N60087.AR.000602
NAS BRUNSWICK
5090.3a

U.S. DEPARTMENT OF THE NAVY

INSTALLATION RESTORATION PROGRAM

NAVAL AIR STATION BRUNSWICK

BRUNSWICK, MAINE

FINAL
SOURCE INVESTIGATION REPORT

SITE 9

NEPTUNE DRIVE
DISPOSAL SITE

APRIL 1997

U.S. DEPARTMENT OF THE NAVY
INSTALLATION RESTORATION PROGRAM

NAVAL AIR STATION BRUNSWICK
BRUNSWICK, MAINE

SOURCE INVESTIGATION REPORT
FINAL

SITE 9
NEPTUNE DRIVE DISPOSAL SITE

Prepared for:

U.S. Department of the Navy
Northern Division
Naval Facilities Engineering Command
Contract N62472-91-C-1013

Prepared by:

ABB Environmental Services, Inc.
Portland, Maine 04112
Project No. 8733-02

APRIL 1997

Program Manager
ABB Environmental Services, Inc.

Geologist
ABB Environmental Services, Inc.

STATE OF MAINE
THOMAS D. LONGLEY
284
CERTIFIED GEOLOGIST

SOURCE INVESTIGATION REPORT
FINAL
SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAS BRUNSWICK

TABLE OF CONTENTS

Section	Title	Page No.
1.0	INTRODUCTION	1-1
2.0	SITE DESCRIPTION AND BACKGROUND	2-1
2.1	PREVIOUS SITE INVESTIGATIONS AT SITE 9	2-2
2.2	SITE DESCRIPTION	2-3
2.3	SUMMARY OF SITE CHARACTERISTICS	2-5
3.0	FIELD PROGRAM	3-1
3.1	PROJECT LOGISTICS	3-6
3.2	SOIL BORINGS AND SAMPLING	3-8
3.3	MONITORING WELL INSTALLATIONS	3-10
3.4	TEST PITTING AND SOIL SAMPLING	3-12
3.5	GROUNDWATER SAMPLING	3-13
3.6	SURVEY OF EXPLORATIONS	3-16
4.0	LABORATORY AND ANALYTICAL PROGRAM	4-1
4.1	PROGRAM SUMMARY	4-1
4.2	DATA QUALITY OBJECTIVES (DQOs)	4-8
4.3	DATA VALIDATION	4-11
4.4	DATA QUALITY EVALUATION	4-12
5.0	NATURE AND DISTRIBUTION OF CONTAMINATION	5-1
5.1	SOIL BORINGS	5-2
5.2	TEST PIT SOILS	5-16
5.3	GROUNDWATER	5-18
6.0	SUMMARY AND CONCLUSIONS	6-1

APPENDICES
APPENDIX A - BORING LOGS

SOURCE INVESTIGATION REPORT
FINAL
SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAS BRUNSWICK

TABLE OF CONTENTS

Section		Title
APPENDIX B	-	MONITORING WELL DEVELOPMENT RECORDS
APPENDIX C	-	TEST PIT LOGS
APPENDIX D	-	GROUNDWATER SAMPLING DATA RECORDS
APPENDIX E	-	SURVEY DATA
APPENDIX F	-	ANALYTICAL DATA

SOURCE INVESTIGATION REPORT
FINAL
SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAS BRUNSWICK

LIST OF FIGURES

Figure	Title	Page No.
1-1	Site Location Map	1-2
3-1	Site Location and Exploration Map	3-2
5-1	Interpretive Groundwater Control Map	5-20
5-2	Groundwater VOC Results September 1995	5-22

SOURCE INVESTIGATION REPORT
FINAL
SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAS BRUNSWICK

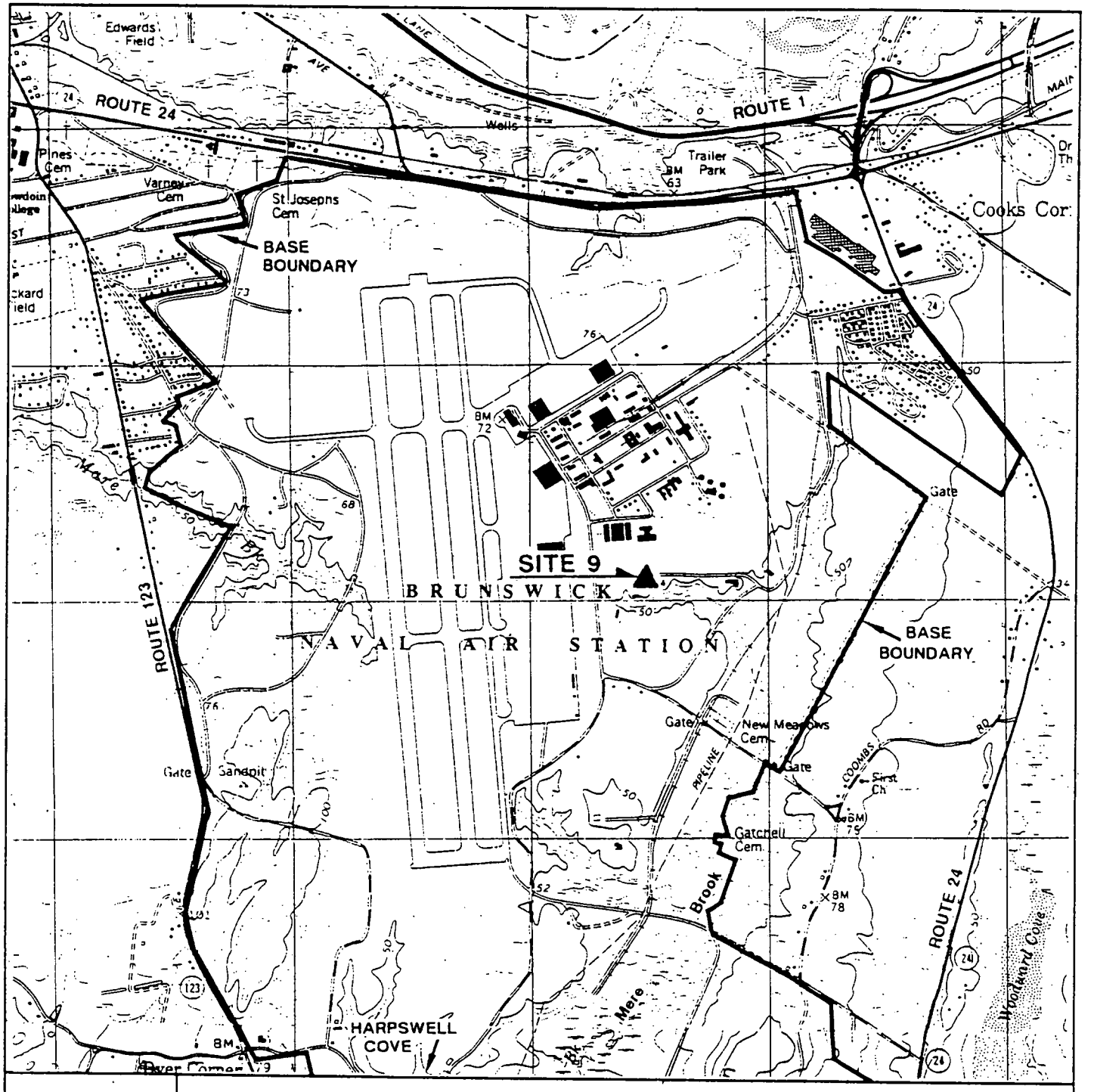
LIST OF TABLES

Table	Title	Page No.
3-1	Summary of Explorations	3-3
4-1	Exploration and Sample Information - Soil Samples	4-2
4-2	Exploration and Sample Information - Groundwater Samples	4-3
4-3	Summary of Laboratory Analytical Program - Soil Samples	4-6
4-4	Summary of Laboratory Analytical Program - Groundwater Samples	4-7
5-1	Summary of Soil Organic Analysis - August 1995	5-8
5-2	Published Background Soil Concentrations of PAHs	5-10
5-3	Summary of Soil Inorganic Analysis - August 1995	5-14
5-4	Groundwater Elevations - September 1995	5-19
5-5	Summary of Groundwater Volatile Organic Analysis - September 1995	5-23
5-6	Historical Vinyl Chloride Results	5-27
5-7	Summary of Groundwater Miscellaneous Analysis - September 1995	5-28
5-8	Summary of Groundwater Semivolatile Organic Analysis - September 1995	5-30
5-9	Summary of Groundwater Inorganic Analysis - September 1995	5-31
5-10	Comparison of Inorganic Results for MW-915	5-34

1.0 INTRODUCTION

This Data Summary Report describes the site-specific activities for an additional source investigation at Site 9, the Neptune Drive Disposal Site (Figure 1-1) at the Naval Air Station (NAS) in Brunswick, Maine. Results of previous field investigations at this site have identified groundwater contaminants present at concentrations greater than drinking water standards; however, no current source area(s) of contamination has been identified. The field investigation described in this report was conducted to evaluate potential source areas around Site 9. The results of this investigation will be used to determine if additional remedial actions are required at this site.

The scope of work and methodologies that ABB Environmental Services, Inc. (ABB-ES) implemented to collect this additional information at the site are described in "Source Investigation Sampling and Analysis Plan; Site 9 Neptune Drive Disposal Site" (SAP) (ABB-ES, 1995). Work was performed under Contract N62472-91-C-1013 with the U.S. Department of the Navy, Northern Division, Naval Facilities Engineering Command.



SOURCE: USGS QUADRANGLE, BRUNSWICK, AND ORRS ISLAND, ME, DATED 1980, 1978. 7.5 MINUTE SERIES.

QUADRANGLE LOCATION

N

SCALE IN FEET

0 2,000 4,000

ABB ASEA BROWN BOVERI

ABB Environmental Services Inc.

INSTALLATION RESTORATION PROGRAM
NAVAL AIR STATION
BRUNSWICK, MAINE

SITE LOCATION MAP
SITE 9

SOURCE INVESTIGATION

JOB NO. 8733-02

FIGURE 1-1

This Data Summary Report consists of six sections. Section 1.0 is the introduction to the project. Section 2.0 provides a site description and background; Section 3.0 describes the field program, including site-specific explorations and exploration techniques. Section 4.0 summarizes the laboratory and analytical program, and Section 5.0 includes an interpretation of the results and identification of site contaminants. The summary and conclusions are presented in Section 6.0.

2.0 SITE DESCRIPTION AND BACKGROUND

NAS Brunswick, located in Brunswick, Maine, is included in the U.S. Department of the Navy's Installation Restoration Program (IRP), which was established to identify potential contamination resulting from past operations at Navy and Marine Corps facilities, and, if necessary, to institute corrective remedial measures. The U.S. Environmental Protection Agency (USEPA), in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan, placed NAS Brunswick on the National Priorities List (NPL) in 1987. In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the 1986 Superfund Amendments and Reauthorization Act (SARA), work on this project follows the *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA* (USEPA, 1988a). In addition, USEPA and the Maine Department of Environmental Protection (MEDEP) provide review and input throughout the Remedial Investigation/Feasibility Study (RI/FS) and CERCLA/SARA processes, pursuant to a Federal Facility Agreement.

2.1 PREVIOUS SITE INVESTIGATIONS AT SITE 9

Based on the Navy's request, E.C. Jordan Co. of Portland, Maine (now ABB-ES), prepared an RI/FS Work Plan for NAS Brunswick (E.C. Jordan Co., 1988a) and conducted the first phase of RI fieldwork during the summer and fall of 1988. An additional Sampling Plan was developed and fieldwork was conducted in 1989 (E.C. Jordan Co., 1989). To address data gaps identified in the Draft Phase II FS screening report and Draft Final RI report, and as a continuation of the FS program, a Post-Screening Work Plan was developed and fieldwork was conducted in 1990 (E.C. Jordan Co., 1990a, 1990b, and 1990c). Based on the results of the Post-Screening fieldwork, a Supplemental RI report was prepared. In 1993, the Navy conducted additional field investigations to support remedial designs for Site 9 and to better characterize the ash landfill/dump area north of Neptune Drive. A Technical Memorandum was prepared summarizing the 1993 field program at Site 9 (ABB-ES, 1994).

2.2 SITE DESCRIPTION

Site 9 is located in the central portion of the base. According to historical information, including aerial photographs and grading plans, Site 9 was originally defined as encompassing three areas of potential contamination: (1) the former location of an incinerator in the northeastern corner of the current site of Building 220, and an ash disposal/dump area in the current location of Buildings 218 and 219 (Marine barracks north of Neptune Drive); (2) a reported dumping area behind Building 201 (the enlisted men's club south of Neptune Drive); and (3) the two streams bordering the recreational area behind Building 201.

Former Incinerator and Ash Landfill

There is no precise information concerning the location of the incinerator and ash landfill, or the types of wastes handled or disposed of in these areas. The incinerator was apparently operated during a period commencing on or after April 1943, when the air station was commissioned, until the fall of 1946, when it was demobilized. The air station was recommissioned in 1951, but it is unknown whether the incinerator resumed operation at that time. The incinerator could have been used

as late as 1953, when the barracks that now occupy the location of the former incinerator were built. Wastes disposed of at Site 9, presumably at the location of the ash landfill but not at the incinerator itself, reportedly included solvents that were burned on the ground, paint sludges, and possible wastes from the Metal Shop.

Current land use at the former incinerator and inactive ash landfill is for military residences. The grading plans for the barracks (Buildings 212 through 220) constructed at this location show an oblong "dump area," approximately 125 by 75 feet, located around existing Building 219. The grading plans also show an old, 42-inch-diameter drain adjacent to the dump area. The drain ran from north of Orion Street, past the dump area, under Neptune Drive to the stream running between Buildings 201 and 293. The drain was reportedly removed during construction of the barracks.

Building 201

Historical information and aerial photographs indicate an area southeast of Building 201 as a potential source of contamination. This area, reportedly once used

as a dumping area, has more recently been used as a picnic area. A barbecue pit is located southeast of Building 201.

Unnamed Streams

Two unnamed streams border the area around Building 201; one to the north and one to the south. These streams receive runoff from the central portion of the base including the runways, parking lots, and paved roads. Groundwater seeps have been observed flowing into the northern unnamed stream.

2.3 SUMMARY OF SITE CHARACTERISTICS

The nature and distribution of contamination at Site 9 is summarized by field program and medium in the *Interim Record of Decision for the Groundwater Operable Unit at Site 9, Naval Air Station, Brunswick, Maine* (ABB-ES, 1994b). A complete discussion of the site characteristics can be found in Section 11.0 of the Draft Final RI Report (E.C. Jordan Co., 1990b) and in the Technical Memorandum (ABB-ES, 1994a).

The RI fieldwork conducted in 1988 and 1990 was designed to assess the areal distribution of soil contamination at the site, monitor groundwater downgradient of Site 9, assess the significance of chemicals detected in the groundwater, and determine the impact of this site on surface water and sediment quality. Most of the RI fieldwork focused on the area south of Neptune Drive and included a soil gas survey; test pits; soil borings; installation of monitoring wells; sampling of soils, groundwater, surface water, sediment, and a leachate seep; and in situ aquifer permeability tests.

Groundwater flow at the site is to the south and southeast, discharging to the two streams. The calculated seepage velocities range from 26 feet per year throughout most of the site to 130 feet per year in the vicinity of the streams (E.C. Jordan Co., 1991).

Groundwater at Site 9 occurs in the overburden soil and varies in elevation between 10 and 14 feet below ground surface (bgs). Overburden soil at Site 9 is a stratified formation consisting of a sand layer, a transition layer, and a clay layer overlying bedrock. The elevation of ground surface at the site is approximately 40 to 50 feet mean sea level. The top of clay has been interpreted from boring logs to range from

a depth of near surface in the vicinity of the unnamed stream, to near 48 feet bgs in the center of the site, to 7 feet bgs in the vicinity of the NEX service station. Overall, the depth to the top of clay increases to the north and west in the vicinity of Site 9. The corresponding increased depths of the upper sandier deposits above the clay layer in the vicinity of the western portion of the unnamed stream may provide a potential for migration of contamination beneath the stream. The monitoring well MW-909 located south of the unnamed stream reported a detection for vinyl chloride for the first time during the current investigation (see Section 5). Continued future monitoring will determine the significance of this detection.

The results of the 1988, 1990, and 1993 field investigations at Site 9 indicate the presence of vinyl chloride and dichloroethene (DCE) in groundwater at concentrations in excess of federal maximum contaminant levels (MCLs) and vinyl chloride, DCE and 1,1-dichloroethane (1,1-DCA) in excess of State of Maine maximum exposure guidelines (MEGs). The septic system, originally thought to be the source of volatile organic compound (VOC) contamination south of Neptune Drive, was sampled to evaluate residual contamination. Sampling results indicate that the septic system is not currently a source of groundwater contamination. The former ash landfill/dump area, north of Neptune Drive, was identified and

characterized. Polycyclic aromatic hydrocarbons (PAHs) were detected in the ash material; however, these compounds were not detected in groundwater immediately downgradient from this area. Vinyl chloride was detected in one monitoring well downgradient from the ash landfill/dump area but was not detected in ash or soil samples. Elevated concentrations of inorganics were detected in groundwater downgradient of the ash disposal area; the presence of these analytes may be due to past disposal activities in this area. Inorganics and PAHs were detected in leachate and/or sediment samples, which may be due to the ash or to other non-point source runoff from the roadways or parking lots.

Finding no definitive source for the groundwater contamination, the Navy recommended an interim remedial action for the groundwater operable unit at Site 9. An Interim Record of Decision (ROD) for groundwater remediation was signed in September 1994 (ABB-ES, 1994c). The remediation specified in the ROD consists of natural attenuation, long term environmental monitoring, institutional controls to prevent exposure to contaminated groundwater, and five-year reviews.

Previous investigations have concluded that the former incinerator and ash landfill/dump area and the septic system are not current sources of VOC

contamination. In an effort to find an on-going source of the observed VOCs, the Navy agreed to conduct further investigations at Site 9, the results of which are presented in this report. The final Proposed Plan and ROD for Site 9 will incorporate the results of the additional source investigations and address any other remedial actions that may be necessary to remediate the remainder of the site.

3.0 FIELD PROGRAM

The field investigation program was designed to evaluate the presence or absence of source contamination at Site 9. The sampling locations are shown on Figure 3-1 and are described in Table 3-1. The program included soil borings, installation of monitoring wells, soil sampling from test pits and soil borings, groundwater sampling, and a location survey.

The soil borings, monitoring well installations, and well development were completed by New Hampshire Boring of Derry, New Hampshire. Test pits were excavated by Clean Harbors of South Portland, Maine. All subcontractor work was conducted under the supervision of ABB-ES. Analytical samples were submitted for analysis to CompuChem Environmental Corporation of Research Triangle Park, North Carolina. Samples were analyzed for compounds as described in Section 4.0. The ground elevation and location survey was conducted by Maine Coast Surveying of Damariscotta, Maine.

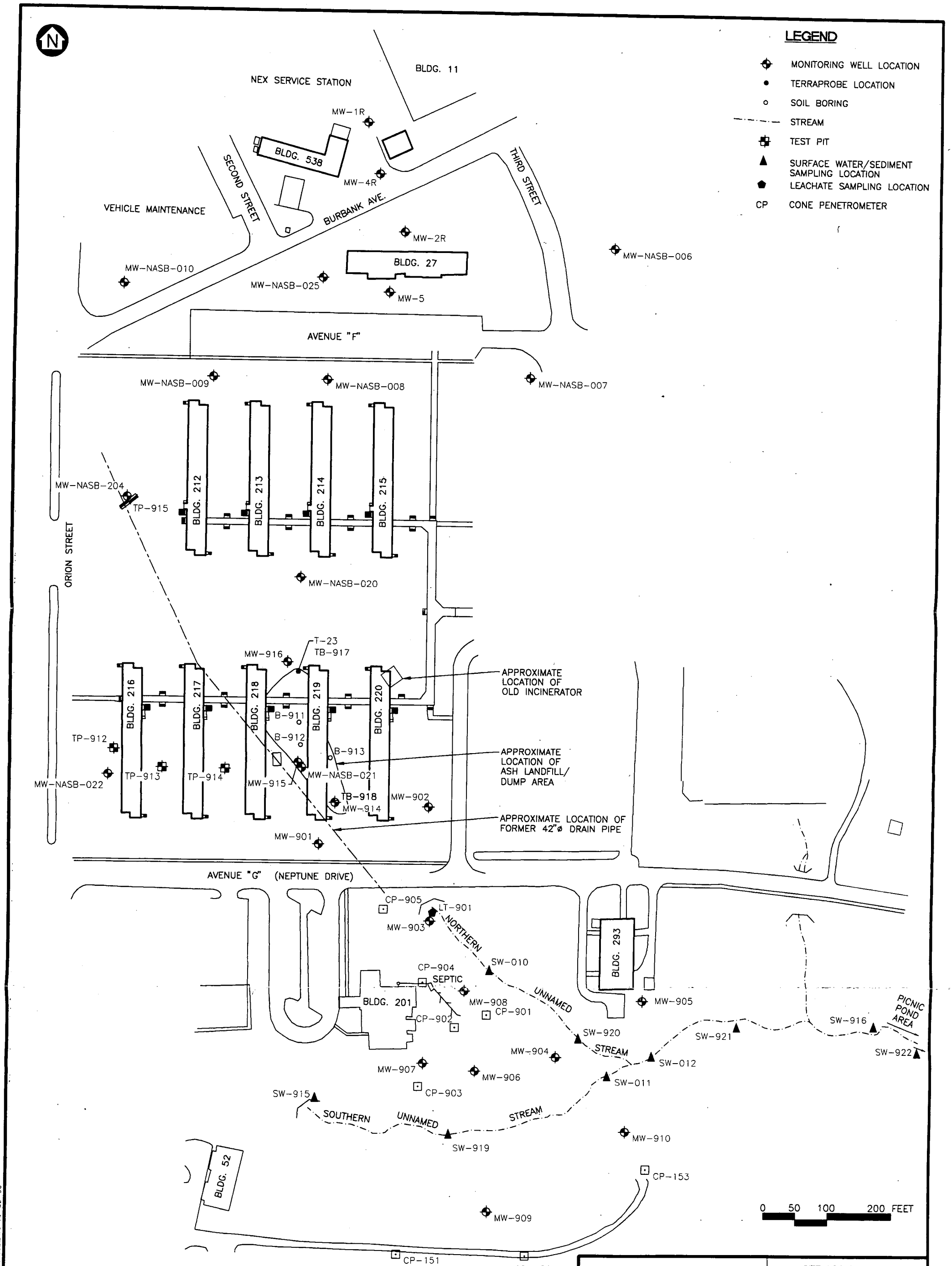

N
LEGEND
MONITORING WELL LOCATION
TERRAPROBE LOCATION
SOIL BORING
STREAM
TEST PIT
SURFACE WATER/SEDIMENT SAMPLING LOCATION
LEACHATE SAMPLING LOCATION
CP CONE PENETROMETER
NEX SERVICE STATION
BLDG. 11
MW-1R
BLDG. 538
MW-4R
SECOND STREET
THIRD STREET
BURBANK AVE.
VEHICLE MAINTENANCE
MW-2R
BLDG. 27
MW-NASB-006
MW-NASB-010
MW-NASB-025
MW-5
AVENUE "F"
MW-NASB-009
MW-NASB-008
MW-NASB-007
MW-NASB-204
TP-915
BLDG. 212
BLDG. 213
BLDG. 214
BLDG. 215
ORION STREET
MW-NASB-020
T-23
TB-917
MW-916
APPROXIMATE LOCATION OF OLD INCINERATOR
BLDG. 216
BLDG. 217
BLDG. 218
BLDG. 219
BLDG. 220
B-911
B-912
B-913
TP-912
TP-913
TP-914
MW-NASB-022
MW-915
MW-NASB-021
APPROXIMATE LOCATION OF ASH LANDFILL/ DUMP AREA
TB-918
MW-914
MW-902
APPROXIMATE LOCATION OF FORMER 42"ø DRAIN PIPE
MW-901
AVENUE "G" (NEPTUNE DRIVE)
CP-905
LT-901
MW-903
NORTHERN
SW-010
BLDG. 293
CP-904
SEPTIC
BLDG. 201
MW-908
CP-901
CP-902
UNNAMED
MW-905
PICNIC POND AREA
SW-916
SW-920
SW-921
STREAM
SW-922
MW-904
SW-012
MW-907
MW-906
SW-011
CP-903
SW-915
SOUTHERN
UNNAMED
STREAM
SW-919
MW-910
BLDG. 52
CP-153
MW-909
0 50 100 200 FEET
CP-151
CP-152
ABB ABB Environmental Services, Inc.
SITE LOCATION AND EXPLORATION MAP: SITE 9
INSTALLATION RESTORATION PROGRAM
NAVAL AIR STATION
BRUNSWICK, MAINE
SOURCE INVESTIGATION
JOB NO. 6733-02
FIGURE 3-1

TABLE 3-1
SUMMARY OF EXPLORATIONS

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

AREA OF CONCERN (MEDIA)	EXPLORATION TYPE AND IDENTIFICATION	RATIONALE	FIELD SCREENING	LABORATORY SAMPLE TYPE	PARAMETERS ANALYZED	COMMENTS
ASH LANDFILL/DEMO DEBRIS AREA						
TerraProbe T-23 (Subsurface Soil)	HSA Test Boring TB-917	Better characterize subsurface soils associated with "fuel odor" at 8-10 feet in T-23	Continuous sampling - field screening using PI/headspace	1 Soil Sample collected at 8-10 feet	VOC, SVOC, Inorganics, Fuel Oil, Gasoline	Drilled to depth of 18 feet bgs
MW-914 (Subsurface Soil)	HSA Test Boring TB-918	Better characterize subsurface soils associated with "fuel soaked soil" observed at MW-914	Continuous sampling - field screening using PI/headspace	1 Soil Sample collected at 16-18 feet	VOC, SVOC, Inorganics, Fuel Oil, Gasoline	Drilled to depth of 20 feet bgs
Upgradient of Ash Landfill and MW-916 (Subsurface Soil, Groundwater)	HSA Test Boring/ Monitoring Well TB(MW)-NASB-020	Evaluate background groundwater quality	Continuous sampling - field screening using PI/headspace	1 Soil Sample collected at 10-12 feet 1 Groundwater Sample	Soil VOC, SVOC, Inorganics Fuel Oil, Gasoline Groundwater VOC, SVOC, Inorganics Fuel Oil, Gasoline, Vinyl Chloride	Drilled to 24 feet bgs; end at clay. Well screen set at 7-17 feet bgs.
Near MW-915 (Subsurface Soil, Groundwater)	HSA Test Boring/ Monitoring Well TB(MW)-NASB-021	Characterize groundwater quality below depth of MW-915	Continuous sampling below 16 feet bgs	1 Soil Sample Collected at 18-20 feet 1 Groundwater Sample	Soil VOC, SVOC, Inorganics Fuel Oil, Gasoline Groundwater VOC, SVOC, Inorganics Fuel Oil, Gasoline, Vinyl Chloride	Drilled to 50 feet. Hit clay at 47 feet. Well screen set at 42.5 - 47.5 feet bgs.

continued

TABLE 3-1
SUMMARY OF EXPLORATIONS

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

AREA OF CONCERN (MEDIA)	EXPLORATION TYPE AND IDENTIFICATION	RATIONALE	FIELD SCREENING	LABORATORY SAMPLE TYPE	PARAMETERS ANALYZED	COMMENTS
POTENTIAL DUMP AREA						
Southwest of Bldg. 216 (Subsurface Soil, Groundwater)	HSA Test Boring/ Monitoring Well TB(MW)-NASB-022	Characterize groundwater flow west of Ash Landfill	Continuous sampling - field screening using PI/headspace	1 Soil Sample Collected at 8-10 feet 1 Groundwater Sample	Soil VOC, SVOC, Inorganics Fuel Oil, Gasoline Groundwater VOC, SVOC, Inorganics Fuel Oil, Gasoline, Vinyl Chloride	Drilled to 24 feet bgs. Well screen set at 5 to 15 feet bgs.
Potential Dump Area - Vicinity of Bldg. 216 (Subsurface Soil)	Test Pit TP-912	Assess the presence or absence of landfill material	1 Soil sample field screened using PI/ headspace	1 Soil Sample collected at 6 feet	VOC, SVOC, Pest/PCB, Inorganics, Fuel Oil, Gasoline	Excavated to 6 feet bgs; all natural soil below topsoil.
Potential Dump Area - Between Bldgs. 216 and 217 (Subsurface Soil)	Test Pit TP-913	Assess the presence or absence of landfill material	1 Soil sample field screened using PI/ headspace	1 Soil Sample collected at 8 feet	VOC, SVOC, Inorganics, Fuel Oil, Gasoline	Excavated to 8 feet bgs; all natural soil below top soil.
Potential Dump Area - Between Bldgs. 217 and 218 (Subsurface Soil)	Test Pit TP-914	Assess the presence or absence of landfill material	1 Soil sample field screened using PI/ headspace	1 Soil Sample collected at 6 feet	VOC, SVOC, Inorganics, Fuel Oil, Gasoline	Excavated to 6 feet bgs; natural soil below 4 feet bgs.

continued

TABLE 3-1
SUMMARY OF EXPLORATIONS

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

AREA OF CONCERN (MEDIA)	EXPLORATION TYPE AND IDENTIFICATION	RATIONALE	FIELD SCREENING	LABORATORY SAMPLE TYPE	PARAMETERS ANALYZED	COMMENTS
FORMER PIPE LINE						
Former 42" Drain Pipe - upgradient of Ash Landfill (Subsurface Soil, Groundwater)	Test Pit/Trench TP-915	Look for evidence of the former drain and assist in locating Monitoring Well	2 Soil Samples field screened using PI/ headspace	1 Soil Sample collected at 6.5 feet	VOC, SVOC, Pest/PCB, Inorganics, Fuel Oil, Gasoline	Excavated to 7.3 feet bgs; natural soil below 4 feet bgs.
	Test Boring/ Monitoring Well TB(MW)-NASB-204	Evaluate groundwater quality - potential preferential pathway for contamination migration	Continuous sampling - field screening using PI/headspace	1 Groundwater Sample 1 Soil Sample collected at between 6-10 feet	Soil VOC, SVOC, Pest/PCB, Inorganics, Fuel Oil, Gasoline Groundwater VOC, SVOC, Pest/PCB, Inorganics, Fuel, Oil, Gasoline, Vinyl Chloride	Drilled to 20 feet bgs. Well screen set at 5 to 15 feet bgs.

Notes:

bgs	=	feet below ground surface (estimated)
CLP	=	Contract Laboratory Program 3/90 Statement of Work
MW	=	monitoring well
Pest/PCBs	=	Pesticides/Polychlorinated biphenyls
PI	=	photoionization
SVOCs	=	Semivolatile Organic Compounds
TB	=	test boring
TP	=	test pit
VOCs	=	Volatile Organic Compounds

ABB-ES performed the field investigation in accordance with the Quality Assurance Program Plan (QAPP) prepared for the Navy's IRP (E.C. Jordan Co., 1988b) and the site specific SAP (ABB-ES, 1995). Health and safety procedures for the on-site activities were detailed in the site-specific Health and Safety Plan included as Appendix A in the SAP.

While performing the field exploration activities, a radiation alert monitor was used as a screening tool to evaluate potential radiation hazards. This monitor was present for both the drilling and test pitting portions of the program. No readings were detected above background conditions.

3.1 PROJECT LOGISTICS

Exploration locations that were examined during the field work were outlined in the SAP (ABB-ES, 1995) and were checked for utility clearance prior to the initiation of field work. Clearance activities included reviewing of utility drawings and the use of a line locator for detecting any potentially buried utilities. These activities were performed prior to any intrusive work being conducted. Additionally, a technician

from On-Target Underground Locating Services was called on site to clear areas prior to the test pitting program.

At each exploration location, personnel and equipment were decontaminated. Disposable clothing and sampling equipment that were non-hazardous were double-bagged and deposited into the on-site dumpster at the construction work trailers located on Old Gurnet Road. Sampling equipment and tools which were to be reused were washed with Liquinox, rinsed with isopropyl alcohol, and rinsed with deionized water between samples. Fluids that were generated during personnel and equipment decontamination were disposed of at each exploration location. Soils that were excavated during test pitting and soil boring were returned to the respective explorations upon completion of work at each location. Only one partially-filled drum containing soil cuttings (from test boring TB-917 which had elevated PID readings) was generated during the program. This drum was secured, labeled, and moved to the staging/office trailer area on Old Gurnet Road to be disposed of by NAS Brunswick.

3.2 SOIL BORINGS AND SAMPLING

A total of six soil borings were installed at different areas around the site; four of these were used as monitoring wells and are discussed in more detail in the following section. The two remaining soil borings were drilled to better characterize the subsurface soils associated with the "fuel odor" at the T-23 location and what resembled "fuel soaked soil" at the MW-914 location, as reported in the Technical Memorandum (ABB-ES, 1994a). Continuous split spoon-samples were collected from all borings as outlined in Table 3-1. Soil borings TB-917 and TB-918 were drilled using 4.25-inch inside diameter (ID) hollow-stem augers, and the remaining monitoring wells were drilled using 6-inch ID hollow-stem augers to completion depths. The borings were sampled using a standard 2-foot split-spoon sampler driven by a 140-pound hammer dropped 30 inches. Reference samples were collected from the split-spoons and used to help determine the samples to be sent for off-site analysis. This determination was based on photoionization detector (PID) readings from the headspace of the reference sample (see headspace methodology below). Additionally, the PID was used to screen each soil sample for the presence of VOCs as each split-spoon sample was opened. The sample descriptions were recorded on exploration boring logs and are included in Appendix A. Subsurface soil samples

were collected from each of the six borings for laboratory analysis for the parameters listed in Table 3-1. Results are discussed in Section 5.0.

Reference Jar Headspace Readings. The headspace of the reference samples were determined by generally following the technique as described in Appendix Q of MEDEP Chapter 691. Specifically, portions of each split-spoon sample were placed into 16-oz. glass, wide-mouthed, metal screw-top jars so that each jar was approximately half full. The jars were then sealed by placing a sheet of aluminum foil over the top of the jar and screwing on the lid. After each boring was drilled, the collected reference samples were set aside for approximately fifteen minutes. The samples were allowed to come to ambient temperatures, and were then shaken for approximately 30 seconds. The headspace of each jar was then measured by punching through the aluminum cap with a properly calibrated PID instrument; the resultant PID readings for each sample were recorded and reported on the soil boring logs. Each day, the PID (a Thermo Environmental 580B OVM) was calibrated with 100 ppm equivalent isobutelyne span gas set to read 255 equivalent ppm. This is the set point for gasoline sites when using this type of instrument; because this site is downgradient of the NEX service station, the gas set point was chosen.

3.3 MONITORING WELL INSTALLATIONS

Four monitoring wells were installed in completed borings for the purpose of collecting groundwater samples from areas not previously characterized. These were:

- MW-NASB-020 situated north of MW-916, to evaluate background water quality,

- MW-NASB-021 located adjacent to MW-915, to characterize deeper groundwater quality in the area of the ash landfill/dump area,

- MW-NASB-022 located southwest of Building 216, to characterize groundwater flow west of the ash landfill/dump area, and

- MW-NASB-204 (changed from the designation of MW-NASB-023 as described in the SAP) located west of Building 212 in the area of the old drain pipe, to evaluate groundwater quality flowing through this potentially preferential pathway.

The monitoring wells were constructed using 2-inch ID, threaded, flush-joint, Schedule 40 polyvinyl chloride, with 10-foot lengths (5-foot for MW-NASB-021) of 0.0010-inch machine-slotted well screens. The well screens (except for MW-NASB-021, which had a 5-foot screen installed at the bottom of the boring) were installed with the intent of placing the screens approximately 2 feet above and 8 feet below the groundwater table. A silica sand filter pack was placed around the annulus of each well screen and extended a minimum of 1 foot above the well screen. A bentonite pellet seal or a bentonite slurry seal was installed above the sandpack. Wells were completed with above-ground steel protective casings and locking caps. Boring logs and monitoring well installation diagrams are included in Appendix A.

The monitoring wells were developed by pumping and surging. Well development water was allowed to infiltrate the ground at each location. Well development logs are included in Appendix B.

3.4 TEST PITTING AND SOIL SAMPLING

Four test pits were installed to evaluate potential source areas of contamination, to examine subsurface soils, and to collect soil samples for chemical analysis in the area around Site 9. Three test pits (designated as TP-912, TP-913, and TP-914) were excavated in the potential "dump area." (The "dump area" identified on an engineering drawing may be interpreted to represent a larger area than the ash landfill identified in earlier investigations). The purpose of these test pits was to determine the presence or absence of landfill material. The fourth test pit/trench (TP-915) was excavated near the "old drain pipe" identified north of Neptune Drive on an engineering drawing. The drain pipe could represent a preferential pathway of contaminant migration. The test pit/trench was proposed to determine whether the pipe is still present and to assist in locating a monitoring well in this area. Test pit soils and stratigraphy were logged by an ABB-ES geologist. Test pit locations are shown in Figure 3-1. Test pit logs are included in Appendix C.

Soil samples for reference jar headspace readings and analytical purposes were collected from each of the backhoe-excavated test pits once a representative soil profile was excavated. One soil sample from each test pit was selected to be sent off-

site for laboratory analysis. Selection was determined by the highest apparent potential for contamination, based on PI meter readings, visual indications of contamination, and professional judgement.

Results of the soil sampling are discussed in Section 5.0.

3.5 GROUNDWATER SAMPLING

Groundwater sampling protocols were followed during sample collection as detailed in the SAP (ABB-ES, 1995), Appendix A of the QAPP for the Long Term Monitoring Plan for Building 95, Sites 1 and 3 and Eastern Plume, and the original program QAPP (ABB-ES, 1994b and E.C. Jordan Co., 1988b).

Groundwater samples were collected from a total of 27 monitoring wells for the parameters listed in Table 3-1. Groundwater samples were collected between September 18 and 25, 1995. Sampled wells included those installed in this investigation, those installed at Site 9 as part of the IRP (i.e., MW-900 series), and those associated with the NEX gas station (see Figure 3-1). Because of the presence

of vinyl chloride and other VOCs at Site 9, as well as technological advances in low-flow purging and sampling techniques, a different groundwater sampling procedure was used during this field program than had been in previous remedial investigations. Well purging and sampling was conducted in general accordance with the current USEPA guidance (i.e., Resource Conservation and Recovery Act Ground-Water Monitoring: Draft Technical Guidance: EPA/530-R-93-001, 1992). Temperature, pH, turbidity, specific conductance, and dissolved oxygen of each sample were measured in the field in accordance with EPA-600/4-79-020 March, 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). Results of the field parameters are summarized in a table in Appendix D. Some of the wells sampled had dedicated sampling equipment in place at the time of well sampling; others were sampled with portable equipment that was decontaminated after each use. Also, some wells with dedicated equipment could not reach groundwater due to low water conditions. In these instances, the equipment was removed and the wells were sampled with the portable equipment. All sampling was performed using Grundfos Redi-Flo2 low-flow stainless steel and Teflon® submersible pumping systems. Groundwater sampling data records of each well are included in Appendix D.

An attempt was made to sample all wells upon reaching stabilization of the field parameters. It was observed in using the low-flow purging and sampling technique that the amount of pumping time combined with the small volumes of water flowing through the submersible pumps caused the pumps to become heated and resulted in the recording of elevated water temperatures (see Appendix D).

During the groundwater sampling portion of the program, trip blanks (designated as 09QTXX...in Appendix F), source water blanks (designated as 09QDXX...), and samples of equipment blanks (designated as 09QSXX...) were collected as required in the SAP (ABB-ES, 1995). Except for the detection of isopropyl alcohol at a concentration of 3JN μg/L in one of three sampler blank samples, there were no volatile organics detected in any of the water blank samples. The procedure for the collection of sampler blanks was to collect a sample of reagent water passed through or over the sampling apparatus after washing with the decontamination solution followed by at least one rinse with reagent water. Sampler blanks were collected directly into the appropriate sample container. Results of the groundwater sampling are discussed in Section 5.0.

3.6 SURVEY OF EXPLORATIONS

The location and elevation of new explorations were surveyed to the nearest 0.5 foot horizontally and 0.01 foot vertically and referenced to NAS Brunswick data. Additionally, wells MW-914, MW-915, and MW-916, which were installed in a previous field effort, were surveyed for the first time. Survey data is included in Appendix E.

4.0 LABORATORY AND ANALYTICAL PROGRAM

4.1 PROGRAM SUMMARY

Soil and groundwater samples were sent off site for laboratory analysis to identify and quantify chemical contaminants. Samples collected for laboratory analyses were analyzed as indicated in Tables 4-1 and 4-2. Table 4-3 and 4-4 summarize the laboratory analytical program. VOC analyses were performed in accordance with the USEPA Contract Laboratory Program (CLP) October 1992 Statement of Work (SOW) for low concentration VOCs in the water. Semivolatile organic compounds (SVOCs) and pesticide/polychlorinated biphenyls (PCBs) for soil and water, and VOCs for soil were analyzed according to USEPA SOW OLM 01.9 and target analyte list (TAL) inorganics employing USEPA CLP SOW ILM 03.0. The Contract Required Quantitation Limits (CRQLs) (organics) and Contract Required Detection Limits (inorganics) are included with the analytical results in Appendix F. Data collection, validation, and reporting were consistent with the requirements of the Navy IRP (NEESA, 20.2-047B, 1988).

TABLE 4-1
EXPLORATION AND SAMPLE INFORMATION
SOIL SAMPLES

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

EXPLORATION ID	SAMPLE DEPTH[1]	SAMPLE ID	LABORATORY ANALYSES					
			VOCs[2]	SVOCs[3]	PEST/ PCBs[3]	INORGANICS[4]	TPH FUEL OIL	TPH GASOLINE
TB-917	8-10	09SB917X10X1XX	CLP	CLP	-	CLP	MEDEP 4.1.2	MEDEP 4.2.3
TB-918	16-18	09SB918X18X1XX	CLP	CLP	-	CLP	MEDEP 4.1.2	MEDEP 4.2.3
TB(MW)-NASB-020	10-12	09SB020X12X1XX	CLP	CLP	-	CLP	MEDEP 4.1.2	MEDEP 4.2.3
TB-(MW)-NASB-021	18-20	09BS021X20X1XX	CLP	CLP	-	CLP	MEDEP 4.1.2	MEDEP 4.2.3
TB-(MW)-NASB-022	8-10	09SB022X10X1XX	CLP	CLP	-	CLP	MEDEP 4.1.2	MEDEP 4.2.3
TB-(MW)-NASB-204	6-10	09BS204XX8X1XX	CLP	CLP	CLP	CLP	MEDEP 4.1.2	MEDEP 4.2.3
TP-912	6	09PS912XX6X1XX	CLP	CLP	CLP	CLP	MEDEP 4.1.2	MEDEP 4.2.3
TP-913	8	09PS913XX8X1XX	CLP	CLP	-	CLP	MEDEP 4.1.2	MEDEP 4.2.3
TP-914	6	09PS914XX6X1XX	CLP (+Dup)	CLP (+Dup)	-	CLP (+Dup)	MEDEP 4.1.2 (+Dup)	MEDEP 4.2.3 (+Dup)
TP-915	6.5	09PS915XX6X1XX	CLP	CLP	CLP (+Dup)	CLP	MEDEP 4.1.2	MEDEP 4.2.3

Notes:

1 feet below ground surface
2 Target Compound List with tentatively identified compounds
3 Target Compound List
4 Target Analyte List

CLP = Contract Laboratory Program 3/90 Statement of Work (Revisions OLM 01.9 and ILM 03.0)
Dup = Duplicate Sample
ID = identifier
PS = test pit soil sample
SB(BS) = test boring soil sample
SVOCs = Semivolatile Organic Compounds
TB = test boring
TP = test pit
TPH = total petroleum hydrocarbons
Pest/PCBs = Pesticides/Polychlorinated biphenyls
VOCs = Volatile Organic Compounds
- = no analysis

TABLE 4-2
EXPLORATION AND SAMPLE INFORMATION
GROUNDWATER SAMPLES

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

EXPLORATION ID	SAMPLE ID	LABORATORY ANALYSES					TPH FUEL OIL	TPH GASOLINE
		VOCs[1,2]	SVOCs[2]	PEST/PCBs[2]	INORGANICS[3]	VINYL CHLORIDE		
MW-901	09MW901XXX08XX[4]	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-902	09MW902XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-903	09MW903XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-904	09MW904XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-905	09MW905XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-906	09MW906XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-907	09MW907XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-908	09MW908XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-909	09MW909XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-910	09MW910XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-914	09MW914XXX08XX	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-915	09MW915XXX08XX	CLP (+Dup)	-	-	CLP (+Dup)	Selective Ion Monitoring GC/MS (+Dup)	MEDEP 4.1.1 (+Dup)	MEDEP 4.2.1 (+Dup)

continued

TABLE 4-2
EXPLORATION AND SAMPLE INFORMATION
GROUNDWATER SAMPLES

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

EXPLORATION ID	SAMPLE ID	LABORATORY ANALYSES					TPH FUEL OIL	TPH GASOLINE
		VOCs[1,2]	SVOCs[2]	PEST/PCBs[2]	INORGANICS[3]	VINYL CHLORIDE		
MW-916	09MW916XXX08XX[4]	CLP	-	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NASB-020	09MW020XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NASB-021	09MW021XXX08XX	CLP	CLP (+Dup)	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NASB-022	09MW022XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NASB-204	09MW204XXX08XX	CLP (+Dup)	CLP (+Dup)	CLP (+Dup)	CLP (+Dup)	Selective Ion Monitoring GC/MS (+Dup)	MEDEP 4.1.1 (+Dup)	MEDEP 4.2.1 (+Dup)
MW-NEX-001R	09MW001XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NEX-002	09MW002XXX08XX	CLP (+Dup)	CLP	-	CLP (+Dup)	Selective Ion Monitoring GC/MS (+Dup)	MEDEP 4.1.1 (+Dup)	MEDEP 4.2.1 (+Dup)
MW-NEX-003	09MW003XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NEX-004R	09MW004XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NEX-005	09MW005XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NASB-006	09MW006XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1

continued

TABLE 4-2
EXPLORATION AND SAMPLE INFORMATION
GROUNDWATER SAMPLES

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

EXPLORATION ID	SAMPLE ID	LABORATORY ANALYSES					TPH FUEL OIL	TPH GASOLINE
		VOCs[1,2]	SVOCs[2]	PEST/PCBs[2]	INORGANICS[3]	VINYL CHLORIDE		
MW-NASB-007	09MW007XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NASB-008	09MW008XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NASB-009	09MW009XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1
MW-NASB-010	09MW010XXX08XX	CLP	CLP	-	CLP	Selective Ion Monitoring GC/MS	MEDEP 4.1.1	MEDEP 4.2.1

Notes:

[1] Target Compound List with tentatively identified compounds; analyzed for low concentration VOCs using USEPA Method 10/92.
[2] Target Compound List
[3] Target Analyte List
[4] This is the 8th sampling event at Site 9.

ID = identifier
CLP = Contract Laboratory Program 3/90 Statement of Work (Revisions OLM 01.9 and ILM 03.0)
Dup = Duplicate Sample
GC/MS = Gas Chromatography/Mass Spectrometry
MW = monitoring well
Pest/PCBs = Pesticides/Polychlorinated biphenyls
SVOCs = Semivolatile Organic Compounds
TPH = total petroleum hydrocarbons
VOCs = Volatile Organic Compounds
- = no analysis

TABLE 4-3
SUMMARY OF LABORATORY ANALYTICAL PROGRAM - SOIL SAMPLES

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

	LABORATORY ANALYTICAL PROCEDURES					
	TCL VOCs	TCL SVOCs	TCL PEST/PCBs	TAL INORGANICS	FUEL OIL IN SOIL	GASOLINE IN SOIL
Subtotal	10	10	3	10	10	10
Field Duplicates	1	1	1	1	1	1
Sampler Blanks	1	1	1	1	1	1
Trip Blanks	3	NA	NA	NA	NA	NA
Source Water Blanks	2	2	2	2	2	2
MS/MSD Samples	1/1	1/1	-/-	1/1	1/1	1/1
Total	19	16	7	16	16	16

Notes:

MS/MSD = Matrix spike/matrix spike duplicate
NA = Not applicable
Pest/PCBs = Pesticides/Polychlorinated biphenyls
SVOCs = Semivolatile Organic Compounds
TAL = USEPA Target Analyte List
TCL = USEPA Target Compound List
VOC = Volatile Organic Compounds

TABLE 4-4
SUMMARY OF LABORATORY ANALYTICAL PROGRAM - GROUNDWATER SAMPLES

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

	LABORATORY ANALYTICAL PROCEDURES						
	TCL VOCs	TCL SVOCs	TCL PEST/PCBs	VINYL CHLORIDE	TAL INORGANICS	TPH FUEL OIL IN WATER	TPH GASOLINE IN WATER
Subtotal	27	14	1	27	27	27	27
Field Duplicates	3	2	1	3	3	3	3
Sampler Blanks	3	2	1	3	3	3	3
Trip Blanks	6	NA	NA	6	NA	NA	NA
Source Water Blanks	2	2	1	2	2	2	2
MS/MSD Samples	2/2	1/1	1/1	2/2	2/2	2/2	2/2
Total	45	22	6	45	39	39	39

Notes:

MS/MSD = Matrix spike/matrix spike duplicate
NA = Not applicable
Pest/PCBs = Pesticides/Polychlorinated biphenyls
SVOCs = Semivolatile Organic Compounds
TCL = USEPA Target Compound List
TAL = USEPA Target Analyte List
VOC = Volatile Organic Compounds

4.2 DATA QUALITY OBJECTIVES (DQOS)

DQOs are based on the premise that different data uses require different levels of data quality. Data quality refers to the degree of uncertainty of analytical measurements with respect to precision, accuracy, representativeness, completeness, and comparability (PARCC). Specific objectives for each characteristic are established to develop sampling protocols and to identify the applicable documentation, sample handling procedures, and measurement system procedures. These objectives are established based on the site conditions, the objectives of the program, and the knowledge of the available measurement systems.

Data obtained during the NAS Brunswick field program are used to evaluate the presence or absence of contaminants. The levels of data quality applicable to the NAS Brunswick investigation are described in the following paragraphs and are consistent with requirements for the Navy IRP (NEESA, 20.2-047B, 1988).

Level A. Generated data provide information on the presence or absence of contamination and are generally qualitative rather than quantitative. Level A data (including PI meter readings, pH, temperature, and specific conductance

measurements) were collected to aid in the identification of sampling locations, health and safety monitoring, and characterization of samples.

Level C. These data are generated by an off-site analytical laboratory using non-CLP USEPA or MEDEP methods. This level is suitable for site characterization where the documentation of USEPA CLP procedures (Level D) is not required.

Level D. These data represents confirmational laboratory information generated using USEPA CLP methods and supported by rigorous quality control, documentation, and validation procedures. These data are typically used for site characterization, risk assessment, engineering alternative selection and design, and enforcement/litigation activities. Level D data closely correspond with the USEPA Level IV data, with additional quality assurance requirements.

Data from this field program may be used for several purposes, depending on the specific task and medium of concern. The following DQOs have been identified:

- Temperature, pH, specific conductance, and PI meter measurements were conducted in the field, providing Level A quality.

- Soil and groundwater samples collected during the field program were analyzed for TCL VOCs, SVOCs, and TAL inorganics using USEPA CLP protocols to provide Level D data quality.

- Low level vinyl chloride analyses were performed using a low level method by gas chromatograph/mass spectrometer (GC/MS) using the selective ion monitoring method. These results are sufficient to support Level D data quality.

- Fuel oil and gasoline in soil and water were analyzed using laboratory protocols sufficient to support Level D data quality. Samples analyzed for total petroleum hydrocarbons (TPH) as fuel oil employed MEDEP Methods 4.1.2 for soil and 4.1.1 for water. Samples analyzed for TPH as gasoline employed a GC/FID and the leaking underground fuel tank method (the equivalent of MEDEP method 4.2.3) for soils, and MEDEP Method 4.2.1 for water.

4.3 DATA VALIDATION

Validation of Level D laboratory analytical data is a systematic process designed to provide assurance that the data are adequate for their intended use. The process includes the following activities:

- auditing measurement system calibration and calibration verification
- auditing quality control activities
- reviewing data for technical credibility with respect to the sample site setting
- auditing field sample data records and chain of custody
- checking intermediate calculations
- certifying the process

At a minimum, the Level D CLP analytical data were validated by ABB-ES in accordance with the USEPA *Laboratory Data Validation, Functional Guidelines for Evaluating Organics Analyses* (USEPA, 1988b) and *Laboratory Data Validation, Functional Guidelines for Evaluating Inorganics Analyses* (USEPA, 1988c), as well as the appropriate USEPA Region I revisions. The data evaluation criteria include method blank correction, evaluation of holding times, instrument performance (e.g., calibration), and surrogate recoveries. Validation of Level A data were not performed. Results of the data validation effort are presented in Appendix F.

4.4 DATA QUALITY EVALUATION

The purpose of data quality evaluation is to assure that data generated during the field program are consistent with the project objectives. The data validation results were used to evaluate data utility and include assessment of the PARCC parameters. Data quality assessments were conducted as detailed in the QAPP (E.C. Jordan Co., 1988b).

5.0 NATURE AND DISTRIBUTION OF CONTAMINATION

This section discusses the results of the exploration program conducted at the site. Because no source of groundwater contamination had been identified prior to this investigation, additional field explorations were conducted. This program was designed to provide additional information regarding potential source area(s) of groundwater contamination at Site 9 and better characterize the ash landfill/dump area. The program included the following tasks:

- installing test soil borings;
- installing monitoring wells;
- installing test pits;
- performing conventional soil and groundwater sampling and laboratory analysis; and,

- conducting a survey of monitoring well locations and elevations.

These efforts were detailed in Section 3.0, and their results are discussed in the following subsections.

5.1 SOIL BORINGS

A total of six soil borings were installed at the site, with four of the borings completed as monitoring wells. One soil sample from each of the borings was submitted for off-site laboratory analysis for the parameters listed in Table 4-1. Because the area around TB(MW)-NASB-204 had not been characterized previously, the sample collected from this boring was analyzed for pesticides/PCBs, in addition to the Table 4-1 parameters.

Soil boring TB-917 was drilled to better characterize the subsurface soils associated with the "fuel odor" detected at between 8 to 10 feet in the previously installed TerraProbe boring T-23. A clean, fine-to-medium sand was encountered from the surface to approximately three feet bgs, where a black-to-rusty-brown ash-fill material

was observed between the intervals of around 3.5 to 8 feet bgs. The presence of this material indicated that this location is within the area of the ash landfill of the site. This ash-fill material in turn overlies what appears to be natural, fine-to-silty sand. The boring was terminated at 18 feet bgs; groundwater was observed at approximately 9 feet bgs, and an analytical sample was collected from the interval of 8 to 10 feet bgs. This interval, and that below it, exhibited the highest PID readings of the split spoons collected from this boring. Because the 8-to-10-foot interval straddled the water table, it was decided that this interval was the better of the two for the off-site sample.

TB-918 was installed to characterize subsurface soils associated with what was described as "fuel soaked soil" observed in the previously installed MW-914. TB-918 was placed approximately 3 feet west of the well. Soils appearing to be fill extend down to approximately 7 feet bgs, and the interval between 4 to 5 feet bgs is ash-fill material. Soils below 7 feet appear to be natural, fine, silty and organic-rich sand with layers of fibrous peat. A soil sample for off-site analysis was collected from the interval of 16 to 18 feet bgs; the material was light gray sand alternating with black, fibrous peat. This sample had the highest PID readings observed in the boring.

To evaluate background conditions relative to the ash landfill, TB(MW)-NASB-020 was installed (see Figure 3-1). Conditions were interpreted as being natural below approximately 3 feet of clean fill and topsoil. Soils of fine to very fine, stratified sands that become micaceous below 14 feet bgs were encountered above a dark gray silt/clay at 23 feet bgs; water was observed at approximately 10 feet bgs. Because water was observed at this depth and the PID reading of the split spoon was elevated, a sample for off-site analysis was collected from the 10-to-12 foot interval. The elevated response with the PID in this instance may not be a true indicator of the presence of volatile organics. In the field, it was noted that when the PID was turned off and then on again, the meter registered possibly erroneous readings (see boring log in Appendix A). The likelihood that the PID reading was false is supported by the non-detect headspace screening result for the same interval, which is a more accurate indicator of volatiles than the PID screening of the split spoon. This boring was completed as a monitoring well with a 10-foot screen straddling the water table from 7 to 17 feet bgs.

Concerns about water quality at depth in the vicinity of the ash landfill led to the installation of boring TB(MW)-NASB-021, placed near MW-915 and sampled continuously below 16 feet; MW-915 was drilled to 17 feet bgs. A consistent, fine

sand (with occasional peat lenses to 20 feet) was observed in the boring down to a blue-gray clayey silt at approximately 47 feet; the total depth of the boring was 50 feet bgs. A soil sample for off-site analysis was collected from the 18-to-20 foot interval. The highest PID headspace reading (all PID spoon readings were at background levels) for this boring was obtained from the 16 to 18 foot interval, possibly due to the observed peat layer at this depth. These PID headspace readings are only known after the reference jars have stabilized to ambient temperatures, which may be sometime after the decision regarding which intervals to sample have been made. In this case, since adjacent monitoring well MW-915 was placed to 17 feet bgs, collecting a sample from the 18 to 20 foot interval made better sense than collecting one from a shallower depth. The boring was completed as a monitoring well, with a 5-foot screen set between 42.5 to 47.5 feet bgs. The intent of this well was to assess for possible dense non-aqueous phase liquid (DNAPL) contamination of groundwater above the clay layer.

To characterize groundwater conditions west of the ash landfill, boring TB(MW)-NASB-022 (see Figure 3-1) was drilled to a total depth of 24 feet; clay was encountered at about 23 feet bgs. Fill was interpreted to extend to 7 feet bgs, and groundwater was observed at 7.5 to 8 feet bgs. A consistent, stratified fine-to-silty

fine sand was observed below the fill and above the clay. PID readings above background conditions were not observed. Therefore, a decision was made to send the first water-saturated spoon (8-to-10-foot interval) for off-site analysis. The boring was completed as a water table well with a 10-foot screen placed between 5 and 15 feet bgs.

TB(MW)-NASB-204 was placed in an upgradient location relative to the ash landfill to evaluate the potential for a preferential pathway for contaminant migration along the former drain pipe (see Figure 3-1). This boring would be drilled to a total depth of 30 feet or clay and then completed with a well screen set at the depth with the highest PID readings. Clay was determined to be located at 19 feet bgs, with filled soil down to 4 feet bgs. A fine, silty sand (with peat down to 12 feet) was observed between the fill and clay. The likely location for a sample from this boring was from the water table, located at around 6 feet bgs. Due to volume requirements, the VOC soil fraction was collected from the 6-to-8-foot interval and the other analytical parameters were composited from soil collected from the 6-to-10-foot intervals.

Environmental conditions were assessed from the analytical results of the soil samples collected during the exploration program. The only VOC detected in the

total of 10 soil samples was 2-Butanone, at a concentration of 10J micrograms per kilogram (μg/kg) in the sample collected in TB-918. This concentration is just equal to the CRQL (Table 5-1). This VOC is considered a common laboratory contaminant (USEPA, 1988b) and at such a low concentration is not considered indicative of site contamination.

One means of evaluating the degree of site-related contamination is to compare site data to established background concentrations. Site background concentrations are generally preferable, but background values for SVOC compounds have not been formally established in soils at NAS Brunswick. Therefore, literature values for background concentrations for SVOCs may be consulted. Table 5-2 presents a compilation of background values for PAHs associated with rural, agricultural, and urban soils.

TABLE 5-1
SUMMARY OF SOIL ORGANIC ANALYSIS - AUGUST 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

COMPOUND/ANALYTE	CRQL	TB(MW)-NASB-021	TB(MW)-NASB-204	TB(MW)-NASB-020	TB(MW)-NASB-022	TB-917	TB-918	TP-912	TP-913	TP-914/Dup	TP-915
TCL VOLATILE ORGANIC COMPOUNDS[1] (µg/kg)											
2-Butanone	10	--	--	--	--	--	10J	--	--	--/--	--
TCL SEMIVOLATILE ORGANIC COMPOUNDS[1] (µg/kg)											
Naphthalene	330	--	--	--	--	--	200J	--	--	--/--	--
2-Methylnaphthalene	330	--	--	--	--	--	51J	--	--	--/--	--
Acenaphthene	330	--	--	--	--	--	440J	--	--	--/--	--
Dibenzofuran	330	--	--	--	--	--	170J	--	--	--/--	--
Fluorene	330	--	--	--	--	--	360J	--	--	--/--	--
Phenanthrene	330	140J	130J	--	--	--	1400J	--	--	--/--	--
Anthracene	330	--	--	--	--	--	310J	--	--	--/--	--
Carbazole	330	--	--	--	--	--	170J	--	--	--/--	--
Fluoranthene	330	150J	270J	--	--	--	1900J	--	--	--/--	--
Pyrene	330	150J	230J	--	--	310J	1400J	--	--	--/--	--
Benzo(a)Anthracene	330	95J	120J	--	--	--	960J	--	--	--/--	--
Chrysene	330	91J	160J	--	--	--	670J	--	--	--/--	--
bis(2-Ethylhexyl)phthalate	330	--	--	--	--	--	--	--	--	48J/--	--
Benzo(b)Fluoranthene	330	120JN	270JN	--	--	--	1600JN	--	--	--/--	--
Benzo(k)Fluoranthene	330	--	--	--	--	--	1500JN	--	--	--/--	--
Benzo(a)Pyrene	330	76J	120J	--	--	--	680J	--	--	--/--	--
Indeno(1,2,3-c,d)Pyrene	330	--	--	--	--	--	230J	--	--	--/--	--
Benzo(g,h,i)perylene	330	--	--	--	--	--	190J	--	--	--/--	--
TCL PESTICIDE/POLYCHLORINATED BIPHENYL COMPOUNDS[1] (µg/kg)											PS-915/Dup
4,4'-DDE	3.3	NA	12	NA	NA	NA	NA	--	NA	NA/NA	3.9J/1.7J
4,4'-DDT	3.3	NA	7.6	NA	NA	NA	NA	--	NA	NA/NA	2.8J/2.1J
Methoxychlor	17	NA	0.49J	NA	NA	NA	NA	--	NA	NA/NA	--/0.4J
gamma-Chlordane	1.7	NA	0.091J	NA	NA	NA	NA	--	NA	NA/NA	--/--

continued

TABLE 5-1
SUMMARY OF SOIL ORGANIC ANALYSIS - AUGUST 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

COMPOUND/ANALYTE	CRQL	TB(MW)-NASB-021	TB(MW)-NASB-204	TB(MW)-NASB-020	TB(MW)-NASB-022	TB-917	TB-918	TP-912	TP-913	TP-914/Dup	TP-915
TPH (mg/kg)	**PQL**										
Gasoline	5.0	--	--	--	--	200	--	--	--	--/--	--
Fuel Oil	10	--	--	--	--	37	62	--	--	--/--	--

Notes:

Compounds that were non-detected in all samples are not listed.

--	=	not detected above sample quantitation limit
CRQL	=	Contract Required Quantitation Limit (Organics)
Dup	=	Duplicate
J	=	Estimated
mg/kg	=	milligrams per kilogram
NA	=	Not Analyzed; analysis was not required.
N	=	presumptive evidence of a compound
µg/kg	=	micrograms per kilogram
PQL	=	Practical Quantitation Limit
TPH	=	Total Petroleum Hydrocarbons
BS/SB	=	Soil Boring
PS	=	test pit soil
TB	=	Test Boring
TP	=	Test Pit

TABLE 5-2
PUBLISHED BACKGROUND SOIL CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

COMPOUND	CONCENTRATION (μg/kg)		
	RURAL SOIL	AGRICULTURAL SOIL	URBAN SOIL
Acenaphthene	.0017	6	
Acenaphthylene		5	
Anthracene		11-13	
Benzo(a)anthracene	5-20	56-110	169-59,000
Benzo(a)pyrene	2-1,300	4.6-900	165-220
Benzo(b)fluoranthene	20-30	58-220	15,000-62,000
Benzo(e)pyrene		53-130	60-14,000
Benzo(ghi)perylene	10-70	66	900-47,000
Benzo(k)fluoranthene	10-110	58-250	300-26,000
Chrysene	38.3	78-120	251-640
Fluoranthene	0.3-40	120-210	200-166,000
Fluorene		9.7	
Indeno(1,2,3-cd)pyrene	10-15	63-100	8,000-61,000
Phenanthrene	30.0	48-140	
Pyrene	1-19.7	99-150	145-147,000

Sources:

IARC (1973)
White and Vanderslice (1980)
Windsor and Hites (1979)
Edwards (1983)
Butler et al. (1984)
Vogt et al. (1987)
Jones et al. (1987)
μg/kg = micrograms per kilogram

W0119521T.CD/22

SVOCs were detected at concentrations above the CRQL only in the TB-918 sample (see Table 5-1), where the total PAHs were approximately 12,000J μg/kg. When the values for PAHs observed from the boring samples are compared to the values in Table 5-2, the PAHs from site soils range between the published values for agricultural and urban soils. With the exception of the detection of pyrene in TB-917 at 310 μg/kg (which is below the CRQL), the detections for PAHs at the site are only from the borings TB(MW)-NASB-021, TB(MW)-NASB-204, and TB-918. A review of the boring logs shows that the analytical samples collected from each of these borings were collected from soils that had some organics (peat) in the sample intervals. Since PAHs have an affinity to attach and be bound with organics, the elevated values found in these boring samples for PAHs are not unexpected. These results may be further explained by the fact that prior to the barracks being built at Site 9, the area where these borings are located was once a natural drainage swale where localized runoff could have caused an accumulation of PAHs in the organics within the swale (Figure 2-4, ABB-ES, 1994a).

Only one boring, TB(MW)-NASB-204, was sampled for pesticides/PCBs with results showing some detections of pesticides (see Table 5-1). These low-level detections may be attributed to former base-wide practices of pest control, and are well below

the site cleanup level of 500 μg/kg established for the Building 95 removal action (ABB-ES, 1992). This target cleanup concentration was established to be protective of human and ecological receptors. Therefore, pesticides are not considered to be contaminants of concern at this site.

All soil samples were analyzed for fuel oil and gasoline according to the MEDEP methods, with only TB-917 and TB-918 showing detections (see Table 5-1). TB-917 had TPH detections of gasoline at 200 milligrams per kilogram (mg/kg) and fuel oil at 37 mg/kg. The fact that there are TPH detections for gasoline but no VOC detections reported for TB-917 may be explained by noting that the sample was analyzed as a medium level sample (i.e., diluted by a factor of 125 times normal), due to elevated levels of non-TCL compounds. This may have caused the volatiles to be diluted out of the results. A review of the tentatively identified compound summary sheet for soils (Appendix F) reveals that 238 mg/kg of unknown volatiles were present in the sample; this result is comparable with the TPH result of 200 mg/kg for gasoline. A review of the chromatograms for this sample also reveals a heavy component of fuel oil, supporting the detection of 37 mg/kg fuel oil. Further analysis factoring in the TPH results suggests that this sample may have been collected from an area proximal to a fuel spill. A review of the supporting

documentation from the laboratory results for TB-918 suggests that the TPH result for fuel oil of 62 mg/kg is indicative of a "cleaner" hydrocarbon than that detected in the sample from TB-917. The chromatogram shows little of the heavier hydrocarbons associated with fuel oil or a nearby source and suggests that what is seen may be hydrocarbons that, similar to the PAHs, have migrated and have been adsorbed onto the organics of the old stream/drainage area.

TAL inorganics in the boring soil samples were detected at levels generally consistent with typical soil values for NAS Brunswick (Table 5-3). Included on this table are the background inorganic sand values for samples collected from locations throughout NAS Brunswick. Some inorganics are occasionally detected at

TABLE 5-3
SUMMARY OF SOIL INORGANIC ANALYSIS - AUGUST 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

	CRDL	TB(MW)-NASB-021	TB(MW)-NASB-204	TB(MW)-NASB-020	TB(MW)-NASB-022	TB-917	TB-918	TP-912	TP-913	TP-914/Dup	TP-915	*Background Inorganic Sand Values NAS Brunswick
TAL INORGANIC ANALYTES (mg/kg)												
Aluminum	40	4800	5370	4450	11200	8600	4560	4290	5350	7440/6440	4740	6900
Antimony	12	--	--	--	--	--	--	--	--	--/--	--	ND
Arsenic	2	3.2	1.9J	0.71J	4.3	1.4J	0.81J	8.5	0.57J	1.5J/0.84J	1.4J	8.2
Barium	40	17.2J	13.1J	16.7J	56.1	12.4J	24.5J	13.2J	21.4J	34.5J/29.9J	11.4J	26
Beryllium	1	0.4J	--	0.24J	0.53J	0.33J	--	--	--	--/--	--	0.33
Cadmium	1	--	--	--	--	--	0.13J	--	--	--/--	--	ND
Calcium	1000	640J	988J	608J	606J	731J	779J	235J	774J	1080J/1010J	484J	760
Chromium	2	13.7	6.2	8.1	17.1	10.7	6.8	7.5	10.1	13.9/12.4	6.5	12
Cobalt	10	7.4J	4.5J	6.1J	7.6J	2.8J	2.7J	3.9J	4.3J	5.3J/4.7J	3.0J	5.9
Copper	5	6.9J	3.6J	6.9	15.4	5.1J	8.4	5.7	8.7	11.2/10.1	6.1J	8.1
Iron	20	12200	6080	7220	16400	9210	6460	14000	8200	11400/10100	5100	11000
Lead	0.6	3.4	3.9	3.5	7.3	6.5	11.1	2.6	2.8	3.7/3.6	4.8	2.1
Magnesium	1000	1620	885J	1820	3600	1410	1170J	1860	2320	3300/2910	1050J	3100
Manganese	3	391	67.3	399	538	67.7	64	159	123	157/138	64.2	260
Mercury	0.1	--	--	--	--	--	--	--	--	--/--	--	0.013
Nickel	8	5.6J	4.4J	6.3J	16.4	5.7J	8.9J	6.7J	8.3	12/10.6	5.7J	9.7
Potassium	1000	846J	334J	962J	1950	482J	446J	923J	1160	1770/1580	343J	1500

W0119521T.CD/15

continued

TABLE 5-3
SUMMARY OF SOIL INORGANIC ANALYSIS - AUGUST 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

	CRDL	TB(MW)-NASB-021	TB(MW)-NASB-204	TB(MW)-NASB-020	TB(MW)-NASB-022	TB-917	TB-918	TP-912	TP-913	TP-914/Dup	TP-915	*Background Inorganic Sand Values NAS Brunswick
Selenium	1	1.2J	1.2J	--	0.96J	--	1.3	0.87J	--	1.2/0.84J	--	0.22
Silver	2	--	--	--	--	--	--	--	--	--/--	--	ND
Sodium	1000	425J	356J	324J	387J	333J	315J	265J	260J	341J/308J	396J	160
Thallium	2	--	--	--	--	--	--	--	--	--/--	--	0.17
Vanadium	10	17.2	10.9J	11.9	23.4	18.3	9.2J	11.5	13.6	18.5/16.6	8.3J	20
Zinc	4	16.7	11.3	16.4	29.4	17.4	27.1	15.7	19.0	25.7/22.7	15.6	26
Cyanide	1	--	--	--	--	--	--	--	--	--/--	--	ND

Notes:

*	=	Source: E.C. Jordan Co., 1990, "Draft Final RI Report - Naval Air Station, Brunswick, Maine"; U.S. Department of the Navy; Volume 3, Appendix K; and ABB Environmental Services, Inc., 1993, "Site Inspection Report, West Runway Study Area", U.S. Department of the Navy.
ND	=	no data
--	=	not detected above sample quantitation limit
BS/SB	=	Soil Boring
CRDL	=	Contract Required Detection Limit (Inorganics)
Dup	=	Duplicate
J	=	Estimated
mg/kg	=	milligrams per kilogram
TP	=	test pit

concentrations above base background, but below cleanup levels established for other sites on base. Overall, inorganic contamination of concern was not observed in soil borings.

5.2 TEST PIT SOILS

Four test pits were excavated, and one soil sample from each test pit was submitted for off-site testing as shown in Table 4-1. Three test pits, TP-912, TP-913, and TP-914 were placed to test for the presence of landfill material to the west of the known ash landfill. The fourth test pit, TP-915, was placed near the "old drain pipe," identified north of Neptune Drive on a base engineering drawing. All four test pits were planned to be excavated to the depth of natural soil or groundwater, whichever came first. All excavations were, however, extended to below fill depths for better characterization.

Test pits TP-912 and TP-913 encountered similar natural in-place soils below a thin topsoil layer. No unusual observations were made and PID readings above ambient

conditions were not recorded. Soil samples were collected from 6 feet and 8 feet bgs from the two respective test pits.

TP-914, located between buildings 217 and 218, had one foot of topsoil above three feet of clean fill consisting of fine to medium sand. Stratified natural fine sands and silts were observed to the bottom of the pit at 6 feet bgs; a sample was collected at this point.

TP-915 was excavated as a trench to better locate the trend of the former 42" drain pipe that had been removed prior to the barracks being built. The trend of the former pipeline was scaled off an engineering drawing that showed pre-construction details of the area. The trench was excavated at right angles to the trend of the pipeline down to the depth of natural soils or groundwater. Final dimensions of the trench measured 30 foot long by up to 7.3 feet deep by 2 to 3 feet wide. Topsoil extended down to approximately 1 foot bgs, with a gravelly sand fill down to about 4 feet deep. Natural soils were found below 4 feet, consisting of what was interpreted as being the top of the original soil profile, with a continuous root horizon throughout the length of the trench at about the 5 foot depth. The soils were wet, black, organic-rich, mucky silty-sand. Evidence of the former drain was not

found. The analytical sample was collected from a depth of about 6.5 feet bgs; the jar headspace of the soil at this location was recorded at 2 parts per million.

Results of the test pit samples for organic analyses are shown in Table 5-1. The low-level detection of organic compounds in these samples do not present a concern to human health or the environment.

TAL inorganics in the test pit soil samples were detected at levels consistent with typical soil values for NAS Brunswick (see Table 5-3). Inorganic contamination of concern was not observed in the test pit soil samples.

5.3 GROUNDWATER

Based on water levels gathered on September 29, 1995 (Table 5-4), an interpretive groundwater contour map is shown in Figure 5-1. Water levels were not obtainable in some wells because the dedicated sampling equipment prevented insertion of the water level probe.

TABLE 5-4
GROUNDWATER ELEVATIONS - SEPTEMBER 1995

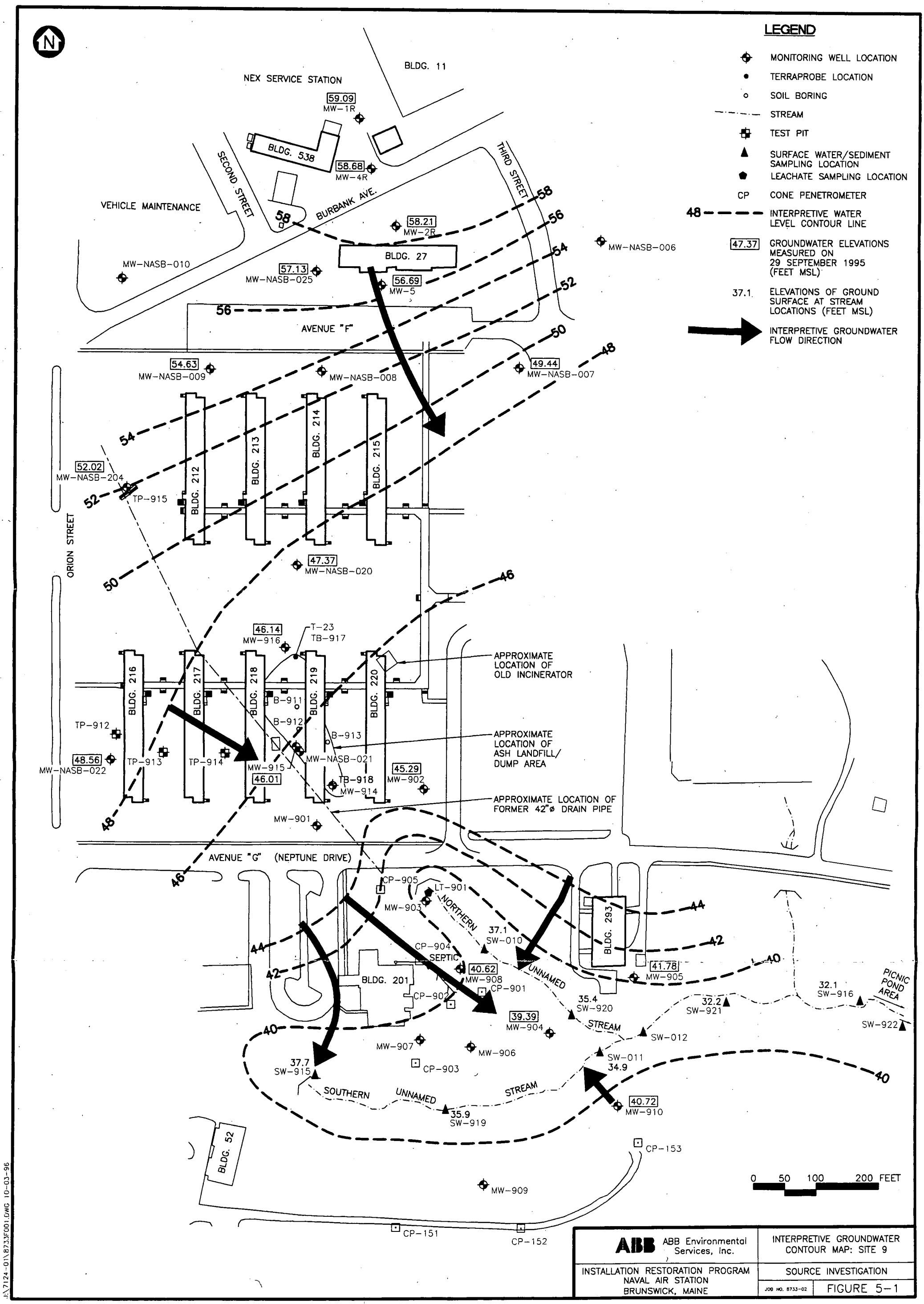
NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

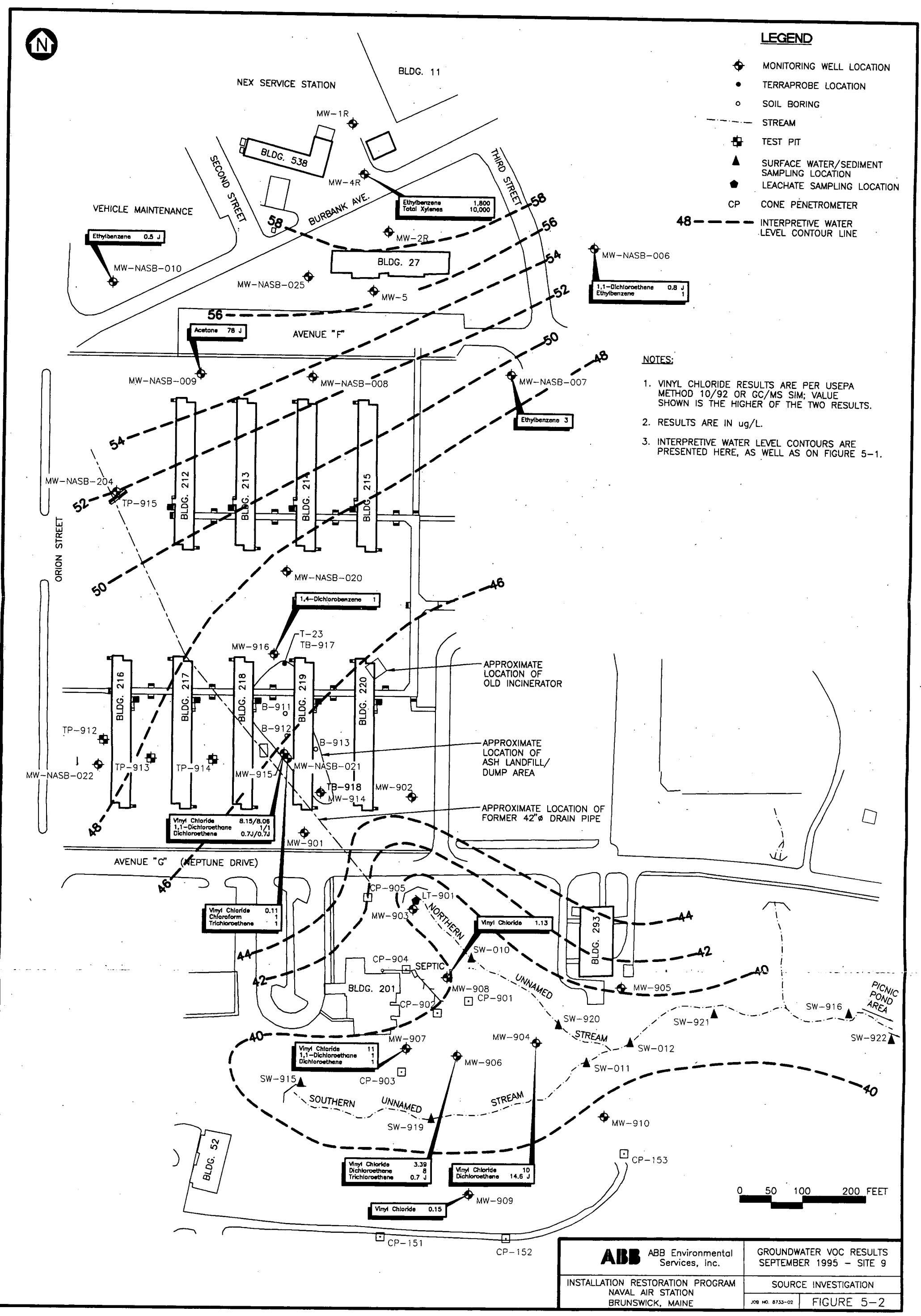
WELL DESIGNATION[1]	ALTERNATE DESIGNATION[2]	DEPTH TO WATER BELOW RISER (ft)[5]	RISER ELEVATION (ft MSL)	WATER TABLE ELEVATION (ft MSL)
MW-901	MW-NASB-069	N/A	57.30	--
MW-902	MW-NASB-070	12.97	58.26	45.29
MW-903	MW-NASB-071	N/A	46.25	--
MW-904	MW-NASB-072	10.42	49.81	39.39
MW-905	MW-NASB-073	9.93	51.71	41.78
MW-906	MW-NASB-074	N/A	51.68	--
MW-907	MW-NASB-075	N/A	54.916	--
MW-908	MW-NASB-076	12.17	52.79	40.62
MW-909	MW-NASB-077	N/A	58.89	--
MW-910	MW-NASB-078	13.02	53.74	40.72
MW-914	MW-NASB-079	N/A	58.15	--
MW-915	MW-NASB-080	12.50	58.51	46.01
MW-916	MW-NASB-081	12.08	58.22	46.14
MW-NASB-020	MW-NASB-020	14.31	61.68	47.37
MW-NASB-021	MW-NASB-021	12.73	57.89	45.16
MW-NASB-022	MW-NASB-022	10.96	59.52	48.56
MW-NASB-204[3]	MW-NASB-204	10.07	62.09	52.02
MW-NEX-001R	MW-NASB-023	8.20	67.29	59.09
MW-NEX-002	MW-NASB-024	7.10	65.31	58.21
MW-NEX-003	MW-NASB-025	7.15	64.28	57.13
MW-NEX-004R	MW-NASB-026	7.93	66.61	58.68
MW-NEX-005	MW-NASB-027	3.81	60.50	56.69
MW-NASB-006	MW-NASB-006	7.73	N/A	--
MW-NASB-007	MW-NASB-007	7.73	57.17	49.44
MW-NASB-008	MW-NASB-008	3.49	N/A	--
MW-NASB-009	MW-NASB-009	4.33	58.96	54.63
MW-NASB-010	MW-NASB-010	N/A	N/A	--

Notes:

[1] Designations as shown in Sampling and Analysis Plan (ABB-ES, 1995).
[2] Designations per NASB convention.
[3] Originally mislabeled as MW-NASB-023 in Sampling and Analysis Plan.
N/A = Water levels not available due to dedicated sampling equipment being in wells.
MSL = Mean Sea Level
Water levels were measured on 29 September 1995.

W0119521T.CD/10


LEGEND
MONITORING WELL LOCATION
TERRAPROBE LOCATION
SOIL BORING
STREAM
TEST PIT
SURFACE WATER/SEDIMENT SAMPLING LOCATION
LEACHATE SAMPLING LOCATION
CP CONE PENETROMETER
48 INTERPRETIVE WATER LEVEL CONTOUR LINE
47.37 GROUNDWATER ELEVATIONS MEASURED ON 29 SEPTEMBER 1995 (FEET MSL)
37.1 ELEVATIONS OF GROUND SURFACE AT STREAM LOCATIONS (FEET MSL)
INTERPRETIVE GROUNDWATER FLOW DIRECTION
N
NEX SERVICE STATION
BLDG. 11
59.09 MW-1R
BLDG. 538
58.68 MW-4R
SECOND STREET
THIRD STREET
BURBANK AVE.
VEHICLE MAINTENANCE
58.2.1 MW-2R
BLDG. 27
MW-NASB-006
MW-NASB-010
57.13 MW-NASB-025
56.69 MW-5
AVENUE "F"
54.63 MW-NASB-009
MW-NASB-008
49.44 MW-NASB-007
BLDG. 212
BLDG. 213
BLDG. 214
BLDG. 215
52.02 MW-NASB-204
TP-915
ORION STREET
47.37 MW-NASB-020
46.14 MW-916
T-23
TB-917
APPROXIMATE LOCATION OF OLD INCINERATOR
BLDG. 216
BLDG. 217
BLDG. 218
BLDG. 219
BLDG. 220
B-911
B-912
B-913
TP-912
48.56 MW-NASB-022
TP-913
TP-914
MW-915
46.01
MW-NASB-021
TB-918
MW-914
45.29 MW-902
APPROXIMATE LOCATION OF ASH LANDFILL/ DUMP AREA
APPROXIMATE LOCATION OF FORMER 42"ø DRAIN PIPE
MW-901
AVENUE "G" (NEPTUNE DRIVE)
CP-905
LT-901
MW-903
NORTHERN
37.1 SW-010
BLDG. 293
CP-904
SEPTIC
40.62 MW-908
CP-901
UNNAMED
41.78 MW-905
BLDG. 201
CP-902
35.4 SW-920
32.1 SW-916
PICNIC POND AREA
32.2 SW-921
SW-922
39.39 MW-904
STREAM
SW-012
MW-907
MW-906
SW-011
34.9
37.7 SW-915
CP-903
SOUTHERN
UNNAMED
STREAM
35.9 SW-919
40.72 MW-910
BLDG. 52
CP-153
MW-909
CP-151
CP-152
0 50 100 200 FEET
ABB Environmental Services, Inc.
INTERPRETIVE GROUNDWATER CONTOUR MAP: SITE 9
INSTALLATION RESTORATION PROGRAM
NAVAL AIR STATION
BRUNSWICK, MAINE
SOURCE INVESTIGATION
JOB NO. 8733-02
FIGURE 5-1
J:\7124-01\8733F001.DWG 10-03-96


LEGEND
MONITORING WELL LOCATION
TERRAPROBE LOCATION
SOIL BORING
STREAM
TEST PIT
SURFACE WATER/SEDIMENT SAMPLING LOCATION
LEACHATE SAMPLING LOCATION
CP CONE PENETROMETER
48 INTERPRETIVE WATER LEVEL CONTOUR LINE
NOTES:
1. VINYL CHLORIDE RESULTS ARE PER USEPA METHOD 10/92 OR GC/MS SIM; VALUE SHOWN IS THE HIGHER OF THE TWO RESULTS.
2. RESULTS ARE IN ug/L.
3. INTERPRETIVE WATER LEVEL CONTOURS ARE PRESENTED HERE, AS WELL AS ON FIGURE 5-1.
NEX SERVICE STATION
BLDG. 11
MW-1R
BLDG. 538
MW-4R
Ethylbenzene 1,800
Total Xylenes 10,000
SECOND STREET
THIRD STREET
BURBANK AVE.
VEHICLE MAINTENANCE
Ethylbenzene 0.5 J
MW-NASB-010
MW-2R
BLDG. 27
MW-NASB-025
MW-5
MW-NASB-006
1,1-Dichloroethene 0.8 J
Ethylbenzene 1
Acetone 78 J
AVENUE "F"
MW-NASB-009
MW-NASB-008
MW-NASB-007
Ethylbenzene 3
MW-NASB-204
TP-915
BLDG. 212
BLDG. 213
BLDG. 214
BLDG. 215
ORION STREET
MW-NASB-020
1,4-Dichlorobenzene 1
T-23
TB-917
MW-916
BLDG. 216
BLDG. 217
BLDG. 218
BLDG. 219
BLDG. 220
APPROXIMATE LOCATION OF OLD INCINERATOR
B-911
B-912
B-913
TP-912
TP-913
TP-914
MW-NASB-022
MW-915
MW-NASB-021
TB-918
MW-914
MW-902
APPROXIMATE LOCATION OF ASH LANDFILL/ DUMP AREA
APPROXIMATE LOCATION OF FORMER 42"ø DRAIN PIPE
Vinyl Chloride 8.15/8.06
1,1-Dichloroethane 1/1
Dichloroethene 0.7J/0.7J
MW-901
AVENUE "G" (NEPTUNE DRIVE)
CP-905
LT-901
MW-903
NORTHERN
Vinyl Chloride 1.13
Vinyl Chloride 0.11
Chloroform 1
Trichloroethene 1
BLDG. 293
SW-010
CP-904
SEPTIC
BLDG. 201
MW-908
CP-901
UNNAMED
MW-905
CP-902
SW-920
STREAM
SW-921
SW-916
PICNIC POND AREA
SW-922
SW-012
MW-907
MW-904
Vinyl Chloride 11
1,1-Dichloroethane 1
Dichloroethene 1
MW-906
SW-011
SW-915
CP-903
SOUTHERN
UNNAMED
STREAM
SW-919
MW-910
BLDG. 52
CP-153
Vinyl Chloride 3.39
Dichloroethene 8
Trichloroethene 0.7 J
Vinyl Chloride 10
Dichloroethene 14.6 J
MW-909
Vinyl Chloride 0.15
CP-151
CP-152
0 50 100 200 FEET
ABB Environmental Services, Inc.
GROUNDWATER VOC RESULTS SEPTEMBER 1995 - SITE 9
INSTALLATION RESTORATION PROGRAM
NAVAL AIR STATION
BRUNSWICK, MAINE
SOURCE INVESTIGATION
JOB NO. 8733-02
FIGURE 5-2

Twenty-seven monitoring wells were sampled for the parameters as listed in Table 4-2. Groundwater results for VOCs are shown in Figure 5-2 and complete laboratory data are in Appendix F.

Of 23 positive detections for VOCs in groundwater, eight are above the Maine MEGs and five of these eight are for vinyl chloride (Table 5-5). Of the three other detections, two are fuel-related compounds detected in the service station well MW-NEX-004R; the other detection is for acetone (at 78J micrograms per liter [μg/L] in MW-NASB-009), which may be due to laboratory contamination. The five vinyl chloride detections above the Maine MEG are from wells previously known to have this contaminant. Laboratory analysis for the detection of vinyl chloride in groundwater was performed using two methods: A GC/MS method employing a selective ion monitoring technique with a practical quantitation limit of 0.10 μg/L and the USEPA Method 10/92 with a CRQL of 1 μg/L; results for both are presented in Table 5-5. The results for these two methods are similar; detections range from 1.13 μg/L in MW-908 to 11 μg/L in MW-907. Positive detections for vinyl chloride at or below the MEG are in MW-909 at 0.15 μg/L and in MW-NASB-021 at 0.11 μg/L.

TABLE 5-5
SUMMARY OF GROUNDWATER VOLATILE ORGANIC ANALYSIS - SEPTEMBER 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

COMPOUND/ANALYTE	CRQL	MAINE MEG µg/L	MW-NEX-004R	MW-NASB-006	MW-NASB-007	MW-NASB-009	MW-NASB-010	MW-NASB-021
GC/MS SIM PQL 0.10 µg/L								
Vinyl Chloride	–	0.15	–	–	–	–	–	0.11
TCL VOLATILE ORGANIC COMPOUNDS (µg/L) USEPA METHOD 10/92								
Vinyl Chloride	1	0.15	–	–	–	–	–	–
Acetone	5	-	–	–	–	78J	–	–
1,1-Dichloroethane	1	5	–	–	–	–	–	–
cis-1,2-Dichloroethene	1	70	–	0.8J	–	–	–	–
trans-1,2-Dichloroethene	1	70	–	–	–	–	–	–
Chloroform	1	-	–	–	–	–	–	1
Trichloroethene	1	5	–	–	–	–	–	1
Ethylbenzene	1	700	1800	1	3	–	0.5J	–
Total Xylenes	1	600	10000	–	–	–	–	–
1,4-Dichlorobenzene	1	27	–	–	–	–	–	–

continued

TABLE 5-5
SUMMARY OF GROUNDWATER VOLATILE ORGANIC ANALYSIS SEPTEMBER 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

COMPOUND/ANALYTE	CRQL	MAINE MEG µg/L	MW-904	MW-906	MW-907	MW-908	MW-909	MW-915/Dup	MW-916
GC/MS SIM PQL 0.10 µg/L									
Vinyl Chloride	--	0.15	8.36	3.39	8.60	1.13	0.15	8.15/8.06	--
TCL VOLATILE ORGANIC COMPOUNDS (µg/L)USEPA METHOD 10/92									
Vinyl Chloride	1	0.15	10	2	11	1	--	6/5	--
Acetone	5	-	--	--	--	--	--	--	--
1,1-Dichloroethane	1	.5	--	--	1	--	--	1/1	--
cis-1,2-Dichloroethene	1	70	14	8	1	--	--	0.7J/0.7J	--
trans-1,2-Dichloroethene	1	70	0.6J	--	--	--	--	--	--
Chloroform	1	-	--	--	--	--	--	--	--
Trichloroethene	1	5	--	0.7J	--	--	--	--	--
Ethylbenzene	1	700	--	--	--	--	--	--	--
Total Xylenes	1	600	--	--	--	--	--	--	--
1,4-Dichlorobenzene	1	27	--	--	--	--	--	--	1

Notes:

Compounds that were non-detected in all samples are not listed.
The following monitoring wells had no detections of any volatile organic compounds, and are therefore not included in the Table: MW-NEX-001R, MW-NEX-002, MW-NEX-003, MW-NEX-005, MW-NASB-008, MW-NASB-020, MW-NASB-022, MW-NASB-204, MW-901, MW-902, MW-903, MW-905, MW-910, MW-914

CRQL	=	Contract Required Quantitation Limit
GC/MS	=	Gas Chromatograph/Mass Spectrometry
Dup	=	Duplicate
J	=	estimated
MEG	=	Maximum Exposure Guideline (Maine Department of Human Services, September 1992)
MW	=	Monitoring Well
PQL	=	Practical Quantitation Limit
SIM	=	Selective Ion Monitoring
TCL	=	Target Compound List
µg/L	=	micrograms per liter
-	=	no value
--	=	not detected above sample quantitation limit

A historic review of the vinyl chloride detections from the site wells is presented in Table 5-6, which lists the date sampled and results. This table is a compilation of new results and results presented in previous site reports and shows the date and sampling techniques of the sample collection. Presumably, samples collected using the low-flow technique would show higher levels of vinyl chloride, or levels more representative of natural in-situ conditions. Although there are a limited number of results obtained by low-flow sampling so far, it appears that the detections for vinyl chloride are essentially the same regardless of the sampling method. This indicates that either the low-flow sampling method is no more effective in detecting low concentrations of vinyl chloride, contamination is being naturally attenuated over time, or a combination of these two possibilities exists. The other VOCs of 1,1-DCA and DCE would show similar trends if plotted with time.

All 27 wells were tested for fuel oil and gasoline in water using the MEDEP Methods 4.1.1 and 4.2.1, respectively; results are summarized in Table 5-7. MW-NEX-004R shows high detections of gasoline and fuel oil. These detections are consistent with the historic VOC and SVOC results obtained from this well. The other well with detections of gasoline in water is MW-NASB-204 at 69 μg/L in both

the sample and duplicate sample. These results are just above the practical quantitation limit of 50 μg/L.

TABLE 5-6
HISTORICAL VINYL CHLORIDE RESULTS

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

	SAMPLED USING BAILING METHODS (µg/L)						SAMPLED USING LOW-FLOW TECHNIQUES (µg/L)			
Monitoring Well	Date Sampled 9/88	12/88	4/89	10/89	11/90	2/93	3/95	5/95	8/95	9/95*
MW-904	12	27	--	--	NA	8J	--	3	9	10 [8.36]
MW-906	NS	NS	NS	--	31	--	2	1J	4	2 [3.39]
MW-907	NS	NS	NS	18	NA	9J	12	5	13	11 [8.60]
MW-908	NS	NS	NS	--	NA	-/2J	--	--	2	1 [1.13]
MW-915	NS	NS	NS	NS	NS	10J/8J	3	3	7	6/5 [8.15/8.06]

Notes:

--	=	Not detected above sample quantitation limit
NA	=	Not analyzed
J	=	Estimated value
NS	=	Not sampled
µg/L	=	micrograms per liter
-/-	=	Sample and duplicate sample result
*	=	Samples collected on this date were analyzed using two methods: USEPA Method 10/92, and GC/MS SIM Method (whose results are in brackets).

W0119521T.CD/24

TABLE 5-7
SUMMARY OF GROUNDWATER MISCELLANEOUS ANALYSIS - SEPTEMBER 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

COMPOUND/ANALYTE	PQL	MW-NEX-004R	MW-NASB-204/Dup
Fuel Oil in Water (μg/L)	50	93000	--/--
Gasoline in Water (μg/L)	50	35000	69/69

Notes:

The following monitoring wells had no detections of Fuel Oil or Gasoline in Water, and are therefore not included in the Table: MW-NEX-001R, MW-NEX-002, MW-NEX-003, MW-NEX-005, MW-NASB-006, MW-NASB-007, MW-NASB-008, MW-NASB-009, MW-NASB-010, MW-NASB-020, MW-NASB-021, MW-NASB-022, MW-901, MW-902, MW-903, MW-904, MW-905, MW-906, MW-907, MW-909, MW-910, MW-914, MW-915, MW-916

Dup	=	Duplicate
PQL	=	Practical Quantitation Limit
μg/L	=	micrograms per liter
--	=	not detected above sample quantitation limit

TCL SVOCs were detected in three wells (Table 5-8). Pentachlorophenol, at 2J μg/L in MW-NASB-006, and bis(2-ethylhexyl)phthalate, detected at 1J μg/L in only the duplicate sample for MW-NASB-021, may be site-related or sampling/analysis artifacts and are not considered contaminants of concern at such low detections. The other SVOC detections are from the NEX well MW-NEX-004R. Naphthalene (at 750 μg/L) and 2-methylnaphthalene (at 180 μg/L) may be considered indicators of gasoline or fuel oil. Only one groundwater sample and the duplicate sample from MW-204 was analyzed for pesticides/PCBs and the results were non-detect.

Total inorganic analyte concentrations in Site 9 groundwater (Table 5-9) show a similar result to previous investigations. Samples collected in this investigation were collected using low-flow techniques and results show comparable or higher concentrations to those collected using conventional methods. One example is the results from MW-915, compared in Table 5-10, which show a similar distribution of inorganic compounds occurring regardless of the sampling method. The only "unusual" result is that for chromium in MW-910 which was detected at 177 μg/L. This is a somewhat higher detection than for the other wells and is above the MCL

TABLE 5-8
SUMMARY OF GROUNDWATER SEMIVOLATILE ORGANIC ANALYSIS - SEPTEMBER 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

COMPOUND/ANALYTE	CRQL	MW-NEX-004R	MW-NASB-006	MW-NASB-021/Dup
TCL SEMIVOLATILE ORGANIC COMPOUNDS (μg/L)				
2,4-Dimethylphenol	10	36	--	--/--
Naphthalene	10	750	--	--/--
2-Methylnaphthalene	10	180	--	--/--
Pentachlorophenol	25	--	2J	--/--
bis(2-Ethylhexyl)phthalate	10	--	--	--/1J
TCL PESTICIDE/POLYCHLORINATED BIPHENYL COMPOUNDS (μg/L)			**MW-NASB-204/Dup**	
			--/--	

Notes:

The following monitoring wells had no detections of any semi-volatile organic compounds, and are therefore not included in the Table: MW-NEX-001R, MW-NEX-002, MW-NEX-003, MW-NEX-005, MW-NASB-007, MW-NASB-008, MW-NASB-009, MW-NASB-010, MW-NASB-020, MW-NASB-021, MW-NASB-022

MW-NASB-006 was the only sample analyzed for Pesticide/PCB

CRQL = Contract Required Quantitation Limit
μg/L = micrograms per liter
-- = not detected above sample quantitation limit

W0119521T.CD/11

TABLE 5-9
SUMMARY OF GROUNDWATER INORGANIC ANALYSIS - SEPTEMBER 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

ANALYTE (µg/L)	CRDL	+MCL	+ +MEGs	+ + +Bkg. Conc. of Inorg./NASB	MW-NEX-001R	MW-NEX-002/Dup	MW-NEX-003	MW-NEX-004R	MW-NEX-005	MW-NASB-006
Aluminum	200	50-200S	1430	652	--	--	--	--	--	1370
Antimony	60	6	-	-	--	--	--	--	--	--
Arsenic	10	50R	-	2.8	--	--	--	--	--	10.7
Barium	200	2000	1500	17	36.6J	25.5J/--	50.8J	28.9J	--	144.J
Calcium	5000	-	-	18000	10700J	14500J/14300J	56300J	42600J	9640J	9240J
Chromium	10	100	100	6.3	24.0	30.9/12.2	3.7J	--	3.2J	49.8
Cobalt	50	-	-	8	--	3.2J/1.4J	4.3J	--	--	5.4J
Copper	25	1300T	-	4	--	--	--	--	--	--
Iron	100	300S	-	4430	1670	915J/607J	1080J	1120	336J	9330J
Lead	3	15T	20	10	--	--	--	--	--	--
Magnesium	5000	-	-	8300	1650J	5850/5780	14000	4420J	3190J	3510J
Manganese	15	50S	200	570	51.0	128/118	2800	1310	29.0	140
Nickel	40	100	150	-	43.6	22J/19.5J	8.7J	6.7J	4.3J	39.9J
Potassium	5000	-	-	4800	1670J	3520J/3470J	10200	10100	3010J	9940
Sodium	5000	-	-	52500	23700J	10100J/9930J	152000J	53400J	9650J	28900J
Vanadium	50	-	-	9.2	1.9J	--	--	--	--	4.7J
Zinc	20	5000S	-	105	--	--	18.9J	--	16.0J	33.5J

W0119521T.CD/19

continued

TABLE 5-9
SUMMARY OF GROUNDWATER INORGANIC ANALYSIS - SEPTEMBER 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

ANALYTE (µg/L)	MW-NASB-007	MW-NASB-008	MW-NASB-009	MW-NASB-010	MW-NASB-020	MW-NASB-021	MW-NASB-022	MW-NASB-204/Dup	MW-901	MW-902
Aluminum	16300	--	1370	12600	--	1400J	--	--	--	--
Antimony	2.0J	--	--	--	--	--	--	--	--	--
Arsenic	73.4	--	--	7.8J	4.2J	3.4J	--	15.4/15.3	--	--
Barium	84.9J	--	49.5J	66.5J	--	--	33.2J	25.2/21.7J	--	73.5J
Calcium	20900J	16700J	19800J	12400J	5650J	5720J	22500J	12800J/ 13300J	3770J	14900J
Chromium	123	8.2J	6.1J	68.1	--	3.2J	--	--	0.75J	3.6J
Cobalt	--	1.0J	2.0J	10.6J	--	2.6J	--	--	--	7.3J
Copper	43.7	--	--	14.5J	--	--	--	--	--	--
Iron	42900J	1280J	4190J	22400J	943J	3720	908	6030/6260	234	148
Lead	13.3	--	--	14.2	--	--	--	--	--	--
Magnesium	13700	1970J	3330J	2600J	2230J	2430J	2860J	3400J/ 3470J	1650J	2830J
Manganese	1060	144	554	1220	675	382	924	5900/6100	204	2000
Nickel	102	6.6J	6.5J	52.0	--	4.4J	6.1J	3.8J/3.6J	--	9.0J
Potassium	7350	3680J	3680J	4560J	1040J	2300J	4660J	1230J/ 1240J	1220J	1330J
Sodium	17600J	33500J	45700J	45500J	11500J	37200J	53100J	11600J/ 11900J	35400J	34600J
Vanadium	32.5J	--	4.8J	21.4J	--	3.1J	2.0J	--	--	--
Zinc	72.1J	--	--	20.5J	--	53.6J	--	--	--	--

continued

TABLE 5-9
SUMMARY OF GROUNDWATER INORGANIC ANALYSIS - SEPTEMBER 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

ANALYTE (µg/L)	MW-903	MW-904	MW-905	MW-906	MW-907	MW-908	MW-909	MW-910	MW-914	MW-915/Dup	MW-916
Aluminum	--	--	2550J	--	--	--	--	2950J	2280J	3470J/--	--
Antimony	--	--	--	--	--	--	--	--	--	--	--
Arsenic	--	--	47.4	--	--	--	--	--	6.7J	--	--
Barium	--	--	--	--	21.2J	--	--	--	384J	550J/438J	70.3J
Calcium	11500J	22400J	7070J	11000J	35000J	23900J	1590J	3260J	32700J	51000J/49900J	35600J
Chromium	--	--	--	--	--	1.7J	4.1J	177	6.7J	11.3/4.4J	1.9J
Cobalt	--	--	--	--	--	--	--	7.8J	2.3J	1.8J/0.70J	--
Copper	--	--	--	--	--	--	9.4J	--	--	--	--
Iron	6260	205	2970	403	751	--	139	4000	44900	8190/6960	--
Lead	--	--	--	--	--	--	--	--	7.8J	5.1J/--	--
Magnesium	5680	4730J	3310J	3870J	4310J	2230J	661J	1300J	2030J	4110J/3900J	3020J
Manganese	327	197	65.7	48.5	5800	484	6.2J	109	139	551/615	1040
Nickel	2.7J	--	8.2J	--	6.6J	--	13.3J	141	9.6J	11J/7.8J	2.7J
Potassium	2280J	2240J	5300	1970J	2900J	1970J	--	566J	2970J	7060/7080	8870
Sodium	25100J	28400J	56800J	32200J	19900J	24900J	--	--	--	21800J/21800J	63100J
Vanadium	--	0.60J	5.2J	--	2.1J	--	--	5.7J	0.64J	7.4J/1.0J	--
Zinc	--	--	--	--	--	--	--	--	--	--	--

Notes:

Samples collected 18 through 25 September 1995. All values are µg/L (micrograms per liter)

CRDL = Contract Required Detection Limit (Inorganics)
Dup = Duplicate Sample
J = Estimated Value
MCL = Maximum Contaminant Level
MW = monitoring well
R = Under Review
S = Secondary Drinking Water Standard
T = Based on Treatment Technique. Value given is an action level.

\+ = According to Safe Drinking Water Act (SDWA), U.S. Environmental Protection Agency (USEPA), 1992, Fact Sheet: Drinking Water Regulations and Health Advisories. Office of Water, Washington, D.C., December, 1992.
\+ + = Maximum Exposure Guideline, as established in the Maine Drinking Water Rules (10-144A CMR - Chapters 231-233).
\+ + + = Background concentrations as reported in Table 2-7, Technical Memorandum Site 9: Neptune Drive Disposal Site (ABB-ES, 1994).
\- = Value not available
-- = Not detected above sample quantitation limit

TABLE 5-10
COMPARISON OF INORGANIC RESULTS FOR MW-915

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

	MW-915/DUP	
ANALYTE (µG/L)	CONVENTIONALLY SAMPLED ON 3/93	SAMPLED BY LOW-FLOW TECHNIQUE ON 9/95
Aluminum	1910/1830	3470J/--
Barium	443/441	550J/438J
Calcium	51300/51300	51000J/49900J
Chromium	--/4.3J	11.3/4.4J
Cobalt	--/--	1.8J/0.70J
Iron	12000J/12100J	8190/6960
Lead	--/--	5.1J/--
Magnesium	4490J/4500J	4110J/3900J
Manganese	991/1010	551/615
Nickel	--/--	11J/7.8J
Potassium	7430/7430	7060/7080
Sodium	27900/27900	21800J/21800J
Vanadium	--/--	7.4J/1.0J

Collected samples are unfiltered.

and MEG of 100 μg/L. Chromium was not detected in this well when it was sampled for inorganics in February 1993.

6.0 SUMMARY AND CONCLUSIONS

Since about 1984, numerous exploration activities have been conducted at Site 9 with the intent of characterizing the site's environment. A heightened attention was raised when it became known that an incinerator and landfill operation on site may have included the disposal of potentially hazardous wastes such as solvents and paint sludges. Numerous environmental sampling and characterization efforts have included soil gas, geophysical and TerraProbe surveys, boring and monitoring well installations, groundwater sampling, stream and sediment sampling, seep sampling, surface soil, boring soil, and test pit soil sampling, cone penetrometer and groundwater field screening, and aquifer permeability testing. The landfill has been characterized and delineated, and a septic leach field on site has been investigated and determined not to be a continuing source of VOC contamination to the groundwater.

Results of previous investigations at this site have identified groundwater contaminants present at concentrations greater than drinking water standards; however, no clear indication of a current source area of contamination had been

identified. These previous investigations have produced data that suggest no remedial action is warranted but that continued groundwater monitoring should be conducted both north and south of Neptune Drive. The purpose of this Source Investigation was to further evaluate potential source areas around the site.

Sampling and analysis of a soil sample at the TerraProbe T-23 location suggests that a fuel spill may have occurred in that area; detections of 200 mg/kg for TPH-gasoline and 37 mg/kg for TPH-fuel oil were obtained from subsurface soils associated with "fuel odor" at the 8- to 10-foot depth interval. Fuel-related compounds were not observed in adjacent or downgradient monitoring wells, suggesting that the area of impacted soil is not extensive. The Navy concludes that the observed levels of TPH in soils at this location do not justify any further action.

Characterization of soil, which was previously described as appearing "fuel soaked" (ABB-ES, 1994a), was obtained near the MW-914 location by installing test boring TB-918 approximately 3 feet from MW-914. This area is located in an old buried drainage channel and the material's appearance may actually be due to naturally decaying organic matter. Additionally, the detection of PAHs in soils from this boring may also be directly associated with the high organic content and its location

in an old drainage area. This drainage area is similar to other deeply incised streams located on base, and at one time collected the runoff from a major portion of the base. The results of groundwater samples collected from MW-914 have not detected contaminants of concern. Further action other than the continuation of long term monitoring is not recommended for this location.

Four test pits were installed, three to assess the presence of landfill materials, and one to test for the presence of an old drainage pipe. Landfill materials were not observed in any of the test pits and the old drainage pipe was not found. Laboratory analytical samples collected from the test pits did not detect contaminants of concern.

A total of 27 monitoring wells were sampled during this exploration effort. This number includes 23 previously installed wells and four newly installed wells. These four new wells were placed in areas upgradient of the landfill, west of the landfill, and below a monitored zone just downgradient of the landfill. Vinyl chloride was detected only in the new downgradient well (MW-NASB-021) at 0.11 μg/L, which is below the Maine MEG of 0.15 μg/L. This well was installed at a depth to complement the water table well MW-915, which has had consistent detections for vinyl chloride up to 10J μg/L through five sampling events. Other volatiles of

concern were not detected in these new wells. Other volatile halogenated organics (VHO), including 1,1-DCA, DCE, and trichloroethene were detected in wells previously shown to have these contaminants. Results suggest that concentrations have stabilized over time and that the source of these VHOs may have been historical disposal in the landfill area and possibly in the area behind Building 201. Vinyl chloride was detected for the first time in MW-909 located south of the unnamed stream at 0.15 μg/L, which is equal to the Maine MEG, and is just above the practical quantitation limit of 0.10 μg/L. If this detection is confirmed in subsequent monitoring rounds, it may indicate that either contaminants are migrating beyond the stream, or that a possible source exists to the south of MW-909. Because of these detections, continued long term monitoring of all wells is recommended. All wells were sampled using low-flow sampling techniques. Results indicate that either the low-flow sampling method is no more effective in detecting low concentrations of vinyl chloride, contamination is being naturally attenuated over time, or a combination of these two possibilities exists.

Previous interpretations state that a continuing source of contamination (other than the landfill ash as a likely source of inorganics) is not causing environmental impact. This interpretation is not changed based on results of this investigation. Therefore,

no remedial action is warranted at Site 9, and actions other than the continuation of the long-term monitoring program currently in place are not recommended. The continued monitoring of the groundwater will more clearly show whether contaminant concentrations change over time and whether natural attenuation is occurring.

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ABB-ES	ABB Environmental Services, Inc.
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	Contract Laboratory Program
CRQL	Contract Required Quantitation Limits
1,1-DCA	1,1-dichloroethane
DCE	1,2-dichloroethene
DQO	data quality objective
FS	Feasibility Study
GC/MS	gas chromatograph/mass spectrometer
ID	inside diameter
IRP	Installation Restoration Program
MCL	maximum contaminant level
MEDEP	Maine Department of Environmental Protection
MEG	maximum exposure guidelines
mg/kg	milligrams per kilogram
NAS	Naval Air Station
NPL	National Priorities List
PAH	polycyclic aromatic hydrocarbons
PARCC	precision, accuracy, representativeness, completeness, and comparability
PCB	polychlorinated biphenyls
PID	photoionization detector
QAAP	Quality Assurance Program Plan
RI	Remedial Investigation
ROD	Record of Decision

SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act
SOW	statement of work
SVOC	semivolatile organic compound
TAL	target analyte list
TPH	total petroleum hydrocarbons
USEPA	U.S. Environmental Protection Agency
μg/kg	micrograms per kilogram
μg/L	micrograms per liter
VHO	volatile halogenated organics
VOC	volatile organic compound

REFERENCES

ABB Environmental Services, Inc., 1992. "Engineering Evaluation/Cost Analysis Building 95"; Portland, Maine; November.

ABB Environmental Services, Inc., 1994a. "Technical Memorandum Site 9: Neptune Drive Disposal Site"; NAS Brunswick; Portland, Maine; June 1994.

ABB Environmental Services, Inc., 1994b. "Long Term Monitoring Plan Building 95, Sites 1 and 3 and Eastern Plume"; NAS Brunswick; Portland, Maine; June 1994.

ABB Environmental Services, Inc., 1994c. "Interim Record of Decision for the Groundwater Operable Unit at Site 9"; NAS Brunswick; Portland, Maine; September 1994.

ABB Environmental Services, Inc., 1995. "Source Investigation Sampling and Analysis Plan Site 9, Neptune Drive Disposal Site"; prepared for U.S. Department of the Navy; Portland, Maine; January 1995.

Beardsley, Nancy, 1993. Letter to Fred Evans, Northdiv Remedial Project Manager; regarding comments on additional source investigations at Site 9, NAS Brunswick. MEDEP Project Manager, Augusta, Maine; December 8, 1993.

Butler, H.T, M.E. Coddens, C.F. Poole, 1984. "Qualitative Identification of Polycyclic Aromatic Hydrocarbons by High Performance Thin-layer Chromatography and Fluorescence Scanning Densitometry. J Chromatog 290:113-126.

E.C. Jordan Co., 1988a. "Remedial Investigation/Feasibility Study Work Plan NAS Brunswick"; Portland, Maine; April 1988.

E.C. Jordan Co., 1988b. "Quality Assurance Program Plan - U.S. Navy Installation Restoration Program"; Portland, Maine; February 1988.

E.C. Jordan Co., 1989. "Additional Sampling Plan, RI/FS Program NAS Brunswick"; Portland, Maine; August 1989.

E.C. Jordan Co., 1990a. "Draft Phase II Feasibility Study NAS Brunswick"; Portland, Maine; August 1990.

E.C. Jordan Co., 1990b. "Draft Final Remedial Investigation Report NAS Brunswick"; Portland, Maine; August 1990.

E.C. Jordan Co., 1990c. "Post-Screening Work Plan NAS Brunswick"; Portland, Maine; July 1990.

E.C. Jordan Co., 1991. "Draft Final Supplemental Remedial Investigation Report NAS Brunswick"; Portland, Maine; August.

Edwards, N.T., 1983. "Polycyclic Aromatic Hydrocarbons (PAHs) in the Terrestrial Environment - A Review." J Environ Qual 12:427-441.

Evans, Fred, 1994. Letter to Nancy Beardsley, MEDEP Project Manager; regarding Source Investigation Work Plan for Site 9, NAS Brunswick and Response to MEDEP's comments of December 8, 1993. Northdiv Remedial Project Manager; Lester, PA; July 19, 1994.

Federal Register, 1990. Vol. 55; No. 143; 40 CFR Part 141 et al. *National Primary and Secondary Drinking Water Regulations*; July 25; p. 30413.

IARC, 1973. "Certain Polycyclic Aromatic Hydrocarbons and Heterocyclic Compounds. Monographs on the Evaluation of Carcinogenic Risk of the Chemical to Man." Vol. 3, Lyon, France; International Agency for Research on Cancer.

Jones, K.C., J.A. Stratford, K. Waterhouse, et al., 1987. "Polynuclear Aromatic Hydrocarbons in U.K. Soils: Long-term Temporal Trends and Current Levels." Trace Subst Environ Health 2:140-148.

Maine Department of Environmental Protection (MEDEP), 1995. "Procedural Guidelines for Establishing Standards for Remediation of 0.1 Contaminated Soil and Ground Water", approved January 11, 1995. Effective February 1, 1995.

Maine Department of Health (MEDOH), 1990. *Revised Maximum Exposure Guidelines*; Robert Frakes, Ph.D, State Toxicologist; May 30.

REFERENCES

Naval Energy and Environmental Support Activity (NEESA), 20.2-047B, 1988. "Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Restoration Program"; June 1988.

U.S. Environmental Protection Agency (USEPA), 1988a. "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA"; USEPA/540/G-89/004; Washington, D.C.; October 1988.

U.S. Environmental Protection Agency (USEPA), 1988b. "Region I Laboratory Data Validation: Functional Guidelines for Evaluating Organics Analysis"; prepared for the USEPA Hazardous Site Evaluation Division; February 1988; modified November 1988.

U.S. Environmental Protection Agency (USEPA), 1988c. "Region I Laboratory Data Validation: Functional Guidelines for Evaluating Inorganics Analysis"; prepared for the USEPA Hazardous Site Evaluation Division; EPA 68-01-7443; June 1988; modified February 1988.

U.S. Environmental Protection Agency (USEPA), 1991a. "National Functional Guidelines for Organic Data Review"; Draft December 1990; revised June 1991.

U.S. Environmental Protection Agency (USEPA), 1991b. "Management of Investigation-Derived Wastes During Site Inspections"; Office of Research and Development; EPA/540/G-91/009; Washington D.C.; May 1991.

U.S. Environmental Protection Agency (USEPA), 1992. "RCRA Groundwater Monitoring: Draft Technical Guidance"; EPA/530-R-93-001; Washington D.C.

Vogt, N.B., F. Brakstad, K. Thrane, et al., 1987. Polycyclic Aromatic Hydrocarbons in Soil and Air: Statistical Analysis and Classification by the SIMCA method." Environ Sci Technol 21:35-44.

White, J.B., R.R. Vanderslice, 1980. "POM Source and Ambient Concentration Data: Review and Analysis." Washington, D.C.; U.S. Environmental Protection Agency; Office of Research and Development; EPA-600/7-80-044.

Windsor, J.G, R.A. Hites, 1979. "Polycyclic Aromatic Hydrocarbons in Gulf of Maine Sediments and Nova Scotia Soils." Geochim Cosmochim Acta 43:27-33.

BORING LOGS

SOIL BORING LOG

Study Area: Neptune Drive - Site 9			
Boring No.: TB-917			
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8-21-95	Completed: 8-21-95	
Method: H.S.A.	Casing Size: 4.25" HSA	PI Meter: TE 580 BOVM	
Ground Elev.:	Soil Drilled: 18'	Total Depth: 18'	
Logged by: TDL	Checked by:	▽ Below Ground: ~9'	
Screen: — (ft.) Riser: — (ft.)	Diam: — (ID) Material: —	Page 1 of: 2	

HEADSPACE AT 25°C
AFTER AGITATION ~30 SEC.

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) SPOON/HEAD SPACE	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-1	0-2		2.0/1.5	0/0	0-0.5 V. DRY, PAVEMENT LOAM & GRASS 0.5-1.5 YELLOW ORANGE & BRN. FINE & MED SAND, DRY, IN LENSES, TR. GRAVEL - FILL		3 6 9 8			
	S-2	2-4		2.0/1.3	0/0	TAN TO BLACK LAMINATED FINE SAND, DRY LOOSE BOTTOM 0.4 IS BLACK ASH FILL W/ GLASS SHARDS, COAL-LIKE GLOSSY BLACK SPECS - DRY FILL		8 9 6 6			
	S-3	4-6		2.0/0.4	0/2	ASH FILL BLACK & RUSTY BROWN W/ GLASS, GRAY ASH, & COAL-LIKE GLOSSY BLACK SPECS (HAS COAL SHEEN) - LIKE CHARCOAL - MOIST		3 3 1 2			
	S-4	6-8	X NO	2.0/0.7	3/2	AS ABOVE - ASH FILL MATERIAL W/ LOT OF GLASS - BLACK & RUSTY BRN. TIP OF SPOON IS BRIGHT YELLOW ORANGE FINE SAND - NOT ENOUGH SOIL FOR HEAD SPACE ~~(TOO WEIGHT~~ COLLECTED VOC HERE & COMPOSITED OTHER ANALYSES FROM 6-8 & 8-10 SPLIT SPOONS (DID DO HEADSPACE) (S-5) NO! TOOK ALL FROM THIS SPOON only		1 2 1 1			
	S-5	8-10	✓	2.0/1.4	32/7.3	YELLOW ORANGE FINE SAND TO 1.0', MOIST, SILTY 1.0-1.4 GRAY SAND - STAINED? WET (LIGHT GRAY) LOOSE (LOW HEAD SPACE DUE TO MOST OF GRAY MAT'L WAS PUT INTO SAMPLE JARS)		2 2 3 3			▽ ~9'

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

Study Area: Neptune Drive - Site 9			
Client: U.S. Navy	Project No. 8733-02	Boring No.: TB-917	
Contractor: N.H. Boring	Date Started: 8-21-95	Protection: D	
Method: H.S.A.	Casing Size: 4.25" HSA	Completed: 8-21-95	
Ground Elev.:	Soil Drilled: 18'	PI Meter: TE 550B OVM	
Logged by: TDL	Checked by:	Total Depth: 18'	
Screen: / (ft.)	Riser: / (ft.)	Diam: / (ID)	Material: /
▽ Below Ground: ~9'		Page 2 of: 2	

HEADSPACE AT ~~20°C~~ 25°

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) SPOON/HEADSPACE	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-6	10-12		2.0/1.5	35/381	0-0.5 LT. GRAY, SATURATED, ODOROUS FINE SAND, WELL SORTED, LOOSE 0.5-1.5 LIGHT BRN. TO YELLOWISH BROWN, MICACEOUS, FINE SAND SP/SM, LOOSE (THIS HEADSPACE DUE TO MOST BEING IN HEADSPACE JAR)		3 4 5 4			
	S-7	12-14		2.0/1.2	2/12.7	TAN TO YELLOWISH ORANGE MICACEOUS FINE SAND, STRATIFIED, SATURATED, LOOSE - SILTY FINE SAND SP/SM		2 2 5 6			
	S-8	14-16		2.0/1.4	0/2	TAN-BROWN SILTY FINE SAND, SATURATED LOOSE, STRATIFIED, MICACEOUS		W/4 2 2 2			
	S-9	16-18		2.0/2.0	0/0	AS ABOVE		2 3 3 4			
						B.O.B. @ 18' NO WELL *NOTE: S-5 & S-6 WAS OF SAME MAT'L.					

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

Study Area: Neptune Drive - Site 9			
Boring No.: TB-9.8			
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8-21-95	Completed: 8-21-95 14:45	
Method: H.S.A.	Casing Size: 4.25" HSA	PI Meter: TE 580B O.M	
Ground Elev.:	Soil Drilled: 20'	Total Depth: 20	
Logged by: T.D.L.	Checked by:	Below Ground: ~ 9'	
Screen: / (ft.)	Riser: / (ft.)	Diam: / (ID)	Material: /
Page 1 of: 2			

HEADSPACE TAKEN AT 27°C

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) Spoon/Headspace	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-1	0-2		2.0/1.3	0/0	0-0.4 BLACK SILT & SAND, DRY TOPSOIL 0.4-1 YELLOW BRN. FI. & MED. SAND (SP) 1-1.3 BROWN FINE & MED. SAND DRY (SP) FILL		2 5 7 6			
	S-2	2-4		2.0/1.1	0/0	YELLOWISH ORANGE FINE SAND, IN LENSES, DRY, LOOSE (SP) FILL		7 10 10 8			
	S-3	4-6	✓	2.0/1.3	0/0	0-0.7 BLACK, DRY RUSTY RED & YELLOW, GRAY ASH FILL MATERIAL W/ 1/2" PIECE OF SLAG OVER REDDISH BRN. FINE SAND, LOOSE, FILL TOOK SAMPLE HERE SAMPLE DISCARDED		4 3 3 3 ~~2 4 3 3~~			
	S-4	6-8		2.0/1.4	0/0	0-0.4 YELLOWISH ORANGE, MOTTLED FINE SAND 0.4-1.4 STRATIFIED V. FINE & WELL SORTED FINE SAND, DRY, LOOSE - looks natural		2 4 3 3			
	S-5	8-10		2.0/1.9	0/0	0-1 AS ABOVE BUT MOIST TO DRY THEN 1.0-1.9 GRAY BRN, SATURATED FINE, V. WELL SORTED SAND W/ BLACK ORGANIC RICH NODULES W/SOME FIBER - AT SATURATED HORIZON IS MOTTLED BLACK LENSES. - SOME MICACEOUS SPECS THROUGHOUT.		1 1→ 1→			▽ = 9'

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

		Study Area: Neptune Drive - Site 9	
		Boring No.: TB-91E	
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8-21-95	Completed: 8-21-95 14:45	
Method: H.S.A.	Casing Size: 4.25" HSA	PI Meter: TE 580 BOVM	
Ground Elev.:	Soil Drilled: 20'	Total Depth: 20	
Logged by: TDL	Checked by:	▽ Below Ground: ~9'	
Screen: — (ft.) Riser: — (ft.)	Diam: — (ID) Material: —	Page 2 of: 2	

Headspace taken at 27°C (by Thermometer)

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) SPOON / HEADSPACE	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-6	10-12		38/1.7	0/0	0-0.9 AS ABOVE - GRAY BRN, MICACEOUS FINE SAND (SM) TOP OF SPOON HAD FIBERS (PLANT)		WEIGHT OF HAMMER			
						0.9-1.7 GRAY BRN, VERY FINE SAND, SATURATED W/ OCCASIONAL BLACK ORGANIC NODULE - BOTTOM 0.1 IS BLACK, FIBROUS MUCK - LOOKS MATURE (SP) w/ ~~sand~~ (PT)					
	S-7	12-14		2.0/0.7	0/0	DARK GRAY TO GRAY BLACK MICACEOUS SAND W/ BLACK WOOD PIECES (LOOKS LIKE SLOW STREAM SEDIMENTS) SATURATED SP/SM		WEIGHT OF RODS THRU 18" WEIGHT OF HAMMER 6"			
	S-8	14-16		2.0/1.0	0/0	DARK GRAY TO GRAY BLACK - AS ABOVE W/ 0.1 OF BLACK SILTY FIBEROUS MAT'L. SP/SM/PT		WEIGHT OF HAMMER			
14:25	S-9	16-18	✓	2.0/2.0	0/8.7 TO 10	0-1.2 AS ABOVE 28-oz. & 14-oz jars 1.2-2.0 SOLID, DENSE LIGHT GRAY SAND ALTERNATING W/ BLACK PEAT/FIBROUS MATERIAL SP/SM/PT SAMPLE COLLECTED 095B918X18X1XX		W/BLOWS 1 2 4			
	S-10	18-20		2.0/1.1	0/X	light GRAY ALTERNATING W/ DARK GRAY FINE SAND, SILTY SAND & ORGANIC-RICH LAYERS - FIBROUS - MICACEOUS SILTY SAND MIXTURE SP/SM/PT		1 2 2 3			
						B.O.B. @ 20'					
						NO WELL INSTALLED					

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

Study Area: Neptune Drive - Site 9			
Boring No.: TB (MW)-NASB-020			
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8-22-95	Completed: 8-22-95	
Method: H.S.A.	Casing Size: 6".25 I.D.	PI Meter: TE 580 B ppm	
Ground Elev.: 58.8	Soil Drilled: 24'	Total Depth: 24'	
Logged by: TDL	Checked by:	▽ Below Ground: ~10'	
Screen: 10 (ft.)	Riser: (ft.)	Diam: 2 (ID)	Material: PVC/40
Page 1 of: 2			

Headspace @ 30" ✓

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm)/Sample/Headspace	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-1	0-2		2.0/1.4	0/0	0-0.7 SILT & F. SAND (LOAM) w/ CRMS POWDERY DRY, LOOSE, ROOTS 0.7-1.4 LT. BRN. F. SAND, TR. C. SAND, WELL SORTED DRY FILL (SP)		3 3 7 7			
	S-2	2-4		2.0/1.0	0/0	LT. BRN. TO YELLOWISH ORANGE V. F. SAND & SILT - AT 0.8 POSSIBLE OLD SURFACE HORIZON BLACK ORGANIC LENSES - LOOSE, DRY, WELL SORTED		12 12 14 15			
	S-3	4-6		2.0/1.7	0/2.7	0-0.4 AS ABOVE 0.4-1.2 LT. GRAY, STRAT. V. F. SAND, TR SILT, V. WELL SORTED, LOOSE, LOOKS NATURAL SP, DRY METAL 5GAL. PAIL HD COMES UP AUGERS		6 9 6 8			
	S-4	6-8		2.0/1.0	0/0	LT. GRAY TO YELLOWISH ORANGE FINE SAND (SILT TOO?) LOOSE, DRY, V. WELL SORTED, STRATIFIED SP		3 6 6 6			
	S-5	8-10		2.0/1.7	4/0	LT. GRAY STRATIFIED W/ YELLOWISH ORANGE LENSES FINE - V. F. SAND, LOOSE, MOIST only AT TIP (PID READING WAS HERE) SP		3 4 5 5			
	S-6	10-12	✓	2.0/1.4	*21/0	AS ABOVE TO 0.9 Then 0.1 THICK RED BRN. LENSE OVER LT. GRAY SILT & SAND, V. WELL SORTED, SATURATED, STRATIFIED		3 4 5 4			
	S-7	12-14		2.0/1.5	0/0	AS ABOVE - SATURATED LT. GRAY W/ OCCASIONAL RUSTY BRN. LENSES - V. F. SAND. V. well SORTED		3 3 3 4			

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

*MAY BE FALSE - WHEN PID IS TURNED OFF THEN ON AGAIN, A READING OF 20 TO 25 IS REGISTERED - This may HAVE HAPPENED HERE.

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

Study Area: Neptune Drive - Site 9			
Boring No.: TB(MW)-NASB-020			
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8-22-95	Completed: 8-22-95	
Method: H.S.A.	Casing Size: 6.25" I.D.	PI Meter: ~~FE~~ 580B OVM	
Ground Elev.: 58.8	Soil Drilled: 24	Total Depth: 24'	
Logged by: TDL	Checked by:	▽ Below Ground: ~10	
Screen: (ft.) Riser: (ft.)	Diam: (ID)	Material:	Page 2 of: 2

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) ~~BZ/BZ~~ HEAD SPACE	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-8	14-16		2.0/1.3	0/0	AS ABOVE TO 0.7 then 0.1 Thick IRON RED Layer Then AS ABOVE - light GRAY, SATURATED FINE SAND, MICACEOUS V. WELL SORTED SP (DRILLERS ADDED water TO keep Running SAND PROBLEM TO MINIMUM) ≈ 15 GAL.		1 1 2 2			
	S-9	16-18		2.0/1.0	0/0	LT. GRAY V.F. SAND (SILT?) ~~SATURATED~~ SATURATED, MICACEOUS, STRATIFIED, LOOSE (ADDED ~10 GAL. water)	SP	1 1 1 2			
	S-10	18-20		2.0/1.4	0/0	LT. GRAY, V. WELL SORTED, MICACEOUS F. SAND. SATURATED	SP	1 2 2 2			
	S-11	20-22		2.0/1.4	0/0	AS ABOVE	SP	W.O.R./W.O.R./1-1			
	S-12	22-24		2.0/1.4	0/0	AS ABOVE TO 0.5 0.5-0.6 REDDISH FINE SAND 0.6-1.2 GRAY SILT, SL/MOD. PLASTIC, FIRM, SATURATED, MASSIVE 1.2-1.4 DARK GRAY SILT/CLAY, FIRM, SATURATED	ML/CL	W.O.R./W.O.R./1-2			
						B.O.B. @ 24' WILL SET WELL					

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

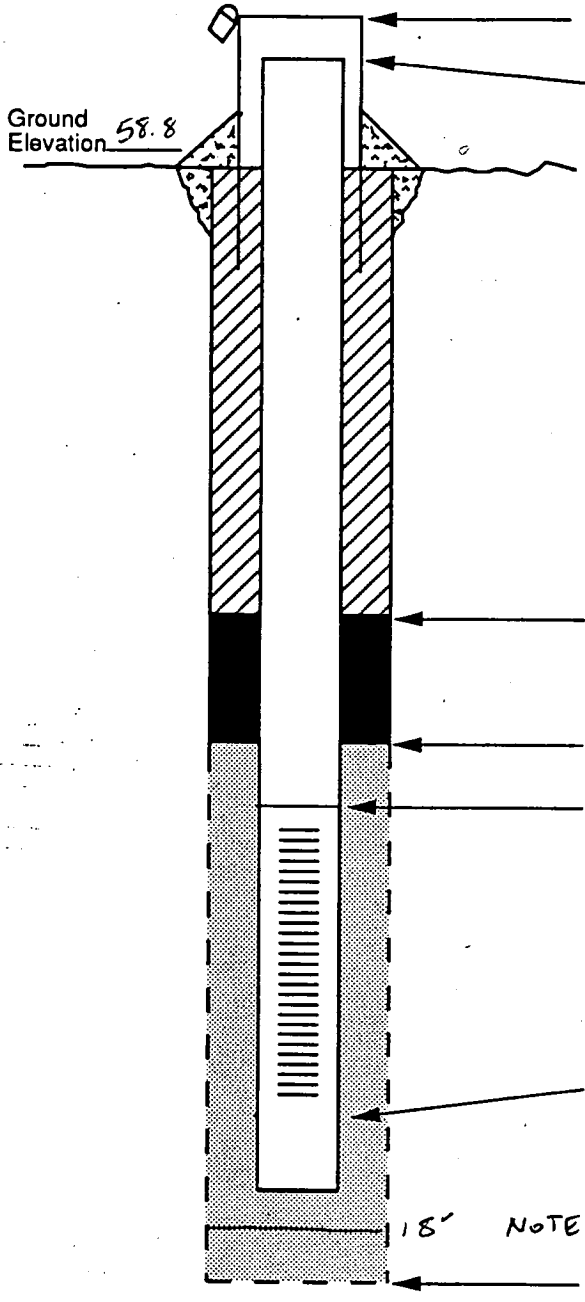
SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

9508017D 7

MONITORING WELL INSTALLATION DIAGRAM

Project: NASB
Study Area: Sit 9
Driller: New Hampshire Boring
Project No.: 8733-02
Boring No.: TB(MW)-NASB-020
Drilling Method: H.S.A.
Date Installed: 8-22-95
Development Method: Bump and Surge
Field Geologist: TDL/BKB



Elevation of Top of Surface Casing: 61.86
Stick-up of Casing Above Ground Surface: 3'
Elevation of Top of Riser Pipe: 61.68
Type of Surface Seal: CONCRETE
Type of Surface Casing: STEEL

ID of Surface Casing: 4"

Diameter of Borehole: NOM. 10"

Riser Pipe ID: 2"
Type of Riser Pipe: SCH 40 PVC

Type of Backfill: CONCRETE MIX

Elevation of Top of Seal: 56.8
Depth of Top of Seal: 2'
Type of Seal: BENT. PLUG

Elevation of Top of Sand: 53.8
Depth of Top of Sand: 5'
Elevation of Top of Screen: 51.8
Depth of Top of Screen: 7'

Type of Screen: SCH 40 PVC
Slot Size x Length: 10' x 0.010"
ID of Screen: 2"

Type of Sandpack: SILICA SAND - FILTER PACK

Elevation of Bottom of Screen: 17' JDZ 10/18/96
Depth of Bottom of Screen: 41.8
Depth of Sediment Sump with Plug:

NOTE: Natural Cave between 24' AND 18' JDZ 10/18/96

Elevation of Bottom of Borehole: 34.8
Depth of Bottom of Borehole: 24'

MONITORING WELL INSTALLATION DIAGRAM
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

9508017D 16

ABB Environmental Services, Inc.

SOIL BORING LOG

Client: U.S. Navy	Project No. 8733-02	Study Area: Neptune Drive - Site 9
		Boring No.: SB-021
		Protection: D
Contractor: N.H. B ring	Date Started: 8/23/95	Completed: 8/24/95
Method: H.S.A.	Casing Size: 6" ID HSA	PI Meter: 10.0 EV # M00106
Ground Elev.: 56	Soil Drilled: 50'	Total Depth: 50'
Logged by: BK Butler	Checked by:	Below Ground: ~9'
Screen: 5 (ft.) Riser: (ft.)	Diam: 2" (ID) Material: Sch40 PVC	Page 1 of: 4

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) (spoon headspace)	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
						Brown to Dk Brown gravelly sand fill. Drilled w/o sampling	Fill				
16	M S-1	16-18		1.1/2.0	0/38	16-16.5' - brown to gray fine-med SAND/w little to trace fine gravel. wet. wellgraded.	SW	1 1 1 1			
						16.5-17.5' - black organic matter (Peat) /w roots, little f. sand, wet. Mica.	Pt				
18						17.5-18 Grey sand in spoon tip.	SW				
	M S-2	18-20	OVGO21K20X1XX	1.3/2.0	0/2.0	Gray fine SAND/w tr. silt, little med. sand, tr. gravel. Black organic (Pt) layer/w roots @ midpoint, wet, Poorly graded	Sp / Pt / Sp	3 3 4 6			
20						20-20.2' - black sandy pt/w tr. roots, fine sand	Pt				
	M S-3	20-22		1.1/2.0	0/8.8	20.2-21.8 - gray fine sand /w tr. iron staining/laminae. 21.8-22' - reddish brown stained fine sand, poorly graded, wet	Sp	3 4 5 4			
22	M S-4	22-24		1.1/2.0	0/5.9	Brown fine SAND/w little-trace med sand, mica flakes, tr. iron staining, poorly graded, wet.	Sp	1 3 4 7			
24	M S-5	24-26		0.7/2.0	0/0	Brown changing downward to orange brown fine SAND/w tr. silt, wet, poorly graded	Sp	2 2 4 6			

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (li)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

95080170 7

SOIL BORING LOG

Study Area: Neptune Drive - Site 9			
Boring No.: SB-021			
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8/23/95	Completed: 8/24/95	
Method: H.S.A.	Casing Size: 6" ID HSA	PI Meter: 10.0 ev, #M00106	
Ground Elev.: 56	Soil Drilled: 50'	Total Depth: 50'	
Logged by: BK Butler	Checked by:	Below Ground:	
Screen: 5 (ft.) Riser: (ft.)	Diam: 2" (ID)	Material: Sch40PVC	Page 2 of: 4

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
26	M S-6	26-28'		1.1/2.0	0/0	Brown to orange brown fine SAND, poorly graded, wet.	Sp	1 2 3 4			
28	M S-7	28-30		1.4/2.0	0/0	Grayish brown fine SAND, some faint orangebrown staining, poorly graded, wet	Sp	WOH 1 2			
30	M S-8	30-32		1.5/2.0	0/0	As Above. Grayish brown fine SAND, orangish brown staining bottom third of spoon, poorly graded, wet.	Sp	WOH 2 3			
32	M S-9	32-34	0950021x34x1xx	1.4/2.0	0/0	Gray fine-med SAND/w some orange stained laminae, poorly graded, wet. silty fine sand in spoon tip.	Sp	WOH/1 1/3/12			
34	M S-10	34-36		0.9/2.0	0/0	Gray fine SAND/w little/tr. Silt laminae, some orange-brown staining wet, poorly graded	M.L Sp	w/3/4/5			

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

Sample 0950021x34x1xx
Not selected for off-site analysis.

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

Study Area: Neptun Driv - Site 9			
Boring No.: SB-021			
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8/23/95	Completed: 8/24/95	
Method: H.S.A.	Casing Size: 6" ID HSA	PI Meter: 10.0eV, #M00106	
Ground Elev.: 56	Soil Drilled: 50'	Total Depth: 50'	
Logged by: BButler	Checked by:	▽ Below Ground:	
Screen: 5 (ft.) Riser: (ft.)	Diam: 2" (ID)	Material: Sch40 PVC	Page 3 of: 4

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
36	M S-11	36-38		1.3/2.0	0/0	Gray fine SAND/w tr. silt poorly graded, tr. orange staining, faintly laminated, wet.	Sp	W 4 4 5			
38	M S-12	38-40		1.5/2.0	0/0	Gray fine SAND/w tr. silt poorly graded tr. orange staining, wet.	Sp	W 3 7 12			
40	M S-13	40-42		1.7/2.0	0/0	Gray fine SAND/w tr. silt, tr. 1"-thick silt laminae (2), faint tr. orange staining wet, poorly graded.	Sp	2 4 3 7			
42	M S-14	42-44		0.8/2.0	0/0	Gray very fine SAND/w little silt, faint brown staining, poorly graded, wet.	Sp	7 6 12 18			
44	M S-15	44-46		0.8/2.0	0/0	As Above	Sp	4 7 6 10			

PROPORTIONS	(-) AMOUNT (+)
Trace (tr)	0-10%
Little (li)	10-20%
Some (so)	20-35%
and	35-50%

ABBREVIATIONS

f = fine	gr = gray	MS = Split Spoon
m = medium	bn = brown	BW = Screened Auger
c = coarse	blk = black	HP = Hydropunch

W = weight of rods

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

Study Area: Neptune Drive - Site 9			
Boring No.: SB-021			
Client: U.S. Navy	Project No.: 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8-23-95	Completed: 8-24-95	
Method: H.S.A.	Casing Size: 6" ID HSA	PI Meter: 10.0eV #M00106	
Ground Elev.: 56	Soil Drilled: 50'	Total Depth: 50'	
Logged by: BButler	Checked by:	▽ Below Ground:	
Screen: 5 (ft.)	Riser: (ft.)	Diam: 2" (ID)	Material: PVC
Page 4 of: 4			

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
46	NS	NS		NS	NS	No sampling 46-48'	SP				
						Drilling water changes to gray ~47' (Top of Presumpscot)					
48	m 5-16	48-50'		2.0 / 2.0	0 / 0	Blue-gray clayey silt/w tr. fine SAND, wet, soft Presumpscot fm.	ML	WWII			
50						BOB = 50' bgs					

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

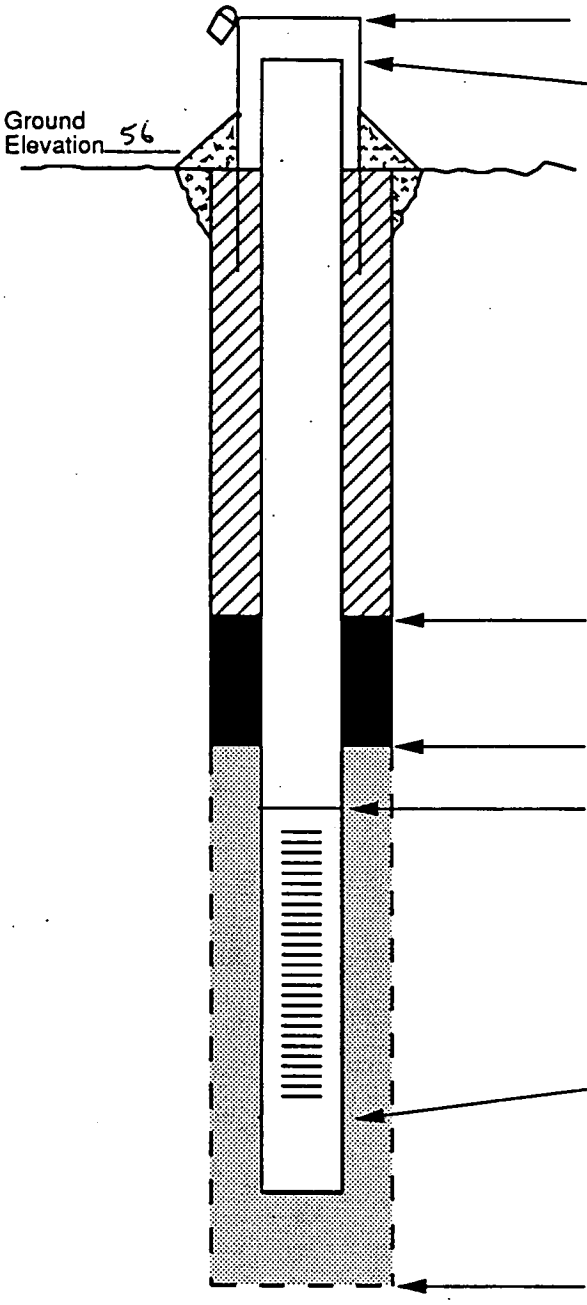
9508017D 7

MONITORING WELL INSTALLATION DIAGRAM

Project: NASB
Project No.: 8733-02
Field Geologist: BK Beth

Study Area: Sit 9
Boring No.: MW-021
Date Installed: 8-24-95

Driller: New Hampshire Boring
Drilling Method: H.S.A. 6" ID
Development Method: Pump & Surge



Elevation of Top of Surface Casing: 58.03
Stick-up of Casing Above Ground Surface: ~2.77'
Elevation of Top of Riser Pipe: 57.89
Type of Surface Seal: SAKRETE
Type of Surface Casing: STEEL

ID of Surface Casing: 4"

Diameter of Borehole: NOM. 12"

Riser Pipe ID: 2"
Type of Riser Pipe: SCH 40 PVC

Type of Backfill: NATURAL CAVE & SOIL CUTTINGS

Elevation of Top of Seal: 29'
Depth of Top of Seal: ~27'
Type of Seal: BENT. SLURRY

Elevation of Top of Sand: 18.5
Depth of Top of Sand: 37.5'
Elevation of Top of Screen: 13.5
Depth of Top of Screen: 42.5'

Type of Screen: SCH 40 PVC
Slot Size x Length: 0.010" x ~~10'~~ 5'
ID of Screen: 2"

Type of Sandpack: SILICA SAND

Elevation of Bottom of Screen: 8.5
Depth of Bottom of Screen: 47.5'
Depth of Sediment Sump with Plug:

Elevation of Bottom of Borehole: +6
Depth of Bottom of Borehole: 50'

MONITORING WELL INSTALLATION DIAGRAM
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

9508017D 16

SOIL BORING LOG

Client: U.S. Navy	Project No. 8733-02		Study Area: Neptune Drive - Site 9
			Boring No.: TB (MW)-NAS8-022
			Protection: D
Contractor: N.H. Boring	Date Started: 8-22-95		Completed: 8-22-95
Method: H.S.A.	Casing Size: 6.25" ID		PI Meter: TE 580B OVM
Ground Elev.: 56.7	Soil Drilled: 24'		Total Depth: 24'
Logged by: TDL	Checked by:		▽ Below Ground: ~7.5/8'
Screen: (ft.)	Riser: (ft.)	Diam: (ID) / Material:	Page 1 of: 2

Headspace Temp. = 24°C

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) SPONY/HEADSPACE	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-1	0-2		2.0/1.4	0/0	0-0.6 TOPSOIL - ROOTS, GRASS, LOAM 0.6-1.4 YELLOWISH BRN/ORANGE SILT & V. FINE SAND, DRY, TR. GRAVEL AT 0.6 FILL		3 6 6 5			
	S-2	2-4		2.0/1.4	0/0	0-0.6 DK. BRN. TO GREENISH GRAY TO REDDISH BRN. SILT, SOME V.F. SAND, FIRM TO STIFF, DRY, FILL 0.6-1.4 TAN V. WELL SORTED FINE SAND, LOOSE DRY - LOOKS NATURAL - FILL	SP	7 8 8 8			
	S-3	4-6		2.0/1.5	0/0	TAN, V. WELL SORTED, V. FINE SAND, AS ABOVE, LOOSE, DRY - FILL	SP	2 3 4 3			
	S-4	6-8		2.0/1.4	0/0	0-0.4 AS ABOVE - DRY 0.4-1.4 REDDISH BRN. TO OLIVE GRAY MOTTLED SILT & ~~FINE~~ V.F. SAND - VARVED, WET - FIRM TO STIFF, NON/SL. PLASTIC - BREAKS AT SAND LENSES	SM/ML	4 4 4 3			▽ ~7.5-8
	S-5	8-10	✓	2.0/1.5	0/0	ALT. LAYERS OF SAND, SILT, SAND - TIP OF SPOON IN REDDISH BRN. SILTY FINE SAND - REST OF SPOON IS GRAYISH TAN - SATURATED - SILT LAYERS ARE VARVED, FIRM TOOK ANALYTICAL HERE	SP/SM/ML	2 2 4 4			
	S-6	10-12		2.0/1.0	0/0	REDDISH BRN. TO GREENISH GRAY, VARVED, SILT & SAND TO 0.5 THEN FINE SAND TO END - SATURATED, NON-PLASTIC	SM/ML	1 3 3 3			
	S-7	12-14		2.0/1.0	0/0	REDDISH (SLIGHT) BRN. V.F. SAND, V. WELL SORTED, STRATIFIED, LOOSE SP	SP	W.O. RODS			

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

		Study Area: Neptune Drive - Site 9	
		Boring No.: TB(MW)-NASB-022	
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8-22-95	Completed: 8-22-95	
Method: H.S.A.	Casing Size: 6.25" I.D.	PI Meter: TE 580B OVM	
Ground Elev.: 56.7	Soil Drilled: 24	Total Depth: 24	
Logged by: T.D.L.	Checked by:	Below Ground:	
Screen: (ft.) Riser: (ft.)	Diam: (ID) Material:	Page 2 of: 2	

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm)/~~HEADSPACE~~	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-8	14-16		2.0/1.0	0/0	AS ABOVE	SP	W. OF RODS			
	S-9	16-18		2.0/1.2	0/0	AS ABOVE W/ MICA, TR SILT	SP/ML	W. OF H. / 1 2			
	S-10	18-20		2.0/1.6	0/0	0.5 JJ 8/22/95 0-~~1.6~~ AS ABOVE ~~1.6~~ 0.5-1.6 RED & REDDISH BRN. TO GREENISH GRAY, VARVED SILT & V.F. SAND LENSES, SOFT, SATURATED (ADDING WATER TO MINIMIZE RUNNING SANDS) ~15 GAL. + 20 & 55 GAL.	SP/ML	1 3 4 6			
	S-11	20-22		2.0/0.8	0/0	REDDISH BRN. & GREENISH GRAY TO BRN. STRATIFIED SAND & SILTS - V. WELL SORTED (ADDED 10 GALS.)	SP/ML	1 2 2 2			
	S-12	22-24		2.0/1.1	0/0	0-0.3 AS ABOVE THEN BRIGHT RED SAND LENS THEN ABRUPT CHANGE TO DARK GRAY SILT/CLAYEY SILT/~~CLAY~~ SANDY CLAY for LAST 0.7' - SOFT B.O.B. @ 24' - WILL SET WELL	ML/CL	1 1 → 1	~~NA~~		

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

ABB Environmental Services, Inc.

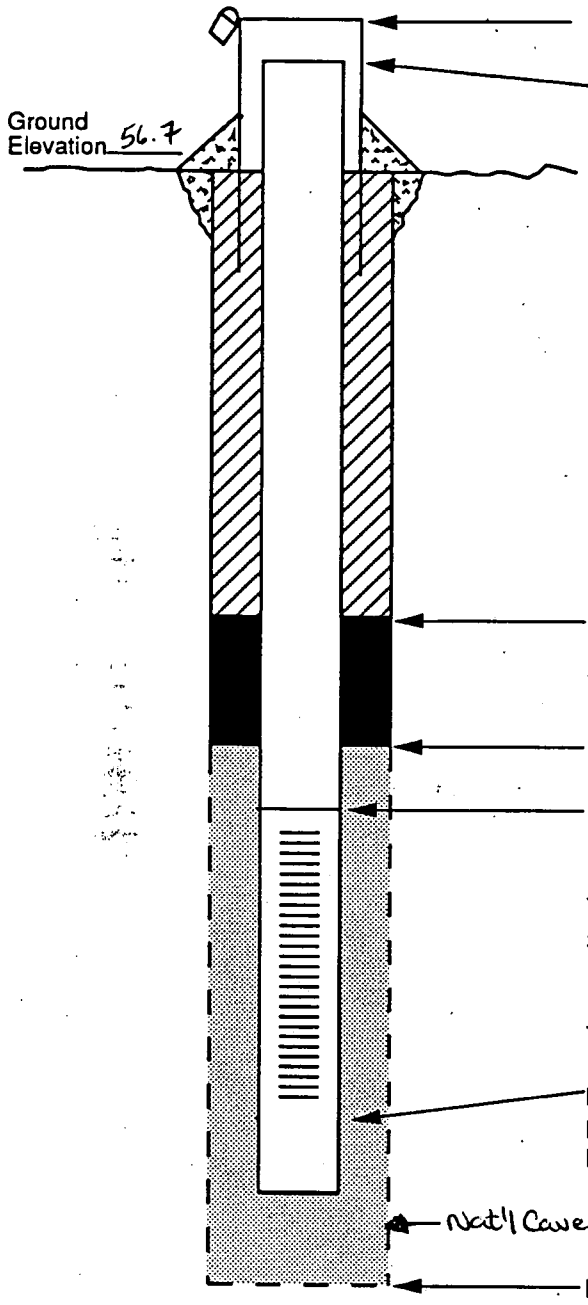
9508017D 7

MONITORING WELL INSTALLATION DIAGRAM

Project: NASB
Project No.: 8733-02
Field Geologist: BK Butler

Study Area: Site 9
Boring No.: MW-022
Date Installed: 8/23/95

Driller: New Hampshire Boring
Drilling Method: H.S.A. 6" ID
Development Method: Pump & surge



Elevation of Top of Surface Casing: 59.68
Stick-up of Casing Above Ground Surface: 3.0'
Elevation of Top of Riser Pipe: 59.52
Type of Surface Seal: Cement
Type of Surface Casing: Steel

ID of Surface Casing: 4"

Diameter of Borehole: 10" diam

Riser Pipe ID: 2"
Type of Riser Pipe: Sch 40 PVC

Type of Backfill: Cement - Sakrete Concrete Mix

Elevation of Top of Seal: 54.7
Depth of Top of Seal: 2' bgs
Type of Seal: Wyoming Bentonite Chips

Elevation of Top of Sand: 52.7
Depth of Top of Sand: 4' bgs
Elevation of Top of Screen: 51.7
Depth of Top of Screen: 5' bgs

Type of Screen: Sch 40 PVC
Slot Size x Length: 0.010 slot x 10'
ID of Screen: 2"

Type of Sandpack: 'Valve' med. Sand

Elevation of Bottom of Screen: 41.7
Depth of Bottom of Screen: 15' bgs
Depth of Sediment Sump with Plug: N/A

Elevation of Bottom of Borehole: 32.7
Depth of Bottom of Borehole: 24' bgs

MONITORING WELL INSTALLATION DIAGRAM
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

9508017D 16

ABB Environmental Services, Inc.

SOIL BORING LOG

Study Area: Neptune Driv - Site 9		
Boring No.: TB(mw)-NAS2-204		
Client: U.S. Navy	Project No. 8733-02	Protection: D
Contractor: N.H. Boring	Date Started: 8-24-95	Completed: 8-24-95
Method: H.S.A.	Casing Size: 6.25" ID	PI Meter: TE 580B OVM #MD011
Ground Elev.: 59.3	Soil Drilled: 20'	Total Depth: 20'
Logged by: TDL	Checked by:	Below Ground: ~7'
Screen: 10 (ft.) Riser: 8 (ft.)	Diam: 2" (ID) Material: SCH40, PVC	Page 1 of: 2

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) ↓ GROWN/HEADSPACE	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-1	0-2		2.0/1.7	0/0	0-0.5 TOPSOIL & GRASS/ROOTS BROWN SAND & SILT, DRY - FILL 0.5-1.7 BROWN SILT & SAND, TR GRAVEL DRY FILL		3 6 7 8			
	S-2	2-4		2.0/1.4	0/0	DK. BRN. SAND, TR. SILT, TR GRAVEL, WELL SORTED, MED. DENSE, DRY, FILL? TR. BLACK ORGANIC RICH NODULES		8 9 6 6			
	S-3	4-6		2.0/1.5	0/1.6	0-1.1 AS ABOVE W/ ROOTS (FEW TO COMMON) 1.1-1.5 YELLOWISH BRN. V.F. SAND, LITTLE SILT, TR. C. SAND, WELL SORTED, DAMP FILL? TOP OF ORIGINAL SOIL?		2 2 1 1			
14:20	S-4	6-8	✓ DISCRETE VOC & COMPOSITED OTHERS	2.0/1.4	0/X	YELLOWISH BRN., F. SAND, TR. SILT, TR. ORGANIC NODULES (BLACK), MOTTLED, W/ TR. REDDISH BRN. LENSES, WET NO HEADSPACE MADE - NOT ENOUGH sample DUE TO ANALYTICAL TAKEN HERE - TOOK VOC HERE & COMPOSITED S-4 & S-5 for SVOC, P/P, Inorg, Fuel OIL & GASOLINE JJ 8/24/95	SM	2 2 1 1			
14:30	S-5	8-10	✓	2.0/1.1	0/X	OLIVE BRN. ~~OVER BLACK~~ SAND, LITTLE SILT W/ BL. ORGANIC NODULES, SATURATED, OVER BLACK, ORGANIC RICH ~~muck~~ muck, SOME ROOTS - STREAM DEPOSIT? NO HEADSPACE JAR DUE TO sample JAR REQUIREMENTS	SM/PT	1 1 1 1			

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 7

SOIL BORING LOG

Study Area: Neptune Drive - Site 9			
Boring No.: TB(MW)-NASB-204			
Client: U.S. Navy	Project No. 8733-02	Protection: D	
Contractor: N.H. Boring	Date Started: 8-24-95	Completed: 8-24-95	
Method: H.S.A.	Casing Size: 6.25" I.D.	PI Meter: TE 580 OVM #M00111	
Ground Elev.: 59.3	Soil Drilled: 20'	Total Depth: 20'	
Logged by: TDL	Checked by:	Below Ground: ~7'	
Screen: 10 (ft.) Riser: 8 (ft.)	Diam: 2 (ID)	Material: Sch 40 PVC	Page 2 of: 2

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	CLP/SCREENING	RECOVERY	PID (ppm) (SPOON/HEADSPACE)	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
	S-6	10-12		2.0/1.5	0/2	BLACK FIBROUS PEAT W/ occasional lense of GRAY or YELLOW BRN. SILTY SAND, or white leached sandy zones, WOOD FIBERS, SATURATED - PEAT	Pt	1 1 1 3			
	S-7	12-14		2.0/1.1	0/0	GRAY TO OLIVE GRAY W/ TR. ORANGE BRN. lense, MICACEOUS V.F. SILTY SAND, LOOSE, SATURATED, STRATIFIED	SP/SM	3 5 7 10			
	S-8	14-16		2.0/1.3	0/1	AS ABOVE - TIP OF SPOON HAS ORANGE-BRN. COLOR - SILTY SAND - V.F. SAND ADD 5 GALS. water for running sands	SP/SM	3 4 8 10			
16:00	S-9	16-18		2.0/1.3	0/0	OLIVE GREEN TO ORANGE BRN. SILT & SAND, V.F. SAND & SILT LENSES, W/ TR. MANGANESE STAINING AT 0.8', WELL SORTED, LOOSE TO MED. DENSE, SATURATED, VARVED IN PLACES, ADD 5 GALS. water	SP/SM	2 7 7 8			
16:20	S-10	18-20		2.0/1.3	0/0	0-1.0 OLIVE GREEN/GRAY & RUSTY RED SILT & V.F. SAND LENSES 1.0-1.3 DARK GRAY CLAYEY SILT TO SILTY CLAY, SL. PLASTIC, SOFT, SAT. VARVED, W/ BLACK ORGANIC RICH VARVES ADDED 5 GAL. water B.O.B. @ 20' Setting well @ 5'-15' bgs screen	SP/SM / CL	5 10 4 3			

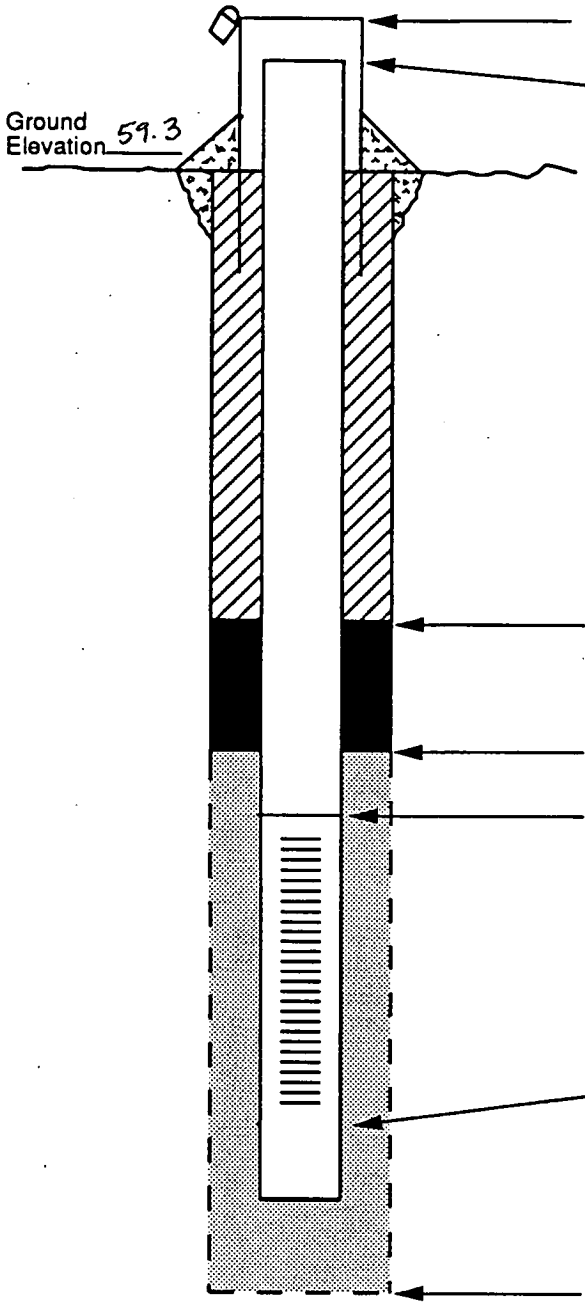
PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-20%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

SOIL BORING LOG
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 7

MONITORING WELL INSTALLATION DIAGRAM

Project: NASB
Study Area: Site 9
Driller: New Hampshire Boring
Project No.: 8733-02
Boring No.: TB(MW)-NASB-204
Drilling Method: H.S.A.
Date Installed: 8-24-95
Development Method: PUMP & SURGE
Field Geologist: T.D.L & B.K.B.



Elevation of Top of Surface Casing: 62.27
Stick-up of Casing Above Ground Surface: NOM. 3'
Elevation of Top of Riser Pipe: 62.09
Type of Surface Seal: SAKRETE MORTAR MIX
Type of Surface Casing: STEEL

ID of Surface Casing: 4"

Diameter of Borehole: NOM. 12"

Riser Pipe ID: 2"
Type of Riser Pipe: SCH 40 PVC

Type of Backfill: SAKRETE MORTAR MIX

Elevation of Top of Seal: 57.3
Depth of Top of Seal: 2'
Type of Seal: BENT. CHIPS

Elevation of Top of Sand: 55.3
Depth of Top of Sand: 4'
Elevation of Top of Screen: 54.3
Depth of Top of Screen: 5'

Type of Screen: SCH 40 PVC
Slot Size x Length: 0.010" x 10'
ID of Screen: 2"

Type of Sandpack: SILICA SAND PLACED FROM 20' TO 4'
JDJ 10/18/96

Elevation of Bottom of Screen: 44.3
Depth of Bottom of Screen: 15'
Depth of Sediment Sump with Plug:

Elevation of Bottom of Borehole: 39.3
Depth of Bottom of Borehole: 20'

MONITORING WELL INSTALLATION DIAGRAM
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 16

MONITORING WELL DEVELOPMENT RECORDS

WELL DEVELOPMENT RECORD

Project: NASB - SITE 9	Well Installation Date(s): 8/24/95		Project No. 8733-02
Client: U.S. Navy	Well Development Date(s): 8/25/95	Logged by: BBotter	Checked by:
Well/Site I.D.: MW-021	Weather: Clear, 60°F	Start Date: 8/25/95	Finish Date: 8/25/95
Initial Water Level (ft): (All water levels from top of riser) 12.20' BTOR @ 710		Start Time: 0710	Finish Time: 1145

Water Level during Initial Pumping/Purging (ft): 19.32' BTOR @ 915

Water Level at Termination of Pumping/Purging (ft): And 24 Hours After Development (ft):

Quantity of Water Lost During Drilling: estimated 150 gallons

Quantity of Fluid in Well Prior to Development: Sanding in Well _____ Contained in Saturated Annulus _____

Depth From Top of Well Riser to Bottom of Well (from diagram) _____ Screen Length (from diagram): 5'

Depth From Top of Riser to Sediment Before: 45.5 After: 45.5 Development:

Type and Size/Capacity of Pump/Bailer Used: Whale Super #921 and #991

Description of Surge Technique: Pump and surge, collected parameters in-line

Height of Well Casing Above Ground:

	TIME	Total Gallons Purged	TEMP.	pH	Conductivity	NTU	Est. Pumping Rate (gal./min.)	Est. Recharge	DO	Salin
BEGINNING OF DEVELOPMENT	0715	<1	15.7 ~~17.9~~	8.24 ~~3.99~~	0.284	999			8.17	0.01
	0915	202	13.5	6.15	0.228	119			0.15	0.0
	1015	322	13.3	5.79	0.226	33			0.07	0.0
	1055	402	13.9	5.99	0.222	20			0.07	0.0
	1125	462	13.3	6.08	0.223	45			0.02	0.0
	1130	472	13.3	6.09	0.224	47			0.07	0.0
END OF DEVELOPMENT	1135	482	13.3	6.09	0.224	40			0.07	0.0
	1140	492	13.3	6.08	0.225	37			0.06	0.0

NOTES: e.g., Clarity, Color Particulates, Odor of Removal Water; Calculations of Volumes

Has a One-pint Sample of Development Water Been Collected? ___ Yes X No

Well Developer's Signature [signature]

WELL DEVELOPMENT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 6

WELL DEVELOPMENT RECORD

Project: NASB - SITE 9	Well Installation Date(s): 8/24/95		Project No. 8733-02
Client: U.S. Navy	Well Development Date(s): 8/25/95	Logged by: BButler	Checked by:
Well/Site I.D.: MW-~~209~~ 204	Weather: Clear, 60°F	Start Date: 8/24/95	Finish Date: 8/24/95
Initial Water Level (ft): (All water levels from top of riser) 10.08' BTOR		Start Time: 739	Finish Time: 826

Water Level during Initial Pumping/Purging (ft): 12.66' BTOR @ 757

Water Level at Termination of Pumping/Purging (ft): 13.79' BTOR @ 826 And 24 Hours After Development (ft):

Quantity of Water Lost During Drilling:

Quantity of Fluid in Well Prior to Development: Sanding in Well _____ Contained in Saturated Annulus _____

Depth From Top of Well Riser to Bottom of Well (from diagram) _____ Screen Length (from diagram): 10'

Depth From Top of Riser to Sediment Before: 17.95 After: _____ Development:

Type and Size/Capacity of Pump/Bailer Used: In-line whale Supersub #921 and Superline #991

Description of Surge Technique: Pump & Surge

Height of Well Casing Above Ground:

	TIME	Total Gallons Purged	TEMP.	pH	Conductivity	NTU	Est. Pumping Rate (gal./min.)	Est. Recharge	DO	Salin
BEGINNING OF DEVELOPMENT 739	744	10	13.0	6.57	0.238	999	2	2	2.61	0
	749	20	12.2	5.99	0.272	999	2	2	0.34	0.01
	754	30	12.1	5.87	0.286	999	2	2	0.35	[illegible]
	759	40	12.1	5.80	0.291	999	2	2	0.36	0.01
	804	50	12.1	5.78	0.299	110	2	2	0.57	0.01
	809	60	12.0	5.82	0.301	127	2	2	1.01	0.01
END OF DEVELOPMENT	814	70	11.9	5.86	0.304	8	2	2	0.28	0.01
	819	80	11.9	5.88	0.305	4	2	2	0.33	0.01
	824	90	11.9	5.90	0.307	0	2	2	0.38	0.01

NOTES: e.g., Clarity, Color Particulates, Odor of Removal Water; Calculations of Volumes

water began as opaque, tan silty water.

Has a One-pint Sample of Development Water Been Collected? ___ Yes X No

Well Developer's Signature BK Butler

WELL DEVELOPMENT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 6

WELL DEVELOPMENT RECORD

Project: NASB - SITE 9	Well Installation Date(s): 8/22/95		Project No. 8733-02
Client: U.S. Navy	Well Development Date(s): 8/24/95	Logged by: BButler	Checked by:
Well/Site I.D.: Site 9, MW-020	Weather: Pty Cloudy, 70°F's	Start Date: 8/24/95	Finish Date: 8/24/95
Initial Water Level (ft): (All water levels from top of riser) 13.78' BTOR (BOW= 19.92' BTOR)		Start Time: 1015	Finish Time: 1230

Water Level during Initial Pumping/Purging (ft): 14.74' @ 1134 AM

Water Level at Termination of Pumping/Purging (ft): 14.82' @ 1217 hrs And 24 Hours After Development (ft):

Quantity of Water Lost During Drilling: 0

Quantity of Fluid in Well Prior to Development: Sanding in Well _____ Contained in Saturated Annulus _____

Depth From Top of Well Riser to Bottom of Well (from diagram) 20 Screen Length (from diagram): 10

Depth From Top of Riser to Sediment Before: 0.09 After: 0 Development:

Type and Size/Capacity of Pump/Bailer Used: 1 in-line Whale SuperSub #921's and Superline #991

Description of Surge Technique: Pump and surge. Parameters collected in-line/w discharge

Height of Well Casing Above Ground: 3.07' AG (Δcasing-Riser = 0.18')

	TIME	Total Gallons Purged	TEMP.	pH	Conductivity	NTU	Est. Pumping Rate (gal./min.)	Est. Recharge	D.O.	Sal
BEGINNING OF DEVELOPMENT	1037	<1	14.1	5.87	0.117	999			-0.09	0
Begin 936:30	1041	+10	13.9	5.71	0.112	257			0.50	0
	1046	+10	13.8	5.57	0.111	497			0.81	0
	1052	+10	13.7	5.43	0.112	18			0.92	0
	1057	+10	13.7	5.35	0.113	6			0.94	0
Pump on Again @ 1126	1130 (Shutoff)	+10	13.8	5.78	0.113	465			4.02	0
	see Back									
END OF DEVELOPMENT	1215	140 Total	13.7	5.40	0.113	0			0.07	0

NOTES: e.g., Clarity, Color Particulates, Odor of Removal Water; Calculations of Volumes

Water began as turbid, tan silty water. Clear, silt free when developed.

Has a One-pint Sample of Development Water Been Collected? ___ Yes X No

Well Developer's Signature BK Butler

WELL DEVELOPMENT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 6

Time	Gallons	pH	Cond	Turb	DO	Temp	Sal
1135	10	5.74	0.113	805	0.27	13.7	0
1140	10	5.63	0.114	834	0.90	13.7	0
1145	10	5.53	0.112	593	1.54	13.7	0
1150	10	5.47	0.113	328	0.73	13.7	0
1155	10	5.40	0.112	14	0.19	13.7	0
1200	10	5.43	0.114	5	0.12	13.7	0
1205	10	5.43	0.114	0	0.08	13.7	0
1210	10	5.40	0.114	0	0.0~~8~~ 0 BB 4/23/95	13.7	0
1215	10	5.40	0.113	0	~~0.007~~ 0.07 BB 4/23/95	13.7	0

END of Development. WL @ 14.82' 1217hrs

WELL DEVELOPMENT RECORD

Project: NASB - SITE 9	Well Installation Date(s): 8/		Project No. 8733-02
Client: U.S. Navy	Well Development Date(s): 8/24/95	Logged by: BButler	Checked by:
Well/Site I.D.: MW-022	Weather: Clear/Ptly Cloudy, High 70's	Start Date: 8/24/95	Finish Date: 8/24/95
Initial Water Level (ft): (All water levels from top of riser) 10.75 BTOR (BOW= 18.0' BTOR)		Start Time: 1258	Finish Time: 1448

Water Level during Initial Pumping/Purging (ft): 12.78' BTOR

Water Level at Termination of Pumping/Purging (ft): 12.84' BTOR And 24 Hours After Development (ft):

Quantity of Water Lost During Drilling: 50-60 gallons

Quantity of Fluid in Well Prior to Development: Sanding in Well _____ Contained in Saturated Annulus _____

Depth From Top of Well Riser to Bottom of Well (from diagram) 18.0 Screen Length (from diagram): 10

Depth From Top of Riser to Sediment Before: 18.0 After: 18.0 Development: Ø

Type and Size/Capacity of Pump/Bailer Used: In-line Whale Superjob #921 and Super-line #991

Description of Surge Technique: Pump and Surge Parameters collected in line/w discharge

Height of Well Casing Above Ground:

	TIME	Total Gallons Purged	TEMP.	pH	Conductivity	NTU	Est. Pumping Rate (gal./min.)	Est. Recharge	DO	Salinit
BEGINNING OF DEVELOPMENT	1300	5	16.5	6.12	0.584	999			4.88	0.02
Begin Pumping @1258	1302	10	16.5	6.11	0.569	999			6.16	0.02
	1308	20	16.3	6.06	0.514	999			7.95	0.02
	1313	30	16.2	5.96	0.474	413			5.30	0.01
	1318	40	16.1	5.91	0.437	204			4.89	0.01
	1323	50	16.1	5.83	0.395	83			4.57	0.01
	See Back-									
END OF DEVELOPMENT	1448	220	15.8	5.52	0.275	0			1.05	0.01

NOTES: e.g., Clarity, Color Particulates, Odor of Removal Water; Calculations of Volumes

Water opaque silty tan when began development.
Water clear, silt free at end.

Has a One-pint Sample of Development Water Been Collected? ___ Yes X No

Well Developer's Signature [signature]

WELL DEVELOPMENT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 6

Time	Total Purged	pH	Cond	Turb	DO	Temp	Sal
1328	60	5.81	0.372	175	4.23	16.1	0.01
1333	70	5.75	0.346	69	3.83	16.0	0.01
1338	80	5.71	0.331	39	3.53	16.0	0.01
1343	90	5.66	0.307	1	3.18	15.9	0.01
1353	110	5.60	0.301	78	2.78	15.9	0.01
1403	130	5.51	0.282	1	2.21	15.9	0.01
1413	150	5.41	0.271	1	1.85	15.8	0.01
1423	170	5.41	0.276	0	1.46	15.8	0.01
1433	190	5.47	0.277	0	1.20	15.8	0.01
1443	~~140~~ 210	5.51	0.275	0	1.09	15.8	0.01
1448	220	5.52	0.275	0	1.05	15.8	0.01

END of development

(1445 hrs, WL@ 12.84' BTOR)

WELL DEVELOPMENT RECORD

Project: NASB - SITE 9	Well Installation Date(s): 8/22/95		Project No. 8733-02
Client: U.S. Navy	Well Development Date(s): 8/24/95	Logged by: BButler	Checked by:
Well/Site I.D.: Site 9, MW-020	Weather: Pty Cloudy, 70°F's	Start Date: 8/24/95	Finish Date: 8/24/95
Initial Water Level (ft): (All water levels from top of riser) 13.78' BTOR (BOW= 19.92' BTOR)		Start Time: 1015	Finish Time: 1230

Water Level during Initial Pumping/Purging (ft): 14.74' @ 1134 AM

Water Level at Termination of Pumping/Purging (ft): 14.82' @ 1217 hrs And 24 Hours After Development (ft):

Quantity of Water Lost During Drilling: 0

Quantity of Fluid in Well Prior to Development: Sanding in Well _____ Contained in Saturated Annulus _____

Depth From Top of Well Riser to Bottom of Well (from diagram) 20 Screen Length (from diagram): 10

Depth From Top of Riser to Sediment Before: 0.08 After: 0 Development:

Type and Size/Capacity of Pump/Bailer Used: 2 in-line Whale Supersub #921's and Superline #991

Description of Surge Technique: Pump and surge. Parameters collected in-line/w discharge

Height of Well Casing Above Ground: 3.07' AG (Δ Casing-Riser = 0.18')

	TIME	Total Gallons Purged	TEMP.	pH	Conductivity	NTU	Est. Pumping Rate (gal./min.)	Est. Recharge	D.O.	Sal
BEGINNING OF DEVELOPMENT	1037:00	<1	14.1	5.87	0.117	999			-0.09	0
Begin 936:30	1041:00	+10	13.9	5.71	0.112	257			0.50	0
	1046	+10	13.8	5.57	0.111	497			0.81	0
	1052	+10	13.7	5.43	0.112	18			0.92	0
	1057	+10	13.7	5.35	0.113	6			0.94	0
Pump on Begin @ 1122	1130	+10	13.8	5.78	0.113	465			4.02	0
	1215	140 Total	13.7	5.40	0.113	0			0.07	0

Shutoff

See Back

NOTES: e.g., Clarity, Color Particulates, Odor of Removal Water; Calculations of Volumes

water began as turbid, tan silty water. Clear, silt free when developed.

Has a One-pint Sample of Development Water Been Collected? ___ Yes X No

Well Developer's Signature [signature]

WELL DEVELOPMENT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 6

Time	Gallons	pH	Cond	Turb	DO	Temp	SAL
1135	10	5.74	0.113	805	0.27	13.7	0
1140	10	5.63	0.114	834	0.40	13.7	0
1145	10	5.53	0.112	593	1.54	13.7	0
1150	10	5.47	0.113	328	0.73	13.7	0
1155	10	5.40	0.112	14	0.19	13.7	0
1200	10	5.43	0.114	5	0.12	13.7	0
1205	10	5.43	0.114	0	0.08	13.7	0
1210	10	5.40	0.114	0	0.0~~8~~6 GB 4/23/95	13.7	0
1215	10	5.40	0.113	0	~~0.007~~ 0.07 AG 4/23/95	13.7	0

END of Development. WL @ 14.82' 1217hrs

WELL DEVELOPMENT RECORD

Project: NASB - SITE 9	Well Installation Date(s): 8/		Project No. 8733-02
Client: U.S. Navy	Well Development Date(s): 8/24/95	Logged by: BButler	Checked by:
Well/Site I.D.: MW-022	Weather: Clear/Ptly Cloudy, High 70's	Start Date: 8/24/95	Finish Date: 8/24/95
Initial Water Level (ft): (All water levels from top of riser) 10.75 BTOR (BOW= 18.0' BTOR)		Start Time: 1258	Finish Time: 1448

Water Level during Initial Pumping/Purging (ft): 12.78' BTOR

Water Level at Termination of Pumping/Purging (ft): 12.84' BTOR And 24 Hours After Development (ft):

Quantity of Water Lost During Drilling: 50-60 gallons

Quantity of Fluid in Well Prior to Development: Sanding in Well _____ Contained in Saturated Annulus _____

Depth From Top of Well Riser to Bottom of Well (from diagram) 18.0 Screen Length (from diagram): 10

Depth From Top of Riser to Sediment Before: 18.0 After: 18.0 Development: Ø

Type and Size/Capacity of Pump/Bailer Used: in-line Whale Superjob #921 and Super-line #991

Description of Surge Technique: Pump and Surge Parameters collected in line w/ discharge

Height of Well Casing Above Ground:

	TIME	Total Gallons Purged	TEMP.	pH	Conductivity	NTU	Est. Pumping Rate (gal./min.)	Est. Recharge	DO	Salinit
BEGINNING OF DEVELOPMENT	1300	5	16.5	6.12	0.584	999			4.88	0.02
Begin Pumping @1258	1302	10	16.5	6.11	0.569	999			6.16	0.02
	1308	20	16.3	6.06	0.514	999			7.95	0.02
	1313	30	16.2	5.96	0.474	413			5.30	0.01
	1318	40	16.1	5.91	0.437	204			4.89	0.01
	1323	50	16.1	5.83	0.395	83			4.57	0.01
END OF DEVELOPMENT	See Back - 1448	220	15.8	5.52	0.275	0			1.05	0.01

NOTES: e.g., Clarity, Color Particulates, Odor of Removal Water; Calculations of Volumes

Water opaque silty tan when began development.
Water clear, silt-free at end.

Has a One-pint Sample of Development Water Been Collected? ___ Yes X No

Well Developer's Signature [signature]

WELL DEVELOPMENT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 6

Time	Total Purged	pH	Cond	Turb	DO	Temp	Sal
1328	60	5.81	0.372	175	4.23	16.1	0.01
1333	70	5.75	0.346	69	3.83	16.0	0.01
1338	80	5.71	0.331	39	3.53	16.0	0.01
1343	90	5.66	0.307	1	3.18	15.9	0.01
1353	110	5.60	0.301	78	2.78	15.9	0.01
1403	130	5.51	0.282	1	2.21	15.9	0.01
1413	150	5.41	0.271	1	1.85	15.8	0.01
1423	170	5.41	0.276	0	1.46	15.8	0.01
1433	190	5.47	0.277	0	1.20	15.8	0.01
1443	~~140~~ 210	5.51	0.275	0	1.09	15.8	0.01
1448	220	5.52	0.275	0	1.05	15.8	0.01

END of development

(1445 hrs, WL @ 12.84' BTOR)

TEST PIT LOGS

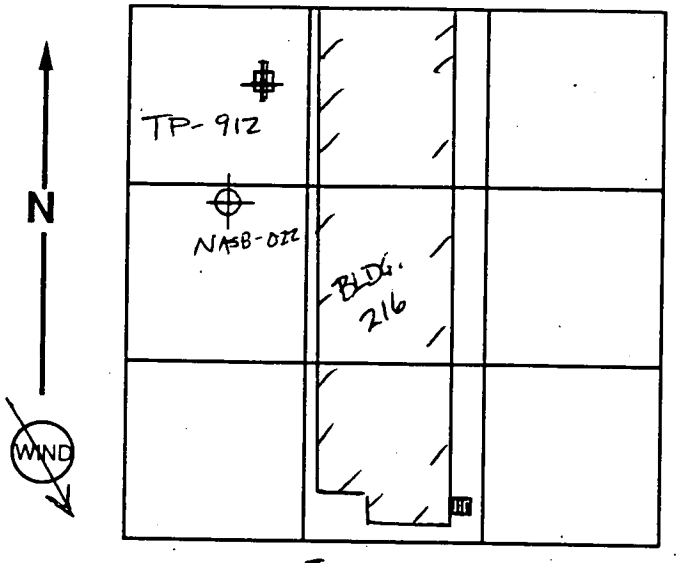
TEST PIT RECORD

Site: Neptune Drive Disposal Site - Site 9

Test Pit: TP-912 Date: 8-25-95 Time: 08:40 End: 09:20

Coordinates: SEE BELOW Grid Element:

SKETCH MAP OF TEST PIT SITE



SCALE 1" = 50 FT.

Crew Members:

1. T. LONGLEY - ABB
2. T. ANDERSON
3. J. SMALL

CLEAN HARBORS

4.
5.
6.

Monitor Equipment:

PI Meter	Y	N
Explosive Gas	Y	N
Avail. Oxygen	Y	N
OVA	Y	N

Other RADIATION ALERT MONITOR

Photographs, Roll Yes -ON FILE-

Exposure

NOTES:

LOCATED APPROX. 20' WEST OF BLDG. 216 & NORTH OF MONITORING WELL NASB-022

TO TEST FOR POSSIBLE LANDFILL MATERIAL / POTENTIAL DUMP & TO COLLECT A SOIL SAMPLE FROM NEW EXPLORATION AREA

K. KLUZAK OF MEDEP OBSERVED ACTIVITIES

TEST PIT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

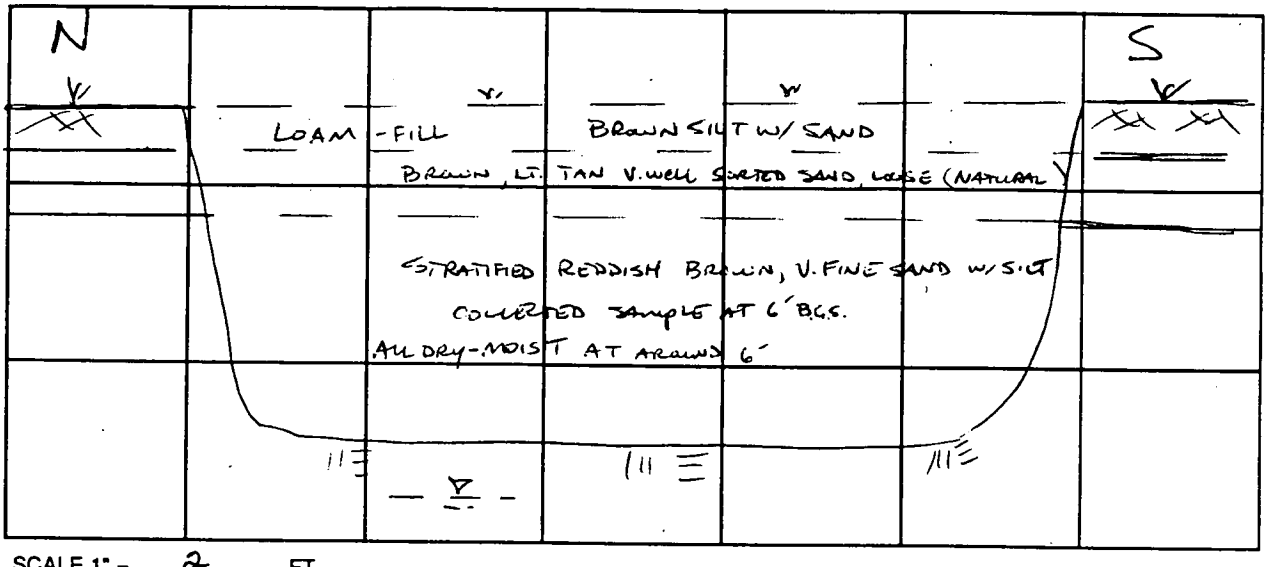
9508017D 2

TEST PIT RECORD

Profile Along Test Pit: TP-912

Site: **Neptune Drive Disposal Site - Site 9**

SKETCH MAP OF TEST PIT PROFILE



SCALE 1" = 2 FT.
DEPTH (FT). 8

NOTES:

TOTAL DIMENSIONS OF PIT: 10' LONG X 6' DEEP X 2.5' WIDE

APPEARS TO BE ALL NATURAL SOIL BELOW THE LOAMY TOPSOIL. NO UNUSUAL OBSERVATIONS - STRATIFIED UNDISTURBED SOILS BELOW TOPSOIL -

COLLECTED SOIL SAMPLE FROM ~6' BGS FOR: VOC, SVOC, PEST/PCB, INORG., FUEL OIL, GASOLINE ANALYSES

No.	Int. Ser. No.	Depth (Ft.)	HD. SP. VOA PPM
S-1	09TS912XX6X1XX	6	0 ppm
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, Pg. Book #1

ATTACHMENTS p.p. 30

SIGNATURE: [signature]

TEST PIT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

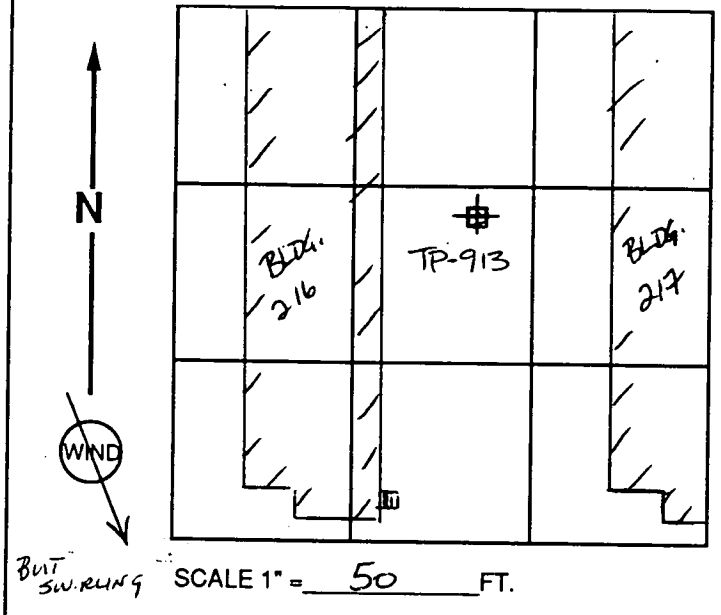
TEST PIT RECORD

Site: Neptune Drive Disposal Site - Site 9

Test Pit: TP-913 Date: 8-25-95 Time: 09:30 End: 09:50

Coordinates: SEE BELOW Grid Element:

SKETCH MAP OF TEST PIT SITE



SCALE 1" = 50 FT.

Crew Members:

1. T. LONGLEY - ABB
2. T. ANDERSON } CLEAN HARBORS
3. J. SMALL
4.
5.
6.

Monitor Equipment:

PI Meter	(Y)	N
Explosive Gas	(Y)	N
Avail. Oxygen	(Y)	N
OVA	Y	N

Other RADIATION ALERT MONITOR

Photographs, Roll YES - ON FILE

Exposure

NOTES:

PURPOSE - TO ASSESS PRESENCE/ABSENCE OF LANDFILL MATERIAL & TO COLLECT SOIL SAMPLE FROM A NEW EXPLORATION AREA

LOCATION - APPROX. 25' EAST OF BLDG. 216 & 80' NORTH OF BLDG. 216 SE CORNER.

K. KLUZAK OF MEDEP OBSERVED ACTIVITIES

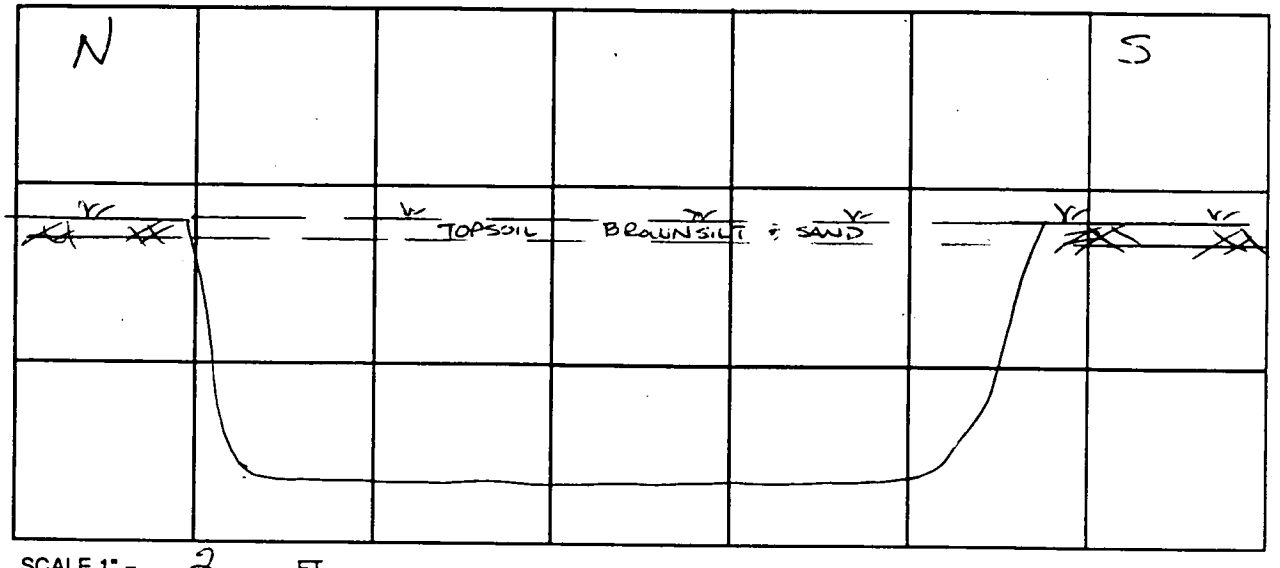
TEST PIT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

TEST PIT RECORD

Profile Along Test Pit: TP-913

Site: **Neptune Drive Disposal Site - Site 9**

SKETCH MAP OF TEST PIT PROFILE



SCALE 1" = 2 FT.
DEPTH (FT). ~~8~~ 6

NOTES:

TOTAL DIMENSIONS OF PIT: 9' LONG X 8' DEEP X 2.5' W

0-0.6' BROWN SILT & SAND W/ GRASS & ROOTS
TOPSOIL - LOAM

0.6'-8' ALTERNATING LAYERS & LENSES OF CLEAN FINE SAND & SILT LENSES - BROWN & TAN W/ DARK SILTY ZONES
STRATIFIED - HORIZONTAL PLATY STRUCTURE TO SILT LENSES -
REDDISH BROWN SANDY LENSE JUST ABOVE WATER AT ~7½' BGS

COLLECTED SOIL SAMPLE FROM ~8' bgs.
FOR: VOC, SVOC, Inorganics, Fuel Oil, Gasoline ANALYSES

No.	Int. Ser. No.	Depth (Ft.)	HD. SP. VOA PPM
S-1	09PS913XX8XXXX	8	0
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, Pg. #1, P. 31

ATTACHMENTS

SIGNATURE: [illegible]

TEST PIT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK

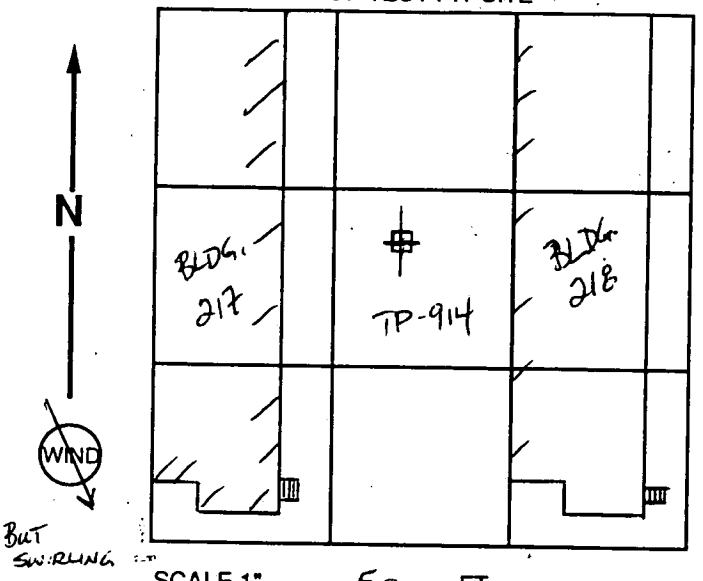
TEST PIT RECORD

Site: Neptune Drive Disposal Site - Site 9

Test Pit: TP-914 Date: 8-25-95 Time: 10:15 End: 10:50

Coordinates: SEE BELOW Grid Element:

SKETCH MAP OF TEST PIT SITE



SCALE 1" = 50 FT.

Crew Members:

1. T. LONGLEY - ABB
2. T. ANDERSON
3. J. SMALL

CLEAN HARBORS

4.
5.
6.

Monitor Equipment:

PI Meter	Y	N
Explosive Gas	Y	N
Avail. Oxygen	Y	N
OVA	Y	N

Other RADIATION ALERT MONITOR

Photographs, Roll YES - ON FILE -

Exposure

NOTES:

PURPOSE: TO ASSESS PRESENCE/ABSENCE OF LANDFILL MATERIAL & TO COLLECT SOIL SAMPLE FROM A NEW EXPLORATION AREA

LOCATION: APPROX. 70' NORTH & 30' EAST FROM SE CORNER OF BLDG. 217.

K. KUZAK OF MEDEP OBSERVED ACTIVITIES

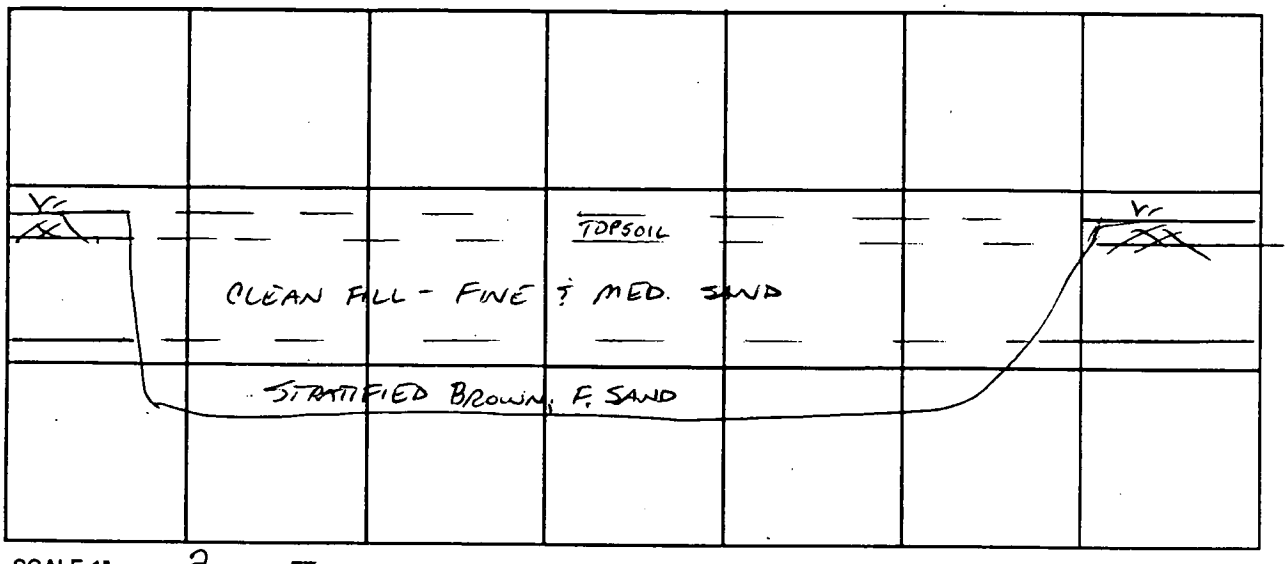
TEST PIT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

TEST PIT RECORD

Profile Along Test Pit: TP-914

Site: **Neptune Drive Disposal Site - Site 9**

SKETCH MAP OF TEST PIT PROFILE



SCALE 1" = 2 FT.
DEPTH (FT). 6

NOTES:

TOTAL DIMENSIONS: 10' LONG X 6' DEEP X 2.5' WIDE

0-1' - GRAVELLY SILT & SAND - TOPSOIL
FILL - 1 PIECE OF WOOD.

1'-4' - CLEAN FINE TO MED. SAND,
LOOSE, DRY, WELL SORTED - FILL

4'-6' - STRATIFIED BROWN FINE ~~TO MED.~~ SAND,
SILT, W/ REDDISH BROWN LAYERS,
DRY BUT MOIST AT BOTTOM - NATURAL

SAMPLE AT 6' FOR: VOC, SVOC, Inorganics,
FUEL OIL GASOLINE analyses.
TOOK DUPLICATE SAMPLES HERE

No.	Int. Ser. No.	Depth (Ft.)	HD. SP. VOA PPM
S-1	09TS914XX6XXX	6	0
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, Pg. Book #1, p. 32

ATTACHMENTS

SIGNATURE: [signature]

TEST PIT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 3

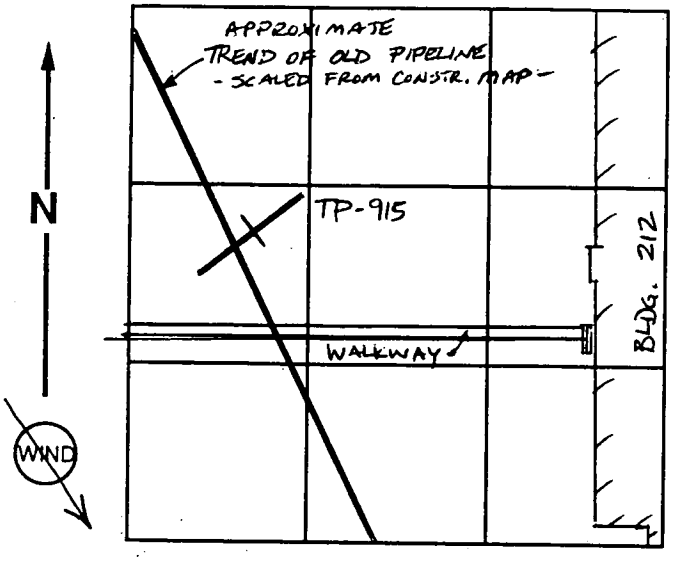
TEST PIT RECORD

Site: Neptune Drive Disposal Site - Site 9

Test Pit: TP-915 Date: 8-23-95 Time: 09:35 End: 11:20

Coordinates: SEE BELOW Grid Element:

SKETCH MAP OF TEST PIT SITE



SCALE 1" = 50 FT.

Crew Members:

1. T. LONGLEY - ABB
2. R. BABBIDGE
3. J. SMALL
} CLEAN HARBORS
4.
5.
6.

Monitor Equipment:

PI Meter	(Y)	N
Explosive Gas	(Y)	N
Avail. Oxygen	(Y)	N
OVA	Y	N

Other RADIATION MONITOR

Photographs, Roll YES -ON FILE-

Exposure

NOTES:

PURPOSE WAS TO EXCAVATE IN AN AREA THAT HAD A FORMER 42" DRAIN LINE/PIPE IN AN UPGRADIENT LOCATION FROM ASH LANDFILL. A TRENCH WAS EXCAVATED ALONG AN AREA AT RIGHT ANGLE TO PIPELINE DOWN TO WATER AND/OR NATURAL SOILS.

TREND OF FORMER PIPELINE WAS SCALED OFF OF DRAWING SHOWING PRE-CONSTRUCTION ~~DRAWINGS~~ FEATURES OF BARRACKS AND "EXISTING 42" DRAIN TO BE REMOVED"

MEDEP PERSONNEL OBSERVED ENTIRE EXERCISE

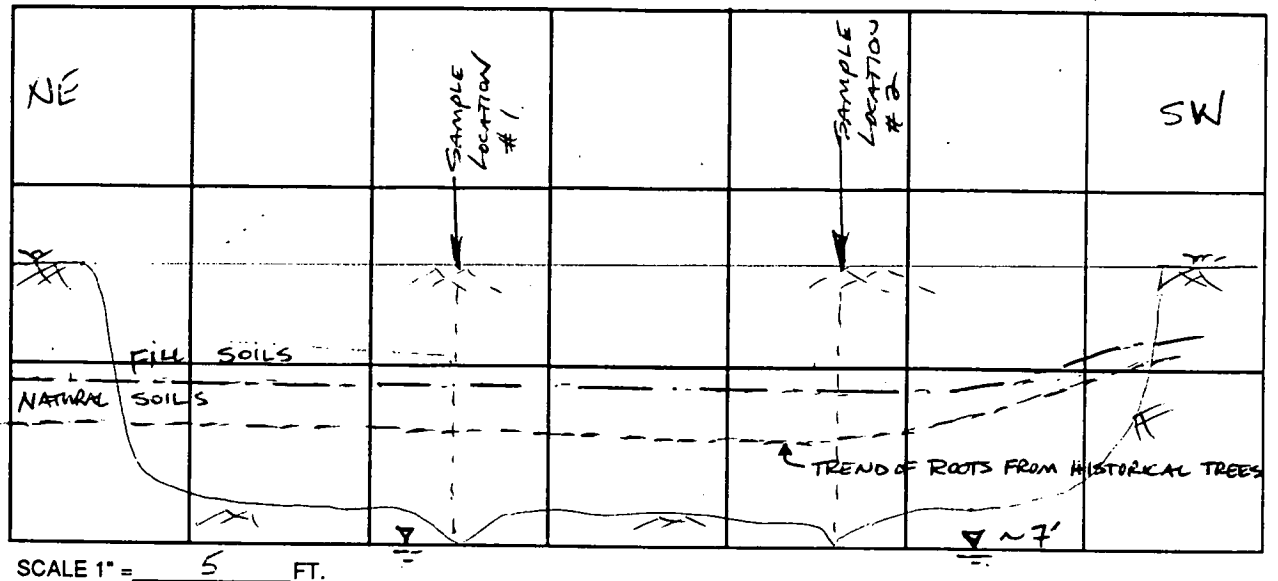
TEST PIT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

TEST PIT RECORD

Profile Along Test Pit: TP-915 LOOKING SOUTHEAST

Site: **Neptune Drive Disposal Site - Site 9**

SKETCH MAP OF TEST PIT PROFILE



SCALE 1" = 5 FT.
DEPTH (FT). 5

NOTES:

FINAL TEST PIT DIMENSIONS: 30' LONG X 7.3' DEEP X 2.5' WIDE.
SAMPLE LOCATION #1: COLLECTED ANALYTICAL (NOT SENT TO LAB) HEADSPACE SAMPLE AT ≈7' BGS. OF BLACK, ORGANIC-RICH, MUCKY-SILTY SAND TO SANDY SILT, WET. HEADSPACE READING = 1 PPM
SAMPLE LOCATION #2: ANALYTICAL (SENT TO LAB) & HEADSPACE SAMPLE AT APPROX. 6.5' BGS. - SAME AS AT SAMPLE LOCATION #1. HEADSPACE HERE = 2 PPM.
OVERALL, 0-1.3' = TOPSOIL W/ GRAVELLY SILT & SAND
1.3'-4' GRAVELLY SAND - FILL
4' ONWARD - NATURAL PROFILE W/ A CONTINUOUS ROOT HORIZON THROUGHOUT TRENCH AT APPROX. 5' BGS. THESE ROOTS APPEAR TO RISE AT THE SW END OF PIT.
NO INDICATION OF HISTORIC TRENCH WAS OBSERVED

No.	Int. Ser. No.	Depth (Ft.)	HD. SP. VOA PPM	
S-1	# 1	7	1	
S-2	# 2	6.5	2	*
S-3				
S-4				
S-5				
S-6				
S-7				
S-8				

REFERENCE: FIELD BOOK, Pg. Book 2 pp. 1-5

ATTACHMENTS

SIGNATURE: [signature]

* SAMPLE I.D. = 09PS915XX6X1XX
FOR VOC, SVOC, PEST/PCB, INORGANICS, FUEL OIL, GASOLINE ANALYSES

TEST PIT RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D 3

GROUNDWATER SAMPLING DATA RECORDS

TABLE D-1
SUMMARY OF FIELD PARAMETERS - SEPTEMBER 1995

NEPTUNE DRIVE DISPOSAL AREA - SITE 9
SOURCE INVESTIGATION
NAS BRUNSWICK

WELL DESIGNATION[1]	ALTERNATE DESIGNATION[2]	TEMP. °C	pH	CONDUCTIVITY µMHOS\CM	TURBIDITY (NTU)	SALINITY (%)	DISSOLVED OXYGEN (ppm)
MW-901	MW-NASB-069	17.3	6.16	225	3	0	2.76
MW-902	MW-NASB-070	19.0	5.47	318	2	0.01	3.10
MW-903	MW-NASB-071	16.5	6.45	298	2	0.01	4.16
MW-904	MW-NASB-072	15.3	6.38	312	18	0.01	2.01
MW-905	MW-NASB-073	15.0	8.02	343	47	0.01	2.72
MW-906	MW-NASB-074	16.1	6.45	272	5	0.01	2.75
MW-907	MW-NASB-075	19.3	6.44	354	25	0.01	1.97
MW-908	MW-NASB-076	21.3	5.92	305	0	0.01	4.02
MW-909	MW-NASB-077	13.7	6.30	38	9	0	4.71
MW-910	MW-NASB-078	10.9	5.10	51	50	0	5.84
MW-914	MW-NASB-079	21.1	7.02	287	98	0.01	1.40
MW-915	MW-NASB-080	22.3	6.74	450	10	0.01	0.68
MW-916	MW-NASB-081	23.0	6.54	575	22	0.02	3.03
MW-NASB-020	MW-NASB-020	24.0	5.75	129	10	0	3.08
MW-NASB-021	MW-NASB-021	17.7	6.26	281	51	0.01	1.32
MW-NASB-022	MW-NASB-022	19.9	6.37	527	90	0.02	2.96
MW-NASB-204[3]	MW-NASB-204	17.8	6.25	212	663	0	2.16
MW-NEX-001R	MW-NASB-023	24.5	5.18	288	10	0.01	5.84
MW-NEX-002	MW-NASB-024	17.3	6.45	184	1	0	4.8
MW-NEX-003	MW-NASB-025	18.0	5.69	171	7	0.08	2.5
MW-NEX-004R	MW-NASB-026	26.7	6.25	645	10	0.02	1.10
MW-NEX-005	MW-NASB-027	18.8	6.06	153	12	0	5.4
MW-NASB-006	MW-NASB-006	18.9	5.10	577	10	0.02	2.58
MW-NASB-007	MW-NASB-007	19.3	6.51	349	41	0.01	1.30
MW-NASB-008	MW-NASB-008	21.5	6.00	355	14	0.01	2.2
MW-NASB-009	MW-NASB-009	20.8	5.64	468	10	0.01	1.33
MW-NASB-010	MW-NASB-010	20.5	5.83	373	97	0.01	2.71

Notes:

[1] Designations as shown in Sampling and Analysis Plan (ABB-ES, 1995).
[2] Designations per NAS Brunswick convention.
[3] Originally mislabeled as MW-NASB-023 in Sampling and Analysis Plan.

NTU = nephelometric turbidity unit
ppm = parts per million

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-902
Time: Start: 09:20 End: 12:00

Date: 9-18-95
Field Sample No.: 09MW902XXXX08XX
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth ~~12.91~~ 25 Ft. ✓ Measured ✓ Historical 25'

✓ Top of Well
___ Top of Protective Casing

Well Riser Stick-up 2.65 Ft. (from ground)

Protective -0.08 Ft. Casing/Well Difference

Protective 2.73 Ft. Casing

Depth to Water ~~12.91~~ 12.91 Ft.

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column 12.09 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 1.93 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	✓ ABB Supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB - Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl & DI H_2O Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ ~0.5 Gal.	@ 0.6 Gal.	@ 0.9 Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	17.2	18.0	19.0		
pH, units	5.24	5.42	5.47		
Specific Conductivity	310	310	318		
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	6	3	2		
~~Oxidation - Reduction, +/- mv~~ SAL	0.01	0.01	0.01		
Dissolved Oxygen, ppm	3.0	2.70	3.10		

Sampl Collection Requir ments

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
- VOA		HCL	✓ 2-40 ml vials	✓	/ / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
- Inorganics		HNO_3	✓ 1- 1 liter P	✓	/ / /
- TPH, Fuel Oil		4°C	2 ~~1~~ 1 liter AG	✓	/ / /
- TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
- Vinyl Chloride		4°C	3 ~~2~~ 40 ml vials	✓	/ / /

Notes: @ 09:55 purging @ 0.2L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-901
Time: Start: ~~13:05~~ 13:20 End: _____

Date: 9-18-95 09MW901XXXX08XX
Field Sample No.: ~~09MW903XXXX08XX~~
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth 40 Ft. ___ Measured ✓ Historical

___ Top of Well
___ Top of Protective Casing
___ _____

Well Riser Stick-up _____ Ft. (from ground)

Protective _____ Ft. Casing/Well Difference

Protective _____ Ft. Casing

Depth to Water N/A * Ft.

Well Material: ✓ PVC ___ SS _____

Well Locked?: ___ Yes ✓ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column N/A * Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = _____ Gal/Vol _____ Total Gal Purged

Well Integrity: Yes / No
Prot. Casing Secure: ___ / ✓
Concrete Collar Intact: ___ / ✓
Other _____ ___ / ___

WELL IS BENT OVER & DAMAGED

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
___	___	Peristaltic Pump	_____
✓	✓	Submersible Pump	_____ ~0.25 ml/min.
___	___	Bailer	_____
___	___	PVC/Silicon Tubing	_____
✓	✓	~~Teflon/Silicon Tubing~~	_____
___	___	Airlift	_____
___	___	Hand Pump	_____
___	___	In-line Filter	_____
___	___	Press/Vac Filter	_____
___	___		_____

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
✓ Isopropyl Solution (DI + H_2O)

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 0 Gal.	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ 20 Gal.
Temperature, Deg. C	~~6.79~~ DO 16.5	17.3	17.5	17.3	17.3
pH, units	6.19	6.10	5.98	6.15	6.16
Specific Conductivity	314	221	221	222	225
~~(umhos/cm, @ 25 Deg. C)~~ NTU	53	20	12	6	3
~~Oxidation Reduction, +/- mv~~ SALIN	0.01 %	0	0	0	0
Dissolved Oxygen, ppm	2.64	2.06	2.26	2.68	2.76

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
- VOA	___	HCL	- 2-40 ml vials	✓	___/___/___/___
SVOA	___	4°C	1-1 liter AG	___	___/___/___/___
Pest/PCB	___	4°C	1-1 liter AG	___	___/___/___/___
- Inorganics	___	HNO_3	- 1-1 liter P	✓	___/___/___/___
- TPH, Fuel Oil	___	4°C	- 2 1 liter AG	✓	___/___/___/___
- TPH, Gasoline	___	4°C	- 2-40 ml vials	✓	___/___/___/___
- Vinyl Chloride	___	4°C	- 3 40 ml vials	✓	___/___/___/___

Notes: * HAD DEDICATED EQUIP. IN WELL - Could NOT MEASURE W/ These IN well

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-916
Time: Start: 14:20 End:

Date: 9-18-95
Field Sample No.: 09MW916XXXX08XX
Signature of Sampler:

Water Level/Well Data

Well Depth ~19 Ft. ___ Measured ✓ Historical

✓ Top of Well
___ Top of Protective Casing

Well Riser Stick-up 1.78 Ft. (from ground)

Protective ~~1.89~~ 0.11 Ft. Casing/Well Difference

Protective 1.89 Ft. Casing

Depth to Water ~~N/A~~ * 12 Ft.

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column 7 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 1.12 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used: 0.25 L/min.

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB Supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB-Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used: (✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl & DI H_2O Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 0 ~~Gal.~~ min	@ 10 ~~Gal.~~ min	@ 15 ~~Gal.~~ min	@ 20 ~~Gal.~~ min	@ ___ Gal.
Temperature, Deg. C	17.9	20.3	22.4	23.0	
pH, units	6.71	6.83	6.70	6.54	
Specific Conductivity	658	621	583	575	
~~(umhos/cm. @ 25 Deg. C)~~ NTU	85	28	29	22	
~~Oxidation Reduction, +/- mv~~ SALINITY	0.02	0.02	0.02	0.02	
Dissolved Oxygen, ppm	3.64	3.75	3.57	3.03	

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
- VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1-1 liter P	✓	/ / /
- TPH, Fuel Oil		4°C	2-1 liter AG	✓	/ / /
- TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
- Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: * DEDICATED EQUIP. DOES NOT ALLOW ADDITIONAL EQUIP. IN HOLE
* TOOK OUT DEDICATED EQUIP.; IT DID NOT GO INTO WATER - TOO SHORT. USED OWN SAMPLER W/ THIS WELL

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-908
Time: Start: ~~15:50~~ 16:10 End: 16:45

Date: 9-18-95
Field Sample No.: 09MW908XXX08XX
Signature of Sampler: [illegible]

Water Level/Well Data

Well Depth ~19.5 Ft.
19.50
0.18
17.32

___ Measured
✓ Historical

✓ Top of Well
___ Top of Protective Casing

Well Riser Stick-up (from ground) 1.78 Ft.

Protective Casing/Well Difference 0.14 Ft.

Protective Casing 1.92 Ft.

Depth to Water 2.18 Ft.

Well Material:
✓ PVC
___ SS

Well Locked?:
✓ Yes
___ No

Well Dia.
✓ 2 inch
___ 4 inch
___ 6 inch

Water Level Equip. Used:
✓ Elect. Cond. Probe
___ Float Activated
___ Press. Transducer

Height of Water Column 17.3 Ft. X
✓ .16 Gal/Ft. (2 in.)
___ .65 Gal/Ft. (4 in.)
___ 1.5 Gal/Ft. (6 in.)
___ Gal/Ft. (__in.)
= 2.77 Gal/Vol
___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

0.3 L/min

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	DEDICATED pump
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
✓ Isopropyl + DI H_2O Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ___ In-line ✓ In Container

Sample Observations: __Turbid __Clear __Cloudy __Colored __Odor

Purge Data	@ 0 Gal.	@ 10 Gal.	@ 15 Gal.	@ 20 Gal.	@ ___ Gal.
Temperature, Deg. C	19.5	21.1	21.2	21.3	
pH, units	5.89	5.89	5.94	5.92	
Specific Conductivity	315	311	307	305	
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	1	0	0	0	
~~Oxidation Reduction, +/- mv~~ Salin	0.01%	0.01	0.01	0.01	
Dissolved Oxygen, ppm	3.63	3.72	3.89	4.02	

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
- VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
- Inorganics		HNO_3	1- 1 liter P	✓	/ / /
- TPH, Fuel Oil		4°C	2- 1 liter AG	✓	/ / /
- TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
- Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: ___

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-910
Time: Start: 07:50 End: 09:30

Date: 9-19-95
Field Sample No.: 09MW910XXX08XX
Signature of Sampler: [illegible]

Water Level/Well Data

Well Depth 15.17 Ft. ✓ Measured ✓ Historical

15.17
12.96
2.21

✓ Top of Well
___ Top of Protective Casing

Well Riser Stick-up 3.08 Ft. (from ground)

Protective 0.38 Ft. Casing/Well Difference

Protective 3.46 Ft. Casing

Depth to Water *12.96 Ft.

(* CAN'T GET PROBE BEYOND DEDICATED EQUIPMENT - HISTORICAL)

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

* Height of Water Column 2.21 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 0.35 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used: ~0.38 L/min
pump on @ 08:00
Purging @ 08:10

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	DEDICATED NOT USED
		Bailer	
✓	✓	PVC/~~Silicon Tubing~~	DEDICATED NOT USED
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used: (✓ All That Apply at Location)

___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
✓ ISOPROPYL & DI SOLUTION

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ✓ Turbid ✓ Colored BRN. ___ Clear ___ Odor ✓ Cloudy SLIGHT

Purge Data	@ 5 min Gal.	@ 10 ~~Gal.~~	@ 15 Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	10.6	10.9	OUT OF H_2O		
pH, units	5.13	5.10			
Specific Conductivity	56	51			
NTU ~~(umhos/cm. @ 25 Deg. C)~~ SAL	58	50			
~~Oxidation - Reduction, +/- mv~~	0%	0			
Dissolved Oxygen, ppm	6.44	5.84			

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
✓ VOA	___	HCL	2-40 ml vials	✓	___/___/___/___
SVOA	___	4°C	1-1 liter AG	___	___/___/___/___
Pest/PCB	___	4°C	1-1 liter AG	___	___/___/___/___
✓ Inorganics	___	HNO_3	1-1 liter P	✓	___/___/___/___
✓ TPH, Fuel Oil	___	4°C	2-1 liter AG	✓	___/___/___/___
✓ TPH, Gasoline	___	4°C	2-40 ml vials	✓	___/___/___/___
- Vinyl Chloride	___	4°C	3-40 ml vials	✓	___/___/___/___

Notes: * DEDICATED EQUIP. NOT INTO WATER - HAD TO INSERT OWN EQUIP. TO SAMPLE - PLACED THIS ON BOTTOM

AT 15 min., PUMP IS CUTTING OUT DUE TO LOW WATER IN WELL - WILL WAIT FOR RECHARGE THEN SAMPLE

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-909
Time: Start: @ well @ 09:35 End: 11:00
Pump on 10:10

Date: 9-19-95
Field Sample No.: ~~09~~ MW909XXXX08XX
Signature of Sampler: [signature]

Water Lev I/W II Data

Well Depth 37 Ft. ___ Measured ✓ Historical
37.00
18.10
18.90

✓ Top of Well
___ Top of Protective Casing

Well Riser Stick-up 2.86 Ft. (from ground)

Protective 0.14 Ft. Casing/Well Difference

Protective 3.0 Ft. Casing

Depth to Water 18.10 Ft.

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column 18.9 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (___in.) = 3 Gal/Vol; ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

09:36 ~~09:35~~ pump on @ 0.26 l/min.
pump off @ 10:55.

(✓ If Used For) Purging	Sampling	Equipment	Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	DEDICATED
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/Silicon Tubing	DEDICATED
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used: (✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl + DI Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	12.6	13.4	13.7		
pH, units	6.33	6.31	6.30		
Specific Conductivity	42	41	38		
~~(umhos/cm. @ 25 Deg. C.)~~ NTU SAL	14	12	9		
~~Oxidation-Reduction, +/- mv~~	0	0	0		
Dissolved Oxygen, ppm	4.18	4.39	4.71		

Sampl Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1- 1 liter P	✓	/ / /
TPH, Fuel Oil		4°C	2- 1 liter AG	✓	/ / /
TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: ___

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-914
Time: Start: 11:20 End: 12:25

Date: 9-19-95
Field Sample No.: 09MW914XXX08XX
Signature of Sampler: [signature]

Water Level/W ll Data

Well Depth 19 Ft. ___ Measured ✓ Historical

✓ Top of Well ___ Top of Protective Casing

Well Riser Stick-up 2.09 Ft. (from ground)

Protective 0.11 Ft. Casing/Well Difference

Protective 2.20 Ft. Casing

19.00
11.67
7.33

13.00

Depth to Water ~~11.67~~ Ft. *

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column ~~7.33~~ Ft. * 6 X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 0.96 ~~1.17~~ Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

11:20 pump on
0.2 L/min
12:20 pump off

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump *	DEDICATED - NOT in water
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~ *	DEDICATED - NOT in water
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used: (✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ ISOPROPYL + DI solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ✓ Colored ___ Odor

Purge Data	@ 0 Gal.	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ 20 min Gal.
Temperature, Deg. C	18	19.5	21.4	19.4	21.1
pH, units	6.42	6.74	6.79	6.96	7.02
Specific Conductivity	201	242	245	267	287
~~(umhos/cm. @ 25 Deg. C)~~ NTU	290	412	281	124	98
~~Oxidation - Reduction, +/- mv~~ SAL.	0	0	0	0.01	0.01
Dissolved Oxygen, ppm	1.42	1.13	2.18	0.64	1.90

Sampl Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
- VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
- Inorganics		HNO_3	1- 1 liter P	✓	/ / /
- TPH, Fuel Oil		4°C	2- 1 liter AG	✓	/ / /
- TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
- Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: * HAVE TO REMOVE DEDICATED EQUIP. & INSERT OWN EQUIP. - ORIGINAL H_2O LEVEL WAS WRONG.

HAD TROUBLE W/ FLOW when suspended - LOWERED PUMP TO BOTTOM TO continue

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-915
Time: Start: 13:00 End: 13:50

Date: 9-19-95
Field Sample No.: 09MW915XXXX08XX
Signature of Sampler: [signature]

Water Level/W ll Data

Well Depth ~19 Ft. — ___ Measured ✓ Historical

✓ Top of Well ___ Top of Protective Casing

Well Riser Stick-up 1.92 Ft. (from ground) — 0.05 + .15 = 1.92

Protective -0.13 Ft. Casing/Well Difference

Protective 2.05 Ft. Casing

Depth to Water 12.37 Ft. — 19.00 − 12.37 = 6.63

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column 6.6 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 1.1 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Docum ntation

Purging/Sampling Equipment Used: HA 13:53 pump off

Decontamination Fluids Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB-supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	~~ABB-supplied~~
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

(✓ All That Apply at Location)
- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min ~~Gal.~~	@ 10 min ~~Gal.~~	@ 15 min ~~Gal.~~	@ 20 min Gal.	@ ___ Gal.
Temperature, Deg. C	21.5	22.8	20.1	22.3	
pH, units	6.76	6.71	6.77	6.74	
Specific Conductivity	465	464	448	450	
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	19	14	16	10	
~~Oxidation Reduction, +/- mv~~ SAL	0.01	0.01	0.01	0.01	
Dissolved Oxygen, ppm	1.29	1.33	0.77	0.68	

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
- VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
- Inorganics		HNO_3	1- 1 liter P	✓	/ / /
- TPH, Fuel Oil		4°C	2- 1 liter AG	✓	/ / /
- TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
- Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: HAD TO TAKE OUT DEDICATED EQUIPMENT & INSERT OWN PUMP SET-UP - DEDICATED EQUIP. NOT IN WATER

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NASB-021
Time: Start: 14:20 End: 15:15

Date: 9-19-95
Field Sample No.: 09MW021XXX08XX
Signature of Sampler: [illegible]

Wat r L vel/Well Data

Well Depth ~49.5 Ft. — ___ Measured ✓ Historical — ✓ Top of Well ___ Top of Protective Casing

49.50
12.71
36.79

Well Riser Stick-up 2.53 Ft. (from ground)

Protective -0.21 Casing/Well Difference Ft.

Protective 2.74 Casing Ft.

Depth to Water 12.71 Ft.

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column 36.8 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 5.9 Gal/Vol; ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Docum ntation

Purging/Sampling Equipment Used: 14:20 purging @ 0.3 l/min. 15:10 pump is OFF

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB-Supplied
		Bailer	
~~✓~~	~~✓~~	~~PVC/Silicon Tubing~~	~~ABB-Supplied~~
✓	✓	Teflon/~~Silicon Tubing~~	ABB Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used: (✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl & DI Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear (✓ Cloudy SLIGHTLY) ___ Colored ___ Odor

Purge Data	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ 20 Gal.	@ Gal.
Temperature, Deg. C	16.5	17.1	17.5	17.7	
pH, units	6.46	6.31	6.24	6.26	
Specific Conductivity	293	287	285	281	
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	106	113	58	51	
~~Oxidation - Reduction, +/- mv~~ SAL	0.01%	0.01	0.01%	0.01	
Dissolved Oxygen, ppm	0.32	1.21	0.93	1.32	

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
– VOA		HCL	2-40 ml vials	✓	/ / /
– SVOA		4°C	2-1 liter AG	✓	/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
– Inorganics		HNO_3	1-1 liter P	✓	/ / /
– TPH, Fuel Oil		4°C	2-1 liter AG	✓	/ / /
– TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
– Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: Dup for SVOC taken here

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-906
Time: Start: ~~15:50~~ 16:15 End: 16:50

Date: 9-19-95
Field Sample No.: 09.MW906XXX08XX
Signature of Sampler: [signature]

Wat r Lev l/W ll Data

Well Depth 26 Ft. ___ Measured ✓ Historical

✓ Top of Well ___ Top of Protective Casing ___ ___

Well Riser Stick-up 1.76 Ft. (from ground)

Protective -0.08 Ft. Casing/Well Difference

Protective 1.84 Ft. Casing

Depth to Water 11 Ft.

Well Material: ✓ PVC ___ SS ___ ___

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch ___ ___

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ ___

Height of Water Column 15 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (___in.) = 2.4 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other ___		

Equipment D cumentation

Purging/Sampling Equipment Used: 1610 purging is on

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	DEDICATED
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	DEDICATED
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used: (✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl & DI Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	16.2	16.2	16.1		
pH, units	6.46	6.47	6.45		
Specific Conductivity	293	272	272		
~~(umhos/cm @ 25 Deg. C.)~~ NTU	15	12	5		
~~Oxidation - Reduction, w/ mv~~ SAL.	0.01	0.01	0.01		
Dissolved Oxygen, ppm	3.16	2.36	2.75		

Sampl Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	___/___/___/___
SVOA		4°C	1-1 liter AG		___/___/___/___
Pest/PCB		4°C	1-1 liter AG		___/___/___/___
Inorganics		HNO_3	1-1 liter P	✓	___/___/___/___
TPH, Fuel Oil		4°C	2-1 liter AG	✓	___/___/___/___
TPH, Gasoline		4°C	2-40 ml vials	✓	___/___/___/___
Vinyl Chloride		4°C	3-40 ml vials	✓	___/___/___/___

Notes: Purge rate 0.25 L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: 09MW907XXX09XX
Time: Start: 0740 End: 0900

Date: 9-20-95
Field Sample No.:
Signature of Sampler: D. Lovejoy

Water Level/Well Data

Well Depth 19 Ft. ___ Measured X Historical

X Top of Well ___ Top of Protective Casing ___ ___

Well Riser Stick-up 2.07 Ft. (from ground)

Protective -0.11 Ft. Casing/Well Difference

Protective ___ Ft. Casing

Depth to Water 15.11 Ft.

Well Material: X PVC ___ SS ___

Well Locked?: X Yes ___ No

Well Dia. X 2 inch ___ 4 inch ___ 6 inch ___ ___

Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ ___

Height of Water Column 3.89 Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (___ in.) = 0.62 Gal/Vol; ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	X	
Concrete Collar Intact	X	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
X	X	Submersible Pump	
		Bailer	
		PVC/Silicon Tubing	
X	X	Teflon/~~Silicon~~ Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- X Isopropyl

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line X In Container

Sample Observations: X Turbid X Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 8 min ~~Gal.~~	@ 13 min Gal.	@ 18 min ~~Gal.~~	@ 23 min ~~Gal.~~	@ ___ Gal.
Temperature, Deg. C	13.3	18.3	19.2	19.3	
pH, units	6.27	6.44	6.46	6.44	
Specific Conductivity	.364	.354	.352	.354	
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	144	69	34	25	
~~Oxidation - Reduction, +/- mv~~ SALINITY	0.01 %	0.01 %	0.01	0.01	
Dissolved Oxygen, ppm	1.3	2.7	2.57	1.97	

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2 ~~2~~-40 ml vials	✓	2 / ___ / ___ / ___
SVOA		4°C	~~1~~-1 liter AG		___ / ___ / ___ / ___
Pest/PCB		4°C	~~1~~-1 liter AG		___ / ___ / ___ / ___
Inorganics		HNO_3	~~1~~ 1 liter P	✓	1 / ___ / ___ / ___
TPH, Fuel Oil		4°C	~~2~~ 1 liter AG	✓	2 / ___ / ___ / ___
TPH, Gasoline		4°C	~~2~~-40 ml vials	✓	2 / ___ / ___ / ___
Vinyl Chloride		4°C	~~3~~-40 ml vials	✓	3 / ___ / ___ / ___

Notes: Purge rate @ 0.2 L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: 09MW904XXX08XX
Time: Start: 0905 End: 1005

Date: 9-20-95
Field Sample No.:
Signature of Sampler: D Lovegrove

Water Level/Well Data

Well Depth 13 Ft. ___ Measured ___ Historical

X Top of Well ___ Top of Protective Casing

Well Riser Stick-up 2.21 Ft. (from ground)

Protective -0.24 Ft. Casing/Well Difference

Protective 2.25 Ft. Casing

Depth to Water 10.13 Ft.

Well Material: X PVC ___ SS

Well Locked?: X Yes ___ No

Well Dia. X 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: X Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column 7.87 Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 1.26 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	X	
Concrete Collar Intact	N/A	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
X	X	Submersible Pump	
		Bailer	
		PVC/Silicon Tubing	
X	X	Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- X Deionized Water
- X Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- X Isopropyl

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth ___ ppm Field Data Collected ___ In-line X In Container

Sample Observations: ___ Turbid X Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ ___ min Gal.	@ ___ Gal.
Temperature, Deg. C	14.2	15.0	15.3		
pH, units	6.46	6.41	6.38		
Specific Conductivity	.316	.311	.312		
~~(umhos/cm. @ 25 Deg. C)~~ NTU	92	35	18		
~~Oxidation-Reduction, +/- mv~~ SAL.	0.01	0.01	0.01		
Dissolved Oxygen, ppm	1.45	1.6	2.01		

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1-1 liter P	✓	/ / /
TPH, Fuel Oil		4°C	1-1 liter AG	✓	/ / /
TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
Vinyl Chloride		4°C	3 ~~2~~-40 ml vials	✓	/ / /

Notes: Purge Rate = 0.3 L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: 09mw903XXX09XX
Time: Start: 1015 End: 1105

Date: 9-20-95
Field Sample No.:
Signature of Sampler: D. Lovegoy

Water Level/Well Data

Well Depth _____ Ft. ___ Measured ___ Historical

✓ Top of Well ___ Top of Protective Casing

Well Riser Stick-up 3.65 Ft. (from ground)

Protective -0.09 Ft. Casing/Well Difference

Protective 3.74 Ft. Casing

Depth to Water 3.17 Ft.

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column _____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = _____ Gal/Vol _____ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	NA	
Other _____		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
✓ Isopropyl

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min ~~Gal.~~	@ 10 min Gal.	@ 15 min ~~Gal.~~	@ ~~Gal.~~	@ ~~Gal.~~
Temperature, Deg. C	15.2	16.0	16.5		
pH, units	6.49	6.45	6.45		
Specific Conductivity	.293	.298	.298		
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	5	21	2		
~~Oxidation Reduction, +/- mv~~ SAL	0.01	0.01	0.01		
Dissolved Oxygen, ppm	3.45	3.29	4.16		

Sampl Coll ctl n Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	✓ / / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1-1 liter P	✓	✓ / / /
TPH, Fuel Oil		4°C	1-1 liter AG		✓ / / /
TPH, Gasoline		4°C	2-40 ml vials		✓ / / /
Vinyl Chloride		4°C	2-40 ml vials		✓ / / /

Notes: Purge 0.28 L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: 09MW905XXX08XX
Time: Start: 1330 End: 1420

Date: 9-20-95
Field Sample No.:
Signature of Sampler: D. Lovejoy

Water Level/Well Data

Well Depth 30 Ft. ~~Measured~~ DOL / X Historical

X Top of Well / ___ Top of Protective Casing

Well Riser Stick-up 1.86 Ft. (from ground)

Protective -0.15 Ft. Casing/Well Difference

Protective 2.01 Ft. Casing

Depth to Water 9.75 Ft.

Well Material: X PVC / ___ SS

Well Locked?: X Yes / ___ No

Well Dia. X 2 inch / ___ 4 inch / ___ 6 inch

Water Level Equip. Used: X Elect. Cond. Probe / ___ Float Activated / ___ Press. Transducer

Height of Water Column 20.25 Ft. X ___ .16 Gal/Ft. (2 in.) / ___ .65 Gal/Ft. (4 in.) / ___ 1.5 Gal/Ft. (6 in.) / ___ Gal/Ft. (__in.) = 3.24 Gal/Vol / ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ___ In-line / ___ In Container

Sample Observations: ___ Turbid / X Clear / ___ Cloudy / ___ Colored / ___ Odor

Purge Data	@ 5 min ~~Gal.~~	@ 10 min ~~Gal.~~	@ 15 min ~~Gal.~~	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	13.9	14.9	15.0		
pH, units	8.05	8.08	8.02		
Specific Conductivity	.351	.339	.343		
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	95	62	47		
~~Oxidation-Reduction, w/ mv~~	0.01	0.01	0.01		
Dissolved Oxygen, ppm	2.83	3.7	2.72		

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	2 / / /
SVOA		4°C	1-1 liter AG		/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1-1 liter P	✓	1 / / /
TPH, Fuel Oil		4°C	1 liter AG	✓	2 / / /
TPH, Gasoline		4°C	2-40 ml vials	✓	2 / / /
Vinyl Chloride		4°C	3-40 ml vials	✓	3 / / /

Notes: Purge rate @ 0.2L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: 09MW022XXX08XX
Time: Start: 1335 End: 1455

Date: 9-20-95
Field Sample No.: MW-NASB-022
Signature of Sampler: D. Lovegrove

Water Level/Well Data

Well Depth 15 Ft. ___ Measured ✗ Historical

✗ Top of Well ___ Top of Protective Casing ___ ___

Well Riser Stick-up 2.88 Ft. (from ground)

Protective -0.17 Ft. Casing/Well Difference

Protective 3.05 Ft. Casing

Depth to Water 10.96 Ft.

Well Material: ✗ PVC ___ SS ___

Well Locked?: ✗ Yes ___ No

Well Dia. ✗ 2 inch ___ 4 inch ___ 6 inch ___ ___

Water Level Equip. Used: ✗ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ ___

Height of Water Column 4.04 Ft. X ✗ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (___ in.) = 0.64 Gal/Vol ___ Total Gal Purged

Well Integrity: Prot. Casing Secure — Yes ✗ No ___; Concrete Collar Intact — Yes ✗ No ___; Other ___ — Yes ___ No ___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For)

Purging	Sampling		Equipment ID
___	___	Peristaltic Pump	
✗	✗	Submersible Pump	
___	___	Bailer	
___	___	PVC/Silicon Tubing	
✗	✗	Teflon/~~Silicon Tubing~~	
___	___	Airlift	
___	___	Hand Pump	
___	___	In-line Filter	
___	___	Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)

___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
✓ None
___ Isopropanol

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 6 ppm Field Data Collected ___ In-line ✗ In Container

Sample Observations: ✗ Turbid ✗ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 ~~Gal.~~ min	@ 10 ~~Gal.~~ min	@ 15 Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	18	19.8	19.9		
pH, units	6.53	6.41	6.37		
Specific Conductivity	.564	.530	.527		
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	90	120	90		
~~Oxidation - Reduction, +/- mv~~ SAL	0.02	0.02	0.02		
Dissolved Oxygen, ppm	4.02	3.22	2.96		

Sample Collecti n Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA	___	HCL	2-40 ml vials	✓	___/___/___/___
SVOA	___	4°C	2 1 liter AG	✓	___/___/___/___
Pest/PCB	___	4°C	2-1 liter AG	___	___/___/___/___
Inorganics	___	HNO_3	1- 1 liter P	✓	___/___/___/___
TPH, Fuel Oil	___	4°C	2 1 liter AG	✓	___/___/___/___
TPH, Gasoline	___	4°C	2-40 ml vials	✓	___/___/___/___
Vinyl Chloride	___	4°C	3-40 ml vials	✓	___/___/___/___

Notes: Purge rate 0.24 L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NASB-204
Time: Start: ____ End: 1125

Date: 9-21-95
Field Sample No.: 09MW204XXX08XX
Signature of Sampler: [illegible]

Water Level/Well Data

Well Depth 15 Ft. ___ Measured ✓ Historical

✓ Top of Well ___ Top of Protective Casing ___ ____

Well Riser Stick-up 2.55 Ft. (from ground)

Protective -0.38 Ft. Casing/Well Difference

Protective 2.96 Ft. Casing

Depth to Water 10.05 Ft.

Well Material: ✓ PVC ___ SS ____

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch ___ ____

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ ____

Height of Water Column 4.9 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (__in.) = 0.78 Gal/Vol ____ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other ____		

Equipment Documentation

Purging/Sampling Equipment Used: Purged 2 in 0.24 min

Decontamination Fluids Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB Supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/Silicon Tubing	ABB Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

(✓ All That Apply at Location)
- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl / DI solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 Gal.	@ 10 Gal.	@ 15 Gal.	@ 20 Gal.	@ ____ Gal.
Temperature, Deg. C	15.2	17.3	17.8	17.9	after sampling
pH, units	6.15	6.23	6.21	6.25	was complete
Specific Conductivity	214	211	209	212	
~~(umhos/cm, @ 25 Deg. C.)~~ NTU	367	631	704	663	10
~~Oxidation-Reduction, +/- mv~~ SAL	0	0	0	0	
Dissolved Oxygen, ppm	2.47	2.13	2.00	2.16	

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA	___	HCL	2-40 ml vials	✓	___/___/___/___
SVOA	___	4°C	2-1 liter AG	✓	___/___/___/___
Pest/PCB	___	4°C	2-1 liter AG	✓	___/___/___/___
Inorganics	___	HNO_3	1-1 liter P	✓	___/___/___/___
TPH, Fuel Oil	___	4°C	2-1 liter AG	✓	___/___/___/___
TPH, Gasoline	___	4°C	2-40 ml vials	✓	___/___/___/___
Vinyl Chloride	___	4°C	3-40 ml vials	✓	___/___/___/___

Notes: Dup & MS/MSD collected for all parameters
Purge rate 2.2 L/min
Final turbidity 10 NTU

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NASB-020
Time: Start: 11:50 End: 12:40

Date: 9-21-95
Field Sample No.: 09MW020XXX08XX
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth ~20 Ft. ___ Measured ✓ Historical

✓ Top of Well ___ Top of Protective Casing ___ ___

Well Riser Stick-up 2.85 Ft. (from ground)

Protective Casing/Well Difference -0.18 Ft.

Protective Casing 3.03 Ft.

Depth to Water 14.75 Ft.

Well Material: ✓ PVC ___ SS ___

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column ~5.8 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = .9 Gal/Vol ___ Total Gal Purged

Well Integrity: Prot. Casing Secure ✓ Yes ___ No; Concrete Collar Intact ✓ Yes ___ No; Other ___ ___ ___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
___	___	Peristaltic Pump	
✓	✓	Submersible Pump	ABB-supplied
___	___	Bailer	
___	___	PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB-supplied
___	___	Airlift	
___	___	Hand Pump	
___	___	In-line Filter	
___	___	Press/Vac Filter	
___	___		

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
___ Deionized Water
___ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
___ ___
___ ___

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ ___ ~~Gal.~~ Min	@ ___ ~~Gal.~~ Min	@ ___ ~~Gal.~~ Min	@ ___ ~~Gal.~~ Min	@ ___ Gal.
Temperature, Deg. C	21.3	23.5	24.1	24.0	
pH, units	6.07	5.87	5.75	5.75	
Specific Conductivity	123	125	128	129	
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	10	10	10	10	
~~Oxidation Reduction, +/- mv~~ SAL	0	0	0	0	
Dissolved Oxygen, ppm	2.57	3.14	3.48	3.09	

Sampl Collectl n Requirem nts (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA	___	HCL	2-40 ml vials	✓	___/___/___/___
SVOA	___	4°C	2-1 liter AG	✓	___/___/___/___
Pest/PCB	___	4°C	1-1 liter AG	___	___/___/___/___
Inorganics	___	HNO_3	1-1 liter P	✓	___/___/___/___
TPH, Fuel Oil	___	4°C	2-1 liter AG	✓	___/___/___/___
TPH, Gasoline	___	4°C	2-40 ml vials	✓	___/___/___/___
Vinyl Chloride	___	4°C	3-40 ml vials	✓	___/___/___/___

Notes: Purge rate = 0.28 L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: 09.MW001XXX08XX
Time: Start: 13:25 End: 14:35

Date: 9-21-95 MW-NEX-001R
Field Sample No.: MW-NASB-023 (1R)
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth 21 Ft. — ___ Measured / ✓ Historical

✓ Top of Well / ___ Top of Protective Casing

Well Riser Stick-up -0.25 Ft. (from ground)

Protective Casing/Well Difference -0.25 Ft.

Protective Casing ___ Ft. Flush Mount

Depth to Water 8.19 Ft.

Well Material: ✓ PVC / ___ SS

Well Locked?: ✓ Yes / ___ No

Well Dia. ✓ 2 inch / ___ 4 inch / ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe / ___ Float Activated / ___ Press. Transducer

Height of Water Column ~13 Ft. X ✓ .16 Gal/Ft. (2 in.) / ___ .65 Gal/Ft. (4 in.) / ___ 1.5 Gal/Ft. (6 in.) / ___ Gal/Ft. (__in.) = 2 Gal/Vol / ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB Supplied
		Bailer	
~~✓~~	~~✓~~	~~PVC/Silicon Tubing~~	ABB Supplied
✓	✓	Teflon/~~Silicon Tubing~~	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl & DI Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line / ✓ In Container

Sample Observations: ___ Turbid / ✓ Clear / ___ Cloudy / ___ Colored / ___ Odor

Purge Data	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	23.9	24.7	24.5		
pH, units	5.12	5.19	5.18		
Specific Conductivity	2.76	2.82	2.88		
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	10	10	10		
~~Oxidation - Reduction, +/- mv~~ SAL	0.01	0.01	0.01		
Dissolved Oxygen, ppm	6.85	6.76	5.84		

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	2-1 liter AG	✓	/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1-1 liter P	✓	/ / /
TPH, Fuel Oil		4°C	2-1 liter AG	✓	/ / /
TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
Vinyl Chloride		4°C	2-40 ml vials	✓	/ / /

Notes: ___

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: ~~09MW004~~ 09MW004XXX08XX
Time: Start: 15:10 End: ~~16:52~~ 15:52
Date: 9-21-95
Field Sample No.: MW-NEX-004R
Signature of Sampler: [illegible]

Water Level/Well Data

Well Depth 12 Ft. — ✓ Measured — ✓ Top of Well — Well Riser Stick-up -0.43 Ft. (from ground) — Protective -0.43 Ft. Casing/Well Difference

Historical — Top of Protective Casing — ~~Ground~~ TOP.

Protective ____ Ft. Casing

Depth to Water 7.92 Ft.

12.00
7.90
4.10

Well Material: ✓ PVC — SS

Well Locked?: ✓ Yes — No

Well Dia. ✓ 2 inch — 4 inch — 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe — Float Activated — Press. Transducer

Height of Water Column 4 Ft. X ✓ .16 Gal/Ft. (2 in.) — .65 Gal/Ft. (4 in.) — 1.5 Gal/Ft. (6 in.) — Gal/Ft. (in.) = 0.64 Gal/Vol — Total Gal Purged

Well Integrity: Prot. Casing Secure — Yes ✓ No; Concrete Collar Intact — Yes ✓ No; Other ____

Equipment Documentation

Purging/Sampling Equipment Used:

Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used: (✓ All That Apply at Location)

- Methanol (100%)
- 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- Hexane
- HNO_3/D.I. Water Solution
- Potable Water
- None
- ✓ Isopropyl & DI Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected: ✓ In-line — ✓ In Container

Sample Observations: Turbid — ✗ Clear — Cloudy — Colored — Odor

Purge Data	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ 20 min Gal.	@ ____ Gal.
Temperature, Deg. C	24.2	24.4	24.3	26.7	
pH, units	6.24	6.47	6.81	6.25	
Specific Conductivity	633	657	644	645	
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	10	~~10~~ 6	10	10	
~~Oxidation - Reduction, +/- mv~~ Salinity	0.02	0.02	0.02	0.02	
Dissolved Oxygen, ppm	1.47	2.14	1.59	1.10	

Sampl Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	2-1 liter AG	✓	/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1- 1 liter P	✓	/ / /
TPH, Fuel Oil		4°C	2- 1 liter AG	✓	/ / /
TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: Purge rate @ 0.2 L/min

Finish @ 15:52

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NASB-007
Time: Start: 1612 End: 1800

Date: 9-21-95
Field Sample No.: 09MW007XXX08XX
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth 15 Ft. — ___ Measured ✓ Historical

___ Top of Well
___ Top of Protective Casing
✓ Ground

Well Riser Stick-up -0.41 Ft. (from ground)

Protective -0.41 Ft. Casing/Well Difference

Protective N/A Ft. Casing Flush

Depth to Water 7.73 Ft.

Well Material: ✓ PVC ___ SS ___

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column ~7.3 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (___ in.) = ~1.2 Gal/Vol

___ Total Gal Purged

Well Integrity: Yes ✓ No ___
Prot. Casing Secure ✓
Concrete Collar Intact ✓
Other ___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB Supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used: (✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl & DI Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ___ Clear ✓ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min Gal.	@ 10 Gal.	@ 15 Gal.	@ 20 Gal.	@ 25 Gal.
Temperature, Deg. C	18.6	22.2	20.3	18.6	19.3
pH, units	6.65	6.45	6.48	6.38	6.51
Specific Conductivity	334	343	356	334	349
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	289	150	86	47	41
~~Oxidation Reduction, +/- mv~~ Salinity	0.01	0.01	0.01	0.01	0.01
Dissolved Oxygen, ppm	1.40	1.03	1.20	1.00	1.30

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	2-1 liter AG	✓	/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1-1 liter P	✓	/ / /
TPH, Fuel Oil		4°C	2-1 liter AG	✓	/ / /
TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: Purge @ 0.28L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NASB-010
Time: Start: 0825 End: 0900

Date: 9-22-95
Field Sample No.: 09MW010XXX05XX
Signature of Sampler: [signature]

Water Level/W ll Data

Well Depth 14 Ft. — ___ Measured ✓ Historical

___ Top of Well
___ Top of Protective Casing
✓ Ground

Well Riser Stick-up -0.47 Ft. (from ground)

Protective -0.47 Ft. Casing/Well Difference

Protective N/A Ft. Casing Flush

Depth to Water 6.89 Ft.

Well Material: ✓ PVC ___ SS ___

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch ___

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___

Height of Water Column 7.1 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 1.1 Gal/Vol ___ Total Gal Purged

Well Integrity: Prot. Casing Secure ✓ Yes ___ No; Concrete Collar Intact ✓ Yes ___ No; Other ___ Yes ___ No

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
___	✓	Peristaltic Pump	
✓	✓	Submersible Pump	ABB Supplied
___	___	Bailer	
___	___	PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB Supplied
___	___	Airlift	
___	___	Hand Pump	
___	___	In-line Filter	
___	___	Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
✓ Isopropyl & DI Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Colored ___ Clear ___ Odor ___ Cloudy

Purge Data	@ 5 Min Gal.	@ 10 Min Gal.	@ ___ Min Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	17.8	19.1	19.7	20.5	Final Reading
pH, units	5.67	5.65	5.73	5.83	
Specific Conductivity	357	356	370	373	
~~(umhos/cm. @ 25 Deg. C)~~ NTU	999	595	203	97	343
~~Oxidation - Reduction, +/- mv~~ SAL	0.01	0.01	0.01	0.01	
Dissolved Oxygen, ppm	2.27	2.75	2.40	2.71	

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA	___	HCL	2-40 ml vials	✓	___/___/___/___
SVOA	___	4°C	2-1 liter AG	✓	___/___/___/___
Pest/PCB	___	4°C	1-1 liter AG	___	___/___/___/___
Inorganics	___	HNO_3	1-1 liter P	✓	___/___/___/___
TPH, Fuel Oil	___	4°C	1-1 liter AG	✓	___/___/___/___
TPH, Gasoline	___	4°C	2-40 ml vials	✓	___/___/___/___
Vinyl Chloride	___	4°C	3-40 ml vials	✓	___/___/___/___

Notes: Purge @ 0.3 L/min

Very rusty colored water that clears but pump must be surged from time to time which agitates the well & clouds it up again

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NASB-006
Time: Start: 09:20 End: 10:25

Date: 9-22-95
Field Sample No.: 09 MW006 XXX08XX
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth 11 Ft. — ___ Measured / ✓ Historical

___ Top of Well / ___ Top of Protective Casing / ✓ Ground

Well Riser Stick-up ~0.23 Ft. (from ground)

Protective Casing/Well Difference ~0.23 Ft.

Protective Casing N/A Ft. Flush

Depth to Water 7.7 Ft.

11.0
7.7
3.3

Well Material: ✓ PVC / ___ SS / ___

Well Locked?: ✓ Yes / ___ No

Well Dia. ✓ 2 inch / ___ 4 inch / ___ 6 inch / ___

Water Level Equip. Used: ✓ Elect. Cond. Probe / ___ Float Activated / ___ Press. Transducer / ___

Height of Water Column 3.3 Ft. X ✓ .16 Gal/Ft. (2 in.) / ___ .65 Gal/Ft. (4 in.) / ___ 1.5 Gal/Ft. (6 in.) / ___ Gal/Ft. (__in.) = ~0.53 Gal/Vol / ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl & DI solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line / ✓ In Container

Sample Observations: ___ Turbid / ☒ Clear / ___ Cloudy / ___ Colored / ___ Odor

Purge Data	@ 5 min Gal.	@ 10 min Gal.	@ 15 min Gal.	@ 20 min Gal.	@ ___ Gal.
Temperature, Deg. C	17.9	19.1	19.3	18.9	
pH, units	5.19	4.96	5.03	5.10	
Specific Conductivity	580	626	579	577	
~~(umhos/cm. @ 25 Deg. C.)~~ NTU Salinity	10	10	26 *	10	
~~Oxidation - Reduction, +/- mv~~	0.02	0.02	0.02	0.02	
Dissolved Oxygen, ppm	2.14	2.07	2.22	2.58	

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	2-1 liter AG	✓	/ / /
Pest/PCB		4°C	1-1 liter AG		/ / /
Inorganics		HNO_3	1-1 liter P	✓	/ / /
TPH, Fuel Oil		4°C	2-1 liter AG	✓	/ / /
TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: * Had to lower pump
Purge @ 0.24 L/min

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NASB-009
Time: Start: 10:50 End: 12:00

Date: 9-22-99
Field Sample No.: 09MW009XXX08XX
Signature of Sampler: [illegible]

Water Level/Well Data

Well Depth 13 Ft. — ___ Measured / ✓ Historical

___ Top of Well / ___ Top of Protective Casing / ✓ Ground

Well Riser Stick-up -0.38 Ft. (from ground)

Protective -0.38 Ft. Casing/Well Difference

Protective N/A Ft. Casing FLUSH

Depth to Water 4.4 Ft.

Well Material: ✓ PVC / ___ SS / ___

Well Locked?: ✓ Yes / ___ No

Well Dia. ✓ 2 inch / ___ 4 inch / ___ 6 inch / ___

Water Level Equip. Used: ✓ Elect. Cond. Probe / ___ Float Activated / ___ Press. Transducer / ___

Height of Water Column 8.6 Ft. X ✓ .16 Gal/Ft. (2 in.) / ___ .65 Gal/Ft. (4 in.) / ___ 1.5 Gal/Ft. (6 in.) / ___ Gal/Ft. (___ in.) = 1.4 Gal/Vol / ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB-supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB-supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl & DI Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line / ✓ In Container

Sample Observations: ___ Turbid / ✓ Clear / ___ Cloudy / ___ Colored / ___ Odor

Purge Data	@ 5 ~~Gal.~~ min.	@ 10 ~~Gal.~~ min.	@ 15 ~~Gal.~~ min.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	20.2	20.7	20.8		
pH, units	5.65	5.67	5.64		
Specific Conductivity	459	469	468		
NTU ~~(umhos/cm, @ 25 Deg. C.)~~	10	10	10		
SALINITY ~~Oxidation - Reduction, +/- mv~~	0.01 %	0.01	0.01		
Dissolved Oxygen, ppm	1.34	1.46	1.33		

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	___/___/___/___
SVOA		4°C	2-1 liter AG	✓	___/___/___/___
Pest/PCB		4°C	2-1 liter AG		___/___/___/___
Inorganics		HNO_3	1-1 liter P	✓	___/___/___/___
TPH, Fuel Oil		4°C	2-1 liter AG	✓	___/___/___/___
TPH, Gasoline		4°C	2-40 ml vials	✓	___/___/___/___
Vinyl Chloride		4°C	3-40 ml vials	✓	___/___/___/___

Notes: PURGE STARTED @ 0.26 L/min.

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NEX-002
Time: Start: 08:20/14:00 End: 10:20/15:30

Date: 9-25-95
Field Sample No.: 09MW002XXX08XX
Signature of Sampler: _____

Water Level/Well Data

Well Depth 14 Ft. ___ Measured ✓ Historical

___ Top of Well
___ Top of Protective Casing
✓ Ground

Well Riser Stick-up -0.88 Ft. (from ground)

Protective -0.88 Ft. Casing/Well Difference

Protective N/A Ft. Casing FLUSH

Depth to Water 7.08 Ft.

Well Material: ✓ PVC ___ SS

Well Locked?: ✓ Yes ___ No

Well Dia. ___ 2 inch ✓ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column ~6 Ft. X ___ .16 Gal/Ft. (2 in.) ✓ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 3.9 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB-Supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB-Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None
- ✓ Isopropyl Solution

Field Analysis Data

Ambient Air VOC ____ ppm Well Mouth ____ ppm Field Data Collected ___ In-line ___ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min. Gal.	@ 10 min. Gal.	@ 15 min. Gal.	@ 20 min. Gal.	@ ____ Gal.
Temperature, Deg. C	14.7	15.5	17.3	17.3	
pH, units	6.79	6.25	6.33	6.45	
Specific Conductivity	197	202	188	184	
~~(umhos/cm. @ 25 Deg. C.)~~ NTU	10	2	1	1	
~~Oxidation - Reduction, +/- mv~~ SAL.	0.0 %	0.0 %	0.0 %	0.0 %	
Dissolved Oxygen, ppm	4.1	5.7	5.6	4.3	

Sampl Collection Requir ments (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	___/___/___/___
SVOA		4°C	2 1 liter AG	✓	___/___/___/___
Pest/PCB		4°C	2 1 liter AG		___/___/___/___
Inorganics		HNO_3	1- 1 liter P	✓	___/___/___/___
TPH, Fuel Oil		4°C	2- 1 liter AG	✓	___/___/___/___
TPH, Gasoline		4°C	2-40 ml vials	✓	___/___/___/___
Vinyl Chloride		4°C	3 40 ml vials	✓	___/___/___/___

Notes: STARTED PURGE @ 0.29 L/min.
- PURGED DRY DURING sampling - ∴ LEFT
∴ CAME BACK TO FINISH AT 14:30 to 15:30
- COLLECTED DUP/MS-MSD AT This well

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NEX-003
Time: Start: 10:45 End: 12:00

Date: 9-25-95
Field Sample No.: 09MW003XXX08XX
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth 15 Ft. ___ Measured ✓ Historical

___ Top of Well ___ Top of Protective Casing ✓ GROUND

Well Riser Stick-up (from ground) -0.5 Ft.

Protective Casing/Well Difference -0.5 Ft.

Protective Casing N/A Ft. FLUSH

Depth to Water 7.1 Ft.

Well Material: ✓ PVC ___ SS ___

Well Locked?: ✓ Yes ___ No

Well Dia. ___ 2 inch ✓ 4 inch ___ 6 inch

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column 7.9 Ft. X ___ .16 Gal/Ft. (2 in.) ✓ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = ~5.1 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB-Supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB-Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
✓ Isopropyl Alcohol

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min Gal.	@ 10 min Gal.	@ 20 min Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	15.0	16.6	17.6	18.0	
pH, units	5.61	5.67	5.65	5.69	
Specific Conductivity	170	172	172	171	
~~(umhos/cm. @ 25 Deg. C.)~~ TURB.	42	19	8	7	
~~Oxidation Reduction, +/- mv~~ Salinity	0.08%				
Dissolved Oxygen, ppm	1.79	1.81	2.8	2.5	

Sampl Collecti n Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	2-1 liter AG	✓	/ / /
Pest/PCB		4°C	2-1 liter AG		/ / /
Inorganics		HNO_3	1- 1 liter P	✓	/ / /
TPH, Fuel Oil		4°C	2- 1 liter AG	✓	/ / /
TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: PURGE STARTED @ 0.28L/min.

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NEX-005
Time: Start: 12:10 End: 13:00

Date: 9-25-95
Field Sample No.: 09MW005XXX08XX
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth 14 Ft. ___ Measured ✓ Historical

___ Top of Well
___ Top of Protective Casing
✓ Ground

Well Riser Stick-up -0.88 Ft. (from ground)

Protective -0.88 Ft. Casing/Well Difference

Protective N/A Ft. Casing

Depth to Water 3.73 Ft.

Well Material: ✓ PVC ___ SS ___

Well Locked?: ___ Yes ___ No

Well Dia. ___ 2 inch ✓ 4 inch ___ 6 inch ___

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___

Height of Water Column ~9.4 Ft. X ___ .16 Gal/Ft. (2 in.) ✓ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = ~6.1 Gal/Vol; ___ Total Gal Purged

Well Integrity: Yes / No
Prot. Casing Secure: ✓ / ___
Concrete Collar Intact: ✓ / ___
Other ___ / ___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB-Supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB-Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
✓ Isopropyl Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 min. Gal.	@ 10 min. Gal.	@ 15 min. Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	16.9	18.5	18.8		
pH, units	6.24	6.10	6.06		
Specific Conductivity	158	154	153		
Turb. ~~(umhos/cm. @ 25 Deg. C.)~~	16	12	12		
Salinity ~~Oxidation - Reduction, +/- mv~~	0.00	0.00	0.00		
Dissolved Oxygen, ppm	5.9	5.6	5.4		

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA	___	HCL	2-40 ml vials	✓	___/___/___/___
SVOA	___	4°C	2-1 liter AG	✓	___/___/___/___
Pest/PCB	___	4°C	2-1 liter AG	___	___/___/___/___
Inorganics	___	HNO_3	1-1 liter P	✓	___/___/___/___
TPH, Fuel Oil	___	4°C	2-1 liter AG	✓	___/___/___/___
TPH, Gasoline	___	4°C	2-40 ml vials	✓	___/___/___/___
Vinyl Chloride	___	4°C	3-40 ml vials	✓	___/___/___/___

Notes: Purge Started @ 0.28L/min.

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: NASB
Project Number: 8733-02
Sample Location ID: MW-NASB-008
Time: Start: 13:10 End: 1400

Date: 9-25-95
Field Sample No.: 09MW008XXX08XX
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth 13.5 Ft. — ___ Measured ✓ Historical

___ Top of Well
___ Top of Protective Casing
✓ Ground

Well Riser Stick-up -0.34 Ft. (from ground)

Protective -0.34 Ft. Casing/Well Difference

Protective N/A Casing FLUSH Ft.

Depth to Water 3.45 Ft.

Well Material: ✓ PVC ___ SS ___

Well Locked?: ✓ Yes ___ No

Well Dia. ✓ 2 inch ___ 4 inch ___ 6 inch ___

Water Level Equip. Used: ✓ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___

Height of Water Column ~10 Ft. X ✓ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__in.) = 1.6 Gal/Vol ___ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure	✓	
Concrete Collar Intact	✓	
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
		Peristaltic Pump	
✓	✓	Submersible Pump	ABB-Supplied
		Bailer	
		PVC/Silicon Tubing	
✓	✓	Teflon/~~Silicon Tubing~~	ABB-Supplied
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None
✓ Isopropyl Solution

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm

Field Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ 5 ~~min~~ Gal.	@ 10 min Gal.	@ 15 min Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	19.3	21.1	21.5		
pH, units	5.49	5.91	6.00		
Specific Conductivity	352	351	355		
TURB. ~~(umhos/cm. @ 25 Deg. C.)~~	62	20	14		
SAL ~~Oxidation - Reduction, +/- mv~~	0.01 %	0.01 %	0.01 %		
Dissolved Oxygen, ppm	2.4	2.0	2.2		

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL	2-40 ml vials	✓	/ / /
SVOA		4°C	2-1 liter AG	✓	/ / /
Pest/PCB		4°C	2-1 liter AG		/ / /
Inorganics		HNO_3	1-1 liter P	✓	/ / /
TPH, Fuel Oil		4°C	2-1 liter AG	✓	/ / /
TPH, Gasoline		4°C	2-40 ml vials	✓	/ / /
Vinyl Chloride		4°C	3-40 ml vials	✓	/ / /

Notes: PURGE STARTED @ 0.28 L/min.

GROUNDWATER SAMPLE FIELD DATA RECORD
SOURCE INVESTIGATION - SITE 9
NEPTUNE DRIVE DISPOSAL SITE
NAVAL AIR STATION BRUNSWICK
ABB Environmental Services, Inc.

9508017D(a) 22

SURVEY DATA

Maine Coast Surveying

FILE COPY

Professional Land Surveyors
Roderick H. Craib, Jr.
David C. Tonry

Elm Street
P.O. Box 1210
Damariscotta, Maine 04543
207-563-1500

Final Report

ABB Environmental Services, Inc.
Brunswick Naval Air Station, Brunswick, Maine

PO #NE534389G

Project #95046
September 22, 1995

COPY

This project was undertaken in response to a subcontract agreement #NE534389G between ABB Environmental Services and Maine Coast Surveying dated August 8, 1995. The purpose of this project was to determine the horizontal coordinates and the elevations for 17 soil borings and monitoring wells for ABB's on-going work at the Brunswick Naval Air Station. The specific scope of the services requested are detailed in the subcontract agreement. We met with Tom Longley on site on September 12, 1995 and performed the work. No unusual events occurred that had any effect on this project.

The coordinates and the elevations of the monitoring wells are shown in Table I, attached, and are contained in a file named 95046.WKS on the enclosed diskette. A sketch showing the relative location of the points is attached. Copies of our field notes are attached as Appendix A.

We tied our work to the provided coordinates of MW902 and MW901. Therefore, no closure report is included. However, we did notice that the coordinates of MW-NASB-007 do not match those provided. No attempt was made to resolve this apparent discrepancy. The elevations shown in Table I are based on our observations of Brunswick Naval Air Station Benchmark #2 which is a published elevation of 59.47'.

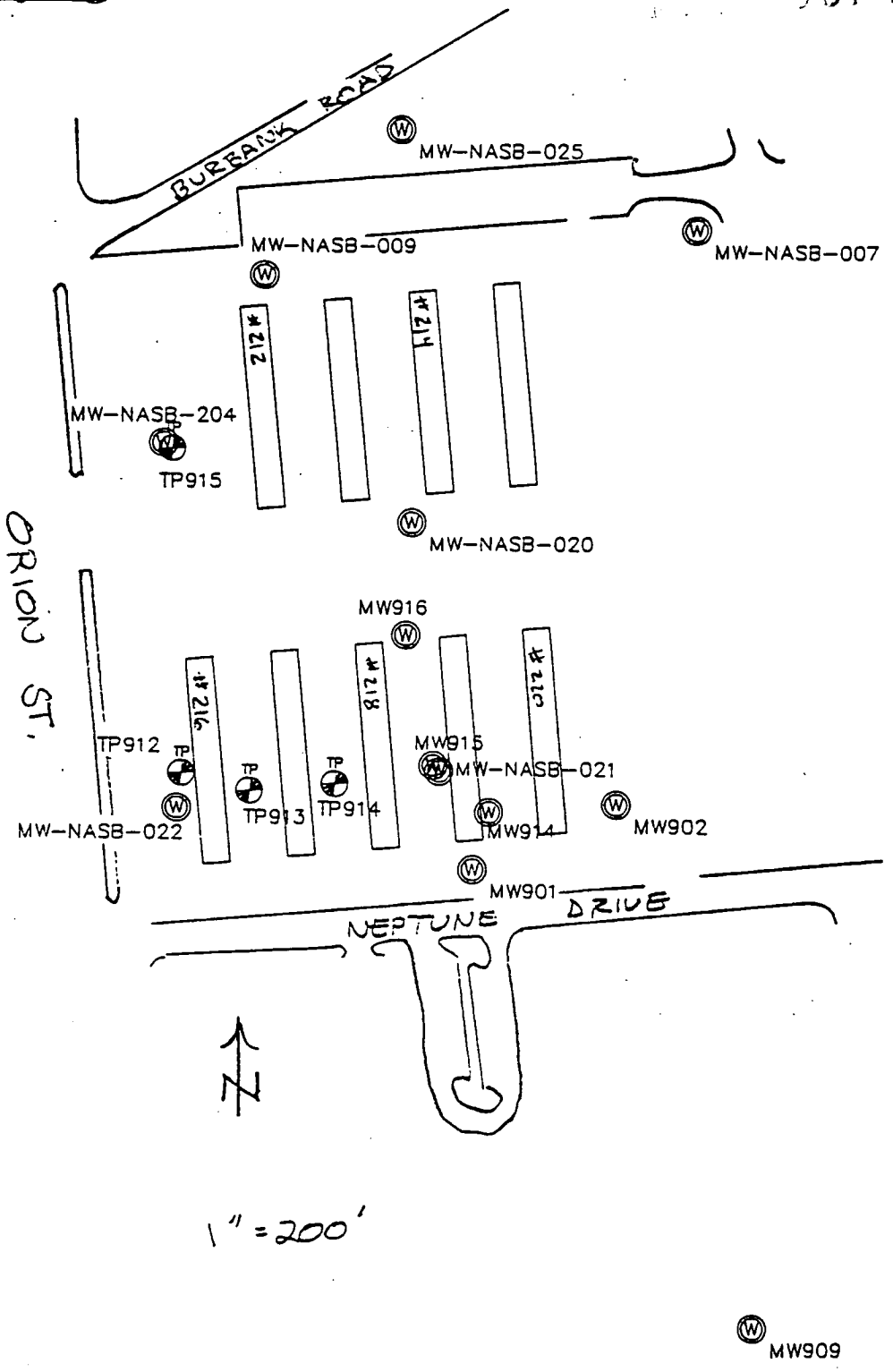
This report has been prepared by Maine Coast Surveying from the records of the work performed. It is correct to the best of our knowledge and ability. This report completes our work on this phase of this project.

MAINE COAST SURVEYING

by: Roderick H Craib
Roderick H. Craib, Jr., President
Professional Land Surveyor #1191

Member:
Maine Society of Land Surveyors • National Society of Professional Surveyors • American Congress on Surveying and Mapping

Maine Coast Surveying



Maine Coast Surveying

Brunswick Naval Air Station
for ABB Environmental Services
September 12, 1995

Point #	Identifier	Northing	Easting	Elevation casing	Elevation ground	Elevation PVC
11	MW 909	385558.5	563041.3	59.03	56.0	58.89
12	MW 914	386156.2	562738.3	58.26	56.1	58.15
13	MW 902	386165.5	562882.3	58.33	55.6	58.26
14	MW 901	386090.3	562720.0	disturbed	55.1	disturbed
15	MW 915	386203.3	562680.6	58.71	56.0	58.51
16	MW-NASB-021	386210.4	562674.0	58.03	56.0	57.89
17	TP 914	386188.2	562563.4		56.1	
18	TP 913	386179.5	562466.9		56.4	
19	MW-NASB-022	386159.6	562385.3	59.68	56.7	59.52
20	TP 912	386199.7	562389.8		56.8	
21	TP 915	386579.3	562375.6		59.2	
22	MW-NASB-204	386585.7	562365.9	62.27	59.3	62.09
23	MW-NASB-020	386493.3	562645.7	61.86	58.8	61.68
24	MW 916	386361.9	562640.7	58.33	56.5	58.22
25	MW-NASB-009	386783.1	562476.7	59.31	59.3	58.96
26	MW-NASB-025	386953.4	562627.3	64.81	64.8	64.28
27	MW-NASB-007	386836.7	562962.4	57.56	57.6	57.17
108	BM 2	386551.6	562319.2	59.47		

Elevations based on BNAS disk "BM 2" in the NE corner of a 12'x12' concrete base of steam manhole "D-6" on the east side of Orion Street.

Coordinates are based on coordinates of MW 901 and MW 902 provided by ABB Environmental Services.

MAINE COAST SURVEYING
by: Roderick H Craib
Roderick H. Craib, Jr. President
Professional Land Surveyor # 1191

ANALYTICAL DATA

SOIL ANALYTICAL DATA

ABB Environmental Services, Inc.
Data Validation Report
Brunswick NAS - Project #8733-02
Sampling Date: August 22 to August 25, 1995

MEMORANDUM

To: Tom Longley

From: Joanne Romano

Date: October 12, 1995

Review is complete for the data packages generated by Compuchem concerning the soil samples collected during the field program. Review was performed following *USEPA Region I Laboratory Data Validation Functional Guilelines for Evaluating Inorganics Analyses* and *USEPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses,* ABB-ES designed review forms for ME DEP TPH in Gasoline in Soil and for ME DEP TPH in Fuel Oil in Soil. Samples were analyzed for TCL VOCs, SVOCs, and pesticides/PCBs according to USEPA CLP SOW OLM01.9, TAL inorganics employing USEPA CLP SOW ILM03.0, MEDEP TPH in Fuel Oil employing method 4.1.2, and MEDEP TPH in Gasoline employing a GC/FID method based on the LUFT method.

Table 1: Laboratory Report of Analysis
Table 2: Validation / Summary

Table 1 presents the analytical results as reported by the laboratory. Table 2 presents the validated results with the appropriate data qualifiers. The laboratory qualifiers used on Table 1 are defined in Attachment I; data validation qualifiers used on Table 2 are defined in Attachment II.

For the analyses performed for the soil samples in this project, more than one set of criteria may not have been met. If the data were not affected because criteria were not met, the criteria not met are not addressed in this memo. Sample results that were affected by criteria that were not met are addressed below including the appropriate assigned qualifier flag.

In cases where several criteria were not met for a sample requiring different qualification, the qualifier reported on Table 2 was based on the worst case scenario. In cases where several criteria were not met for a sample and the same qualifier flag was required, the qualifier flag was reported on the Table 2 only once. The following subsections summarize the qualifications/edits that have been detected by validation.

I. VOLATILE COMPOUNDS

Notations:

Compound results below the contract required quantitation limit (CRQL) were flagged with a J by the laboratory on Table 1. These results were considered estimated and flagged J on Table 2.

Qualifications/Edits:

1. Holding Times Holding times are evaluated to address the validity of the results based on the elapsed time from sample collection to analysis. All holding times were met.

2. System Monitoring Compound (SMC) or Surrogate Recovery
System monitoring compounds are added to all samples and blanks prior to analysis to assess recovery (accuracy). Action is taken if any system monitoring compound recoveries are outside the acceptance range. SMC recoveries were met for all samples.

3. Matrix Spike/Matrix Spike Duplicate Matrix spike/matrix spike duplicate analyses are performed at a frequency of 5% to assess method precision and accuracy. All criteria were met.

4. Blank Contamination Laboratory (method) and field (trip/equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times (10 times for common contaminants) the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination; results greater than this level are considered to be acceptable. The table below lists the compounds and samples that were qualified as nondetected.

SAMPLE	COMPOUNDS
09BS021X20X1XX	Methylene chloride & Acetone
09BS204XX8X1XX	Methylene chloride & Acetone
09PS912XX6X1XX	Methylene chloride
09PS913XX8X1XX	Methylene chloride & Acetone
09PS914XX6X1XD	Methylene chloride
09PS914XX6X1XX	Methylene chloride & Acetone
09PS915XX6X1XX	Methylene chloride & Acetone
09SB020X12X1XX	Methylene chloride & Acetone
09SB022X10X1XX	Methylene chloride & Acetone
09SB918X18X1XX	Methylene chloride & Acetone
09SB917X10X1XX	Methylene chloride & Acetone

6. Gas Chromatography/Mass Spectrometry (GC/MS) Instrument Performance Check
GC/MS instrument performance checks are performed to ensure mass resolution, identification, and sensitivity. If the ion abundance criteria are not met, action is taken. The ion abundance criteria were met for all samples.

7. Target Compound (TCL) Identification and Quantitation
The objectives of the criteria for GC/MS qualitative analysis is to minimize the number of erroneous identifications of the compounds. The relative retention times (RRTs) must be within ± 0.06. The mass spectra of the sample compound and a current laboratory-generated standard must match. Laboratory calculations (two positive results for each sample) are checked to verify that reported concentrations and CRQLs are accurate. The RRT criterion was met, mass spectra were acceptable, and all transcriptions and calculations were acceptable.

8. Initial Calibration Initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear calibration curve. The relative response factor (RRF) for all volatile target compounds must be greater than or equal to 0.05. The percent relative standard deviation (%RSD) must be less than or equal to 30.0% for all target compounds. The %RSD criterion was not met for the compounds and the samples listed in the table below and were qualified as indicated.

SAMPLE	COMPOUNDS	QUALIFIER
09BS021X20X1XX	Acetone	J
09BS204XX8X1XX	Acetone	J
09PS913XX8X1XX	Acetone	J
09PS914XX6X1XX	Acetone	J
09PS915XX6X1XX	Acetone	J
09SB020X12X1XX	Acetone	J
09SB022X10X1XX	Acetone	J
09SB918X18X1XX	Acetone	J

9. Continuing Calibration Continuing calibration checks are performed every 12 hours to demonstrate that the instrument can produce acceptable qualitative and quantitative results as established by the initial calibration. All criteria were met.

10. Internal Standards Internal standards performance criteria ensure that GC/MS sensitivity and response are stable during each analysis. All criteria were met.

11. Field Duplicates Field duplicate samples are collected and analyzed to assess sampling and analytical precision. All criteria were met.

II. SEMIVOLATILE COMPOUNDS

Notations:

Compound results below the CRQL were qualified with a J by the laboratory on Table 1. These results were considered estimated and qualified Jon Table 2.

Qualifications/Edits:

1. Holding Times Holding times are evaluated to address the validity of the results based on the elapsed time from sample collection to extraction and from extraction to analysis.

   Samples 09SB020X12X1XX, 09SB022X10X1XX, 09SB917X10X1XX, and 09SB918X18X1XX exceeded holding time. All compounds for these four samples were qualified as estimated (J).

2. System Monitoring Compound (SMC) Recovery (Surrogate Recovery)
   System monitoring compounds are added to all samples and blanks prior to analysis to assess recovery (accuracy). All criteria were met for all samples.

3. Matrix Spike/Matrix Spike Duplicate Matrix spike/matrix spike duplicate analyses are performed at a frequency of 5% to assess method precision and accuracy. All criteria were met for all samples.

4. Blank Contamination Laboratory (method) and field (trip/equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times (10 times for common contaminants) the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination; results greater than this level are considered to be acceptable.

   Due to blank contamination, bis(2-ethylhexyl)phthalate in samples 09SB020X12X1XX and 9SB022X10X1XX were qualified as nondetected.

5. Gas Chromatography/Mass Spectrometry (GC/MS) Instrument Performance Check
   GC/MS instrument performance checks are performed to ensure mass resolution, identification, and sensitivity. If the ion abundance criteria are not met, action is taken. All criteria were met.

6. Target Compound (TCL) Identification and Quantitation
   The objectives of the criteria for GC/MS qualitative analysis is to minimize the number of erroneous identifications of the compounds. The RRTs must be within ± 0.06. The mass spectra of the sample compound and a current laboratory-generated standard must match. Laboratory calculations (two positive results for each sample) were checked to verify that reported concentrations and contract required quantitation limits (CRQLs) were accurate.

The RRT criterion was met, mass spectra were acceptable, and all transcriptions and calculations were acceptable.

Compounds benzo(b)fluoranthene and benzo(k)fluoranthene coeulted for samples 09BS021X20X1XX, 09S204XX8X1XX, and 09SB918X18X1XX. Compounds that coelute are qualified JN (estimated/presumptive evidence of) by validation on Table 2. In some cases, the coeulted result is reported as a sum result associated with one of the two compounds and in other cases it is reported separately for each compound. Results for the first two samples were reported as one result and the result for the last sample was reported separately.

7. Initial Calibration Initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear calibration curve. All criteria were met for all samples.

8. Continuing Calibration Continuing calibration checks are performed every 12 hours to demonstrate that the instrument can produce acceptable qualitative and quantitative results as established by the initial calibration. The continuing calibration percent difference (%D) must be less than 25% and the RRF must be greater than 0.05.

   The %D criterion was not met for 2-methylnaphthalene for sample 09SB918X18X1XX; therefore, 2-methylnaphthalene was qualifed as estimated (J) for this sample.

9. Internal Standards Internal standards performance criteria ensures that GC/MS sensitivity and response are stable during each analysis. All criteria were met.

10. Field Duplicates Field duplicate samples are collected and analyzed to assess sampling and analytical precision.

    The RPD criterion was not met for bis(2-ethylhexyl)phthalate for the field duplicate pair. The action requires that if one value is nondetect and one is positive, the positive result should be qualified as estimated (J). Based on this action the result for bis(2-ethylhexyl)phthalate for sample 09PS914XX6X1XX was qualified as estimated (J). The result for the field duplicate was nondetect; therefore, it was not qualified.

III. PESTICIDE/PCB COMPOUNDS

Qualifications/Edits

1. Holding Times Holding times are evaluated to address the validity of the results based on the elapsed time from sample collection to extraction and and from extraction to analysis. All holding times were met for all samples.

2 System Monitoring Compound (SMC) Recovery or Surrogate Recovery
System monitoring compounds are added to all samples and blanks prior to analysis to assess recovery (accuracy). All criteria were met for all samples.

3. Matrix Spike/Matrix Spike Duplicate Matrix spike/matrix spike duplicate analyses are performed at a frequency of 5% to assess method precision and accuracy. All criteria were met.

4. Blank Contamination Laboratory (method) and field (trip/equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination; results greater than this level are considered to be acceptable.

Due to blank contamination, heptachlor was qualified as nondetect in sample 09PS912XX6X1XX.

6. Initial Calibration Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical sequence and of producing a linear calibraion curve. This includes an evaluation of the following:

a. All retention times of each pesticide in each level of Individual Mixtures A & B during the initial calibration analytical sequence must fall within the retention time window.

b. The linearity for the initial analyses of Individual Standards A & B must fall within the limits for both columns. (%RSD must be less than or equal of 20% for all analytes except for the 2 surrogates, which must not exceed 30.0% RSD).

c. Resolution Check Mixture - The depth of the valley between two adjacent peaks in the Resolution check Mixture must be greater than or equal to 60.0 percent of the height of the shorter peak.

d. For each multi-component analyte, the retention times are determined for 3 to 5 peaks. The retention time for all multi-component analyte must fall within the retention time window.

Criteria were met for all of the above parameters.

7. Calibration Verification Calibration verification checks and documents satisfactory performance of the instrument over specific time periods during sample analysis. All criteria were met for all samples.

8. Analytical Sequence The proper analytical sequence must be followed for each initial calibration and subsequent analyses. The proper analytical sequence was followed for all samples associated with this project.

9. Cleanup Efficiency Florisil cleanup is required for all Pest/PCB extracts and percent recoveries must fall within 80-120% . GPC cleanup is required of all soil samples and percent recoveries must fall within 80-110%. Florisil cleanup recoveries were within criteria. The GPC and Florisil cleanup criteria were met.

10. Pesticide/PCB Identification Retention times are checked to ensure that they fall within the established windows for both columns, GC/MS confirmation is checked, and positive sample results on the two GC columns are checked to ensure that they are < 25%. All retention times were within the established windows.

    Pesticides/PCBs that had greater than 25% difference between the two analytical columns were qualified with a P by the laboratory. The P qualifier indicates that the difference between the results for the two colums were < 25%. These values were considered estimated and were qualified with a J on Table 2.

11. Pesticide Quantitation Laboratory calculations (two positive results for each sample) were checked to verify that reported concentrations and sample quantitation limits (CRQLs) were accurate. The calculations which were reviewed were performed correctly and the CRQLs were adjusted for sample size and dilution factors if it was necessary.

12. Field Duplicates Field duplicate samples are collected and analyzed to assess sampling and analytical precision. All field duplicate criteria were met.

V. TOTAL INORGANIC ANALYSES

Notations:

The (B) qualifier is used by the laboratory and reported on Table 1 to indicate that the results reported are between the instrument detection limit (IDL) and the CRDL. All (B) qualifiers are changed to (J) on Table 2. A list or table has not been generated to indicate the analytes and samples affected. After reviewing the following qualifications/edits below, the Table 1 can be used to determine which results and samples were affected. All (B) qualifiers should have been changed to a (J) unless they were qualified due to other criteria not met.

Qualifications/Edits:

1. Holding Times Hold times are evaluated to address the validity of the results based on the elapsed time from sample collection to extraction and from extraction to analysis. All holding times were met.

2. Initial Calibration The initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. All criteria were met for all samples.

3. Blanks Laboratory (method and continuing calibration) and field (equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination and are qualified with a "U"; results greater than this level are considered to be acceptable.

   Due to blank contamination the beryllium results for the following samples were qualified as nondetected (U):

09BS204XX8X1XX	09PS914XX6X1XX
09PS912XX6X1XX	09PS915XX6X1XX
09PS913XX8X1XX	09SB918X18X1XX
09PS914XX6X1XD	

4. Initial and Continuing Calibration Verification (ICV) Calibration verification establishes that the initial calibration is still valid by checking the performance of the instrument on a continual basis. The ICV criteria were met for all samples.

5. Interference Check Sample (ICS) The interference check sample verifies the contract laboratory's interelement and background correction factors. The ICS criteria were met for all samples.

6. Spiked Sample Recovery The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The spike %R must be within the established acceptance limits.

   The %R criteria for antimony (Sb) and cyanide (CN) were not met. The Sb and CN results for the following samples were affected and qualified as estimated (J):

09BS021X20X1XX	09PS915XX6X1XX
09BS204XX8X1XX	09SB020X12X1XX
09PS912XX6X1XX	09SB022X10X1XX
09PS913XX8X1XX	09SB917X10X1XX
09PS914XX6X1XD	09SB918X18X1XX
09PS914XX6X1XX	

7. Laboratory Duplicate Duplicate sample determinations are used to demonstrate acceptable method precision by the laboratory at the time of analysis. Duplicate analyses

are also performed to generate data in order to determine the long-term precision of the analytical method on various matrices. All criteria were met.

8. Field Duplicates Field duplicate samples are collected and analyzed to assess sampling and analytical precision. Field duplicates criteria were met.

9. Laboratory Control Sample (LCS) The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS criteria were met.

10. Serial Dilution The serial dilution of samples quantitated by ICP determines whether or not significant physical or chemical interferences exist due to sample matrix. Serial dilution criteria were met.

11. Furnace Atomic Absorption (AA) QC Analysis Duplicate injections and multiple level furnace post digestion spikes are used to establish the precision and accuracy of the individual analytical determinations. All criteria were met.

VI. ME DEP TPH - Gasoline in Water

The following ME DEP TPH (Gasoline in Water) QC requirements were checked during validation of data generated for ME DEP TPH (Gasoline in Water) analysis:

*Holding Times
*Practical Quantitation Limit
*Laboratory Control Sample
*Method Blank
*Field Duplicates
*Initial Calibration
*Continuing Calibration
*MS/MSD
*Field Blanks

The Level D review included checking all of the above requirements and reviewing the calculations, transcriptions, and chromatograms associated. All of the criteria for the parameters listed above were met.

VII. ME DEP TPH - Fuel Oil in Soil

The following ME DEP TPH (Fuel Oil in Soil) QC requirements were checked during validation of data generated for ME DEP TPH (Fuel Oil in Soil) analysis:

*Holding Times
*Practical Quantitation Limit
*Laboratory Control Sample
*Method Blank
*Field Duplicates
*Initial Calibration
*Continuing Calibration
*MS/MSD
*Field Blanks

The Level D review included checking all of the above requirements and reviewing the calculations, transcriptions, and chromatograms associated. All of the above criteria were met except as noted under qualifications/edits.

Qualifications/Edits:

1. Blank Contamination Laboratory and field (equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination and are qualified with a "U"; results greater than this level are not qualified. Due to blank contamination, the results for samples 09BS021X20X1XX, 09SB020X12X1XX, and 09SB022X10X1XX were qualified as nondetected (U).

2. Laboratory Control Sample (LCS) An LCS was not analyzed by the laboratory. The laboratory confirmed that an LCS was not analyzed by resubmitting the narrative with this notation. The sample results were not qualified based on the absence of the LCS data.

2. Laboratory Control Sample (LCS) An LCS was not analyzed by the laboratory. The laboratory confirmed that an LCS was not analyzed by resubmitting the narrative with this notation. The sample results were not qualified based on the absence of the LCS data.

Signature: Joanne O. Fonuma Date: 10/12/95

Attachment I - Definition of Laboratory Qualifiers
(for Table 1 - Laboratory Report of Analysis)

Organic Data Qualifiers

J - Indicates an estimated concentration below the contract required detection level (CRQL) but greater than 0 or when estimating a concentration for TICs.

U - Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

B - Indicates analyte was detected in both the sample and the associated laboratory method blank for all analyses except inorganics. The B qualifier for inorganics data indicates that the result was between the IDL and the CRDL. The B qualifier is removed and replaced with a J qualifier on Table 2.

E - Indicates that the analyte concentration exceeded the calibration range of the GC/MS and that a re-analysis of a diluted sample is required.

D - Indicates that sample concentration was obtained by dilution to bring result within calibration range.

N - Indicates presumptive evidence of a compound. This flag is used for TICs were the identification is based on a library search and is applied to all TIC results. For general classes of compounds (hydrocarbons, etc.) this flag is not used.

P - This flag is used for pesticides/PCBs when there is greater than 25% difference between the concentrations on the two columns used for analysis. The lower value is reported.

C - This flag applies to pesticide/PCBs results when the identification has been confirmed by GC/MS.

A - Indicates that a TIC is a suspected aldol-condensation product.

X - Laboratory-defined qualifier used to provide additional information not covered by the other qualifiers.

Inorganic Data Qualifiers

E - The reported concentration is estimated because of the presence of an interference.

M - Duplicate injection precision criteria were not met.

N - Spiked sample recovery not within control limits.

S - The reported concentration was determined by the method of standard additions.

W - Post-digestion spike for furnace atomic absorption analysis is outside control limits.

B - Concentration reported is below CRDL but greater than the IDL.

* - Duplicate analysis not within control limits.

+ - Correlation coefficient for the method of standard additions was less than 0.995

U - Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

Attachment II - Definition of Validation Qualifiers
(for Table 2 - Validation/Summary Table)

J - Estimated concentration because QC criteria were not met.

R - Results were rejected because of serious QC deficiencies.

U - Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

N - Indicates presumptive evidence of a compound. This flag is used for TICs were the identification is based on a library search and is applied to all TIC results. For general classes of compounds (hydrocarbons, etc.) this flag is not used.

UJ - Quantitation limit was estimated concentration because QC criteria were not met.

JN - Presence of an analyte was tentatively identified and the associated result represents an estimated concentration.

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-05
SOIL (ug/kg)

VOLATILE

	09SB917X10X1XX
Pentane, 2,3,4 - Trimethyl	23000 JN
Unknown	148000 J(6)
Decahydromethylnaphthalene	48000 J(2)
Unknown Hydrocarbon	19000 J

NO VOLATILE TICs WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

09BS021X20X1XX	09PS914XX6X1XX
09BS204XX8X1XX	09PS915XX6X1XX
09PS912XX6X1XX	09SB020X12X1XX
09PS913XX8X1XX	09SB022X10X1XX
09PS914XX6X1XD	09SB918X18X1XX

SEMIVOLATILE

	09BS021X20X1XX	09BS204XX8X1XX	09PS912XX6X1XX	09PS913XX8X1XX
Unknown	2200 J(4)	16000 J(17)	460 J(3)	2000 J(4)
Unknown Hydrocarbon	110 J	600 J(2)		
Unknown Alcohol	1200 J			
Benzofluoranthene	130 J			
Unknown Carboxylic acid		360 J		
Benzopyrene		340 J		
Tetrachloroethane				89 J

	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX	09SB020X12X1XX
Unknown	1500 J(4)	250 J(2)	3000 J(8)	3600 J(9)
Tetrachloroethane & Unknown	190 J			
Unknown Alcohol		640 J		99 J
Unknown Carboxylic acid			170 J	
Unknown Hydrocarbon				1200 J(6)

	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
Unknown	2200 J(4)	96000 J(9)	13000 J(12)
Unknown Alkene	510 J		
Substituted Naphthalene		3900	
Unknown Hydrocarbon		46000 J(9)	880 J(2)
Unknown Cycloalkane		4500 J	
Dibenzothiophene			220 JN
Unknown Carboxylic acid			300 J
Unknown PAH			200 J
7,12a-Dimethyl-1,2,3,4,4a,11,12,12a Octahydrochrysene			200 JN
Unknown ester			3000 J
Benzofluoranthene			740 J

b05s

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-05
WATER (ug/L)

SEMIVOLATILE

	09QDXX1XXXX1XX	09QDXX2XXXX1XX	09QSXX1XXXX1XX
Unknown	7 J(2)	31 J(3)	35 J(3)

b05W

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-01
AQUEOUS (ug/L)

VOLATILE

NO VOLATILE TICs WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

09QDXX1XXXX1XX	09QTXX1XXXX1XX
09QDXX2XXXX1XX	09QTXX2XXXX1XX
09QSXX1XXXX1XX	09QTXX3XXXX1XX

b01w

Table 1
Laboratory Report of Analysis

		LOCATION:	QT-1		QT-2		QT-3	
		ISIS ID:	09QTXX1XXXX1XX		09QTXX2XXXX1XX		09QTXX3XXXX1XX	
		LAB NUMBER:	750333		750515		750965	
		DATE SAMPLED:	08/21/95		08/23/95		08/25/95	
		DATE ANALYZED:	08/31/95		08/31/95		08/31/95	
ANALYTE	SOW-10/92	CRQL						
Chloromethane		1	1	U	1	U	1	U
Bromomethane		1	1	U	1	U	1	U
Vinyl Chloride		1	1	U	1	U	1	U
Chloroethane		1	1	U	1	U	1	U
Methylene Chloride		2	0.7	J	0.6	J	0.6	J
Acetone		5	5	U	5	U	5	U
Carbon Disulfide		1	1	U	1	U	1	U
1,1-Dichloroethene		1	1	U	1	U	1	U
1,1-Dichloroethane		1	1	U	1	U	1	U
cis-1,2-Dichloroethene		1	1	U	1	U	1	U
trans-1,2-Dichloroethene		1	1	U	1	U	1	U
Chloroform		1	1	U	1	U	1	U
1,2-Dichloroethane		1	1	U	1	U	1	U
2-Butanone		5	5	U	5	U	5	U
Bromochloromethane		1	1	U	1	U	1	U
1,1,1-Trichloroethane		1	1	U	1	U	1	U
Carbon Tetrachloride		1	1	U	1	U	1	U
Bromodichloromethane		1	1	U	1	U	1	U
1,2-Dichloropropane		1	1	U	1	U	1	U
cis-1,3-Dichloropropene		1	1	U	1	U	1	U
Trichloroethene		1	1	U	1	U	1	U
Dibromochloromethane		1	1	U	1	U	1	U
1,1,2-Trichloroethane		1	1	U	1	U	1	U
Benzene		1	1	U	1	U	1	U
trans-1,3-Dichloropropene		1	1	U	1	U	1	U
Bromoform		1	1	U	1	U	1	U
4-Methyl-2-Pentanone		5	5	U	5	U	5	U
2-Hexanone		5	5	U	5	U	5	U
Tetrachloroethene		1	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane		1	1	U	1	U	1	U
1,2-Dibromoethane		1	1	U	1	U	1	U
Toluene		1	1	U	1	U	1	U
Chlorobenzene		1	1	U	1	U	1	U
Ethylbenzene		1	1	U	1	U	1	U
Styrene		1	1	U	1	U	1	U
Total Xylenes		1	1	U	1	U	1	U
1,3-Dichlorobenzene		1	1	U	1	U	1	U
1,4-Dichlorobenzene		1	1	U	1	U	1	U
1,2-Dichlorobenzene		1	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane		1	1	U	1	U	1	U
Dilution Factor:			1.00		1.00		1.00	
Sample Volume\Weight (ml\g):			25.0		25.0		25.0	
Associated Method Blank:			CC950831C52.D		CC950831C52.D		CC950831C52.D	
Associated Equipment Blank:			-		-		-	
Associated Field Blank:			-		-		-	
Associated Trip Blank:			-		-		-	

TRIP BLANKS

Table 1
Laboratory Report of Analysis

LOCATION:	QS-1
ISIS ID:	09QSXX1XXXX1XX
LAB NUMBER:	750361
DATE SAMPLED:	08/22/95
DATE ANALYZED:	08/28/95

ANALYTE	PQL	
Total Petroleum Hydrocarbons (TPH)		
ME DEP - Gasoline in Water	50	50 U

Dilution Factor:	1.0
Sample Volume\Weight (ml\g):	5.0
Associated Method Blank:	VTIBLAF
Associated Equipment Blank:	-
Associated Field Blank:	-

EQUIPMENT RINSATE

F-17

Table 1
Laboratory Report of Analysis

LOCATION:	QS-1
ISIS ID:	09QSXX1XXXX1XX
LAB NUMBER:	750362
DATE SAMPLED:	08/22/95
DATE ANALYZED:	08/31/95

ANALYTE	PQL	
Total Petroleum Hydrocarbons (TPH)		
ME DEP - Fuel Oil in Water	50	67 JB

Dilution Factor:	1.0
Sample Volume\Weight (ml\g):	1000
Associated Method Blank:	PBLK04
Associated Equipment Blank:	-
Associated Field Blank:	-

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

LOCATION: QS-1
ISIS ID: 09QSXX1XXXX1XX
LAB NUMBER: 750341
DATE SAMPLED: 08/22/95
DATE EXTRACTED: 08/28/95
DATE ANALYZED: 09/09/95

ANALYTE	SOW-3/90 - II CRQL		
alpha-BHC	0.05	0.05	U
beta-BHC	0.05	0.05	U
delta-BHC	0.05	0.05	U
gamma-BHC (Lindane)	0.05	0.0011	JP
Heptachlor	0.05	0.0021	J
Aldrin	0.05	0.05	U
Heptachlor Epoxide	0.05	0.05	U
Endosulfan I	0.05	0.05	U
Dieldrin	0.1	0.1	U
4,4'-DDE	0.1	0.1	U
Endrin	0.1	0.1	U
Endosulfan II	0.1	0.1	U
4,4'-DDD	0.1	0.1	U
Endrin Aldehyde	0.1	0.1	U
Endosulfan Sulfate	0.1	0.1	U
4,4'-DDT	0.1	0.1	U
Methoxychlor	0.5	0.5	U
Endrin Ketone	0.1	0.1	U
alpha-Chlordane	0.05	0.05	U
gamma-Chlordane	0.05	0.0028	JP
Toxaphene	5	5.0	U
Aroclor-1016	1	1.0	U
Aroclor-1221	2	2.0	U
Aroclor-1232	1	1.0	U
Aroclor-1242	1	1.0	U
Aroclor-1248	1	1.0	U
Aroclor-1254	1	1.0	U
Aroclor-1260	1	1.0	U

Dilution Factor: 1.00
Sample Volume\Weight (ml\g): 1000

Associated Method Blank: 751325
Associated Equipment Blank: -
Associated Field Blank: -

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

LOCATION: QS-1
ISIS ID: 09QSXX1XXXX1XX
LAB NUMBER: 750357
DATE SAMPLED: 08/22/95

ANALYTE	SOW-3/90 - II CRDL		
Aluminum	200	11.5	U
Antimony	60	1.9	U
Arsenic	10	2.7	U
Barium	200	0.20	U
Beryllium	5	0.10	U
Cadmium	5	0.50	U
Calcium	5000	14.5	U
Chromium	10	0.70	U
Cobalt	50	0.50	U
Copper	25	0.50	U
Iron	100	9.7	U
Lead	3	1.6	U
Magnesium	5000	5.4	U
Manganese	15	0.20	U
Mercury	0.2	0.20	U
Nickel	40	2.4	U
Potassium	5000	30.8	U
Selenium	5	3.4	U
Silver	10	0.60	U
Sodium	5000	150	U
Thallium	10	3.6	U
Vanadium	50	0.60	U
Zinc	20	1.2	U
Cyanide	10	10.0	U

Associated Method Blank: SDG9B
Associated Equipment Blank: -
Associated Field Blank: -

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

LOCATION: QS-1
ISIS ID: 09QSXX1XXXX1XX
LAB NUMBER: 750341
DATE SAMPLED: 08/22/95
DATE EXTRACTED: 08/29/95
DATE ANALYZED: 08/30/95

ANALYTE	SOW-3/90 - II CRQL		
Phenol	10	10	U
bis(2-Chloroethyl)ether	10	10	U
2-Chlorophenol	10	10	U
1,3-Dichlorobenzene	10	10	U
1,4-Dichlorobenzene	10	10	U
1,2-Dichlorobenzene	10	10	U
2-Methylphenol	10	10	U
2,2'-oxybis(1-Chloropropane)	10	10	U
4-Methylphenol	10	10	U
N-Nitroso-di-n-propylamine	10	10	U
Hexachloroethane	10	10	U
Nitrobenzene	10	10	U
Isophorone	10	10	U
2-Nitrophenol	10	10	U
2,4-Dimethylphenol	10	10	U
bis(2-Chloroethoxy)methane	10	10	U
2,4-Dichlorophenol	10	10	U
1,2,4-Trichlorobenzene	10	10	U
Naphthalene	10	10	U
4-Chloroaniline	10	10	U
Hexachlorobutadiene	10	10	U
4-Chloro-3-Methylphenol	10	10	U
2-Methylnaphthalene	10	10	U
Hexachlorocyclopentadiene	10	10	U
2,4,6-Trichlorophenol	10	10	U
2,4,5-Trichlorophenol	25	25	U
2-Chloronaphthalene	10	10	U
2-Nitroaniline	25	25	U
Dimethylphthalate	10	10	U
Acenaphthylene	10	10	U
2,6-Dinitrotoluene	10	10	U

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

LOCATION: QS-1
ISIS ID: 09QSXX1XXXX1XX
LAB NUMBER: 750341
DATE SAMPLED: 08/22/95
DATE EXTRACTED: 08/29/95
DATE ANALYZED: 08/30/95

ANALYTE	SOW-3/90 - II CRQL		
3-Nitroaniline	25	25	U
Acenaphthene	10	10	U
2,4-Dinitrophenol	25	25	U
4-Nitrophenol	25	25	U
Dibenzofuran	10	10	U
2,4-Dinitrotoluene	10	10	U
Diethylphthalate	10	10	U
4-Chlorophenyl-phenylether	10	10	U
Fluorene	10	10	U
4-Nitroaniline	25	25	U
4,6-Dinitro-2-methylphenol	25	25	U
N-Nitrosodiphenylamine	10	10	U
4-Bromophenyl-phenylether	10	10	U
Hexachlorobenzene	10	10	U
Pentachlorophenol	25	25	U
Phenanthrene	10	10	U
Anthracene	10	10	U
Carbazole	10	10	U
Di-n-butylphthalate	10	10	U
Fluoranthene	10	10	U
Pyrene	10	10	U
Butylbenzylphthalate	10	10	U
3,3'-Dichlorobenzidine	10	10	U
Benzo(a)Anthracene	10	10	U
Chrysene	10	10	U
bis(2-Ethylhexyl)phthalate	10	2	J
Di-n-octylphthalate	10	10	U
Benzo(b)Fluoranthene	10	10	U
Benzo(k)Fluoranthene	10	10	U
Benzo(a)Pyrene	10	10	U
Indeno(1,2,3-c,d)Pyrene	10	10	U
Dibenz(a,h)Anthracene	10	10	U
Benzo(g,h,i)perylene	10	10	U

Dilution Factor: 1.00
Sample Volume\Weight (ml\g): 1000

Associated Method Blank: GH051150A15.D
Associated Equipment Blank: -
Associated Field Blank: -

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

LOCATION: QS-1
ISIS ID: 09QSXX1XXXX1XX
LAB NUMBER: 750338
DATE SAMPLED: 08/22/95
DATE ANALYZED: 08/31/95

ANALYTE	SOW-10/92 CRQL		
Chloromethane	1	1	U
Bromomethane	1	1	U
Vinyl Chloride	1	1	U
Chloroethane	1	1	U
Methylene Chloride	2	0.5	J
Acetone	5	5	U
Carbon Disulfide	1	1	U
1,1-Dichloroethene	1	1	U
1,1-Dichloroethane	1	1	U
cis-1,2-Dichloroethene	1	1	U
trans-1,2-Dichloroethene	1	1	U
Chloroform	1	1	U
1,2-Dichloroethane	1	1	U
2-Butanone	5	5	U
Bromochloromethane	1	1	U
1,1,1-Trichloroethane	1	1	U
Carbon Tetrachloride	1	1	U
Bromodichloromethane	1	1	U
1,2-Dichloropropane	1	0.6	J
cis-1,3-Dichloropropene	1	1	U
Trichloroethene	1	1	U
Dibromochloromethane	1	1	U
1,1,2-Trichloroethane	1	1	U
Benzene	1	1	U
trans-1,3-Dichloropropene	1	1	U
Bromoform	1	1	U
4-Methyl-2-Pentanone	5	5	U
2-Hexanone	5	5	U
Tetrachloroethene	1	1	U
1,1,2,2-Tetrachloroethane	1	1	U
1,2-Dibromoethane	1	1	U
Toluene	1	1	U
Chlorobenzene	1	1	U
Ethylbenzene	1	1	U
Styrene	1	1	U
Total Xylenes	1	1	U
1,3-Dichlorobenzene	1	1	U
1,4-Dichlorobenzene	1	1	U
1,2-Dichlorobenzene	1	1	U
1,2-Dibromo-3-Chloropropane	1	1	U

Dilution Factor: 1.00
Sample Volume\Weight (ml\g): 25.0

Associated Method Blank: CC950831C52.D
Associated Equipment Blank: -
Associated Field Blank: -
Associated Trip Blank: -

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

	LOCATION:	QD-1	QD-2
	ISIS ID:	09QDXX1XXXX1XX	09QDXX2XXXX1XX
	LAB NUMBER:	750373	750376
	DATE SAMPLED:	08/22/95	08/22/95
	DATE ANALYZED:	08/31/95	08/31/95
ANALYTE	PQL		
Total Petroleum Hydrocarbons (TPH)			
ME DEP - Fuel Oil in Water	50	50 U	57 JB
Dilution Factor:		1.0	1.0
Sample Volume\Weight (ml\g):		1000	1000
Associated Method Blank:		PBLK04	PBLK04
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

FIELD BLANKS

Table 1
Laboratory Report of Analysis

	LOCATION:	QD-1	QD-2
	ISIS ID:	09QDXX1XXXX1XX	09QDXX2XXXX1XX
	LAB NUMBER:	750366	750374
	DATE SAMPLED:	08/22/95	08/22/95
	DATE ANALYZED:	08/28/95	08/28/95
ANALYTE	PQL		
Total Petroleum Hydrocarbons (TPH)			
ME DEP - Gasoline in Water	50	50 U	50 U
Dilution Factor:		1.0	1.0
Sample Volume\Weight (ml\g):		5.0	5.0
Associated Method Blank:		VTIBLAF	VTIBLAF
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

FIELD BLANKS

F-25

Table 1
Laboratory Report of Analysis

		LOCATION:	QD-1		QD-2	
		ISIS ID:	09QDXX1XXXX1XX		09QDXX2XXXX1XX	
		LAB NUMBER:	750356		750355	
		DATE SAMPLED:	08/22/95		08/22/95	
ANALYTE	SOW-3/90 - II CRDL					
Aluminum	200		11.5	U	11.5	U
Antimony	60		1.9	U	1.9	U
Arsenic	10		2.7	U	2.7	U
Barium	200		0.43	B	1.3	B
Beryllium	5		0.12	B	0.19	B
Cadmium	5		0.50	U	0.50	U
Calcium	5000		14.5	U	14.5	U
Chromium	10		0.70	U	0.70	U
Cobalt	50		0.50	U	0.50	U
Copper	25		0.50	U	0.50	U
Iron	100		9.7	U	9.7	U
Lead	3		1.6	U	1.6	U
Magnesium	5000		5.4	U	5.4	U
Manganese	15		0.20	U	0.20	U
Mercury	0.2		0.20	U	0.20	U
Nickel	40		2.4	U	2.4	U
Potassium	5000		30.8	U	30.8	U
Selenium	5		3.4	U	3.4	U
Silver	10		0.60	U	0.60	U
Sodium	5000		150	U	150	U
Thallium	10		3.6	U	3.6	U
Vanadium	50		0.60	U	0.60	U
Zinc	20		1.2	U	1.2	U
Cyanide	10		10.0	U	10.0	U
Associated Method Blank:			SDG9B		SDG9B	
Associated Equipment Blank:			-		-	
Associated Field Blank:			-		-	

FIELD BLANKS

Table 1
Laboratory Report of Analysis

LOCATION:		QD-1		QD-2	
ISIS ID:		09QDXX1XXXX1XX		09QDXX2XXXX1XX	
LAB NUMBER:		750342		750349	
DATE SAMPLED:		08/22/95		08/22/95	
DATE EXTRACTED:		08/28/95		08/28/95	
DATE ANALYZED:		09/09/95		09/09/95	
ANALYTE	SOW-3/90 - II CRQL				
alpha-BHC	0.05	0.05	U	0.05	U
beta-BHC	0.05	0.05	U	0.05	U
delta-BHC	0.05	0.05	U	0.05	U
gamma-BHC (Lindane)	0.05	0.05	U	0.0031	JP
Heptachlor	0.05	0.05	U	0.0018	J
Aldrin	0.05	0.05	U	0.05	U
Heptachlor Epoxide	0.05	0.05	U	0.05	U
Endosulfan I	0.05	0.05	U	0.05	U
Dieldrin	0.1	0.1	U	0.1	U
4,4'-DDE	0.1	0.1	U	0.1	U
Endrin	0.1	0.1	U	0.1	U
Endosulfan II	0.1	0.1	U	0.1	U
4,4'-DDD	0.1	0.1	U	0.1	U
Endrin Aldehyde	0.1	0.1	U	0.1	U
Endosulfan Sulfate	0.1	0.1	U	0.1	U
4,4'-DDT	0.1	0.1	U	0.1	U
Methoxychlor	0.5	0.5	U	0.5	U
Endrin Ketone	0.1	0.1	U	0.1	U
alpha-Chlordane	0.05	0.05	U	0.05	U
gamma-Chlordane	0.05	0.05	U	0.05	U
Toxaphene	5	5.0	U	5.0	U
Aroclor-1016	1	1.0	U	1.0	U
Aroclor-1221	2	2.0	U	2.0	U
Aroclor-1232	1	1.0	U	1.0	U
Aroclor-1242	1	1.0	U	1.0	U
Aroclor-1248	1	1.0	U	1.0	U
Aroclor-1254	1	1.0	U	1.0	U
Aroclor-1260	1	1.0	U	1.0	U
Dilution Factor:		1.00		1.00	
Sample Volume\Weight (ml\g):		1000		1000	
Associated Method Blank:		751325		751325	
Associated Equipment Blank:		-		-	
Associated Field Blank:		-		-	

FIELD BLANKS

Table 1
Laboratory Report of Analysis

LOCATION:		QD-1		QD-2		
ISIS ID:		09QDXX1XXXX1XX		09QDXX2XXXX1XX		
LAB NUMBER:		750342		750349		
DATE SAMPLED:		08/22/95		08/22/95		
DATE EXTRACTED:		08/29/95		08/29/95		
DATE ANALYZED:		08/31/95		08/30/95		
ANALYTE	SOW-3/90 - II CRQL					
Phenol	10	10	U	10	U	
bis(2-Chloroethyl)ether	10	10	U	10	U	
2-Chlorophenol	10	10	U	10	U	
1,3-Dichlorobenzene	10	10	U	10	U	
1,4-Dichlorobenzene	10	10	U	10	U	
1,2-Dichlorobenzene	10	10	U	10	U	
2-Methylphenol	10	10	U	10	U	
2,2'-oxybis(1-Chloropropane)	10	10	U	10	U	
4-Methylphenol	10	10	U	10	U	
N-Nitroso-di-n-propylamine	10	10	U	10	U	
Hexachloroethane	10	10	U	10	U	
Nitrobenzene	10	10	U	10	U	
Isophorone	10	10	U	10	U	
2-Nitrophenol	10	10	U	10	U	
2,4-Dimethylphenol	10	10	U	10	U	
bis(2-Chloroethoxy)methane	10	10	U	10	U	
2,4-Dichlorophenol	10	10	U	10	U	
1,2,4-Trichlorobenzene	10	10	U	10	U	
Naphthalene	10	10	U	10	U	
4-Chloroaniline	10	10	U	10	U	
Hexachlorobutadiene	10	10	U	10	U	
4-Chloro-3-Methylphenol	10	10	U	10	U	
2-Methylnaphthalene	10	10	U	10	U	
Hexachlorocyclopentadiene	10	10	U	10	U	
2,4,6-Trichlorophenol	10	10	U	10	U	
2,4,5-Trichlorophenol	25	25	U	25	U	
2-Chloronaphthalene	10	10	U	10	U	
2-Nitroaniline	25	25	U	25	U	
Dimethylphthalate	10	10	U	10	U	
Acenaphthylene	10	10	U	10	U	
2,6-Dinitrotoluene	10	10	U	10	U	

FIELD BLANKS

Table 1
Laboratory Report of Analysis

LOCATION:		QD-1	QD-2
ISIS ID:		09QDXX1XXXX1XX	09QDXX2XXXX1XX
LAB NUMBER:		750342	750349
DATE SAMPLED:		08/22/95	08/22/95
DATE EXTRACTED:		08/29/95	08/29/95
DATE ANALYZED:		08/31/95	08/30/95
ANALYTE	SOW-3/90 - II CRQL		
3-Nitroaniline	25	25 U	25 U
Acenaphthene	10	10 U	10 U
2,4-Dinitrophenol	25	25 U	25 U
4-Nitrophenol	25	25 U	25 U
Dibenzofuran	10	10 U	10 U
2,4-Dinitrotoluene	10	10 U	10 U
Diethylphthalate	10	10 U	10 U
4-Chlorophenyl-phenylether	10	10 U	10 U
Fluorene	10	10 U	10 U
4-Nitroaniline	25	25 U	25 U
4,6-Dinitro-2-methylphenol	25	25 U	25 U
N-Nitrosodiphenylamine	10	10 U	10 U
4-Bromophenyl-phenylether	10	10 U	10 U
Hexachlorobenzene	10	10 U	10 U
Pentachlorophenol	25	25 U	25 U
Phenanthrene	10	10 U	10 U
Anthracene	10	10 U	10 U
Carbazole	10	10 U	10 U
Di-n-butylphthalate	10	10 U	10 U
Fluoranthene	10	10 U	10 U
Pyrene	10	10 U	10 U
Butylbenzylphthalate	10	10 U	10 U
3,3'-Dichlorobenzidine	10	10 U	10 U
Benzo(a)Anthracene	10	10 U	10 U
Chrysene	10	10 U	10 U
bis(2-Ethylhexyl)phthalate	10	10 U	10 U
Di-n-octylphthalate	10	10 U	10 U
Benzo(b)Fluoranthene	10	10 U	10 U
Benzo(k)Fluoranthene	10	10 U	10 U
Benzo(a)Pyrene	10	10 U	10 U
Indeno(1,2,3-c,d)Pyrene	10	10 U	10 U
Dibenz(a,h)Anthracene	10	10 U	10 U
Benzo(g,h,i)perylene	10	10 U	10 U
Dilution Factor:		1.00	1.00
Sample Volume\Weight (ml\g):		1000	1000
Associated Method Blank:		GH051150A15.D	GH051150A15.D
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

FIELD BLANKS

Table 1
Laboratory Report of Analysis

		LOCATION:	QD-1		QD-2	
		ISIS ID:	09QDXX1XXXX1XX		09QDXX2XXXX1XX	
		LAB NUMBER:	750339		750340	
		DATE SAMPLED:	08/22/95		08/22/95	
		DATE ANALYZED:	08/31/95		08/31/95	
ANALYTE	SOW-10/92 CRQL					
Chloromethane	1		1	U	1	U
Bromomethane	1		1	U	1	U
Vinyl Chloride	1		1	U	1	U
Chloroethane	1		1	U	1	U
Methylene Chloride	2		1	J	0.9	J
Acetone	5		5	U	5	U
Carbon Disulfide	1		1	U	1	U
1,1-Dichloroethene	1		1	U	1	U
1,1-Dichloroethane	1		1	U	1	U
cis-1,2-Dichloroethene	1		1	U	1	U
trans-1,2-Dichloroethene	1		1	U	1	U
Chloroform	1		16		1	U
1,2-Dichloroethane	1		1	U	1	U
2-Butanone	5		5	U	5	U
Bromochloromethane	1		1	U	1	U
1,1,1-Trichloroethane	1		1	U	1	U
Carbon Tetrachloride	1		1	U	1	U
Bromodichloromethane	1		3		1	U
1,2-Dichloropropane	1		1	U	0.6	J
cis-1,3-Dichloropropene	1		1	U	1	U
Trichloroethene	1		1	U	1	U
Dibromochloromethane	1		0.6	J	1	U
1,1,2-Trichloroethane	1		1	U	1	U
Benzene	1		1	U	1	U
trans-1,3-Dichloropropene	1		1	U	1	U
Bromoform	1		1	U	1	U
4-Methyl-2-Pentanone	5		5	U	5	U
2-Hexanone	5		5	U	5	U
Tetrachloroethene	1		1	U	1	U
1,1,2,2-Tetrachloroethane	1		1	U	1	U
1,2-Dibromoethane	1		1	U	1	U
Toluene	1		1	U	1	U
Chlorobenzene	1		1	U	1	U
Ethylbenzene	1		1	U	1	U
Styrene	1		1	U	1	U
Total Xylenes	1		1	U	1	U
1,3-Dichlorobenzene	1		1	U	1	U
1,4-Dichlorobenzene	1		1	U	1	U
1,2-Dichlorobenzene	1		1	U	1	U
1,2-Dibromo-3-Chloropropane	1		1	U	1	U
Dilution Factor:			1.00		1.00	
Sample Volume\Weight (ml\g):			25.0		25.0	
Associated Method Blank:			CC950831C52.D		CC950831C52.D	
Associated Equipment Blank:			-		-	
Associated Field Blank:			-		-	
Associated Trip Blank:			-		-	

FIELD BLANKS

Table 1
Laboratory Report of Analysis

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750980 #	750984 #	750976 #	750971 #	750528 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/23/95
DATE ANALYZED:	09/01/95	09/01/95	08/31/95	08/31/95	08/31/95
ANALYTE PQL					
Total Petroleum Hydrocarbons (TPH) ME DEP - Gasoline in Soil 5.0	5.3 U	6.4 U	5.9 U	5.8 U	7.0 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0
Percent Solids:	94	78	75	86	71
Sample Volume\Weight (ml\g):	10.0	10.0	10.0	10.0	10.0
Associated Method Blank:	VTBLME	VTBLME	VTBLME	VTBLME	VTBLME
Associated Equipment Blank:	-	-	-	-	-
Associated Field Blank:	-	-	-	-	-

Site: TEST PIT
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750980 #	750984 #	750976 #	750971 #	750528 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/23/95
DATE ANALYZED:	09/01/95	09/01/95	08/31/95	08/31/95	08/31/95
ANALYTE PQL					
Total Petroleum Hydrocarbons (TPH) ME DEP - Gasoline in Soil 5.0	5.3 U	6.4 U	5.9 U	5.8 U	7.0 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0
Percent Solids:	94	78	75	86	71
Sample Volume\Weight (ml\g):	10.0	10.0	10.0	10.0	10.0
Associated Method Blank:	VTBLME	VTBLME	VTBLME	VTBLME	VTBLME
Associated Equipment Blank:	-	-	-	-	-
Associated Field Blank:	-	-	-	-	-

Site: TEST PIT
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750981 #	750985 #	750977 #	750972 #	750535 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/25/95
DATE EXTRACTED:	08/28/95	08/28/95	08/28/95	08/28/95	08/28/95
DATE ANALYZED:	08/31/95	08/31/95	08/31/95	08/31/95	08/31/95
ANALYTE PQL					
Total Petroleum Hydrocarbons (TPH)					
ME DEP - Fuel Oil in Soil 10	11 U	13 U	12 U	12 U	14 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0
Percent Solids:	94	78	85	86	71
Sample Volume\Weight (ml\g):	20.0	20.1	20.2	20.0	20.0
Associated Method Blank:	PBLK03	PBLK03	PBLK03	PBLK03	PBLK03
Associated Equipment Blank:	-	-	-	-	-
Associated Field Blank:	-	-	-	-	-

Site: TEST PIT
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750981 #	750985 #	750977 #	750972 #	750535 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/25/95
DATE EXTRACTED:	08/28/95	08/28/95	08/28/95	08/28/95	08/28/95
DATE ANALYZED:	08/31/95	08/31/95	08/31/95	08/31/95	08/31/95
ANALYTE	PQL				
Total Petroleum Hydrocarbons (TPH)					
ME DEP - Fuel Oil in Soil	10	11 U	13 U	12 U	12 U	14 U
Dilution Factor:		1.0	1.0	1.0	1.0	1.0
Percent Solids:		94	78	85	86	71
Sample Volume\Weight (ml\g):		20.0	20.1	20.2	20.0	20.0
Associated Method Blank:		PBLK03	PBLK03	PBLK03	PBLK03	PBLK03
Associated Equipment Blank:		-	-	-	-	-
Associated Field Blank:		-	-	-	-	-

Site: TEST PIT
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750978 #	750982 #	750974 #	750966 #	750516 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/23/95
DATE ANALYZED:	08/29/95	08/29/95	08/29/95	08/29/95	08/26/95

ANALYTE	SOW-3/90 - II CRQL									
Chloromethane	10	11	U	13	U	12	U	12	U	14	U
Bromomethane	10	11	U	13	U	12	U	12	U	14	U
Vinyl Chloride	10	11	U	13	U	12	U	12	U	14	U
Chloroethane	10	11	U	13	U	12	U	12	U	14	U
Methylene Chloride	10	16	B	19	B	15	B	16	B	29	B
Acetone	10	11	U	14	B	12	U	15	B	17	B
Carbon Disulfide	10	11	U	13	U	12	U	12	U	14	U
1,1-Dichloroethene	10	11	U	13	U	12	U	12	U	14	U
1,1-Dichloroethane	10	11	U	13	U	12	U	12	U	14	U
1,2-Dichloroethene (total)	10	11	U	13	U	12	U	12	U	14	U
Chloroform	10	11	U	13	U	12	U	12	U	14	U
1,2-Dichloroethane	10	11	U	13	U	12	U	12	U	14	U
2-Butanone	10	11	U	13	U	12	U	12	U	14	U
1,1,1-Trichloroethane	10	11	U	13	U	12	U	12	U	14	U
Carbon Tetrachloride	10	11	U	13	U	12	U	12	U	14	U
Bromodichloromethane	10	11	U	13	U	12	U	12	U	14	U
1,2-Dichloropropane	10	11	U	13	U	12	U	12	U	14	U
cis-1,3-Dichloropropene	10	11	U	13	U	12	U	12	U	14	U
Trichloroethene	10	11	U	13	U	12	U	12	U	14	U
Dibromochloromethane	10	11	U	13	U	12	U	12	U	14	U
1,1,2-Trichloroethane	10	11	U	13	U	12	U	12	U	14	U
Benzene	10	11	U	13	U	12	U	12	U	14	U
trans-1,3-Dichloropropene	10	11	U	13	U	12	U	12	U	14	U
Bromoform	10	11	U	13	U	12	U	12	U	14	U
4-Methyl-2-Pentanone	10	11	U	13	U	12	U	12	U	14	U
2-Hexanone	10	11	U	13	U	12	U	12	U	14	U
Tetrachloroethene	10	11	U	13	U	12	U	12	U	14	U
1,1,2,2-Tetrachloroethane	10	11	U	13	U	12	U	12	U	14	U
Toluene	10	11	U	13	U	12	U	12	U	14	U
Chlorobenzene	10	11	U	13	U	12	U	12	U	14	U
Ethylbenzene	10	11	U	13	U	12	U	12	U	14	U
Styrene	10	11	U	13	U	12	U	12	U	14	U
Total Xylenes	10	11	U	13	U	12	U	12	U	14	U

Dilution Factor:	1.00	1.00	1.00	1.00	1.00
Percent Solids:	94	78	85	86	71
Sample Volume\Weight (ml\g):	5.00	5.00	5.00	5.00	5.00
Associated Method Blank:	GH051214C51.D	GH051214C51.D	GH051214C51.D	GH051214C51.D	GH050908A51.D
Associated Equipment Blank:	-	-	-	-	-
Associated Field Blank:	-	-	-	-	-
Associated Trip Blank:	09QTXX3XXXX1XX	09QTXX3XXXX1XX	09QTXX3XXXX1XX	09QTXX3XXXX1XX	09QTXX2XXXX1XX

Site: TEST PIT
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750978 #	750982 #	750974 #	750966 #	750516 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/23/95
DATE ANALYZED:	08/29/95	08/29/95	08/29/95	08/29/95	08/26/95

ANALYTE	SOW-3/90 - II CRQL									
Chloromethane	10	11	U	13	U	12	U	12	U	14	U
Bromomethane	10	11	U	13	U	12	U	12	U	14	U
Vinyl Chloride	10	11	U	13	U	12	U	12	U	14	U
Chloroethane	10	11	U	13	U	12	U	12	U	14	U
Methylene Chloride	10	16	U	19	U	15	U	16	U	29	U
Acetone	10	11	U	14	UJ	12	U	15	UJ	17	UJ
Carbon Disulfide	10	11	U	13	U	12	U	12	U	14	U
1,1-Dichloroethene	10	11	U	13	U	12	U	12	U	14	U
1,1-Dichloroethane	10	11	U	13	U	12	U	12	U	14	U
1,2-Dichloroethene (total)	10	11	U	13	U	12	U	12	U	14	U
Chloroform	10	11	U	13	U	12	U	12	U	14	U
1,2-Dichloroethane	10	11	U	13	U	12	U	12	U	14	U
2-Butanone	10	11	U	13	U	12	U	12	U	14	U
1,1,1-Trichloroethane	10	11	U	13	U	12	U	12	U	14	U
Carbon Tetrachloride	10	11	U	13	U	12	U	12	U	14	U
Bromodichloromethane	10	11	U	13	U	12	U	12	U	14	U
1,2-Dichloropropane	10	11	U	13	U	12	U	12	U	14	U
cis-1,3-Dichloropropene	10	11	U	13	U	12	U	12	U	14	U
Trichloroethene	10	11	U	13	U	12	U	12	U	14	U
Dibromochloromethane	10	11	U	13	U	12	U	12	U	14	U
1,1,2-Trichloroethane	10	11	U	13	U	12	U	12	U	14	U
Benzene	10	11	U	13	U	12	U	12	U	14	U
trans-1,3-Dichloropropene	10	11	U	13	U	12	U	12	U	14	U
Bromoform	10	11	U	13	U	12	U	12	U	14	U
4-Methyl-2-Pentanone	10	11	U	13	U	12	U	12	U	14	U
2-Hexanone	10	11	U	13	U	12	U	12	U	14	U
Tetrachloroethene	10	11	U	13	U	12	U	12	U	14	U
1,1,2,2-Tetrachloroethane	10	11	U	13	U	12	U	12	U	14	U
Toluene	10	11	U	13	U	12	U	12	U	14	U
Chlorobenzene	10	11	U	13	U	12	U	12	U	14	U
Ethylbenzene	10	11	U	13	U	12	U	12	U	14	U
Styrene	10	11	U	13	U	12	U	12	U	14	U
Total Xylenes	10	11	U	13	U	12	U	12	U	14	U

Dilution Factor:	1.00	1.00	1.00	1.00	1.00
Percent Solids:	94	78	85	86	71
Sample Volume\Weight (ml\g):	5.00	5.00	5.00	5.00	5.00
Associated Method Blank:	GH051214C51.D	GH051214C51.D	GH051214C51.D	GH051214C51.D	GH050908A51.D
Associated Equipment Blank:	-	-	-	-	-
Associated Field Blank:	-	-	-	-	-
Associated Trip Blank:	09QTXX3XXXX1XX	09QTXX3XXXX1XX	09QTXX3XXXX1XX	09QTXX3XXXX1XX	09QTXX2XXXX1XX

Site: TEST PIT
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750978 #	750982 #	750974 #	750966 #	750516 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/23/95
DATE EXTRACTED:	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95
DATE ANALYZED:	09/05/95	09/05/95	09/01/95	09/01/95	09/05/95

ANALYTE	SOW-3/90 - II CRQL										
Phenol	330	350	U	420	U	390	U	380	U	460	U
bis(2-Chloroethyl)ether	330	350	U	420	U	390	U	380	U	460	U
2-Chlorophenol	330	350	U	420	U	390	U	380	U	460	U
1,3-Dichlorobenzene	330	350	U	420	U	390	U	380	U	460	U
1,4-Dichlorobenzene	330	350	U	420	U	390	U	380	U	460	U
1,2-Dichlorobenzene	330	350	U	420	U	390	U	380	U	460	U
2-Methylphenol	330	350	U	420	U	390	U	380	U	460	U
2,2'-oxybis(1-Chloropropane)	330	350	U	420	U	390	U	380	U	460	U
4-Methylphenol	330	350	U	420	U	390	U	380	U	460	U
N-Nitroso-di-n-propylamine	330	350	U	420	U	390	U	380	U	460	U
Hexachloroethane	330	350	U	420	U	390	U	380	U	460	U
Nitrobenzene	330	350	U	420	U	390	U	380	U	460	U
Isophorone	330	350	U	420	U	390	U	380	U	460	U
2-Nitrophenol	330	350	U	420	U	390	U	380	U	460	U
2,4-Dimethylphenol	330	350	U	420	U	390	U	380	U	460	U
bis(2-Chloroethoxy)methane	330	350	U	420	U	390	U	380	U	460	U
2,4-Dichlorophenol	330	350	U	420	U	390	U	380	U	460	U
1,2,4-Trichlorobenzene	330	350	U	420	U	390	U	380	U	460	U
Naphthalene	330	350	U	420	U	390	U	380	U	460	U
4-Chloroaniline	330	350	U	420	U	390	U	380	U	460	U
Hexachlorobutadiene	330	350	U	420	U	390	U	380	U	460	U
4-Chloro-3-Methylphenol	330	350	U	420	U	390	U	380	U	460	U
2-Methylnaphthalene	330	350	U	420	U	390	U	380	U	460	U
Hexachlorocyclopentadiene	330	350	U	420	U	390	U	380	U	460	U
2,4,6-Trichlorophenol	330	350	U	420	U	390	U	380	U	460	U
2,4,5-Trichlorophenol	800	850	U	1000	U	930	U	930	U	1100	U
2-Chloronaphthalene	330	350	U	420	U	390	U	380	U	460	U
2-Nitroaniline	800	850	U	1000	U	930	U	930	U	1100	U
Dimethylphthalate	330	350	U	420	U	390	U	380	U	460	U
Acenaphthylene	330	350	U	420	U	390	U	380	U	460	U
2,6-Dinitrotoluene	330	350	U	420	U	390	U	380	U	460	U

Site: TEST PIT
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750978 #	750982 #	750974 #	750966 #	750516 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/23/95
DATE EXTRACTED:	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95
DATE ANALYZED:	09/05/95	09/05/95	09/01/95	09/01/95	09/05/95

ANALYTE	SOW-3/90 - II CRQL										
3-Nitroaniline	800	850	U	1000	U	930	U	930	U	1100	U
Acenaphthene	330	350	U	420	U	390	U	380	U	460	U
2,4-Dinitrophenol	800	850	U	1000	U	930	U	930	U	1100	U
4-Nitrophenol	800	850	U	1000	U	930	U	930	U	1100	U
Dibenzofuran	330	350	U	420	U	390	U	380	U	460	U
2,4-Dinitrotoluene	330	350	U	420	U	390	U	380	U	460	U
Diethylphthalate	330	350	U	420	U	390	U	380	U	460	U
4-Chlorophenyl-phenylether	330	350	U	420	U	390	U	380	U	460	U
Fluorene	330	350	U	420	U	390	U	380	U	460	U
4-Nitroaniline	800	850	U	1000	U	930	U	930	U	1100	U
4,6-Dinitro-2-methylphenol	800	850	U	1000	U	930	U	930	U	1100	U
N-Nitrosodiphenylamine	330	350	U	420	U	390	U	380	U	460	U
4-Bromophenyl-phenylether	330	350	U	420	U	390	U	380	U	460	U
Hexachlorobenzene	330	350	U	420	U	390	U	380	U	460	U
Pentachlorophenol	800	850	U	1000	U	930	U	930	U	1100	U
Phenanthrene	330	350	U	420	U	390	U	380	U	460	U
Anthracene	330	350	U	420	U	390	U	380	U	460	U
Carbazole	330	350	U	420	U	390	U	380	U	460	U
Di-n-butylphthalate	330	350	U	420	U	390	U	380	U	460	U
Fluoranthene	330	350	U	420	U	390	U	380	U	460	U
Pyrene	330	350	U	420	U	390	U	380	U	460	U
Butylbenzylphthalate	330	350	U	420	U	390	U	380	U	460	U
3,3'-Dichlorobenzidine	330	350	U	420	U	390	U	380	U	460	U
Benzo(a)Anthracene	330	350	U	420	U	390	U	380	U	460	U
Chrysene	330	350	U	420	U	390	U	380	U	460	U
bis(2-Ethylhexyl)phthalate	330	350	U	420	U	390	U	48	J	460	U
Di-n-octylphthalate	330	350	U	420	U	390	U	380	U	460	U
Benzo(b)Fluoranthene	330	350	U	420	U	390	U	380	U	460	U
Benzo(k)Fluoranthene	330	350	U	420	U	390	U	380	U	460	U
Benzo(a)Pyrene	330	350	U	420	U	390	U	380	U	460	U
Indeno(1,2,3-c,d)Pyrene	330	350	U	420	U	390	U	380	U	460	U
Dibenz(a,h)Anthracene	330	350	U	420	U	390	U	380	U	460	U
Benzo(g,h,i)perylene	330	350	U	420	U	390	U	380	U	460	U

Dilution Factor:	1.00	1.00	1.00	1.00	1.00
Percent Solids:	94	78	85	86	71
Sample Volume\Weight (ml\g):	30.2	30.0	30.2	30.0	30.0
Associated Method Blank:	GJ051169B02.D	GJ051169B02.D	GH051169A21.D	GH051169A21.D	GJ051169B02.D
Associated Equipment Blank:	-	-	-	-	-
Associated Field Blank:	-	-	-	-	-

Site: TEST PIT
#: Level IV Validation

PROJECT: Brunswick NAS

Semivolatile Organic Soil Analysis (ug/kg)

10/12/95

Table 2
Validation / Summary Table

LOCATION:		PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:		09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:		750978 #	750982 #	750974 #	750966 #	750516 #
DATE SAMPLED:		08/25/95	08/25/95	08/25/95	08/25/95	08/23/95
DATE EXTRACTED:		08/30/95	08/30/95	08/30/95	08/30/95	08/30/95
DATE ANALYZED:		09/05/95	09/05/95	09/01/95	09/01/95	09/05/95
ANALYTE	SOW-3/90 - II CRQL					
Phenol	330	350 U	420 U	390 U	380 U	460 U
bis(2-Chloroethyl)ether	330	350 U	420 U	390 U	380 U	460 U
2-Chlorophenol	330	350 U	420 U	390 U	380 U	460 U
1,3-Dichlorobenzene	330	350 U	420 U	390 U	380 U	460 U
1,4-Dichlorobenzene	330	350 U	420 U	390 U	380 U	460 U
1,2-Dichlorobenzene	330	350 U	420 U	390 U	380 U	460 U
2-Methylphenol	330	350 U	420 U	390 U	380 U	460 U
2,2'-oxybis(1-Chloropropane)	330	350 U	420 U	390 U	380 U	460 U
4-Methylphenol	330	350 U	420 U	390 U	380 U	460 U
N-Nitroso-di-n-propylamine	330	350 U	420 U	390 U	380 U	460 U
Hexachloroethane	330	350 U	420 U	390 U	380 U	460 U
Nitrobenzene	330	350 U	420 U	390 U	380 U	460 U
Isophorone	330	350 U	420 U	390 U	380 U	460 U
2-Nitrophenol	330	350 U	420 U	390 U	380 U	460 U
2,4-Dimethylphenol	330	350 U	420 U	390 U	380 U	460 U
bis(2-Chloroethoxy)methane	330	350 U	420 U	390 U	380 U	460 U
2,4-Dichlorophenol	330	350 U	420 U	390 U	380 U	460 U
1,2,4-Trichlorobenzene	330	350 U	420 U	390 U	380 U	460 U
Naphthalene	330	350 U	420 U	390 U	380 U	460 U
4-Chloroaniline	330	350 U	420 U	390 U	380 U	460 U
Hexachlorobutadiene	330	350 U	420 U	390 U	380 U	460 U
4-Chloro-3-Methylphenol	330	350 U	420 U	390 U	380 U	460 U
2-Methylnaphthalene	330	350 U	420 U	390 U	380 U	460 U
Hexachlorocyclopentadiene	330	350 U	420 U	390 U	380 U	460 U
2,4,6-Trichlorophenol	330	350 U	420 U	390 U	380 U	460 U
2,4,5-Trichlorophenol	800	850 U	1000 U	930 U	930 U	1100 U
2-Chloronaphthalene	330	350 U	420 U	390 U	380 U	460 U
2-Nitroaniline	800	850 U	1000 U	930 U	930 U	1100 U
Dimethylphthalate	330	350 U	420 U	390 U	380 U	460 U
Acenaphthylene	330	350 U	420 U	390 U	380 U	460 U
2,6-Dinitrotoluene	330	350 U	420 U	390 U	380 U	460 U

Site: TEST PIT
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	PS-912	PS-913	PS-914 DUP	PS-914	PS-915
ISIS ID:	09PS912XX6X1XX	09PS913XX8X1XX	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX
LAB NUMBER:	750978 #	750982 #	750974 #	750966 #	750516 #
DATE SAMPLED:	08/25/95	08/25/95	08/25/95	08/25/95	08/23/95
DATE EXTRACTED:	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95
DATE ANALYZED:	09/05/95	09/05/95	09/01/95	09/01/95	09/05/95

ANALYTE	SOW-3/90 - II CRQL										
3-Nitroaniline	800	850	U	1000	U	930	U	930	U	1100	U
Acenaphthene	330	350	U	420	U	390	U	380	U	460	U
2,4-Dinitrophenol	800	850	U	1000	U	930	U	930	U	1100	U
4-Nitrophenol	800	850	U	1000	U	930	U	930	U	1100	U
Dibenzofuran	330	350	U	420	U	390	U	380	U	460	U
2,4-Dinitrotoluene	330	350	U	420	U	390	U	380	U	460	U
Diethylphthalate	330	350	U	420	U	390	U	380	U	460	U
4-Chlorophenyl-phenylether	330	350	U	420	U	390	U	380	U	460	U
Fluorene	330	350	U	420	U	390	U	380	U	460	U
4-Nitroaniline	800	850	U	1000	U	930	U	930	U	1100	U
4,6-Dinitro-2-methylphenol	800	850	U	1000	U	930	U	930	U	1100	U
N-Nitrosodiphenylamine	330	350	U	420	U	390	U	380	U	460	U
4-Bromophenyl-phenylether	330	350	U	420	U	390	U	380	U	460	U
Hexachlorobenzene	330	350	U	420	U	390	U	380	U	460	U
Pentachlorophenol	800	850	U	1000	U	930	U	930	U	1100	U
Phenanthrene	330	350	U	420	U	390	U	380	U	460	U
Anthracene	330	350	U	420	U	390	U	380	U	460	U
Carbazole	330	350	U	420	U	390	U	380	U	460	U
Di-n-butylphthalate	330	350	U	420	U	390	U	380	U	460	U
Fluoranthene	330	350	U	420	U	390	U	380	U	460	U
Pyrene	330	350	U	420	U	390	U	380	U	460	U
Butylbenzylphthalate	330	350	U	420	U	390	U	380	U	460	U
3,3'-Dichlorobenzidine	330	350	U	420	U	390	U	380	U	460	U
Benzo(a)Anthracene	330	350	U	420	U	390	U	380	U	460	U
Chrysene	330	350	U	420	U	390	U	380	U	460	U
bis(2-Ethylhexyl)phthalate	330	350	U	420	U	390	U	48	J	460	U
Di-n-octylphthalate	330	350	U	420	U	390	U	380	U	460	U
Benzo(b)Fluoranthene	330	350	U	420	U	390	U	380	U	460	U
Benzo(k)Fluoranthene	330	350	U	420	U	390	U	380	U	460	U
Benzo(a)Pyrene	330	350	U	420	U	390	U	380	U	460	U
Indeno(1,2,3-c,d)Pyrene	330	350	U	420	U	390	U	380	U	460	U
Dibenz(a,h)Anthracene	330	350	U	420	U	390	U	380	U	460	U
Benzo(g,h,i)perylene	330	350	U	420	U	390	U	380	U	460	U
Dilution Factor:		1.00		1.00		1.00		1.00		1.00	
Percent Solids:		94		78		85		86		71	
Sample Volume\Weight (ml\g):		30.2		30.0		30.2		30.0		30.0	
Associated Method Blank:		GJ051169B02.D		GJ051169B02.D		GH051169A21.D		GH051169A21.D		GJ051169B02.D	
Associated Equipment Blank:		-		-		-		-		-	
Associated Field Blank:		-		-		-		-		-	

Site: TEST PIT
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:		PS-912	PS-915 DUP	PS-915
ISIS ID:		09PS912XX6X1XX	09PS915XX6X1XD	09PS915XX6X1XX
LAB NUMBER:		750978 #	750520 #	750516 #
DATE SAMPLED:		08/25/95	08/23/95	08/23/95
DATE EXTRACTED:		08/30/95	08/30/95	08/30/95
DATE ANALYZED:		09/06/95	09/06/95	09/06/95
ANALYTE	SOW-3/90 - II CRQL			
alpha-BHC	1.7	1.8 U	2.3 U	2.4 U
beta-BHC	1.7	1.8 U	2.3 U	2.4 U
delta-BHC	1.7	1.8 U	2.3 U	2.4 U
gamma-BHC (Lindane)	1.7	1.8 U	2.3 U	2.4 U
Heptachlor	1.7	0.058 JP	2.3 U	2.4 U
Aldrin	1.7	1.8 U	2.3 U	2.4 U
Heptachlor Epoxide	1.7	1.8 U	2.3 U	2.4 U
Endosulfan I	1.7	1.8 U	2.3 U	2.4 U
Dieldrin	3.3	3.5 U	4.5 U	4.6 U
4,4'-DDE	3.3	3.5 U	1.7 J	3.9 J
Endrin	3.3	3.5 U	4.5 U	4.6 U
Endosulfan II	3.3	3.5 U	4.5 U	4.6 U
4,4'-DDD	3.3	3.5 U	4.5 U	4.6 U
Endrin Aldehyde	3.3	3.5 U	4.5 U	4.6 U
Endosulfan Sulfate	3.3	3.5 U	4.5 U	4.6 U
4,4'-DDT	3.3	3.5 U	2.1 JP	2.8 J
Methoxychlor	17	18 U	0.4 JP	24 U
Endrin Ketone	3.3	3.5 U	4.5 U	4.6 U
alpha-Chlordane	1.7	1.8 U	2.3 U	2.4 U
gamma-Chlordane	1.7	1.8 U	2.3 U	2.4 U
Toxaphene	170	180 U	230 U	240 U
Aroclor-1016	33	35 U	45 U	46 U
Aroclor-1221	67	71 U	92 U	94 U
Aroclor-1232	33	35 U	45 U	46 U
Aroclor-1242	33	35 U	45 U	46 U
Aroclor-1248	33	35 U	45 U	46 U
Aroclor-1254	33	35 U	45 U	46 U
Aroclor-1260	33	35 U	45 U	46 U
Dilution Factor:		1.00	1.00	1.00
Percent Solids:		94	73	71
Sample Volume\Weight (ml\g):		30.0	30.0	30.1
Associated Method Blank:		751376	751376	751376
Associated Equipment Blank:		-	-	-
Associated Field Blank:		-	-	-

Site: TEST PIT
#: Level IV Validation

Table 2
Validation / Summary Table

	LOCATION:	PS-912	PS-915 DUP	PS-915
	ISIS ID:	09PS912XX6X1XX	09PS915XX6X1XD	09PS915XX6X1XX
	LAB NUMBER:	750978 #	750520 #	750516 #
	DATE SAMPLED:	08/25/95	08/23/95	08/23/95
	DATE EXTRACTED:	08/30/95	08/30/95	08/30/95
	DATE ANALYZED:	09/06/95	09/06/95	09/06/95
ANALYTE	SOW-3/90 - II CRQL			
alpha-BHC	1.7	1.8 U	2.3 U	2.4 U
beta-BHC	1.7	1.8 U	2.3 U	2.4 U
delta-BHC	1.7	1.8 U	2.3 U	2.4 U
gamma-BHC (Lindane)	1.7	1.8 U	2.3 U	2.4 U
Heptachlor	1.7	1.8 U	2.3 U	2.4 U
Aldrin	1.7	1.8 U	2.3 U	2.4 U
Heptachlor Epoxide	1.7	1.8 U	2.3 U	2.4 U
Endosulfan I	1.7	1.8 U	2.3 U	2.4 U
Dieldrin	3.3	3.5 U	4.5 U	4.6 U
4,4'-DDE	3.3	3.5 U	1.7 J	3.9 J
Endrin	3.3	3.5 U	4.5 U	4.6 U
Endosulfan II	3.3	3.5 U	4.5 U	4.6 U
4,4'-DDD	3.3	3.5 U	4.5 U	4.6 U
Endrin Aldehyde	3.3	3.5 U	4.5 U	4.6 U
Endosulfan Sulfate	3.3	3.5 U	4.5 U	4.6 U
4,4'-DDT	3.3	3.5 U	2.1 J	2.8 J
Methoxychlor	17	18 U	0.4 J	24 U
Endrin Ketone	3.3	3.5 U	4.5 U	4.6 U
alpha-Chlordane	1.7	1.8 U	2.3 U	2.4 U
gamma-Chlordane	1.7	1.8 U	2.3 U	2.4 U
Toxaphene	170	180 U	230 U	240 U
Aroclor-1016	33	35 U	45 U	46 U
Aroclor-1221	67	71 U	92 U	94 U
Aroclor-1232	33	35 U	45 U	46 U
Aroclor-1242	33	35 U	45 U	46 U
Aroclor-1248	33	35 U	45 U	46 U
Aroclor-1254	33	35 U	45 U	46 U
Aroclor-1260	33	35 U	45 U	46 U
Dilution Factor:		1.00	1.00	1.00
Percent Solids:		94	73	71
Sample Volume\Weight (ml\g):		30.0	30.0	30.1
Associated Method Blank:		751376	751376	751376
Associated Equipment Blank:		-	-	-
Associated Field Blank:		-	-	-

Site: TEST PIT
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	PS-912		PS-913		PS-914 DUP		PS-914		PS-915	
ISIS ID:	09PS912XX6X1XX		09PS913XX8X1XX		09PS914XX6X1XD		09PS914XX6X1XX		09PS915XX6X1XX	
LAB NUMBER:	750979 #		750983 #		750975 #		750967 #		750524 #	
DATE SAMPLED:	08/25/95		08/25/95		08/25/95		08/25/95		08/23/95	
ANALYTE SOW-3/90 - II CRDL										
Aluminum 40	4290		5350		6440		7440		4740	
Antimony 12	0.41	UN	0.39	UN	0.45	UN	0.44	UN	0.56	UN
Arsenic 2	8.5		0.57	B	0.84	B	1.5	B	1.4	B
Barium 40	13.2	B	21.4	B	29.9	B	34.5	B	11.4	B
Beryllium 1	0.34	B	0.23	B	0.27	B	0.32	B	0.24	B
Cadmium 1	0.11	U	0.10	U	0.12	U	0.12	U	0.15	U
Calcium 1000	235	B	774	B	1010	B	1080	B	484	B
Chromium 2	7.5		10.1		12.4		13.9		6.5	
Cobalt 10	3.9	B	4.3	B	4.7	B	5.3	B	3.0	B
Copper 5	5.7	E	8.7	E	10.1	E	11.2	E	6.1	BE
Iron 20	14000		8200		10100		11400		5100	
Lead 0.6	2.6		2.8		3.6		3.7		4.8	
Magnesium 1000	1860		2320		2910		3300		1050	B
Manganese 3	159		123		138		157		64.2	
Mercury 0.1	0.11	U	0.10	U	0.12	U	0.12	U	0.15	U
Nickel 8	6.7	B	8.3		10.6		12.0		5.7	B
Potassium 1000	923	B	1160		1580		1770		343	B
Selenium 1	0.87	B	0.70	U	0.84	B	1.2		0.99	U
Silver 2	0.13	U	0.12	U	0.14	U	0.14	U	0.18	U
Sodium 1000	265	B	260	B	308	B	341	B	396	B
Thallium 2	0.77	U	0.74	U	0.84	U	0.83	U	1.1	U
Vanadium 10	11.5		13.6		16.6		18.5		8.3	B
Zinc 4	15.7		19.0		22.7		25.7		15.6	
Cyanide 1	0.53	UN	0.51	UN	0.59	UN	0.58	UN	0.73	UN
Percent Solids:	94		98		85		86		68	
Associated Method Blank:	129023		129023		129023		129023		129023	
Associated Equipment Blank:	-		-		-		-		-	
Associated Field Blank:	-		-		-		-		-	

Site: TEST PIT
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	PS-912		PS-913		PS-914 DUP		PS-914		PS-915	
ISIS ID:	09PS912XX6X1XX		09PS913XX8X1XX		09PS914XX6X1XD		09PS914XX6X1XX		09PS915XX6X1XX	
LAB NUMBER:	750979 #		750983 #		750975 #		750967 #		750524 #	
DATE SAMPLED:	08/25/95		08/25/95		08/25/95		08/25/95		08/23/95	
ANALYTE SOW-3/90 - II CRDL										
Aluminum 40	4290		5350		6440		7440		4740	
Antimony 12	0.41	UJ	0.39	UJ	0.45	UJ	0.44	UJ	0.56	UJ
Arsenic 2	8.5		0.57	J	0.84	J	1.5	J	1.4	J
Barium 40	13.2	J	21.4	J	29.9	J	34.5	J	11.4	J
Beryllium 1	0.34	U	0.23	U	0.27	U	0.32	U	0.24	U
Cadmium 1	0.11	U	0.10	U	0.12	U	0.12	U	0.15	U
Calcium 1000	235	J	774	J	1010	J	1080	J	484	J
Chromium 2	7.5		10.1		12.4		13.9		6.5	
Cobalt 10	3.9	J	4.3	J	4.7	J	5.3	J	3.0	J
Copper 5	5.7		8.7		10.1		11.2		6.1	J
Iron 20	14000		8200		10100		11400		5100	
Lead 0.6	2.6		2.8		3.6		3.7		4.8	
Magnesium 1000	1860		2320		2910		3300		1050	J
Manganese 3	159		123		138		157		64.2	
Mercury 0.1	0.11	U	0.10	U	0.12	U	0.12	U	0.15	U
Nickel 8	6.7	J	8.3		10.6		12.0		5.7	J
Potassium 1000	923	J	1160		1580		1770		343	J
Selenium 1	0.87	J	0.70	U	0.84	J	1.2		0.99	U
Silver 2	0.13	U	0.12	U	0.14	U	0.14	U	0.18	U
Sodium 1000	265	J	260	J	308	J	341	J	396	J
Thallium 2	0.77	U	0.74	U	0.84	U	0.83	U	1.1	U
Vanadium 10	11.5		13.6		16.6		18.5		8.3	J
Zinc 4	15.7		19.0		22.7		25.7		15.6	
Cyanide 1	0.53	UJ	0.51	UJ	0.59	UJ	0.58	UJ	0.73	UJ
Percent Solids:	94		98		85		86		68	
Associated Method Blank:	129023		129023		129023		129023		129023	
Associated Equipment Blank:	-		-		-		-		-	
Associated Field Blank:	-		-		-		-		-	

Site: TEST PIT
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	BS-021	BS-204	SB-020	SB-022	SB-917	SB-918
ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
LAB NUMBER:	750531 #	750533 #	750409 #	750407 #	750408 #	750403 #
DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95	08/21/95
DATE ANALYZED:	08/31/95	08/31/95	08/31/95	08/31/95	09/01/95	08/31/95
ANALYTE PQL						
Total Petroleum Hydrocarbons (TPH) ME DEP - Gasoline in Soil 5.0	8.1 U	6.7 U	6.7 U	6.0 U	200	6.1 U
Dilution Factor:	1.0	1.0	1.0	1.0	10.0	1.0
Percent Solids:	62	75	75	83	80	82
Sample Volume\Weight (ml\g):	10.0	10.0	10.0	10.0	10.0	10.0
Associated Method Blank:	VTBLME	VTBLME	VTBLME	VTBLME	VTBLME	VTBLME
Associated Equipment Blank:	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX
Associated Field Blank:	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 2
Validation / Summary Table

	LOCATION:	BS-021	BS-204	SB-020	SB-022	SB-917	SB-918
	ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
	LAB NUMBER:	750531 #	750533 #	750409 #	750407 #	750408 #	750403 #
	DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95	08/21/95
	DATE ANALYZED:	08/31/95	08/31/95	08/31/95	08/31/95	09/01/95	08/31/95
ANALYTE	PQL						
Total Petroleum Hydrocarbons (TPH)							
ME DEP - Gasoline in Soil	5.0	8.1 U	6.7 U	6.7 U	6.0 U	200	6.1 U
Dilution Factor:		1.0	1.0	1.0	1.0	10.0	1.0
Percent Solids:		62	75	75	83	80	82
Sample Volume\Weight (ml\g):		10.0	10.0	10.0	10.0	10.0	10.0
Associated Method Blank:		VTBLME	VTBLME	VTBLME	VTBLME	VTBLME	VTBLME
Associated Equipment Blank:		09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX
Associated Field Blank:		09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 1
Laboratory Report of Analysis

	LOCATION:	BS-021	BS-204	BS-020	SB-022	SB-917	SB-918
	ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
	LAB NUMBER:	750537 #	750539 #	750416 #	750414 #	750415 #	750410 #
	DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95	08/21/95
	DATE EXTRACTED:	08/28/95	08/28/95	08/28/95	08/28/95	08/28/95	08/28/95
	DATE ANALYZED:	08/31/95	08/31/95	08/31/95	08/31/95	08/31/95	08/31/95
ANALYTE	PQL						
Total Petroleum Hydrocarbons (TPH)							
ME DEP - Fuel Oil in Soil	10	9.4 JB	13 U	18	2.1 JB	37 B	62 B
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0
Percent Solids:		62	75	75	83	80	82
Sample Volume\Weight (ml\g):		20.0	20.1	20.0	20.0	20.1	20.1
Associated Method Blank:		PBLK03	PBLK03	PBLK03	PBLK03	PBLK03	PBLK03
Associated Equipment Blank:		09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX
Associated Field Blank:		09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 2
Validation / Summary Table

	LOCATION:	BS-021	BS-204	SB-020	SB-022	SB-917	SB-918
	ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
	LAB NUMBER:	750537 #	750539 #	750416 #	750414 #	750415 #	750410 #
	DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95	08/21/95
	DATE EXTRACTED:	08/28/95	08/28/95	08/28/95	08/28/95	08/28/95	08/28/95
	DATE ANALYZED:	08/31/95	08/31/95	08/31/95	08/31/95	08/31/95	08/31/95
ANALYTE	PQL						
Total Petroleum Hydrocarbons (TPH)							
ME DEP - Fuel Oil in Soil	10	16 U	13 U	18 U	12 U	37	62
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0
Percent Solids:		62	75	75	83	80	82
Sample Volume\Weight (ml\g):		20.0	20.1	20.0	20.0	20.1	20.1
Associated Method Blank:		PBLK03	PBLK03	PBLK03	PBLK03	PBLK03	PBLK03
Associated Equipment Blank:		09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX
Associated Field Blank:		09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX	09QDXX1XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 1
Laboratory Report of Analysis

		LOCATION:	BS-021		BS-204		SB-020		SB-022		SB-917		SB-918	
		ISIS ID:	09BS021X20X1XX		09BS204XX8X1XX		09SB020X12X1XX		09SB022X10X1XX		09SB917X10X1XX		09SB918X18X1XX	
		LAB NUMBER:	750525 #		750526 #		750402 #		750397 #		750398 #		750393 #	
		DATE SAMPLED:	08/23/95		08/24/95		08/22/95		08/22/95		08/21/95		08/21/95	
ANALYTE	SOW-3/90 - II	CRDL												
Aluminum		40	4880		5370		4450		11200		8600		4560	
Antimony		12	0.56	UN	0.50	UN	0.44	UN	0.47	UN	0.46	UN	0.48	UN
Arsenic		2	3.2		1.9	B	0.71	B	4.3		1.4	B	0.81	B
Barium		40	17.2	B	13.1	B	16.7	B	56.1		12.4	B	24.5	B
Beryllium		1	0.40	B	0.31	B	0.24	B	0.53	B	0.33	B	0.24	B
Cadmium		1	0.15	U	0.13	U	0.12	U	0.12	U	0.12	U	0.13	B
Calcium		1000	640	B	988	B	608	B	606	B	731	B	779	B
Chromium		2	13.7		6.2		8.1		17.1		10.7		6.8	
Cobalt		10	7.4	B	4.5	B	6.1	B	7.6	B	2.8	B	2.7	B
Copper		5	6.9	BE	3.6	BE	6.9	E	15.4	E	5.1	BE	8.4	E
Iron		20	12200		6080		7220		16400		9210		6460	
Lead		0.6	3.4		3.9		3.5		7.3		6.5		11.1	
Magnesium		1000	1620		885	B	1820		3600		1410		1170	B
Manganese		3	391		67.3		399		538		67.7		64.0	
Mercury		0.1	0.15	U	0.13	U	0.12	U	0.12	U	0.12	U	0.13	U
Nickel		8	5.6	B	4.4	B	6.3	B	16.4		5.7	B	8.9	B
Potassium		1000	846	B	334	B	962	B	1950		482	B	446	B
Selenium		1	1.2	B	1.2	B	0.78	U	0.96	B	0.83	U	1.3	
Silver		2	0.18	U	0.16	U	0.14	U	0.15	U	0.15	U	0.15	U
Sodium		1000	425	B	356	B	324	B	387	B	333	B	315	B
Thallium		2	1.1	U	0.95	U	0.83	U	0.89	U	0.88	U	0.91	U
Vanadium		10	17.2		10.9	B	11.9		23.4		18.3		9.2	B
Zinc		4	16.7		11.3		16.4		29.4		17.4		27.1	
Cyanide		1	0.74	UN	0.66	UN	0.58	UN	0.62	UN	0.61	UN	0.63	UN
Percent Solids:			68		76		87		81		82		79	
Associated Method Blank:			129023		129023		129023		129023		129023		129023	
Associated Equipment Blank:			09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX	
Associated Field Blank:			09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX	

Site: SOIL BORINGS
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	BS-021		BS-204		SB-020		SB-022		SB-917		SB-918	
ISIS ID:	09BS021X20X1XX		09BS204XX8X1XX		09SB020X12X1XX		09SB022X10X1XX		09SB917X10X1XX		09SB918X18X1XX	
LAB NUMBER:	750525 #		750526 #		750402 #		750397 #		750398 #		750393 #	
DATE SAMPLED:	08/23/95		08/24/95		08/22/95		08/22/95		08/21/95		08/21/95	
ANALYTE SOW-3/90 - II CRDL												
Aluminum 40	4880		5370		4450		11200		8600		4560	
Antimony 12	0.56	UJ	0.50	UJ	0.44	UJ	0.47	UJ	0.46	UJ	0.48	UJ
Arsenic 2	3.2		1.9	J	0.71	J	4.3		1.4	J	0.81	J
Barium 40	17.2	J	13.1	J	16.7	J	56.1		12.4	J	24.5	J
Beryllium 1	0.40	J	0.31	U	0.24	J	0.53	J	0.33	J	0.24	U
Cadmium 1	0.15	U	0.13	U	0.12	U	0.12	U	0.12	U	0.13	J
Calcium 1000	640	J	988	J	608	J	606	J	731	J	779	J
Chromium 2	13.7		6.2		8.1		17.1		10.7		6.8	
Cobalt 10	7.4	J	4.5	J	6.1	J	7.6	J	2.8	J	2.7	J
Copper 5	6.9	J	3.6	J	6.9		15.4		5.1	J	8.4	
Iron 20	12200		6080		7220		16400		9210		6460	
Lead 0.6	3.4		3.9		3.5		7.3		6.5		11.1	
Magnesium 1000	1620		885	J	1820		3600		1410		1170	J
Manganese 3	391		67.3		399		538		67.7		64.0	
Mercury 0.1	0.15	U	0.13	U	0.12	U	0.12	U	0.12	U	0.13	U
Nickel 8	5.6	J	4.4	J	6.3	J	16.4		5.7	J	8.9	J
Potassium 1000	846	J	334	J	962	J	1950		482	J	446	J
Selenium 1	1.2	J	1.2	J	0.78	U	0.96	J	0.83	U	1.3	
Silver 2	0.18	U	0.16	U	0.14	U	0.15	U	0.15	U	0.15	U
Sodium 1000	425	J	356	J	324	J	387	J	333	J	315	J
Thallium 2	1.1	U	0.95	U	0.83	U	0.89	U	0.88	U	0.91	U
Vanadium 10	17.2		10.9	J	11.9		23.4		18.3		9.2	J
Zinc 4	16.7		11.3		16.4		29.4		17.4		27.1	
Cyanide 1	0.74	UJ	0.66	UJ	0.58	UJ	0.62	UJ	0.61	UJ	0.63	UJ
Percent Solids:	68		76		87		81		82		79	
Associated Method Blank:	129023		129023		129023		129023		129023		129023	
Associated Equipment Blank:	09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX	
Associated Field Blank:	09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX	

Site: SOIL BORINGS
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	BS-021	BS-204	SB-020	SB-022	SB-917	SB-918
ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
LAB NUMBER:	750523 #	750519 #	750392 #	750378 #	750379 #	750377 #
DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95	08/21/95
DATE EXTRACTED:	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95
DATE ANALYZED:	09/01/95	09/05/95	09/01/95	09/01/95	09/06/95	09/06/95

ANALYTE	SOW-3/90 - II CRQL												
Phenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
bis(2-Chloroethyl)ether	330	530	U	440	U	440	U	400	U	2000	U	400	U
2-Chlorophenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
1,3-Dichlorobenzene	330	530	U	440	U	440	U	400	U	2000	U	400	U
1,4-Dichlorobenzene	330	530	U	440	U	440	U	400	U	2000	U	400	U
1,2-Dichlorobenzene	330	530	U	440	U	440	U	400	U	2000	U	400	U
2-Methylphenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
2,2'-oxybis(1-Chloropropane)	330	530	U	440	U	440	U	400	U	2000	U	400	U
4-Methylphenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
N-Nitroso-di-n-propylamine	330	530	U	440	U	440	U	400	U	2000	U	400	U
Hexachloroethane	330	530	U	440	U	440	U	400	U	2000	U	400	U
Nitrobenzene	330	530	U	440	U	440	U	400	U	2000	U	400	U
Isophorone	330	530	U	440	U	440	U	400	U	2000	U	400	U
2-Nitrophenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
2,4-Dimethylphenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
bis(2-Chloroethoxy)methane	330	530	U	440	U	440	U	400	U	2000	U	400	U
2,4-Dichlorophenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
1,2,4-Trichlorobenzene	330	530	U	440	U	440	U	400	U	2000	U	400	U
Naphthalene	330	530	U	440	U	440	U	400	U	2000	U	200	J
4-Chloroaniline	330	530	U	440	U	440	U	400	U	2000	U	400	U
Hexachlorobutadiene	330	530	U	440	U	440	U	400	U	2000	U	400	U
4-Chloro-3-Methylphenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
2-Methylnaphthalene	330	530	U	440	U	440	U	400	U	2000	U	51	J
Hexachlorocyclopentadiene	330	530	U	440	U	440	U	400	U	2000	U	400	U
2,4,6-Trichlorophenol	330	530	U	440	U	440	U	400	U	2000	U	400	U
2,4,5-Trichlorophenol	800	1300	U	1100	U	1100	U	960	U	5000	U	970	U
2-Chloronaphthalene	330	530	U	440	U	440	U	400	U	2000	U	400	U
2-Nitroaniline	800	1300	U	1100	U	1100	U	960	U	5000	U	970	U
Dimethylphthalate	330	530	U	440	U	440	U	400	U	2000	U	400	U
Acenaphthylene	330	530	U	440	U	440	U	400	U	2000	U	400	U
2,6-Dinitrotoluene	330	530	U	440	U	440	U	400	U	2000	U	400	U

Site: SOIL BORINGS
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	BS-021		BS-204		SB-020		SB-022		SB-917		SB-918	
ISIS ID:	09BS021X20X1XX		09BS204XX8X1XX		09SB020X12X1XX		09SB022X10X1XX		09SB917X10X1XX		09SB918X18X1XX	
LAB NUMBER:	750523 #		750519 #		750392 #		750378 #		750379 #		750377 #	
DATE SAMPLED:	08/23/95		08/24/95		08/22/95		08/22/95		08/21/95		08/21/95	
DATE EXTRACTED:	08/30/95		08/30/95		08/30/95		08/30/95		08/30/95		08/30/95	
DATE ANALYZED:	09/01/95		09/05/95		09/01/95		09/01/95		09/06/95		09/06/95	
ANALYTE SOW-3/90 - II CRQL												
3-Nitroaniline 800	1300	U	1100	U	1100	U	960	U	5000	U	970	U
Acenaphthene 330	530	U	440	U	440	U	400	U	2000	U	440	
2,4-Dinitrophenol 800	1300	U	1100	U	1100	U	960	U	5000	U	970	U
4-Nitrophenol 800	1300	U	1100	U	1100	U	960	U	5000	U	970	U
Dibenzofuran 330	530	U	440	U	440	U	400	U	2000	U	170	J
2,4-Dinitrotoluene 330	530	U	440	U	440	U	400	U	2000	U	400	U
Diethylphthalate 330	530	U	440	U	440	U	400	U	2000	U	400	U
4-Chlorophenyl-phenylether 330	530	U	440	U	440	U	400	U	2000	U	400	U
Fluorene 330	530	U	440	U	440	U	400	U	2000	U	360	J
4-Nitroaniline 800	1300	U	1100	U	1100	U	960	U	5000	U	970	U
4,6-Dinitro-2-methylphenol 800	1300	U	1100	U	1100	U	960	U	5000	U	970	U
N-Nitrosodiphenylamine 330	530	U	440	U	440	U	400	U	2000	U	400	U
4-Bromophenyl-phenylether 330	530	U	440	U	440	U	400	U	2000	U	400	U
Hexachlorobenzene 330	530	U	440	U	440	U	400	U	2000	U	400	U
Pentachlorophenol 800	1300	U	1100	U	1100	U	960	U	5000	U	970	U
Phenanthrene 330	140	J	130	J	440	U	400	U	2000	U	1400	
Anthracene 330	530	U	440	U	440	U	400	U	2000	U	310	J
Carbazole 330	530	U	440	U	440	U	400	U	2000	U	170	J
Di-n-butylphthalate 330	530	U	440	U	440	U	400	U	2000	U	400	U
Fluoranthene 330	150	J	270	J	440	U	400	U	2000	U	1900	
Pyrene 330	150	J	230	J	440	U	400	U	310	J	1400	
Butylbenzylphthalate 330	530	U	440	U	440	U	400	U	2000	U	400	U
3,3'-Dichlorobenzidine 330	530	U	440	U	440	U	400	U	2000	U	400	U
Benzo(a)Anthracene 330	95	J	120	J	440	U	400	U	2000	U	960	
Chrysene 330	91	J	160	J	440	U	400	U	2000	U	670	
bis(2-Ethylhexyl)phthalate 330	530	U	440	U	60	J	47	J	2000	U	400	U
Di-n-octylphthalate 330	530	U	440	U	440	U	400	U	2000	U	400	U
Benzo(b)Fluoranthene 330	120	JX	270	JX	440	U	400	U	2000	U	1600	X
Benzo(k)Fluoranthene 330		JX		JX	440	U	400	U	2000	U	1500	X
Benzo(a)Pyrene 330	76	J	120	J	440	U	400	U	2000	U	680	
Indeno(1,2,3-c,d)Pyrene 330	530	U	440	U	440	U	400	U	2000	U	230	J
Dibenz(a,h)Anthracene 330	530	U	440	U	440	U	400	U	2000	U	400	U
Benzo(g,h,i)perylene 330	530	U	440	U	440	U	400	U	2000	U	190	J
Dilution Factor:	1.00		1.00		1.00		1.00		5.00		1.00	
Percent Solids:	62		75		75		83		80		82	
Sample Volume\Weight (ml\g):	30.1		30.2		30.1		30.2		30.2		30.1	
Associated Method Blank:	GH051169A21.D		GJ051169B02.D		GH051169A21.D		GH051169A21.D		GJ051169B02.D		GJ051169B02.D	
Associated Equipment Blank:	09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX	
Associated Field Blank:	09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX	

Site: SOIL BORINGS
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	BS-021	BS-204	SB-020	SB-022	SB-917	SB-918
ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
LAB NUMBER:	750523 #	750519 #	750392 #	750378 #	750379 #	750377 #
DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95	08/21/95
DATE EXTRACTED:	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95
DATE ANALYZED:	09/01/95	09/05/95	09/01/95	09/01/95	09/06/95	09/06/95

ANALYTE	SOW-3/90 - II CRQL														
Phenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
bis(2-Chloroethyl)ether	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2-Chlorophenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
1,3-Dichlorobenzene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
1,4-Dichlorobenzene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
1,2-Dichlorobenzene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2-Methylphenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2,2'-oxybis(1-Chloropropane)	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
4-Methylphenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
N-Nitroso-di-n-propylamine	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Hexachloroethane	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Nitrobenzene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Isophorone	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2-Nitrophenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2,4-Dimethylphenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
bis(2-Chloroethoxy)methane	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2,4-Dichlorophenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
1,2,4-Trichlorobenzene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Naphthalene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	200	J
4-Chloroaniline	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Hexachlorobutadiene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
4-Chloro-3-Methylphenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2-Methylnaphthalene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	51	J
Hexachlorocyclopentadiene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2,4,6-Trichlorophenol	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2,4,5-Trichlorophenol	800	1300	U	1100	U	1100	UJ	960	UJ	5000	UJ	970	UJ
2-Chloronaphthalene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2-Nitroaniline	800	1300	U	1100	U	1100	UJ	960	UJ	5000	UJ	970	UJ
Dimethylphthalate	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Acenaphthylene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
2,6-Dinitrotoluene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ

Site: SOIL BORINGS
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	BS-021	BS-204	SB-020	SB-022	SB-917	SB-918
ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
LAB NUMBER:	750523 #	750519 #	750392 #	750378 #	750379 #	750377 #
DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95	08/21/95
DATE EXTRACTED:	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95	08/30/95
DATE ANALYZED:	09/01/95	09/05/95	09/01/95	09/01/95	09/06/95	09/06/95

ANALYTE	SOW-3/90 - II CRQL												
3-Nitroaniline	800	1300	U	1100	U	1100	UJ	960	UJ	5000	UJ	970	UJ
Acenaphthene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	440	J
2,4-Dinitrophenol	800	1300	U	1100	U	1100	UJ	960	UJ	5000	UJ	970	UJ
4-Nitrophenol	800	1300	U	1100	U	1100	UJ	960	UJ	5000	UJ	970	UJ
Dibenzofuran	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	170	J
2,4-Dinitrotoluene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Diethylphthalate	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
4-Chlorophenyl-phenylether	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Fluorene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	360	J
4-Nitroaniline	800	1300	U	1100	U	1100	UJ	960	UJ	5000	UJ	970	UJ
4,6-Dinitro-2-methylphenol	800	1300	U	1100	U	1100	UJ	960	UJ	5000	UJ	970	UJ
N-Nitrosodiphenylamine	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
4-Bromophenyl-phenylether	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Hexachlorobenzene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Pentachlorophenol	800	1300	U	1100	U	1100	UJ	960	UJ	5000	UJ	970	UJ
Phenanthrene	330	140	J	130	J	440	UJ	400	UJ	2000	UJ	1400	J
Anthracene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	310	J
Carbazole	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	170	J
Di-n-butylphthalate	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Fluoranthene	330	150	J	270	J	440	UJ	400	UJ	2000	UJ	1900	J
Pyrene	330	150	J	230	J	440	UJ	400	UJ	310	J	1400	J
Butylbenzylphthalate	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
3,3'-Dichlorobenzidine	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Benzo(a)Anthracene	330	95	J	120	J	440	UJ	400	UJ	2000	UJ	960	J
Chrysene	330	91	J	160	J	440	UJ	400	UJ	2000	UJ	670	J
bis(2-Ethylhexyl)phthalate	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Di-n-octylphthalate	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Benzo(b)Fluoranthene	330	120	JN	270	JN	440	UJ	400	UJ	2000	UJ	1600	JN
Benzo(k)Fluoranthene	330		JN		JN	440	UJ	400	UJ	2000	UJ	1500	JN
Benzo(a)Pyrene	330	76	J	120	J	440	UJ	400	UJ	2000	UJ	680	J
Indeno(1,2,3-c,d)Pyrene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	230	J
Dibenz(a,h)Anthracene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	400	UJ
Benzo(g,h,i)perylene	330	530	U	440	U	440	UJ	400	UJ	2000	UJ	190	J

Dilution Factor:	1.00	1.00	1.00	1.00	5.00	1.00
Percent Solids:	62	75	75	83	80	82
Sample Volume\Weight (ml\g):	30.1	30.2	30.1	30.2	30.2	30.1
Associated Method Blank:	GH051169A21.D	GJ051169B02.D	GH051169A21.D	GH051169A21.D	GJ051169B02.D	GJ051169B02.D
Associated Equipment Blank:	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX
Associated Field Blank:	09QDXX2XXXX1XX	09QDXX2XXXX1XX	09QDXX2XXXX1XX	09QDXX2XXXX1XX	09QDXX2XXXX1XX	09QDXX2XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION: BS-204
ISIS ID: 09BS204XX8X1XX
LAB NUMBER: 750519 #
DATE SAMPLED: 08/24/95
DATE EXTRACTED: 08/30/95
DATE ANALYZED: 09/06/95

ANALYTE	SOW-3/90 - II CRQL		
alpha-BHC	1.7	2.3	U
beta-BHC	1.7	2.3	U
delta-BHC	1.7	2.3	U
gamma-BHC (Lindane)	1.7	2.3	U
Heptachlor	1.7	2.3	U
Aldrin	1.7	2.3	U
Heptachlor Epoxide	1.7	2.3	U
Endosulfan I	1.7	2.3	U
Dieldrin	3.3	4.4	U
4,4'-DDE	3.3	12	
Endrin	3.3	4.4	U
Endosulfan II	3.3	4.4	U
4,4'-DDD	3.3	4.4	U
Endrin Aldehyde	3.3	4.4	U
Endosulfan Sulfate	3.3	4.4	U
4,4'-DDT	3.3	7.6	
Methoxychlor	17	0.49	JP
Endrin Ketone	3.3	4.4	U
alpha-Chlordane	1.7	2.3	U
gamma-Chlordane	1.7	0.091	JP
Toxaphene	170	230	U
Aroclor-1016	33	44	U
Aroclor-1221	67	89	U
Aroclor-1232	33	44	U
Aroclor-1242	33	44	U
Aroclor-1248	33	44	U
Aroclor-1254	33	44	U
Aroclor-1260	33	44	U

Dilution Factor: 1.00
Percent Solids: 75
Sample Volume\Weight (ml\g): 30.0

Associated Method Blank: 751376
Associated Equipment Blank: 09QSXX1XXXX1XX
Associated Field Blank: 09QDXX2XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	BS-204
ISIS ID:	09BS204XX8X1XX
LAB NUMBER:	750519 #
DATE SAMPLED:	08/24/95
DATE EXTRACTED:	08/30/95
DATE ANALYZED:	09/06/95

ANALYTE	SOW-3/90 - II CRQL		
alpha-BHC	1.7	2.3	U
beta-BHC	1.7	2.3	U
delta-BHC	1.7	2.3	U
gamma-BHC (Lindane)	1.7	2.3	U
Heptachlor	1.7	2.3	U
Aldrin	1.7	2.3	U
Heptachlor Epoxide	1.7	2.3	U
Endosulfan I	1.7	2.3	U
Dieldrin	3.3	4.4	U
4,4'-DDE	3.3	12	
Endrin	3.3	4.4	U
Endosulfan II	3.3	4.4	U
4,4'-DDD	3.3	4.4	U
Endrin Aldehyde	3.3	4.4	U
Endosulfan Sulfate	3.3	4.4	U
4,4'-DDT	3.3	7.6	
Methoxychlor	17	0.49	J
Endrin Ketone	3.3	4.4	U
alpha-Chlordane	1.7	2.3	U
gamma-Chlordane	1.7	0.091	J
Toxaphene	170	230	U
Aroclor-1016	33	44	U
Aroclor-1221	67	89	U
Aroclor-1232	33	44	U
Aroclor-1242	33	44	U
Aroclor-1248	33	44	U
Aroclor-1254	33	44	U
Aroclor-1260	33	44	U

Dilution Factor:	1.00
Percent Solids:	75
Sample Volume\Weight (ml\g):	30.0
Associated Method Blank:	751376
Associated Equipment Blank:	09QSXX1XXXX1XX
Associated Field Blank:	09QDXX2XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION: SB-917
ISIS ID: 09SB917X10X1XX
LAB NUMBER: 750379 #
DATE SAMPLED: 08/21/95
DATE ANALYZED: 08/30/95

ANALYTE	SOW-3/90 - II CRQL		
Chloromethane	1200	2700	U
Bromomethane	1200	2700	U
Vinyl Chloride	1200	2700	U
Chloroethane	1200	2700	U
Methylene Chloride	1200	300	JB
Acetone	1200	2700	U
Carbon Disulfide	1200	2700	U
1,1-Dichloroethene	1200	2700	U
1,1-Dichloroethane	1200	2700	U
1,2-Dichloroethene (total)	1200	2700	U
Chloroform	1200	2700	U
1,2-Dichloroethane	1200	2700	U
2-Butanone	1200	2700	U
1,1,1-Trichloroethane	1200	2700	U
Carbon Tetrachloride	1200	2700	U
Bromodichloromethane	1200	2700	U
1,2-Dichloropropane	1200	2700	U
cis-1,3-Dichloropropene	1200	2700	U
Trichloroethene	1200	2700	U
Dibromochloromethane	1200	2700	U
1,1,2-Trichloroethane	1200	2700	U
Benzene	1200	2700	U
trans-1,3-Dichloropropene	1200	2700	U
Bromoform	1200	2700	U
4-Methyl-2-Pentanone	1200	2700	U
2-Hexanone	1200	2700	U
Tetrachloroethene	1200	2700	U
1,1,2,2-Tetrachloroethane	1200	2700	U
Toluene	1200	2700	U
Chlorobenzene	1200	2700	U
Ethylbenzene	1200	2700	U
Styrene	1200	2700	U
Total Xylenes	1200	2700	U

Dilution Factor: 1.00
Percent Solids: 80
Sample Volume\Weight (ml\g): 4.00

Associated Method Blank: CR051117B55.D
Associated Equipment Blank: 09QSXX1XXXX1XX
Associated Field Blank: 09QDXX2XXXX1XX
Associated Trip Blank: 09QTXX1XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION: SB-917
ISIS ID: 09SB917X10X1XX
LAB NUMBER: 750379 #
DATE SAMPLED: 08/21/95
DATE ANALYZED: 08/30/95

ANALYTE	SOW-3/90 - II CRQL		
Chloromethane	1200	2700	U
Bromomethane	1200	2700	U
Vinyl Chloride	1200	2700	U
Chloroethane	1200	2700	U
Methylene Chloride	1200	2700	U
Acetone	1200	2700	U
Carbon Disulfide	1200	2700	U
1,1-Dichloroethene	1200	2700	U
1,1-Dichloroethane	1200	2700	U
1,2-Dichloroethene (total)	1200	2700	U
Chloroform	1200	2700	U
1,2-Dichloroethane	1200	2700	U
2-Butanone	1200	2700	U
1,1,1-Trichloroethane	1200	2700	U
Carbon Tetrachloride	1200	2700	U
Bromodichloromethane	1200	2700	U
1,2-Dichloropropane	1200	2700	U
cis-1,3-Dichloropropene	1200	2700	U
Trichloroethene	1200	2700	U
Dibromochloromethane	1200	2700	U
1,1,2-Trichloroethane	1200	2700	U
Benzene	1200	2700	U
trans-1,3-Dichloropropene	1200	2700	U
Bromoform	1200	2700	U
4-Methyl-2-Pentanone	1200	2700	U
2-Hexanone	1200	2700	U
Tetrachloroethene	1200	2700	U
1,1,2,2-Tetrachloroethane	1200	2700	U
Toluene	1200	2700	U
Chlorobenzene	1200	2700	U
Ethylbenzene	1200	2700	U
Styrene	1200	2700	U
Total Xylenes	1200	2700	U

Dilution Factor: 1.00
Percent Solids: 80
Sample Volume\Weight (ml\g): 4.00

Associated Method Blank: CR051117B55.D
Associated Equipment Blank: 09QSXX1XXXX1XX
Associated Field Blank: 09QDXX2XXXX1XX
Associated Trip Blank: 09QTXX1XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	BS-021	BS-204	SB-020	SB-022	SB-918
ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB918X18X1XX
LAB NUMBER:	750523 #	750519 #	750392 #	750378 #	750377 #
DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95
DATE ANALYZED:	08/26/95	08/26/95	08/26/95	08/26/95	08/26/95

ANALYTE	SOW-3/90 - II CRQL									
Chloromethane	10	16	U	13	U	13	U	12	U	12	U
Bromomethane	10	16	U	13	U	13	U	12	U	12	U
Vinyl Chloride	10	16	U	13	U	13	U	12	U	12	U
Chloroethane	10	16	U	13	U	13	U	12	U	12	U
Methylene Chloride	10	37	B	20	B	22	B	24	B	47	B
Acetone	10	40	B	31	B	35	B	71	B	77	B
Carbon Disulfide	10	16	U	13	U	13	U	12	U	12	U
1,1-Dichloroethene	10	16	U	13	U	13	U	12	U	12	U
1,1-Dichloroethane	10	16	U	13	U	13	U	12	U	12	U
1,2-Dichloroethene (total)	10	16	U	13	U	13	U	12	U	12	U
Chloroform	10	16	U	13	U	13	U	12	U	12	U
1,2-Dichloroethane	10	16	U	13	U	13	U	12	U	12	U
2-Butanone	10	16	U	13	U	13	U	12	U	10	J
1,1,1-Trichloroethane	10	16	U	13	U	13	U	12	U	12	U
Carbon Tetrachloride	10	16	U	13	U	13	U	12	U	12	U
Bromodichloromethane	10	16	U	13	U	13	U	12	U	12	U
1,2-Dichloropropane	10	16	U	13	U	13	U	12	U	12	U
cis-1,3-Dichloropropene	10	16	U	13	U	13	U	12	U	12	U
Trichloroethene	10	16	U	13	U	13	U	12	U	12	U
Dibromochloromethane	10	16	U	13	U	13	U	12	U	12	U
1,1,2-Trichloroethane	10	16	U	13	U	13	U	12	U	12	U
Benzene	10	16	U	13	U	13	U	12	U	12	U
trans-1,3-Dichloropropene	10	16	U	13	U	13	U	12	U	12	U
Bromoform	10	16	U	13	U	13	U	12	U	12	U
4-Methyl-2-Pentanone	10	16	U	13	U	13	U	12	U	12	U
2-Hexanone	10	16	U	13	U	13	U	12	U	12	U
Tetrachloroethene	10	16	U	13	U	13	U	12	U	12	U
1,1,2,2-Tetrachloroethane	10	16	U	13	U	13	U	12	U	12	U
Toluene	10	16	U	13	U	13	U	12	U	12	U
Chlorobenzene	10	16	U	13	U	13	U	12	U	12	U
Ethylbenzene	10	16	U	13	U	13	U	12	U	12	U
Styrene	10	16	U	13	U	13	U	12	U	12	U
Total Xylenes	10	16	U	13	U	13	U	12	U	12	U

Dilution Factor:	1.00	1.00	1.00	1.00	1.00
Percent Solids:	62	75	75	83	82
Sample Volume\Weight (ml\g):	5.00	5.00	5.00	5.00	5.00
Associated Method Blank:	GH050908A51.D	GH050908A51.D	GH050908A51.D	GH050908A51.D	GH050908A51.D
Associated Equipment Blank:	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX	09QSXX1XXXX1XX
Associated Field Blank:	09QDXX2XXXX1XX	09QDXX2XXXX1XX	09QDXX2XXXX1XX	09QDXX2XXXX1XX	09QDXX2XXXX1XX
Associated Trip Blank:	09QTXX2XXXX1XX	09QTXX2XXXX1XX	09QTXX1XXXX1XX	09QTXX1XXXX1XX	09QTXX1XXXX1XX

Site: SOIL BORINGS
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	BS-021	BS-204	SB-020	SB-022	SB-918
ISIS ID:	09BS021X20X1XX	09BS204XX8X1XX	09SB020X12X1XX	09SB022X10X1XX	09SB918X18X1XX
LAB NUMBER:	750523 #	750519 #	750392 #	750378 #	750377 #
DATE SAMPLED:	08/23/95	08/24/95	08/22/95	08/22/95	08/21/95
DATE ANALYZED:	08/26/95	08/26/95	08/26/95	08/26/95	08/26/95

ANALYTE	SOW-3/90 - II CRQL									
Chloromethane	10	16	U	13	U	13	U	12	U	12	U
Bromomethane	10	16	U	13	U	13	U	12	U	12	U
Vinyl Chloride	10	16	U	13	U	13	U	12	U	12	U
Chloroethane	10	16	U	13	U	13	U	12	U	12	U
Methylene Chloride	10	37	U	20	U	22	U	24	U	47	U
Acetone	10	40	UJ	31	UJ	35	UJ	71	UJ	77	UJ
Carbon Disulfide	10	16	U	13	U	13	U	12	U	12	U
1,1-Dichloroethene	10	16	U	13	U	13	U	12	U	12	U
1,1-Dichloroethane	10	16	U	13	U	13	U	12	U	12	U
1,2-Dichloroethene (total)	10	16	U	13	U	13	U	12	U	12	U
Chloroform	10	16	U	13	U	13	U	12	U	12	U
1,2-Dichloroethane	10	16	U	13	U	13	U	12	U	12	U
2-Butanone	10	16	U	13	U	13	U	12	U	10	J
1,1,1-Trichloroethane	10	16	U	13	U	13	U	12	U	12	U
Carbon Tetrachloride	10	16	U	13	U	13	U	12	U	12	U
Bromodichloromethane	10	16	U	13	U	13	U	12	U	12	U
1,2-Dichloropropane	10	16	U	13	U	13	U	12	U	12	U
cis-1,3-Dichloropropene	10	16	U	13	U	13	U	12	U	12	U
Trichloroethene	10	16	U	13	U	13	U	12	U	12	U
Dibromochloromethane	10	16	U	13	U	13	U	12	U	12	U
1,1,2-Trichloroethane	10	16	U	13	U	13	U	12	U	12	U
Benzene	10	16	U	13	U	13	U	12	U	12	U
trans-1,3-Dichloropropene	10	16	U	13	U	13	U	12	U	12	U
Bromoform	10	16	U	13	U	13	U	12	U	12	U
4-Methyl-2-Pentanone	10	16	U	13	U	13	U	12	U	12	U
2-Hexanone	10	16	U	13	U	13	U	12	U	12	U
Tetrachloroethene	10	16	U	13	U	13	U	12	U	12	U
1,1,2,2-Tetrachloroethane	10	16	U	13	U	13	U	12	U	12	U
Toluene	10	16	U	13	U	13	U	12	U	12	U
Chlorobenzene	10	16	U	13	U	13	U	12	U	12	U
Ethylbenzene	10	16	U	13	U	13	U	12	U	12	U
Styrene	10	16	U	13	U	13	U	12	U	12	U
Total Xylenes	10	16	U	13	U	13	U	12	U	12	U
Dilution Factor:		1.00		1.00		1.00		1.00		1.00	
Percent Solids:		62		75		75		83		82	
Sample Volume\Weight (ml\g):		5.00		5.00		5.00		5.00		5.00	
Associated Method Blank:		GH050908A51.D		GH050908A51.D		GH050908A51.D		GH050908A51.D		GH050908A51.D	
Associated Equipment Blank:		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX		09QSXX1XXXX1XX	
Associated Field Blank:		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX		09QDXX2XXXX1XX	
Associated Trip Blank:		09QTXX2XXXX1XX		09QTXX2XXXX1XX		09QTXX1XXXX1XX		09QTXX1XXXX1XX		09QTXX1XXXX1XX	

Site: SOIL BORINGS
#: Level IV Validation

GROUNDWATER ANALYTICAL DATA

ABB Environmental Services, Inc.
Data Validation Report

Brunswick NAS | **Project #: 8733-02**
Project Manager: Jeff Brandow | **Report date: November 13, 1995**

INTRODUCTION

Review is complete for the data packages generated by Compuchem concerning the water samples collected from September 18, 1995 through September 25, 1995 during the field sampling program. A Level IV review was performed following *USEPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses* and *USEPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses.* Validation of ME DEP TPH Gasoline in Water, ME DEP TPH Fuel Oil in Water, and Vinyl Chlorides was performed using ABB-ES designed procedures based on national and regional validation guidelines as well as professional judgment.. Samples were analyzed for low concentration VOCs employing USEPA method 10/92, SVOCs, pesticides/PCBs according to USEPA SOW OLM01.9, TAL inorganics employing USEPA CLP SOW ILM03.0, MEDEP TPH in Fuel Oil employing method 4.1.1, MEDEP TPH in Gasoline employing method 4.2.1, and Vinyl Chlorides by GC/MS using the SIM method.

Table 1: Laboratory Report of Analysis
Table 2: Validation / Summary

Table 1 presents the analytical results as reported by the laboratory. Table 2 presents the validated results with the appropriate data qualifiers. The laboratory qualifiers used on Table 1 are defined in Attachment I; data validation qualifiers used on Table 2 are defined in Attachment II.

Several samples were reanalyzed. Both the original result and reanalysis result appear on Table 1; only the analysis that required less rigorous qualification was reported on Table 2.

More than one set of criteria may not have been met for the analyses performed for the water samples in this project. If the data were not affected because criteria were not met, the criteria not met are not addressed in this memo. Sample results that were affected by criteria that were not met are addressed in the following subsections including the appropriate assigned qualifier flag.

In cases where several criteria were not met for a sample requiring different qualification, the qualifier reported on Table 2 was based on the worst case scenario. In cases where several criteria were not met for a sample and the same qualifier flag was required, the qualifier flag was reported on the Table 2 only once. The following subsections summarize the qualifications/edits that have been detected by validation.

I. VOLATILE COMPOUNDS

Notations:

Compound results below the contract required quantitation limit (CRQL) were qualified with a J by the laboratory on Table 1. These results were considered estimated by validation; therefore, the J qualifier remained on Table 2 if the result was not negated by blank contamination and qualified as nondetected (U).

Qualifications/Edits:

1. Holding Times Holding times are evaluated to address the validity of the results based on the elapsed time from sample collection to analysis. All holding times were met.

2. System Monitoring Compound (SMC) or Surrogate Recovery
System monitoring compounds are added to all samples and blanks prior to analysis to assess recovery (accuracy). Action is taken if any system monitoring compound recovery is outside the acceptance range. SMC recoveries were met for all samples.

3. Matrix Spike/Matrix Spike Duplicate MS/MSD analyses are performed to assess method precision and accuracy. All criteria were met.

4. Blank Contamination Laboratory (method) and field (trip/equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times (10 times for common contaminants) the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination and are qualified as nondetected (U); results greater than this level are considered to be acceptable.

   See the attached Table A for a list of the compounds and samples that were qualified as nondetected.

6. Gas Chromatography/Mass Spectrometry (GC/MS) Instrument Performance Check
GC/MS instrument performance checks are performed to ensure mass resolution, identification, and sensitivity. If the ion abundance criteria are not met, action is taken. The ion abundance criteria were met for all samples.

7. Target Compound (TCL) Identification and Quantitation
The objectives of the criteria for GC/MS qualitative analysis is to minimize the number of erroneous identifications of the compounds. The relative retention times (RRTs) must be within ± 0.06. The mass spectra of the sample compound and a current laboratory-generated standard must match. Laboratory calculations (two positive results for each sample) are checked to verify that reported concentrations and sample quantitation limits

(SQLs) are accurate. The RRT criterion was met, mass spectra were acceptable, and all transcriptions and calculations checked were acceptable.

8. Initial Calibration Initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear calibration curve. The relative response factor (RRF) for all volatile target compounds must be greater than or equal to 0.05. The percent relative standard deviation (%RSD) must be less than or equal to 30.0% for all target compounds.

   See the attached Table B for a list of the compounds and samples that were qualified, and the qualifiers added.

9. Continuing Calibration Continuing calibration checks are performed every 12 hours to demonstrate that the instrument can produce acceptable qualitative and quantitative results as established by the initial calibration.

   See the attached Table C for a list of the compounds and samples that were qualified, and the qualifiers added.

10. Internal Standards Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during each analysis. For low concentration volatiles, the internal standard area counts for the samples must not vary by more than ± 40% from the associated calibration standard and the retention time of the internal standards must not vary by more than ± 20 seconds from the retention time of the associated 12 hour calibration standard.

    The retention time criterion was not met for sample 09MW007XXX08XXRE for the internal standard 1,4-difluorobenzene; therefore, all compounds for this sample associated with this internal standard were qualified as estimated (J).

11. Field Duplicates Field duplicate samples are collected and analyzed to assess sampling and analytical precision. All criteria were met.

12. Laboratory Control Sample (LCS) The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS criteria were met.

II. SEMIVOLATILE COMPOUNDS

Notations:

Compound results below the CRQL were qualified with a J by the laboratory on Table 1. These results were considered estimated by validation; therefore, the J qualifier remained on Table 2 if the result was not negated by blank contamination and qualified as nondetected (U).

Qualifications/Edits:

1. Holding Times Holding times are evaluated to address the validity of the results based on the elapsed time from sample collection to extraction and from extraction to analysis. All holding times were met.

2. System Monitoring Compound (SMC) Recovery (Surrogate Recovery)
SMCs are added to all samples and blanks prior to analysis to assess recovery (accuracy). All criteria were met for all samples.

3. Matrix Spike/Matrix Spike Duplicate MS/MSD analyses are performed to assess method precision and accuracy. All criteria were met for all samples.

4. Blank Contamination Laboratory (method) and field (trip/equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times (10 times for common contaminants) the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination and are qualified as nondetected (U); results greater than this level are considered to be acceptable.

   Due to contamination in the blanks, data were qualified. See the following table for a list of the qualified compounds, samples affected, and qualifiers used:

SAMPLE	COMPOUNDS	QUALIFIER
09MW003XXX08XX	Bis(2-ethylhexyl)phthalate	U
09MW006XXX08XX	Bis(2-ethylhexyl)phthalate	U
09MW009XXX08XX	Bis(2-ethylhexyl)phthalate	U
09MW010XXX08XX	Bis(2-ethylhexyl)phthalate	U
09MW021XXX08XX	Pentachlorophenol	U

5. Gas Chromatography/Mass Spectrometry (GC/MS) Instrument Performance Check
GC/MS instrument performance checks are performed to ensure mass resolution, identification, and sensitivity. If the ion abundance criteria are not met, action is taken. All criteria were met.

6. Target Compound Identification and Quantitation
The objectives of the criteria for GC/MS qualitative analysis is to minimize the number of erroneous identifications of the compounds. The RRTs must be within ± 0.06. The mass spectra of the sample compound and a current laboratory-generated standard must match. Laboratory calculations (two positive results for each sample) were checked to verify that reported concentrations and sample required quantitation limits (SQLs) were accurate. The RRT criterion was met, mass spectra were acceptable, and all transcriptions and calculations checked were acceptable.

7. Initial Calibration Initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear calibration curve. All criteria were met for all samples.

8. Continuing Calibration Continuing calibration checks are performed every 12 hours to demonstrate that the instrument can produce acceptable qualitative and quantitative results as established by the initial calibration. All criteria were met.

9. Internal Standards Internal standard performance criteria ensures that GC/MS sensitivity and response are stable during each analysis. All criteria were met.

10. Field Duplicates Field duplicate samples are collected and analyzed to assess sampling and analytical precision. The following table lists qualified compounds, samples affected, qualifiers used, and criteria not met.

SAMPLE	CRITERION NOT MET	COMPOUND	QUALIFIER
09MW021XXX08XD	RPD	Bis(2-ethylhexyl)phthalate	J
09MW021XXX08XX	RPD	Pentachlorophenol	J

The RPD action requires that if one value is nondetect and one is positive for the duplicate pair, the positive result should be qualified as estimated (J); the nondetected value is not qualified. This is the reason both compounds are not qualified for both samples.

III. PESTICIDE/PCB COMPOUNDS

Qualifications/Edits

1. Holding Times Holding times are evaluated to address the validity of the results based on the elapsed time from sample collection to extraction and from extraction to analysis. All holding times were met for all samples.

2 System Monitoring Compound Recovery or Surrogate Recovery
SMCs are added to all samples and blanks prior to analysis to assess recovery (accuracy). All criteria were met for all samples.

3. Matrix Spike/Matrix Spike Duplicate Matrix spike/matrix spike duplicate analyses are performed at a frequency of 5% to assess method precision and accuracy. Three criteria are used to evaluate MS/MSD analyses. The spiked compounds are evaluated for %R and RPD. The unspiked compounds in the sample, its matrix spike sample, and its matrix spike duplicate sample are evaluated for %RSD. If the %RSD criterion is not met, both positive results and nondetected results are qualified as estimated (J).

The %RSD criterion was not met for endrin ketone for sample 09MW204XXX08XX and its field duplicate; therefore, this compound was qualified as estimated (J) in both samples.

4. Blank Contamination Laboratory (method) and field (trip/equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination; results greater than this level are considered to be acceptable. No action was required due to blank contamination.

6. Initial Calibration Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical sequence and of producing a linear calibration curve. All criteria were met.

7. Calibration Verification Calibration verification checks and documents satisfactory performance of the instrument over specific time periods during sample analysis. All criteria were met for all samples.

8. Analytical Sequence The proper analytical sequence must be followed for each initial calibration and subsequent analyses. The proper analytical sequence was followed for all samples associated with this project.

9. Cleanup Efficiency Florisil cleanup is required for all Pesticide/PCB extracts and percent recoveries must fall within 80-120% . Florisil cleanup recoveries were within criteria.

10. Pesticide/PCB Identification Retention times are checked to ensure that they fall within the established windows for both columns, GC/MS confirmation is checked, and positive sample results on the two GC columns are checked to ensure that they are < 25%. All retention times were within the established windows.

11. Pesticide Quantitation There were no positive hits for any of the samples; therefore, quantitation of positive results was not performed.

12. Field Duplicates Field duplicate samples are collected and analyzed to assess sampling and analytical precision. The field duplicate criterion was met.

IV. TOTAL INORGANIC ANALYTES

Notations:

The B qualifier is used by the laboratory and reported on Table 1 to indicate that the results reported are between the instrument detection limit (IDL) and the contract required detection limit (CRDL). All results between the IDL and CRDL are considered estimated; therefore, all B qualifiers are changed to a J on Table 2. A list or table has not been generated to indicate the

analytes and samples affected. After reviewing the following qualifications/edits below, the Table 1 can be used to determine which results and samples were affected. All B qualifiers should have been changed to a J on Table 2 unless they were qualified due to other criteria not met.

Qualifications/Edits:

1. Holding Times Hold times are evaluated to address the validity of the results based on the elapsed time from sample collection to analysis. All holding times were met.

2. Initial Calibration The initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. All criteria were met for all samples.

3. Blanks Laboratory (method and continuing calibration) and field (equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination and are qualified with a "U"; results greater than this level are considered to be acceptable. When the concentration in the sample is greater than the IDL but less than 2X IDL, less than the CRDL, and less than the action level, the data are qualified as nondetected and estimated (UJ). When the method blank has a negative result with an absolute value between 2X IDL and the CRDL, positive results are qualified as estimated (J).

   Due to contamination in the blanks, data were qualified. See Table D for a list of the qualified analytes, samples affected, and qualifiers used.

4. Initial/Continuing Calibration Verification (ICV/CCV) and CRDL Standards Calibration verification establishes that the initial calibration is still valid by checking the performance of the instrument on a continual basis. The ICV and CCV criteria were met for all samples.

   The CRDL standard %R criterion was not met. If the %R criterion is not met for the CRDL standards, positive results less than three times the CRDL and nondetected results are qualified as estimated (J). The CRDL standards were outside the %R criterion for the compounds and samples listed on the attached Table E.

5. Interference Check Sample (ICS) The interference check sample verifies the contract laboratory's interelement and background correction factors. The ICS criteria were met for all samples.

6. Spiked Sample Recovery The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The spike %R must be within the established acceptance limits. The %R criteria were met.

7. Laboratory Duplicate Duplicate sample determinations are used to demonstrate acceptable method precision by the laboratory at the time of analysis. Duplicate analyses are also performed to generate data in order to determine the long-term precision of the analytical method on various matrices. All criteria were met.

8. Field Duplicates Field duplicate samples are collected and analyzed to assess sampling and analytical precision. Two field duplicate criteria must be met:

   a. The difference between the sample and its field duplicate must be < 2 times the CRDL for sample or duplicate results < 5 times the CRDL.

   b. The relative percent difference between the sample and its field duplicate must be ≤ 30% for sample and duplicate results ≥ 5 times the CRDL.

   If field duplicate criteria are not met, all samples in a batch within the same matrix are qualified.

   The criteria was not met for the analytes and samples listed on the attached Table F and were qualified as noted.

9. Laboratory Control Sample The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS criteria were met.

10. Serial Dilution The serial dilution of samples quantitated by inductively coupled plasma (ICP) determines whether or not significant physical or chemical interferences exist due to sample matrix. If the analyte concentration is sufficiently high (concentration in the original sample is a factor of 50 above the IDL), the serial dilution analysis (a 5-fold dilution) must then agree within a 15% difference of the original determination after correction for dilution.

    This criterion was not met for barium and sodium analytes; therefore, barium and sodium were qualified as estimated (J) for all samples.

11. Furnace Atomic Absorption (AA) QC Analysis Duplicate injections are used to establish the precision and accuracy of the individual analytical determinations. All criteria were met.

V. VINYL CHLORIDE

The following vinyl chloride data requirements were checked during validation:

*Holding Times
Internal Standards
*Laboratory Control Sample
*Method Blank
*Field Duplicates
*Initial Calibration
*Continuing Calibration
*MS/MSD
*Field Blanks

The Level IV review included checking all of the above requirements and reviewing the calculations, transcriptions, and chromatograms associated. All criteria were met except as noted under qualifications/edits.

Qualifications/Edits:

1. Matrix spike/Matrix spike duplicate MS/MSD analyses are performed at a frequency of 5% to assess method precision and accuracy.

   The %R criterion was not met; therefore, sample 09MW204XXX08XX and its field duplicate were qualified as estimated (J).

VI. ME DEP TPH - Gasoline in Water

The following ME DEP TPH (Gasoline in Water) QC requirements were checked during validation of data generated for ME DEP TPH (Gasoline in Water) analysis:

*Holding Times
*Practical Quantitation Limit
*Laboratory Control Sample
*Method Blank
*Field Duplicates
*Initial Calibration
*Continuing Calibration
*MS/MSD
*Field Blanks

The Level IV review included checking all of the above requirements and reviewing the calculations, transcriptions, and chromatograms associated. All of the above criteria were met except as noted under qualifications/edits.

Qualifications/Edits:

1. Blank Contamination Laboratory (initial) and field (equipment/source) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank. Method blanks were not analyzed as the samples were not extracted. The laboratory analyzed instrument blanks instead. Sample results below this action

level are considered attributable to blank contamination and are qualified with a "U"; results greater than this level are not qualified.

Due to instrument contamination, the result for sample 09MW907XXX08XX was qualified as nondetected (U).

Also, sample 09MW007XXX08XX was qualified as estimated (J) due to possible bias based on instrument blank contamination. The chromatogram associated with the instrument blank and the standard chromatogram showed similar peaks which were not characteristic of gasoline.

VII. ME DEP TPH - Fuel Oil in Water

The following ME DEP TPH (Fuel Oil in Water) QC requirements were checked during validation of data generated for ME DEP TPH (Fuel Oil in Water) analysis:

*Holding Times
Practical Quantitation Limit
*Laboratory Control Sample
*Method Blank
*Field Duplicates
*Initial Calibration
*Continuing Calibration
*MS/MSD
*Field Blanks

The Level IV review included checking all of the above requirements, review of the calculations, transcriptions, and associated chromatograms. All of the criteria were met and the review of the data was acceptable.

Signature: Joanne E. Fornaro Date: Nov. 13, 1995

TABLE A
V latile Blanks

SAMPLE	COMPOUNDS			
	Methylene chloride	Acetone	Toluene	Total Xylenes
09MW004XXX08XX			U	
09MW204XXX08XD		U		
09MW204XXX08XX		U		
09MW901XXX08XX	U			
09MW902XXX08XX		U		
09MW903XXX08XX	U	U		
09MW904XXX08XX	U			
09MW905XXX08XX	U	U		
09MW907XXX08XX	U	U		
09MW908XXX08XX	U			
09MW916XXX08XX	U	U		
09MW022XXX08XX	U			
09MW002XXX08XD	U			
09MW002XXX08XX	U			
09MW003XXX08XX	U			
09MW005XXX08XX	U			
09MW006XXX08XX			U	U
09MW007XXX08XX R	U	U		U
09MW008XXX08XX	U			
09MW009XXX08XX				U
09MW010XXX08XX				U
09MW020XXX08XX		U		

TABLE B
V latile Initial Calibrati n

SAMPLE	COMPOUNDS			
	Acetone	2-Butanone	2-Hexanone	Methylene chloride
09MW001XXX08XX	R	R		
09MW004XXX08XX	R	R		
09MW021XXX08XX	R	R	R	
09MW204XXX08XD	J	R		
09MW204XXX08XX	J	R		
09MW901XXX08XX	R	R		
09MW902XXX08XX	J	R		
09MW903XXX08XX	J	R		
09MW904XXX08XX	R	R		
09MW905XXX08XX	J	R		
09MW906XXX08XX	R	R	R	
09MW907XXX08XX	J	R		
09MW908XXX08XX	R	R		
09MW909XXX08XX	R	R	R	
09MW910XXX08XX	R	R	R	
09MW914XXX08XX	R	R	R	
09MW915XXX08XD	R	R	R	
09MW915XXX08XX	R	R	R	
09MW916XXX08XX	J	R		
09MW022XXX08XX	R	R		
09MW002XXX08XD	R	R	R	J
09MW002XXX08XX	R	R	R	J
09MW003XXX08XX	R	R	R	J
09MW005XXX08XX	R	R	R	J
09MW006XXX08XX	R	R	R	
09MW007XXX08XXR	J	R	R	
09MW008XXX08XX	R	R	R	J
09MW009XXX08XX	J	R	R	
09MW010XXX08XX	R	R	R	
09MW020XXX08XX	J	R	R	

TABLE C
Volatile Continuing Calibration

SAMPLE	COMPOUNDS					
	ACET	MEK	2-Hexanone	CH3Cl	C Disulfide	12DB3CP
09MW001XXX08XX	R	R			J	
09MW004XXX08XX	R	R			J	
09MW021XXX08XX	R	R	R	J		
09MW204XXX08XD	J	R			J	
09MW204XXX08XX	J	R			J	
09MW901XXX08XX	R	R	R		J	
09MW902XXX08XX	J	R	R		J	
09MW903XXX08XX	J	R			J	
09MW904XXX08XX	R	R			J	
09MW905XXX08XX	J	R			J	
09MW906XXX08XX	R	R	R	J		
09MW907XXX08XX	J	R			J	
09MW908XXX08XX	R	R	R		J	
09MW909XXX08XX	R	R	R	J		
09MW910XXX08XX	R	R	R	J		
09MW914XXX08XX	R	R	R	J		
09MW915XXX08XD	R	R	R	J		
09MW915XXX08XX	R	R	R	J		
09MW916XXX08XX	J	R	R		J	
09MW022XXX08XX	R	R			J	
09MW002XXX08XD	R	R				R
09MW002XXX08XX	R	R				R
09MW003XXX08XX	R	R				R
09MW005XXX08XX	R	R				R
09MW006XXX08XX	R	R			J	
09MW007XXX08XXR	J	R				
09MW008XXX08XX	R	R				R
09MW009XXX08XX	J	R			J	
09MW010XXX08XX	R	R			J	
09MW020XXX08XX	J	R			J	

ACET = Acetone
MEK = 2-Butanone
CH3Cl = Chloromethane
C Disulfide = Carbon Disulfide
12DB3CP = 1,2-Dibromo-3-chloropropane

TABLE D
Inorganic Blanks

SAMPLE	ANALYTE											
	Al	Be	Cu	Ba	Fe	K	Na	Zn	Co	Cr	V	Ca
09MW001XXX08XX	U		U					U	U			J
09MW004XXX08XX	U		U					U	U			J
09MW021XXX08XX			U	U								J
09MW022XXX08XX	U	U	U						U	U		J
09MW204XXX08XD	U	U	U					U	U	U		J
09MW204XXX08XX	U	U	U					U	U	U	U	J
09MW901XXX08XX	U	U	U	U				U			U	J
09MW902XXX08XX	U	U	U									J
09MW903XXX08XX	U	U	U	U					U			J
09MW904XXX08XX	U			U						U		J
09MW905XXX08XX		U	U	U				U	U	U		J
09MW906XXX08XX	U	U		U				U				J
09MW907XXX08XX	U	U	U					U	U	U		J
09MW908XXX08XX	U			U	U			U	U			J
09MW909XXX08XX	U	U		U		U	U	U				J
09MW910XXX08XX		U	U	U			U	U				J
09MW914XXX08XX		U	U				U	U				J
09MW915XXX08XD	U	U	U					U				J
09MW915XXX08XX		U	U					U				J
09MW916XXX08XX	U		U		U			U	U		U	J
09MW002XXX08XD	U	U	U	U				UJ			U	J
09MW002XXX08XX	U	U	U					UJ			U	J
09MW003XXX08XX	U	U	U					J				J
09MW005XXX08XX	U	U	U	U				J			U	J
09MW006XXX08XX		U	U					J				J
09MW007XXX08XX		U						J	U			J
09MW008XXX08XX	U		U	U				UJ			U	J
09MW009XXX08XX		U	U					UJ				J
09MW010XXX08XX		U						J				J
09MW020XXX08XX	U	U	U	U				UJ	U	U		J

TABLE E
Inorganic CRDL Standards

SAMPLE	ANALYTE		
	Pb	Se	Zn
09MW001XXX08XX	J	J	J
09MW004XXX08XX	J	J	J
09MW021XXX08XX	J	J	J
09MW022XXX08XX	J	J	J
09MW204XXX08XD	J	J	J
09MW204XXX08XX	J	J	J
09MW901XXX08XX	J	J	J
09MW902XXX08XX	J	J	J
09MW903XXX08XX	J	J	J
09MW904XXX08XX	J	J	J
09MW905XXX08XX	J	J	J
09MW906XXX08XX	J	J	J
09MW907XXX08XX	J	J	J
09MW908XXX08XX	J	J	J
09MW909XXX08XX	J	J	J
09MW910XXX08XX	J	J	J
09MW914XXX08XX	J	J	J
09MW915XXX08XD	J	J	J
09MW915XXX08XX	J	J	J
09MW916XXX08XX	J	J	J
09MW002XXX08XD	J		
09MW002XXX08XX	J		
09MW003XXX08XX	J		
09MW005XXX08XX	J		
09MW006XXX08XX	J		
09MW008XXX08XX	J		
09MW009XXX08XX	J		
09MW020XXX08XX	J		

TABLE F
Inorganic Field Duplicate

SAMPLE	ANALYTE	
	Fe	Al
09MW001XXX08XX		J
09MW004XXX08XX		J
09MW021XXX08XX		J
09MW022XXX08XX		J
09MW204XXX08XD		J
09MW204XXX08XX		J
09MW901XXX08XX		J
09MW902XXX08XX		J
09MW903XXX08XX		J
09MW904XXX08XX		J
09MW905XXX08XX		J
09MW906XXX08XX		J
09MW907XXX08XX		J
09MW908XXX08XX		J
09MW909XXX08XX		J
09MW910XXX08XX		J
09MW914XXX08XX		J
09MW915XXX08XD		J
09MW915XXX08XX		J
09MW916XXX08XX		J
09MW002XXX08XD	J	
09MW002XXX08XX	J	
09MW003XXX08XX	J	
09MW005XXX08XX	J	
09MW006XXX08XX	J	
09MW007XXX08XX	J	
09MW008XXX08XX	J	
09MW009XXX08XX	J	
09MW010XXX08XX	J	
09MW020XXX08XX	J	

Attachment I - Definition of Laboratory Qualifiers
(for Table 1 - Laboratory Report of Analysis)

Organic Data Qualifiers

J - Indicates an estimated concentration below the contract required detection level (CRQL) but greater than 0 or when estimating a concentration for TICs.

U - Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

B - Indicates analyte was detected in both the sample and the associated laboratory method blank for all analyses except inorganics. The B qualifier for inorganics data indicates that the result was between the IDL and the CRDL. The B qualifier is removed and replaced with a J qualifier on Table 2.

E - Indicates that the analyte concentration exceeded the calibration range of the GC/MS and that a re-analysis of a diluted sample is required.

D - Indicates that sample concentration was obtained by dilution to bring result within calibration range.

N - Indicates presumptive evidence of a compound. This flag is used for TICs were the identification is based on a library search and is applied to all TIC results. For general classes of compounds (hydrocarbons, etc.) this flag is not used.

P - This flag is used for pesticides/PCBs when there is greater than 25% difference between the concentrations on the two columns used for analysis. The lower value is reported.

C - This flag applies to pesticide/PCBs results when the identification has been confirmed by GC/MS.

A - Indicates that a TIC is a suspected aldol-condensation product.

X - Laboratory-defined qualifier used to provide additional information not covered by the other qualifiers.

Inorganic Data Qualifiers

E - The reported concentration is estimated because of the presence of an interference.

M - Duplicate injection precision criteria were not met.

N - Spiked sample recovery not within control limits.

S - The reported concentration was determined by the method of standard additions.

W - Post-digestion spike for furnace atomic absorption analysis is outside control limits.

B - Concentration reported is below CRDL but greater than the IDL.

* - Duplicate analysis not within control limits.

+ - Correlation coefficient for the method of standard additions was less than 0.995

U - Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

Attachment II - Definition of Validation Qualifiers
(for Table 2 - Validation/Summary Table)

J - Estimated concentration because QC criteria were not met.

R - Results were rejected because of serious QC deficiencies.

U - Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

N - Indicates presumptive evidence of a compound. This flag is used for TICs were the identification is based on a library search and is applied to all TIC results. For general classes of compounds (hydrocarbons, etc.) this flag is not used.

UJ - Quantitation limit was estimated concentration because QC criteria were not met.

JN - Presence of an analyte was tentatively identified and the associated result represents an estimated concentration.

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-01
AQUEOUS (ug/L)

VOLATILE

NO VOLATILE TICs WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

09QDXX1XXXX1XX	09QTXX1XXXX1XX
09QDXX2XXXX1XX	09QTXX2XXXX1XX
09QSXX1XXXX1XX	09QTXX3XXXX1XX

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-05
SOIL (ug/kg)

VOLATILE

	09SB917X10X1XX
Pentane, 2,3,4 - Trimethyl	23000 JN
Unknown	148000 J(6)
Decahydromethylnaphthalene	48000 J(2)
Unknown Hydrocarbon	19000 J

NO VOLATILE TICs WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

09BS021X20X1XX 09PS914XX6X1XX
09BS204XX8X1XX 09PS915XX6X1XX
09PS912XX6X1XX 09SB020X12X1XX
09PS913XX8X1XX 09SB022X10X1XX
09PS914XX6X1XD 09SB918X18X1XX

SEMIVOLATILE

	09BS021X20X1XX	09BS204XX8X1XX	09PS912XX6X1XX	09PS913XX8X1XX
Unknown	2200 J(4)	16000 J(17)	460 J(3)	2000 J(4)
Unknown Hydrocarbon	110 J	600 J(2)		
Unknown Alcohol	1200 J			
Benzofluoranthene	130 J			
Unknown Carboxylic acid		360 J		
Benzopyrene		340 J		
Tetrachloroethane				89 J

	09PS914XX6X1XD	09PS914XX6X1XX	09PS915XX6X1XX	09SB020X12X1XX
Unknown	1500 J(4)	250 J(2)	3000 J(8)	3600 J(9)
Tetrachloroethane & Unknown	190 J			
Unknown Alcohol		640 J		99 J
Unknown Carboxylic acid			170 J	
Unknown Hydrocarbon				1200 J(6)

	09SB022X10X1XX	09SB917X10X1XX	09SB918X18X1XX
Unknown	2200 J(4)	96000 J(9)	13000 J(12)
Unknown Alkene	510 J		
Substituted Naphthalene		3900	
Unknown Hydrocarbon		46000 J(9)	880 J(2)
Unknown Cycloalkane		4500 J	
Dibenzothiophene			220 JN
Unknown Carboxylic acid			300 J
Unknown PAH			200 J
7,12a-Dimethyl-1,2,3,4,4a,11,12,12a Octahydrochrysene			200 JN
Unknown ester			3000 J
Benzofluoranthene			740 J

b05s

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-05B
Aqueous (ug/L)

SEMIVOLATILE

	09QDXX1XXXX1XX	09QDXX2XXXX1XX	09QSXX1XXXX1XX
Unknown	7 J(2)	31 J(3)	35 J(3)

b05W

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-09
AQUEOUS (ug/L)

VOLATILE

	09MW004XXX08XX
Unknown	1100 J(2)
Butane, 2-Methyl-	730 JN
Benzene, Propyl-	380 JN
Ethylmethylbenzene	3200 J(2)
Trimethylbenzene	4500 J(3)
Substituted Benzene	970 J

NO VOLATILE TICs WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

09MW001XXX08XX	09MW902XXX08XX	09MW907XXX08XX	09MW915XXX08XD
09MW021XXX08XX	09MW903XXX08XX	09MW908XXX08XX	09MW915XXX08XX
09MW204XXX08XD	09MW904XXX08XX	09MW909XXX08XX	09MW916XXX08XX
09MW204XXX08XX	09MW905XXX08XX	09MW910XXX08XX	09MW022XXX08XX
09MW901XXX08XX	09MW906XXX08XX	09MW914XXX08XX	

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-10
AQUEOUS (ug/L)

VOLATILE

	09MW003XXX08XX	09MW009XXX08XX
Unknown	13 J	2 J
Pentane		
Pentane,3-Methyl-		
Benzene,1-Ethyl-2-Methyl-		
Benzene,1,3-Diethyl-		
Cyclopentane,Methyl-		
1,2,4-Trimethylbenzene		

NO VOLATILE TICs WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

09MW002XXX08XD	09MW007XXX08XX RE
09MW002XXX08XX	09MW008XXX08XX
09MW005XXX08XX	09MW010XXX08XX
09MW006XXX08XX	09MW020XXX08XX

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-16B
Aqueous (ug/L)

VOLATILE

	09QSXX4XXXX1XX
Isopropyl Alcohol	3 JN

No volatile TIC's were identified in the following samples:

09QDXX3XXXX1XX	09QTXX5XXXX1XX
09QDXX4XXXX1XX	09QTXX6XXXX1XX
09QSXX2XXXX1XX	09QTXX7XXXX1XX
09QSXX3XXXX1XX	09QTXX8XXXX1XX
09QTXX4XXXX1XX	09QTXX9XXXX1XX

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-22
Aqueous (ug/L)

SEMIVOLATILE

	09MW004XXX08XX	09MW004XXX08XX DL	09MW020XXX08XX	09MW204XXX08XD
Unknown	160 J(4)	420 J(3)	4 J	6 J
substituted benzene	930 J(9)	2300 J(8)		
trimethylbenzene	650 J(2)	1900 J		
ethyldimethylbenzene	60 J	450 J(3)		
methylmethylethylbenzene	42 J	77 J		
methylpropenylbenzene	140 J	100 J		
indane	200 JN	730 JN		
1H-indene,2,3-dihydro-4-methyl-	89 JN			
ethylmethylbenzene		1400 J		
methylnaphthalene		78 J		

No semivolatile TIC's were identified in the following samples:

09MW001XXX08XX
09MW007XXX08XX
09MW204XXX08XX

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-23
Aqueous (ug/L)

SEMIVOLATILE

	09MW002XXX08XX	09MW003XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW008XX08XX
unknown	3 J	23 J(5)	8 J(3)	6 J(2)	2 J

	09MW021XXX08XD	09MW021XXX08XX
unknown	30 J(3)	28 J(3)

No Semivolatile TIC's were identified in the following samples:

09MW009XXX08XX
09MW010XXX08XX
09MW022XXX08XX

b23W

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Brunswick NAS; FILE: 8733-24B
Aqueous (ug/L)

SEMIVOLATILE

	09QSXX3XXXX1XX	09QDXX4XXXX1XX	09QSXX2XXXX1XX	09QDXX3XXXX1XX
unknown	42 J(2)	6 J	37 J(3)	39 J(2)

Table 1
Laboratory Report of Analysis

	LOCATION:	QT-4	QT-5	QT-6	QT-7	QT-8	QT-9
	ISIS ID:	09QTXX4XXXX1XX	09QTXX5XXXX1XX	09QTXX6XXXX1XX	09QTXX7XXXX1XX	09QTXX8XXXX1XX	09QTXX9XXXX1XX
	LAB NUMBER:	756663	757164	757946	758274	758785	759271
	DATE SAMPLED:	09/18/95	09/19/95	09/20/95	09/21/95	09/22/95	09/25/95
	DATE ANALYZED:	09/26/95	09/25/95	09/26/95	09/26/95	09/27/95	09/26/95
ANALYTE	PQL						
Vinyl Chloride	.10	.10 U	.10 U	.10 U	.10 U	.10 U	.10 U
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		25	25	25	25	25	25
Associated Method Blank:		CB950926A03	CC950925A03	CB950926A03	CB950926B03	CB950926B03	CB950926B03
Associated Equipment Blank:		-	-	-	-	-	-
Associated Field Blank:		-	-	-	-	-	-

TRIP BLANKS

Table 1
Laboratory Report of Analysis

	LOCATION:	QS-2	QS-3	QS-4
	ISIS ID:	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX
	LAB NUMBER:	756678	758329	759248
	DATE SAMPLED:	09/18/95	09/21/95	09/25/95
	DATE ANALYZED:	09/26/95	09/27/95	09/26/95
ANALYTE	PQL			
Vinyl Chloride	.10	.10 U	.10 U	.10 U
Dilution Factor:		1.0	1.0	1.0
Sample Volume\Weight (ml\g):		25	25	25
Associated Method Blank:		CB950926A03	CB950926B03	CB950926B03
Associated Equipment Blank:		-	-	-
Associated Field Blank:		-	-	-

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

LOCATION:	QS-1	QS-2	QS-3	QS-4
ISIS ID:	09QSXX1XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX
LAB NUMBER:	750361	756684	758330	759250
DATE SAMPLED:	08/22/95	09/18/95	09/21/95	09/25/95
DATE ANALYZED:	08/28/95	09/21/95	09/30/95	09/30/95
ANALYTE PQL				
Total Petroleum Hydrocarbons (TPH)				
ME DEP - Gasoline in Water 50	50 U	50 U	50 U	50 U
Dilution Factor:	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	5.0	5.0	5.0	5.0
Associated Method Blank:	VTIBLAF	VTIBLAK	VTIBLAM	VTIBLAM
Associated Equipment Blank:	-	-	-	-
Associated Field Blank:	-	-	-	-

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

LOCATION:	QS-1	QS-2	QS-3	QS-4
ISIS ID:	09QSXX1XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX
LAB NUMBER:	750362	756692	758332	759251
DATE SAMPLED:	08/22/95	09/18/95	09/21/95	09/25/95
DATE ANALYZED:	08/31/95	09/28/95	09/26/95	09/28/95
ANALYTE	PQL			
Total Petroleum Hydrocarbons (TPH)				
ME DEP - Fuel Oil in Water	50	67 JB	50 U	50 U	50 U
Dilution Factor:		1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		1000	1000	1000	1000
Associated Method Blank:		PBLK04	757120	758631	760191
Associated Equipment Blank:		-	-	-	-
Associated Field Blank:		-	-	-	-

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

	LOCATION:	QD-3	QD-4
	ISIS ID:	09QDXX3XXXX1XX	09QDXX4XXXX1XX
	LAB NUMBER:	756701	759231
	DATE SAMPLED:	09/18/95	09/25/95
	DATE ANALYZED:	09/26/95	09/26/95
ANALYTE	PQL		
Vinyl Chloride	.10	.10 U	.10 U
	Dilution Factor:	1.0	1.0
	Sample Volume\Weight (ml\g):	25	25
	Associated Method Blank:	CB950926A03	CB950926A03
	Associated Equipment Blank:	-	-
	Associated Field Blank:	-	-

FIELD BLANKS

Table 1
Laboratory Report of Analysis

	LOCATION:	QD-1	QD-2	QD-3	QD-4
	ISIS ID:	09QDXX1XXXX1XX	09QDXX2XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX
	LAB NUMBER:	750366	750374	756698	759233
	DATE SAMPLED:	08/22/95	08/22/95	09/18/95	09/25/95
	DATE ANALYZED:	08/28/95	08/28/95	09/21/95	09/30/95
ANALYTE	PQL				
Total Petroleum Hydrocarbons (TPH)					
ME DEP - Gasoline in Water	50	50 U	50 U	50 U	50 U
Dilution Factor:		1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		5.0	5.0	5.0	5.0
Associated Method Blank:		VTIBLAF	VTIBLAF	VTIBLAK	VTIBLAM
Associated Equipment Blank:		-	-	-	-
Associated Field Blank:		-	-	-	-

FIELD BLANKS

Table 1
Laboratory Report of Analysis

	LOCATION:	QD-1	QD-2	QD-3	QD-4
	ISIS ID:	09QDXX1XXXX1XX	09QDXX2XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX
	LAB NUMBER:	750373	750376	756700	759234
	DATE SAMPLED:	08/22/95	08/22/95	09/18/95	09/25/95
	DATE ANALYZED:	08/31/95	08/31/95	09/28/95	09/28/95
ANALYTE	PQL				
Total Petroleum Hydrocarbons (TPH)					
ME DEP - Fuel Oil in Water	50	50 U	57 JB	50 U	50 U
Dilution Factor:		1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		1000	1000	1000	1000
Associated Method Blank:		PBLK04	PBLK04	757120	760191
Associated Equipment Blank:		-	-	-	-
Associated Field Blank:		-	-	-	-

FIELD BLANKS

Table 1
Laboratory Report of Analysis

	LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
	ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
	LAB NUMBER:	758291 #	759243 #	759237 #	759254 #	758276 #	759260 #	758794 #	758285 #
	DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95
	DATE ANALYZED:	09/26/95	09/27/95	09/27/95	09/27/95	09/26/95	09/27/95	09/27/95	09/27/95
ANALYTE	PQL								
Vinyl Chloride	.10	.10 U	.10 U	.10 U	.10 U	.10 U	.10 U	.10 U	.10 U
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		25.0	25	25	25	25.0	25	25	25
Associated Method Blank:		CB950926A3	CB950926B03	CB950926B03	CB950926B03	CB950926A3	CB950926B03	CB950926B03	CB950926B03
Associated Equipment Blank:		09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:		09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX
Associated Trip Blank:		09QTXX7XXXX1XX	09QTXX9XXXX1XX	09QTXX9XXXX1XX	09QTXX9XXXX1XX	09QTXX7XXXX1XX	09QTXX9XXXX1XX	09QTXX8XXXX1XX	09QTXX7XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP	MW-204
ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:	759266 #	758800 #	758788 #	758323 #	757183 #	757976 #	758315 #	758303 #
DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/20/95	09/21/95	09/21/95
DATE ANALYZED:	09/27/95	09/27/95	09/27/95	09/27/95	09/25/95	09/26/95	09/26/95	09/26/95
ANALYTE PQL								
Vinyl Chloride .10	.10 U	.10 U	.10 U	.10 U	0.11	.10 U	.10 U	.10 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	25	25	25	25	25.0	25.0	25.0	25.0
Associated Method Blank:	CB950926B03	CB950926B03	CB950926B03	CB950926B03	CC950925A03	CB950926A03	CB950926A3	CB950926A03
Associated Equipment Blank:	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX
Associated Trip Blank:	09QTXX9XXXX1XX	09QTXX8XXXX1XX	09QTXX8XXXX1XX	09QTXX7XXXX1XX	09QTXX5XXXX1XX	09QTXX6XXXX1XX	09QTXX7XXXX1XX	09QTXX7XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:		MW-901	MW-902	MW-903	MW-904	MW-904	MW-905	MW-906	MW-906
ISIS ID:		09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW906XXX08XX
LAB NUMBER:		756625 #	756667 #	757959 #	757953 #	757953 R #	757968 #	757176 #	757176 R #
DATE SAMPLED:		09/18/95	09/18/95	09/20/95	09/21/95	09/21/95	09/20/95	09/19/95	09/19/95
DATE ANALYZED:		09/25/95	09/25/95	09/26/95	09/26/95	09/26/95	09/26/95	09/25/95	09/25/95
ANALYTE	PQL								
Vinyl Chloride	.10	0.10 U	.10 U	.10 U	9.34	8.36	.10 U	2.60	3.39
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		25.0	25.0	25.0	25.0	4.0	25.0	25.0	14.0
Associated Method Blank:		CC950925A03	CC950925A03	CB950926A03	CB950926A03	CB950926A03	CB950926A03	CC950925A03	CC950925A03
Associated Equipment Blank:		09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:		09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX
Associated Trip Blank:		09QTXX4XXXX1XX	09QTXX4XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX5XXXX1XX	09QTXX5XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-907	MW-907	MW-908	MW-909	MW-910	MW-914	MW-915 DUP	MW-915 DUP
ISIS ID:	09MW907XXX08XX	09MW907XXX08XX	09MW908XXX08XX	09MW909XXX08XX	09MW910XXX08XX	09MW914XXX08XX	09MW915XXX08XD	09MW915XXX08XD
LAB NUMBER:	757948 #	757948 R #	756647 #	757166 #	757159 #	757171 #	757139 #	757139 R #
DATE SAMPLED:	09/20/95	09/20/95	09/18/95	09/19/95	09/19/95	09/19/95	09/19/95	09/19/95
DATE ANALYZED:	09/26/95	09/26/95	09/25/95	09/25/95	09/25/95	09/25/95	09/25/95	09/25/95
ANALYTE PQL								
Vinyl Chloride .10	9.15	8.60	1.13	0.15	.10 U	.10 U	7.16	8.06
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	25.0	4.0	25.0	25.0	25.0	25.0	25.0	5.0
Associated Method Blank:	CB950926A03	CB950926A03	CC950925A03	CC950925A03	CC950925A03	CC950925A03	CC950925A03	CC950925A03
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX
Associated Trip Blank:	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX4XXXX1XX	09QTXX5XXXX1XX	09QTXX5XXXX1XX	09QTXX5XXXX1XX	09QTXX5XXXX1XX	09QTXX5XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

	LOCATION:	MW-915	MW-915	MW-916
	ISIS ID:	09MW915XXX08XX	09MW915XXX08XX	09MW916XXX08XX
	LAB NUMBER:	757144 #	757144 R #	756654 #
	DATE SAMPLED:	09/19/95	09/19/95	09/18/95
	DATE ANALYZED:	09/25/95	09/25/95	09/25/95
ANALYTE	PQL			
Vinyl Chloride	.10	6.15	8.15	.10 U
Dilution Factor:		1.0	1.0	1.0
Sample Volume\Weight (ml\g):		25.0	6.0	25.0
Associated Method Blank:		CC950925A03	CC950925A03	CC950925A03
Associated Equipment Blank:		09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:		09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX
Associated Trip Blank:		09QTXX5XXXX1XX	09QTXX5XXXX1XX	09QTXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
LAB NUMBER:	758291 #	759243 #	759237 #	759254 #	758276 #	759260 #	758794 #	758285 #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95
DATE ANALYZED:	09/26/95	09/27/95	09/27/95	09/27/95	09/26/95	09/27/95	09/27/95	09/27/95
ANALYTE / PQL								
Vinyl Chloride / .10	.10 U	.10 U	.10 U	.10 U	.10 U	.10 U	.10 U	.10 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	25.0	25	25	25	25.0	25	25	25
Associated Method Blank:	CB950926A3	CB950926B03	CB950926B03	CB950926B03	CB950926A3	CB950926B03	CB950926B03	CB950926B03
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX
Associated Trip Blank:	09QTXX7XXXX1XX	09QTXX9XXXX1XX	09QTXX9XXXX1XX	09QTXX9XXXX1XX	09QTXX7XXXX1XX	09QTXX9XXXX1XX	09QTXX8XXXX1XX	09QTXX7XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:		MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP	MW-204
ISIS ID:		09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:		759266 #	758800 #	758788 #	758323 #	757183 #	757976 #	758315 #	758303 #
DATE SAMPLED:		09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/20/95	09/21/95	09/21/95
DATE ANALYZED:		09/27/95	09/27/95	09/27/95	09/27/95	09/25/95	09/26/95	09/26/95	09/26/95
ANALYTE	PQL								
Vinyl Chloride	.10	.10 U	.10 U	.10 U	.10 U	0.11	.10 U	.10 UJ	.10 UJ
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		25	25	25	25	25.0	25.0	25.0	25.0
Associated Method Blank:		CB950926B03	CB950926B03	CB950926B03	CB950926B03	CC950925A03	CB950926A03	CB950926A3	CB950926A03
Associated Equipment Blank:		09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:		09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX
Associated Trip Blank:		09QTXX9XXXX1XX	09QTXX8XXXX1XX	09QTXX8XXXX1XX	09QTXX7XXXX1XX	09QTXX5XXXX1XX	09QTXX6XXXX1XX	09QTXX7XXXX1XX	09QTXX7XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-901	MW-902	MW-903	MW-904	MW-905	MW-906	MW-907	MW-908
ISIS ID:	09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW907XXX08XX	09MW908XXX08XX
LAB NUMBER:	756625 #	756667 #	757959 #	757953 R #	757968 #	757176 R #	757948 R #	756647 #
DATE SAMPLED:	09/18/95	09/18/95	09/20/95	09/21/95	09/20/95	09/19/95	09/20/95	09/18/95
DATE ANALYZED:	09/25/95	09/25/95	09/26/95	09/26/95	09/26/95	09/25/95	09/26/95	09/25/95
ANALYTE PQL								
Vinyl Chloride .10	0.10 U	.10 U	.10 U	8.36	.10 U	3.39	8.60	1.13
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	25.0	25.0	25.0	4.0	25.0	14.0	4.0	25.0
Associated Method Blank:	CC950925A03	CC950925A03	CB950926A03	CB950926A03	CB950926A03	CC950925A03	CB950926A03	CC950925A03
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX
Associated Trip Blank:	09QTXX4XXXX1XX	09QTXX4XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX5XXXX1XX	09QTXX6XXXX1XX	09QTXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-909	MW-910	MW-914	MW-915 DUP	MW-915	MW-916
ISIS ID:	09MW909XXX08XX	09MW910XXX08XX	09MW914XXX08XX	09MW915XXX08XD	09MW915XXX08XX	09MW916XXX08XX
LAB NUMBER:	757166 #	757159 #	757171 #	757139 R #	757144 R #	756654 #
DATE SAMPLED:	09/19/95	09/19/95	09/19/95	09/19/95	09/19/95	09/18/95
DATE ANALYZED:	09/25/95	09/25/95	09/25/95	09/25/95	09/25/95	09/25/95
ANALYTE PQL						
Vinyl Chloride .10	0.15	.10 U	.10 U	8.06	8.15	.10 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	25.0	25.0	25.0	5.0	6.0	25.0
Associated Method Blank:	CC950925A03	CC950925A03	CC950925A03	CC950925A03	CC950925A03	CC950925A03
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX
Associated Trip Blank:	09QTXX5XXXX1XX	09QTXX5XXXX1XX	09QTXX5XXXX1XX	09QTXX5XXXX1XX	09QTXX5XXXX1XX	09QTXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
LAB NUMBER:	758298	759246 #	759240 #	759257 #	758279	759263 #	758796 #	758288 #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/21/95	09/22/95	09/21/95
DATE EXTRACTED:	09/25/95	09/27/95	09/27/95	09/27/95	09/25/95	09/27/95	09/26/95	09/25/95
DATE ANALYZED:	09/28/95	09/29/95	09/29/95	09/29/95	09/28/95	09/29/95	09/28/95	09/26/95
ANALYTE / PQL								
Total Petroleum Hydrocarbons (TPH)								
ME DEP - Fuel Oil in Water 50	50 U	50 U	50 U	50 U	93000	50 U	50 U	50 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:	758630	760177	760177	760177	758630	760177	759148	758632
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORNG WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

	LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP	MW-204
	ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
	LAB NUMBER:	759269 #	758802 #	758790 #	758326 #	757187	757978	758318	758312
	DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/20/95	09/21/95	09/21/95
	DATE EXTRACTED:	09/27/95	09/26/95	09/26/95	09/26/95	09/22/95	09/23/95	09/25/95	09/25/95
	DATE ANALYZED:	09/29/95	09/28/95	09/28/95	09/26/95	09/28/95	09/26/95	09/28/95	09/28/95
ANALYTE	PQL								
Total Petroleum Hydrocarbons (TPH)									
ME DEP - Fuel Oil in Water	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:		760177	759148	759148	758632	757514	758243	758630	758630
Associated Equipment Blank:		09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:		09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORNG WELL
#: Level IV Validation

F-107

Table 1
Laboratory Report of Analysis

LOCATION:	MW-901	MW-902	MW-903	MW-904	MW-905	MW-906	MW-907	MW-908
ISIS ID:	09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW907XXX08XX	09MW908XXX08XX
LAB NUMBER:	756640	756673	757962	757955	757971	757178	757950	756650
DATE SAMPLED:	09/18/95	09/18/95	09/20/95	09/20/95	09/20/95	09/19/95	09/20/95	09/18/95
DATE EXTRACTED:	09/21/95	09/21/95	09/23/95	09/23/95	09/23/95	09/22/95	09/23/95	09/21/95
DATE ANALYZED:	09/27/95	09/27/95	09/26/95	09/26/95	09/26/95	09/27/95	09/26/95	09/27/95
ANALYTE PQL								
Total Petroleum Hydrocarbons (TPH)								
ME DEP - Fuel Oil in Water 50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:	757119	757119	758243	758243	758243	757514	758243	757119
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORNG WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-909	MW-910	MW-914	MW-915 DUP	MW-915	MW-916
ISIS ID:	09MW909XXX08XX	09MW910XXX08XX	09MW914XXX08XX	09MW915XXX08XD	09MW915XXX08XX	09MW916XXX08XX
LAB NUMBER:	757168	757161	757173	757141	757156	756657
DATE SAMPLED:	09/19/95	09/19/95	09/19/95	09/19/95	09/19/95	09/18/95
DATE EXTRACTED:	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95	09/21/95
DATE ANALYZED:	09/27/95	09/28/95	09/27/95	09/27/95	09/28/95	09/27/95
ANALYTE PQL						
Total Petroleum Hydrocarbons (TPH)						
ME DEP - Fuel Oil in Water 50	50 U	50 U	50 U	50 U	50 U	50 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	1000	1000	1000	1000	1000	1000
Associated Method Blank:	757514	757514	757514	757514	757514	757119
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORNG WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
LAB NUMBER:	758298	759246 #	759240 #	759257 #	758279	759263 #	758796 #	758288 #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/21/95	09/22/95	09/21/95
DATE EXTRACTED:	09/25/95	09/27/95	09/27/95	09/27/95	09/25/95	09/27/95	09/26/95	09/25/95
DATE ANALYZED:	09/28/95	09/29/95	09/29/95	09/29/95	09/28/95	09/29/95	09/28/95	09/26/95
ANALYTE	PQL							
Total Petroleum Hydrocarbons (TPH)								
ME DEP - Fuel Oil in Water	50	50 U	50 U	50 U	50 U	93000	50 U	50 U	50 U
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:		758630	760177	760177	760177	758630	760177	759148	758632
Associated Equipment Blank:		09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:		09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORNG WELL
#: Level IV Validation

F-110

Table 2
Validation / Summary Table

LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP	MW-204
ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:	759269 #	758802 #	758790 #	758326 #	757187	757978	758318	758312
DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/20/95	09/21/95	09/21/95
DATE EXTRACTED:	09/27/95	09/26/95	09/26/95	09/26/95	09/22/95	09/23/95	09/25/95	09/25/95
DATE ANALYZED:	09/29/95	09/28/95	09/28/95	09/26/95	09/28/95	09/26/95	09/28/95	09/28/95
ANALYTE PQL								
Total Petroleum Hydrocarbons (TPH)								
ME DEP - Fuel Oil in Water 50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:	760177	759148	759148	758632	757514	758243	758630	758630
Associated Equipment Blank:	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORNG WELL
#: Level IV Validation

F-111

Table 2
Validation / Summary Table

LOCATION:	MW-901	MW-902	MW-903	MW-904	MW-905	MW-906	MW-907	MW-908
ISIS ID:	09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW907XXX08XX	09MW908XXX08XX
LAB NUMBER:	756640	756673	757962	757955	757971	757178	757950	756650
DATE SAMPLED:	09/18/95	09/18/95	09/20/95	09/20/95	09/20/95	09/19/95	09/20/95	09/18/95
DATE EXTRACTED:	09/21/95	09/21/95	09/23/95	09/23/95	09/23/95	09/22/95	09/23/95	09/21/95
DATE ANALYZED:	09/27/95	09/27/95	09/26/95	09/26/95	09/26/95	09/27/95	09/26/95	09/27/95
ANALYTE PQL								
Total Petroleum Hydrocarbons (TPH)								
ME DEP - Fuel Oil in Water 50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):	1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:	757119	757119	758243	758243	758243	757514	758243	757119
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORNG WELL
#: Level IV Validation

F-112

Table 2
Validation / Summary Table

	LOCATION:	MW-909	MW-910	MW-914	MW-915 DUP	MW-915	MW-916
	ISIS ID:	09MW909XXX08XX	09MW910XXX08XX	09MW914XXX08XX	09MW915XXX08XD	09MW915XXX08XX	09MW916XXX08XX
	LAB NUMBER:	757168	757161	757173	757141	757156	756657
	DATE SAMPLED:	09/19/95	09/19/95	09/19/95	09/19/95	09/19/95	09/18/95
	DATE EXTRACTED:	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95	09/21/95
	DATE ANALYZED:	09/27/95	09/28/95	09/27/95	09/27/95	09/28/95	09/27/95
ANALYTE	PQL						
Total Petroleum Hydrocarbons (TPH)							
ME DEP - Fuel Oil in Water	50	50 U	50 U	50 U	50 U	50 U	50 U
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		1000	1000	1000	1000	1000	1000
Associated Method Blank:		757514	757514	757514	757514	757514	757119
Associated Equipment Blank:		09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:		09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORNG WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

	LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
	ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
	LAB NUMBER:	758296 #	759245 #	759239 #	759256 #	758277 #	759262 #	758795 #	758286 #
	DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95
	DATE ANALYZED:	10/02/95	09/29/95	09/29/95	09/29/95	10/03/95	09/29/95	09/30/95	10/02/95
ANALYTE	PQL								
Total Petroleum Hydrocarbons (TPH)									
ME DEP - Gasoline in Water	50	50 U	50 U	50 U	50 U	35000	50 U	50 U	95
Dilution Factor:		1	1	1	1	1	1	1	1
Sample Volume\Weight (ml\g):		5.0	5.0	5.0	5.0	0.05	5.0	5.0	5.0
Associated Method Blank:		092295	092995	092995	092995	092295	092995	092995	092295
Associated Equipment Blank:		09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:		09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

	LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP	MW-204
	ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
	LAB NUMBER:	759268 #	758801 #	758789 #	758324 #	757186	757977 #	758316 #	758310 #
	DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/18/95	09/20/95	09/21/95	09/21/95
	DATE ANALYZED:	09/29/95	09/30/95	09/30/95	10/04/95	09/22/95	09/22/95	09/29/95	09/29/95
ANALYTE	PQL								
Total Petroleum Hydrocarbons (TPH)									
ME DEP - Gasoline in Water	50	50 U	50 U	50 U	50 U	50 U	50 U	69	69
Dilution Factor:		1	1	1	1	1	1	1	1
Sample Volume\Weight (ml\g):		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Associated Method Blank:		092995	092995	092995	100495	VTIBLAK	092295	092995	092995
Associated Equipment Blank:		09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:		09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

	LOCATION:	MW-901	MW-902	MW-903	MW-904	MW-905	MW-906	MW-907	MW-908
	ISIS ID:	09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW907XXX08XX	09MW908XXX08XX
	LAB NUMBER:	756628	756668 #	757961 #	757954 #	757969 #	757177	757949 #	756648
	DATE SAMPLED:	09/18/95	09/18/95	09/20/95	09/20/95	09/20/95	09/19/95	09/20/95	09/18/95
	DATE ANALYZED:	09/21/95	09/21/95	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95	09/21/95
ANALYTE	PQL								
Total Petroleum Hydrocarbons (TPH)									
ME DEP - Gasoline in Water	50	50 U	50 U	50 U	50 U	50 U	50 U	56	50 U
Dilution Factor:		1	1	1	1	1	1	1	1
Sample Volume\Weight (ml\g):		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Associated Method Blank:		VTIBLAK	092195	092295	092295	092295	VTIBLAK	092295	VTIBLAK
Associated Equipment Blank:		09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:		09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

	LOCATION:	MW-909	MW-910	MW-914	MW-915 DUP	MW-915	MW-916
	ISIS ID:	09MW909XXX08XX	09MW910XXX08XX	09MW914XXX08XX	09MW915XXX08XD	09MW915XXX08XX	09MW916XXX08XX
	LAB NUMBER:	757167	757160	757172	757140	757145	756655
	DATE SAMPLED:	09/19/95	09/19/95	09/19/95	09/19/95	09/19/95	09/18/95
	DATE ANALYZED:	09/22/95	09/22/95	09/22/95	09/21/95	09/21/95	09/21/95
ANALYTE	PQL						
Total Petroleum Hydrocarbons (TPH)							
ME DEP - Gasoline in Water	50	50 U	50 U	50 U	50 U	50 U	50 U
Dilution Factor:		1	1	1	1	1	1
Sample Volume\Weight (ml\g):		5.0	5.0	5.0	5.0	5.0	5.0
Associated Method Blank:		VTIBLAK	VTIBLAK	VTIBLAK	VTIBLAK	VTIBLAK	VTIBLAK
Associated Equipment Blank:		09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:		09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
LAB NUMBER:	758296 #	759245 #	759239 #	759256 #	758277 #	759262 #	758795 #	758286 #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95
DATE ANALYZED:	10/02/95	09/29/95	09/29/95	09/29/95	10/03/95	09/29/95	09/30/95	10/02/95
ANALYTE PQL								
Total Petroleum Hydrocarbons (TPH)								
ME DEP - Gasoline in Water 50	50 U	50 U	50 U	50 U	35000	50 U	50 U	95 J
Dilution Factor:	1	1	1	1	1	1	1	1
Sample Volume\Weight (ml\g):	5.0	5.0	5.0	5.0	0.05	5.0	5.0	5.0
Associated Method Blank:	092295	092995	092995	092995	092295	092995	092995	092295
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP	MW-204
ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:	759268 #	758801 #	758789 #	758324 #	757186	757977 #	758316 #	758310 #
DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/18/95	09/20/95	09/21/95	09/21/95
DATE ANALYZED:	09/29/95	09/30/95	09/30/95	10/04/95	09/22/95	09/22/95	09/29/95	09/29/95
ANALYTE PQL								
Total Petroleum Hydrocarbons (TPH)								
ME DEP - Gasoline in Water 50	50 U	50 U	50 U	50 U	50 U	50 U	69	69
Dilution Factor:	1	1	1	1	1	1	1	1
Sample Volume\Weight (ml\g):	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Associated Method Blank:	092995	092995	092995	100495	VTIBLAK	092295	092995	092995
Associated Equipment Blank:	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-901	MW-902	MW-903	MW-904	MW-905	MW-906	MW-907	MW-908
ISIS ID:	09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW907XXX08XX	09MW908XXX08XX
LAB NUMBER:	756628	756668 #	757961 #	757954 #	757969 #	757177	757949 #	756648
DATE SAMPLED:	09/18/95	09/18/95	09/20/95	09/20/95	09/20/95	09/19/95	09/20/95	09/18/95
DATE ANALYZED:	09/21/95	09/21/95	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95	09/21/95
ANALYTE PQL								
Total Petroleum Hydrocarbons (TPH)								
ME DEP - Gasoline in Water 50	50 U	50 U	50 U	50 U	50 U	50 U	56	50 U
Dilution Factor:	1	1	1	1	1	1	1	1
Sample Volume\Weight (ml\g):	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Associated Method Blank:	VTIBLAK	092195	092295	092295	092295	VTIBLAK	092295	VTIBLAK
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-909	MW-910	MW-914	MW-915 DUP	MW-915	MW-916
ISIS ID:	09MW909XXX08XX	09MW910XXX08XX	09MW914XXX08XX	09MW915XXX08XD	09MW915XXX08XX	09MW916XXX08XX
LAB NUMBER:	757167	757160	757172	757140	757145	756655
DATE SAMPLED:	09/19/95	09/19/95	09/19/95	09/19/95	09/19/95	09/18/95
DATE ANALYZED:	09/22/95	09/22/95	09/22/95	09/21/95	09/21/95	09/21/95
ANALYTE / PQL						
Total Petroleum Hydrocarbons (TPH)						
ME DEP - Gasoline in Water 50	50 U	50 U	50 U	50 U	50 U	50 U
Dilution Factor:	1	1	1	1	1	1
Sample Volume\Weight (ml\g):	5.0	5.0	5.0	5.0	5.0	5.0
Associated Method Blank:	VTIBLAK	VTIBLAK	VTIBLAK	VTIBLAK	VTIBLAK	VTIBLAK
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-001		MW-002 DUP		MW-002		MW-003		MW-004		MW-005		MW-006		MW-007	
ISIS ID:	09MW001XXX08XX		09MW002XXX08XD		09MW002XXX08XX		09MW003XXX08XX		09MW004XXX08XX		09MW005XXX08XX		09MW006XXX08XX		09MW007XXX08XX	
LAB NUMBER:	758299 #		759244 #		759238 #		759255 #		758280 #		759261 #		758797 #		758289 #	
DATE SAMPLED:	09/21/95		09/25/95		09/25/95		09/25/95		09/21/95		09/25/95		09/22/95		09/21/95	
ANALYTE SOW-3/90 - II CRDL																
Aluminum 200	973		346		563		252		131	B	426		1370		16300	
Antimony 60	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	2.0	B
Arsenic 10	2.7	U	2.7	U	2.7	U	2.7	U	2.7	U	2.7	U	10.7		73.4	
Barium 200	36.6	BE	14.9	BE	25.5	BE	50.8	BE	28.9	BE	10.7	BE	144	BE	84.9	BE
Beryllium 5	0.10	U	0.22	B	0.23	B	0.29	B	0.10	U	0.15	B	0.24	B	0.95	B
Cadmium 5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Calcium 5000	10700		14300		14500		56300		42600		9640		9240		20900	
Chromium 10	24.0		12.2		30.9		3.7	B	0.70	U	3.2	B	49.8		123	
Cobalt 50	5.9	B	1.4	B	3.2	B	4.3	B	9.4	B	0.50	U	5.4	B	21.3	B
Copper 25	3.2	B	2.4	B	3.7	B	2.1	B	2.9	B	2.2	B	3.7	B	43.7	
Iron 100	1670		607		915		1080		1120		336		9330		42900	
Lead 3	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	13.3	
Magnesium 5000	1650	B	5780		5850		14000		4420	B	3190	B	3510	B	13700	
Manganese 15	51.0		118		128		2800		1310		29.0		140		1060	
Mercury 0.2	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel 40	43.6		19.5	B	22.0	B	8.7	B	6.7	B	4.3	B	39.9	B	102	
Potassium 5000	1670	B	3470	B	3520	B	10200		10100		3010	B	9940		7350	
Selenium 5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver 10	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Sodium 5000	23700	E	9930	E	10100	E	152000	E	53400	E	9650	E	28900	E	17600	E
Thallium 10	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U
Vanadium 50	1.9	B	1.5	B	2.5	B	0.60	U	0.60	U	0.69	B	4.7	B	32.5	B
Zinc 20	10.0	B	5.3	B	8.2	B	18.9	B	8.4	B	16.0	B	33.5		72.1	
Cyanide 10	NR		NR		NR		NR		NR		NR		NR		NR	
Associated Method Blank:	SDG92		211		211		211		SDG92		211		211		211	
Associated Equipment Blank:	09QSXX3XXXX1XX		09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX3XXXX1XX		09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX3XXXX1XX	
Associated Field Blank:	09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation

PROJECT: Brunswick NAS

Inorganic Aqueous Analysis (ug/L)

11/10/95

Table 1
Laboratory Report of Analysis

LOCATION:	MW-008		MW-009		MW-010		MW-020		MW-021		MW-022		MW-204 DUP		MW-204	
ISIS ID:	09MW008XXX08XX		09MW009XXX08XX		09MW010XXX08XX		09MW020XXX08XX		09MW021XXX08XX		09MW022XXX08XX		09MW204XXX08XD		09MW204XXX08XX	
LAB NUMBER:	759267 #		758803 #		758791 #		758327 #		757188 #		757979 #		758321 #		758313 #	
DATE SAMPLED:	09/25/95		09/22/95		09/22/95		09/21/95		09/19/95		09/20/95		09/21/95		09/21/95	
ANALYTE SOW-3/90 - II CRDL																
Aluminum 200	441		1370		12600		279		1400		716		419		446	
Antimony 60	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Arsenic 10	2.7	U	2.7	U	7.8	B	4.2	B	3.4	B	2.7	U	15.3		15.4	
Barium 200	16.3	BE	49.5	BE	66.5	BE	8.2	BE	15.6	BE	33.2	BE	21.7	BE	25.2	BE
Beryllium 5	0.10	U	0.33	B	1.0	B	0.24	B	0.10	U	0.28	B	0.18	B	0.30	B
Cadmium 5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Calcium 5000	16700		19800		12400		5650		5720		22500		13300		12800	
Chromium 10	8.2	B	6.1	B	68.1		1.6	B	3.2	B	5.6	B	3.0	B	2.4	B
Cobalt 50	1.0	B	2.0	B	10.6	B	1.2	B	2.6	B	1.2	B	1.5	B	2.5	B
Copper 25	2.7	B	3.4	B	14.5	B	2.0	B	2.9	B	1.2	B	1.5	B	4.6	B
Iron 100	1280		4190		22400		943		3720		908		6260		6030	
Lead 3	1.6	U	1.6	U	14.2		1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Magnesium 5000	1970	B	3330	B	2600	B	2230	B	2430	B	2860	B	3470	B	3400	B
Manganese 15	144		554		1220		675		382		924		6100		5900	
Mercury 0.2	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel 40	6.6	B	6.5	B	52.0		2.4	U	4.4	B	6.1	B	3.6	B	3.8	B
Potassium 5000	3680	B	3680	B	4560	B	1040	B	2300	B	4660	B	1240	B	1230	B
Selenium 5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver 10	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Sodium 5000	33500	E	45700	E	45500	E	11500	E	37200	E	53100	E	11900	E	11600	E
Thallium 10	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U
Vanadium 50	1.7	B	4.8	B	21.4	B	0.60	U	3.1	B	2.0	B	0.60	U	1.3	B
Zinc 20	6.6	B	7.1	B	20.5		8.2	B	53.6		1.2	U	5.1	B	11.0	B
Cyanide 10	NR		NR		NR		NR		NR		NR		NR		NR	
Associated Method Blank:	211		211		211		211		SDG92		SDG92		SDG92		SDG92	
Associated Equipment Blank:	09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX3XXXX1XX		09QSXX2XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX	
Associated Field Blank:	09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-901		MW-902		MW-903		MW-904		MW-905		MW-906		MW-907		MW-908	
ISIS ID:	09MW901XXX08XX		09MW902XXX08XX		09MW903XXX08XX		09MW904XXX08XX		09MW905XXX08XX		09MW906XXX08XX		09MW907XXX08XX		09MW908XXX08XX	
LAB NUMBER:	756636 #		756672 #		757964 #		757956 #		757972 #		757192 #		757951 #		756649 #	
DATE SAMPLED:	09/18/95		09/18/95		09/20/95		09/20/95		09/20/95		09/19/95		09/20/95		09/18/95	
ANALYTE SOW-3/90 - II	CRDL															
Aluminum	200	176	B	252		140	B	271		2550		127	B	718		105	B
Antimony	60	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Arsenic	10	2.7	U	2.7	U	2.7	U	2.7	U	47.4		2.7	U	2.7	U	2.7	U
Barium	200	6.6	BE	73.5	BE	8.6	BE	15.0	BE	15.3	BE	8.1	BE	21.2	BE	12.0	BE
Beryllium	5	0.26	B	0.31	B	0.11	B	0.10	U	0.42	B	0.13	B	0.21	B	0.10	U
Cadmium	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Calcium	5000	3770	B	14900		11500		22400		7070		11000		35000		23900	
Chromium	10	0.75	B	3.6	B	0.70	U	0.81	B	11.1		0.70	U	5.8	B	1.7	B
Cobalt	50	0.50	U	7.3	B	1.4	B	0.50	U	2.9	B	0.50	U	1.4	B	1.8	B
Copper	25	0.92	B	2.0	B	2.3	B	0.50	U	4.7	B	0.50	U	0.69	B	0.50	U
Iron	100	234		148		6260		205		2970		403		751		20.2	B
Lead	3	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Magnesium	5000	1650	B	2830	B	5680		4730	B	3310	B	3870	B	4310	B	2230	B
Manganese	15	204		2000		327		197		65.7		48.5		5800		484	
Mercury	0.2	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel	40	2.4	U	9.0	B	2.7	B	2.4	U	8.2	B	2.4	U	6.6	B	2.4	U
Potassium	5000	1220	B	1330	B	2280	B	2240	B	5300		1970	B	2900	B	1970	B
Selenium	5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver	10	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Sodium	5000	35400	E	34600	E	25100	E	28400	E	56800	E	32200	E	19900	E	24900	E
Thallium	10	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U
Vanadium	50	1.0	B	0.60	U	0.60	U	0.60	B	5.2	B	0.60	U	2.1	B	0.60	U
Zinc	20	9.7	B	1.2	U	1.2	U	1.2	U	21.5		1.5	B	4.4	B	6.8	B
Cyanide	10	NR		NR		NR		NR		NR		NR		NR		NR	
Associated Method Blank:		SDG92		SDG92		SDG92		SDG92		SDG92		SDG92		SDG92		SDG92	
Associated Equipment Blank:		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX2XXXX1XX	
Associated Field Blank:		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-909		MW-910		MW-914		MW-915 DUP		MW-915		MW-916	
ISIS ID:	09MW909XXX08XX		09MW910XXX08XX		09MW914XXX08XX		09MW915XXX08XD		09MW915XXX08XX		09MW916XXX08XX	
LAB NUMBER:	757169 #		757162 #		757174 #		757142 #		757157 #		756656 #	
DATE SAMPLED:	09/19/95		09/19/95		09/19/95		09/19/95		09/19/95		09/18/95	
ANALYTE SOW-3/90 - II CRDL												
Aluminum 200	178	B	2950		2280		536		3470		244	
Antimony 60	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Arsenic 10	2.7	U	2.7	U	6.7	B	2.7	U	2.7	U	2.7	U
Barium 200	2.5	BE	16.9	BE	384	E	438	E	550	E	70.3	BE
Beryllium 5	0.21	B	0.21	B	0.37	B	0.66	B	0.45	B	0.10	U
Cadmium 5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Calcium 5000	1590	B	3260	B	32700		49900		51000		35600	
Chromium 10	4.1	B	177		6.7	B	4.4	B	11.3		1.9	B
Cobalt 50	0.50	U	7.8	B	2.3	B	0.70	B	1.8	B	1.5	B
Copper 25	9.4	B	6.7	B	2.7	B	2.2	B	6.1	B	4.0	B
Iron 100	139		4000		44900		6960		8190		123	
Lead 3	1.6	U	1.6	U	7.8		1.6	U	5.1		1.6	U
Magnesium 5000	661	B	1300	B	2030	B	3900	B	4110	B	3020	B
Manganese 15	6.2	B	109		139		615		551		1040	
Mercury 0.2	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel 40	13.3	B	141		9.6	B	7.8	B	11.0	B	2.7	B
Potassium 5000	404	B	566	B	2970	B	7080		7060		8870	
Selenium 5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
Silver 10	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Sodium 5000	4480	BE	3130	BE	4510	BE	21800	E	21800	E	63100	E
Thallium 10	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U
Vanadium 50	0.60	U	5.7	B	0.64	B	1.0	B	7.4	B	0.91	B
Zinc 20	4.7	B	16.9	B	26.9		7.3	B	21.0		2.4	B
Cyanide 10	NR		NR		NR		NR		NR		NR	
Associated Method Blank:	SDG92		SDG92		SDG92		SDG92		SDG92		SDG92	
Associated Equipment Blank:	09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX	
Associated Field Blank:	09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
LAB NUMBER:	758299 #	759244 #	759238 #	759255 #	758280 #	759261 #	758797 #	758289 #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95
ANALYTE SOW-3/90 - II CRDL								
Aluminum 200	973 UJ	346 U	563 U	252 U	131 UJ	426 U	1370	16300
Antimony 60	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 J
Arsenic 10	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	10.7	73.4
Barium 200	36.6 J	14.9 UJ	25.5 J	50.8 J	28.9 J	10.7 UJ	144 J	84.9 J
Beryllium 5	0.10 U	0.22 U	0.23 U	0.29 U	0.10 U	0.15 U	0.24 U	0.95 U
Cadmium 5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium 5000	10700 J	14300 J	14500 J	56300 J	42600 J	9640 J	9240 J	20900 J
Chromium 10	24.0	12.2	30.9	3.7 J	0.70 U	3.2 J	49.8	123
Cobalt 50	5.9 U	1.4 J	3.2 J	4.3 J	9.4 U	0.50 U	5.4 J	21.3 U
Copper 25	3.2 U	2.4 U	3.7 U	2.1 U	2.9 U	2.2 U	3.7 U	43.7
Iron 100	1670	607 J	915 J	1080 J	1120	336 J	9330 J	42900 J
Lead 3	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	13.3
Magnesium 5000	1650 J	5780	5850	14000	4420 J	3190 J	3510 J	13700
Manganese 15	51.0	118	128	2800	1310	29.0	140	1060
Mercury 0.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel 40	43.6	19.5 J	22.0 J	8.7 J	6.7 J	4.3 J	39.9 J	102
Potassium 5000	1670 J	3470 J	3520 J	10200	10100	3010 J	9940	7350
Selenium 5	3.4 UJ	3.4 U	3.4 U	3.4 U	3.4 UJ	3.4 U	3.4 U	3.4 U
Silver 10	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Sodium 5000	23700 J	9930 J	10100 J	152000 J	53400 J	9650 J	28900 J	17600 J
Thallium 10	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Vanadium 50	1.9 J	1.5 U	2.5 U	0.60 U	0.60 U	0.69 U	4.7 J	32.5 J
Zinc 20	10.0 UJ	5.3 UJ	8.2 UJ	18.9 J	8.4 UJ	16.0 J	33.5 J	72.1 J
Cyanide 10	NR	NR	NR	NR	NR	NR	NR	NR
Associated Method Blank:	SDG92	211	211	211	SDG92	211	211	211
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP	MW-204
ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:	759267 #	758803 #	758791 #	758327 #	757188 #	757979 #	758321 #	758313 #
DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/20/95	09/21/95	09/21/95

ANALYTE	SOW-3/90 - II CRDL																				
Aluminum	200	441	U	1370		12600		279	U	1400	J	716	UJ	419	UJ	446	UJ
Antimony	60	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Arsenic	10	2.7	U	2.7	U	7.8	J	4.2	J	3.4	J	2.7	U	15.3		15.4	
Barium	200	16.3	UJ	49.5	J	66.5	J	8.2	UJ	15.6	UJ	33.2	J	21.7	J	25.2	J
Beryllium	5	0.10	U	0.33	U	1.0	U	0.24	U	0.10	U	0.28	U	0.18	U	0.30	U
Cadmium	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Calcium	5000	16700	J	19800	J	12400	J	5650	J	5720	J	22500	J	13300	J	12800	J
Chromium	10	8.2	J	6.1	J	68.1		1.6	U	3.2	J	5.6	U	3.0	U	2.4	U
Cobalt	50	1.0	J	2.0	J	10.6	J	1.2	U	2.6	J	1.2	U	1.5	U	2.5	U
Copper	25	2.7	U	3.4	U	14.5	J	2.0	U	2.9	U	1.2	U	1.5	U	4.6	U
Iron	100	1280	J	4190	J	22400	J	943	J	3720		908		6260		6030	
Lead	3	1.6	UJ	1.6	UJ	14.2		1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ
Magnesium	5000	1970	J	3330	J	2600	J	2230	J	2430	J	2860	J	3470	J	3400	J
Manganese	15	144		554		1220		675		382		924		6100		5900	
Mercury	0.2	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel	40	6.6	J	6.5	J	52.0		2.4	U	4.4	J	6.1	J	3.6	J	3.8	J
Potassium	5000	3680	J	3680	J	4560	J	1040	J	2300	J	4660	J	1240	J	1230	J
Selenium	5	3.4	U	3.4	U	3.4	U	3.4	U	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ
Silver	10	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Sodium	5000	33500	J	45700	J	45500	J	11500	J	37200	J	53100	J	11900	J	11600	J
Thallium	10	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U
Vanadium	50	1.7	U	4.8	J	21.4	J	0.60	U	3.1	J	2.0	J	0.60	U	1.3	U
Zinc	20	6.6	UJ	7.1	UJ	20.5	J	8.2	UJ	53.6	J	1.2	UJ	5.1	UJ	11.0	UJ
Cyanide	10	NR		NR		NR		NR		NR		NR		NR		NR	

Associated Method Blank:	211	211	211	211	SDG92	SDG92	SDG92	SDG92
Associated Equipment Blank:	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-901	MW-902	MW-903	MW-904	MW-905	MW-906	MW-907	MW-908
ISIS ID:	09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW907XXX08XX	09MW908XXX08XX
LAB NUMBER:	756636 #	756672 #	757964 #	757956 #	757972 #	757192 #	757951 #	756649 #
DATE SAMPLED:	09/18/95	09/18/95	09/20/95	09/20/95	09/20/95	09/19/95	09/20/95	09/18/95
ANALYTE — SOW-3/90 - II — CRDL								
Aluminum 200	176 UJ	252 UJ	140 UJ	271 UJ	2550 J	127 UJ	718 UJ	105 UJ
Antimony 60	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Arsenic 10	2.7 U	2.7 U	2.7 U	2.7 U	47.4	2.7 U	2.7 U	2.7 U
Barium 200	6.6 UJ	73.5 J	8.6 UJ	15.0 UJ	15.3 UJ	8.1 UJ	21.2 J	12.0 UJ
Beryllium 5	0.26 U	0.31 U	0.11 U	0.10 U	0.42 U	0.13 U	0.21 U	0.10 U
Cadmium 5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Calcium 5000	3770 J	14900 J	11500 J	22400 J	7070 J	11000 J	35000 J	23900 J
Chromium 10	0.75 J	3.6 J	0.70 U	0.81 U	11.1 U	0.70 U	5.8 U	1.7 J
Cobalt 50	0.50 U	7.3 J	1.4 U	0.50 U	2.9 U	0.50 U	1.4 U	1.8 U
Copper 25	0.92 U	2.0 U	2.3 U	0.50 U	4.7 U	0.50 U	0.69 U	0.50 U
Iron 100	234	148	6260	205	2970	403	751	20.2 U
Lead 3	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ
Magnesium 5000	1650 J	2830 J	5680	4730 J	3310 J	3870 J	4310 J	2230 J
Manganese 15	204	2000	327	197	65.7	48.5	5800	484
Mercury 0.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel 40	2.4 U	9.0 J	2.7 J	2.4 U	8.2 J	2.4 U	6.6 J	2.4 U
Potassium 5000	1220 J	1330 J	2280 J	2240 J	5300	1970 J	2900 J	1970 J
Selenium 5	3.4 UJ	3.4 UJ	3.4 UJ	3.4 UJ	3.4 UJ	3.4 UJ	3.4 UJ	3.4 UJ
Silver 10	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Sodium 5000	35400 J	34600 J	25100 J	28400 J	56800 J	32200 J	19900 J	24900 J
Thallium 10	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Vanadium 50	1.0 U	0.60 U	0.60 U	0.60 J	5.2 J	0.60 U	2.1 J	0.60 U
Zinc 20	9.7 UJ	1.2 UJ	1.2 UJ	1.2 UJ	21.5 UJ	1.5 UJ	4.4 UJ	6.8 UJ
Cyanide 10	NR	NR	NR	NR	NR	NR	NR	NR
Associated Method Blank:	SDG92	SDG92	SDG92	SDG92	SDG92	SDG92	SDG92	SDG92
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-909		MW-910		MW-914		MW-915 DUP		MW-915		MW-916	
ISIS ID:	09MW909XXX08XX		09MW910XXX08XX		09MW914XXX08XX		09MW915XXX08XD		09MW915XXX08XX		09MW916XXX08XX	
LAB NUMBER:	757169 #		757162 #		757174 #		757142 #		757157 #		756656 #	
DATE SAMPLED:	09/19/95		09/19/95		09/19/95		09/19/95		09/19/95		09/18/95	
ANALYTE SOW-3/90 - II CRDL												
Aluminum 200	178	UJ	2950	J	2280	J	536	UJ	3470	J	244	UJ
Antimony 60	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Arsenic 10	2.7	U	2.7	U	6.7	J	2.7	U	2.7	U	2.7	U
Barium 200	2.5	UJ	16.9	UJ	384	J	438	J	550	J	70.3	J
Beryllium 5	0.21	U	0.21	U	0.37	U	0.66	U	0.45	U	0.10	U
Cadmium 5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Calcium 5000	1590	J	3260	J	32700	J	49900	J	51000	J	35600	J
Chromium 10	4.1	J	177		6.7	J	4.4	J	11.3		1.9	J
Cobalt 50	0.50	U	7.8	J	2.3	J	0.70	J	1.8	J	1.5	U
Copper 25	9.4	J	6.7	U	2.7	U	2.2	U	6.1	U	4.0	U
Iron 100	139		4000		44900		6960		8190		123	U
Lead 3	1.6	UJ	1.6	UJ	7.8	J	1.6	UJ	5.1	J	1.6	UJ
Magnesium 5000	661	J	1300	J	2030	J	3900	J	4110	J	3020	J
Manganese 15	6.2	J	109		139		615		551		1040	
Mercury 0.2	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Nickel 40	13.3	J	141		9.6	J	7.8	J	11.0	J	2.7	J
Potassium 5000	404	U	566	J	2970	J	7080		7060		8870	
Selenium 5	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ
Silver 10	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Sodium 5000	4480	UJ	3130	UJ	4510	UJ	21800	J	21800	J	63100	J
Thallium 10	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U	3.6	U
Vanadium 50	0.60	U	5.7	J	0.64	J	1.0	J	7.4	J	0.91	U
Zinc 20	4.7	UJ	16.9	UJ	26.9	UJ	7.3	UJ	21.0	UJ	2.4	UJ
Cyanide 10	NR		NR		NR		NR		NR		NR	
Associated Method Blank:	SDG92		SDG92		SDG92		SDG92		SDG92		SDG92	
Associated Equipment Blank:	09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX	
Associated Field Blank:	09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:		MW-204 DUP	MW-204
ISIS ID:		09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:		758317 #	758311 #
DATE SAMPLED:		09/21/95	09/21/95
DATE EXTRACTED:		09/25/95	09/25/95
DATE ANALYZED:		09/28/95	09/28/95
ANALYTE	SOW-3/90 - II CRQL		
alpha-BHC	0.05	0.05 U	0.05 U
beta-BHC	0.05	0.05 U	0.05 U
delta-BHC	0.05	0.05 U	0.05 U
gamma-BHC (Lindane)	0.05	0.05 U	0.05 U
Heptachlor	0.05	0.05 U	0.05 U
Aldrin	0.05	0.05 U	0.05 U
Heptachlor Epoxide	0.05	0.05 U	0.05 U
Endosulfan I	0.05	0.05 U	0.05 U
Dieldrin	0.1	0.1 U	0.1 U
4,4'-DDE	0.1	0.1 U	0.1 U
Endrin	0.1	0.1 U	0.1 U
Endosulfan II	0.1	0.1 U	0.1 U
4,4'-DDD	0.1	0.1 U	0.1 U
Endrin Aldehyde	0.1	0.1 U	0.1 U
Endosulfan Sulfate	0.1	0.1 U	0.1 U
4,4'-DDT	0.1	0.1 U	0.1 U
Methoxychlor	0.5	0.5 U	0.5 U
Endrin Ketone	0.1	0.1 U	0.1 U
alpha-Chlordane	0.05	0.05 U	0.05 U
gamma-Chlordane	0.05	0.05 U	0.05 U
Toxaphene	5	5.0 U	5.0 U
Aroclor-1016	1	1.0 U	1.0 U
Aroclor-1221	2	2.0 U	2.0 U
Aroclor-1232	1	1.0 U	1.0 U
Aroclor-1242	1	1.0 U	1.0 U
Aroclor-1248	1	1.0 U	1.0 U
Aroclor-1254	1	1.0 U	1.0 U
Aroclor-1260	1	1.0 U	1.0 U
Dilution Factor:		1.00	1.00
Sample Volume\Weight (ml\g):		1000	1000
Associated Method Blank:		758633	758633
Associated Equipment Blank:		09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:		09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITROING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

	LOCATION:	MW-204 DUP	MW-204
	ISIS ID:	09MW204XXX08XD	09MW204XXX08XX
	LAB NUMBER:	758317 #	758311 #
	DATE SAMPLED:	09/21/95	09/21/95
	DATE EXTRACTED:	09/25/95	09/25/95
	DATE ANALYZED:	09/28/95	09/28/95
ANALYTE	SOW-3/90 - II CRQL		
alpha-BHC	0.05	0.05 U	0.05 U
beta-BHC	0.05	0.05 U	0.05 U
delta-BHC	0.05	0.05 U	0.05 U
gamma-BHC (Lindane)	0.05	0.05 U	0.05 U
Heptachlor	0.05	0.05 U	0.05 U
Aldrin	0.05	0.05 U	0.05 U
Heptachlor Epoxide	0.05	0.05 U	0.05 U
Endosulfan I	0.05	0.05 U	0.05 U
Dieldrin	0.1	0.1 U	0.1 U
4,4'-DDE	0.1	0.1 U	0.1 U
Endrin	0.1	0.1 U	0.1 U
Endosulfan II	0.1	0.1 U	0.1 U
4,4'-DDD	0.1	0.1 U	0.1 U
Endrin Aldehyde	0.1	0.1 U	0.1 U
Endosulfan Sulfate	0.1	0.1 U	0.1 U
4,4'-DDT	0.1	0.1 U	0.1 U
Methoxychlor	0.5	0.5 U	0.5 U
Endrin Ketone	0.1	0.1 UJ	0.1 UJ
alpha-Chlordane	0.05	0.05 U	0.05 U
gamma-Chlordane	0.05	0.05 U	0.05 U
Toxaphene	5	5.0 U	5.0 U
Aroclor-1016	1	1.0 U	1.0 U
Aroclor-1221	2	2.0 U	2.0 U
Aroclor-1232	1	1.0 U	1.0 U
Aroclor-1242	1	1.0 U	1.0 U
Aroclor-1248	1	1.0 U	1.0 U
Aroclor-1254	1	1.0 U	1.0 U
Aroclor-1260	1	1.0 U	1.0 U
Dilution Factor:		1.00	1.00
Sample Volume\Weight (ml\g):		1000	1000
Associated Method Blank:		758633	758633
Associated Equipment Blank:		09QSXX2XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:		09QDXX3XXXX1XX	09QDXX3XXXX1XX

Site: MONITROING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

		LOCATION:	MW-001	MW-002	MW-003	MW-004	MW-004	MW-005	MW-006	MW-007
		ISIS ID:	09MW001XXX08XX	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
		LAB NUMBER:	758297 #	759236 #	759253 #	758278 #	758278 D #	759259 #	758793 #	758287 #
		DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/21/95	09/21/95	09/25/95	09/22/95	09/21/95
		DATE EXTRACTED:	09/25/95	09/30/95	09/30/95	09/25/95	09/25/95	09/30/95	09/26/95	09/25/95
		DATE ANALYZED:	09/29/95	10/02/95	10/02/95	09/29/95	09/29/95	10/02/95	09/29/95	09/29/95
ANALYTE	SOW-3/90 - II	CRQL								
Phenol		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2-Chlorophenol		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
1,3-Dichlorobenzene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
1,4-Dichlorobenzene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
1,2-Dichlorobenzene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2-Methylphenol		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane)		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
4-Methylphenol		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Hexachloroethane		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Nitrobenzene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Isophorone		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2-Nitrophenol		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2,4-Dimethylphenol		10	10 U	10 U	10 U	36	44 DJ	10 U	10 U	10 U
bis(2-Chloroethoxy)methane		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2,4-Dichlorophenol		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Naphthalene		10	10 U	10 U	10 U	210 E	750 D	10 U	10 U	10 U
4-Chloroaniline		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Hexachlorobutadiene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2-Methylnaphthalene		10	10 U	10 U	10 U	100 E	180 D	10 U	10 U	10 U
Hexachlorocyclopentadiene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2,4,6-Trichlorophenol		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2,4,5-Trichlorophenol		25	25 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U
2-Chloronaphthalene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2-Nitroaniline		25	25 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U
Dimethylphthalate		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Acenaphthylene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2,6-Dinitrotoluene		10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-001	MW-002	MW-003	MW-004	MW-004	MW-005	MW-006	MW-007
ISIS ID:	09MW001XXX08XX	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
LAB NUMBER:	758297 #	759236 #	759253 #	758278 #	758278 D #	759259 #	758793 #	758287 #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/21/95	09/21/95	09/25/95	09/22/95	09/21/95
DATE EXTRACTED:	09/25/95	09/30/95	09/30/95	09/25/95	09/25/95	09/30/95	09/26/95	09/25/95
DATE ANALYZED:	09/29/95	10/02/95	10/02/95	09/29/95	09/29/95	10/02/95	09/29/95	09/29/95
ANALYTE SOW-3/90 - II CRQL								
3-Nitroaniline 25	25 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U
Acenaphthene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2,4-Dinitrophenol 25	25 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U
4-Nitrophenol 25	25 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U
Dibenzofuran 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
2,4-Dinitrotoluene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Diethylphthalate 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Fluorene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
4-Nitroaniline 25	25 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol 25	25 U	25 U	25 U	25 U	250 U	25 U	25 U	25 U
N-Nitrosodiphenylamine 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
4-Bromophenyl-phenylether 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Hexachlorobenzene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Pentachlorophenol 25	25 U	25 U	25 U	25 U	250 U	25 U	2 J	25 U
Phenanthrene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Anthracene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Carbazole 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Di-n-butylphthalate 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Fluoranthene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Pyrene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Butylbenzylphthalate 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Benzo(a)Anthracene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Chrysene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate 10	10 U	10 U	1 J	10 U	24 DJ	10 U	6 J	10 U
Di-n-octylphthalate 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Benzo(b)Fluoranthene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Benzo(k)Fluoranthene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Benzo(a)Pyrene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Indeno(1,2,3-c,d)Pyrene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Dibenz(a,h)Anthracene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Benzo(g,h,i)perylene 10	10 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U
Dilution Factor:	1.00	1.00	1.00	1.00	10.0	1.00	1.00	1.00
Sample Volume\Weight (ml\g):	1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:	GH058978C08.D	GH060225B02.D	GH060225B02.D	GH058978C08.D	GH058978C08.D	GH060225B02.D	GH058980A05.D	GH058978C08.D
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021 DUP	MW-021	MW-022	MW-204 DUP
ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XD	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD
LAB NUMBER:	759265 #	758799 #	758787 #	758325 #	757179 #	757190 #	757975 #	758317 #
DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/19/95	09/20/95	09/21/95
DATE EXTRACTED:	09/30/95	09/26/95	09/26/95	09/25/95	09/24/95	09/24/95	09/23/95	09/25/95
DATE ANALYZED:	10/02/95	09/29/95	09/29/95	09/29/95	09/29/95	09/29/95	09/27/95	09/29/95
ANALYTE SOW-3/90 - II CRQL								
Phenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane) 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021 DUP	MW-021	MW-022	MW-204 DUP
ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XD	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD
LAB NUMBER:	759265 #	758799 #	758787 #	758325 #	757179 #	757190 #	757975 #	758317 #
DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/19/95	09/20/95	09/21/95
DATE EXTRACTED:	09/30/95	09/26/95	09/26/95	09/25/95	09/24/95	09/24/95	09/23/95	09/25/95
DATE ANALYZED:	10/02/95	09/29/95	09/29/95	09/29/95	09/29/95	09/29/95	09/27/95	09/29/95

ANALYTE	SOW-3/90 - II CRQL																			
3-Nitroaniline	25	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U
Acenaphthene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrophenol	25	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U
4-Nitrophenol	25	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U
Dibenzofuran	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrotoluene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Diethylphthalate	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorophenyl-phenylether	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Fluorene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Nitroaniline	25	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U
4,6-Dinitro-2-methylphenol	25	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U
N-Nitrosodiphenylamine	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Bromophenyl-phenylether	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Pentachlorophenol	25	25	U	25	U	25	U	25	U	25	U	1	JB	25	U	25	U
Phenanthrene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Anthracene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbazole	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Di-n-butylphthalate	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Fluoranthene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Pyrene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Butylbenzylphthalate	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(a)Anthracene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chrysene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	10	10	U	3	J	2	J	10	U	1	J	10	U	10	U	10	U
Di-n-octylphthalate	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(b)Fluoranthene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(k)Fluoranthene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(a)Pyrene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Indeno(1,2,3-c,d)Pyrene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Dibenz(a,h)Anthracene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	10	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Dilution Factor:		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Sample Volume\Weight (ml\g):		1000		1000		1000		1000		1000		1000		1000		1000	
Associated Method Blank:		GH060225B02.D		GH058980A05.D		GH058980A05.D		GH058978C08.D		GH057714A05.D		GH057714A05.1		GH058252B60.D		GH058978C08.D	
Associated Equipment Blank:		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX	
Associated Field Blank:		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX4XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION: MW-204
ISIS ID: 09MW204XXX08XX
LAB NUMBER: 758311 #
DATE SAMPLED: 09/21/95
DATE EXTRACTED: 09/25/95
DATE ANALYZED: 09/29/95

ANALYTE	SOW-3/90 - II CRQL		
Phenol	10	10	U
bis(2-Chloroethyl)ether	10	10	U
2-Chlorophenol	10	10	U
1,3-Dichlorobenzene	10	10	U
1,4-Dichlorobenzene	10	10	U
1,2-Dichlorobenzene	10	10	U
2-Methylphenol	10	10	U
2,2'-oxybis(1-Chloropropane)	10	10	U
4-Methylphenol	10	10	U
N-Nitroso-di-n-propylamine	10	10	U
Hexachloroethane	10	10	U
Nitrobenzene	10	10	U
Isophorone	10	10	U
2-Nitrophenol	10	10	U
2,4-Dimethylphenol	10	10	U
bis(2-Chloroethoxy)methane	10	10	U
2,4-Dichlorophenol	10	10	U
1,2,4-Trichlorobenzene	10	10	U
Naphthalene	10	10	U
4-Chloroaniline	10	10	U
Hexachlorobutadiene	10	10	U
4-Chloro-3-Methylphenol	10	10	U
2-Methylnaphthalene	10	10	U
Hexachlorocyclopentadiene	10	10	U
2,4,6-Trichlorophenol	10	10	U
2,4,5-Trichlorophenol	25	25	U
2-Chloronaphthalene	10	10	U
2-Nitroaniline	25	25	U
Dimethylphthalate	10	10	U
Acenaphthylene	10	10	U
2,6-Dinitrotoluene	10	10	U

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION: MW-204
ISIS ID: 09MW204XXX08XX
LAB NUMBER: 758311 #
DATE SAMPLED: 09/21/95
DATE EXTRACTED: 09/25/95
DATE ANALYZED: 09/29/95

ANALYTE	SOW-3/90 - II CRQL		
3-Nitroaniline	25	25	U
Acenaphthene	10	10	U
2,4-Dinitrophenol	25	25	U
4-Nitrophenol	25	25	U
Dibenzofuran	10	10	U
2,4-Dinitrotoluene	10	10	U
Diethylphthalate	10	10	U
4-Chlorophenyl-phenylether	10	10	U
Fluorene	10	10	U
4-Nitroaniline	25	25	U
4,6-Dinitro-2-methylphenol	25	25	U
N-Nitrosodiphenylamine	10	10	U
4-Bromophenyl-phenylether	10	10	U
Hexachlorobenzene	10	10	U
Pentachlorophenol	25	25	U
Phenanthrene	10	10	U
Anthracene	10	10	U
Carbazole	10	10	U
Di-n-butylphthalate	10	10	U
Fluoranthene	10	10	U
Pyrene	10	10	U
Butylbenzylphthalate	10	10	U
3,3'-Dichlorobenzidine	10	10	U
Benzo(a)Anthracene	10	10	U
Chrysene	10	10	U
bis(2-Ethylhexyl)phthalate	10	10	U
Di-n-octylphthalate	10	10	U
Benzo(b)Fluoranthene	10	10	U
Benzo(k)Fluoranthene	10	10	U
Benzo(a)Pyrene	10	10	U
Indeno(1,2,3-c,d)Pyrene	10	10	U
Dibenz(a,h)Anthracene	10	10	U
Benzo(g,h,i)perylene	10	10	U

Dilution Factor: 1.00
Sample Volume\Weight (ml\g): 1000

Associated Method Blank: GH058978C08.D
Associated Equipment Blank: 09QSXX3XXXX1XX
Associated Field Blank: 09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-001	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007	MW-008
ISIS ID:	09MW001XXX08XX	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX	09MW008XXX08XX
LAB NUMBER:	758297 #	759236 #	759253 #	758278 #	759259 #	758793 #	758287 #	759265 #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95	09/25/95
DATE EXTRACTED:	09/25/95	09/30/95	09/30/95	09/25/95	09/30/95	09/26/95	09/25/95	09/30/95
DATE ANALYZED:	09/29/95	10/02/95	10/02/95	09/29/95	10/02/95	09/29/95	09/29/95	10/02/95
ANALYTE SOW-3/90 - II CRQL								
Phenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane) 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol 10	10 U	10 U	10 U	36	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene 10	10 U	10 U	10 U	750	10 U	10 U	10 U	10 U
4-Chloroaniline 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene 10	10 U	10 U	10 U	180	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-001	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007	MW-008
ISIS ID:	09MW001XXX08XX	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX	09MW008XXX08XX
LAB NUMBER:	758297 #	759236 #	759253 #	758278 #	759259 #	758793 #	758287 #	759265 #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95	09/25/95
DATE EXTRACTED:	09/25/95	09/30/95	09/30/95	09/25/95	09/30/95	09/26/95	09/25/95	09/30/95
DATE ANALYZED:	09/29/95	10/02/95	10/02/95	09/29/95	10/02/95	09/29/95	09/29/95	10/02/95
ANALYTE SOW-3/90 - II CRQL								
3-Nitroaniline 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Acenaphthene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4-Nitrophenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol 25	25 U	25 U	25 U	25 U	25 U	2 J	25 U	25 U
Phenanthrene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)Anthracene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)Fluoranthene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)Pyrene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-c,d)Pyrene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)Anthracene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dilution Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):	1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:	GH058978C08.D	GH060225B02.D	GH060225B02.D	GH058978C08.D	GH060225B02.D	GH058980A05.D	GH058978C08.D	GH060225B02.D
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-009	MW-010	MW-020	MW-021 DUP	MW-021	MW-022	MW-204 DUP	MW-204
ISIS ID:	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XD	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:	758799 #	758787 #	758325 #	757179 #	757190 #	757975 #	758317 #	758311 #
DATE SAMPLED:	09/22/95	09/22/95	09/21/95	09/19/95	09/19/95	09/20/95	09/21/95	09/21/95
DATE EXTRACTED:	09/26/95	09/26/95	09/25/95	09/24/95	09/24/95	09/23/95	09/25/95	09/25/95
DATE ANALYZED:	09/29/95	09/29/95	09/29/95	09/29/95	09/29/95	09/27/95	09/29/95	09/29/95
ANALYTE SOW-3/90 - II CRQL								
Phenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane) 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-009	MW-010	MW-020	MW-021 DUP	MW-021	MW-022	MW-204 DUP	MW-204
ISIS ID:	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XD	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:	758799 #	758787 #	758325 #	757179 #	757190 #	757975 #	758317 #	758311 #
DATE SAMPLED:	09/22/95	09/22/95	09/21/95	09/19/95	09/19/95	09/20/95	09/21/95	09/21/95
DATE EXTRACTED:	09/26/95	09/26/95	09/25/95	09/24/95	09/24/95	09/23/95	09/25/95	09/25/95
DATE ANALYZED:	09/29/95	09/29/95	09/29/95	09/29/95	09/29/95	09/27/95	09/29/95	09/29/95
ANALYTE SOW-3/90 - II CRQL								
3-Nitroaniline 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Acenaphthene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4-Nitrophenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol 25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol 25	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U	25 U
Phenanthrene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)Anthracene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate 10	10 U	10 U	10 U	1 J	10 U	10 U	10 U	10 U
Di-n-octylphthalate 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)Fluoranthene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)Pyrene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-c,d)Pyrene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)Anthracene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dilution Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):	1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:	GH058980A05.D	GH058980A05.D	GH058978C08.D	GH057714A05.D	GH057714A05.1	GH058252B60.D	GH058978C08.D	GH058978C08.D
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

		LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
		ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
		LAB NUMBER:	758290 #	759241 #	759235 #	759252 #	758275 #	759258 #	758792 #	758284 #
		DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95
		DATE ANALYZED:	09/27/95	09/29/95	09/29/95	09/29/95	09/27/95	09/29/95	09/29/95	09/26/95
ANALYTE	SOW-10/92	CRQL								
Chloromethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Bromomethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Vinyl Chloride		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Chloroethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Methylene Chloride		2	2 U	0.6 JB	0.6 JB	0.5 JB	360 U	0.7 JB	2 U	2 J
Acetone		5	5 U	5 U	5 U	5 U	890 U	5 U	5 U	7 U
Carbon Disulfide		1	1 U	1 U	1 U	1 U	180 U	1 U	1	1 U
1,1-Dichloroethene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,1-Dichloroethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
cis-1,2-Dichloroethene		1	1 U	1 U	1 U	1 U	180 U	1 U	0.8 J	1 U
trans-1,2-Dichloroethene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Chloroform		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,2-Dichloroethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
2-Butanone		5	5 U	5 U	5 U	5 U	890 U	5 U	5 U	7 U
Bromochloromethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,1,1-Trichloroethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Carbon Tetrachloride		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Bromodichloromethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,2-Dichloropropane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
cis-1,3-Dichloropropene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Trichloroethene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Dibromochloromethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,1,2-Trichloroethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Benzene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
trans-1,3-Dichloropropene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Bromoform		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
4-Methyl-2-Pentanone		5	5 U	5 U	5 U	5 U	890 U	5 U	5 U	7 U
2-Hexanone		5	5 U	5 U	5 U	5 U	890 U	5 U	5 U	7 U
Tetrachloroethene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,2-Dibromoethane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Toluene		1	1 U	1 U	1 U	1 U	330	1 U	2	1 U
Chlorobenzene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Ethylbenzene		1	1 U	1 U	1 U	1 U	1800	1 U	1	4
Styrene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Total Xylenes		1	1 U	1 U	1 U	1 U	10000	1 U	3	28
1,3-Dichlorobenzene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,4-Dichlorobenzene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,2-Dichlorobenzene		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane		1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	1 U
Dilution Factor:			1.00	1.00	1.00	1.00	179	1.00	1.00	1.40
Sample Volume\Weight (ml\g):			25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Associated Method Blank:			CF950926B56.D	CB950929C55.D	CB950929C55.D	CB950929C55.D	CF950926B56.D	CB950929C55.D	CF950926B56.D	CD950925B56.D
Associated Equipment Blank:			09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:			09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX
Associated Trip Blank:			09QTXX7XXXX1XX	09QTXX9XXXX1XX	09QTXX9XXXX1XX	09QTXX9XXXX1XX	09QTXX7XXXX1XX	09QTXX9XXXX1XX	09QTXX8XXXX1XX	09QTXX7XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-007	MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP
ISIS ID:	09MW007XXX08XX	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD
LAB NUMBER:	758284 R #	759264 #	758798 #	758786 #	758322 #	757181 #	757974 #	758314 #
DATE SAMPLED:	09/21/95	09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/20/95	09/21/95
DATE ANALYZED:	09/27/95	09/29/95	09/26/95	09/27/95	09/26/95	09/22/95	09/22/95	09/27/95

ANALYTE SOW-10/92	CRQL																															
Chloromethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	2	2	JBD	0.6	JB	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.7	J	2	U	2	U	2	U
Acetone	5	200	D	5	U	78	B	5	U	2	JB	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	10		10		10	
Carbon Disulfide	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5	16	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-Pentanone	5	16	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5	16	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	3	D	1	U	1	U	0.5	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Total Xylenes	1	24	D	1	U	2		4		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	1	3	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dilution Factor:		3.10		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Sample Volume\Weight (ml\g):		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0	
Associated Method Blank:		CF950926B56.D		CB950929C55.D		CD950925B56.D		CF950926B56.D		CD950925B56.D		CB950922C52.D		CC950922A56.D		CF950926B56.D																	
Associated Equipment Blank:		09QSXX3XXXX1XX		09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX3XXXX1XX		09QSXX2XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX																	
Associated Field Blank:		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX4XXXX1XX																	
Associated Trip Blank:		09QTXX7XXXX1XX		09QTXX9XXXX1XX		09QTXX8XXXX1XX		09QTXX8XXXX1XX		09QTXX7XXXX1XX		09QTXX5XXXX1XX		09QTXX6XXXX1XX		09QTXX7XXXX1XX																	

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

LOCATION:	MW-204	MW-901	MW-902	MW-903	MW-904	MW-905	MW-906	MW-907
ISIS ID:	09MW204XXX08XX	09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW907XXX08XX
LAB NUMBER:	758302 #	756620 #	756666 #	757958 #	757952 #	757966 #	757175 #	757947 #
DATE SAMPLED:	09/21/95	09/18/95	09/18/95	09/20/95	09/20/95	09/20/95	09/19/95	09/20/95
DATE ANALYZED:	09/27/95	09/21/95	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95
ANALYTE SOW-10/92 CRQL								
Chloromethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride 1	1 U	1 U	1 U	1 U	10	1 U	2	11
Chloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride 2	2 U	3 B	2 U	0.5 J	0.7 J	0.7 J	2 U	0.7 J
Acetone 5	7	5 U	5 B	1 J	5 U	2 J	5 U	1 J
Carbon Disulfide 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1
cis-1,2-Dichloroethene 1	1 U	1 U	1 U	1 U	14	1 U	8	1
trans-1,2-Dichloroethene 1	1 U	1 U	1 U	1 U	0.6 J	1 U	1 U	1 U
Chloroform 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone 5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromochloromethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene 1	1 U	1 U	1 U	1 U	1 U	1 U	0.7 J	1 U
Dibromochloromethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-Pentanone 5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone 5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylenes 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dilution Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Associated Method Blank:	CF950926B56.D	CB950921A56.D	CB950921A56.D	CC950922A56.D	CC950922A56.D	CC950922A56.D	CB950922C52.D	CC950922A56.D
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX
Associated Trip Blank:	09QTXX7XXXX1XX	09QTXX4XXXX1XX	09QTXX4XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX5XXXX1XX	09QTXX6XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 1
Laboratory Report of Analysis

ANALYTE	SOW-10/92 CRQL	MW-908		MW-909		MW-910		MW-914		MW-915 DUP		MW-915		MW-916	
ISIS ID:		09MW908XXX08XX		09MW909XXX08XX		09MW910XXX08XX		09MW914XXX08XX		09MW915XXX08XD		09MW915XXX08XX		09MW916XXX08XX	
LAB NUMBER:		756646 #		757165 #		757158 #		757170 #		757138 #		757143 #		756653 #	
DATE SAMPLED:		09/18/95		09/19/95		09/19/95		09/19/95		09/19/95		09/19/95		09/18/95	
DATE ANALYZED:		09/21/95		09/22/95		09/22/95		09/22/95		09/22/95		09/22/95		09/21/95	
Chloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	1		1	U	1	U	1	U	5		6		1	U
Chloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	2	1	JB	2	U	2	U	2	U	2	U	2	U	1	JB
Acetone	5	5	U	5	U	5	U	5	U	5	U	5	U	15	B
Carbon Disulfide	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	1	U	1	U	1	U	1	U	1		1		1	U
cis-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	0.7	J	0.7	J	1	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-Pentanone	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Total Xylenes	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	
1,2-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dilution Factor:		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Sample Volume\Weight (ml\g):		25.0		25.0		25.0		25.0		25.0		25.0		25.0	
Associated Method Blank:		CB950921A56.D		CB950922C52.D		CB950922C52.D		CB950922C52.D		CB950922C52.D		CB950922C52.D		CB950921A56.D	
Associated Equipment Blank:		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX	
Associated Field Blank:		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX	
Associated Trip Blank:		09QTXX4XXXX1XX		09QTXX5XXXX1XX		09QTXX5XXXX1XX		09QTXX5XXXX1XX		09QTXX5XXXX1XX		09QTXX5XXXX1XX		09QTXX4XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-001	MW-002 DUP	MW-002	MW-003	MW-004	MW-005	MW-006	MW-007
ISIS ID:	09MW001XXX08XX	09MW002XXX08XD	09MW002XXX08XX	09MW003XXX08XX	09MW004XXX08XX	09MW005XXX08XX	09MW006XXX08XX	09MW007XXX08XX
LAB NUMBER:	758290 #	759241 #	759235 #	759252 #	758275 #	759258 #	758792 #	758284 R #
DATE SAMPLED:	09/21/95	09/25/95	09/25/95	09/25/95	09/21/95	09/25/95	09/22/95	09/21/95
DATE ANALYZED:	09/27/95	09/29/95	09/29/95	09/29/95	09/27/95	09/29/95	09/29/95	09/27/95
ANALYTE SOW-10/92 CRQL								
Chloromethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Bromomethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Vinyl Chloride 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Chloroethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Methylene Chloride 2	2 U	2 UJ	2 UJ	2 UJ	360 U	2 UJ	2 U	6 U
Acetone 5	R	R	R	R	R	R	R	200 UJ
Carbon Disulfide 1	1 UJ	1 U	1 U	1 U	180 UJ	1 U	1	3 UJ
1,1-Dichloroethene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,1-Dichloroethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
cis-1,2-Dichloroethene 1	1 U	1 U	1 U	1 U	180 U	1 U	0.8 J	3 U
trans-1,2-Dichloroethene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Chloroform 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,2-Dichloroethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
2-Butanone 5	R	R	R	R	R	R	R	R
Bromochloromethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,1,1-Trichloroethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Carbon Tetrachloride 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Bromodichloromethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,2-Dichloropropane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
cis-1,3-Dichloropropene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Trichloroethene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Dibromochloromethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,1,2-Trichloroethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Benzene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
trans-1,3-Dichloropropene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Bromoform 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
4-Methyl-2-Pentanone 5	5 U	5 U	5 U	5 U	890 U	5 U	5 U	16 U
2-Hexanone 5	5 U	R	R	R	890 U	R	R	R
Tetrachloroethene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,1,2,2-Tetrachloroethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,2-Dibromoethane 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Toluene 1	1 U	1 U	1 U	1 U	330 U	1 U	2 U	3 U
Chlorobenzene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Ethylbenzene 1	1 U	1 U	1 U	1 U	1800	1 U	1	3
Styrene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
Total Xylenes 1	1 U	1 U	1 U	1 U	10000	1 U	3 U	24 U
1,3-Dichlorobenzene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,4-Dichlorobenzene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,2-Dichlorobenzene 1	1 U	1 U	1 U	1 U	180 U	1 U	1 U	3 U
1,2-Dibromo-3-Chloropropane 1	1 U	R	R	R	180 U	R	1 U	3 U
Dilution Factor:	1.00	1.00	1.00	1.00	179	1.00	1.00	3.10
Sample Volume\Weight (ml\g):	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Associated Method Blank:	CF950926B56.D	CB950929C55.D	CB950929C55.D	CB950929C55.D	CF950926B56.D	CB950929C55.D	CF950926B56.D	CF950926B56.D
Associated Equipment Blank:	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX	09QSXX4XXXX1XX	09QSXX4XXXX1XX	09QSXX3XXXX1XX
Associated Field Blank:	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX	09QDXX4XXXX1XX
Associated Trip Blank:	09QTXX7XXXX1XX	09QTXX9XXXX1XX	09QTXX9XXXX1XX	09QTXX9XXXX1XX	09QTXX7XXXX1XX	09QTXX9XXXX1XX	09QTXX8XXXX1XX	09QTXX7XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-008	MW-009	MW-010	MW-020	MW-021	MW-022	MW-204 DUP	MW-204
ISIS ID:	09MW008XXX08XX	09MW009XXX08XX	09MW010XXX08XX	09MW020XXX08XX	09MW021XXX08XX	09MW022XXX08XX	09MW204XXX08XD	09MW204XXX08XX
LAB NUMBER:	759264 #	758798 #	758786 #	758322 #	757181 #	757974 #	758314 #	758302 #
DATE SAMPLED:	09/25/95	09/22/95	09/22/95	09/21/95	09/19/95	09/20/95	09/21/95	09/21/95
DATE ANALYZED:	09/29/95	09/26/95	09/27/95	09/26/95	09/22/95	09/22/95	09/27/95	09/27/95

ANALYTE	SOW-10/92 CRQL																			
Chloromethane	1	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U
Bromomethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	2	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Acetone	5		R	78	J		R	5	UJ		R		R	10	UJ	7	UJ
Carbon Disulfide	1	1	U	1	UJ	1	UJ	1	UJ	1	U	1	UJ	1	UJ	1	UJ
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	1	U	1	U	1	U	1	U	1		1	U	1	U	1	U
1,2-Dichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5		R		R		R		R		R		R		R		R
Bromochloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	1	U	1	U	1	U	1	U	1		1	U	1	U	1	U
Dibromochloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-Pentanone	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5		R		R		R		R		R	5	U	5	U	5	U
Tetrachloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	1	U	1	U	0.5	J	1	U	1	U	1	U	1	U	1	U
Styrene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Total Xylenes	1	1	U	2	U	4	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	1		R	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dilution Factor:		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Sample Volume\Weight (ml\g):		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0	
Associated Method Blank:		CB950929C55.D		CD950925B56.D		CF950926B56.D		CD950925B56.D		CB950922C52.D		CC950922A56.D		CF950926B56.D		CF950926B56.D	
Associated Equipment Blank:		09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX4XXXX1XX		09QSXX3XXXX1XX		09QSXX2XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX		09QSXX3XXXX1XX	
Associated Field Blank:		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX4XXXX1XX		09QDXX4XXXX1XX	
Associated Trip Blank:		09QTXX9XXXX1XX		09QTXX8XXXX1XX		09QTXX8XXXX1XX		09QTXX7XXXX1XX		09QTXX5XXXX1XX		09QTXX6XXXX1XX		09QTXX7XXXX1XX		09QTXX7XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-901	MW-902	MW-903	MW-904	MW-905	MW-906	MW-907	MW-908
ISIS ID:	09MW901XXX08XX	09MW902XXX08XX	09MW903XXX08XX	09MW904XXX08XX	09MW905XXX08XX	09MW906XXX08XX	09MW907XXX08XX	09MW908XXX08XX
LAB NUMBER:	756620 #	756666 #	757958 #	757952 #	757966 #	757175 #	757947 #	756646 #
DATE SAMPLED:	09/18/95	09/18/95	09/20/95	09/20/95	09/20/95	09/19/95	09/20/95	09/18/95
DATE ANALYZED:	09/21/95	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95	09/21/95
ANALYTE SOW-10/92 CRQL								
Chloromethane 1	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Bromomethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride 1	1 U	1 U	1 U	10	1 U	2	11	1
Chloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride 2	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Acetone 5	R	5 UJ	5 UJ	R	5 UJ	R	5 UJ	R
Carbon Disulfide 1	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ
1,1-Dichloroethene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U
cis-1,2-Dichloroethene 1	1 U	1 U	1 U	14	1 U	8	1	1 U
trans-1,2-Dichloroethene 1	1 U	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U
Chloroform 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone 5	R	R	R	R	R	R	R	R
Bromochloromethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene 1	1 U	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U
Dibromochloromethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-Pentanone 5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone 5	R	R	5 U	5 U	5 U	R	5 U	R
Tetrachloroethene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylenes 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane 1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dilution Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Associated Method Blank:	CB950921A56.D	CB950921A56.D	CC950922A56.D	CC950922A56.D	CC950922A56.D	CB950922C52.D	CC950922A56.D	CB950921A56.D
Associated Equipment Blank:	09QSXX2XXXX1XX	09QSXX2XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX3XXXX1XX	09QSXX2XXXX1XX
Associated Field Blank:	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX	09QDXX3XXXX1XX
Associated Trip Blank:	09QTXX4XXXX1XX	09QTXX4XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX6XXXX1XX	09QTXX5XXXX1XX	09QTXX6XXXX1XX	09QTXX4XXXX1XX

Site: MONITORING WELL
#: Level IV Validation

Table 2
Validation / Summary Table

LOCATION:	MW-909	MW-910	MW-914	MW-915 DUP	MW-915	MW-916
ISIS ID:	09MW909XXX08XX	09MW910XXX08XX	09MW914XXX08XX	09MW915XXX08XD	09MW915XXX08XX	09MW916XXX08XX
LAB NUMBER:	757165 #	757158 #	757170 #	757138 #	757143 #	756653 #
DATE SAMPLED:	09/19/95	09/19/95	09/19/95	09/19/95	09/19/95	09/18/95
DATE ANALYZED:	09/22/95	09/22/95	09/22/95	09/22/95	09/22/95	09/21/95

ANALYTE	SOW-10/92 CRQL											
Chloromethane	1	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ	1	U
Bromomethane	1	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	1	U	1	U	1	U	5		6		1	U
Chloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	2	2	U	2	U	2	U	2	U	2	U	2	U
Acetone	5		R		R		R		R		R	15	UJ
Carbon Disulfide	1	1	U	1	U	1	U	1	U	1	U	1	UJ
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	1	U	1	U	1	U	1		1		1	U
cis-1,2-Dichloroethene	1	1	U	1	U	1	U	0.7	J	0.7	J	1	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5		R		R		R		R		R		R
Bromochloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	1	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-Pentanone	5	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5		R		R		R		R		R		R
Tetrachloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane	1	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	1	1	U	1	U	1	U	1	U	1	U	1	U
Total Xylenes	1	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	
1,2-Dichlorobenzene	1	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	1	1	U	1	U	1	U	1	U	1	U	1	U
Dilution Factor:		1.00		1.00		1.00		1.00		1.00		1.00	
Sample Volume\Weight (ml\g):		25.0		25.0		25.0		25.0		25.0		25.0	
Associated Method Blank:		CB950922C52.D		CB950922C52.D		CB950922C52.D		CB950922C52.D		CB950922C52.D		CB950921A56.D	
Associated Equipment Blank:		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX		09QSXX2XXXX1XX	
Associated Field Blank:		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX		09QDXX3XXXX1XX	
Associated Trip Blank:		09QTXX5XXXX1XX		09QTXX5XXXX1XX		09QTXX5XXXX1XX		09QTXX5XXXX1XX		09QTXX5XXXX1XX		09QTXX4XXXX1XX	

Site: MONITORING WELL
#: Level IV Validation