW006	1135	H_2O		2				X		X			
BN-04-S9-LTSW MS/MSD	1154	H_2O		6				X		X			
BN-04-S9-SW XD1	—	H_2O		2				X		X			

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					[signature] EA	[signature]	11/13/95	0705

Additional Comments
Temp blank included in cooler.
BN-04-S9-SW001 starts SDG (SDG # BN-04-S9-SW001)
VOAs included in cooler with Trip BN-04-S9-QT006

ORIGINAL

[redacted] SPACE RESERVED FOR INSTRUCTIONS [redacted]

299097

pace INCORPORATED

IRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

t: EA Engineering
ess: Old Gurnet Road
Brunswick, Me 04011-5000
e: (207) 798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference
Project Name / No. ENAS 29600.47/7200

Pace Client No.
Pace Project Manager
Pace Project No. 41642
*Requested Due Date:

pled By (PRINT): Karen Ruszczyk 11/11/95
ler Signature: Karen Ruszczyk Date Sampled: 11/11/95

SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA	S_4	ANALYSES REQUEST: VOCs	SVOCs	Cyanide	TAL Elements	REMARKS
BN-04-S9-LTSD1 ms/msD	1155	Sed.		9	X					X	X	+		VOAs by 8260, plus library search
BN-04-S9-SDXD2	—	Sed		8	X					X	X	+		

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					[signature] EA	[signature]	111395	0805

tional Comments
emp. blank ~~IA~~ included in cooler.
IA Samples included in cooler with Trip Blank BN-04-S9-QT006.
N-04-S9-LTSD1 starts SDG and BN-04-S9-SDXD2 ends SDG.

SEE REVERSE SIDE FOR INSTRUCTIONS

RIGINAL

Cooler Temp 2.9°C

299102

pace INCORPORATED
IRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

t: EA Engineering
ess: Old Gurnet Road
Brunswick, Me 04011-5000
ne: (207) 798-5977

Report To: Mike Battle
Bill To: EA Newburgh
P.O. # / Billing Reference
Project Name / No. BNAS 29600.47/7200

Pace Client No.
Pace Project Manager
Pace Project No.
*Requested Due Date:

oled By (PRINT): Brian D. Anderson 11/11/95
oler Signature / Date Sampled
Brian D. Anderson 11/11/95

M	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA - HCl	NaOH	ANALYSES REQUEST: VOCs	Total Elements	Cyanide	SVOC	REMARKS
	BN-04-59-LTSW/MS	1154	H_2O		4			X		X		X	X		VOAs by 8260, plus library search. Total Elements and Cyanide refer to 7-1 in QAPP.
	BN-04-59-QS001	0800	H_2O		5			X	X	X	X	X	X	X	
	BN-04-59-QS002	0815	H_2O		4			X	X	X	X	X	X		
	BN-04-59-QT004	0800	H_2O		2				X		X				

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT/DATE	RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					[signature] EA	[signature]	11/13/95	0915

tional Comments
Temp. blank included in cooler.

SAMPLE BN-04-59-QT 006 ends
SDG # BN-04-59-SW001.

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

000008

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-1
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9LTSW1	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
Methylene chloride	JB2	µg/L	1.0	3.0	EPA 8260	11/19/95	DW	
Acetone	J3	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/19/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK19VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-1
Report Date: 12/11/95
PO No. : 802LSQA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9LTSW1	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTE
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/19/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/19/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/19/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/19/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK19VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-1
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9LTSW1	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/19/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
Dibromofluoromethane (Surr.)	102.	%	1.0		EPA 8260	11/19/95	DW	
Toluene-d8 (Surr.)	100.	%	1.0		EPA 8260	11/19/95	DW	
p-Bromofluorobenzene (Surr.)	94.	%	1.0		EPA 8260	11/19/95	DW	
1,2-Dichlorobenzene	JB1	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/19/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK19VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9LTSW1

Lab Name: PACE, INC.

SDG No.: S9SW001

Matrix (soil/water): Water

Lab Sample ID: WL1840-1

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2804

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. N/A

Date Analyzed: 11/19/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
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30.				

SW846

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9LTSW1

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9SW00

Matrix (soil/water): WATER Lab Sample ID: WL1840-1

Level (low med): LOW Date Received: 11/13/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1740			P
7440-36-0	Antimony	2.6	U		P
7440-38-2	Arsenic	3.5	B		P
7440-39-3	Barium	61.9			P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	0.32	B		P
7440-70-2	Calcium	29600			P
7440-47-3	Chromium	5.3	B		P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	9.3	B		P
7439-89-6	Iron	34500			P
7439-92-1	Lead	35.9	B		P
7439-95-4	Magnesium	3370			P
7439-96-5	Manganese	247			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.2	B		P
7440-09-7	Potassium	4030	B		P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	6.0	U	N	P
7440-23-5	Sodium	45500			P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	9.3	B		P
7440-66-6	Zinc	64.2			P
5712-5	Cyanide	1.3	U	N	C

Color Before: BROWN Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM I - IN ILM02.1

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1842-1
Report Date: 12/22/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9LTSD1	Solid	K. RUSCZYK	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Bromomethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Vinyl chloride	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
Chloroethane	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
Methylene chloride	B8	µg/kgdrywt	1.3	3.0	EPA 8260	11/16/95	LG	
Acetone	B14	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Carbon disulfide	J1	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
1,1-Dichloroethene	J1	µg/kgdrywt	1.3	1.0	EPA 8260	11/16/95	LG	
1,1-Dichloroethane	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
Total 1,2-Dichloroethene	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
Chloroform	JB1	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
1,2-Dichloroethane	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
2-Butanone	JB5	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
1,1,1-Trichloroethane	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/22/95

LJO/jcbgbp(dw)/kwh/lab
LK15VLS2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1842-1
Report Date: 12/22/95
PO No. : 802SLOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9LTSD1	Solid	K. RUSCZYK	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Bromodichloromethane	J1	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
1,2-Dichloropropane	<3.	µg/kgdrywt	1.3	2.5	EPA 8260	11/16/95	LG	
cis-1,3-Dichloropropene	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Trichloroethene	<3.	µg/kgdrywt	1.3	2.5	EPA 8260	11/16/95	LG	
Dibromochloromethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
1,1,2-Trichloroethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Benzene	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
trans-1,3-Dichloropropene	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Bromoform	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
4-Methyl-2-pentanone	<4.	µg/kgdrywt	1.3	3.0	EPA 8260	11/16/95	LG	
2-Hexanone	<5.	µg/kgdrywt	1.3	4.0	EPA 8260	11/16/95	LG	
Tetrachloroethene	JB1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
1,1,2,2-Tetrachloroethane	<7.	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Toluene	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/22/95

LJO/jcbgbp(dw)/kwh/lab
LK15VLS2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1842-1
Report Date: 12/22/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9LTSD1	Solid	K. RUSCZYK	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	J1	µg/kgdrywt	1.3	5.0	EPA 8260	11/16/95	LG	
Ethylbenzene	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
Styrene	<3.	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
Total Xylenes	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
Dibromofluoromethane (Surr.)	116.	%	1.3		EPA 8260	11/16/95	LG	
Toluene-d8 (Surr.)	93.	%	1.3		EPA 8260	11/16/95	LG	
p-Bromofluorobenzene (Surr.)	82.	%	1.3		EPA 8260	11/16/95	LG	
1,2-Dichlorobenzene	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
1,3-Dichlorobenzene	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	
1,4-Dichlorobenzene	J1	µg/kgdrywt	1.3	2.0	EPA 8260	11/16/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/22/95

LJO/jcbglp(dw)/kwh/lab
LK15VLS2

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9LTSD1

Lab Name: PACE, INC.

SDG No.: S9LTSD1

Matrix (soil/water): Soil

Lab Sample ID: WL1842-1

Sample wt/vol: 5 (g/ml) g

Lab File ID: F4105.D

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 22

Date Analyzed: 11/16/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 11

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	000080-56-8	.alpha.-Pinene	20.12	50	JN
2.		Alkane	21.61	28	J
3.	000127-91-3	.beta.-Pinene	21.70	25	JN
4.	013466-78-9	3-Carene	22.53	13	JN
5.		Unknown	24.59	33	J
6.		Unknown	26.91	12	J
7.		Alkane	27.44	29	J
8.		Unknown	27.69	46	J
9.		Unknown	28.14	14	J
10.		Unknown	28.97	24	J
11.		Unknown	29.27	34	J
12.					
13.					
14.					
15.					
16.					
17.					
18.					
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29.					
30.					

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9LTSD1

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9LTSD

Matrix (soil/water): SOIL_ Lab Sample ID: WL1842-1

Level (low/med): LOW__ Date Received: 11/13/95

% Solids: _77.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3230			P
7440-36-0	Antimony	0.31	U		P
7440-38-2	Arsenic	2.1			P
7440-39-3	Barium	12.9	B		P
7440-41-7	Beryllium	0.20	B		P
7440-43-9	Cadmium	0.09	B		P
7440-70-2	Calcium	971			P
7440-47-3	Chromium	6.5		*	P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	6.6		N	P
7439-89-6	Iron	5750			P
7439-92-1	Lead	41.4		*	P
7439-95-4	Magnesium	985		N	P
7439-96-5	Manganese	57.1			P
7439-97-6	Mercury	0.05	U	N	CV
7440-02-0	Nickel	6.1			P
7440-09-7	Potassium	422	B		P
7782-49-2	Selenium	0.45	U		P
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	106	B		P
7440-28-0	Thallium	0.66	U		P
7440-62-2	Vanadium	11.7			P
7440-66-6	Zinc	29.0		*	P
5712-5	Cyanide	0.07	U	N	C

Color Before: BROWN Clarity Before: COARSE Texture: _____

Color After: YELLOW Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1842-2
Report Date: 12/22/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD2	Solid	K. RUSCZYK	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2,3
Reanalysis								
Chloromethane	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Bromomethane	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Vinyl chloride	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Chloroethane	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Methylene chloride	B7	µg/kgdrywt	1.4	3.0	EPA 8260	11/17/95	LG	
Acetone	B18	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Carbon disulfide	J1	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
1,1-Dichloroethene	<1.4	µg/kgdrywt	1.4	1.0	EPA 8260	11/17/95	LG	
1,1-Dichloroethane	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Total 1,2-Dichloroethene	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Chloroform	JB1	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
1,2-Dichloroethane	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

(3) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

12/22/95

LJO/jcbgbp(dw)/kwh/lab
LK17VLS4

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1842-2
Report Date: 12/22/95
PO No. : 802SLQA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD2	Solid	K. RUSCZYK	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Butanone	8.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
1,1,1-Trichloroethane	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Carbon tetrachloride	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Bromodichloromethane	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
1,2-Dichloropropane	<3.5	µg/kgdrywt	1.4	2.5	EPA 8260	11/17/95	LG	
cis-1,3-Dichloropropene	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Trichloroethene	<3.5	µg/kgdrywt	1.4	2.5	EPA 8260	11/17/95	LG	
Dibromochloromethane	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
1,1,2-Trichloroethane	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Benzene	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
trans-1,3-Dichloropropene	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Bromoform	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
4-Methyl-2-pentanone	<4.2	µg/kgdrywt	1.4	3.0	EPA 8260	11/17/95	LG	
2-Hexanone	<5.6	µg/kgdrywt	1.4	4.0	EPA 8260	11/17/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/22/95

LJO/jcbgbp(dw)/kwh/lab
LK17VLS4

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

A WBE Laboratory

Lab Number : WL-1842-2
Report Date: 12/22/95
PO No. : 802SLOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9SDXD2	Solid	K. RUSCZYK	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Tetrachloroethene	JB1	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
1,1,2,2-Tetrachloroethane	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Toluene	JB1	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Chlorobenzene	<7.	µg/kgdrywt	1.4	5.0	EPA 8260	11/17/95	LG	
Ethylbenzene	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Styrene	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Total Xylenes	JB1	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
Dibromofluoromethane (Surr.)	109.	%	1.4		EPA 8260	11/17/95	LG	
Toluene-d8 (Surr.)	100.	%	1.4		EPA 8260	11/17/95	LG	
p-Bromofluorobenzene (Surr.)	75.	%	1.4		EPA 8260	11/17/95	LG	
1,2-Dichlorobenzene	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
1,3-Dichlorobenzene	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	
1,4-Dichlorobenzene	<2.8	µg/kgdrywt	1.4	2.0	EPA 8260	11/17/95	LG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/22/95

LJO/jcbgbp(dw)/kwh/lab
LK17VLS4

40 County Road, Westbrook, ME 04092
el: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9SDXD2RE

Lab Name: PACE, INC.

SDG No.: S9LTSD1

Matrix (soil/water): Soil

Lab Sample ID: WL1842-2RE

Sample wt/vol: 5 (g/ml) g

Lab File ID: F4132.D

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. 26

Date Analyzed: 11/17/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 9

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	000080-56-8	.alpha.-Pinene	20.10	11	JN
2.		Alkane	21.58	17	J
3.		Unknown	22.01	9	J
4.		Unknown	24.57	21	J
5.		Alkane	27.44	13	J
6.		Unknown	27.68	30	J
7.		Unknown	28.12	9	J
8.		Unknown	28.97	15	J
9.		Unknown	29.26	23	J
10.					
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U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9SDXD2

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9LTSD

Matrix (soil/water): SOIL_ Lab Sample ID: WL1842-2

Level (low/med): LOW__ Date Received: 11/13/95

% Solids: _74.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4890			P
7440-36-0	Antimony	0.31	U		P
7440-38-2	Arsenic	3.5			P
7440-39-3	Barium	18.5	B		P
7440-41-7	Beryllium	0.22	B		P
7440-43-9	Cadmium	0.18	B		P
7440-70-2	Calcium	1110			P
7440-47-3	Chromium	12.3		*	P
7440-48-4	Cobalt	3.9	B		P
7440-50-8	Copper	8.5		N	P
7439-89-6	Iron	8530			P
7439-92-1	Lead	50.4		*	P
7439-95-4	Magnesium	2380		N	P
7439-96-5	Manganese	87.9			P
7439-97-6	Mercury	0.06	B	N	CV
7440-02-0	Nickel	10.4			P
7440-09-7	Potassium	597	B		P
7782-49-2	Selenium	0.45	U		P
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	123	B		P
7440-28-0	Thallium	0.66	U		P
7440-62-2	Vanadium	16.0			P
7440-66-6	Zinc	42.8		*	P
5712-5	Cyanide	0.07	U	N	C

Color Before: BROWN Clarity Before: COARSE Texture: _____

Color After: YELLOW Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-9
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Methylene chloride	JB3	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-9
Report Date: 12/11/95
PO No. : 802LSQA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/16/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

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12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-9
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QT006	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Dibromofluoromethane (Surr.)	100.	%	1.0		EPA 8260	11/16/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/16/95	DW	
p-Bromofluorobenzene (Surr.)	98.	%	1.0		EPA 8260	11/16/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9QT006

Lab Name: PACE, INC.

SDG No.: S9SW001

Matrix (soil/water): Water

Lab Sample ID: WL1840-9

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2687

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. N/A

Date Analyzed: 11/16/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-10
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS001	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Methylene chloride	B6	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-10
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS001	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/16/95	DW	
Tetrachloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1840-10
Report Date: 12/11/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS001	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total Xylenes	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Dibromofluoromethane (Surr.)	102.	%	1.0		EPA 8260	11/16/95	DW	
Toluene-d8 (Surr.)	99.	%	1.0		EPA 8260	11/16/95	DW	
p-Bromofluorobenzene (Surr.)	99.	%	1.0		EPA 8260	11/16/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9QS001

Lab Name: PACE, INC.

SDG No.: S9SW001

Matrix (soil/water): Water

Lab Sample ID: WL1840-10

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2688

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. N/A

Date Analyzed: 11/16/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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SW846

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9QS001

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9SW00

Matrix (soil/water): WATER Lab Sample ID: WL1840-10

Level (low/med): LOW Date Received: 11/13/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	44.0	B		P
7440-36-0	Antimony	2.6	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	2.1	B		P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	9.3	U		P
7440-47-3	Chromium	0.54	U		P
7440-48-4	Cobalt	0.61	U		P
7440-50-8	Copper	1.1	U		P
7439-89-6	Iron	68.4	B		P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	11.0	U		P
7439-96-5	Manganese	0.59	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	690	B		P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	6.0	U	N	P
7440-23-5	Sodium	54.8	U		P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	0.48	U		P
7440-66-6	Zinc	5.9	B		P
5712-5	Cyanide	1.3	U	N	C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM I - IN ILM02.1

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-11
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Methylene chloride	B7	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
Acetone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/16/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-11
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/16/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/16/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/16/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LK15VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1840-11
Report Date: 12/11/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S9QS002	Aqueous	K.ILKER	11/11/95	11/13/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/16/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
Dibromofluoromethane (Surr.)	102.	%	1.0		EPA 8260	11/16/95	DW	
Toluene-d8 (Surr.)	101.	%	1.0		EPA 8260	11/16/95	DW	
p-Bromofluorobenzene (Surr.)	103.	%	1.0		EPA 8260	11/16/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	
1,4-Dichlorobenzene	J1	µg/L	1.0	2.0	EPA 8260	11/16/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/11/95

LJO/jcbgbp(dw)/kwh/tjg
LKI5VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S9QS002

Lab Name: PACE, INC.

SDG No.: S9SW001

Matrix (soil/water): Water

Lab Sample ID: WL1840-11

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2689

Level: (low/med) low

Date Received: 11/13/95

% Moisture: not dec. N/A

Date Analyzed: 11/16/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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SW846

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S9QS002

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: S9SW00

Matrix (soil/water): WATER Lab Sample ID: WL1840-11

Level (low/med): LOW Date Received: 11/13/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34.3	B		P
7440-36-0	Antimony	2.6	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	2.1	B		P
7440-41-7	Beryllium	0.13	B		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	9.3	U		P
7440-47-3	Chromium	0.54	U		P
7440-48-4	Cobalt	0.61	U		P
7440-50-8	Copper	1.1	U		P
7439-89-6	Iron	23.9	B		P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	11.0	U		P
7439-96-5	Manganese	0.31	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	331	U		P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	6.0	U	N	P
7440-23-5	Sodium	54.8	U		P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	0.48	U		P
7440-66-6	Zinc	3.4	B		P
5712-5	Cyanide	1.3	U	N	C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM I - IN

ILM02.1

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1767-10
Report Date: 12/08/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S1QD001	Aqueous	B. ANDERSEN	11/02/95	11/03/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Volatile Organics by EPA 8260								1,2
Chloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Bromomethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Vinyl chloride	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Chloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Methylene chloride	B5	µg/L	1.0	3.0	EPA 8260	11/07/95	DW	
Acetone	J4	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Carbon disulfide	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,1-Dichloroethene	<1.	µg/L	1.0	1.0	EPA 8260	11/07/95	DW	
1,1-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Total 1,2-Dichloroethene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Chloroform	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,2-Dichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
2-Butanone	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,1,1-Trichloroethane	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
(2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

12/08/95

LJO/jcbeaw/kwh/ljo(dw)
LK07VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

Lab Number : WL-1767-10
Report Date: 12/08/95
PO No. : 802LSOA

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S1QD001	Aqueous	B. ANDERSEN	11/02/95	11/03/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Bromodichloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,2-Dichloropropane	<2.5	µg/L	1.0	2.5	EPA 8260	11/07/95	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Trichloroethene	<2.5	µg/L	1.0	2.5	EPA 8260	11/07/95	DW	
Dibromochloromethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Benzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Bromoform	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
4-Methyl-2-pentanone	<3.	µg/L	1.0	3.0	EPA 8260	11/07/95	DW	
2-Hexanone	<4.	µg/L	1.0	4.0	EPA 8260	11/07/95	DW	
Tetrachloroethene	J1	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Toluene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/08/95

LJO/jcbeaw/kwh/ljo(dw)
IK07VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

Katahdin
ANALYTICAL SERVICES

Lab Number : WL-1767-10
Report Date: 12/08/95
PO No. : 802LSOA

CLIENT: Data Management
EA Engineering
3 Washington Center
Newburgh, New York 12550

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
S1QD001	Aqueous	B. ANDERSEN	11/02/95	11/03/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5.0	EPA 8260	11/07/95	DW	
Ethylbenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Styrene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Total Xylenes	JB1	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
Dibromofluoromethane (Surr.)	113.	%	1.0		EPA 8260	11/07/95	DW	
Toluene-d8 (Surr.)	102.	%	1.0		EPA 8260	11/07/95	DW	
p-Bromofluorobenzene (Surr.)	97.	%	1.0		EPA 8260	11/07/95	DW	
1,2-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
1,3-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	
1,4-Dichlorobenzene	<2.	µg/L	1.0	2.0	EPA 8260	11/07/95	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

12/08/95

LJO/jcbeaw/kwh/ljo(dw)
LK07VLW1

340 County Road, Westbrook, ME 04092
Tel: (207) 874-2400 Fax: (207) 775-4029

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EA Sample Name: S1QD001

Lab Name: PACE, INC.

SDG No.: S1SW001

Matrix (soil/water): Water

Lab Sample ID: WL1767-10

Sample wt/vol: 5 (g/ml) ml

Lab File ID: Y2510

Level: (low/med) low

Date Received: 11/3/95

% Moisture: not dec. N/A

Date Analyzed: 11/7/95

GC Column: RTX-624 ID: 0.53

Dilution Factor: 1.0

Soil Extract Volume: 0 (ul)

Soil Aliquot Volume: 0 (ul)

Number of TIC's Found: 0

CONCENTRATION UNITS (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.		Q
1.					
2.					
3.					
4.					
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U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S1QD001

Lab Name: PACE_ME Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: SIQD00

Matrix (soil/water): WATER Lab Sample ID: WL1767-10

Level (low/med): LOW Date Received: 11/03/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.5	U		P
7440-36-0	Antimony	2.6	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	1.1	B		P
7440-41-7	Beryllium	0.12	U		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	9.3	U		P
7440-47-3	Chromium	0.54	U		P
7440-48-4	Cobalt	0.61	U		P
7440-50-8	Copper	1.1	U		P
7439-89-6	Iron	23.2	B		P
7439-92-1	Lead	2.8	B		P
7439-95-4	Magnesium	11.0	U		P
7439-96-5	Manganese	2.0	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	331	U		P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	6.0	U	N	P
7440-23-5	Sodium	54.8	U		P
7440-28-0	Thallium	5.5	U		P
7440-62-2	Vanadium	0.48	U		P
7440-66-6	Zinc	4.2	B		P
5712-5	Cyanide	1.3	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM I - IN ILM03.0