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Groundwater Monitoring Report for Six Sampling Events at the Old Navy Fuel Farm Naval Air Station, Brunswick, Maine

~~(Volume 1 of 2)~~

Contract No. N62472-92-D-1296
Contract Task Order No. 0035

U.S. NAVAL AIR STATION
BRUNSWICK, MAINE

Prepared for

Department of the Navy
Engineering Field Activity Northeast
Naval Facilities Engineering Command
North Loop & American Way, Building G
Code 182
Lester, Pennsylvania 19113-2090

Prepared by

EA Engineering, Science, and Technology, Inc.
Southborough Technology Park
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March 2004
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Alexander C. Easterday, P.G.
CTO Manager

5 March 2004
Date

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5 March 2004
Date

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FINAL
Project No. 296.0035

QUALITY REVIEW STATEMENT

Contract No. N62472-92-D-1296 EA Project No.: 29600.35
Contract Task Order No. 0035
Activity: Old Navy Fuel Farm Naval Air Station, Brunswick, Maine

Description of Report/Deliverable:

Groundwater Monitoring Report for Six Sampling Events at the Old Navy Fuel Farm, Naval Air Station, Brunswick, Maine

EA CTO Manager: Alexander C. Easterday, P.G.

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

Senior Technical Reviewer

5 March 2004

Peter A. Conde, P.G. (Date)
Hydrogeologist

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1. INTRODUCTION

Under Contract No. N62472-92-D-1296, Engineering Field Activity Northeast, Naval Facilities Engineering Command issued Contract Task Order No. 0035 to EA Engineering, Science, and Technology, Inc. to conduct groundwater monitoring at the Old Navy Fuel Farm (ONFF), Naval Air Station (NAS) Brunswick, Maine. NAS Brunswick is located south of the Androscoggin River and south of Route 1 between Routes 24 and 123. NAS Brunswick is an active base, owned and operated by the Federal Government through the Department of the Navy. The ONFF site is located on the northeast portion of NAS Brunswick (Figure 1).

A Groundwater Monitoring Plan (EA 2000a) was developed to support the Navy's overall strategy for remediation at the ONFF at NAS Brunswick. The ONFF has petroleum-impacted soil and groundwater. A soil removal action was completed in Fall 2000 during which approximately 15,000 tons of petroleum-impacted soil was removed by the Navy's Remedial Action Contractor, Foster Wheeler Environmental Corporation. The monitoring program was implemented to evaluate the effectiveness of the removal action in achieving cleanup goals.

1.1 SITE DESCRIPTION

The ONFF is located on the northeast portion of NAS Brunswick (Figure 1), and is bounded by Avenue B to the south, 6th Street to the west, and by undeveloped land to the north and east. The topography of the area is characterized as flat and exhibits little relief. Surface grade consists of a level field of grass and paved access roads. The site is not located within 2,000 ft of the Brunswick public water supply wells, and the site groundwater is not used as potable sources for drinking water.

1.2 SITE GEOLOGIC CONDITIONS

Previous hydrogeologic investigations (O'Brien & Gere Engineers, Inc. 1990, 1992) revealed that the site is underlain by a sandy deposit (Upper Sand) which is continuous and underlain by a glacio-marine silty clay deposit (designated as the Presumpscot Formation by the Maine Geologic Survey). The sandy deposit thickness ranges from 2.5 to 9.0 ft with thicker zones located at the northwest section of the site. The groundwater table occurs in the sandy zone, and groundwater flows generally southeasterly parallel to the surface topography.

1.3 HISTORICAL PETROLEUM BULK STORAGE AND ENVIRONMENTAL INVESTIGATION SUMMARY

Prior to decommissioning in 1993, the ONFF consisted of two separate petroleum bulk storage tank farms which, together, included nine mounded underground storage tanks (USTs). The older, western tank farm included five USTs, previously identified as USTs T-101 through T-105. USTs T-101 through T-103 were 100,000-gal capacity tanks used for storage of

petroleum sludge, unleaded gasoline, and aviation gasoline, respectively. At some time prior to April 1990, USTs T-101 through T-103 were taken out of service. USTs T-104 and T-105 were both 25,000-gal capacity tanks used for storage of ethylene glycol. The newer, eastern Fuel Farm included four USTs, previously identified as USTs T-202 through T-205. Each of these USTs were 567,000-gal capacity tanks used for storage of JP-5. All USTs, piping, and associated appurtenances were removed during facility decommissioning completed in 1993.

Previous environmental investigations (O'Brien & Gere Engineers, Inc. 1990, 1992) identified a dissolved-phase hydrocarbon plume located in the east central portion of the ONFF (east of 7th Street) which appeared to originate in the vicinity of former JP-5 UST T-202. This plume previously extended downgradient from the former location of T-202 toward the south-southeast and consisted primarily of benzene, toluene, ethylbenzene, and xylene (BTEX) compounds. In November 1991, a supplemental groundwater sampling event confirmed the continued presence of this dissolved-phase hydrocarbon plume (O'Brien & Gere Engineers, Inc. 1992).

In October and November 1993, HRP Associates, Inc., of Plainville, Connecticut completed a groundwater sampling event at the ONFF following facility decommissioning and associated UST removals, with the exception of T-202 and T-203 (HRP Associates, Inc. 1993). The results of these groundwater sampling events indicated that the dissolved-phase BTEX plume located in the eastern Fuel Farm had exhibited a significant reduction in total BTEX concentration with little or no indication of plume migration. The extent of the dissolved-phase BTEX plume did not exhibit significant change from April 1990 to October-November 1993. However, the maximum dissolved-phase BTEX concentration decreased from greater than 20,000 µg/L in 1990 to 4,777 µg/L in 1993, with similar reductions in dissolved-phase BTEX concentrations throughout the plume area. These observations document that significant natural attenuation of petroleum hydrocarbons at the ONFF has occurred.

It should be noted that groundwater samples collected by both O'Brien & Gere Engineers, Inc. and HRP Associates, Inc. during the period of 1990-1993 indicated the presence of a separate, dissolved-phase hydrocarbon release area in the western Fuel Farm (west of 7th Street). However, insufficient samples were collected to delineate the extent of the western dissolved-phase hydrocarbon plume at these times.

1.4 SUMMARY OF REMEDIAL PROGRAMS AT THE OLD NAVY FUEL FARM

Remedial programs completed at the ONFF include the following:

- Operation of an existing soil vapor extraction/air sparging system as a biosparging system (i.e., low-flow air injection without vapor extraction) during the period of August 1996 – December 1998

- Active soil vapor extraction/air sparging system operation (with groundwater recovery) during March-July 1999

- Biosparging system operation during September 1999 – August 2000
- Remedial excavation of residual source area soils during September-November 2000.

The following sections provide brief summaries of each remedial program outlined above.

1.4.1 Biosparging System Operation (August 1996 to December 1998)

A soil vapor extraction/air sparging system for remediation of vadose and saturated-zone hydrocarbon contamination at the ONFF was designed by HRP Associates, Inc. OHM, Inc. completed soil vapor extraction/air sparging system installation in early 1996. In June 1996, a pre-start investigation was conducted during which it was found that the water table elevation was at or above the level of the lateral soil vapor extraction intake screens, preventing operation of the soil vapor extraction system. Since effective operation of the soil vapor extraction system was not possible, the Navy obtained approval from the Maine Department of Environmental Protection (MEDEP) to operate the system as a biosparging system to enhance *in situ* biodegradation of petroleum hydrocarbons. The ONFF biosparging system was activated on 8 August 1996 with the injection of compressed air into both lateral soil vapor extraction screens and air sparging wells throughout the eastern and western dissolved-phase plume areas.

The biosparging system was operated until December 1998, at which point the system was de-activated to allow completion of system modifications for soil vapor extraction operations. Based on a comparison of groundwater samples collected prior to, and following this biosparging period (i.e., 7-8 August 1996 baseline sampling event and 15-18 June 1999 sampling event, respectively), a significant reduction in both the extent and concentration of dissolved-phase BTEX concentrations was exhibited throughout the ONFF. This observation is supported by 5 additional groundwater sampling events, conducted bi-annually during the biosparging system operational period (EA 1997a, 1997b, 1998a, 1998b, 2000b).

1.4.2 Soil Vapor Extraction/Air Sparging System Operation (March-July 1999)

In an effort to increase the effectiveness of active remedial operations at the ONFF, modifications were made to allow operation of the soil vapor extraction system (which had previously been inoperable due to elevated water table conditions). The modifications included installation of a dual-phase extraction and separation system and were completed during the period of October 1998 – March 1999. The soil vapor extraction/air sparging system was activated on 9 March 1999 and continued operation until 16 July 1999, when the vapor-phase granular activated carbon emission treatment system became saturated. During the active soil vapor extraction/air sparging period, approximately 600 lb of petroleum hydrocarbons were removed from the site (EA 2000a). Additional *in situ* treatment (i.e., biodegradation) due to enhanced oxygen delivery (both from active air sparging and vadose zone air entrainment) is likely to have occurred but was not quantified.

Following the rapid saturation of the vapor-phase granular activated carbon emission treatment system, the Navy performed an economic analysis of various remedial alternatives and identified excavation of residual source area soils followed by natural attenuation as the most suitable remedial strategy for the ONFF. During the interim period prior to remedial soil excavation (i.e., September 1999 – September 2000), the biosparging system was re-activated.

1.4.3 Remedial Soil Excavation Program

From 9 August to 2 September 1999, a direct-push investigation was completed to delineate the remaining petroleum-impacted source areas and to identify remedial excavation target areas (EA 2000c). The results of the direct-push investigation were used to identify areas for subsequent test-pit excavation completed by Foster Wheeler Environmental Corporation, Inc. (Foster Wheeler 2001). Based on the results of the direct-push and test pit sampling programs, excavation target areas were identified.

During the period of 11 September to 7 November 2000, Foster Wheeler Environmental Corporation removed approximately 14,677 tons of petroleum-impacted soil from the ONFF site. Confirmatory sampling results of the excavation bottom and sidewall samples indicated that residual petroleum impacted soil remains onsite at concentrations ranging from non-detect to 840 mg/kg total petroleum hydrocarbon (TPH) (reported as cumulative TPH-diesel range organic [DRO] and TPH-gasoline range organic [GRO]).

During the test pitting and soil excavation process, the existing soil vapor extraction/air sparging system field components were either removed from the site or abandoned in place. Existing monitoring wells and well points located within the ONFF fence line were decommissioned during 23-30 April 2001 in accordance with MEDEP Solid Waste Management Rules (EA 2001). Therefore, groundwater sampling events conducted after 30 April 2001 include only monitoring wells located downgradient of the ONFF fence line. These monitoring wells serve as sentinel wells to assess the potential for offsite migration of dissolved-phase petroleum compounds. The locations of the decommissioned wells are depicted in Figure 2.

1.5 GROUNDWATER SAMPLING EVENTS

Following completion of the remedial soil excavation program, EA collected groundwater samples from sentinel monitoring wells located downgradient from the ONFF fence line for six events between December 2000 and April 2003. This report presents the monitoring data from the following groundwater sampling events completed at the ONFF on December 2000, May and October 2001, April and September 2002, and April 2003.

1.6 REPORT ORGANIZATION

This Groundwater Monitoring Report details the findings, conclusions, and recommendations based on six groundwater monitoring events that occurred in December 2000, May and October 2001, April and September 2002, and April 2003. This section provides an introduction and background of the remedial and monitoring program activities at the ONFF site. Section 2 details the six monitoring events that occurred between December 2000 and April 2003. Section 3 presents the results of the six monitoring events. Section 4 presents conclusions and recommendations based on these results. Graphs showing trends in analytical data results are presented in Appendix A. The complete analytical data are provided in Appendix B. Appendix C includes the Field Record of Well Gauging, Purging, and Sampling forms. Appendix D contains tag maps that display the detected contaminants from each of the sampling events.

2. MONITORING PLAN

2.1 GROUNDWATER MONITORING

2.1.1 Sampling Locations

A total of 14 monitoring wells were sampled to assess groundwater quality at the ONFF from 11 to 14 December 2000 (MW-NASB-49, MW-NASB-51, MW-NASB-54, MW-NASB-58, MW-NASB-61R, MW-NASB-62, MW-NASB-98, MW-NASB-206, MW-NASB-207, MW-NASB-208, MW-NASB-209R, MW-NASB-210, MW-NASB-213, and MW-NASB-244). The locations of the wells are shown on Figure 2.

A total of 10 monitoring wells were sampled to assess groundwater quality at the ONFF from 8 to 9 May 2001 (MW-NASB-46, MW-NASB-49, MW-NASB-58, MW-NASB-98, MW-NASB-206, MW-NASB-207, MW-NASB-208, MW-NASB-209R, MW-NASB-210, and MW-NASB-244).

A total of 12 monitoring wells were sampled to assess groundwater quality at the ONFF from 17 to 25 October 2001 (MW-NASB-46, MW-NASB-49, MW-NASB-51, MW-NASB-58, MW-NASB-62, MW-NASB-98, MW-NASB-206, MW-NASB-207, MW-NASB-209R, MW-NASB-210, MW-NASB-244, and MW-NASB-245).

A total of 14 monitoring wells were sampled to assess groundwater quality at the ONFF from 24 to 25 April 2002 (MW-NASB-46, MW-NASB-49, MW-NASB-51, MW-NASB-58, MW-NASB-62, MW-NASB-98, MW-NASB-206, MW-NASB-207, MW-NASB-208, MW-NASB-209R, MW-NASB-210, MW-NASB-213, MW-NASB-244, and MW-NASB-245).

A total of 13 monitoring wells were sampled between 24 to 27 September 2002 and from 14 to 17 April 2003 (MW-NASB-46, MW-NASB-49, MW-NASB-51, MW-NASB-58, MW-NASB-62, MW-NASB-98, MW-NASB-206, MW-NASB-207, MW-NASB-208, MW-NASB-209R, MW-NASB-210, MW-NASB-244, and MW-NASB-245).

Monitoring wells MW-NASB-54, MW-NASB-61, and MW-NASB-213 were not sampled as presented in the ONFF Groundwater Monitoring Plan (EA 2000a) due to the decommissioning of these monitoring wells between 23 and 30 April 2001, and are detailed on Figure 2. Since the ONFF area was proposed for development into athletic fields for NAS Brunswick personnel, these wells were decommissioned.

Groundwater monitoring well MW-NASB-245 was not sampled during the December 2000 and May 2001 sampling events due to insufficient volume of water available for a valid analytical sample. Groundwater monitoring well MW-NASB-51 was not sampled during the May 2001 sampling event because field personnel could not gain access to the well.

Groundwater monitoring well MW-NASB-208 was not sampled during the May and October 2001 sampling events because of construction activity in this area.

2.1.2 Groundwater Sampling Program

Prior to collecting groundwater samples, measurement and recording of groundwater elevations were conducted at all of the wells at the site. In accordance with the Groundwater Monitoring Plan (EA 2000a), only the shallow well was gauged and sampled at nested monitoring well clusters. An oil/water interface probe was utilized to assess the presence or absence of light, non-aqueous phase liquid on the groundwater surface. During the December 2000, May and October 2001, April and September 2002, and April 2003 sampling events, no light, non-aqueous phase liquid was detected in the groundwater monitoring wells at the ONFF site.

During each sampling round, 1 groundwater sample was collected via low-flow sampling methods from each of the groundwater monitoring wells as presented in Section 2.1.1. One duplicate sample was collected from groundwater monitoring well MW-NASB-209R for the December 2000, May and October 2001, April and September 2002, and April 2003 sampling events. One field equipment rinsate blank per sampling event was collected and analyzed for sample collection quality control and quality assurance procedures. One trip blank was collected and analyzed per sampling event to document the potential introduction of contaminants during sample shipment and evaluate potential cross-contamination of the samples.

2.1.3 Sampling Parameters

Groundwater samples collected for the six events were analyzed for the following:

- Volatile organic compounds (VOCs) by U.S. Environmental Protection Agency Method 602
- TPHs by Department of Human Services Health and Environmental Testing Laboratory, State of Maine Methods 4.1.25 (DRO) and 4.2.17 (GRO)
- Methane by U.S. Environmental Protection Agency Method 3810 for the December 2000, May 2001 and October 2001, and by AM GAX for April 2002 and September 2002 and April 2003
- Hydrogen by Modified SW-846 for the December 2000 and May and October 2001, and by AM GAX for April 2002 and September 2002 and April 2003
- General water quality parameters by U.S. Environmental Protection Agency 300/400 Series methods
- Iron and manganese by Hach Methods 8146 and 8149, respectively.

The analytical results of groundwater samples collected during these events were compared to the Maximum Exposure Guidelines (MEGs) obtained from the State of Maine Department of Human Services to assess whether there were any exceedances of applicable regulatory standards. Analytic results for the December 2000, May and October 2001, April and September 2002, and April 2003 sampling events are presented in Tables 1 through 7, respectively. The analytical results are summarized in Appendix A, and Laboratory Form 1s are provided in Appendix B.

3. SAMPLING RESULTS

3.1 WATER LEVEL GAUGING PROGRAM

During the December 2000, May and October 2001, April and September 2002, and April 2003 sampling events, select groundwater monitoring wells at the ONFF site were gauged prior to sampling as presented in Section 2.1.1. Interpretive groundwater table maps were developed from the gauging data that were collected during the six sampling events. The gauging data from the December 2000, May and October 2001, April and September 2002, and April 2003 sampling events are presented in Table 1. The interpreted groundwater table contour maps based upon the water levels recorded during each sampling event are presented in Figures 3, 4, 5, 6, 7, and 8.

3.2 GROUNDWATER MONITORING

3.2.1 Volatile Organic Compounds

3.2.1.1 December 2000

No VOC concentrations were detected in any of the groundwater samples. The VOC data for the December 2000 sampling event are summarized in Table 2.

3.2.1.2 May 2001

One VOC (toluene) was detected at concentrations of 1.7 µg/L and 1.8 µg/L in groundwater samples collected from wells MW-NASB-207 and MW-NASB-208, respectively. The detected concentrations of toluene are below the MEDEP MEG of 1,400 µg/L. A summary of the groundwater data for the May 2001 sampling event is presented in Table 3.

3.2.1.3 October 2001

During this sampling event, 2 VOCs (benzene and methyl tertiary-butyl ether [MTBE]) were detected in 3 of 14 groundwater samples, however, no detected VOCs exceeded the applicable MEDEP MEG. Benzene (MEG is 12 µg/L) was detected in sample MW-NASB-244 at 0.35 J µg/L and in sample MW-NASB-245 at 0.23 J µg/L. MTBE (MEG is 35 µg/L) was detected in sample MW-NASB-98 at 0.87 J µg/L. A summary of the groundwater data for the October 2001 sampling event is presented in Table 4.

3.2.1.4 April 2002

No VOC concentrations were detected in any of the groundwater samples during April 2002. The VOC data from the sampling event are summarized in Table 5.

3.2.1.5 September 2002

Three VOCs (benzene, toluene, and MTBE) were detected in 4 of 14 groundwater samples; however, no detected VOCs exceeded the applicable MEDEP MEG. The VOC data from the September 2002 sampling event are summarized in Table 6.

3.2.1.6 April 2003

During this sampling event, 2 VOCs (benzene and MTBE) were detected in 2 of 15 groundwater samples, however, none of the VOCs detected exceeded the applicable MEG. Benzene (MEG 12 µg/L) was detected in sample MW-NASB-208R at 1.4J at µg/L. MTBE was detected in sample MW-NASB-98 at 15 µg/L. A summary of the groundwater data for the April 2003 sampling event is presented in Table 7.

3.2.2 Total Petroleum Hydrocarbons

3.2.2.1 December 2000 Sampling Event

Total Petroleum Hydrocarbons – Diesel Range Organics

TPH-DRO was detected in 12 of 15 groundwater samples (Table 2) and exceeded the MEG of 50 µg/L in 10 samples collected from wells MW-NASB-207, MW-NASB-208, MW-209R-duplicate sample (Dup), MW-NASB-210, MW-NASB-49, MW-NASB-51, MW-NASB-54, MW-NASB-58, MW-NASB-61R, and MW-NASB-98. The TPH-DRO concentrations ranged from 51 µg/L to 700 µg/L. The samples collected from wells MW-NASB-209R, MW-NASB-244 had concentrations of 44 J µg/L and 43 J µg/L, respectively. Table 2 presents a summary of the data for the December 2002 sampling event.

Total Petroleum Hydrocarbons – Gasoline Range Organics

No dissolved-phase TPH-GRO was detected at concentrations exceeding the MEG (50 µg/L) for this sampling event. TPH-GRO was detected in samples collected from wells MW-NASB-54 and MW-NASB-61R at concentrations of 45 µg/L and 24 µg/L, respectively. Table 2 presents a summary of the data for the December 2000 sampling event.

3.2.2.2 May 2001 Sampling Event

Total Petroleum Hydrocarbons – Diesel Range Organics

Groundwater samples collected during the May 2001 sampling event had concentrations of dissolved-phase TPH-DRO detected in all 10 samples. The MEDEP MEG for dissolved-phase TPH-DRO (50 µg/L) was exceeded at 4 monitoring wells locations (MW-NASB-49,

MW-NASB-98, MW-NASB-208, and MW-NASB-210) with concentrations ranging from 63 µg/L to 410 µg/L. A summary of the data is provided in Table 3.

Total Petroleum Hydrocarbons – Gasoline Range Organics

No concentrations of dissolved-phase TPH-GROs were detected above the laboratory detection limit of 10 µg/L in 11 groundwater samples collected during this sampling event. A summary of the data is provided in Table 3.

3.2.2.3 October 2001 Sampling Event

Total Petroleum Hydrocarbons – Diesel Range Organics

Dissolved-phase TPH-DROs were detected in 8 of 13 groundwater samples during the October 2001 sampling event. The MEG for TPH-DRO (50 µg/L) was exceeded by 5 groundwater samples wells (MW-NASB-46, MW-NASB-49, MW-NASB-207, MW-NASB-209R (Dup), and MW-NASB-244) with concentrations ranging from 55 µg/L to 86 µg/L. A summary of the data is provided in Table 4.

Total Petroleum Hydrocarbons – Gasoline Range Organics

No concentrations of dissolved-phase TPH-GROs were detected above the laboratory detection limit of 0.5 µg/L in 13 samples collected during this sampling event. A summary of the data is provided in Table 4.

3.2.2.4 April 2002 Sampling Event

Total Petroleum Hydrocarbons – Diesel Range Organics

Concentrations of dissolved-phase TPH-DRO were detected in 6 of 14 samples, however, none of the detected concentrations exceeded the MEG (50 µg/L). TPH-DRO was detected in the samples collected from wells MW-NASB-208, MW-NASB-244, MW-NASB-46, MW-NASB-58, MW-NASB-62, and MW-NASB-98, and the concentrations ranged from 30J µg/L to 40J µg/L. The data are summarized in Table 5.

Total Petroleum Hydrocarbons – Gasoline Range Organics

No concentrations of dissolved-phase TPH-GROs were detected above the laboratory detection limit of 50 µg/L in 14 samples collected during this sampling event. The data are summarized in Table 5.

3.2.2.5 September 2002 Sampling Event

Total Petroleum Hydrocarbons – Diesel Range Organics

Dissolved-phase TPH-DRO concentrations were identified in10 of 14 samples collected during this sampling event. The detected concentrations ranged from 50 µg/L to 60 µg/L. During this sampling event, only one exceedance of the MEG was identified at well MW-NASB-60 (60 µg/L). The dissolved-phase TPH-DRO results are summarized in Table 6.

Total Petroleum Hydrocarbons – Gasoline Range Organics

Concentrations of dissolved-phase TPH-GRO were detected in 3 of 14 groundwater samples; however, none exceeded the applicable MEG (50 µg/L). The detected dissolved-phase TPH-GRO concentrations ranged from 8J µg/L to 15 µg/L. The results are summarized in Table 6.

3.2.2.6 April 2003 Sampling Event

Total Petroleum Hydrocarbons – Diesel Range Organics

Dissolved-phase TPH-DRO was detected in one groundwater sample at a concentration of 153 µg/L collected from well MW-NASB-208R, and exceeds the MEG (50 µg/L). The sample results for this sampling event are presented in Table 7.

Total Petroleum Hydrocarbons – Gasoline Range Organics

No concentrations of dissolved-phase TPH-GROs were detected above the laboratory detection limits during this sampling event. The data are summarized in Table 7.

3.2.3 Monitored Natural Attenuation Parameters

Groundwater samples were analyzed for monitored natural attenuation parameters during sampling events at the ONFF to support a potential future evaluation of monitored natural attenuation as a remedy for the ONFF. This report will present the monitored natural attenuation data and discuss the results, but is not intended to be a formal monitored natural attenuation evaluation. The reported high and low concentrations in this section are extracted from the six monitoring events combined. The monitored natural attenuation parameter data are presented in Table 8.

3.2.3.1 Alkalinity

Alkalinity has been collected during each of the six groundwater sampling events completed at the ONFF. Detected concentrations of alkalinity from the sampling data range from 3.7 J mg/L to 205 mg/L.

3.2.3.2 Chloride

Chloride has been collected from ONFF wells during each of the six groundwater sampling events completed. Detected concentrations of chloride from the sampling data range from 2 mg/L to 131 mg/L.

3.2.3.3 Nitrate

Nitrate has been collected from ONFF wells during each of the six groundwater sampling events completed. Detected concentrations of nitrate from the sampling data range from 0.02 J mg/L to 5.6 mg/L.

3.2.3.4 Sulfate

Sulfate has been collected from ONFF wells during each of the six groundwater sampling events completed. Detected concentrations of sulfate from the sampling data range from 2.9 mg/L to 190 mg/L.

3.2.3.5 Sulfide

Sulfide has been collected from ONFF wells for 2 of 6 groundwater sampling events completed. Detected concentrations of sulfide from the sampling data range from 3 mg/L to 140 mg/L.

3.2.3.6 Total Organic Carbon

Total organic carbon has been collected from ONFF wells during each of the six groundwater sampling events completed. Detected concentrations of total organic carbon from the sampling data range from 1 mg/L to 57 mg/L.

3.2.3.7 Iron

Iron has been collected from ONFF wells during each of the six groundwater sampling events completed. Detected concentrations of iron from the sampling data range from 0.4 mg/L to 13.6 mg/L.

3.2.3.8 Manganese

Manganese has been collected from ONFF wells during each of the six groundwater sampling events completed. Manganese was not detected above the detection limit in the samples collected during the December 2000, May and October 2001, and April 2002 sampling events. Manganese was detected in one sample collected during the September 2002 and April 2003 sampling events. Manganese was detected in the sample collected from well MW-NASB-207 at 0.2 mg/L in September 2002. In April 2003, manganese was detected in the sample collected

from well MW-NASB-245 at a concentration of 0.9 mg/L. Manganese was not detected above the detection limit in any of the remaining wells during the September 2002 and April 2003 sampling rounds.

3.2.3.9 Hydrogen

Hydrogen has been collected from ONFF wells during each of the six groundwater sampling events completed. Hydrogen has not been detected in the wells at the ONFF for the sampling rounds completed.

3.2.3.10 Methane

Methane has been collected from ONFF wells during each of the six groundwater sampling events completed. Detected concentrations of methane range from 0.017 µg/L to 4,800 µg/L for sampling rounds completed at the ONFF wells during this reporting period.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

4.1.1 Water Level Gauging Program

The results of the groundwater elevation program performed for the last six events, from December 2000 to April 2003, indicate that groundwater flow direction is generally toward the east to southeast across the ONFF site. Light, non-aqueous phase liquid was not identified in the groundwater monitoring wells gauged for the sampling events during this reporting period.

4.1.2 Groundwater Monitoring and Sampling Program

The results of the groundwater sampling and analysis program conducted during sampling events identify the following:

- Low concentrations of VOCs (benzene, toluene, and MTBE) have been detected at some of the ONFF wells ranging from not detected to 15 µg/L. However, there were no exceedances of the applicable MEGs for these detected VOCs. The VOC data indicate that the detected concentrations of VOCs have remained stable during this period of monitoring, except for MTBE concentrations at MW-NASB-098 which have risen from non-detect to 15 µg/L over the last four sampling events; however, this concentration is less than half the State MEG (35 µg/L) for MTBE.

- Dissolved-phase TPH-DRO was detected in several monitoring wells during each of the sampling events at concentrations exceeding the MEG during five of six sampling rounds.

  — ***December 2001***—Dissolved-phase TPH-DRO was identified exceeding the MEG (50 µg/L) in 10 samples collected from wells MW-NASB-207, MW-NASB-208, MW-209R, MW-NASB-210, MW-NASB-49, MW-NASB-51, MW-NASB-54, MW-NASB-58, MW-NASB-61R, and MW-NASB-98. The detected TPH-DRO concentrations exceeding the MEG ranged from 51 µg/L to 700 µg/L.

  — ***May 2001***—Dissolved-phase TPH-DRO was identified in several wells at concentrations ranging from non-detected to 410 µg/L. Dissolved-phase TPH-DRO exceeded the MEG (50 µg/L) at 4 groundwater monitoring well locations (MW-NASB-49, MW-NASB-98, MW-NASB-208, and MW-NASB-210) with concentrations ranging from 63 µg/L to 410 µg/L.

— ***October 2001***—Dissolved-phase TPH-DRO was identified in 8 of 13 groundwater samples collected at the ONFF. Dissolved-phase TPH-DRO concentrations exceeded the MEG in 5 groundwater samples collected from wells MW-NASB-46, MW-NASB-49, MW-NASB-207, MW-NASB-209R, and MW-NASB-244 with concentrations ranging from 55 µg/L to 86 µg/L.

— ***April 2002***—Dissolved-phase TPH-DRO was identified in 6 of 14 groundwater samples collected. No TPH-DRO concentrations were found exceeding the MEG.

— ***September 2002***—Dissolved-phase TPH-DRO was identified in 10 of 14 samples collected from the ONFF wells. Only one well had a concentration of dissolved-phase TPH-DRO (60 µg/L) which exceeded the MEG (50 µg/L). No other wells were found exceeding the MEG for TPH-DRO during this sampling event.

— ***April 2003***—Dissolved-phase TPH-DRO concentrations were identified at well MW-NASB-208R at a concentration of 153 µg/L, which exceeds the MEG of 50 µg/L. There were no other detected concentrations or TPH-DRO during this event.

- Dissolved-phase TPH-DRO concentrations have demonstrated an overall downward trend in the groundwater monitoring wells sampled during the last six sampling events.

- Dissolved-phase TPH-GRO concentrations were detected in two of six sampling events completed during this reporting period.

  — ***December 2000***—Dissolved-phase TPH-GRO concentrations were identified in 2 well locations (MW-NASB-54 and MW-NASB-61R) with concentrations of 45 µg/L and 24 µg/L, respectively. There were no other detected concentrations of dissolved-phase TPH-DRO during this event.

  — ***September 2002***—Dissolved-phase TPH-GRO concentrations were identified in 3 well locations (MW-NASB-51, MW-NASB-98, and MW-NASB-208) at concentrations ranging from 8J µg/L to 15 µg/L.

  — Dissolved-phase TPH-GRO was not detected during sampling events conducted in May and October 2001, April 2002, and April 2003.

- Dissolved-phase TPH-GRO concentrations have demonstrated a stable steady state trend during the last six sampling events at the ONFF.

- The effectiveness of natural attenuation for mitigating residual petroleum hydrocarbons at the ONFF is evidenced by analytical trend data for BTEX and TPH, which exhibit continued reductions in dissolved-phase concentrations. In addition to the analytical trend data, water quality indicator parameters continue to demonstrate a large demand for

electron acceptors (particularly oxygen) within the residual petroleum-impacted area. The reduction in electron acceptor concentrations coupled with the concurrent production of metabolic end products (i.e., carbon dioxide and methane) support the conclusion that biodegradation of residual petroleum compounds continues to occur. This conclusion is further evidenced by the downgradient monitoring well data, which demonstrate that the hydrocarbon plumes have reached steady state and that offsite migration of hydrocarbon compounds is effectively prevented by natural attenuation mechanisms.

- The groundwater data from this reporting period support the conclusion of the February 2003 BIOSCREEN Modeling of Total Petroleum Hydrocarbons at the ONFF (EA 2003) that the plumes (east and west plumes) have reached steady state and that further migration is not likely to occur. This is supported by the groundwater data presented in this report that indicate TPH-GRO concentrations are not detected southeast of Fitch Avenue and that downgradient concentrations of dissolved-phase TPH-DRO continue to decrease.

4.2 RECOMMENDATIONS

The following recommendations are based on the results of the six monitoring events performed between December 2000 and April 2003:

- Continue to perform monitoring of VOCs (BTEX and MTBE) and dissolved-phase TPH-DRO analysis in order to provide additional data to identify groundwater trends and determine the effectiveness of the removal actions at the site.

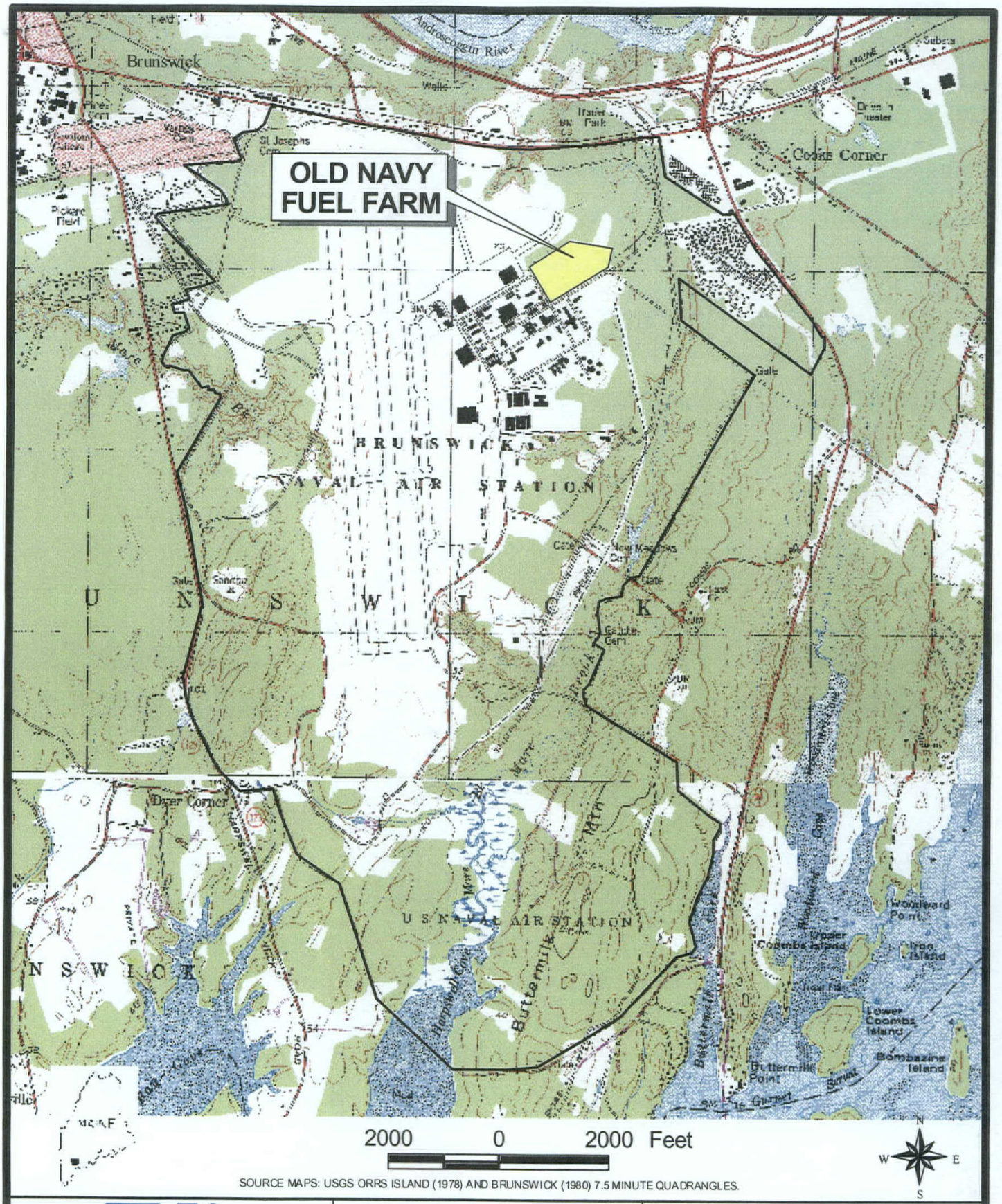
- Eliminate dissolved-phase TPH-GRO analysis from the ONFF groundwater sampling program after obtaining MEDEP concurrence.

- Install 3 shallow groundwater monitoring wells along Avenue B to provide coverage of the shallow groundwater conditions directly downgradient of, and closer to, the former source areas at the ONFF. Several former wells within the footprint of the ONFF were decommissioned for future construction activities that were included in the groundwater monitoring program for the ONFF.

- Request approval from MEDEP to conduct bi-annual monitoring of the ONFF to coincide with the Spring and Fall Long-Term Monitoring Program activities at the National Priorities List sites at NAS Brunswick.

- Revise the list of monitored natural attenuation parameters to the following:

  — Iron II (field measurement)
  — Dissolved oxygen
  — Methane
  — Nitrate
  — Conductivity
  — pH
  — Oxidation reduction potential
  — Total organic carbon.



SOURCE MAPS: USGS ORRS ISLAND (1978) AND BRUNSWICK (1980) 7.5 MINUTE QUADRANGLES.

EA®	OLD NAVY FUEL FARM NAVAL AIR STATION BRUNSWICK, MAINE	FIGURE I SITE LOCATION MAP

PROJECT MGR	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	DATE	PROJECT No	FILE No
ACE	DC	DC	ACE	AS SHOWN	22 DEC 2003	29600.35	I:\NASB_GIS \NAVY. APR

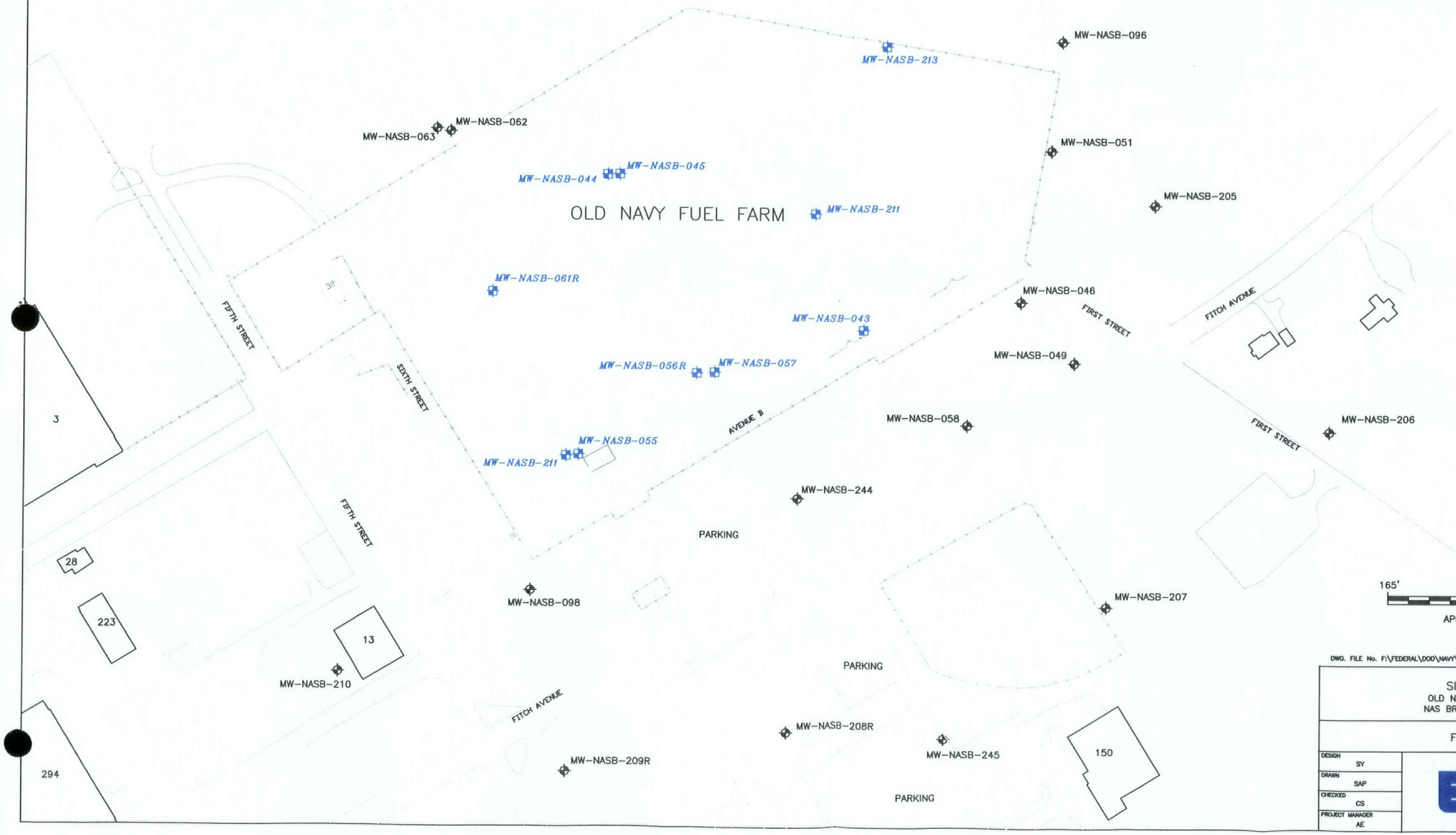
LEGEND

MW-NASB-054 — MONITORING WELL LOCATION

MW-NASB-211 — DECOMMISSIONED MONITORING WELL LOCATION

CHAIN LINK FENCE

NOTE:
WELLS NOT INCLUDED IN OLD NAVY FUEL FARM SAMPLING EVENT INCLUDE: MW-NASB-063, MW-NASB-096, AND MW-NASB-205.



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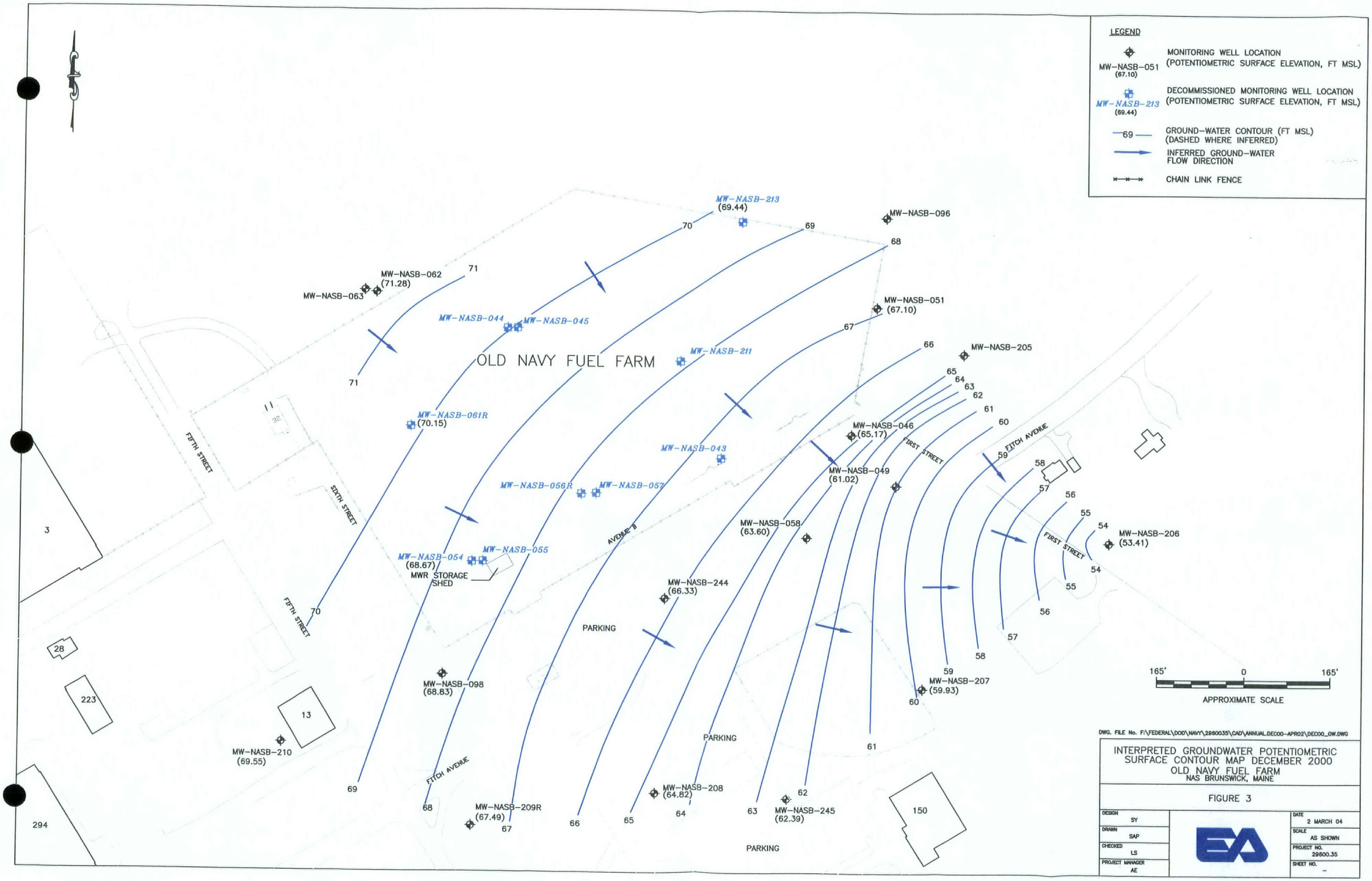
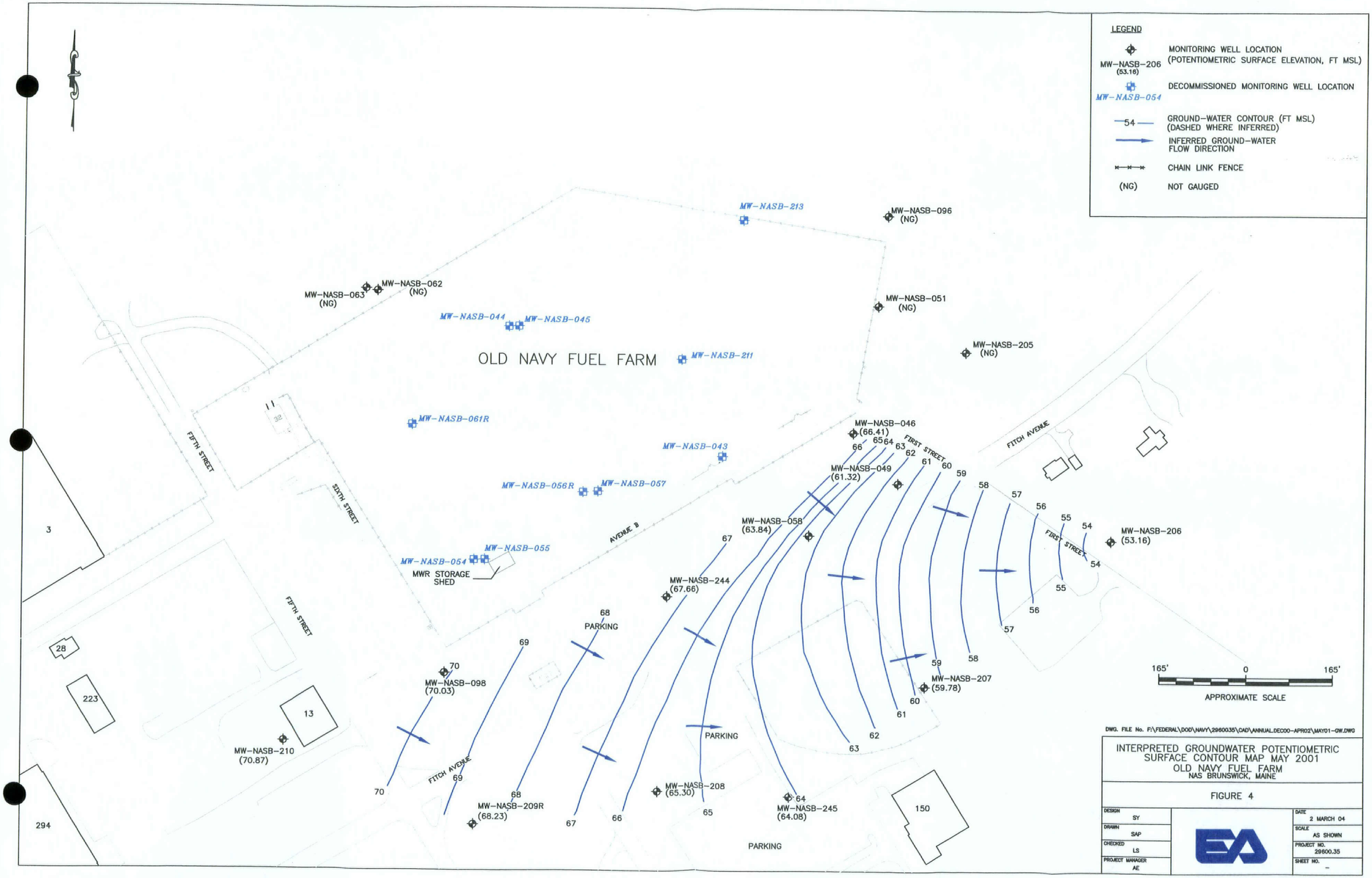
SITE PLAN
OLD NAVY FUEL FARM
NAS BRUNSWICK, MAINE

FIGURE 2

DESIGN SY	EA	DATE 23 JULY 02
DRAWN SAP		SCALE AS SHOWN
CHECKED CS		PROJECT NO. 29600.35
PROJECT MANAGER AE		SHEET NO. –


LEGEND
MW-NASB-051 (67.10)
MONITORING WELL LOCATION (POTENTIOMETRIC SURFACE ELEVATION, FT MSL)
MW-NASB-213 (69.44)
DECOMMISSIONED MONITORING WELL LOCATION (POTENTIOMETRIC SURFACE ELEVATION, FT MSL)
69
GROUND-WATER CONTOUR (FT MSL) (DASHED WHERE INFERRED)
INFERRED GROUND-WATER FLOW DIRECTION
CHAIN LINK FENCE
OLD NAVY FUEL FARM
MW-NASB-213 (69.44)
MW-NASB-096
MW-NASB-062 (71.28)
MW-NASB-063
MW-NASB-044
MW-NASB-045
MW-NASB-051 (67.10)
MW-NASB-211
MW-NASB-205
MW-NASB-061R (70.15)
MW-NASB-046 (65.17)
MW-NASB-043
MW-NASB-049 (61.02)
MW-NASB-056R
MW-NASB-057
MW-NASB-058 (63.60)
MW-NASB-206 (53.41)
MW-NASB-054 (68.67)
MW-NASB-055
MWR STORAGE SHED
MW-NASB-244 (66.33)
MW-NASB-098 (68.83)
MW-NASB-207 (59.93)
MW-NASB-210 (69.55)
MW-NASB-208 (64.82)
MW-NASB-209R (67.49)
MW-NASB-245 (62.39)
PARKING
FIFTH STREET
SIXTH STREET
AVENUE B
FITCH AVENUE
FIRST STREET
3
28
223
13
294
150
165' 0 165'
APPROXIMATE SCALE
DWG. FILE No. F:\FEDERAL\DOD\NAVY\2960035\CAD\ANNUAL.DEC00-APR02\DEC00_GW.DWG
INTERPRETED GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP DECEMBER 2000
OLD NAVY FUEL FARM
NAS BRUNSWICK, MAINE
FIGURE 3
DESIGN SY
DRAWN SAP
CHECKED LS
PROJECT MANAGER AE
DATE 2 MARCH 04
SCALE AS SHOWN
PROJECT NO. 29600.35
SHEET NO. –


LEGEND
MW-NASB-206 (53.16)
MONITORING WELL LOCATION (POTENTIOMETRIC SURFACE ELEVATION, FT MSL)
MW-NASB-054
DECOMMISSIONED MONITORING WELL LOCATION
54
GROUND-WATER CONTOUR (FT MSL) (DASHED WHERE INFERRED)
INFERRED GROUND-WATER FLOW DIRECTION
CHAIN LINK FENCE
(NG)
NOT GAUGED
OLD NAVY FUEL FARM
MW-NASB-213
MW-NASB-096 (NG)
MW-NASB-063 (NG)
MW-NASB-062 (NG)
MW-NASB-051 (NG)
MW-NASB-044
MW-NASB-045
MW-NASB-205 (NG)
MW-NASB-211
MW-NASB-061R
MW-NASB-046 (66.41)
MW-NASB-043
MW-NASB-049 (61.32)
MW-NASB-056R
MW-NASB-057
MW-NASB-058 (63.84)
MW-NASB-206 (53.16)
MW-NASB-055
MW-NASB-054
MWR STORAGE SHED
MW-NASB-244 (67.66)
MW-NASB-098 (70.03)
MW-NASB-207 (59.78)
MW-NASB-210 (70.87)
MW-NASB-208 (65.30)
MW-NASB-209R (68.23)
MW-NASB-245 (64.08)
FIFTH STREET
SIXTH STREET
AVENUE B
FIRST STREET
FITCH AVENUE
PARKING
3
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223
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294
150
165'
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165'
APPROXIMATE SCALE
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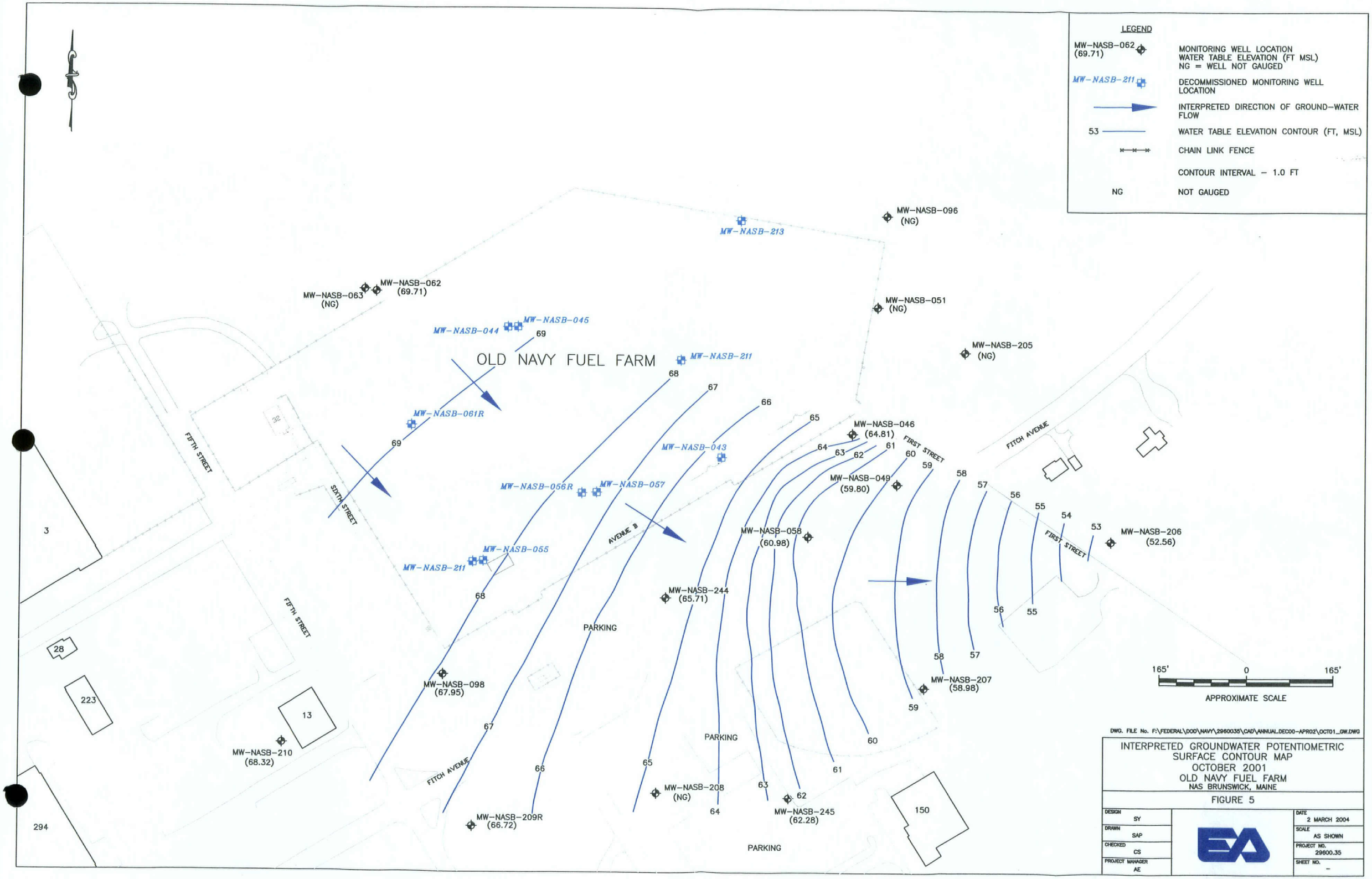
INTERPRETED GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP MAY 2001
OLD NAVY FUEL FARM
NAS BRUNSWICK, MAINE
FIGURE 4
DESIGN SY
DRAWN SAP
CHECKED LS
PROJECT MANAGER AE
DATE 2 MARCH 04
SCALE AS SHOWN
PROJECT NO. 29600.35
SHEET NO. –


LEGEND
MW-NASB-062 (69.71)
MONITORING WELL LOCATION
WATER TABLE ELEVATION (FT MSL)
NG = WELL NOT GAUGED
MW-NASB-211
DECOMMISSIONED MONITORING WELL LOCATION
INTERPRETED DIRECTION OF GROUND-WATER FLOW
53
WATER TABLE ELEVATION CONTOUR (FT, MSL)
CHAIN LINK FENCE
CONTOUR INTERVAL – 1.0 FT
NG
NOT GAUGED
OLD NAVY FUEL FARM
MW-NASB-096 (NG)
MW-NASB-213
MW-NASB-062 (69.71)
MW-NASB-063 (NG)
MW-NASB-051 (NG)
MW-NASB-045
MW-NASB-044
MW-NASB-211
MW-NASB-205 (NG)
MW-NASB-061R
MW-NASB-046 (64.81)
MW-NASB-043
MW-NASB-056R
MW-NASB-057
MW-NASB-049 (59.80)
MW-NASB-058 (60.98)
MW-NASB-206 (52.56)
MW-NASB-055
MW-NASB-211
MW-NASB-244 (65.71)
MW-NASB-098 (67.95)
MW-NASB-207 (58.98)
MW-NASB-210 (68.32)
MW-NASB-208 (NG)
MW-NASB-209R (66.72)
MW-NASB-245 (62.28)
FIFTH STREET
SIXTH STREET
AVENUE B
FITCH AVENUE
FIRST STREET
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165' 0 165'
APPROXIMATE SCALE
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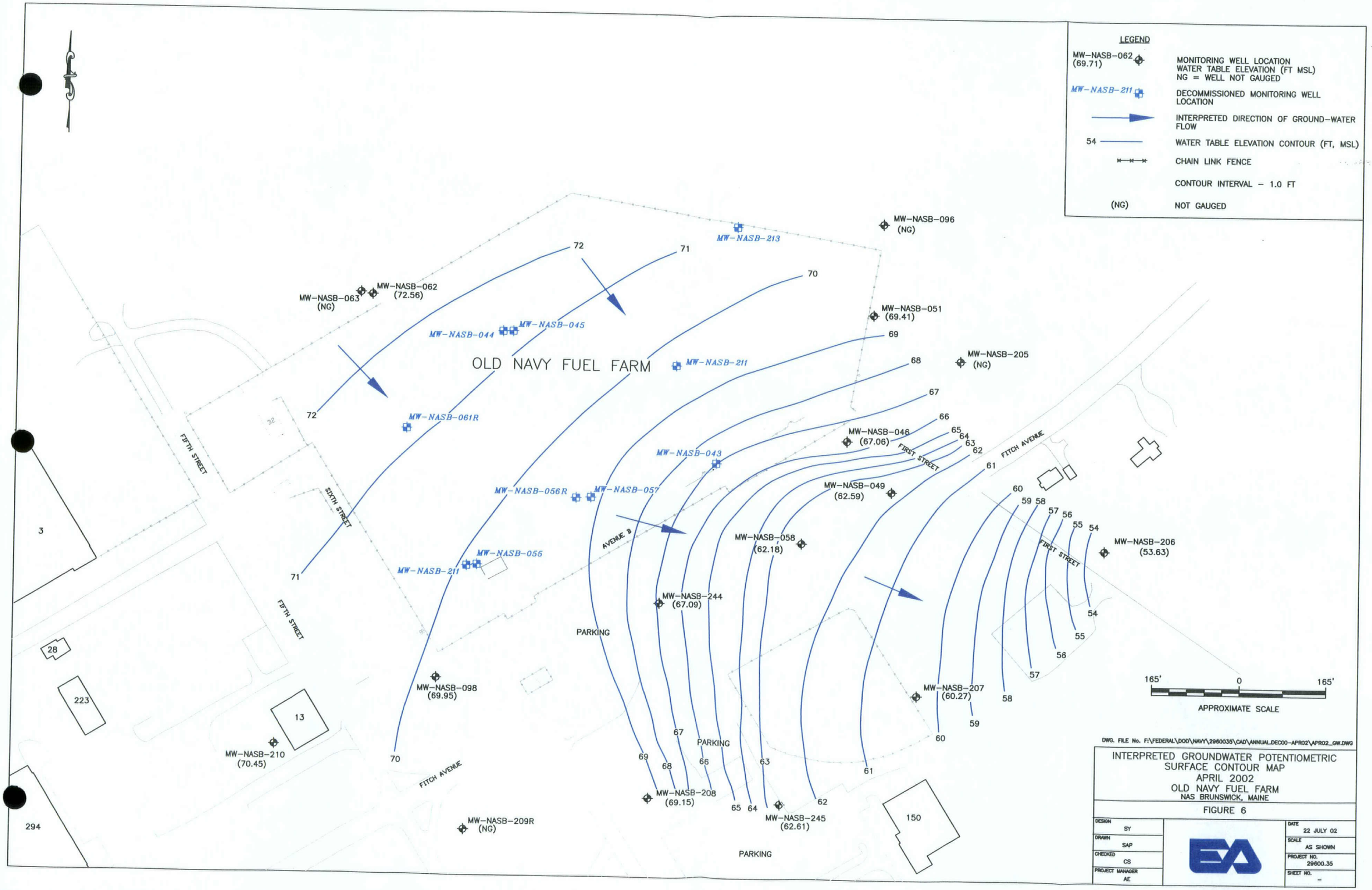
INTERPRETED GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP
OCTOBER 2001
OLD NAVY FUEL FARM
NAS BRUNSWICK, MAINE
FIGURE 5
DESIGN SY
DRAWN SAP
CHECKED CS
PROJECT MANAGER AE
DATE 2 MARCH 2004
SCALE AS SHOWN
PROJECT NO. 29600.35
SHEET NO. –


LEGEND
MW-NASB-062 (69.71)
MONITORING WELL LOCATION
WATER TABLE ELEVATION (FT MSL)
NG = WELL NOT GAUGED
MW-NASB-211
DECOMMISSIONED MONITORING WELL LOCATION
INTERPRETED DIRECTION OF GROUND-WATER FLOW
54
WATER TABLE ELEVATION CONTOUR (FT, MSL)
CHAIN LINK FENCE
CONTOUR INTERVAL - 1.0 FT
(NG)
NOT GAUGED
OLD NAVY FUEL FARM
MW-NASB-096 (NG)
MW-NASB-213
MW-NASB-063 (NG)
MW-NASB-062 (72.56)
MW-NASB-044
MW-NASB-045
MW-NASB-051 (69.41)
MW-NASB-211
MW-NASB-205 (NG)
MW-NASB-061R
MW-NASB-046 (67.06)
MW-NASB-043
MW-NASB-056R
MW-NASB-057
MW-NASB-049 (62.59)
MW-NASB-058 (62.18)
MW-NASB-206 (53.63)
MW-NASB-055
MW-NASB-211
MW-NASB-244 (67.09)
MW-NASB-098 (69.95)
MW-NASB-207 (60.27)
MW-NASB-210 (70.45)
MW-NASB-208 (69.15)
MW-NASB-245 (62.61)
MW-NASB-209R (NG)
FIFTH STREET
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165' 0 165'
APPROXIMATE SCALE
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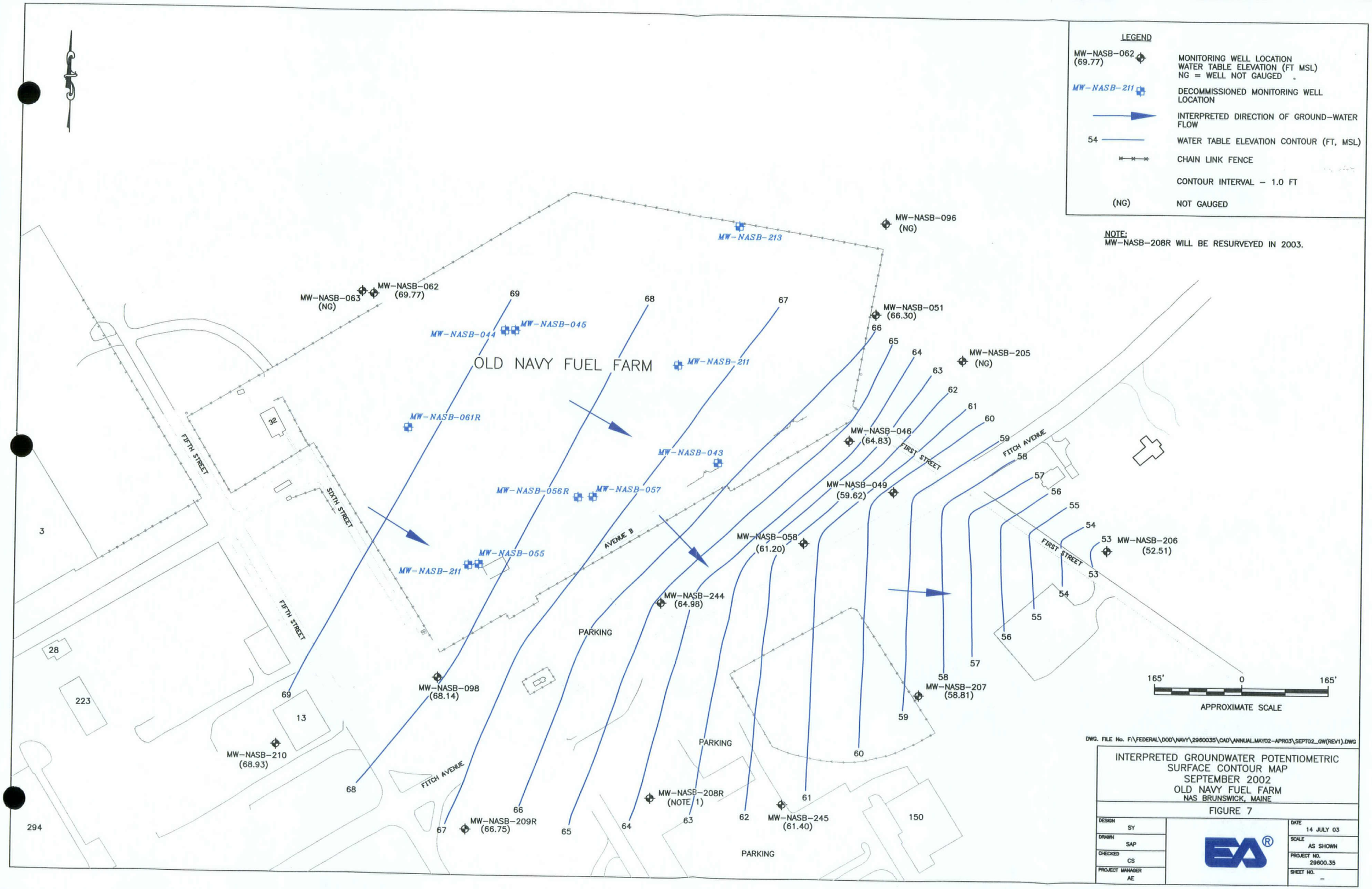
INTERPRETED GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP
APRIL 2002
OLD NAVY FUEL FARM
NAS BRUNSWICK, MAINE
FIGURE 6
DESIGN SY
DRAWN SAP
CHECKED CS
PROJECT MANAGER AE
DATE 22 JULY 02
SCALE AS SHOWN
PROJECT NO. 29600.35
SHEET NO. --


LEGEND
MW-NASB-062 (69.77) MONITORING WELL LOCATION WATER TABLE ELEVATION (FT MSL) NG = WELL NOT GAUGED
MW-NASB-211 DECOMMISSIONED MONITORING WELL LOCATION
INTERPRETED DIRECTION OF GROUND-WATER FLOW
54 WATER TABLE ELEVATION CONTOUR (FT, MSL)
CHAIN LINK FENCE
CONTOUR INTERVAL – 1.0 FT
(NG) NOT GAUGED
NOTE:
MW-NASB-208R WILL BE RESURVEYED IN 2003.
OLD NAVY FUEL FARM
MW-NASB-096 (NG)
MW-NASB-213
MW-NASB-063 (NG)
MW-NASB-062 (69.77)
MW-NASB-044
MW-NASB-045
MW-NASB-051 (66.30)
MW-NASB-211
MW-NASB-205 (NG)
MW-NASB-061R
MW-NASB-046 (64.83)
MW-NASB-043
MW-NASB-056R
MW-NASB-057
MW-NASB-049 (59.62)
MW-NASB-058 (61.20)
MW-NASB-206 (52.51)
MW-NASB-055
MW-NASB-211
MW-NASB-244 (64.98)
MW-NASB-098 (68.14)
MW-NASB-207 (58.81)
MW-NASB-210 (68.93)
MW-NASB-208R (NOTE 1)
MW-NASB-209R (66.75)
MW-NASB-245 (61.40)
FIFTH STREET
SIXTH STREET
AVENUE B
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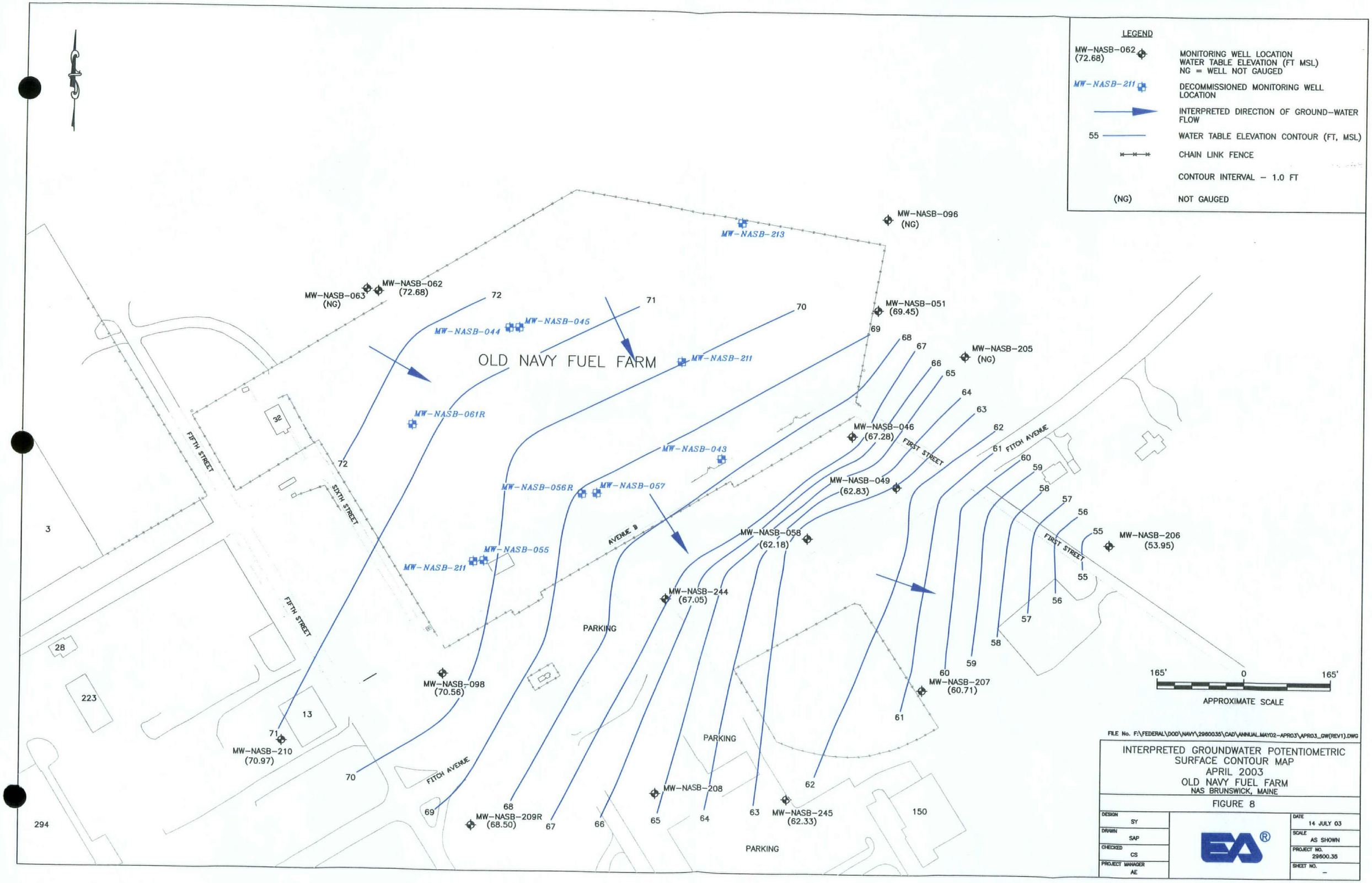
INTERPRETED GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP
SEPTEMBER 2002
OLD NAVY FUEL FARM
NAS BRUNSWICK, MAINE
FIGURE 7
DESIGN SY
DRAWN SAP
CHECKED CS
PROJECT MANAGER AE
DATE 14 JULY 03
SCALE AS SHOWN
PROJECT NO. 29600.35
SHEET NO. –


LEGEND
MW-NASB-062 (72.68) MONITORING WELL LOCATION WATER TABLE ELEVATION (FT MSL) NG = WELL NOT GAUGED
MW-NASB-211 DECOMMISSIONED MONITORING WELL LOCATION
INTERPRETED DIRECTION OF GROUND-WATER FLOW
55 WATER TABLE ELEVATION CONTOUR (FT, MSL)
CHAIN LINK FENCE
CONTOUR INTERVAL – 1.0 FT
(NG) NOT GAUGED
OLD NAVY FUEL FARM
MW-NASB-096 (NG)
MW-NASB-213
MW-NASB-063 (NG)
MW-NASB-062 (72.68)
MW-NASB-044
MW-NASB-045
MW-NASB-051 (69.45)
MW-NASB-211
MW-NASB-205 (NG)
MW-NASB-061R
MW-NASB-046 (67.28)
MW-NASB-043
MW-NASB-056R
MW-NASB-057
MW-NASB-049 (62.83)
MW-NASB-058 (62.18)
MW-NASB-206 (53.95)
MW-NASB-055
MW-NASB-211
MW-NASB-244 (67.05)
MW-NASB-098 (70.56)
MW-NASB-207 (60.71)
MW-NASB-210 (70.97)
MW-NASB-208
MW-NASB-209R (68.50)
MW-NASB-245 (62.33)
FIFTH STREET
SIXTH STREET
AVENUE B
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FITCH AVENUE
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165' 0 165'
APPROXIMATE SCALE
FILE No. F:\FEDERAL\DOD\NAVY\29600035\CAD\ANNUAL_MAY02-APR03\APR03_GW(REV1).DWG
INTERPRETED GROUNDWATER POTENTIOMETRIC SURFACE CONTOUR MAP
APRIL 2003
OLD NAVY FUEL FARM
NAS BRUNSWICK, MAINE
FIGURE 8
DESIGN SY
DRAWN SAP
CHECKED CS
PROJECT MANAGER AE
DATE 14 JULY 03
SCALE AS SHOWN
PROJECT NO. 29600.35
SHEET NO. –

TABLE 1 GROUNDWATER MONITORING WELL DETAIL SUMMARY

Well No.	Ground Elevation (ft MSL)	Top of Casing Elevation (ft MSL)	Total Depth of Well (ft bgs)	Screened Interval (ft bgs)	DEC 2000		MAY 2001		OCT 2001		APR 2002		SEP 2002		APR 2003	
					Depth to Water (ft bgs)	Water Elevation (ft MSL)	Depth to Water (ft bgs)	Water Elevation (ft MSL)	Depth to Water (ft bgs)	Water Elevation (ft MSL)	Depth to Water (ft bgs)	Water Elevation (ft MSL)	Depth to Water (ft bgs)	Water Elevation (ft MSL)	Depth to Water (ft bgs)	Water Elevation (ft MSL)
MW-NASB-46	69.8	71.30	15.00	5.00–15.00	5.85	71.02	4.61	66.69	6.49	64.81	4.24	67.06	6.47	64.83	4.02	67.28
MW-NASB-49	65.0	68.29	12.23	2.23–12.23	5.95	66.97	5.65	62.64	8.49	59.80	5.70	62.59	8.67	59.62	5.46	62.83
MW-NASB-51	71.2	73.41	13.00	3.00–13.00	6.10	73.20	NS	NS	7.58	65.83	4.00	69.41	7.11	66.30	3.96	69.45
MW-NASB-54	74.0	76.23	16.51	6.51–16.51	6.82	75.49	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
MW-NASB-58	68.0	68.00	16.30	6.30–16.30	6.20	69.80	5.96	62.04	7.02	60.98	5.82	62.18	6.8	61.20	5.82	62.18
MW-NASB-61R	72.2	75.52	12.00	3.00–9.50	5.37	70.15	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
MW-NASB-62	78.7	80.73	15.00	5.00–15.00	9.50	80.78	NG	NG	11.02	69.71	8.17	72.56	10.96	69.77	8.05	72.68
MW-NASB-98	73.4	76.53	13.00	3.00–13.00	7.70	76.53	6.50	70.03	8.58	67.95	6.58	69.95	8.39	68.14	5.97	70.56
MW-NASB-206	67.1	59.01	11.30	1.30–11.30	5.60	59.01	5.85	53.16	6.45	52.56	5.38	53.63	6.5	52.51	5.06	53.95
MW-NASB-207	64.4	66.22	17.65	7.65–17.65	6.29	66.22	6.44	59.78	7.24	58.98	5.95	60.27	7.41	58.81	5.51	60.71
MW-NASB-208	72.7	74.55	20.00	10.00–20.00	9.88	74.70	9.40	65.15	(b)	(b)	5.40	69.15	6.46	68.09	5.41	69.14
MW-NASB-209R	73.2	72.94	10.00	5.00–10.00	5.45	67.49	4.71	68.23	6.22	66.72	NG	NG	6.19	66.75	4.44	68.50
MW-NASB-210	75.7	77.55	16.20	6.20–16.20	8.00	69.55	6.68	70.87	9.24	68.31	7.10	70.45	8.62	68.93	6.58	70.97
MW-NASB-213	74.8	77.30	11.50	1.5–11.50	7.37	76.81	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
MW-NASB-244	70.9	70.73	10.00	5.00–10.00	4.40	66.33	3.07	67.66	5.02	65.71	3.64	67.09	5.75	64.98	3.68	67.05
MW-NASB-245	67.7	67.51	10.00	5.00–10.00	5.12	62.39	3.43	64.08	5.23	62.28	4.9	62.61	6.85	60.66	5.18	62.33

(a) Wells were decommissioned on 23-30 April 2001 and, therefore, were not gauged for the subsequent sampling events.
(b) Well not sampled; compromised by construction contractor.

NOTE: MSL = Mean sea level.
bgs = Below ground surface.
NS = Not sampled.
NG = Not gauged.

TABLE 2 SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED IN DECEMBER 2000

GENERAL WATER QUALITY PARAMETERS BY EPA 300/400 SERIES METHODS (mg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 213	MW NASB 244	MW NASB 49	MW NASB 51	MW NASB 54	MW NASB 58	MW NASB 61R	MW NASB 62	MW NASB 98
Compound/Element	**MEG**															
Alkalinity as CaCO3	---	50	200	100	100	90	30	(<20U)	(<20U)	20	30	30	(<20U)	70	(<20U)	30
Chloride	---	10	10	43	33	32	7	9	10	8	3	9	(<2U)	20	10	8
Nitrate as N	10	0.06	(<0.05U)	(<0.05U)	(<0.05U)	(<0.05U)	0.53	(<0.05U)	(<0.05U)	(<0.05U)	(<0.05U)	0.52	(<0.05U)	0.2	(<0.05U)	(<0.05U)
Sulfate	---	10	5	(<1U)	10	12	9	7	11	30	5	21	30	5	11	11
Sulfide	---	20	30	10	46	8	20	(<1U)	3	7	(<4U)	140	(<2U)	70	(<2U)	43
TOC	---	3	8	57	9	11	23	2	8	15	4	26	4	28	8	6

HACH METHODS 8146 AND 8149 (mg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 213	MW NASB 244	MW NASB 49	MW NASB 51	MW NASB 54	MW NASB 58	MW NASB 61R	MW NASB 62	MW NASB 98
Compound/Element	**MEG**															
Iron	---	ND	ND	0.4	0.9	NR	0.5	ND	0.5	2	0.8	3.5	0.5	3.5	0.5	4
Manganese	500	ND	ND	ND	ND	NR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

HYDROGEN AND METHANE BY MODIFIED SW-846 METHOD 3810 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 213	MW NASB 244	MW NASB 49	MW NASB 51	MW NASB 54	MW NASB 58	MW NASB 61R	MW NASB 62	MW NASB 98
Hydrogen	---	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<48.02U)	(<48.02U)	(<200U)	(<48.02U)	(<200U)	(<200U)
Methane	---	(<10U)	(<10U)	14,000	79	73	(<10U)	(<10U)	14	79	1.28	1.28	(<10U)	1.28	(<10U)	1,200

TABLE 2 (CONTINUED)

TPH BY DHS-HETL METHODS 4.1.25 AND 4.2.17 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 213	MW NASB 244	MW NASB 49	MW NASB 51	MW NASB 54	MW NASB 58	MW NASB 61R	MW NASB 62	MW NASB 98
Compound/Element	**MEG**															
TPH-DRO	50	(<50U)	**62**	**250**	44J	**300**	**100**	(<50U)	43J	**87**	**51**	**190**	**54**	**700**	(<50U)	**130**
TPH-GRO	50	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	45	(<10U)	24	(<10U)	(<10U)

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 602 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 213	MW NASB 244	MW NASB 49	MW NASB 51	MW NASB 54	MW NASB 58	MW NASB 61R	MW NASB 62	MW NASB 98
Compound/Element	**MEG**															
Benzene	12	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)
Ethylbenzene	70	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Toluene	1,400	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Xylenes, total	14,000	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)
Total BTEX	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	35	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)

TABLE 2 (CONTINUED)

NOTES:

MEG (Maximum Exposure Guideline) obtained from State of Maine, Department of Human Services, Maximum Exposure Guidelines, memorandum dated 23 October 1992. Dashes (---) indicate compound has no applicable MEG.

MEDEP = Maine Department of Environmental Protection.
EPA = U.S. Environmental Protection Agency.
ND = Not detected.
NR = Not reported.
NS = Not sampled.
U = Not detected. Sample quantitation limit is shown as (<___ U)
J = Estmated concentration.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes.
MTBE = Methyl tertiary-butyl ether.
TPH = Total petroleum hydrocarbons.
GRO = Gasoline range organics.
DRO = Diesel range organics.
TOC = Total Organic Carbon
DHS-HETL = Department of Human Services, Health and Environmental Testing Laboratory, State of Maine.
(Dup) = Duplicate sample.
$CaCO_3$ = Calcium carbonate.
N = Nitrogen.

No volatile organic compounds were detected in the trip blank or equipment rinsate blank.

Bold, shaded values exceed the MEG.

TABLE 3 SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED IN MAY 2001

GENERAL WATER QUALITY PARAMETERS BY EPA 300/400 SERIES METHODS (mg/L)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 46	MW NASB 49	MW NASB 58	MW NASB 98
Alkalinity as CaCO3	---	50	200	130	100	(<20U)	(<20U)	(<20U)	70	30	(<20U)	30
Chloride	---	11	10	20	30	20	10	20	2	60	(<2U)	3
Nitrate as N	10	(<0.05U)	(<0.05U)	(<0.05U)	(<0.05U)	0.1	1.5	0.1	0.2	(<0.05U)	(<0.05U)	(<0.05U)
Sulfate	---	8.6	3	(<2U)	14	5	5	6	120	190	16	9.6
Sulfide	---	9	(<4U)	29	6	15	10	(<4U)	6	10	6	10
TOC	---	1	3	48	6	7	10	7	4	11	2	4

HACH METHODS 8146 AND 8149 (mg/L)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 46	MW NASB 49	MW NASB 58	MW NASB 98
Iron	---	ND	ND	NR	1.6	NR	0.2	ND	ND	3.2	0.8	3.6
Manganese	500	ND	ND	NR	ND	NR	ND	ND	ND	ND	ND	ND

HYDROGEN AND METHANE BY MODIFIED SW-846 METHOD 3810 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 46	MW NASB 49	MW NASB 58	MW NASB 98
Hydrogen	---	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)
Methane	---	(<10U)	(<10U)	9,000	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	57	(<10U)	570

TABLE 3 (CONTINUED)

TPH BY DHS-HETL METHODS 4.1.25 AND 4.2.17 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 46	MW NASB 49	MW NASB 58	MW NASB 98
Compound/Element	**MEG**											
TPH-DRO	50	22J	44J	410	43J	27J	200	24J	43J	63	26J	91
TPH-GRO	50	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 602 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 46	MW NASB 49	MW NASB 58	MW NASB 98
Compound/Element	**MEG**											
Benzene	12	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)
Ethylbenzene	70	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Toluene	1,400	(<1U)	1.7	1.8	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Xylenes, total	14,000	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)	(<1.5U)
Total BTEX	---	ND	1.7	1.8	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	35	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)	(<0.5U)

TABLE 3 (CONTINUED)

NOTES:

MEG (Maximum Exposure Guideline) obtained from State of Maine, Department of Human Services, Maximum Exposure Guidelines, memorandum dated 23 October 1992. Dashes (---) indicate compound has no applicable MEG.

MEDEP = Maine Department of Environmental Protection.
EPA = U.S. Environmental Protection Agency.
ND = Not detected.
NR = Not reported.
NS = Not sampled.
U = Not detected. Sample quantitation limit is shown as (<___ U)
J = Estmated concentration.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes.
MTBE = Methyl tertiary-butyl ether.
TPH = Total petroleum hydrocarbons.
GRO = Gasoline range organics.
DRO = Diesel range organics.
TOC = Total Organic Carbon
DHS-HETL = Department of Human Services, Health and Environmental Testing Laboratory, State of Maine.
(Dup) = Duplicate sample.
$CaCO_3$ = Calcium carbonate.
N = Nitrogen.

No volatile organic compounds were detected in the trip blank or equipment rinsate blank.

Bold, shaded values exceed the MEG.

TABLE 4 SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED IN OCTOBER 2001,

GENERAL WATER QUALITY PARAMETERS BY EPA 300/400 SERIES METHODS (mg/L)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Alkalinity as CaCO3	---	62	190	NS	75	58	38	5	167	99	177	24	10	15	34
Chloride	---	11	13	NS	70	11	10	15	58	4	6	4	(<3U)	11	9
Nitrate as N	10	0.04	0.03	NS	(<0.02U)	(<0.02U)	(<0.02U)	(<0.02U)	(<0.02U)	(<0.02U)	0.03	(<0.02U)	(<0.02U)	(<0.02U)	(<0.02U)
Sulfate	---	14	(<5U)	NS	18	14	13	19	(<5U)	100	16	8	17	6	14
Sulfide	---	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TOC	---	1.1	2.9	NS	5.14	(<1U)	11.6	8.57	48.9	5.85	10	1.6	2.12	6.4	3.8

HACH METHODS 8146 AND 8149 (mg/L)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Iron	---	ND	ND	NS	NR	NR	ND	1.6	NR	0.4	2.4	0.8	2.5	NR	4.2
Manganese	500	ND	ND	NS	NR	NR	ND	ND	NR	ND	ND	ND	ND	NR	ND

HYDROGEN AND METHANE BY MODIFIED SW-846 METHOD 3810 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Hydrogen	---	(<200U)	(<200U)	NS	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)	(<200U)
Methane	---	(<100U)	29	NS	140	17	(<100U)	360	8,600	(<100U)	1,300	370	(<100U)	(<100U)	380

TABLE 4 (CONTINUED)

TPH BY DHS-HETL METHODS 4.1.25 AND 4.2.17 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**														
TPH-DRO	50	(<110U)	**64J**	NS	48J	**60J**	**60J**	**55J**	(<50U)	**86J**	**58J**	(<110U)	34J	(<110U)	(<110U)
TPH-GRO	50	(<50U)	(<50U)	NS	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 602 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**														
Benzene	12	(<1U)	(<1U)	NS	(<1U)	(<1U)	(<1U)	0.35J	0.23J	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Ethylbenzene	70	(<1U)	(<1U)	NS	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Toluene	1,400	(<1U)	(<1U)	NS	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Xylenes, total	14,000	(<2U)	(<2U)	NS	(<2U)	(<2U)	36	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Total BTEX	---	ND	ND	NS	ND	ND	36	0.35	0.23J	ND	ND	ND	ND	ND	ND
MTBE	35	(<1U)	(<1U)	NS	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	0.87J

TABLE 4 (CONTINUED)

NOTES:

MEG (Maximum Exposure Guideline) obtained from State of Maine, Department of Human Services, Maximum Exposure Guidelines, memorandum dated 23 October 1992. Dashes (---) indicate compound has no applicable MEG.

MEDEP = Maine Department of Environmental Protection.
EPA = U.S. Environmental Protection Agency.
ND = Not detected.
NR = Not reported.
NS = Not sampled.
U = Not detected. Sample quantitation limit is shown as (<___ U)
J = Estmated concentration.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes.
MTBE = Methyl tertiary-butyl ether.
TPH = Total petroleum hydrocarbons.
GRO = Gasoline range organics.
DRO = Diesel range organics.
TOC = Total Organic Carbon
DHS-HETL = Department of Human Services, Health and Environmental Testing Laboratory, State of Maine.
(Dup) = Duplicate sample.
$CaCO_3$ = Calcium carbonate.
N = Nitrogen.

No volatile organic compounds were detected in the trip blank or equipment rinsate blank.

Bold, shaded values exceed the MEG.

TABLE 5 SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED IN APRIL 2002

GENERAL WATER QUALITY PARAMETERS BY EPA 300/400 SERIES METHODS (mg/L)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Alkalinity as CaCO3	---	47	199	123	104	26	17	(<2U)	205	110	15	23	12	12	25
Chloride	---	12	13	23	44	8	6	8	131	(<3U)	7	4	(<3U)	11	8
Nitrate as N	10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sulfate	---	11	(<5U)	10	18	9	14	12	47	98	31	(<5U)	13	10	8
TOC	---	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

HACH METHODS 8146 AND 8149 (mg/L)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Iron	---	ND	0.5	NS	NS	NS	1.2	ND	10	0.9	1.4	3.5	4.5	3.5	2.8
Manganese	500	ND	ND	NS	NS	NS	ND	ND	NS	ND	ND	ND	ND	ND	ND

HYDROGEN BY METHOD AM20GAX (nM)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Hydrogen	---	0.58	0.56	0.54	0.44	0.71	0.36	0.69	NS	0.5	0.58	0.67	0.42	0.42	1.4

TABLE 5 (CONTINUED)

METHANE BY METHOD AM20GAX (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	MEG														
Methane	---	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

TPH BY DHS-HETL METHODS 4.1.25 AND 4.2.17 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**														
TPH-DRO	50	(<110U)	(<110U)	40J	(<110U)	(<110U)	(<110U)	30J	(<110U)	40J	(<110U)	(<110U)	40J	40J	30J
TPH-GRO	50	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 602 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**														
Benzene	12	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Ethylbenzene	70	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Toluene	1,400	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Xylenes, total	14,000	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Total BTEX	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	35	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)

TABLE 5 (CONTINUED)

NOTES:

MEG (Maximum Exposure Guideline) obtained from State of Maine, Department of Human Services, Maximum Exposure Guidelines, memorandum dated 23 October 1992. Dashes (---) indicate compound has no applicable MEG.

MEDEP = Maine Department of Environmental Protection.
EPA = U.S. Environmental Protection Agency.
ND = Not detected.
NR = Not reported.
NS = Not sampled.
U = Not detected. Sample quantitation limit is shown as (<___ U)
J = Estmated concentration.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes.
MTBE = Methyl tertiary-butyl ether.
TPH = Total petroleum hydrocarbons.
GRO = Gasoline range organics.
DRO = Diesel range organics.
TOC = Total Organic Carbon
DHS-HETL = Department of Human Services, Health and Environmental Testing Laboratory, State of Maine.
(Dup) = Duplicate sample.
$CaCO_3$ = Calcium carbonate.
N = Nitrogen.

No volatile organic compounds were detected in the trip blank or equipment rinsate blank.

Bold, shaded values exceed the MEG.

TABLE 6 SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED IN SEPTEMBER 2002

GENERAL WATER QUALITY PARAMETERS BY EPA 300/400 SERIES METHODS (mg/L)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Alkalinity as CaCO3	---	71	180	16	70	73	30	3.7J	120	110	140	22	11	15	29
Chloride	---	8.5	9.5	2.9	38	39	7.6	6.5	60	2.7	5	3.2	2.3	8.2	8.4
Nitrate as N	10	(<0.2U)	0.02J	0.03J	(<0.2U)	(<0.2U)	0.73	(<0.2U)	0.03J	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)
Sulfate	---	8	3.9	(<1U)	11	11	9.6	12	2.9	80	21	4.9	12	7.4	11
TOC	---	1.6	3.6	21.3	6.5	6.6	10	10.5	143	4.2	12.2	1.2	1.1	6.8	5.2

HACH METHODS 8146 AND 8149 (mg/L)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Iron	---	0.1	0.1	22	3	3	0.8	10.8	NS	6	15	3.2	9.7	2.8	13.6
Manganese	500	ND	0.2	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND

HYDROGEN BY METHOD AM20GAX (nM)

Compound/Element	MEG	MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Hydrogen	---	3	2.7	11	1.5	NR	1.3	1.8	NS	7.6	NS	6.9	2.7	5.6	1.1

TABLE 6 (CONTINUED)

METHANE BY METHOD AM20GAX (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	MEG														
Methane	---	1.6	9.6	4,400	90	NR	0.92	300	4,200	13	810	10	0.73	2.5	220

TPH BY DHS-HETL METHODS 4.1.25 AND 4.2.17 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**														
TPH-DRO	50	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<60U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)
TPH-GRO	50	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	18	(<10U)	(<10U)	(<10U)	15	(<10U)	(<10U)	8J

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 602 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 208	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**														
Benzene	12	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	0.79J	0.68J	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Ethylbenzene	70	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Toluene	1,400	(<2U)	(<2U)	0.77J	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Xylenes, total	14,000	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Total BTEX	---	ND	ND	0.77	ND	ND	ND	0.79	0.68	ND	ND	ND	ND	ND	ND
MTBE	35	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	5.3

TABLE 6 (CONTINUED)

NOTES:

MEG (Maximum Exposure Guideline) obtained from State of Maine, Department of Human Services, Maximum Exposure Guidelines, memorandum dated 23 October 1992. Dashes (---) indicate compound has no applicable MEG.

MEDEP = Maine Department of Environmental Protection.
EPA = U.S. Environmental Protection Agency.
ND = Not detected.
NR = Not reported.
NS = Not sampled.
U = Not detected. Sample quantitation limit is shown as (<___ U)
J = Estmated concentration.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes.
MTBE = Methyl tertiary-butyl ether.
TPH = Total petroleum hydrocarbons.
GRO = Gasoline range organics.
DRO = Diesel range organics.
TOC = Total Organic Carbon
DHS-HETL = Department of Human Services, Health and Environmental Testing Laboratory, State of Maine.
(Dup) = Duplicate sample.
$CaCO_3$ = Calcium carbonate.
N = Nitrogen.

No volatile organic compounds were detected in the trip blank or equipment rinsate blank.

Bold, shaded values exceed the MEG.

TABLE 7 SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED IN APRIL 2003

GENERAL WATER QUALITY PARAMETERS BY EPA 300/400 SERIES METHODS (mg/L)

		MW NASB 206	MW NASB 207	MW NASB 207 (Dup)	MW NASB 208R	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**															
Alkalinity as CaCO3	---	44	190	190	47	120	100	24	(<10U)	190	100	22	15	16	8.3J	NR
Chloride	---	11	10	11	62	34	30	6.6	6.3	34	3.6	5	4.3	3.2	13	NR
Nitrate as N	10	(<0.2U)	0.02J	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	5.6	0.14J	(<0.2U)	0.34	0.02J	0.14J	(<0.2U)	(<0.2U)	NR
Sulfate	---	8.6	3.9	3.8	3.2	8.2	7.8	13	8.4	25	91	28	4.4	14	6	NR
TOC	---	1.9	2.4	2.7	12.7	5.4	5.3	8.9	9.3	13.7	16.4	7.9	5.1	27.1	7	4.8

HACH METHODS 8146 AND 8149 (mg/L)

		MW NASB 206	MW NASB 207	MW NASB 207 (Dup)	MW NASB 208R	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**															
Iron	---	ND	ND	ND	3	1.1	1.1	ND	ND	1.5	ND	1	ND	0.2	0.8	2.5
Manganese	500	ND	ND	ND	ND	ND	ND	ND	ND	0.9	ND	ND	ND	ND	ND	ND

HYDROGEN BY METHOD AM20GAX (nM)

		MW NASB 206	MW NASB 207	MW NASB 207 (Dup)	MW NASB 208R	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	MEG															
Hydrogen	---	NS	2.2	69	NS	30		1.3	21	NS	43	7.4	14	24	42	NS

TABLE 7 (CONTINUED)

METHANE BY METHOD AM20GAX (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 207 (Dup)	MW NASB 208R	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	MEG															
Methane	---	1.7	2.2	3	4,800	53	0.02	0.07	1.1	NS	4.6	16	0.24	0.44	2.3	700

TPH BY DHS-HETL METHODS 4.1.25 AND 4.2.17 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 207 (Dup)	MW NASB 208R	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**															
TPH-DRO	50	(<50U)	(<50U)	(<50U)	153	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	(<50U)	NR
TPH-GRO	50	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	(<10U)	NR

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 602 (µg/L)

		MW NASB 206	MW NASB 207	MW NASB 207 (Dup)	MW NASB 208R	MW NASB 209R	MW NASB 209R (Dup)	MW NASB 210	MW NASB 244	MW NASB 245	MW NASB 46	MW NASB 49	MW NASB 51	MW NASB 58	MW NASB 62	MW NASB 98
Compound/Element	**MEG**															
Benzene	12	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)	(<1U)
Ethylbenzene	70	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Toluene	1,400	(<2U)	(<2U)	(<2U)	1.4J	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Xylenes, total	14,000	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)
Total BTEX	---	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	35	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	(<2U)	15

TABLE 7 (CONTINUED)

NOTES:

MEG (Maximum Exposure Guideline) obtained from State of Maine, Department of Human Services, Maximum Exposure Guidelines, memorandum dated 23 October 1992. Dashes (---) indicate compound has no applicable MEG.

MEDEP = Maine Department of Environmental Protection.
EPA = U.S. Environmental Protection Agency.
ND = Not detected.
NR = Not reported.
NS = Not sampled.
U = Not detected. Sample quantitation limit is shown as (<___ U)
J = Estmated concentration.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes.
MTBE = Methyl tertiary-butyl ether.
TPH = Total petroleum hydrocarbons.
GRO = Gasoline range organics.
DRO = Diesel range organics.
TOC = Total Organic Carbon
DHS-HETL = Department of Human Services, Health and Environmental Testing Laboratory, State of Maine.
(Dup) = Duplicate sample.
$CaCO_3$ = Calcium carbonate.
N = Nitrogen.

No volatile organic compounds were detected in the trip blank or equipment rinsate blank.

Bold, shaded values exceed the MEG.

TABLE 8 MONITORED NATURAL ATTENUATION PARAMETERS

Well No.	Dissolved Oxygen (mg/L)						Redox Potential (mV)					
	DEC 2000	MAY 2001	OCT 2001	APR 2002	SEP 2002	APR 2003	DEC 2000	MAY 2001	OCT 2001	APR 2002	SEP 2002	APR 2003
MW-NASB-46	5.44	2.17	EM	2.09	1.02	0.95	22	52	52.2	344	98	71
MW-NASB-49	1.14	0.68	4.08	1.2	1.37	0.8	-39	20	37.2	319	83	6
MW-NASB-51	2.21	NS	9	1.12	0.75	5.47	12	NS	-31.5	293	0.75	107
MW-NASB-54	0.65	(a)	(a)	(a)	(a)	(a)	17	(a)	(a)	(a)	(a)	(a)
MW-NASB-58	3.98	4.56	0	1.41	1.65	1.53	-18	54	26.8	330	63.9	106
MW-NASB-61R	0.11	(a)	(a)	(a)	(a)	(a)	-8	(a)	(a)	(a)	(a)	(a)
MW-NASB-62	0.39	EM	2.12	4.81	0.5	4.6	29	EM	162	341	97.2	96
MW-NASB-98	0.3	0.28	0.36	1.9	0.2	0.14	13	19	58	259	88.7	5
MW-NASB-206	1.34	2.97	4.03	2.96	2.74	2.62	23	71	106	70	6.5	102
MW-NASB-207	2.26	1.62	1.95	1.01	0.55	3.52	21	72	125	69	79	102
MW-NASB-208	0.45	0.3	(b)	1.04	0.66	0.5	-9	-1	(b)	61	82.4	123
MW-NASB-209R	0.89	0.51	0.86	EM	0.036	1.6	18	43	63.1	EM	43	81
MW-NASB-210	1.23	4.21	1.03	4.59	2.05	6.06	21	77	128	72	70	73.3
MW-NASB-213	0.58	(a)	(a)	(a)	(a)	(a)	33	(a)	(a)	(a)	(a)	(a)
MW-NASB-244	0.31	6.79	0.23	7.74	0.3	6.04	39	103	-0.3	365	82.6	120
MW-NASB-245	NS	NS	1.42	2.67	69.6	0.48	NS	NS	44	71	29.6	-40

(a) Wells were decommissioned on 23-30 April 2001 and, therefore, were not gauged for the subsequent sampling events.
(b) Well not sampled; compromised by construction contractor.

NOTE: NS = Not sampled.
EM = Equipment malfunction.

Well No.	pH						Conductivity (µmhos/cm)						Temperature (C)					
	DEC 2000	MAY 2001	OCT 2001	APR 2002	SEP 2002	APR 2003	DEC 2000	MAY 2001	OCT 2001	APR 2002	SEP 2002	APR 2003	DEC 2000	MAY 2001	OCT 2001	APR 2002	SEP 2002	APR 2003
MW-NASB-46	6.07	5.88	7.29	6.2	5.99	6.02	431	353	129	291	351	263	14.6	10.49	12.88	7.92	21.85	9.4
MW-NASB-49	5.42	5.61	6.12	5.44	5.88	5.3	135	146	260	105	218	86	13.28	15.47	18.67	7.48	20.54	8.08
MW-NASB-51	5.8	NS	5.65	5.96	5.69	5.68	65	NS	70	49	62	40	13.28	NS	19.26	7.89	18.19	10.49
MW-NASB-54	5.46	(a)	(a)	(a)	(a)	(a)	135	(a)	(a)	(a)	(a)	(a)	13.28	(a)	(a)	(a)	(a)	(a)
MW-NASB-58	5.7	5.84	6.7	5.78	5.61	5.7	88	78	686	48	60	56	10.17	10.79	23.3	7.62	17.61	12.74
MW-NASB-61R	5.56	(a)	(a)	(a)	(a)	(a)	194	(a)	(a)	(a)	(a)	(a)	12.53	(a)	(a)	(a)	(a)	(a)
MW-NASB-62	5.73	NS	5.83	5.86	5.72	5.61	80	NS	79	55	82	55	13.51	EM	16.55	7.92	18.97	9.95
MW-NASB-98	5.87	5.87	5.96	6.07	5.79	5.84	113	119	180	82	120	90	15.12	10.65	20.86	9.41	16.59	10.84
MW-NASB-206	6.12	6.07	6.31	5.99	6.3	5.96	132	152	175	111	185	113	14.09	13.04	17.42	9.18	26.12	16.89
MW-NASB-207	6.32	6.34	5.49	6.31	6.32	6.31	370	416	376	292	325	266	16.62	15.26	19.39	8.37	20.8	12.94
MW-NASB-208	5.73	5.88	(b)	5.86	5.43	5.7	376	312	(b)	260	85	242	15.57	11.23	(b)	9.45	19.35	18.1
MW-NASB-209R	6.3	6.27	6.28	EM	6.1	6.37	269	304	218	EM	290	220	13.85	14.01	17.09	EM	20.39	9.55
MW-NASB-210	6.32	6.3	6.09	6.16	6.14	6.19	91	97	118	69	120	91	12.56	10.06	18.41	8.18	21.52	12.2
MW-NASB-213	5.74	(a)	(a)	(a)	(a)	(a)	89	(a)	(a)	(a)	(a)	(a)	13.4	(a)	(a)	(a)	(a)	(a)
MW-NASB-244	4.86	4.96	4.83	5.19	5.44	5.03	73	89	64	43	72	41	13.24	10.2	14.18	8.21	20.02	9.97
MW-NASB-245	NS	NS	5.22	5.81	5.68	5.9	NS	NS	491	641	5.34[c]	402	NS	NS	15.72	8.52	19.82	16.87

(c) The conductivity value for MW-NASB-245 in September 2002 was 5.34 µmhos/cm. This value was collected after one field parameter reading due to the lack of sufficient water in the well. The value does not represent the true conductivity of the groundwater at MW-NASB-245 in September 2002 because field parameters were not allowed to stabilize.

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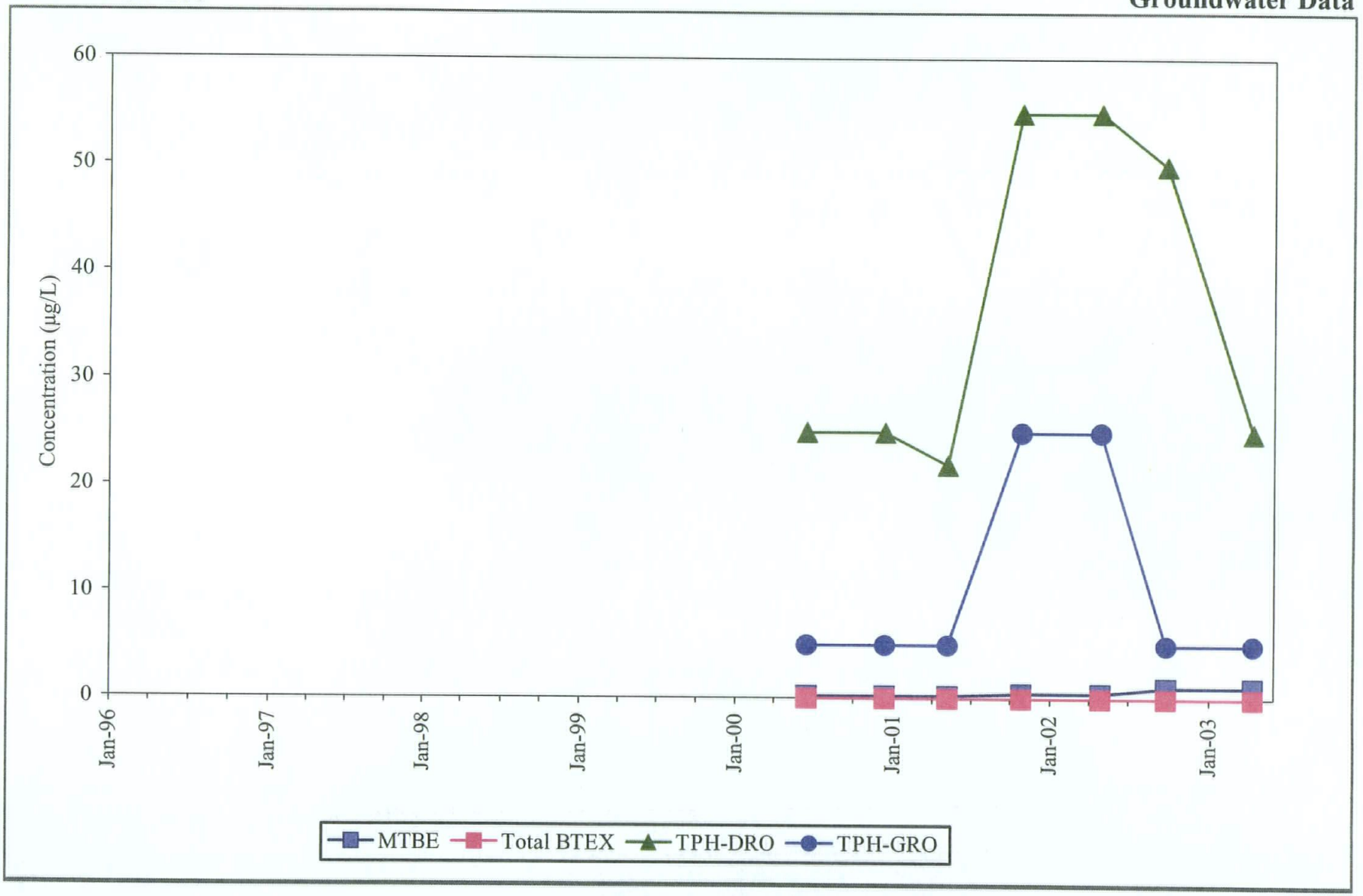
Appendix A

Trend Graphs

Sample Location:
MW-NASB-206

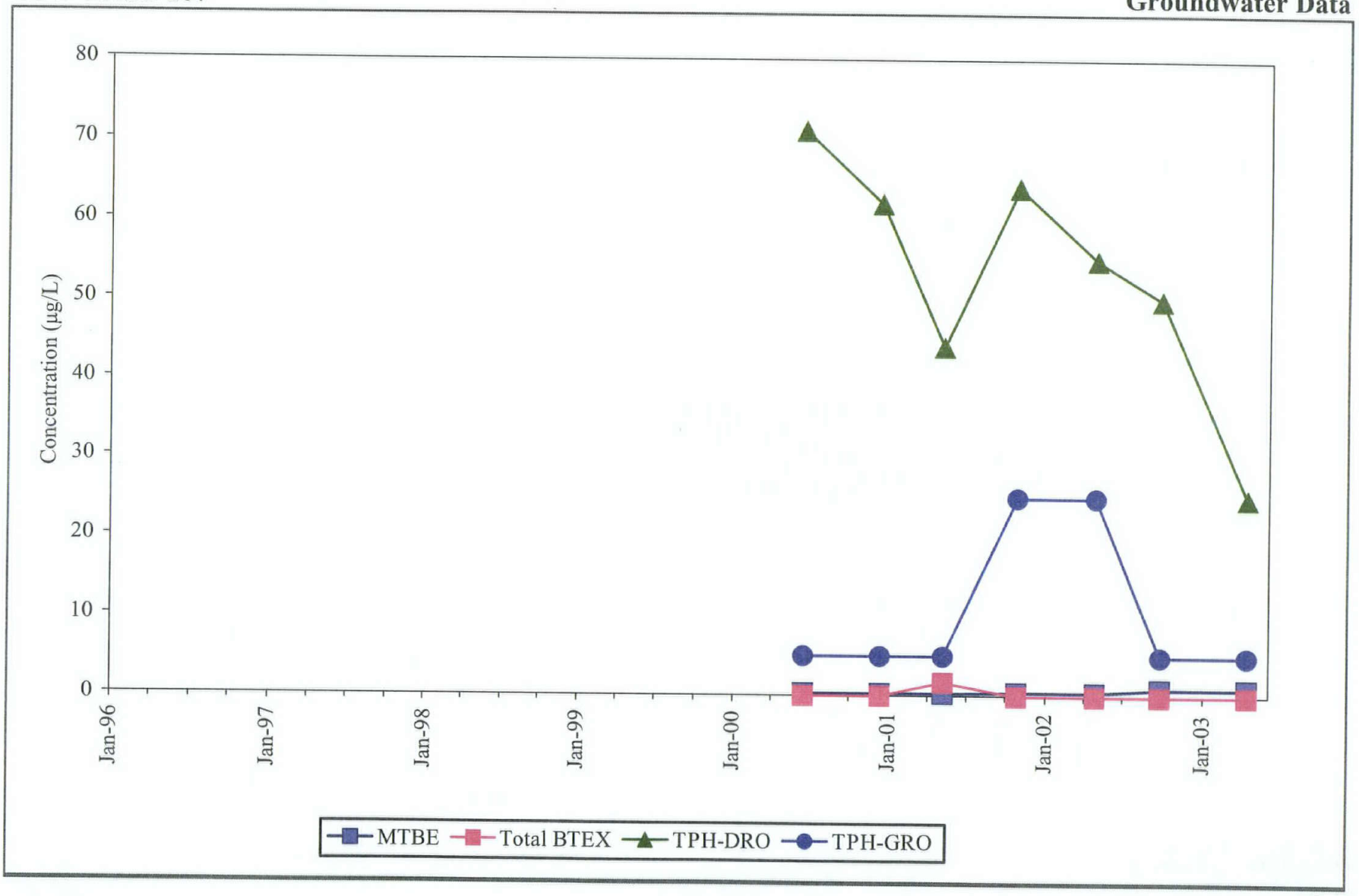
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-207

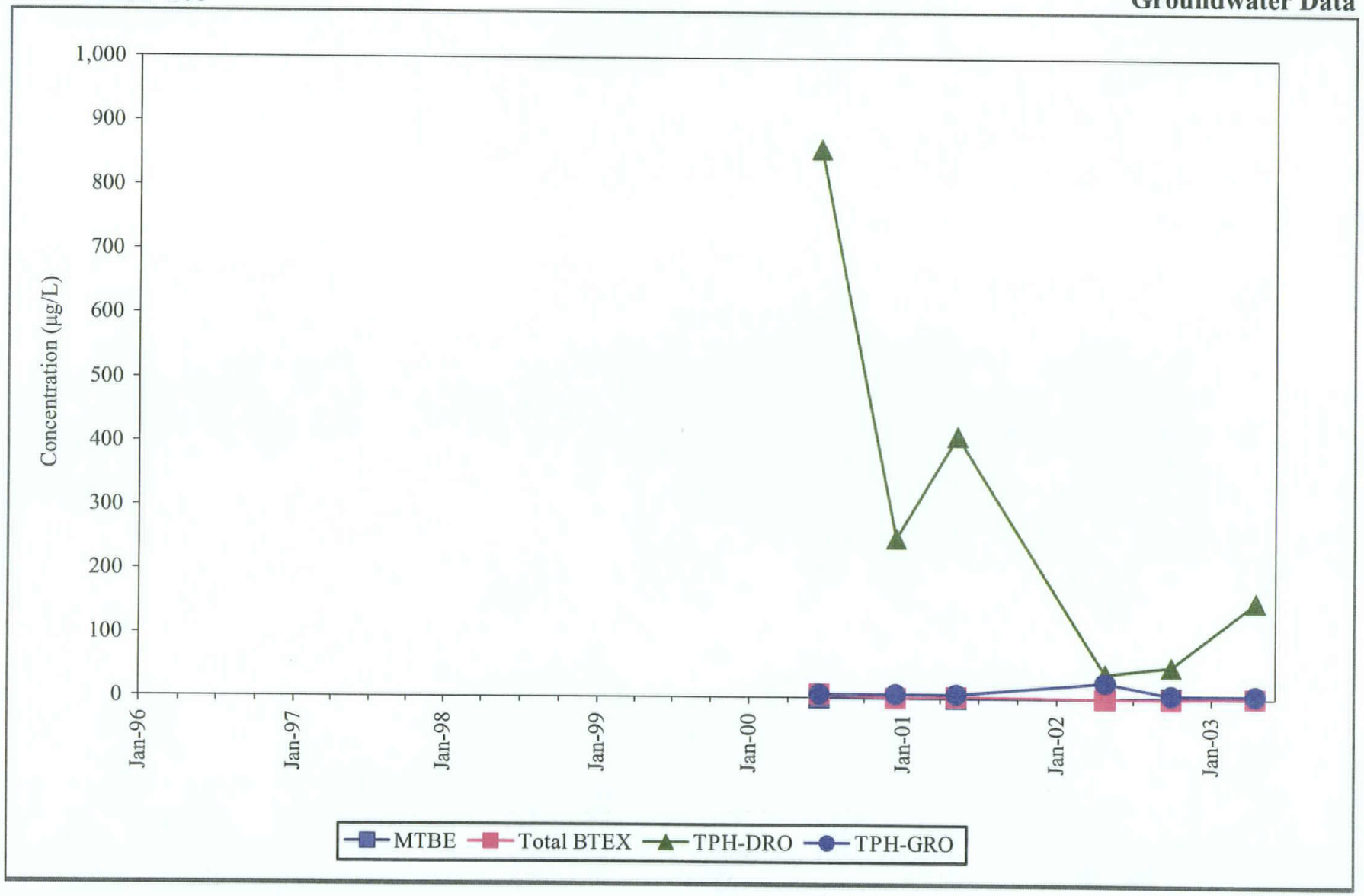
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-208

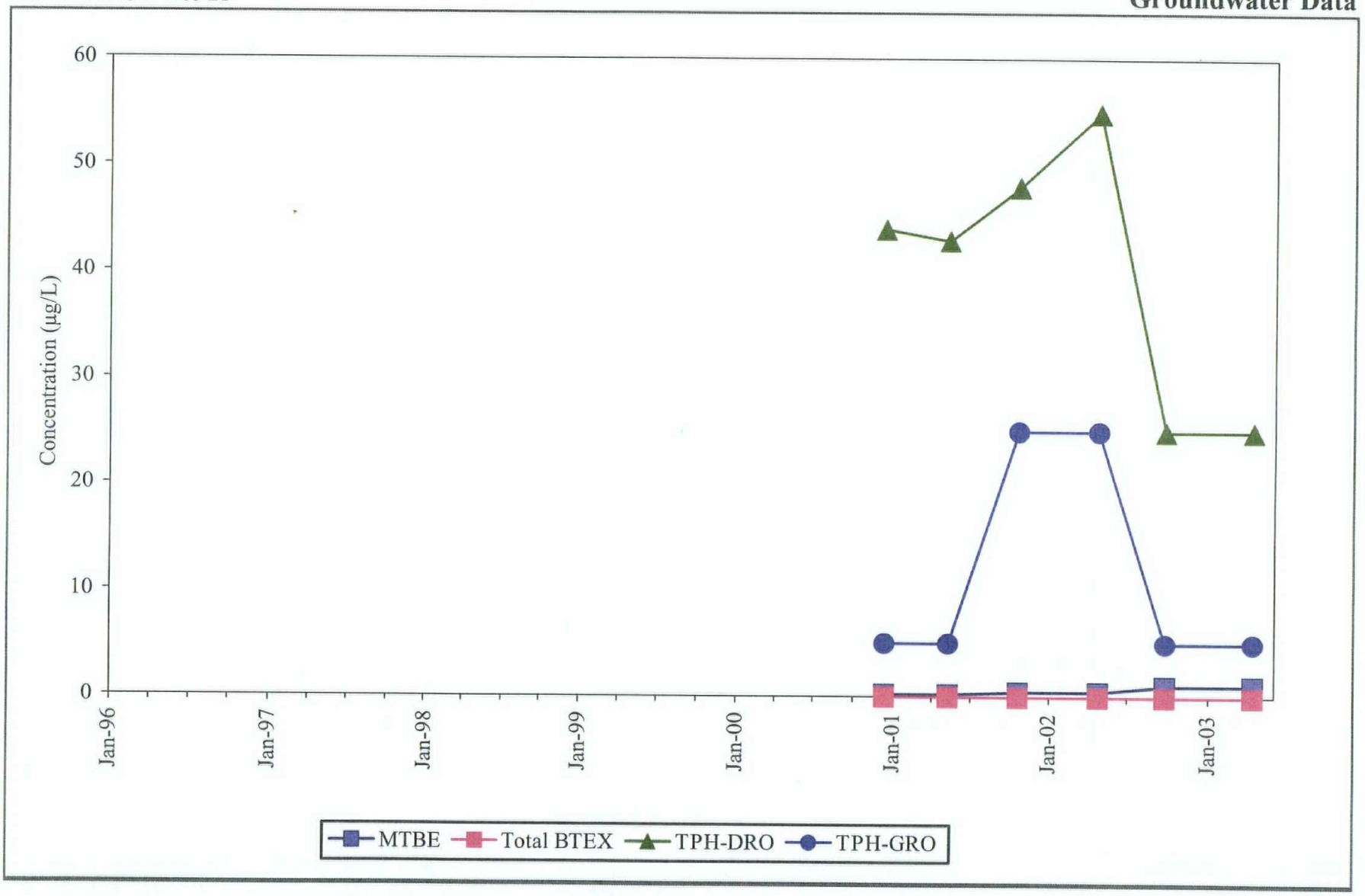
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-209R

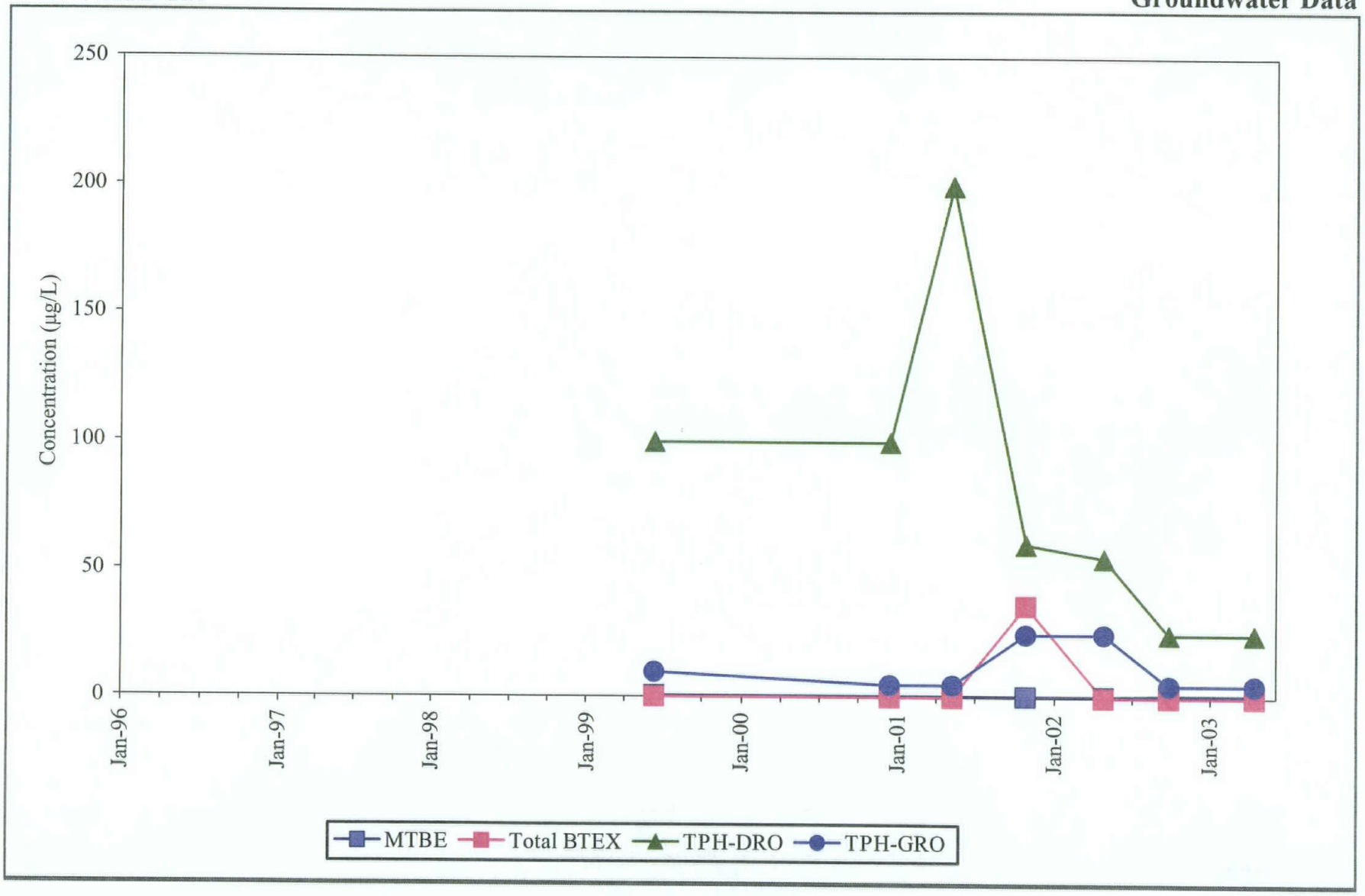
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-210

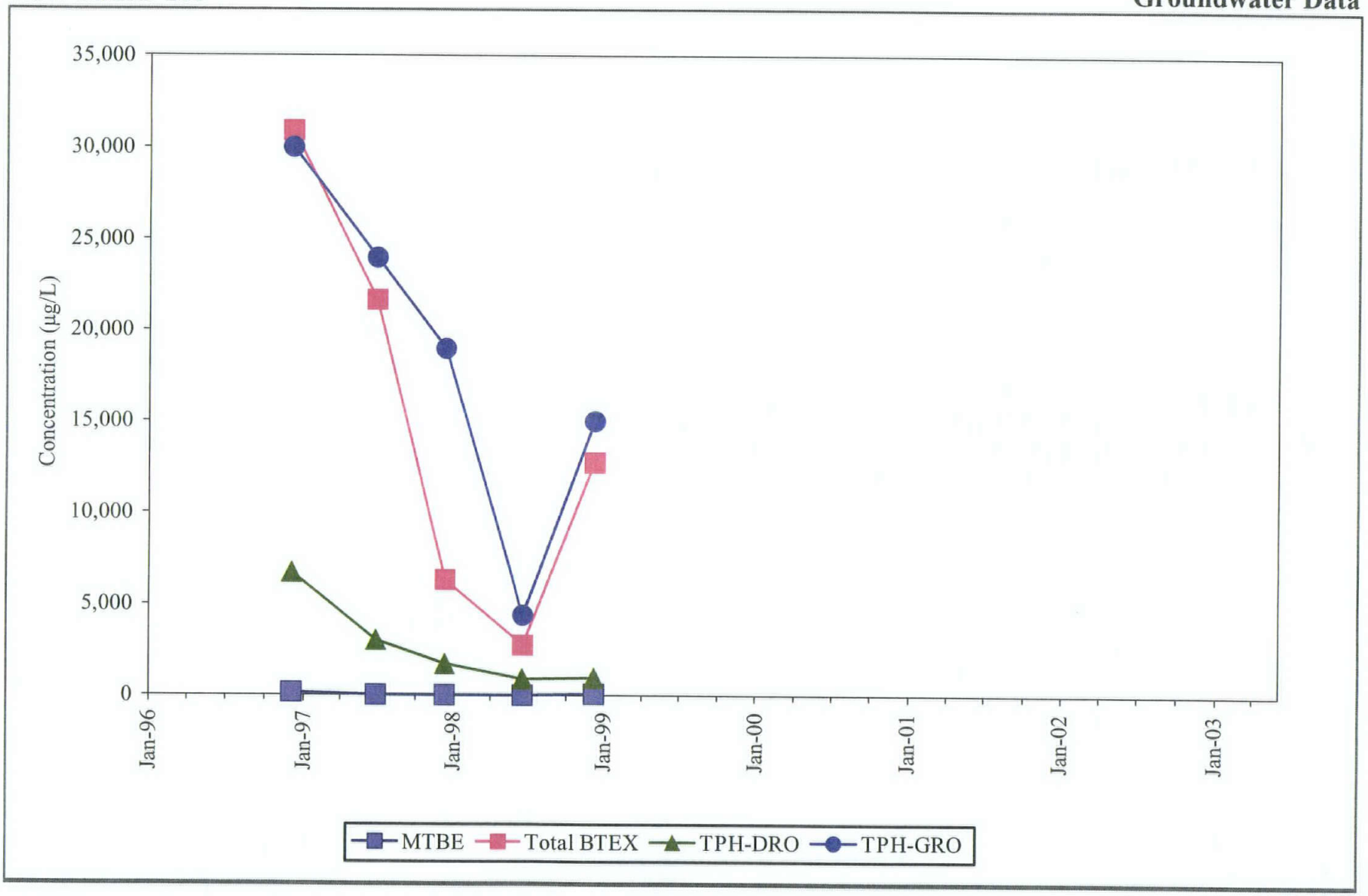
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-211

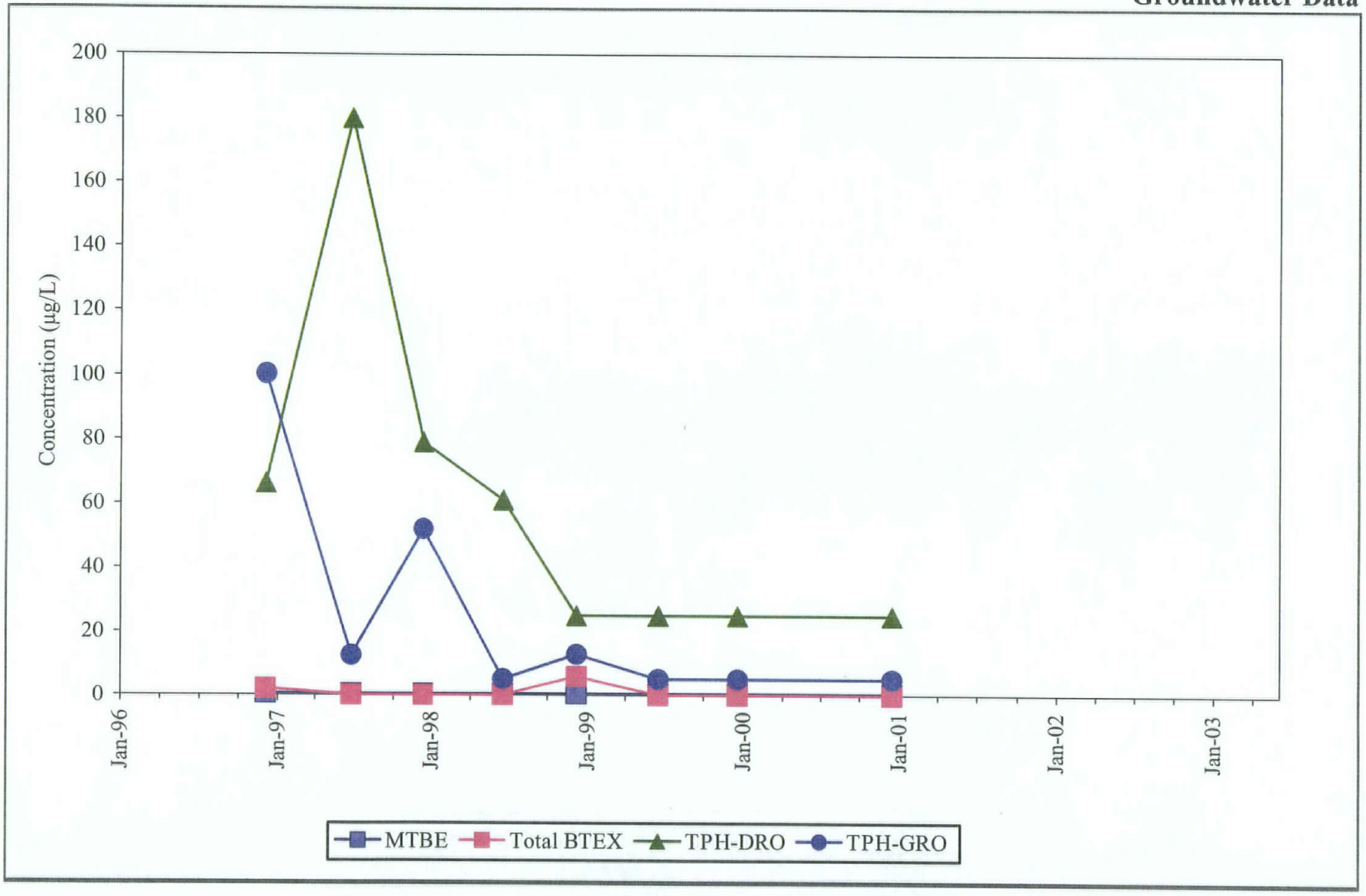
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-213

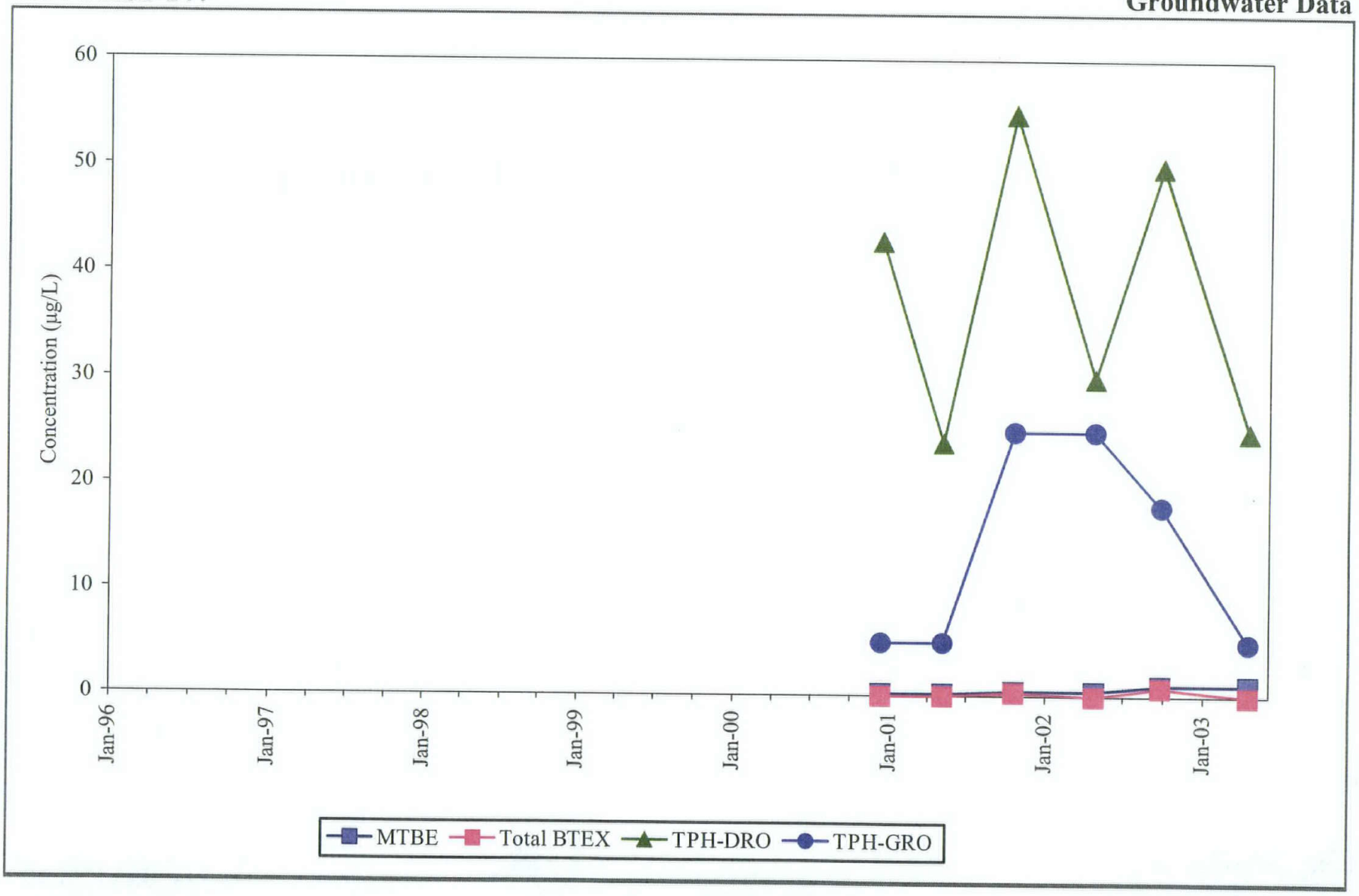
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-244

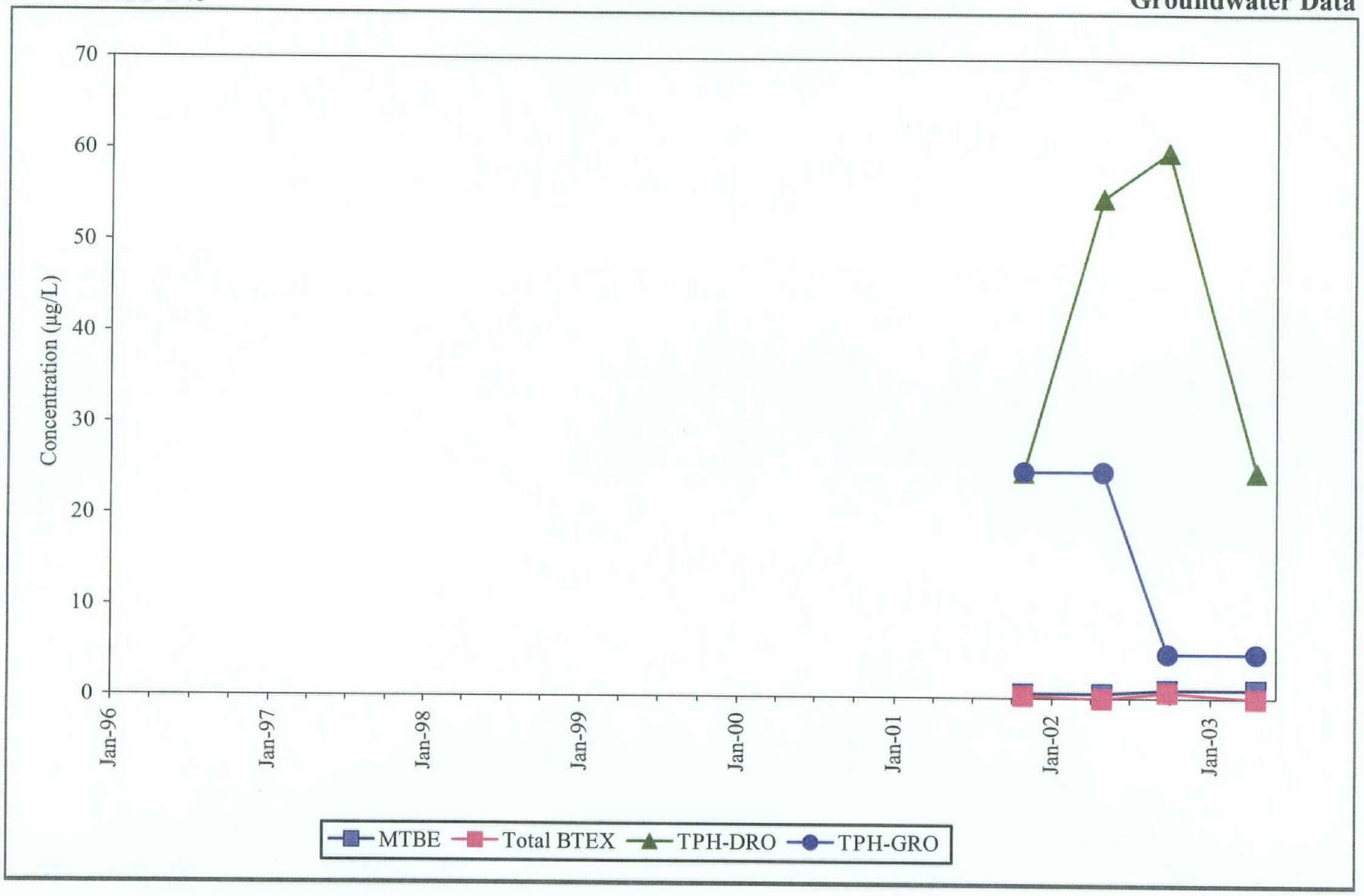
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-245

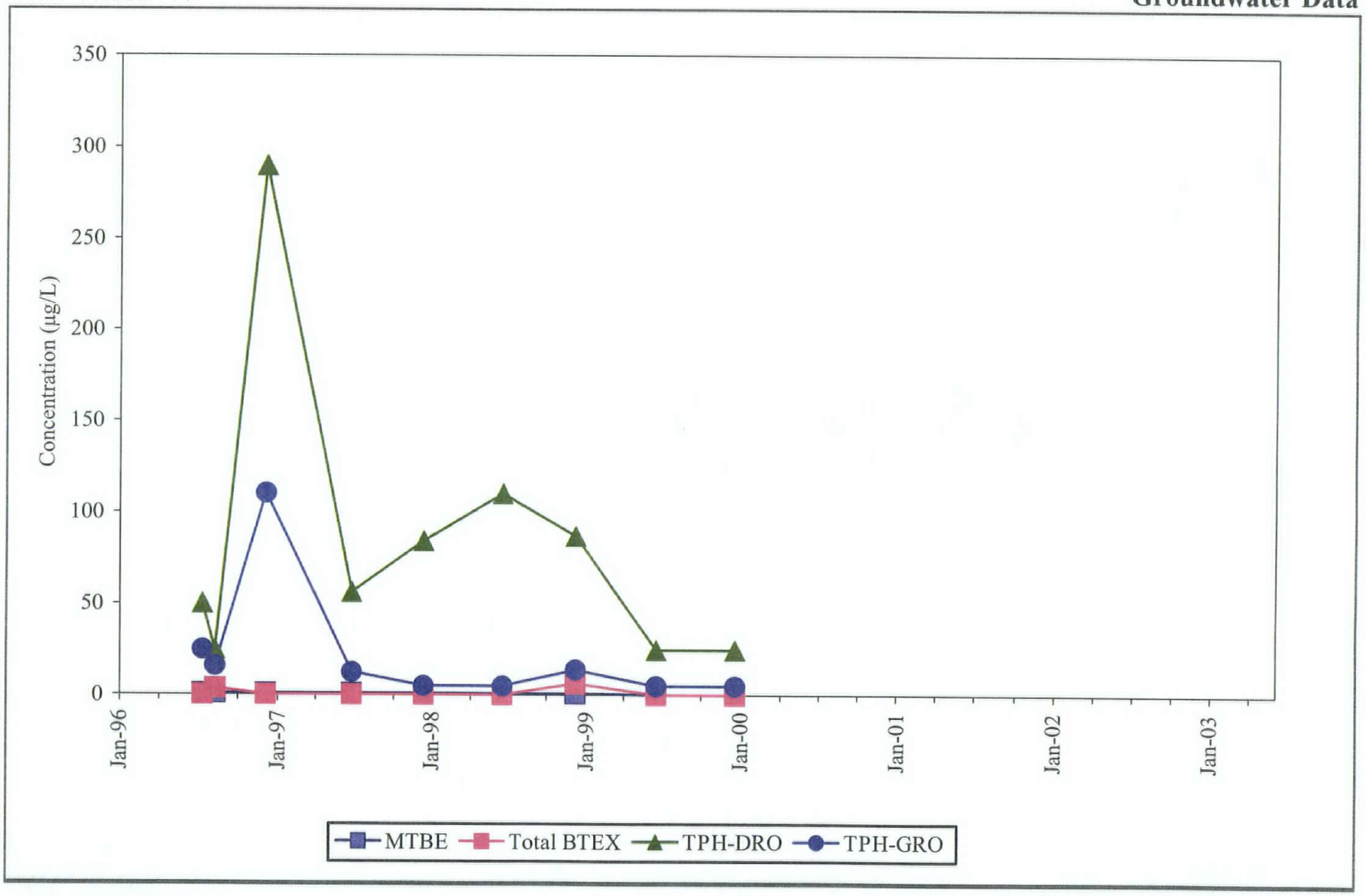
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-44

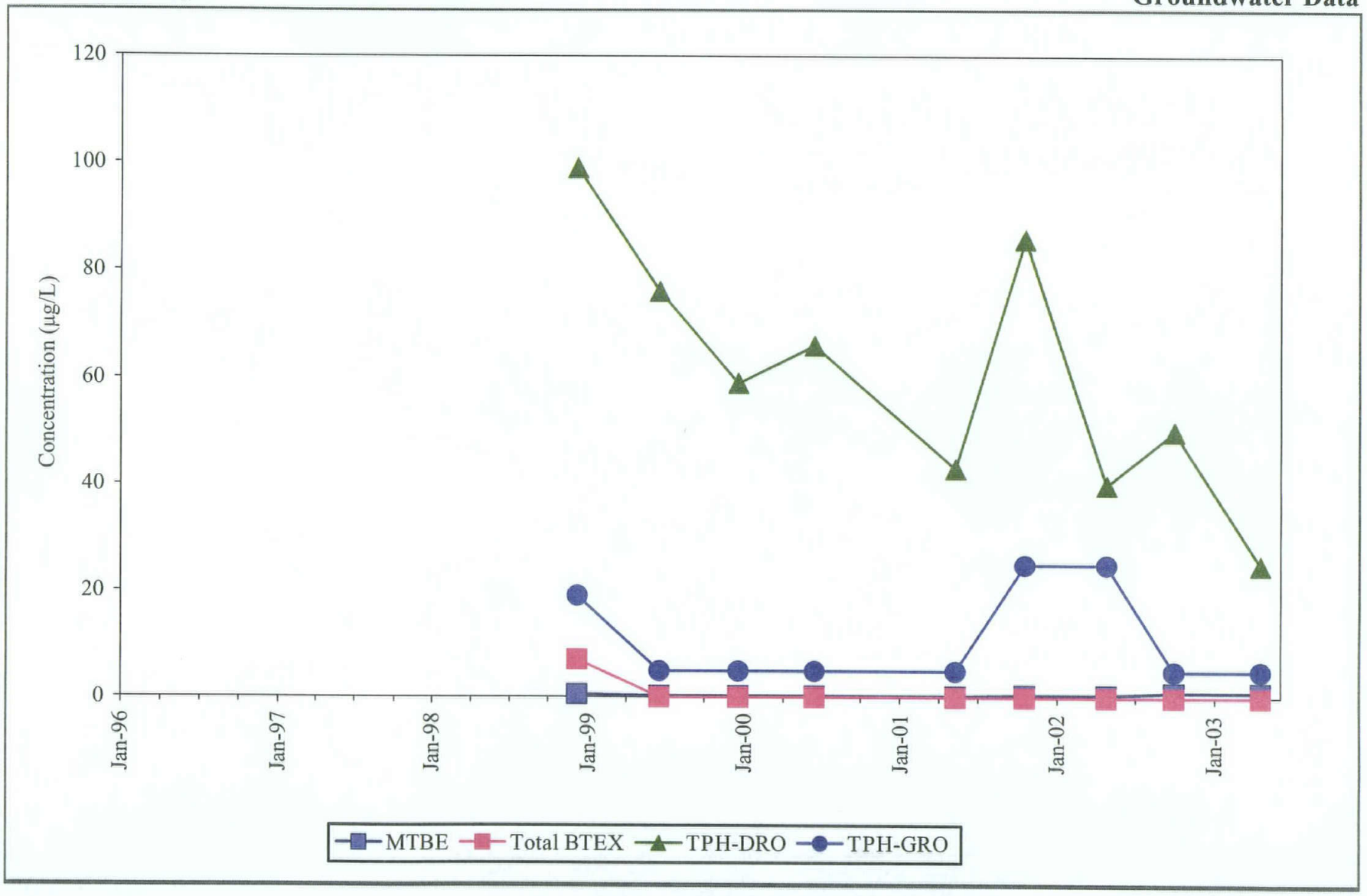
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-46

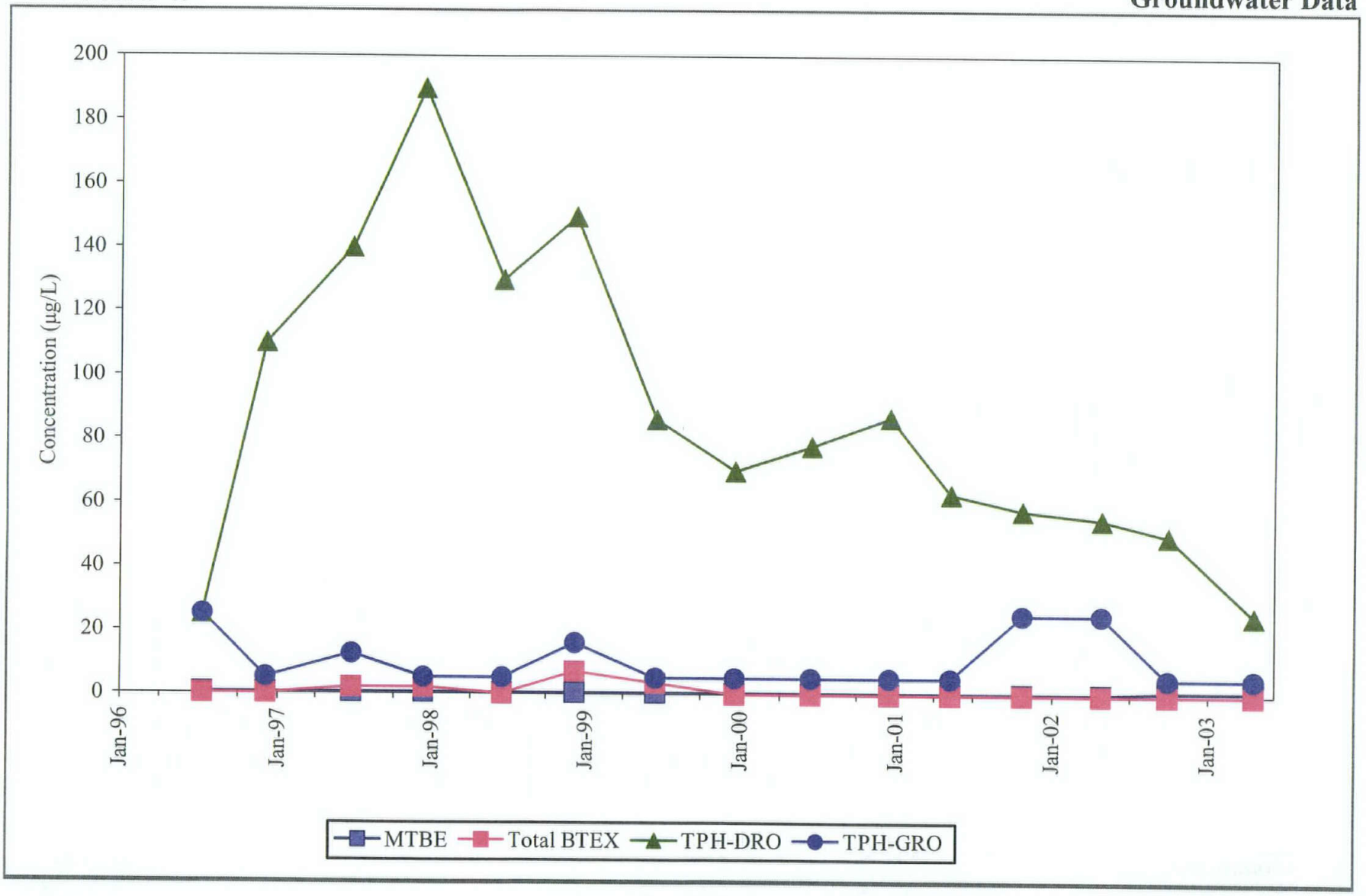
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-49

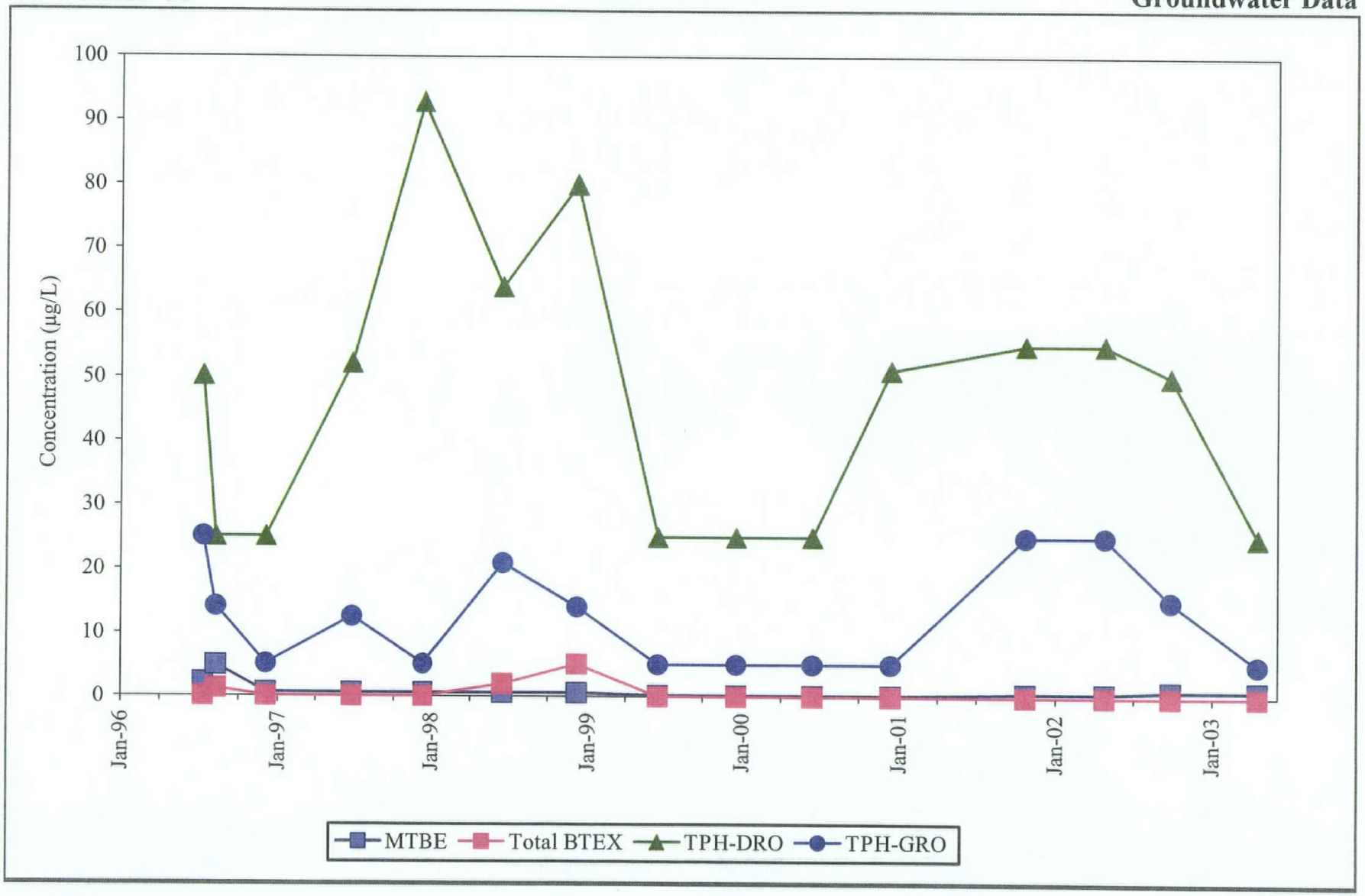
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-51

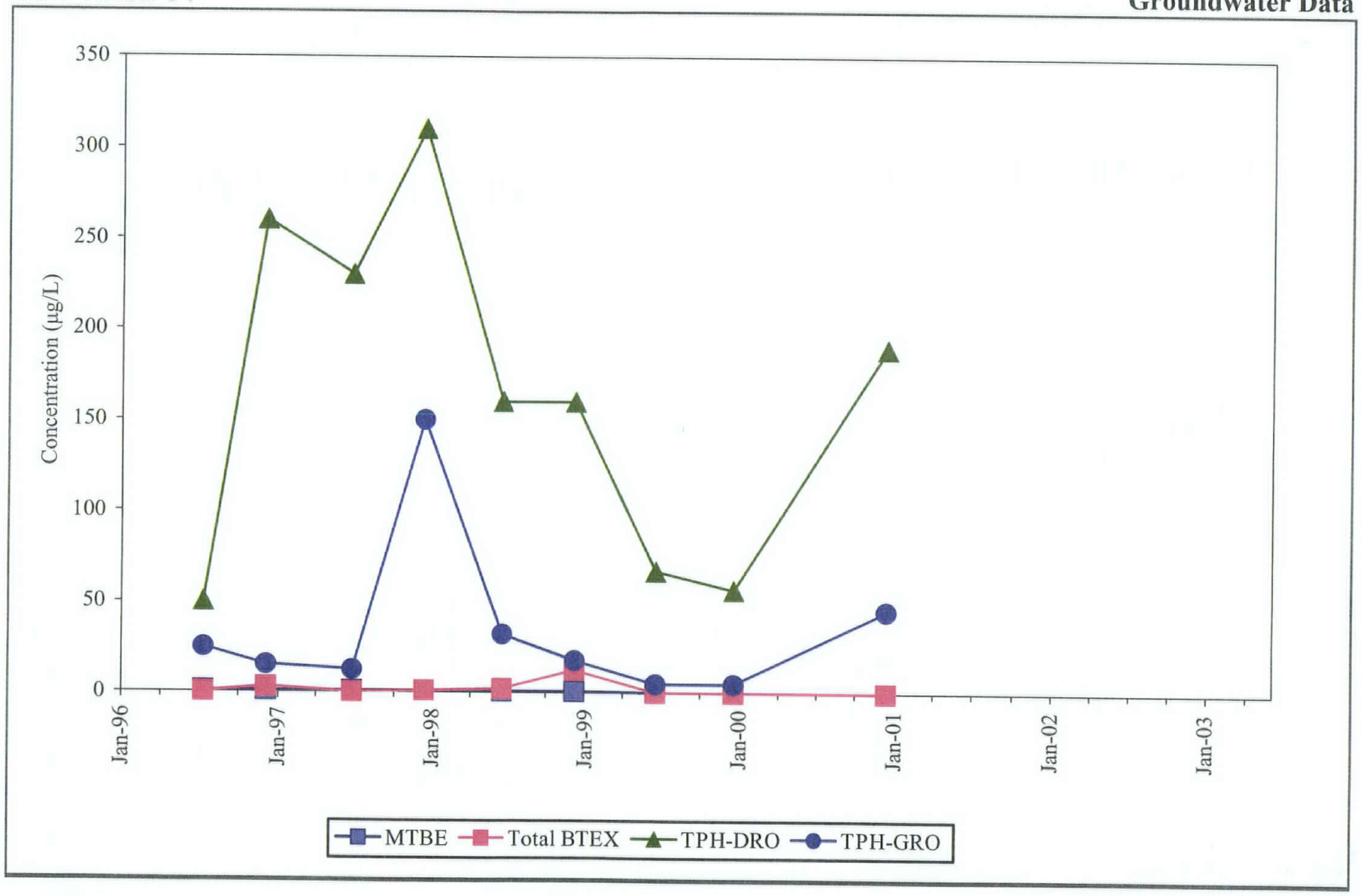
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-54

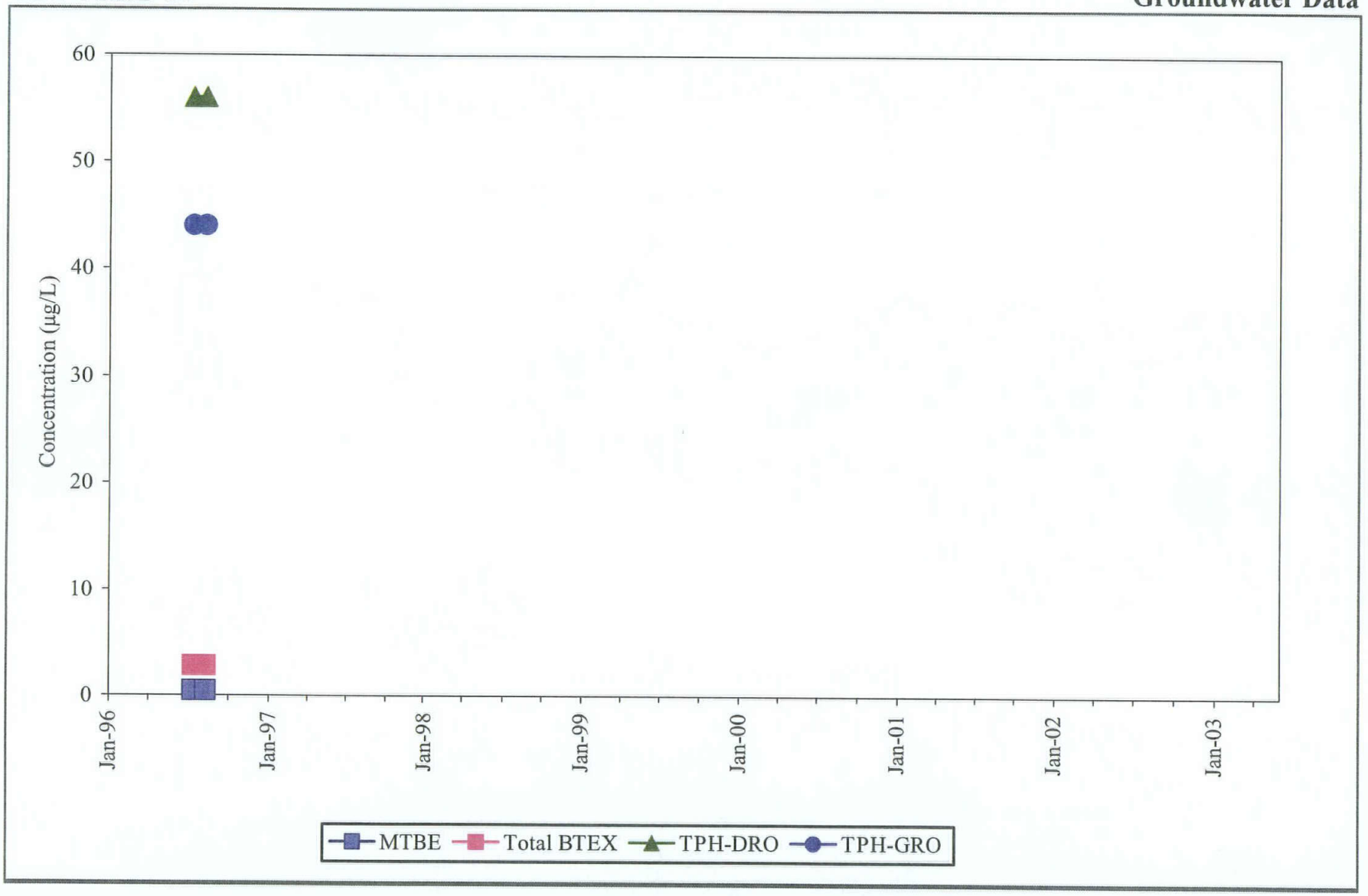
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-56

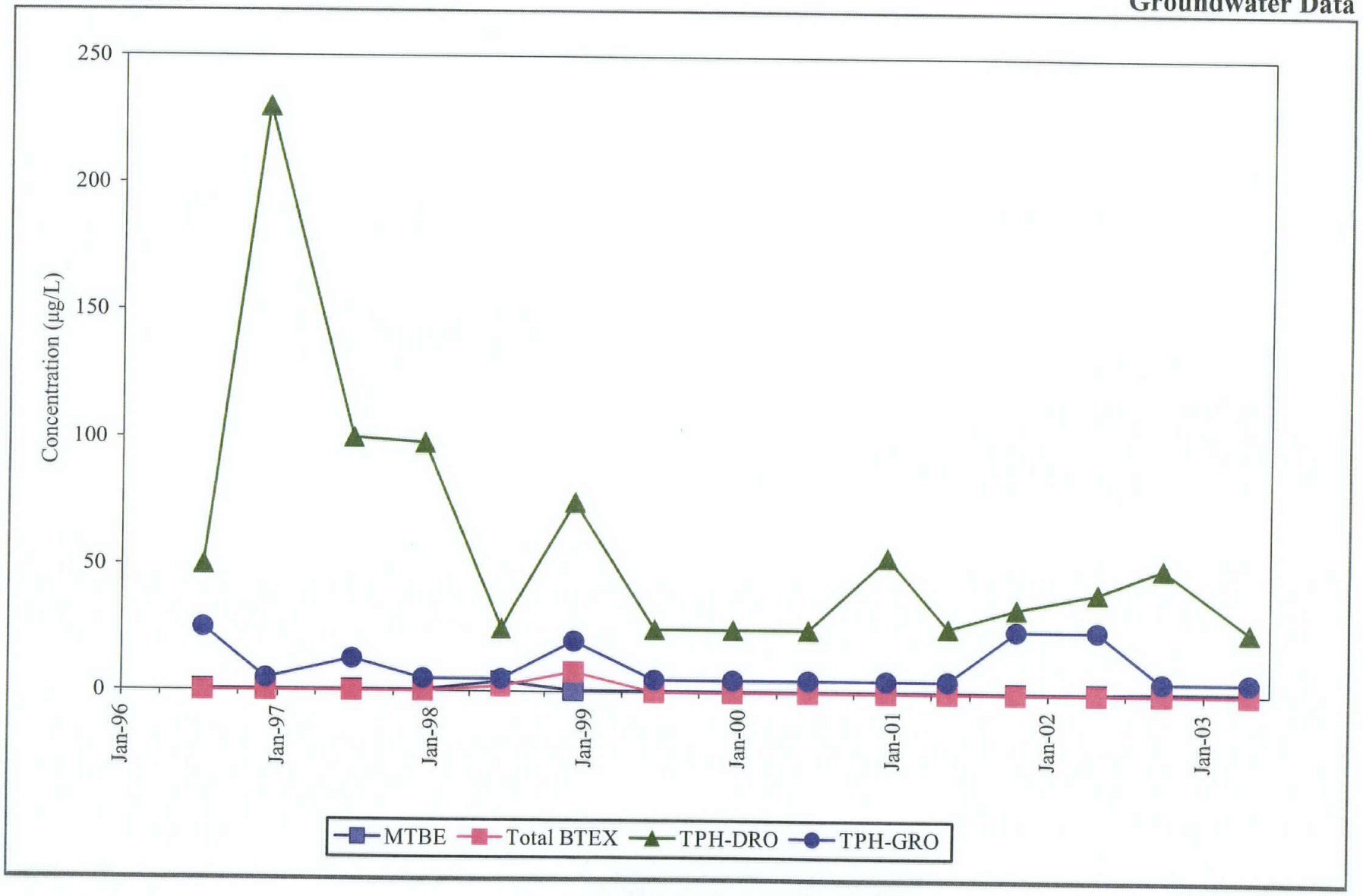
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-58

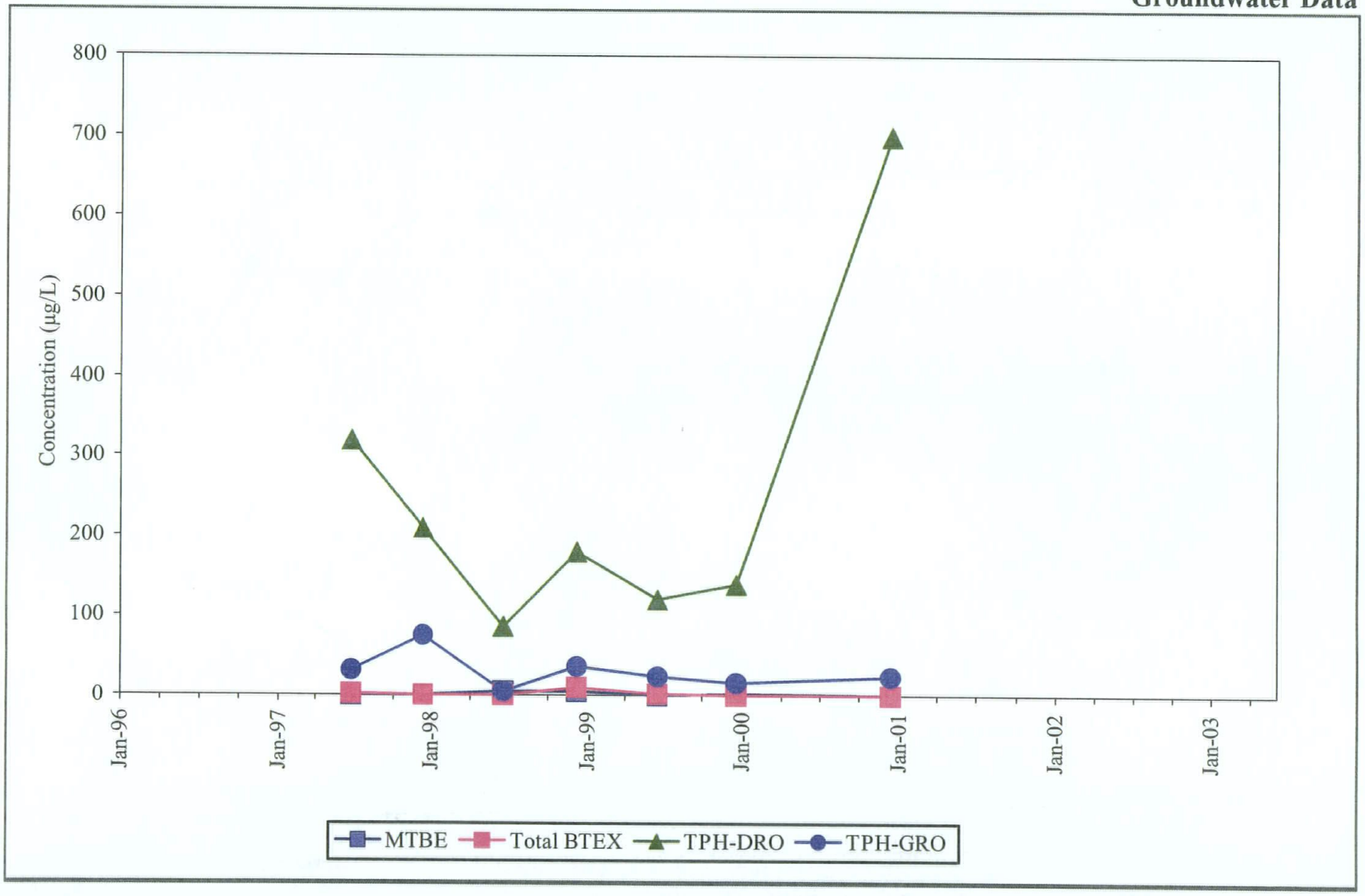
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-61R

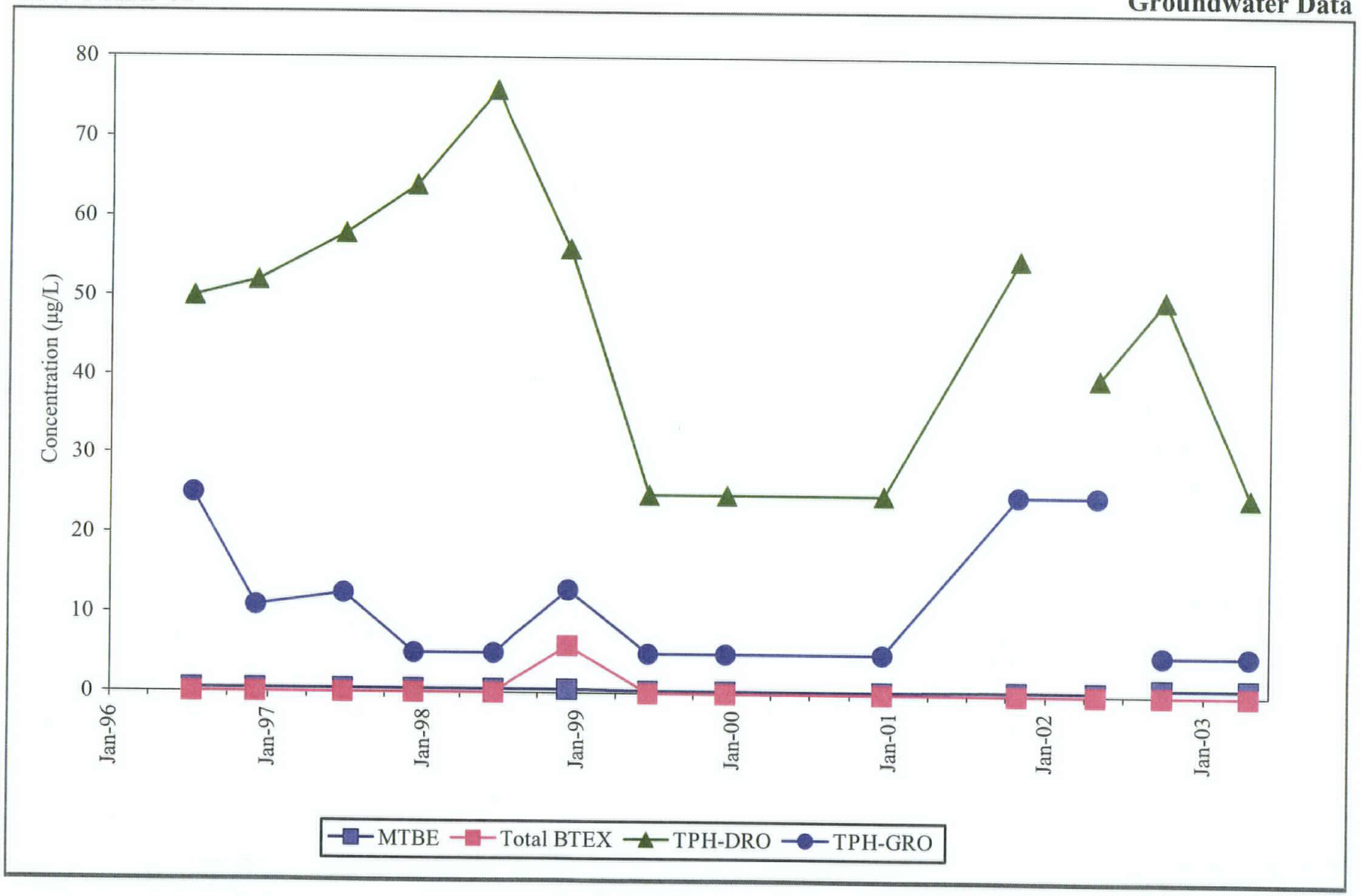
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-62

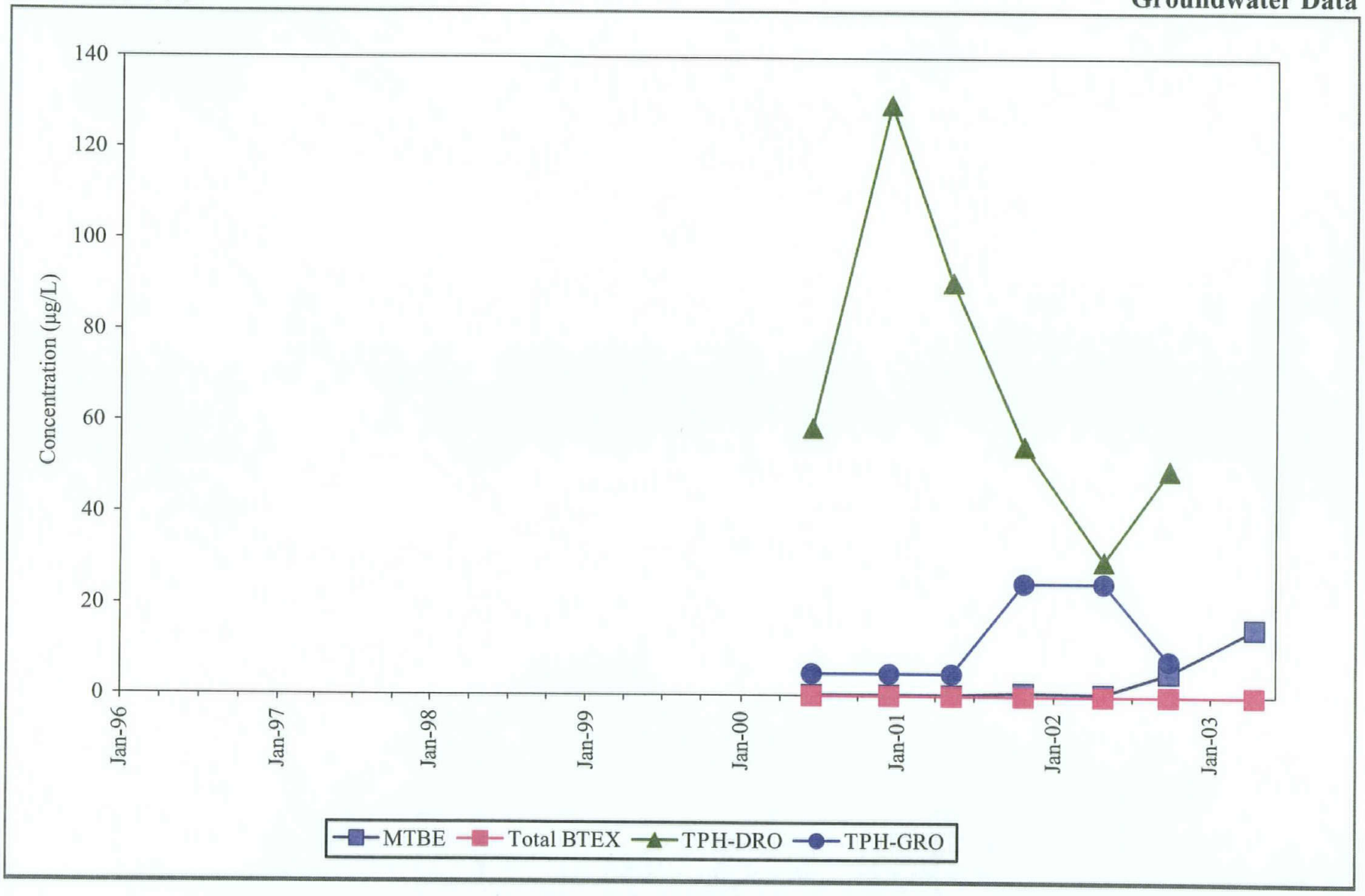
Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Sample Location:
MW-NASB-98

Old Navy Fuel Farm
Groundwater Data



	MTBE	Benzene	TPH-DRO	TPH-GRO
Clean-up Goal:	35 µg/L	5 µg/L	50 µg/L	50 µg/L

Appendix B

Analytical Data

Katahdin ANALYTICAL SERVICES
340 County Road No. 5
P.O. Box 720
Westbrook, ME 04092
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page ____ of ____

Client: EA Engineering
Contact: Sue Chase
Phone #: (207) 798-5977
Fax #: (207) 798-4634
Address: 175 Middlesex Trnpke
City: Bedford
State: MA
Zip Code: 01730
Purchase Order #:
Proj. Name / No.: Old Fuel Farm
Katahdin Quote #:
Bill (if different than above):
Address:
Sampler (Print / Sign):
Copies To:

LAB USE ONLY
WORK ORDER #: WQ3773
KATAHDIN PROJECT MANAGER:
REMARKS:
SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C ____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	BTEX 8021 (Filt. ☐Y ☒N, HCL)	TPH DRO (Filt. ☐Y ☒N, HCL)	TPH GRO (Filt. ☐Y ☒N, HCL)	TOC EPA 415.1 (Filt. ☐Y ☒N, H_2SO_4)	Alkalinity, Chloride, Nitrate, Sulfate (Filt. ☐Y ☒N)	Methane (Filt. ☐Y ☒N)	Hydrogen (Filt. ☐Y ☒N)	Sulfide Zn Ac 37% / NaOH (Filt. ☐Y ☒N)	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	FF-MW-98-[redacted]	12/11/00 / 1120	W	32 33	X	X	X	X	X	X	X	X		
	FF-MW-244	12/11/00 / 1445	W	11	X	X	X	X	X	X	X	X		
	FF-MW-210	12/11/00 / 1530	W	11	X	X	X	X	X	X	X	X		
	FF-MW-209R	12/12/00 / 940	W	11	X	X	X	X	X	X	X	X		
	FF-MW-XD1	12/12/00 / —	W	11	X	X	X	X	X	X	X	X		
	FF-MW-208	12/12/00 / 1055	W	11	X	X	X	X	X	X	X	X		
	FF-MW-207	12/12/00 / 1205	W	11	X	X	X	X	X	X	X	X		
	FF-MW-206	12/12/00 / 1310	W	11	X	X	X	X	X	X	X	X		
	Trip blank	12/7/00 / 0900	W	2	X									
		/												
		/												
		/												
		/												
		/												
		/												
		/												

COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Jane Chase	12/14/00 1500	Scott Taylor		12-12-00 1615	Shelby Hill
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

FORMSOURCE INC. ☎ (877) 782-3311
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ORIGINAL

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3773-1
Report Date: 1/8/2001 2:30:54 PM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-98~	AQ	12/11/2000	12/12/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	30 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	8 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	11 mg/L	1.0	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
SULFIDE	43 mg/L	4.0	4	1.0	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	6 mg/L	1	1	1	E415.1	12/19/00	JLB	N/A	N/A	N/A	

Notes:

Revision: 0.00

340 County Road No. 5
P.O.Box 720, Westbrook, ME 04098
Tel: (207) 874-2400 Fax: (207) 775-4029

http://katahdinlab.com

210 West Road No. 5, Portsmouth, NH 03801
Tel: (603) 431-5777 Fax: (603) 436-3356

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-1
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/28/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-98	Aqueous	12/11/2000	12/12/2000	12/13/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		130	ug/L	1.0	50	50	12/15/2000	AJR
o-Terphenyl		88	%	1.0			12/15/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-1
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/19/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-98	Aqueous	12/11/2000	12/12/2000	12/14/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/14/2000	JEY
4-Bromofluorobenzene		89	%	1.0			12/14/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-1
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-98	Aqueous	12/11/2000	12/12/2000	12/21/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/21/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/21/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/21/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/21/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/21/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/21/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3773-2
Report Date: 1/8/2001 2:30:54 PM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-244~	AQ	12/11/2000	12/12/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	10 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	11 mg/L	1.0	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	3 mg/L	1	1	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	8 mg/L	1	1	1	E415.1	12/26/00	CBU	N/A	N/A	N/A	

Notes:

Revision: 0.00

340 County Road No. 5
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210 West Road No. 5, Portsmouth, NH 03801
Tel: (603) 431-5777 Fax: (603) 436-3356

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-2
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/28/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-244	Aqueous	12/11/2000	12/12/2000	12/13/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	43	ug/L	1.0	50	50	12/16/2000	AJR
o-Terphenyl		88	%	1.0			12/16/2000	AJR

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-2
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/19/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-244	Aqueous	12/11/2000	12/12/2000	12/14/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/14/2000	JEY
4-Bromofluorobenzene		96	%	1.0			12/14/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-2
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-244	Aqueous	12/11/2000	12/12/2000	12/21/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/21/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/21/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/21/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/21/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/21/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/21/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3773-3
Report Date: 1/8/2001 2:30:54 PM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-210~	AQ	12/11/2000	12/12/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	30 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	7 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	0.53 mg/L	0.050	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	9 mg/L	1	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	20 mg/L	4	4	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	23 mg/L	1.0	1	1	E415.1	12/26/00	CBU	N/A	N/A	N/A	

Notes:

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Tel: (603) 431-5777 Fax: (603) 436-3356

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Proj. ID: BNAS

Lab Sample ID: WQ3773-3
SDG: WQ3773
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-210	Aqueous	12/11/2000	12/12/2000	12/13/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		100	ug/L	1.0	50	50	12/16/2000	AJR
o-Terphenyl		75	%	1.0			12/16/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-3
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/19/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-210	Aqueous	12/11/2000	12/12/2000	12/14/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/14/2000	JEY
4-Bromofluorobenzene		97	%	1.0			12/14/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-3
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-210	Aqueous	12/11/2000	12/12/2000	12/21/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/21/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/21/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/21/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/21/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/21/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/21/2000	JEY

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ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3773-4
Report Date: 1/8/2001 2:30:54 PM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-209R~	AQ	12/12/2000	12/12/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	100 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	33 mg/L	2.0	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	10 mg/L	2	2	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	46 mg/L	4.0	4	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	9 mg/L	1	1	1	E415.1	12/26/00	CBU	N/A	N/A	N/A	1

Notes:

(1) Duplicate analyses were performed on this sample for this parameter. The precision of the duplicate results is outside the laboratory'sacceptance range. Sample homogeneity may be a factor. The individual results were 8.720 and 6.877.

Revision: 0.00

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-4
SDG: WQ3773
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-209R	Aqueous	12/12/2000	12/12/2000	12/13/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	44	ug/L	1.0	50	50	12/16/2000	AJR
o-Terphenyl		84	%	1.0			12/16/2000	AJR

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-4
SDG: WQ3773
Report Date: 12/19/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-209R	Aqueous	12/12/2000	12/12/2000	12/14/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/14/2000	JEY
4-Bromofluorobenzene		98	%	1.0			12/14/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-4
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-209R	Aqueous	12/12/2000	12/12/2000	12/21/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/21/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/21/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/21/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/21/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/21/2000	JEY
a,a,a-Trifluorotoluene		97	%	1.0			12/21/2000	JEY

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ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3773-5
Report Date: 1/8/2001 2:30:54 PM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-XD1~	AQ	12/12/2000	12/12/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	90 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	32 mg/L	2.0	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	12 mg/L	1.0	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	8 mg/L	2	2	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	11 mg/L	1.0	1	1	E415.1	01/03/01	CBU	N/A	N/A	N/A	

Notes:

Revision: 0.00

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-5
SDG: WQ3773
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-XD1	Aqueous	12/12/2000	12/12/2000	12/13/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		300	ug/L	1.0	50	50	12/16/2000	AJR
o-Terphenyl		89	%	1.0			12/16/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-5
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/19/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-XD1	Aqueous	12/12/2000	12/12/2000	12/14/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/14/2000	JEY
4-Bromofluorobenzene		104	%	1.0			12/14/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-5
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-XD1	Aqueous	12/12/2000	12/12/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/22/2000	JEY

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ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3773-6
Report Date: 1/8/2001 2:30:54 PM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-208~	AQ	12/12/2000	12/12/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	100 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	43 mg/L	2.0	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	<1 mg/L	1	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	10 mg/L	4	4	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	57 mg/L	1.0	1	1	E415.1	01/03/01	CBU	N/A	N/A	N/A	

Notes:

Revision: 0.00

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-6
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/28/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-208	Aqueous	12/12/2000	12/12/2000	12/13/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		250	ug/L	1.0	50	50	12/16/2000	AJR
o-Terphenyl		87	%	1.0			12/16/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-6
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/19/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-208	Aqueous	12/12/2000	12/12/2000	12/14/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/14/2000	JEY
4-Bromofluorobenzene		98	%	1.0			12/14/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-6
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-208	Aqueous	12/12/2000	12/12/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/22/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3773-7
Report Date: 1/8/2001 2:30:54 PM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-207~	AQ	12/12/2000	12/12/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	200 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	10 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	5 mg/L	1	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	30 mg/L	4	4	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	8 mg/L	1	1	1	E415.1	12/19/00	JLB	N/A	N/A	N/A	

Notes:

Revision: 0.00

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-7
SDG: WQ3773
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-207	Aqueous	12/12/2000	12/12/2000	12/13/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		62	ug/L	1.0	50	50	12/16/2000	AJR
o-Terphenyl		84	%	1.0			12/16/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-7
SDG: WQ3773
Report Date: 12/19/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-207	Aqueous	12/12/2000	12/12/2000	12/14/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/14/2000	JEY
4-Bromofluorobenzene		97	%	1.0			12/14/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Proj. ID: BNAS

Lab Sample ID: WQ3773-7
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-207	Aqueous	12/12/2000	12/12/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/22/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3773-8
Report Date: 1/8/2001 2:30:54 PM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-206~	AQ	12/12/2000	12/12/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	50 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	10 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	0.06 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	10 mg/L	1	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	20 mg/L	4	4	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	3 mg/L	1	1	1	E415.1	12/19/00	JLB	N/A	N/A	N/A	

Notes:

Revision: 0.00

340 County Road No. 5
P.O.Box 720, Westbrook, ME 04098
Tel: (207) 874-2400 Fax: (207) 775-4029

http://katahdinlab.com

210 West Road No. 5, Portsmouth, NH 03801
Tel: (603) 431-5777 Fax: (603) 436-3356

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3773-8
	EA Engineering	SDG:	WQ3773
	175 Middlesex Turnpike	Report Date:	12/28/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-206	Aqueous	12/12/2000	12/12/2000	12/13/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		< 50	ug/L	1.0	50	50	12/16/2000	AJR
o-Terphenyl		80	%	1.0			12/16/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-8
SDG: WQ3773
Report Date: 12/19/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-206	Aqueous	12/12/2000	12/12/2000	12/14/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/14/2000	JEY
4-Bromofluorobenzene		97	%	1.0			12/14/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-8
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-206	Aqueous	12/12/2000	12/12/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		99	%	1.0			12/22/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3773-9
SDG: WQ3773
Report Date: 12/22/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
TRIP BLANK	Aqueous	12/07/2000	12/12/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		96	%	1.0			12/22/2000	JEY

Katahdin ANALYTICAL SERVICES
340 County Road No. 5
P.O. Box 726
Westbrook, ME 04092
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

0012251

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page ____ of ____

Client: Katahdin Analytical Services
Contact: Andrea Colby
Phone #: ( )
Fax #: ( )
Address: as above
City:
State:
Zip Code:
Purchase Order #:
Proj. Name / No.:
Katahdin Quote #:
Bill (if different than above):
Address:
Sampler (Print / Sign):
Copies To:

LAB USE ONLY
WORK ORDER #:
KATAHDIN PROJECT MANAGER
REMARKS: Sub to Air Toxics

SHIPPING INFO: ☐ FED EX ☒ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C ____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE / PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Methane (Filt. ☐Y☐N)	Hydrogen (Filt. ☐Y☐N)								
	WQ3773-1	12-11-00/1120	AQ	6 ~~2~~	X	X	— MS/MSD							
	WQ3773-2	12-11-00/1445		2	X	X								
	WQ3773-3	12-11-00/1530			X	X								
	WQ3773-4	12-12-00/0940			X	X								
	WQ3773-5	12-12-00/—			X	X								
	WQ3773-6	12-12-00/1055			X	X								
	WQ3773-7	12-12-00/1205			X	X								
	WQ3773-8	12-12-00/1310			X	X								
		/												
		/												
		/												
		/												
		/												
		/												
		/												
		/												

COMMENTS

QC-II + DD (WEST-DB3) Results Due: 1-1-01

CUSTODY SEAL INTACT ☐ IN NONE TEMP ICE 6.0°C

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Shelly Wel	12-12-00 1650				
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	12-13-00 10:5	[illegible] ATC			

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN

ORIGINAL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-1

ID#: 0012251-01A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121404	Date of Collection:	12/11/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	1200
Hydrogen	200	Not Detected

Hydrogen reported from file 7121504, analyzed on 12/15/00, at DF=1. Hydrogen sample was taken from vial B and the methane sample was taken from vial E.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-1 MS

ID#: 0012251-01AMS

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121405	Date of Collection:	12/11/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	%Recovery
Methane	10	101
Hydrogen	200	90

Hydrogen reported from file 7121505, analyzed on 12/15/00, at DF=1. Hydrogen sample taken from vial C and methane sample taken from vial F.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-1 MSD

ID#: 0012251-01AMSD

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121406	Date of Collection:	12/11/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	%Recovery
Methane	10	81
Hydrogen	200	85

Hydrogen reported from file 7121506, analyzed on 12/15/00, at DF=1. Hydrogen sample taken from vial D and methane sample taken from vial G.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-2

ID#: 0012251-02A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121407	Date of Collection:	12/11/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	14
Hydrogen	200	Not Detected

Hydrogen reported from file 7121604, analyzed on 12/16/00, at DF=1. Methane sample taken from vial B. Hydrogen sample taken from vial WQ3773-2 - no letter designation provided.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-2 Duplicate

ID#: 0012251-02AA

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Nam	7121408	Date of Collection:	12/11/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	15
Hydrogen	200	Not Detected

Hydrogen reported from file 7121605, analyzed on 12/16/00, at DF=1. Methane sample taken from vial A. Hydrogen sample taken from vial WQ3773-2 - no letter designation provided.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-3

ID#: 0012251-03A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121409	Date of Collection:	12/11/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121507, analyzed on 12/15/00, at DF=1. Hydrogen sample taken from vial B and methane sample taken from vial A.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-4

ID#: 0012251-04A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121410	Date of Collection:	12/12/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	79
Hydrogen	200	Not Detected

Hydrogen reported from file 7121508, analyzed on 12/15/00, at DF=1. Hydrogen sample taken from vial B and methane sample taken from vial A.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-5

ID#: 0012251-05A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121411	Date of Collection:	12/12/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	73
Hydrogen	200	Not Detected

Hydrogen reported from file 7121509, analyzed on 12/15/00, at DF=1. Hydrogen sample taken from vial B and methane sample taken from vial A.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-6

ID#: 0012251-06A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121412	Date of Collection:	12/12/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	14000
Hydrogen	200	Not Detected

Hydrogen reported from file 7121510, analyzed on 12/15/00, at DF=1. Hydrogen sample taken from vial B and methane sample taken from vial A.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-7

ID#: 0012251-07A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121413	Date of Collection:	12/12/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121511, analyzed on 12/15/00, at DF=1. Hydrogen sample taken from vial B and methane sample taken from vial A.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3773-8

ID#: 0012251-08A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121416	Date of Collection:	12/12/00
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121512, analyzed on 12/15/00, at DF=1. Hydrogen sample taken from vial B and methane sample taken from vial A.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0012251-09A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121402	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	%Recovery
Methane	10	101
Hydrogen	200	91

Hydrogen reported from file 7121502, analyzed on 12/15/00, at DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0012251-09B

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121602	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	12/16/00

Compound	Det. Limit (ug/l)	%Recovery
Hydrogen	200	91

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0012251-10A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121403	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	12/14/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121503, analyzed on 12/15/00, at DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0012251-10B

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121603	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	12/16/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Hydrogen	200	Not Detected

Container Type: NA - Not Applicable

Katahdin ANALYTICAL SERVICES
340 County Road No. 5
P.O. Box 720
Westbrook, ME 04092
Tel: (207) 874-2400
Fax: (207) 775-4029

0012251

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page ____ of ____

Client: Katahdin Analytical Services
Contact: Andrea Colby
Phone #: ( )
Fax #: ( )
Address: as above
City
State
Zip Code
Purchase Order #
Proj. Name / No.
Katahdin Quote #
Bill (if different than above)
Address
Sampler (Print / Sign)
Copies To:

LAB USE ONLY
WORK ORDER #:
KATAHDIN PROJECT MANAGER

REMARKS: Sub to Air Toxics

SHIPPING INFO: ☐ FED EX ☒ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Filt. ☐Y☐N Hydrogen - pres. w/HCl	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N
02A	WQ3773-2	12-11-00/1445	AQ	1	1									
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OMMENTS
C-II + DD(WEST-DB3)

CUSTODY SEAL INTACT? Y N NONE TEMP 1.6cd

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Shelby Hill	12-15-00 1645				
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Kimberly ATL	12-16-00 0914				

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN

ORIGINAL

Katahdin ANALYTICAL SERVICES
340 County Road No. 5
P.O. Box 720
Westbrook, ME 04092
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE PRINT IN PEN

Client: EA
Contact: AL Easterday
Phone #: (781) 275-8846
Fax #: (207) 798-5[illegible]

Address: 175 Middlesex Turnpike
City: Bedford
State: MA
Zip Code: 01730

Purchase Order #:
Proj. Name / No.: Old Fuel Farm
Katahdin Quote #:

Bill (if different than above):
Address:

Sampler (Print / Sign):
Copies To:

LAB USE ONLY
WORK ORDER #: WQ3820
KATAHDIN PROJECT MANAGER:

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C: ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	BTEX 602 (Filt. ☐Y☐N)	DRO (Filt. ☐Y☐N)	GRO (Filt. ☐Y☐N)	TOC (Filt. ☐Y☐N)	hydrogen (Filt. ☐Y☐N)	methane (Filt. ☐Y☐N)	IA IK SO4, NO3 CL (Filt. ☐Y☐N)	sulfide (Filt. ☐Y☐N)	(Filt. ☐Y☐N)	(Filt. ☐Y☐N)
	FF-MW-RB	12/14/09 830	W	11	X	X	X	X	X	X	X	X		
	FF-MW-62	12/14/09 1220	W	11	X	X	X	X	X	X	X	X		
	FF-MW-213	12/14/09 1325	W	11	X	X	X	X	X	X	X	X		
	FF-MW-58	12/14/09 1425	W	11	X	X	X	X	X	X	X	X		
	FF-MW-49	12/14/09 1510	W	11	X	X	X	X	X	X	X	X		
	trip blank	12 / -	W	2	X									
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COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[signature]	12/15/09 950	[signature]			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

FORMSOURCE INC. ☎ (207) 782-3311
FORM # CHN-OF-CSTDY

ORIGINAL

Katahdin ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3820-1
Report Date: 1/4/2001 11:29:17 AM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-RB~	AQ	12/14/2000	12/15/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	12/20/00	JLB	N/A	N/A	N/A	
Chloride	<2 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/15/00	JRM	N/A	N/A	N/A	
Sulfate	<1 mg/L	1	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	<2 mg/L	2	2	1	376.1	12/20/00	JF	N/A	N/A	N/A	1
Total Organic Carbon (TOC)	<1 mg/L	1	1	1	E415.1	12/26/00	CBU	N/A	N/A	N/A	

Notes:

(1) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects,sample volume, or quantity used for analysis.

Revision: 0.00

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-1
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-RB	Aqueous	12/14/2000	12/15/2000	12/20/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		< 50	ug/L	1.0	50	50	12/22/2000	AJR
o-Terphenyl		85	%	1.0			12/22/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-1
SDG: WQ3820
Report Date: 12/20/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-RB	Aqueous	12/14/2000	12/15/2000	12/19/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/19/2000	JEY
4-Bromofluorobenzene		95	%	1.0			12/19/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-1
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-RB	Aqueous	12/14/2000	12/15/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		99	%	1.0			12/22/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3820-2
Report Date: 1/4/2001 11:29:17 AM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-62~	AQ	12/14/2000	12/15/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	12/20/00	JLB	N/A	N/A	N/A	
Chloride	10 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/15/00	JRM	N/A	N/A	N/A	
Sulfate	11 mg/L	1.0	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	<2 mg/L	2	2	1	376.1	12/20/00	JF	N/A	N/A	N/A	1
Total Organic Carbon (TOC)	8 mg/L	1	1	1	E415.1	12/26/00	CBU	N/A	N/A	N/A	

Notes:

(1) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects,sample volume, or quantity used for analysis.

Revision: 0.00

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-2
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-62	Aqueous	12/14/2000	12/15/2000	12/20/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		< 50	ug/L	1.0	50	50	12/22/2000	AJR
o-Terphenyl		87	%	1.0			12/22/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-2
SDG: WQ3820
Report Date: 12/20/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-62	Aqueous	12/14/2000	12/15/2000	12/19/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/19/2000	JEY
4-Bromofluorobenzene		105	%	1.0			12/19/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-2
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-62	Aqueous	12/14/2000	12/15/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/22/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3820-3
Report Date: 1/4/2001 11:29:17 AM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-213~	AQ	12/14/2000	12/15/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	12/20/00	JLB	N/A	N/A	N/A	
Chloride	9 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/15/00	JRM	N/A	N/A	N/A	
Sulfate	7 mg/L	1	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	<1 mg/L	1	1	1	376.1	12/20/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	2 mg/L	1	1	1	E415.1	12/26/00	CBU	N/A	N/A	N/A	

Notes:

Revision: 0.00

340 County Road No. 5
P.O.Box 720, Westbrook, ME 04098
Tel: (207) 874-2400 Fax: (207) 775-4029

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210 West Road No. 5, Portsmouth, NH 03801
Tel: (603) 431-5777 Fax: (603) 436-3356

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-3
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-213	Aqueous	12/14/2000	12/15/2000	12/20/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		< 50	ug/L	1.0	50	50	12/22/2000	AJR
o-Terphenyl		80	%	1.0			12/22/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-3
SDG: WQ3820
Report Date: 12/20/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-213	Aqueous	12/14/2000	12/15/2000	12/19/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/19/2000	JEY
4-Bromofluorobenzene		102	%	1.0			12/19/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-3
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-213	Aqueous	12/14/2000	12/15/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		99	%	1.0			12/22/2000	JEY

Katahdin ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3820-4
Report Date: 1/4/2001 11:29:17 AM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-58~	AQ	12/14/2000	12/15/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	12/20/00	JLB	N/A	N/A	N/A	
Chloride	<2 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/15/00	JRM	N/A	N/A	N/A	
Sulfate	30 mg/L	4	4	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	<2 mg/L	2	2	1	376.1	12/20/00	JF	N/A	N/A	N/A	1
Total Organic Carbon (TOC)	4 mg/L	1	1	1	E415.1	12/26/00	CBU	N/A	N/A	N/A	

Notes:

(1) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects,sample volume, or quantity used for analysis.

Revision: 0.00

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-4
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-58	Aqueous	12/14/2000	12/15/2000	12/20/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		54	ug/L	1.0	50	50	12/22/2000	AJR
o-Terphenyl		85	%	1.0			12/22/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-4
SDG: WQ3820
Report Date: 12/20/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-58	Aqueous	12/14/2000	12/15/2000	12/19/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/19/2000	JEY
4-Bromofluorobenzene		100	%	1.0			12/19/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-4
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-58	Aqueous	12/14/2000	12/15/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/22/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3820-5
Report Date: 1/4/2001 11:29:17 AM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-49~	AQ	12/14/2000	12/15/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	20 mg/L	20	1	20	E310.1	12/20/00	JLB	N/A	N/A	N/A	
Chloride	8 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/15/00	JRM	N/A	N/A	N/A	
Sulfate	30 mg/L	4	4	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	7 mg/L	4	4	1	376.1	12/20/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	15 mg/L	1.0	1	1	E415.1	12/26/00	CBU	N/A	N/A	N/A	

Notes:

Revision: 0.00

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3820-5
	EA Engineering	SDG:	WQ3820
	175 Middlesex Turnpike	Report Date:	12/28/2000
	Bedford, MA 01730	PO No.:	29600.35
		Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-49	Aqueous	12/14/2000	12/15/2000	12/20/2000	GNP	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		87	ug/L	1.0	50	50	12/22/2000	AJR
o-Terphenyl		81	%	1.0			12/22/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-5
SDG: WQ3820
Report Date: 12/20/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-49	Aqueous	12/14/2000	12/15/2000	12/19/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/19/2000	JEY
4-Bromofluorobenzene		102	%	1.0			12/19/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-5
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-49	Aqueous	12/14/2000	12/15/2000	12/23/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/23/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/23/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/23/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/23/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/23/2000	JEY
a,a,a-Trifluorotoluene		95	%	1.0			12/23/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WQ3820-6
SDG: WQ3820
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
TRIP BLANK	Aqueous	12/14/2000	12/15/2000	12/23/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/23/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/23/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/23/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/23/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/23/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/23/2000	JEY

Katahdin ANALYTICAL SERVICES
340 County Road #10
P.O. Box 720
Westbrook, ME 04092
Tel: (207) 874-2400
Fax: (207) 775-4029

0012343

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page ____ of ____

ent: Katahdin Analytical Services
Contact: Andrea Colby
Phone #: ( )
Fax #: ( )

dress: as above
City:
State:
Zip Code:

rchase Order #:
Proj. Name / No.:
Katahdin Quote #:

(if different than above)
Address:

npler (Print / Sign):
Copies To:

AB USE ONLY
WORK ORDER #:
KATAHDIN PROJECT MANAGER

MARKS: Sub to Air Toxics

PPING INFO: ☐ FED EX ☒ UPS ☐ CLIENT

BILL NO:

MP°C ____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Methane (Filt. ☐Y☐N)	Hydrogen (Filt. ☐Y☐N)	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N
WQ3820-1	12-14-00/0830	AQ	2	X	X								
WQ3820-2	/1220		2	X	X								
WQ3820-3	/1325		2	X	X								
WQ3820-4	/1425		2	X	X								
WQ3820-5	/1510		2	X	X								
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MENTS

QC-II DD (WEST-DB3) Results Due: 1-4-01

CUSTODY SEAL INTACT? Y N NONE TEMP Iced

nquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[signature]	12-15-00 1645				
nquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	12-16-00 0714	[signature] ATL			

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS

AIR TOXICS LTD.

SAMPLE NAME: WQ3820-1

ID#: 0012343-01A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121829	Date of Collection:	12/14/00
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121606, analyzed on 12/16/00, at DF=1. Hydrogen sample taken from B vial and methane sample taken from A vial.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3820-2

ID#: 0012343-02A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121830	Date of Collection:	12/14/00
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121607, analyzed on 12/16/00, at DF=1. Hydrogen sample taken from B vial and methane sample taken from A vial.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3820-3

ID#: 0012343-03A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121831	Date of Collection:	12/14/00
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121608, analyzed on 12/16/00, at DF=1. Hydrogen sample taken from A vial and methane sample taken from B vial.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3820-4

ID#: 0012343-04A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121832	Date of Collection:	12/14/00
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121609, analyzed on 12/16/00, at DF=1. Hydrogen sample taken from B vial and methane sample taken from A vial.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3820-5

ID#: 0012343-05A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121833	Date of Collection:	12/14/00
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	79
Hydrogen	200	Not Detected

Hydrogen reported from file 7121610, analyzed on 12/16/00, at DF=1. Hydrogen sample taken from B vial and methane sample taken from A vial.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3820-5 Duplicate

ID#: 0012343-05AA

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121834	Date of Collection:	12/14/00
Dil. Factor:	1.00	Date of Analysis:	12/19/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	73
Hydrogen	200	Not Detected

Hydrogen reported from file 7121611, analyzed on 12/16/00, at DF=1. Hydrogen sample taken from B vial and methane sample taken from A vial.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0012343-06A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121802	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	%Recovery
Methane	10	92
Hydrogen	200	91

Hydrogen reported from file 7121602, analyzed on 12/16/00, at DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0012343-07A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121803	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121603, analyzed on 12/16/00, at DF=1.

Container Type: NA - Not Applicable

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Page ____ of ____

Client: EA
Contact: AL Easterday
Phone #: (207) 795-5977
Fax #: ( ) 795-4636
Address:
City:
State:
Zip Code:
Purchase Order #:
Proj. Name / No.: Old Fuel Farm
Katahdin Quote #:
Bill (if different than above):
Address:
Sampler (Print / Sign):
Copies To:

LAB USE ONLY
WORK ORDER #: W03794
KATAHDIN PROJECT MANAGER:
REMARKS:
SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C ____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	BTEX MTBE EPA 602 (Filt. ☐Y☐N)	DRO (Filt. ☐Y☐N)	GRO (Filt. ☐Y☐N)	TOC H_2SO_4 (Filt. ☐Y☐N)	hydrogen (Filt. ☐Y☐N)	Methane (Filt. ☐Y☐N)	Alk $CaSO_4$ NO_3 (Filt. ☐Y☐N)	Sulfide 2N HCl, NaOH (Filt. ☐Y☐N)	(Filt. ☐Y☐N)	(Filt. ☐Y☐N)
	~~FF-MW~~	~~10/16/00 940~~	~~W~~	~~7~~	~~X~~	~~X~~	~~X~~							
	~~FF-MW~~	~~10/16/00 1130~~	~~W~~	~~7~~	~~X~~	~~X~~	~~X~~							
	FF-MW-51	12/13/00 1025	W	11	X	X	X	X	X	X	X	X		
	FF-MW-54	12/13/00 1215	W	11	X	X	X	X	X	X	X	X		
	FF-MW-61R	12/13/00 1335	W	11	X	X	X	X	X	X	X	X		
	trip blank	— / —	W	2	X									
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COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[signature]	12/14/00 1450	[signature]		12-13-00 1555	[signature]
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

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KAS-COC1 (R.0900)

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ORIGINAL

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3794-1
Report Date: 1/4/2001 11:37:05 AM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-51~	AQ	12/13/2000	12/13/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	30 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	3 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	5 mg/L	1	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	<4 mg/L	4	4	1	376.1	12/13/00	JF	N/A	N/A	N/A	1
Total Organic Carbon (TOC)	4 mg/L	1	1	1	E415.1	12/19/00	JLB	N/A	N/A	N/A	

Notes:

(1) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects,sample volume, or quantity used for analysis.

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210 West Road No. 5, Portsmouth, NH 03801
Tel: (603) 431-5777 Fax: (603) 436-3356

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	**Lab Sample ID:**	WQ3794-1
	EA Engineering	**SDG:**	WQ3794
	175 Middlesex Turnpike	**Report Date:**	12/28/2000
	Bedford, MA 01730	**PO No.:**	29600.35
Proj. ID:	BNAS	**Project:**	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-51	Aqueous	12/13/2000	12/13/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/22/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3794-1
	EA Engineering	SDG:	WQ3794
	175 Middlesex Turnpike	Report Date:	12/29/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-51	Aqueous	12/13/2000	12/13/2000	12/18/2000	JRN	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		51	ug/L	1.0	50	50	12/28/2000	AJR
o-Terphenyl		74	%	1.0			12/28/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3794-1
SDG: WQ3794
Report Date: 12/20/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-51	Aqueous	12/13/2000	12/13/2000	12/19/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	12/19/2000	JEY
4-Bromofluorobenzene		101	%	1.0			12/19/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3794-2
Report Date: 1/4/2001 11:37:05 AM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-54~	AQ	12/13/2000	12/13/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	30 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	9 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	0.52 mg/L	0.050	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	21 mg/L	2.0	2	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	140 mg/L	10	10	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	26 mg/L	1.0	1	1	E415.1	12/19/00	JLB	N/A	N/A	N/A	

Notes:

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Proj. ID: BNAS

Lab Sample ID: WQ3794-2
SDG: WQ3794
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-54	Aqueous	12/13/2000	12/13/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/22/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3794-2
	EA Engineering	SDG:	WQ3794
	175 Middlesex Turnpike	Report Date:	12/29/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-54	Aqueous	12/13/2000	12/13/2000	12/18/2000	JRN	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		190	ug/L	1.0	50	50	12/28/2000	AJR
o-Terphenyl		86	%	1.0			12/28/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY EA Engineering 175 Middlesex Turnpike Bedford, MA 01730	Lab Sample ID:	WQ3794-2
		SDG:	WQ3794
		Report Date:	12/20/2000
		PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-54	Aqueous	12/13/2000	12/13/2000	12/19/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		45	ug/L	1.0	10	10	12/19/2000	JEY
4-Bromofluorobenzene		104	%	1.0			12/19/2000	JEY

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WQ3794-3
Report Date: 1/4/2001 11:37:05 AM
PO No.: 29600.35
Project: OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-MW-61R~	AQ	12/13/2000	12/13/2000

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	70 mg/L	20	1	20	E310.1	12/18/00	JLB	N/A	N/A	N/A	
Chloride	20 mg/L	2	1	2	E325.2	12/18/00	KGT	N/A	N/A	N/A	
Nitrate as N	0.2 mg/L	0.05	1	0.05	353.2	12/13/00	KGT	N/A	N/A	N/A	
Sulfate	5 mg/L	1	1	1	375.4	12/29/00	JLB	N/A	N/A	N/A	
Sulfide	70 mg/L	4.0	4	1	376.1	12/13/00	JF	N/A	N/A	N/A	
Total Organic Carbon (TOC)	28 mg/L	1.0	1	1	E415.1	12/19/00	JLB	N/A	N/A	N/A	

Notes:

Revision: 0.00

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Proj. ID: BNAS

Lab Sample ID: WQ3794-3
SDG: WQ3794
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-61R	Aqueous	12/13/2000	12/13/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		102	%	1.0			12/22/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3794-3
	EA Engineering	SDG:	WQ3794
	175 Middlesex Turnpike	Report Date:	12/29/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-61R	Aqueous	12/13/2000	12/13/2000	12/18/2000	JRN	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		700	ug/L	1.0	50	50	12/28/2000	AJR
o-Terphenyl		90	%	1.0			12/28/2000	AJR

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client:	AL EASTERDAY	Lab Sample ID:	WQ3794-3
	EA Engineering	SDG:	WQ3794
	175 Middlesex Turnpike	Report Date:	12/20/2000
	Bedford, MA 01730	PO No.:	29600.35
Proj. ID:	BNAS	Project:	OLD FUEL FARM
		Percent Solids:	N/A
		Analytical Method:	ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-MW-61R	Aqueous	12/13/2000	12/13/2000	12/19/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		24	ug/L	1.0	10	10	12/19/2000	JEY
4-Bromofluorobenzene		102	%	1.0			12/19/2000	JEY

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730
Proj. ID: BNAS

Lab Sample ID: WQ3794-4
SDG: WQ3794
Report Date: 12/28/2000
PO No.: 29600.35
Project: OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
TRIP BLANK	Aqueous	12/13/2000	12/13/2000	12/22/2000	JEY	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Benzene		< 0.50	ug/L	1.0	0.50	0.50	12/22/2000	JEY
Toluene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	12/22/2000	JEY
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	12/22/2000	JEY
a,a,a-Trifluorotoluene		98	%	1.0			12/22/2000	JEY

Katahdin ANALYTICAL SERVICES
340 County Road No. 5
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Tel: (207) 874-2400
Fax: (207) 775-4029

0012289

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page ____ of ____

Client	Contact	Phone #	Fax #
Katahdin Analytical Services	Andrea Colby	( )	( )

Address	City	State	Zip Code
as above			

Purchase Order # | Proj. Name / No. | Katahdin Quote #

Bill (if different than above) | Address

Sampler (Print / Sign) | Copies To:

LAB USE ONLY | WORK ORDER #: | KATAHDIN PROJECT MANAGER

REMARKS: Sub to Air Toxics

SHIPPING INFO: ☐ FED EX ☒ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Methane	Hydrogen	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N
1A	WQ3794-1	12-13-00 / 1025	AQ	2	X	X										
2A	WQ3794-2	↓ / 1215	↓	2	X	X										
3A	WQ3794-3	↓ / 1335	↓	2	X	X										
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CUSTODY SEAL INTACT?
Y N NONE TEMP ____

COMMENTS

QC-II + DD (WEST-DB3) Results Due: 1-2-01

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[signature]	12-13-00 1630				
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	12-14-00 1040	[signature]			

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ORIGINAL

AIR TOXICS LTD.

SAMPLE NAME: WQ3794-1

ID#: 0012289-01A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121826	Date of Collection:	12/13/00
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	28
Hydrogen	200	Not Detected

Hydrogen reported from file 7121515, analyzed on 12/15/00, and taken from vial A. Methane taken from vial B.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3794-2

ID#: 0012289-02A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121827	Date of Collection:	12/13/00
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	2300
Hydrogen	200	Not Detected

Hydrogen reported from file 7121516, analyzed on 12/15/00, and taken from vial A. Methane taken from vial B.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WQ3794-3

ID#: 0012289-03A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121828	Date of Collection:	12/13/00
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	8000
Hydrogen	200	Not Detected

Hydrogen reported from file 7121517, analyzed on 12/15/00, and taken from vial A. Methane taken from vial B.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0012289-04A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121802	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	12/18/00

Compound	Det. Limit (ug/l)	%Recovery
Methane	10	92
Hydrogen	200	91

Hydrogen reported from file 7121502 and analyzed on 12/15/00.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0012289-05A

MODIFIED SW-846 METHOD 3810 GC/FID/TCD

File Name:	7121803	**Date of Collection:**	NA
Dil. Factor:	1.00	**Date of Analysis:**	12/18/00

Compound	Det. Limit (ug/l)	Amount (ug/l)
Methane	10	Not Detected
Hydrogen	200	Not Detected

Hydrogen reported from file 7121503 and analyzed on 12/15/00.

Container Type: NA - Not Applicable

Katahdin ANALYTICAL SERVICES
340 County Road No. 5
P.O. Box 720
Westbrook, ME 04092
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page ____ of ____

Client: Engineering | Contact: Sue Chase | Phone #: (207) 798-5977 | Fax #: ( )

Address | City | State | Zip Code

Purchase Order # | Proj. Name / No. | Katahdin Quote #

Bill (if different than above) | Address

Sampler (Print / Sign): Brian D Andersen / Brian D Andersen | Copies To:

LAB USE ONLY | WORK ORDER #: WR1591

KATAHDIN PROJECT MANAGER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	BTEX / MTBE 602 HCL	DRO (TPH) 4.1.25 HCL	TPH GRO 4.2.17 HCL	Alk, Cl, Nitrate, Sulfide —	Hydrogen (AM20A) —	Methane (AM20A) —	TOC 416.1 H_2SO_4	Sulfide 376.1 —		
					Filt. ☐Y ☒N	Filt. ☐Y ☒N	Filt. ☐Y ☒N	Filt. ☐Y ☒N	Filt. ☐Y ☒N	Filt. ☐Y ☒N	Filt. ☐Y ☒N	Filt. ☐Y ☒N	Filt. ☐Y ☐N	Filt. ☐Y ☐
	FF-03-MW XR1	5/8/01/0900	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW 46	5/8/01/0920	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW 49	5/8/01/1040	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW 58	5/8/01/1145	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW 224	5/8/01/1220	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW XD1	5/8/01/—	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW206	5/8/01/1415	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW207	5/8/01/1530	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW208	5/8/01/1700	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW210	5/9/01/0825	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW98	5/9/01/0910	W	14	X	X	X	X	X	X	X	X		
	FF-03-MW209R	5/9/01/1000	W	14	X	X	X	X	X	X	X	X		
	TRIP BLANK	5/8/01/0900	W	3	X									
		/												
		/												
		/												

OMMENTS * Sampled at 1635 (broken bottles)

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
R. Wina	5/9/01 1625	Wawa		5/10/01 0815	
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN

ORIGINAL

Katahdin ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac Cert. No. E87604

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-1
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MWXR1~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	<2.0 mg/L	2.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	1 2
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	<1.0 mg/L	1.0	1	1	E300	06/06/01	CBU	N/A	N/A	N/A	2
Sulfide	4 mg/L	1.0	1	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

(2) Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

:40 County Road No. 5
'.O.Box 720, Westbrook, ME 04098

http://katahdinlab.com

210 West Road No. 5, Portsmouth, NH 03801
Tel: (603) 431-5777 Fax: (603) 436-3356

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-1
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MWXR1	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	28	ug/L	1.0	50	50	05/29/2001	RRL
o-Terphenyl		79	%	1.0			05/29/2001	RRL

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-1
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MWXR1	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/23/2001	GDL
4-Bromofluorobenzene		101	%	1.0			05/23/2001	GDL

Report Notes:

Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-1
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MWXR1	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/22/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/22/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/22/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/22/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/22/2001	GDL
a,a,a-Trifluorotoluene		100	%	1.0			05/22/2001	GDL

Katahdin ANALYTICAL SERVICES

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Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-2
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW46~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	70 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	2 mg/L	2.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	2 3
Nitrate as N	0.2 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	120 mg/L	10	1	1	E300	06/04/01	CBU	NA	NA	NA	1
Sulfide	6 mg/L	2.0	1	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Please refer to cover letter\ case narrative for additional information concerning this sample result.

(2) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

(3) Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-2
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW46	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	43	ug/L	1.0	50	50	05/29/2001	RRL
o-Terphenyl		92	%	1.0			05/29/2001	RRL

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-2
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW46	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/22/2001	GDL
4-Bromofluorobenzene		95	%	1.0			05/22/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-2
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW46	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/22/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/22/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/22/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/22/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/22/2001	GDL
a,a,a-Trifluorotoluene		98	%	1.0			05/22/2001	GDL

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Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-3
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW49~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	30 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	60 mg/L	20	10	2	E300	06/04/01	CBU	NA	NA	NA	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	190 mg/L	10	1	1	E300	06/04/01	CBU	NA	NA	NA	1
Sulfide	10 mg/L	4.0	4	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Please refer to cover letter\ case narrative for additional information concerning this sample result.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-3
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW49	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		63	ug/L	1.0	50	50	05/29/2001	RRL
o-Terphenyl		90	%	1.0			05/29/2001	RRL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-3
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW49	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/22/2001	GDL
4-Bromofluorobenzene		98	%	1.0			05/22/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-3
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW49	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/22/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/22/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/22/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/22/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/22/2001	GDL
a,a,a-Trifluorotoluene		100	%	1.0			05/22/2001	GDL

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Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-4
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW58~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	<2.0 mg/L	2.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	1 2
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	16 mg/L	1.0	1	1	E300	06/06/01	CBU	N/A	N/A	N/A	2
Sulfide	6 mg/L	2.0	2	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

(2) Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-4
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW58	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	26	ug/L	1.0	50	50	05/29/2001	RRL
o-Terphenyl		83	%	1.0			05/29/2001	RRL

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-4
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW58	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/22/2001	GDL
4-Bromofluorobenzene		92	%	1.0			05/22/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-4
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW58	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/22/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/22/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/22/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/22/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/22/2001	GDL
a,a,a-Trifluorotoluene		99	%	1.0			05/22/2001	GDL

Katahdin ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac Cert. No. E87604

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-5
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW244~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	20 mg/L	4.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	2 3
Nitrate as N	0.1 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	6 mg/L	2.0	2	1	E300	06/06/01	CBU	N/A	N/A	N/A	3
Sulfide	<4.0 mg/L	4.0	4	1	376.1	05/10/01	JF	N/A	N/A	N/A	1

Notes:

(1) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects,sample volume, or quantity used for analysis.

(2) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

(3) Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-5
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW224	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	24	ug/L	1.0	50	50	05/29/2001	RRL
o-Terphenyl		87	%	1.0			05/29/2001	RRL

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-5
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW224	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/22/2001	GDL
4-Bromofluorobenzene		97	%	1.0			05/22/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-5
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW224	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		98	%	1.0			05/23/2001	GDL

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Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-6
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MWXD1~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	20 mg/L	4.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	1 2
Nitrate as N	0.1 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	5 mg/L	2.0	2	1	E300	06/06/01	CBU	N/A	N/A	N/A	2
Sulfide	15 mg/L	4.0	4	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

(2) Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-6
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MWXD1	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	27	ug/L	1.0	50	50	05/30/2001	RRL
o-Terphenyl		85	%	1.0			05/30/2001	RRL

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID:	WR1591-6
SDG:	WR1591
Report Date:	06/05/2001
PO No.:	05.10.01
Project:	BNAS OLD FUEL FARM
Percent Solids:	N/A
Analytical Method:	ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MWXD1	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/22/2001	GDL
4-Bromofluorobenzene		91	%	1.0			05/22/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-6
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MWXD1	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		101	%	1.0			05/23/2001	GDL

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Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-7
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW206~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	50 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	11 mg/L	2.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	1 2
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	8.6 mg/L	1.0	1	1	E300	06/06/01	CBU	N/A	N/A	N/A	2
Sulfide	9 mg/L	4.0	4	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

(2) Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-7
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW206	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	22	ug/L	1.0	50	50	05/30/2001	RRL
o-Terphenyl		81	%	1.0			05/30/2001	RRL

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-7
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW206	Aqueous	05/08/2001	05/10/2001	05/22/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/22/2001	GDL
4-Bromofluorobenzene		87	%	1.0			05/22/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-7
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW206	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		99	%	1.0			05/23/2001	GDL

Katahdin ANALYTICAL SERVICES

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Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-8
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW207~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	200 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	10 mg/L	4.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	2 3
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	3 mg/L	2.0	2	1	E300	06/06/01	CBU	N/A	N/A	N/A	3
Sulfide	<4.0 mg/L	4.0	4	1	376.1	05/10/01	JF	N/A	N/A	N/A	1

Notes:

(1) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects,sample volume, or quantity used for analysis.

(2) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

(3) Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-8
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW207	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	44	ug/L	1.0	50	50	05/30/2001	RRL
o-Terphenyl		80	%	1.0			05/30/2001	RRL

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-8
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW207	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/23/2001	GDL
4-Bromofluorobenzene		100	%	1.0			05/23/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-8
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW207	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		1.7	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		98	%	1.0			05/23/2001	GDL

Katahdin ANALYTICAL SERVICES

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Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-9
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW208~	AQ	5/8/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	130 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	20 mg/L	4.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	1 2
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	<2.0 mg/L	2.0	2	1	E300	06/06/01	CBU	N/A	N/A	N/A	2
Sulfide	29 mg/L	10	10	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

(2) Due to laboratory error, the analysis was performed 1 day(s) after expiration of the analytical hold-time for this parameter.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-9
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW208	Aqueous	05/08/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		410	ug/L	1.0	50	50	05/30/2001	RRL
o-Terphenyl		82	%	1.0			05/30/2001	RRL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-9
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW208	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/23/2001	GDL
4-Bromofluorobenzene		92	%	1.0			05/23/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-9
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW208	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		1.8	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		100	%	1.0			05/23/2001	GDL

Katahdin ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac Cert. No. E87604

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-10
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW210~	AQ	5/9/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	<20 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	10 mg/L	4.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	1
Nitrate as N	1.5 mg/L	0.050	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	5 mg/L	2.0	2	1	E300	06/06/01	CBU	N/A	N/A	N/A	1
Sulfide	10 mg/L	4.0	4	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-10
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW210	Aqueous	05/09/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		200	ug/L	1.0	50	50	05/30/2001	RRL
o-Terphenyl		75	%	1.0			05/30/2001	RRL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-10
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW210	Aqueous	05/09/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/23/2001	GDL
4-Bromofluorobenzene		99	%	1.0			05/23/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-10
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW210	Aqueous	05/09/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		99	%	1.0			05/23/2001	GDL

Katahdin ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac Cert. No. E87604

Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-11
Report Date: 6/13/01 3:26:09 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW98~	AQ	5/9/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	30 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	3 mg/L	2.0	1	2	E300	06/06/01	CBU	N/A	N/A	N/A	1
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	9.6 mg/L	1.0	1	1	E300	06/06/01	CBU	N/A	N/A	N/A	1
Sulfide	10 mg/L	4.0	4	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-11
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW98	Aqueous	05/09/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics		91	ug/L	1.0	50	50	05/30/2001	RRL
o-Terphenyl		85	%	1.0			05/30/2001	RRL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-11
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW98	Aqueous	05/09/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/23/2001	GDL
4-Bromofluorobenzene		87	%	1.0			05/23/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-11
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW98	Aqueous	05/09/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		96	%	1.0			05/23/2001	GDL

Katahdin ANALYTICAL SERVICES

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Report of Analytical Results

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike

Bedford, MA 01730

Lab Sample ID: WR1591-12
Report Date: 6/18/2001 1:26:48 PM
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
SDG:
Solids (%) N/A

Sample Description	Matrix	Date Sampled	Date Received
FF-03-MW209R~	AQ	5/9/01	5/10/01

Parameter	Result	Adj. PQL	DF	PQL	Analytical Method	Analysis Date	By	Prep Method	Prep Date	By	Notes
Alkalinity, as CaCO3	100 mg/L	20	1	20	E310.1	05/22/01	CBU	N/A	N/A	N/A	
Chloride	30 mg/L	20	10	2.0	E300	06/04/01	CBU	NA	NA	NA	
Nitrate as N	<0.05 mg/L	0.05	1	0.05	353.2	05/10/01	KGT	N/A	N/A	N/A	
Sulfate (as SO4)	14 mg/L	2.0	2	1	E300	06/06/01	CBU	N/A	N/A	N/A	1
Sulfide	6 mg/L	4.0	4	1	376.1	05/10/01	JF	N/A	N/A	N/A	

Notes:

(1) Results for the LCS and/or LCSD associated with this sample were outside laboratory acceptance criteria. The sample was not reanalyzed due to expiration of the analytical hold-time for this parameter.

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Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-12
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.1.25

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW209R	Aqueous	05/09/2001	05/10/2001	05/14/2001	TDL	SW846 3510

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Diesel Range Organics	J	43	ug/L	1.0	50	50	05/30/2001	RRL
o-Terphenyl		74	%	1.0			05/30/2001	RRL

Report Notes:

'J' flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-12
SDG: WR1591
Report Date: 06/05/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: ME DEP 4.2.17

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW209R	Aqueous	05/09/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Gasoline Range Organics		< 10	ug/L	1.0	10	10	05/23/2001	GDL
4-Bromofluorobenzene		103	%	1.0			05/23/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-12
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
FF-03-MW209R	Aqueous	05/09/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		100	%	1.0			05/23/2001	GDL

Katahdin Analytical Services, Inc.

REPORT OF ANALYTICAL RESULTS

Client: AL EASTERDAY
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample ID: WR1591-13
SDG: WR1591
Report Date: 06/01/2001
PO No.: 05.10.01
Project: BNAS OLD FUEL FARM
Percent Solids: N/A
Analytical Method: EPA 602

Sample Description	Matrix	Date Sampled	Date Received	Date Prepped	Prep Chemist	Preparative Method
TRIP BLANK	Aqueous	05/08/2001	05/10/2001	05/23/2001	GDL	SW846 5030B

Analyte	Qualifier	Result	Units	DF	Sample PQL	Method PQL	Date Analyzed	Analyst
Methyltertbutyl ether		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Benzene		< 0.50	ug/L	1.0	0.50	0.50	05/23/2001	GDL
Toluene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Ethylbenzene		< 1.0	ug/L	1.0	1.0	1.0	05/23/2001	GDL
Xylenes (Total)		< 1.5	ug/L	1.0	1.5	1.5	05/23/2001	GDL
a,a,a-Trifluorotoluene		101	%	1.0			05/23/2001	GDL

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CHAIN of CUSTODY

0105252

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page ____ of ____

Client: Katahdin
Contact: Andrea Colby
Phone #: ( )
Fax #: ( )
Address: as above
City:
State:
Zip Code:
Purchase Order #:
Proj. Name / No.: WR1591
Katahdin Quote #:
Bill (if different than above):
Address:
Sampler (Print / Sign):
Copies To:

LAB USE ONLY
WORK ORDER #:
KATAHDIN PROJECT MANAGER
REMARKS: Sub to Air Toxics
SHIPPING INFO: ☐ FED EX ☒ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C ____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Methane (unpreserved) Filt. ☐Y☐N	Hydrogen (unpreserved) Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N	Filt. ☐Y☐N
01A	WR1591-1	5-8-01/0900	AQ	4	X	X								
02A	WR1591-2	/0920			X	X								
03A	WR1591-3	/1040			X	X								
04A	WR1591-4	/1145			X	X								
05A	WR1591-5	/1220			X	X								
06A	WR1591-6	/ —			X	X								
07A	WR1591-7	/1415			X	X								
08A	WR1591-8	/1530			X	X								
09A	WR1591-9	/1700			X	X								
10A	WR1591-10	5-9-01/0825			X	X								
11A	WR1591-11	/0910			X	X								
12A	WR1591-12	/1000			X	X								
		/												
		/												
		/												
		/												

COMMENTS

QC-II DB (WEST-DB3) Results Needed By: 6-6-01

CUSTODY SEAL INTACT? ☐ YES ☐ NO NONE TEMP 4.0°C

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[illegible]	5-10-01 1630				
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	5/10/01 1030	[illegible]			

FORMSOURCE INC. ☎ (877) 782-3311

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS

ORIGINAL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-1

ID#: 0105252-01A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051618	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/16/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051412, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-1 Duplicate

ID#: 0105252-01AA

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051619	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected

Sample 0105252-01AA analyzed for methane only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-2

ID#: 0105252-02A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051620	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051413, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-2 Duplicate

ID#: 0105252-02AA

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051414	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/14/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Hydrogen	0.20	Not Detected

Sample 0105252-02AA analyzed for hydrogen only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-3

ID#: 0105252-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051621	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.057
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051415, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-4

ID#: 0105252-04A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051622	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051416, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-5

ID#: 0105252-05A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051623	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051417, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-6

ID#: 0105252-06A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051624	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051418, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-7

ID#: 0105252-07A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051625	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051419, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-8

ID#: 0105252-08A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051626	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051420, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-9

ID#: 0105252-09A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051627	Date of Collection:	5/8/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	9.0
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051421, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-10

ID#: 0105252-10A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051628	Date of Collection:	5/9/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051422, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-11

ID#: 0105252-11A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051629	Date of Collection:	5/9/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.57
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051423, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: WR1591-12

ID#: 0105252-12A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051630	Date of Collection:	5/9/01
Dil. Factor:	1.00	Date of Analysis:	5/17/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051424, analyzed on 5/14/01, at DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: Method Spike

ID#: 0105252-13A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051601	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/16/01

Compound	Rpt. Limit (ug/ml)	%Recovery
Methane	0.010	95
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051409, analyzed on 5/14/01, at DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0105252-14A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7051602	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	5/16/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7051411, analyzed on 5/14/01, at DF=1.

Container Type: NA - Not Applicable

ESS Laboratory

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CHAIN OF CUSTODY

Page 1

Turn Time ___ Standard (2 Weeks) Other _____
If faster than 5 days, prior approval by laboratory is required # _____

Electronic Deliverables ___ Yes ___ No
Formats _____

ESS LAB PROJECT ID: 01100453
Special Detection Limits

State where samples were collected from: MA RI CT NH NJ NY (ME) USACE Other _____

Co. Name: EA Engineering	Project #: 2960035 6810	Project Name (20 Char. or less): Fuel Farm NASB	
Contact Person: Al Easterday	Address: 175 Middlesex Turnpike Ste 301		
City: Bedford	State: MA	Zip: 01730	PO#:
Telephone #: (781) 275-8846	Fax #: (781) 275-7253	Email Address: aeasterd@eaest.com	

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX/MTBE	TPH GRO	TPH DRO	TOC	NO3	Alk/SO4/Cl
1	10/23/01	1200		X	GW	MW-NASB-098	12	V,G,P	✓	✓	✓	✓	✓	✓
2	10/23/01	1255		X	GW	MW-NASB-051	12	VGP	✓	✓	✓	✓	✓	✓
3	10/23/01	1540		X	GW	MW-NASB-049	12	VGP	✓	✓	✓	✓	✓	✓
4	10/24/01	1025		X	GW	MW-NASB-206	12	VGP	✓	✓	✓	✓	✓	✓
5	10/24/01	1235		X	GW	MW-NASB-207	12	VGP	✓	✓	✓	✓	✓	✓
6	10/24/01	—		X	GW	FFDup 1	12	VGP	✓	✓	✓	✓	✓	✓
7	10/24/01	1428		X	GW	MW-NASB-062	12	VGP	✓	✓	✓	✓	✓	✓
8						Trip Blank	3	V	X					

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 5.4

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Brian Anderson	10/24/01 1600	[illegible]	10/25/01 1130				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

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CHAIN OF CUSTODY

Turn Time ___ Standard (2 Weeks) Other ___
If faster than 5 days, prior approval by laboratory is required # ___

State where samples were collected from:
MA RI CT NH NJ NY (ME) USACE Other ___

Electronic Deliverables: X Yes ___ No
Formats: Excel

ESS LAB PROJECT ID: 01C832F
Special Detection Limits

Co. Name: EA Engineering
Project #: 29600.97.6810 35
Project Name (20 Char. or less): Fuel Farm - NASB
Contact Person: Al Easterday
Address: 175 Middlesex Trnpk. Ste. 301
City: Bedford
State: MA
Zip: 01730
PO#: —
Telephone #: (781) 275-8846
Fax #: (781) 275-7253
Email Address: aeasterd@eaest.com

Analysis Required

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX/MTBE	TPH-GRO	TPH-DRO	TOC	NO_3^-	Alk/SO_4^-/Cl^-
C1	10/18/01	1040		X	GW	MW-NASB-209R	8	V	X	X		X		
C1	10/18/01	1040		X	GW	MW-NASB-209R	2	P					X	X
C1	10/18/01	1040		X	GW	MW-NASB-209R	2	G			X			
C2	10/18/01	1250		X	GW	MW-NASB-058	8	V	X	X		X		
C2	10/18/01	1250		X	GW	MW-NASB-058	2	P					X	X
C2	10/18/01	1250		X	GW	MW-NASB-058	2	G			X			
C3	10/18/01	1240		X	GW	MW-NASB-244	8	V	X	X		X		
C3	10/18/01	1240		X	GW	MW-NASB-244	2	P					X	X
C3	10/18/01	1240		X	GW	MW-NASB-244	2	G			X			
C4	10/18/01	1515		X	GW	MW-NASB-046	8	V	X	X		X		

Container Type: P-Poly G-Glass S-Sterile V-VOA
Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present: ✓ Yes ___ No
Seals Intact: ✓ Yes ___ No NA: ___
Cooler Temp: 5.2°C

Internal Use Only
[ ] Pickup
[ ] Technicians ___

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Jill Ann Parrett	10/19/01 0852	[illegible]	10/19/01 1615				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

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CHAIN OF CUSTODY

Turn Time ___ Standard (2 Weeks) Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
MA RI CT NH NJ NY (ME) USACE Other _____

Electronic Deliverables
___ Yes ___ No
Formats _____

ESS LAB PROJECT ID

Special Detection Limits

Co. Name	EA Engineering
Project #	29600.35.6810
Project Name (20 Char. or less)	Fuel Farm - NASB
Contact Person	Al Easterday
Address	175 Middlesex Tnpk Ste 301
City	Bedford
State	MA
Zip	01730
PO#	
Telephone #	(781) 275-8846
Fax #	(781) 275-7253
Email Address	aeasterd@earest.com

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX/MTBE	TPH-GRO	TPH-DRO	TOC	NO3	Alk/SO4/Cl-
04	10/18/01	1515		X		MW-NASB-046	2	P					X	X
04	10/18/01	1515		X		MW-NASB-046	2	G			X			
05	10/18/01	1720		X		Trip Blank	3	V	X					

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ✓ Yes ___ No NA: _____
Cooler Temp: 5.2°C

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Jim Ar Parrett	10/19/01 0852	[illegible]	10/19/01 1615				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

REQUEST FOR SUMMARY ANALYTICAL DATA

With all analytical task orders for the Navy, please provide the following summary information:

Laboratory Name: ESS LABORATORY

Project Number: 29600.35.6810

ess lab id #: 01100472

Matrices	Analytes	Method Numbers	Quantity	Unit Costs
Grand water	AIK	301.1	2	12.00
" "	chloride	325.3	2	16.00
" "	D.R.O	4.1.2.5	3	85.00
" "	GRO	4.2.17	3	85.00
" "	nitrate	353.2	2	20.00
" "	sulfate	375.4	2	16.00
" "	TOC	415.2	2	55.00
" "	VOC: MTBE + BTEX	8020 / 8260	3	56.00

Scheduled Turnaround Time: 5 day

Actual Turnaround Time: 11 DAY

This information should be submitted at the time of analytical data delivery and should be delivered to the CTO manager who will 'cc' the PMO QA/QC officer Mr. Joel Lazzeri.

ESS Laboratory

Division of Thielsch Engineering, Inc.

December 17, 2001

Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Dear Al Easterday:

We appreciate this opportunity to provide you with our analytical services. ESS Laboratory is committed to providing the highest quality service. Our dedication to each client includes responsiveness to emergencies, dependable, well-written reports, and client services, which include the availability of all analysts to answer your inquiries.

Enclosed is your data report. The invoice for this project is being forwarded to your Accounts Payable Department unless other arrangements have previously been made with the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department. We value our continued relationship and look forward to hearing from you in the future.

Sincerely,

ESS LABORATORY

Laurel Stoddard
Laboratory Director

Enclosure

MDP

001

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

CLIENT: EA Engineering
CLIENT PROJECT ID: Fuel Farm - NASB
ESS PROJECT ID: 01100472

Sample Receipt
3 Ground Water samples and 1 Trip Blank were received on October 26, 2001 for the analysis specified on the enclosed Chain of Custody Record.

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan.

DRO Analysis
A baseline subtraction was performed on all samples. Also, components attributed to laboratory contamination were omitted for all results.

Wet Chemistry Analysis
The batch duplicate was outside of the recommended range for Nitrate, however, was within ±MRL.

No other observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.

Laurel Stoddard/Eric Baanante
Laboratory Director/Operations Manager

12/19/01
Date

MDP

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-210

ESS Project ID: 01100472
ESS Sample ID: 01100472-01
Date Sampled: 10/25/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**38**	mg/L	2	11/01/01	310.1	AR
Chloride	**10**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	ND	mg/L	0.02	10/26/01	353.2	JDR
Sulfate	**13**	mg/L	5	10/31/01	375.4	JDR
Total Organic Carbon	**11.6 §**	mg/L	2	11/12/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: LAS

Date: 11/15/01 REVISED MDP

003

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GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 01100472-01
GPL ID: 110162-001-01-1/2
Matrix: Water
Date Collected: 10/25/01
Date Received: 10/30/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch

Analytical Method: SW9060
Date Analyzed: 11/12/01
Time Analyzed 13:45
Analysis Batch 50534

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Total Organic Carbon	11.6	2	mg/L		2

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-210
Date Sampled: 10/25/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-01
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	**0.06 J**	0.11	0.03

J = Reported below MRL; Estimated value.

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

MLP

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-210
Date Sampled: 10/25/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-01
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	92	70-130

Approved By: DMH

Date: 10/31/01

MD

006

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-210
Date Sampled: 10/25/01
Analyst: MD
Date Analyzed: 10/29/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-01
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

MDP

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: FF-RB1
Date Sampled: 10/25/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-02
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: FF-RB1
Date Sampled: 10/25/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-02
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	**0.16**	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	86	70-130

Approved By: DMH

Date: 10/31/01

MD

009

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: FF-RB1
Date Sampled: 10/25/01
Analyst: MD
Date Analyzed: 10/29/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-02
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	**0.2 J**	1	0.2
Xylenes (Total)	ND	2	0.6

J = Reported below MRL; Estimated value.
MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

MDP

010

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-245

ESS Project ID: 01100472
ESS Sample ID: 01100472-03
Date Sampled: 10/25/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**167**	mg/L	10	11/01/01	310.1	AR
Chloride	**58**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	ND	mg/L	0.02	10/26/01	353.2	JDR
Sulfate	ND	mg/L	5	10/31/01	375.4	JDR
Total Organic Carbon	**48.9 §**	mg/L	10	11/12/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: UB

Date: 11/15/01 REVISED MDP

011

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GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 01100472-03
GPL ID: 110162-002-01-1/2
Matrix: Water
Date Collected: 10/25/01
Date Received: 10/30/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch

Analytical Method: SW9060
Date Analyzed: 11/12/01
Time Analyzed 13:45
Analysis Batch 50534

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Total Organic Carbon	48.9	10	mg/L		10

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-245
Date Sampled: 10/25/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-03
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	**0.117**	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

EEE 013

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-245
Date Sampled: 10/25/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-03
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	92	70-130

Approved By: DMH

Date: 10/31/01

MD

014

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-245
Date Sampled: 10/25/01
Analyst: MD
Date Analyzed: 10/29/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-03
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	**0.23 J**	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

J = Reported below MRL; Estimated value.
MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/31/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Trip Blank 2
Date Sampled: 10/25/01
Analyst: MD
Date Analyzed: 10/29/01

ESS Project ID: 01100472
ESS Sample ID: 01100472-04
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD Date: 10/30/01

MDP

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QUALITY CONTROL SECTION

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics Surrogate Report

Client Name: EA Engineering

Client Project ID: Fuel Farm - NASB

ESS Project ID: 01100472

Lab ID (Dilution Factor)	O-Terphenyl
01100472-01 (1x)	85
01100472-02 (1x)	97
01100472-03 (1x)	72
DGC103001B10BS1 (1x)	92
DGC103001B10BS2 (1x)	86
GC103001B10 (1x)	102
GC103001B10BS1 (1x)	111
GC103001B10BS2 (1x)	125

Surrogate	Limits
O-Terphenyl	50 - 150

Approved by: _____ Date: 11/8/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: GC103001B10
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

MLP

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CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: GC103001B10BS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	20	**12.5**	62	50-150

ND = Not Detected above MDL.

Approved By: D Date: 11/6/01

MLP

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CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: GC103001B10BS2
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	20	**14.1**	70	50-150

ND = Not Detected above MDL.

Approved By: D Date: 11/6/01

MLP

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: DGC103001B10BS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	0.55	**0.519**	94	50-150

ND = Not Detected above MDL.

Approved By: D Date: 11/6/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: DGC103001B10BS2
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	0.55	**0.428**	78	50-150

ND = Not Detected above MDL.

Approved By: [signature] Date: 11/6/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: VGB103001B1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	93	70-130

Approved By: DMH

Date: 10/31/01

MD

024

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100472
ESS Sample ID: VGB103001LCS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Gasoline Range Organics	0.5	**0.53**	106	70-130

ND = Not Detected above MRL.

Approved By: DMH

Date: 10/31/01

MD 025

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-245
Date Sampled: 10/25/01
Date Analyzed: 10/30/01
Analyst: DMH
Container: Satisfactory
Preservative: HCl
Methanol Volume: N/A
Units: mg/L

ESS Project ID: 01100472
ESS Sample ID: 01100472-03MS
Matrix: Aqueous
Alkane Dilution: 1
Aromatic Dilution: 1
Percent Solid: N/A
Sample Amount: 5ml
Temperature: See Chain
Extraction Method: 3510

Compound Name	Result	Recovery Limits
Gasoline Range Organics	**90**	70-130

ND = Not Detected.

Approved By: DMH

Date: 10/31/01

MD

026

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-245
Date Sampled: 10/25/01
Date Analyzed: 10/30/01
Analyst: DMH
Container: Satisfactory
Preservative: HCl
Methanol Volume: N/A
Units: mg/L

ESS Project ID: 01100472
ESS Sample ID: 01100472-03MSD
Matrix: Aqueous
Alkane Dilution: 1
Aromatic Dilution: 1
Percent Solid: N/A
Sample Amount: 5ml
Temperature: See Chain
Extraction Method: 3510

Compound Name	Result	RPD	Recovery Limits	RPD Limits
ND = Not Detected.	84	6	70-130	25

Approved By: DMH

Date: 10/31/01

MD 027

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B Surrogate Report

Client Name: EA Engineering

Client Project ID: Fuel Farm - NASB

ESS Project ID: 01100472

Lab ID (Dilution Factor)	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
01100472-01MS (1x)	106	104	106
01100472-01MSD (1x)	106	104	105
01100472-01 (1x)	100	106	106
01100472-02 (1x)	98	106	106
01100472-03 (1x)	97	106	105
01100472-04 (1x)	101	106	106
VMG102901B1 (1x)	96	105	105

Surrogate	Limits
1,2-Dichloroethane-d4	70 - 130
Toluene-d8	70 - 130
4-Bromofluorobenzene	70 - 130

Approved by: mp

Date: 10/30/01

MDP

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: MD
Date Analyzed: 10/29/01

ESS Project ID: 01100472
ESS Sample ID: VMG102901B1
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: [signature]

Date: 10/30/01

MDP

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Laboratory Control Sample
Date Sampled: N/A
Analyst: MD
Date Analyzed: 10/29/01

ESS Project ID: 01100472
ESS Sample ID: VMG102901C1
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Compound	Spike Added	LCS Concentration	LCS Percent Recovery	QC Recovery Limits
Benzene	25	**24.4**	98	60-140
Ethylbenzene	25	**24.1**	96	80-120
Methyl tert-Butyl Ether	25	**25.5**	102	60-140
Toluene	25	**25**	100	60-140
Xylenes (Total)	75	**73**	97	60-140

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

MDP

030

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B
Matrix Spike Report

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-210MS

ESS Project ID: 01100472
ESS Sample ID: 01100472-01MS
Units: µg/L

Compound Name	Spike Added	MS Conc.	MS % Recovery	Recovery Limits
Benzene	25	22.8	91	70-130
Toluene	25	23.2	93	70-130

Approved By: _____ Date: 10/30/01

MDP

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B
Matrix Spike Duplicate Report

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-210MSD

ESS Project ID: 01100472
ESS Sample ID: 01100472-01MSD
Units: µg/L

Compound Name	Spike Added	MSD Conc.	MSD % Recovery	RPD	Recovery Limits	RPD Limits
Benzene	25	22	88	3	70-130	25
Toluene	25	22.5	90	3	70-130	25

RPD = Relative Percent Deviation.

Approved By: MD Date: 10/30/09

MDP

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ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Navy Installation Restoration QA Program
Soil and Water

Rhode Island: A-179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP):
Drinking Water: 242400-C
Wastewater: 242400-D

New York (NELAP): 11313
Potable Water
Non Potable Water
Solid and Hazardous Waste

United States Department of Agriculture
Soil Permit: S-54210

New Jersey (NELAP) RI002
Potable Water
Non Potable Water
Solid and Hazardous Waste

ESS Laboratory

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CHAIN OF CUSTODY

Turn Time ___ Standard (2 Weeks) Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
MA RI CT NH NJ NY (ME) USACE Other _____

Electronic Deliverables ___ Yes ___ No
Formats _____

ESS LAB PROJECT ID: 01100472
Special Detection Limits

Co. Name: EA Engineering
Project #: 29600 35 6810
Project Name (20 Char. or less): Fuel Farm NASB
Contact Person: Al Easterday
Address: 175 Middlesex Trnpk, Ste 301
City: Bedford
State: MA
Zip: 01730
PO#:
Telephone #: (781) 275-8846
Fax #: (781) 275-7253
Email Address: AEASterd@eaest.com

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX/MTBE	TPH Gro	TPH DRO	TOC	NO_3^-	Alk/SO_3^-/Cl^-							
1	10/25/01	1100		X	G W	MW-NASB - 210	12	VG P	X	X	X	X	X	X							
2	10/25/01	1300		X	W	FF-RB1	8	VG	X	X	X										
3	10/25/01	1330		X	G W	MW-NASB - 245	12	VG P	X	X	X	X	X	X							
4						Trip Blank 2	3	V	X												

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: 3.2

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Brian Anderson	10/25/01 1600	[signature]	10/26/01 1130				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

034

Analytical Report For 110162

for

ESS Laboratory

Project Manager: Kevin Braga

Project Name : Various Analyses

November 12, 2001

GPL

Laboratories

GPL Laboratories, LLLP Certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted.

Reviewed by,
Project Manager

Approved by,
Laboratory Director

202 Perry Parkway Gaithersburg, MD 20877 Phone (301) 926-6802 Fax: (301) 840-1209
www.gplab.com

TOTAL # OF PAGES : 9

GPL

Laboratories

CASE NARRATIVE FOR GPL #110162

CLIENT: ESS LABORATORY
PROJECT/SITE: VARIOUS ANALYSES
WORK ORDER(S): 110162
REVIEW DATE: 11/13/01

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Analytical Report are integral parts of GPL Laboratories' report package. If you did not receive all of these documents please contact GPL immediately.

Sample Receipt

Two water samples were received on 10/30/01. The samples were delivered by Federal Express. The samples were received intact. Sample receipt conditions and temperatures are documented on the Sample Receipt Checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Analytical Report of Analysis.

General Chemistry

1. The samples were analyzed for Total Organic Carbon by SW846 method 9060.
2. The samples were analyzed in quadruplicate and the average result is reported.
3. A matrix spike analysis was performed on sample 01100472-01.
4. A laboratory control sample was analyzed along with the sample batch.
5. All QC criteria were met.

Project Manager

Lab Director

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 01100472-01
GPL ID: 110162-001-01-1/2
Matrix: Water
Date Collected: 10/25/01
Date Received: 10/30/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch

Analytical Method: SW9060
Date Analyzed: 11/12/01
Time Analyzed 13:45
Analysis Batch 50534

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Total Organic Carbon	11.6	2	mg/L		2

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 01100472-03
GPL ID: 110162-002-01-1/2
Matrix: Water
Date Collected: 10/25/01
Date Received: 10/30/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch

Analytical Method: SW9060
Date Analyzed: 11/12/01
Time Analyzed 13:45
Analysis Batch 50534

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Total Organic Carbon	48.9	10	mg/L		10

GPL LABORATORIES, LLP
ANALYTICAL RESULTS

Project Name : Various Analyses

Date Printe November 12, 2001

GPL ID	Client ID
110162-001-01-1/2	01100472-01
110162-002-01-1/2	01100472-03

GPL LABORATORIES, LLLP

Qualifier Definitions

U = Indicates that the compound was analyzed for but not detected at or above the reporting limit

Organics:

B = Indicates that the analyte was found in the associated blank as well as in the sample

D = Indicates that the analyte was reported from a diluted analysis

E = Indicates that the concentration detected exceeded the calibration range of the instrument

J = Value is less than the reporting limits but greater than the MDL

P = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns

Metals:

B = Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL

E = Indicates that reported value is estimated because of the possible presence of interference (i.e., the serial dilution not within control limits)

H = Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit

N = Spiked sample recovery not within control limits

• = Duplicate analysis not within control limits

ESS Laboratory

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Tel. (401) 461-7181 Fax (401) 461-4486
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CHAIN OF CUSTODY

Page _____ of _____

Turn Time ___ Standard (2 Weeks) Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
MA RI CT NH NJ NY ME USACE Other _____

Electronic Deliverables ___ Yes ___ No
Formats _____

ESS LAB PROJECT ID

Special Detection Limits

Co. Name: ESS Lab
Project #:
Project Name (20 Char. or less): 01100472
Contact Person: Kevin Bragg
Address:
City State Zip
PO#:
Telephone #
Fax #
Email Address

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	Analysis Required: TCC
1	10/25/01	11:00		X	GW	01100472-01	2	V	X
2	10/25/01	1330		X	GW	01100472-03	2	V	X

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: _____

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
ESS	10/29/01 15:15						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
						10/30	01/10:14 AM

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

FedEx *USA Airbill* FedEx Tracking Number 8131 1070 0921

Form I.D. No. 0215

1 From This portion can be removed for Recipient's records.

Date 10 29 01 FedEx Tracking Number 813110700921

Sender's Name Phone 401 467-2494

Company HAYELSON ENGINEERING ASSOC

Address 150 FRANCES AVE

Dept./Floor/Suite/Room

City CRANSTON State RI ZIP 02910

2 Your Internal Billing Reference

3 To

Recipient's Name Simple Recycling Phone 301 290 1209

Company 591 Industrial LLP

Address 2119 Reg Parkway

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

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8131 1070 0921

4a Express Package Service — *Packages up to 150 lbs.* Delivery commitment may be later in some areas

- [x] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day* — Second business day
- [ ] FedEx Express Saver* — Third business day

* FedEx Letter Rate not available. Minimum charge: One-pound rate.

4b Express Freight Service — *Packages over 150 lbs.* Delivery commitment may be later in some areas

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation: _____

5 Packaging — * Declared value limit $500

- [ ] FedEx Letter*
- [ ] FedEx Pak*
- [x] Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg.

6 Special Handling

- [ ] Saturday Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] Sunday Delivery† — Available for FedEx Priority Overnight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? (One box must be checked.)

- [x] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous Goods cannot be shipped in FedEx packaging.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check
- [ ] Obtain Recip. Acct. No.

Total Packages	Total Weight	Total Charges
1	5	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the *FedEx Service Guide* for details.

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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0396702310

359

GPL Laboratories, LLP

Figure 1
SAMPLE RECEIPT CHECKLIST

W.O. No: 110162

Client Name: EGG Laboratory

Date Received: 10/30/01

Time Received: 10:10 Am

Received By: [illegible]

Carrier Name: Fed Ex

Prepared (Logged In) By: [illegible] 10/30/01 (Initials Date)

Project: 01104112

Site:

VOA Holding Blank I.D. No: /

	YES	NO
Airbill/Manifest Present?	✓	
No. 815110700921		
Shipping Container in Good Condition?		
Custody Seals Present on Shipping Container?		✓
Condition: Broken ____ Intact-not dated or signed ____ Intact-dated and signed ____		
Usage of Tamper Evident Type	✓	✓
Chain-of-Custody Present?	✓	
Chain-of-Custody Agrees with Sample Labels?	✓	
Chain-of-Custody Signed?	✓	
Packing Present in Shipping Container? Type of Packing Foam Block	✓	
Custody seals on Sample Bottles? Condition: Good ____ Broken ____		✓
Total Number of Sample Bottles 4		
Total Number of Samples 2		
Samples Intact?	✓	
Sufficient Sample Volume for Indicated Test?		

	YES	NO
Trip Blanks: No. of Sets ____		✓
Field Blanks: No. of Sets ____		✓
Equip. Blank: No. of Sets ____		✓
Field Duplicate: No. of Sets ____		✓
MS/MSD: No of Sets ____		✓
VOA Vials Have Zero Headspace?	✓	
Preservatives Added to Sample?	✓	
pH Check Required? Performed By? ____	✓	
Ice Present in Shipping Container?	✓	

Container #	Temp.	Container #	Temp.
#1	4.0°C		

Project Manager Contacted?
Name: Laura Bottcher
Date Contacted: 10/30/01

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A/

COMMENTS: Temperature by Temp Blank

Checklist Completed By: [illegible]

Date: 10/30/01

SOP No: F.2V11

WET CHEMISTRY QC

GPL Laboratories, LLLP

Form 3 MD/MS

WATER GENERAL CHEMISTRY DUPLICATE/MATRIX SPIKE RECOVERY

Lab Name: GPL Laboratories, LLLC Client: ESS Laboratory

GPL Work-Order: 110162

All samples were analyzed in quadruplicate, therefore no duplicate is reported.

Analyte	Method	Sample ID	Sample Conc. (mg/L)	MS Conc. (mg/L)	Spike Added (mg/L)	MS % Recov.	MS Recovery Limits
TOC	SW9060	01100472-01	11.6	16.0	4.00	110	75 - 125%

% Recovery - 0 out of 1 outside control limits

Form 3 - LCS

WATER GENERAL CHEMISTRY LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: GPL Laboratories, LLLC

Client: ESS Laboratory

GPL Work-Order: 110162

Analyte	QC ID	LCS True Value (mg/L)	LCS Concentration (mg/L)	LCS %Recovery	Recovery Control Limits
TOC	#14232	5.27	5.00	94.9	85 - 115%

Recovery - 0 out of 1 outside Control Limits

	Test	A	Sample ID	ST	Method	Result	RL	RW	R	Raw	Multiple	Reported	Raw	Final	SD	pH	Vol	Total
1																		
2																		
3																		
4	Total Organic Carbon	AN	ICV	ICV / (	SW9060	2.35	1.0000			2.3531	1.00000000	MGL	MGL	2.3500	0	2.6000	0.00	2.3531
5	Total Organic Carbon	AN	ICB	ICB / E	SW9060	0.144	1.0000			0.1441	1.00000000	MGL	MGL	0.1440	0	0.0000	0.00	0.1441
6	Total Organic Carbon	AN	LCSW	BKS /	SW9060	5	1.0000			4.9990	1.00000000	MGL	MGL	5.0000	0	5.2700	94.88	4.9990
7	Total Organic Carbon	AN	110162-001-01	SMP /	SW9060	11.6	1.0000			5.8119	2.00000000	MGL	MGL	11.6000	0	0.0000	0.00	11.6238
8	Total Organic Carbon	AN	110162-001-01	MS / S	SW9060	16	1.0000			7.9975	2.00000000	MGL	MGL	16.0000	0	4.0000	90.66	15.9950
9	Total Organic Carbon	AN	CCV1	CCV /	SW9060	8.86	1.0000			8.8572	1.00000000	MGL	MGL	8.8600	0	9.0000	0.00	8.8572
10	Total Organic Carbon	AN	CCB1	CCB /	SW9060	0.51	1.0000			0.5099	1.00000000	MGL	MGL	0.5100	0	0.0000	0.00	0.5099
11	Total Organic Carbon	AN	110162-002-01	SMP /	SW9060	48.9	1.0000			4.8862	0.00000000	MGL	MGL	48.9000	0	0.0000	0.00	48.8620
12	Total Organic Carbon	AN	CCV2	CCV /	SW9060	2.43	1.0000			2.4303	1.00000000	MGL	MGL	2.4300	0	2.6000	0.00	2.4303
13	Total Organic Carbon	AN	CCB2	CCB /	SW9060	0.016	1.0000			0.0161	1.00000000	MGL	MGL	0.0160	0	0.0000	0.00	0.0161

	Description	A	SampleId	EB	IV	Rpd	Rpd	N	mdl	S	Retention	LCL	UCL	Mult	Final	Final MDL	Valid	Comments	% Area	Prep
1								☐		☐										
2								☐		☐										
3								☐		☐										
4	Total Organic Carbon	AN	ICV				15	☐	1.0000	☑		85	115		1.000	1.000			1.000	
5	Total Organic Carbon	AN	ICB				15	☐	1.0000	☑		85	115		1.000	1.000			1.000	
6	Total Organic Carbon	AN	LCSW				15	☐	1.0000	☑		85	115		1.000	1.000			1.000	
7	Total Organic Carbon	AN	110162-001-01				15	☐	1.0000	☑		85	115		2.000	2.000			2.000	
8	Total Organic Carbon	AN	110162-001-01				15	☐	1.0000	☑		85	115		2.000	2.000			2.000	
9	Total Organic Carbon	AN	CCV1				15	☐	1.0000	☑		85	115		1.000	1.000			1.000	
10	Total Organic Carbon	AN	CCB1				15	☐	1.0000	☑		85	115		1.000	1.000			1.000	
11	Total Organic Carbon	AN	110162-002-01				15	☐	1.0000	☑		85	115		10.000	10.000			10.000	
12	Total Organic Carbon	AN	CCV2				15	☐	1.0000	☑		85	115		1.000	1.000			1.000	
13	Total Organic Carbon	AN	CCB2				15	☐	1.0000	☑		85	115		1.000	1.000			1.000	

General Chemistry Form 2

TOTAL ORGANIC CARBON CONTINUING CALIBRATION CHECK STANDARD RECOVERY

Lab Name: GPL Laboratories, LLLC

Client: ESS Laboratory

Work-Order # 110162

STD Solution ID: #13244/7965

Standard ID	Solution ID	Control Std True Value (mg/L)	Standard Concentration (mg/L)	Standard %Recovery	Recovery Control Limits
ICV	13244	2.60	2.35	90.4	90 - 110%

Standard ID	Solution ID	Control Std True Value (mg/L)	Standard Concentration (mg/L)	Standard %Recovery	Recovery Control Limits
CCV1	7965	9.00	8.86	98.4	90 - 110%

Standard ID	Solution ID	Control Std True Value (mg/L)	Standard Concentration (mg/L)	Standard %Recovery	Recovery Control Limits
CCV2	13244	2.60	2.43	93.5	90 - 110%

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-098
Date Sampled: 10/23/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-01
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-098
Date Sampled: 10/23/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-01
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	92	70-130

Approved By: DMH

Date: 10/31/01

MD

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-051
Date Sampled: 10/23/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-02
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-051
Date Sampled: 10/23/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-02
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	93	70-130

Approved By: DMH

Date: 10/31/01

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-049
Date Sampled: 10/23/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-03
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	**0.058 J**	0.11	0.03

J = Reported below MRL; Estimated value.

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-049
Date Sampled: 10/23/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-03
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	91	70-130

Approved By: DMH

Date: 10/31/01

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-206
Date Sampled: 10/24/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-04
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-206
Date Sampled: 10/24/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-04
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5-ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	95	70-130

Approved By: DMH

Date: 10/31/01

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-207
Date Sampled: 10/24/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-05
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	**0.064 J**	0.11	0.03

J = Reported below MRL; Estimated value.

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-207
Date Sampled: 10/24/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-05
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	94	70-130

Approved By: DMH

Date: 10/31/01

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Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: FF-Dup 1
Date Sampled: 10/24/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-06
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	92	70-130

Approved By: DMH

Date: 10/31/01

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: FF-Dup 1
Date Sampled: 10/24/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-06
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	**0.058 J**	0.11	0.03

J = Reported below MRL; Estimated value.

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-062
Date Sampled: 10/24/01
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-07
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-062
Date Sampled: 10/24/01
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-07
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	91	70-130

Approved By: DMH

Date: 10/31/01

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-209R
Date Sampled: 10/18/01
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/25/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-01
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 950 ml

Test Name	Result	MRL	~~2*MDL~~
Diesel Range Organics	**0.048 J**	0.116	0.032

J = Reported below MRL; Estimated value.

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-209R
Date Sampled: 10/18/01
Analyst: DMH
Date Analyzed: 10/24/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-01
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5-ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	90	70-130

Approved By: DMH

Date: 10/25/01

DH

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-058
Date Sampled: 10/18/01
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/25/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-02
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	~~2*MDL~~ MDL
Diesel Range Organics	**0.034 J**	0.11	0.03

J = Reported below MRL; Estimated value.

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-058
Date Sampled: 10/18/01
Analyst: DMH
Date Analyzed: 10/24/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-02
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5-ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	92	70-130

Approved By: DMH

Date: 10/25/01

DH

010

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-244
Date Sampled: 10/18/01
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/25/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-03
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	~~2~~ Multiple *MDL
Diesel Range Organics	**0.055 J**	0.11	0.03

J = Reported below MRL; Estimated value.

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-244
Date Sampled: 10/18/01
Analyst: DMH
Date Analyzed: 10/24/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-03
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5-ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	91	70-130

Approved By: DMH

Date: 10/25/01

DH

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-046
Date Sampled: 10/18/01
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/25/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-04
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	**0.086 J**	0.11	0.03

J = Reported below MRL; Estimated value.

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

MLP

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-046
Date Sampled: 10/18/01
Analyst: DMH
Date Analyzed: 10/24/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-04
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5-ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	93	70-130

Approved By: DMH

Date: 10/25/01

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REQUEST FOR SUMMARY ANALYTICAL DATA

With all analytical task orders for the Navy, please provide the following summary information:

Laboratory Name: ESS LABOTATORY

Project Number: 29600.35.6810

ESS LAB ID #: 01100328

Matrices	Analytes	Method Numbers	Quantity	Unit Costs
Ground Water	ALK	310.1	4	12.00
" "	CL	325.3	4	16.00
" "	DRO	4.1.25	4	85.00
" "	GRO	4.2.17	4	85.00
" "	NO3	353.2	4	20.00
" "	SO4	375.3	4	16.00
" "	TOC	9060	4	55.00
" "	VOC	8020 / 8260	4	56.00

Scheduled Turnaround Time: 5 DAY

Actual Turnaround Time: 12 DAY

This information should be submitted at the time of analytical data delivery and should be delivered to the CTO manager who will 'cc' the PMO QA/QC officer Mr. Joel Lazzeri.

ESS Laboratory

Division of Thielsch Engineering, Inc.

November 12, 2001

Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Dear Al Easterday:

We appreciate this opportunity to provide you with our analytical services. ESS Laboratory is committed to providing the highest quality service. Our dedication to each client includes responsiveness to emergencies, dependable, well-written reports, and client services, which include the availability of all analysts to answer your inquiries.

Enclosed is your data report. The invoice for this project is being forwarded to your Accounts Payable Department unless other arrangements have previously been made with the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department. We value our continued relationship and look forward to hearing from you in the future.

Sincerely,

ESS LABORATORY

Laurel Stoddard
Laboratory Director

Enclosure

MDP

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

CLIENT: EA Engineering
CLIENT PROJECT ID: Fuel Farm - NASB
ESS PROJECT ID: 01100328

Sample Receipt
4 Ground Water samples and 1 Trip Blank were received on October 19, 2001 for the analysis specified on the enclosed Chain of Custody Record.

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan.

Maine DRO Analysis
A Baseline subtraction was performed on all samples. Also, components attributed to laboratory contamination were omitted from all results.

No other observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.

Laurel Stoddard/Eric Baanante
Laboratory Director/Operations Manager

11/16/01
Date

MDP

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-209R

ESS Project ID: 01100328
ESS Sample ID: 01100328-01
Date Sampled: 10/18/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**75**	mg/L	10	10/25/01	310.1	AR
Chloride	**70**	mg/L	3	10/23/01	325.2	AR
Nitrate as N	ND	mg/L	0.02	10/19/01	353.2	AR
Sulfate	**18**	mg/L	5	10/23/01	375.4	JDR
Total Organic Carbon	**5.14 §**	mg/L	1	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: 60

Date: 11/6/01
MDP

002

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GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 01100328-01
GPL ID: 110108-001-01-1/2
Matrix: Water
Date Collected: 10/18/01
Date Received: 10/23/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch

Analytical Method: SW9060
Date Analyzed: 10/30/01
Time Analyzed 13:30
Analysis Batch 50320

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Total Organic Carbon	5.14	1	mg/L		1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-209R
Date Sampled: 10/18/01
Analyst: MD
Date Analyzed: 10/23/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-01
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/25/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-058

ESS Project ID: 01100328
ESS Sample ID: 01100328-02
Date Sampled: 10/18/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**10**	mg/L	2	10/25/01	310.1	AR
Chloride	ND	mg/L	3	10/23/01	325.2	AR
Nitrate as N	ND	mg/L	0.02	10/19/01	353.2	AR
Sulfate	**17**	mg/L	5	10/23/01	375.4	JDR
Total Organic Carbon	**2.12 §**	mg/L	1	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 11/6/01

MDP

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GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 01100328-02
GPL ID: 110108-002-01-1/2
Matrix: Water
Date Collected: 10/18/01
Date Received: 10/23/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch

Analytical Method: SW9060
Date Analyzed: 10/30/01
Time Analyzed 13:30
Analysis Batch 50320

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Total Organic Carbon	2.12	1	mg/L		1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-058
Date Sampled: 10/18/01
Analyst: MD
Date Analyzed: 10/23/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-02
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/25/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-244

ESS Project ID: 01100328
ESS Sample ID: 01100328-03
Date Sampled: 10/18/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**5**	mg/L	2	10/25/01	310.1	AR
Chloride	**15**	mg/L	3	10/23/01	325.2	AR
Nitrate as N	ND	mg/L	0.02	10/19/01	353.2	AR
Sulfate	**19**	mg/L	5	10/23/01	375.4	JDR
Total Organic Carbon	**8.57 §**	mg/L	1	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: MDP

Date: 11/6/01

MDP

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GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 01100328-03
GPL ID: 110108-003-01-1/2
Matrix: Water
Date Collected: 10/18/01
Date Received: 10/23/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch

Analytical Method: SW9060
Date Analyzed: 10/30/01
Time Analyzed 13:30
Analysis Batch 50320

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Total Organic Carbon	8.57	1	mg/L		1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-244
Date Sampled: 10/18/01
Analyst: MD
Date Analyzed: 10/23/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-03
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	**0.35 J**	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

J = Reported below MRL; Estimated value.
MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: [illegible]

Date: 10/25/01

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-046

ESS Project ID: 01100328
ESS Sample ID: 01100328-04
Date Sampled: 10/18/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**99**	mg/L	10	10/25/01	310.1	AR
Chloride	**4**	mg/L	3	10/23/01	325.2	AR
Nitrate as N	ND	mg/L	0.02	10/19/01	353.2	AR
Sulfate	**100**	mg/L	40	10/23/01	375.4	JDR
Total Organic Carbon	**5.85 §**	mg/L	1	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KP

Date: 11/6/01

MDP

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GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 01100328-04
GPL ID: 110108-004-01-1/2
Matrix: Water
Date Collected: 10/18/01
Date Received: 10/23/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch

Analytical Method: SW9060
Date Analyzed: 10/30/01
Time Analyzed 13:30
Analysis Batch 50320

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Total Organic Carbon	5.85	1	mg/L		1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-046
Date Sampled: 10/18/01
Analyst: MD
Date Analyzed: 10/23/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-04
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: [signature]

Date: 10/25/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Trip Blank
Date Sampled: 10/18/01
Analyst: MD
Date Analyzed: 10/23/01

ESS Project ID: 01100328
ESS Sample ID: 01100328-05
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/25/01

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QUALITY CONTROL SECTION

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics Surrogate Report

Client Name: EA Engineering

Client Project ID: Fuel Farm - NASB

ESS Project ID: 01100328

Lab ID (Dilution Factor)	O-Terphenyl
01100328-01 (1x)	80
01100328-02 (1x)	80
01100328-03 (1x)	73
01100328-04 (1x)	57
DGC102501B6BS1 (1x)	78
DGC102501B6BS2 (1x)	93
GC102501B6 (1x)	81
GC102501B6BS1 (1x)	131
GC102501B6BS2 (1x)	114

Surrogate	Limits
O-Terphenyl	50 - 150

Approved by: _____ Date: 11/6/01

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/6/01
Date Prepped: 1/25/01

ESS Project ID: 01100328
ESS Sample ID: GC102501B6
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	11/6/01 2*MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/8/01

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped:

ESS Project ID: 01100328
ESS Sample ID: DGC102501B6BS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	0.55	**0.47**	85	50-150

ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped:

ESS Project ID: 01100328
ESS Sample ID: DGC102501B6BS2
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	0.55	**0.55**	100	50-150

ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/25/01

ESS Project ID: 01100328
ESS Sample ID: GC102501B6BS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	20	**14.2**	71	50-150

ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/25/01

ESS Project ID: 01100328
ESS Sample ID: GC102501B6BS2
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	20	**12.5**	62	50-150

ND = Not Detected above MDL.

Approved By: P Date: 11/6/9

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: DMH
Date Analyzed: 10/24/01

ESS Project ID: 01100328
ESS Sample ID: VGB102401B1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	92	70-130

Approved By: DMH

Date: 10/25/01

DH

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: DMH
Date Analyzed: 10/24/01

ESS Project ID: 01100328
ESS Sample ID: VGB102401LCS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Gasoline Range Organics	0.5	**0.54**	108	75-125

ND = Not Detected above MRL.

Approved By: DMH Date: 10/25/01

DH

030

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-046
Date Sampled: 10/18/01
Date Analyzed: 10/24/01
Analyst: DMH
Container: Satisfactory
Preservative: HCl
Methanol Volume: N/A
Units: mg/L

ESS Project ID: 01100328
ESS Sample ID: 01100328-04MS
Matrix: Aqueous
Alkane Dilution: 1
Aromatic Dilution: 1
Percent Solid: N/A
Sample Amount: 5ml
Temperature: See Chain
Extraction Method: 3510

Compound Name	Result	Recovery Limits
Gasoline Range Organics	**84**	70-130

ND = Not Detected.

Approved By: DMH

Date: 10/25/01

DH

031

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-046
Date Sampled: 10/18/01
Date Analyzed: 10/24/01
Analyst: DMH
Container: Satisfactory
Preservative: HCl
Methanol Volume: N/A
Units: mg/L

ESS Project ID: 01100328
ESS Sample ID: 01100328-04MSD
Matrix: Aqueous
Alkane Dilution: 1
Aromatic Dilution: 1
Percent Solid: N/A
Sample Amount: 5ml
Temperature: See Chain
Extraction Method: 3510

Compound Name	Result	RPD	Recovery Limits	RPD Limits
ND = Not Detected.	86	2	70-130	25

Approved By: DMH

Date: 10/25/01

DH

032

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B Surrogate Report

Client Name: EA Engineering

Client Project ID: Fuel Farm - NASB

ESS Project ID: 01100328

Lab ID (Dilution Factor)	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
01100328-01 (1x)	96	106	112
01100328-02 (1x)	95	106	111
01100328-03 (1x)	97	106	112
01100328-04 (1x)	96	106	112
01100328-05 (1x)	94	106	112
01100401-02MS (1x)	100	105	111
01100401-02MSD (1x)	100	105	111
VMG102301B1 (1x)	94	104	112

Surrogate	Limits
1,2-Dichloroethane-d4	70 - 130
Toluene-d8	70 - 130
4-Bromofluorobenzene	70 - 130

Approved by: MD

Date: 10/25/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: MD
Date Analyzed: 10/23/01

ESS Project ID: 01100328
ESS Sample ID: VMG102301B1
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/25/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Laboratory Control Sample
Date Sampled: N/A
Analyst: MD
Date Analyzed: 10/23/01

ESS Project ID: 01100328
ESS Sample ID: VMG102301C1
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Compound	Spike Added	LCS Concentration	LCS Percent Recovery	QC Recovery Limits
Benzene	25	**24.2**	97	60-140
Ethylbenzene	25	**24.6**	98	80-120
Methyl tert-Butyl Ether	25	**22.8**	91	60-140
Toluene	25	**24.2**	97	60-140
Xylenes (Total)	75	**75.8**	101	60-140

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/25/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B
Matrix Spike Report

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Matrix Spike

ESS Project ID: 01100328
ESS Sample ID: 01100401-02MS
Units: µg/L

Compound Name	Spike Added	MS Conc.	MS % Recovery	Recovery Limits
Benzene	25	23.9	96	70-130
Toluene	25	23.8	93	70-130

Approved By: MO Date: 10/25/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B
Matrix Spike Duplicate Report

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Matrix Spike Duplicate

ESS Project ID: 01100328
ESS Sample ID: 01100401-02MSD
Units: µg/L

Compound Name	Spike Added	MSD Conc.	MSD % Recovery	RPD	Recovery Limits	RPD Limits
Benzene	25	23.3	93	3	70-130	25
Toluene	25	22.9	90	3	70-130	25

RPD = Relative Percent Deviation.

Approved By: _____ Date: 10/25/01

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36A

ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Navy Installation Restoration QA Program
Soil and Water

Rhode Island: 179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP):
Drinking Water: 242400-C
Wastewater: 242400-D

New York (NELAP): 11313
Potable Water
Non Potable Water
Solid and Hazardous Waste

a2

REQUEST FOR SUMMARY ANALYTICAL DATA

With all analytical task orders for the Navy, please provide the following summary information:

Laboratory Name: ESS LABORATORY

Project Number: 29600.35.6810

ESS LAB ID #: 01100453

Matrices	Analytes	Method Numbers	Quantity	Unit Costs
GroundWater	ALK	310.1	7	12.00
" "	CL	325.3	7	16.00
" "	DRO	4.1.25	7	85.00
" "	GRO	4.2.17	7	85.00
" "	NO3	353.2	7	20.00
" "	SO4	375.4	7	16.00
" "	TOC	415.2	7	55.00
" "	VOC	8020/8260	7	56.00

Scheduled Turnaround Time: 5 DAY

Actual Turnaround Time: 9 DAY

This information should be submitted at the time of analytical data delivery and should be delivered to the CTO manager who will 'cc' the PMO QA/QC officer Mr. Joel Lazzeri.

ESS Laboratory

Division of Thielsch Engineering, Inc.

November 12, 2001

Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Dear Al Easterday:

We appreciate this opportunity to provide you with our analytical services. ESS Laboratory is committed to providing the highest quality service. Our dedication to each client includes responsiveness to emergencies, dependable, well-written reports, and client services, which include the availability of all analysts to answer your inquiries.

Enclosed is your data report. The invoice for this project is being forwarded to your Accounts Payable Department unless other arrangements have previously been made with the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department. We value our continued relationship and look forward to hearing from you in the future.

Sincerely,

ESS LABORATORY

Laurel Stoddard
Laboratory Director

Enclosure

MDP

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

CLIENT: EA Engineering
CLIENT PROJECT ID: Fuel Farm - NASB
ESS PROJECT ID: 01100453

Sample Receipt
7 Ground Water samples and 1 Trip Blank were received on October 25, 2001 for the analysis specified on the enclosed Chain of Custody Record.

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan.

Maine DRO Analysis
A baseline subtraction was performed on all samples. In addition, components contributing to laboratory contamination were omitted from all results.

No other observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.

Laurel Stoddard/Eric Baanante
Laboratory Director/Operations Manager

11/15/01
Date

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-098

ESS Project ID: 01100453
ESS Sample ID: 01100453-01
Date Sampled: 10/23/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**34**	mg/L	2	10/26/01	310.1	AR
Chloride	**9**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	ND	mg/L	0.02	10/25/01	353.2	DR
Sulfate	**14**	mg/L	5	10/25/01	375.4	VSC
Total Organic Carbon	**3.8 §**	mg/L	1.0	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: MP

Date: 11/6/01

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ESS LABORATORY

Location Collected: 01100453
Date Sample Collected: 10/23/01
Sample Description: 01100453-01
EAS Sample Number: 01100438-01
LIMS ID Number: AC14503
Date Sample Received: 10/26/01

Parameter	Data	Detection Limit	Units	Analysis Date
Total Organic Carbon, Water	3.8	1.0	mg/L	10/30/01

BDL = Below Detection Limit

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-051

ESS Project ID: 01100453
ESS Sample ID: 01100453-02
Date Sampled: 10/23/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**24**	mg/L	2	10/26/01	310.1	AR
Chloride	**4**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	**0.02**	mg/L	0.02	10/25/01	353.2	DR
Sulfate	**8**	mg/L	5	10/25/01	375.4	VSC
Total Organic Carbon	**1.6 §**	mg/L	1.0	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 11/6/01

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ESS LABORATORY

Location Collected: 01100453
Date Sample Collected: 10/23/01
Sample Description: 01100453-02
EAS Sample Number: 01100438-02
LIMS ID Number: AC14504
Date Sample Received: 10/26/01

Parameter	Data	Detection Limit	Units	Analysis Date
Total Organic Carbon, Water	1.6	1.0	mg/L	10/30/01

BDL = Below Detection Limit

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-049

ESS Project ID: 01100453
ESS Sample ID: 01100453-03
Date Sampled: 10/23/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**177**	mg/L	10	10/26/01	310.1	AR
Chloride	**6**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	**0.03**	mg/L	0.02	10/25/01	353.2	DR
Sulfate	**16**	mg/L	5	10/25/01	375.4	VSC
Total Organic Carbon	**10 §**	mg/L	1.0	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 11/6/01

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ESS LABORATORY

Location Collected: 01100453
Date Sample Collected: 10/23/01
Sample Description: 01100453-03
EAS Sample Number: 01100438-03
LIMS ID Number: AC14505
Date Sample Received: 10/26/01

Parameter	Data	Detection Limit	Units	Analysis Date
Total Organic Carbon, Water	10	1.0	mg/L	10/30/01

BDL = Below Detection Limit

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-206

ESS Project ID: 01100453
ESS Sample ID: 01100453-04
Date Sampled: 10/24/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**62**	mg/L	10	10/26/01	310.1	AR
Chloride	**11**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	**0.04**	mg/L	0.02	10/25/01	353.2	DR
Sulfate	**14**	mg/L	5	10/25/01	375.4	VSC
Total Organic Carbon	**1.1 §**	mg/L	1.0	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 11/6/01

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ESS LABORATORY

Location Collected: 01100453
Date Sample Collected: 10/24/01
Sample Description: 01100453-04
EAS Sample Number: 01100438-04
LIMS ID Number: AC14506
Date Sample Received: 10/26/01

Parameter	Data	Detection Limit	Units	Analysis Date
Total Organic Carbon, Water	1.1	1.0	mg/L	10/30/01

BDL = Below Detection Limit

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-207

ESS Project ID: 01100453
ESS Sample ID: 01100453-05
Date Sampled: 10/24/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**190**	mg/L	10	10/26/01	310.1	AR
Chloride	**13**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	**0.03**	mg/L	0.02	10/25/01	353.2	DR
Sulfate	ND	mg/L	5	10/25/01	375.4	VSC
Total Organic Carbon	**2.9 §**	mg/L	1.0	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KP

Date: 11/6/01

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ESS LABORATORY

Location Collected: 01100453
Date Sample Collected: 10/24/01
Sample Description: 01100453-05
EAS Sample Number: 01100438-05
LIMS ID Number: AC14507
Date Sample Received: 10/26/01

Parameter	Data	Detection Limit	Units	Analysis Date
Total Organic Carbon, Water	2.9	1.0	mg/L	10/30/01

BDL = Below Detection Limit

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: FF-Dup 1

ESS Project ID: 01100453
ESS Sample ID: 01100453-06
Date Sampled: 10/24/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**58**	mg/L	10	10/26/01	310.1	AR
Chloride	**11**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	**0.02**	mg/L	0.02	10/25/01	353.2	DR
Sulfate	**14**	mg/L	5	10/25/01	375.4	VSC
Total Organic Carbon	ND §	mg/L	1.0	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 11/16/01

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ESS LABORATORY

Location Collected: 01100453
Date Sample Collected: 10/24/01
Sample Description: 01100453-06
EAS Sample Number: 01100438-06
LIMS ID Number: AC14508
Date Sample Received: 10/26/01

Parameter	Data	Detection Limit	Units	Analysis Date
Total Organic Carbon, Water	BDL	1.0	mg/L	10/30/01

BDL = Below Detection Limit

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-062

ESS Project ID: 01100453
ESS Sample ID: 01100453-07
Date Sampled: 10/24/01

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**15**	mg/L	2	10/26/01	310.1	AR
Chloride	**11**	mg/L	3	10/30/01	325.2	JDR
Nitrate as N	**0.02**	mg/L	0.02	10/25/01	353.2	DR
Sulfate	**6**	mg/L	5	10/25/01	375.4	VSC
Total Organic Carbon	**6.4 §**	mg/L	1.0	10/30/01	*	*

§ = Subcontracted laboratory, see attached report.
ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: MP

Date: 11/6/01

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ESS LABORATORY

Location Collected: 01100453
Date Sample Collected: 10/24/01
Sample Description: 01100453-07
EAS Sample Number: 01100438-07
LIMS ID Number: AC14509
Date Sample Received: 10/26/01

Parameter	Data	Detection Limit	Units	Analysis Date
Total Organic Carbon, Water	6.4	1.0	mg/L	10/30/01

BDL = Below Detection Limit

QUALITY CONTROL SECTION

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics Surrogate Report

Client Name: EA Engineering

Client Project ID: Fuel Farm - NASB

ESS Project ID: 01100453

Lab ID (Dilution Factor)	O-Terphenyl
01100453-01 (1x)	78
01100453-02 (1x)	89
01100453-03 (1x)	89
01100453-04 (1x)	84
01100453-05 (1x)	89
01100453-06 (1x)	93
01100453-07 (1x)	86
DGC103001B10BS1 (1x)	92
DGC103001B10BS2 (1x)	86
GC103001B10 (1x)	102
GC103001B10BS1 (1x)	111
GC103001B10BS2 (1x)	125

Surrogate	Limits
O-Terphenyl	50 - 150

Approved by: _____ Date: 11/6/01

EEB 038

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.2.5

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: GC103001B10
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	2*MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: GC103001B10BS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	20	**12.5**	62	50-150

ND = Not Detected above MDL.

Approved By:

Date: 11/6/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: GC103001B10BS2
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	20	**14.1**	70	50-150

ND = Not Detected above MDL.

Approved By: [signature] Date: 11/6/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: DGC103001B10BS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	0.55	**0.519**	94	50-150

ND = Not Detected above MDL.

Approved By: _____ Date: 11/6/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 11/5/01
Date Prepped: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: DGC103001B10BS2
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	0.55	**0.428**	78	50-150

ND = Not Detected above MDL.

Approved By: [signature] Date: 11/6/01

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: VGB103001B1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5-ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Bromofluorobenzene (FID)	93	70-130

Approved By: DMH

Date: 10/31/01

MD

044

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: DMH
Date Analyzed: 10/30/01

ESS Project ID: 01100453
ESS Sample ID: VGB103001LCS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5-ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Gasoline Range Organics	0.5	**0.53**	106	70-130

ND = Not Detected above MRL.

Approved By: DMH

Date: 10/31/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Matrix Spike
Date Sampled: 10/25/01
Date Analyzed: 10/30/01
Analyst: DMH
Container: Satisfactory
Preservative: HCl
Methanol Volume: N/A
Units: mg/L

ESS Project ID: 01100453
ESS Sample ID: 01100472-03MS
Matrix: Aqueous
Alkane Dilution: 1
Aromatic Dilution: 1
Percent Solid: N/A
Sample Amount: 5ml
Temperature: See Chain
Extraction Method: 3510

Compound Name	Result	Recovery Limits
Gasoline Range Organics	**90**	70-130

ND = Not Detected.

Approved By: DMH Date: 10/31/01

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Matrix Spike Duplicate
Date Sampled: 10/25/01
Date Analyzed: 10/30/01
Analyst: DMH
Container: Satisfactory
Preservative: HCl
Methanol Volume: N/A
Units: mg/L

ESS Project ID: 01100453
ESS Sample ID: 01100472-03MSD
Matrix: Aqueous
Alkane Dilution: 1
Aromatic Dilution: 1
Percent Solid: N/A
Sample Amount: 5ml
Temperature: See Chain
Extraction Method: 3510

Compound Name	Result	RPD	Recovery Limits	RPD Limits
ND = Not Detected.	84	6	70-130	25

Approved By: DMH

Date: 10/31/01

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B Surrogate Report

Client Name: EA Engineering

Client Project ID: Fuel Farm - NASB

ESS Project ID: 01100453

Lab ID (Dilution Factor)	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
01100453-01 (1x)	103	102	107
01100453-02 (1x)	103	102	107
01100453-03 (1x)	103	102	107
01100453-04MS (1x)	111	102	107
01100453-04MSD (1x)	111	101	106
01100453-04 (1x)	103	103	107
01100453-05 (1x)	104	103	107
01100453-06 (1x)	105	103	107
01100453-07 (1x)	103	103	106
01100453-08 (1x)	106	102	106
VMG102601B1 (1x)	101	102	107

Surrogate	Limits
1,2-Dichloroethane-d4	70 - 130
Toluene-d8	70 - 130
4-Bromofluorobenzene	70 - 130

Approved by: rp

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: VMG102601B1
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Laboratory Control Sample
Date Sampled: N/A
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: VMG102601C1
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Compound	Spike Added	LCS Concentration	LCS Percent Recovery	QC Recovery Limits
Benzene	25	**24.2**	97	60-140
Ethylbenzene	25	**23.8**	95	80-120
Methyl tert-Butyl Ether	25	**25.7**	103	60-140
Toluene	25	**24**	96	60-140
Xylenes (Total)	75	**73.5**	98	60-140

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B
Matrix Spike Report

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-206MS

ESS Project ID: 01100453
ESS Sample ID: 01100453-04MS
Units: µg/L

Compound Name	Spike Added	MS Conc.	MS % Recovery	Recovery Limits
Benzene	25	22.1	88	70-130
Toluene	25	22	88	70-130

Approved By: _____ Date: 10/31/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B
Matrix Spike Duplicate Report

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-206MSD

ESS Project ID: 01100453
ESS Sample ID: 01100453-04MSD
Units: µg/L

Compound Name	Spike Added	MSD Conc.	MSD % Recovery	RPD	Recovery Limits	RPD Limits
Benzene	25	21.4	86	2	70-130	25
Toluene	25	21.1	84	5	70-130	25

RPD = Relative Percent Deviation.

Approved By: MD Date: 11/30/01

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ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Navy Installation Restoration QA Program
Soil and Water

Rhode Island: 179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP):
Drinking Water: 242400-C
Wastewater: 242400-D

New York (NELAP): 11313
Potable Water
Non Potable Water
Solid and Hazardous Waste

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-098
Date Sampled: 10/23/01
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-01
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	**0.87 J**	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

J = Reported below MRL; Estimated value.
MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-051
Date Sampled: 10/23/01
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-02
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-049
Date Sampled: 10/23/01
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-03
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-206
Date Sampled: 10/24/01
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-04
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10-ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-207
Date Sampled: 10/24/01
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-05
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: FF-Dup 1
Date Sampled: 10/24/01
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-06
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: rmo

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: MW-NASB-062
Date Sampled: 10/24/01
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-07
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10-ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: Fuel Farm - NASB
Client Sample ID: Trip Blank
Date Sampled: 10/24/01
Analyst: MD
Date Analyzed: 10/26/01

ESS Project ID: 01100453
ESS Sample ID: 01100453-08
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL	2*MDL
Benzene	ND	1	0.2
Ethylbenzene	ND	1	0.2
Methyl tert-Butyl Ether	ND	1	0.4
Toluene	ND	1	0.2
Xylenes (Total)	ND	2	0.6

MDL = Method Detection Limit.
MRL = Method Reporting Limit.

ND = Not Detected above MDL.

Approved By: MD

Date: 10/30/01

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@AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0110393

Work Order Summary

CLIENT:	Mr. Al Easterday EA Engineering 175 Middlesex Turnpike Bedford, MA 01730	**BILL TO:**	Mr. Al Easterday EA Engineering 175 Middlesex Turnpike Bedford, MA 01730
PHONE:	781-275-8846 x209	**P.O. #**	
FAX:	781-275-7253	**PROJECT #**	29600.3S Fuel Farm
DATE RECEIVED:	10/22/01	**CONTACT:**	Betty Chu
DATE COMPLETED:	11/1/01		

FRACTION #	NAME	TEST
01A	MW-NASB-209R	Mod RSK-175
02A	MW-NASB-244	Mod RSK-175
03A	MW-NASB-058	Mod RSK-175
04A	MW-NASB-046	Mod RSK-175
05A	LCS	Mod RSK-175
06A	Lab Blank	Mod RSK-175

October 2001
MW-209R MW-058
MW-244 MW-046

CERTIFIED BY: Linda S. Freeman

Laboratory Director

DATE: 11/02/01

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Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567, LA - AI 30763
Name of Accrediting Agency: NELAP/State of New York Department of Health, Scope of Accreditation : Non Potable Water
Accreditation number :11291, Effective date: 6/7/01, Expiration date: 4/1/02

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(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified RSK 175
EA Engineering
Workorder# 0110393

Four VOA Vial-40 mL samples were received on October 22, 2001. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID and for Hydrogen using GC/TCD . The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is baked and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Receiving Notes

Samples were not received at a temperature of 4 degrees C. +/- 2 degrees. The client was notified via the login fax/email and the analysis proceeded.

Samples MW-NASB-209R and MW-NASB-244 were cancelled for Hydrogen analysis per client's request.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-209R

ID#: 0110393-01A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7102436	Date of Collection:	10/18/01
Dil. Factor:	1.00	Date of Analysis:	10/25/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.14

Sample MW-NASB-209R was analyzed for Methane only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-244

ID#: 0110393-02A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7102437	Date of Collection:	10/18/01
Dil. Factor:	1.00	Date of Analysis:	10/25/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.36

Sample MW-NASB-244 was analyzed for Methane only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-058

ID#: 0110393-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102438	Date of Collection:	10/18/01
Dil. Factor:	1.00	Date of Analysis:	10/25/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102504, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-046

ID#: 0110393-04A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102439	Date of Collection:	10/18/01
Dil. Factor:	1.00	Date of Analysis:	10/25/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102505, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0110393-05A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102402	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/24/01

Compound	Rpt. Limit (ug/ml)	%Recovery
Methane	0.010	95
Hydrogen	0.20	108

Hydrogen reported from file 7102502, analyzed on 10/25/01, DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0110393-06A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/24/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102503, analyzed on 10/25/01, DF=1.

Container Type: NA - Not Applicable

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0110393

Work Order Summary

CLIENT:	Mr. Al Easterday EA Engineering 333 Turnpike Road (Route 9) Southborough Technology Park Southborough, MA 01772	**BILL TO:**	Mr. Al Easterday EA Engineering 333 Turnpike Road (Route 9) Southborough Technology Park Southborough, MA 01772
PHONE:	508-485-2982 x209	**P.O. #**	
FAX:	508-485-5742	**PROJECT #**	29600.3S Fuel Farm
DATE RECEIVED:	10/22/2001	**CONTACT:**	Betty Chu
DATE COMPLETED:	11/1/2001		

FRACTION #	NAME	TEST
01A	MW-NASB-209R	Mod RSK-175
02A	MW-NASB-244	Mod RSK-175
03A	MW-NASB-058	Mod RSK-175
04A	MW-NASB-046	Mod RSK-175
05A	LCS	Mod RSK-175
06A	Lab Blank	Mod RSK-175

MW 209R
MW - 244
MW - 058
MW - 46
October 2001

CERTIFIED BY: Linda S. Freeman

Laboratory Director

DATE: 11/02/01

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
Modified RSK 175
EA Engineering
Workorder# 0110393

Four VOA Vial-40 mL samples were received on October 22, 2001. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID and for Hydrogen using GC/TCD . The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is baked and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Requirement	*RSK 175*	*ATL Modifications*
Sample Collection	Collect sample in 60 mL crimp-top vial.	Collect sample in 40 mL VOA vial.
Headspace Generation	Headspace is generated in 60 mL sample vial by displacing volume of liquid with Helium. The amount of liquid should be 10% of sample volume in bottle, up to 10 mL.	5.0 mL of sample is displaced with 5.0 mL Nitrogen and transferred to a Nitrogen purged and capped autosampler vial. Headspace is then generated in the autosampler vial.
Sample Preparation	Sample is shaken 5 min. to equilibrate analyte between headspace and liquid phase.	Prior to injection, autosampler shakes sample for 15 min. while heating to 40°C.
Headspace Injection	Syringe injection of 300 mL headspace into GC.	Autosampler pressurizes sample to fill 1.0 mL loop with headspace sample.
Calibration and Quantitation	Direct injections of gas phase standards are used to obtain a Calibration Curve. Henry's Law is used to calculate mg of gas per Liter of water. Calculation requires recording total volume of serum bottle and headspace, and sample temperature.	Calibration standards are prepared by addition of a gaseous spike solution to clean water. Response factors are calculated for each level of a multi point calibration, and the mean is used to calculate quantitation for each target analyte.
Initial Calibration Curve (ICAL)	Linear regression	% RSD <= 30%, use average RF to quantify results
Lab Blanks	Blank subtraction is performed.	No blank subtraction; Lab Blank must be less than the Reporting Limit.
Specified Detectors	FID or ECD	FID or TCD

Receiving Notes

Samples were not received at a temperature of 4 degrees C. +/- 2 degrees. The client was notified via the login fax/email and the analysis proceeded.

Samples MW-NASB-209R and MW-NASB-244 were cancelled for Hydrogen analysis per client's

request.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-209R

ID#: 0110393-01A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7102436	Date of Collection:	10/18/01
Dil. Factor:	1.00	Date of Analysis:	10/25/01 02:21 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.14

Sample MW-NASB-209R was analyzed for Methane only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-244

ID#: 0110393-02A

MODIFIED METHOD RSK-175 GC/FID

File Name:	7102437	Date of Collection:	10/18/01
Dil. Factor:	1.00	Date of Analysis:	10/25/01 02:46 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.36

Sample MW-NASB-244 was analyzed for Methane only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-058

ID#: 0110393-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102438	Date of Collection:	10/18/01
Dil. Factor:	1.00	Date of Analysis:	10/25/01 03:10 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102504, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-046

ID#: 0110393-04A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102439	Date of Collection:	10/18/01
Dil. Factor:	1.00	Date of Analysis:	10/25/01 03:35 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102505, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0110393

Client

Mr. Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Phone
781-275-8846 x209

Fax
781-275-7253

Date Promised: 11/02/01
Date Completed:
Date Received: 10/22/01
PO#:
Project#: 29600.3S Fuel Farm

Sales Rep: RMW

Total $: $ 399.24
Logged By: LT

Fraction	Sample #	Analysis	Collected	Amount$
01A	MW-NASB-209R	Mod RSK-175	10/18/01	$50.00
02A	MW-NASB-244	Mod RSK-175	10/18/01	$50.00
03A	MW-NASB-058	Mod RSK-175	10/18/01	$125.00
04A	MW-NASB-046	Mod RSK-175	10/18/01	$125.00

Misc. Charges Shipping Charges (10/17/01) $49.24

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Fuel Farm/3592

BILL TO: Mr. Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Analysis Code: HeadSp

Reporting Method: Mod. RSK-175 (Methane & H2)

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

AIR TOXICS LTD.

Method : Mod. RSK-175 (Methane & H2)

Compound	Rpt. Limit (uG/mL)
Methane	0.010
Hydrogen	0.20

AIR TOXICS LTD.

Method : Mod. RSK-175 (Methane)

Compound	Rpt. Limit (uG/mL)
Methane	0.010

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABARATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: EA Engineering
ATTENTION: Mr. Al Easterday
FAX #: 781-275-7253
FROM: Sample Receiving
Workorder #: 0110393
# of pages (Including Cover): 5

10/24/01

Thank you for selecting Air Toxics Ltd. We have received your samples and have found discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Betty Chu at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

The following discrepancies have been observed:

Samples were not received at the recommended temperature. ATL will proceed with the analysis unless otherwise notified.

Your prompt response is appreciated.

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0110448

Client
Mr. Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Phone
781-275-8846 x209

Fax
781-275-7253

Date Promised: 11/06/01
Date Completed:
Date Received: 10/24/01
PO#:
Project#: 29600.35 Fuel Farm

Total $: $ 375.00
Logged By: LT

Sales Rep: RMW

Fraction	Sample #	Analysis	Collected	Amount$
01A	MW-NASB-098	Mod RSK-175	10/23/01	$125.00
02A	MW-NASB-051	Mod RSK-175	10/23/01	$125.00
03A	MW-NASB-049	Mod RSK-175	10/23/01	$125.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Fuel Farm/3592

BILL TO: Mr. Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Analysis Code: HeadSp

Reporting Method: Mod. RSK-175 (Methane & H2)

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

AIR TOXICS LTD.

Method : Mod. RSK-175 (Methane & H2)

Compound	Rpt. Limit (uG/mL)
Methane	0.010
Hydrogen	0.20

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Al Easterday
Company: EA Engineering
Address: 175 Middlesex Trnpk City: Bedford State: MA Zip: 01730
Phone: (781) 275-8846 FAX: (781) 275-7253
Collected By: Signature

Project info:
P.O. #
Project #: 29600.35
Project Name: Fuel Farm

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	MW-NASB-098	10/23/01 1200	Methane			
	MW-NASB-098	10/23/01 1200	Hydrogen			
02A	MW-NASB-051	10/23/01 1255	Methane			
	MW-NASB-051	10/23/01 1255	Hydrogen			
03A	MW-NASB-049	10/23/01 1540	Methane			
	MW-NASB-049	10/23/01 1540	Hydrogen			

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10-24-01

Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
	Kelly Bluette 10/24/01 0900

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	830378444776	KCB	3.0°C	good	(Yes) No None	0110448

Form 1293 rev. 03

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABARATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: EA Engineering
ATTENTION: Mr. Al Easterday
FAX #: 781-275-7253
FROM: Sample Receiving
Workorder #: 0110448
# of pages (Including Cover): 4

10/25/01

Thank you for selecting Air Toxics Ltd. We have received your samples and have found discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Betty Chu at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

The following discrepancies have been observed:

The Chain of Custody (COC) was not completed properly. Please note for future reference that the COC must be signed and dated in order to properly relinquish samples.

Your prompt response is appreciated.

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0110448

Work Order Summary

CLIENT:	Mr. Al Easterday EA Engineering 175 Middlesex Turnpike Bedford, MA 01730	BILL TO:	Mr. Al Easterday EA Engineering 175 Middlesex Turnpike Bedford, MA 01730
PHONE:	781-275-8846 x209	P.O. #	
FAX:	781-275-7253	PROJECT #	29600.35 Fuel Farm
DATE RECEIVED:	10/24/01	CONTACT:	Betty Chu
DATE COMPLETED:	11/2/01		

FRACTION #	NAME	TEST
01A	MW-NASB-098	Mod RSK-175
01AA	MW-NASB-098 Duplicate	Mod RSK-175
02A	MW-NASB-051	Mod RSK-175
03A	MW-NASB-049	Mod RSK-175
04A	LCS	Mod RSK-175
05A	Lab Blank	Mod RSK-175

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 11/05/01

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Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567, LA - AI 30763
Name of Accrediting Agency: NELAP/State of New York Department of Health, Scope of Accreditation : Non Potable Water
Accreditation number :11291, Effective date: 6/7/01, Expiration date: 4/1/02

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified RSK 175
EA Engineering
Workorder# 0110448

Three VOA Vial-40 mL samples were received on October 24, 2001. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID and for Hydrogen using GC/TCD. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is baked and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Receiving Notes

The chain of custody was not relinquished properly. The client was notified and permission to proceed with the analysis was provided.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-098

ID#: 0110448-01A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103006	Date of Collection:	10/23/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.38
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102506, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-098 Duplicate

ID#: 0110448-01AA

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103007	Date of Collection:	10/23/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.39
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102507, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-051

ID#: 0110448-02A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103008	Date of Collection:	10/23/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.037
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102508, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-049

ID#: 0110448-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103009	Date of Collection:	10/23/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	1.3
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102509, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0110448-04A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	%Recovery
Methane	0.010	97
Hydrogen	0.20	108

Hydrogen reported from file 7102502, analyzed on 10/25/01, DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0110448-05A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102503, analyzed on 10/25/01, DF=1.

Container Type: NA - Not Applicable

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Al Easterday
Company: EA Engineering
Address: 175 Middlesex Trnpk City: Bedford State: MA Zip: 01730
Phone: (781) 275-8846 FAX: (781) 275-7253

Collected By: Signature

Project info:
P.O. #
Project #: 29600.35
Project Name: Fuel Farm

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	MW-NASB-098	10/23/01 1200	Methane			
01A	MW-NASB-098	10/23/01 1200	Hydrogen			
	MW-NASB-051	10/23/01 1255	Methane			
02A	MW-NASB-051	10/23/01 1255	Hydrogen			
	MW-NASB-049	10/23/01 1540	Methane			
03A	MW-NASB-049	10/23/01 1540	Hydrogen			

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10-24-01

Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
	Kelly Bluette 10/24/01 0900

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	8037844776	KCB	3.0°C	good	Yes / No / None	0110448

H

Form 1293 rev. 09

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0110448

Work Order Summary

CLIENT:	Mr. Al Easterday EA Engineering 333 Turnpike Road (Route 9) Southborough Technology Park Southborough, MA 01772	**BILL TO:**	Mr. Al Easterday EA Engineering 333 Turnpike Road (Route 9) Southborough Technology Park Southborough, MA 01772
PHONE:	508-485-2982 x209	**P.O. #**	
FAX:	508-485-5742	**PROJECT #**	29600.35 Fuel Farm
DATE RECEIVED:	10/24/2001	**CONTACT:**	Betty Chu
DATE COMPLETED:	11/2/2001		

FRACTION #	NAME	TEST
01A	MW-NASB-098	Mod RSK-175
01AA	MW-NASB-098 Duplicate	Mod RSK-175
02A	MW-NASB-051	Mod RSK-175
03A	MW-NASB-049	Mod RSK-175
04A	LCS	Mod RSK-175
05A	Lab Blank	Mod RSK-175

October 2001
MW-98, MW-51,
MW-49

CERTIFIED BY: Linda J. Freeman

Laboratory Director

DATE: 11/05/01

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified RSK 175
EA Engineering
Workorder# 0110448

Three VOA Vial-40 mL samples were received on October 24, 2001. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID and for Hydrogen using GC/TCD. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is baked and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Requirement	*RSK 175*	*ATL Modifications*
Sample Collection	Collect sample in 60 mL crimp-top vial.	Collect sample in 40 mL VOA vial.
Headspace Generation	Headspace is generated in 60 mL sample vial by displacing volume of liquid with Helium. The amount of liquid should be 10% of sample volume in bottle, up to 10 mL.	5.0 mL of sample is displaced with 5.0 mL Nitrogen and transferred to a Nitrogen purged and capped autosampler vial. Headspace is then generated in the autosampler vial.
Sample Preparation	Sample is shaken 5 min. to equilibrate analyte between headspace and liquid phase.	Prior to injection, autosampler shakes sample for 15 min. while heating to 40°C.
Headspace Injection	Syringe injection of 300 mL headspace into GC.	Autosampler pressurizes sample to fill 1.0 mL loop with headspace sample.
Calibration and Quantitation	Direct injections of gas phase standards are used to obtain a Calibration Curve. Henry's Law is used to calculate mg of gas per Liter of water. Calculation requires recording total volume of serum bottle and headspace, and sample temperature.	Calibration standards are prepared by addition of a gaseous spike solution to clean water. Response factors are calculated for each level of a multi point calibration, and the mean is used to calculate quantitation for each target analyte.
Initial Calibration Curve (ICAL)	Linear regression	% RSD </= 30%, use average RF to quantify results
Lab Blanks	Blank subtraction is performed.	No blank subtraction; Lab Blank must be less than the Reporting Limit.
Specified Detectors	FID or ECD	FID or TCD

Receiving Notes

The chain of custody was not relinquished properly. The client was notified and permission to proceed with the analysis was provided.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-098

ID#: 0110448-01A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103006	Date of Collection:	10/23/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 12:47 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.38
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102506, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-051

ID#: 0110448-02A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103008	Date of Collection:	10/23/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 01:36 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.037
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102508, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-049

ID#: 0110448-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103009	Date of Collection:	10/23/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 02:00 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	1.3
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102509, analyzed on 10/25/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0110448-05A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01 10:54 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102503, analyzed on 10/25/01, DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0110473

Date Promised: 11/07/01

Client
Mr. Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Phone
781-275-8846 x209

Fax
781-275-7253

Date Completed:
Date Received: 10/25/01
PO#:
Project#: 29600.35 Fuel Farm

Total $: $ 500.00

Sales Rep: RMW

Logged By: LT

Fraction	Sample #	Analysis	Collected	Amount$
01A	MW-NASB-206	Mod RSK-175	10/24/01	$125.00
02A	MW-NASB-207	Mod RSK-175	10/24/01	$125.00
03A	FF-Dup 1	Mod RSK-175	10/24/01	$125.00
04A	MW-NASB-062	Mod RSK-175	10/24/01	$125.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Fuel Farm/3592

Analysis Code: HeadSp

BILL TO: Mr. Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Reporting Method: Mod. RSK-175 (Methane & H2)

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

AIR TOXICS LTD.

Method : Mod. RSK-175 (Methane & H2)

Compound	Rpt. Limit (uG/mL)
Methane	0.010
Hydrogen	0.20

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

Page 1 of 1

Contact Person: AL EASTERDAY
Company: EA Engineering
Address: 175 Middlesex Trnpk City: Bed Ford State: MA Zip: 01730
Phone: (781) 275-8846 FAX: (781) 275-7253
Collected By: Signature: Brian D. Anderson

Project info:
P.O. #:
Project #: 29600.35
Project Name: Fuel Farm

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	MW-NASB-206	10/24/01	Methane			
01AH	MW-NASB-206	10/24/01	~~10/24~~ Hydrogen			
02A	MW-NASB-207	10/24/01	Methane			
02AH	MW-NASB-207	10/24/01	Hydrogen			
03A	FF-Dup 1	10/24/01	Methane			
03AH	FF-Dup 1	10/24/01	Hydrogen			
04A	MW-NASB-062	10/24/01	Methane			
04AH	MW-NASB-062	10/24/01	Hydrogen			

Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
Brian D. Anderson 10/24/01 1630	Laura A. Thomas ATC 10-25-01 0915
Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEX	8284 3164 5669	SJ	2.0	Good	(Yes) No None	0110473

Form 1290 rev. 09

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABARATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: EA Engineering
ATTENTION: Mr. Al Easterday
FAX #: 781-275-7253
FROM: Sample Receiving
Workorder #: 0110473
# of pages (Including Cover): 4

10/26/01

Thank you for selecting Air Toxics Ltd. We have received your samples and have found discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Betty Chu at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

The following discrepancies have been observed:

The COC states that the date sampled for sample MW-NASB-207 is 10/24/01, while the sample tag says 10/23/01. ATL will report the information as appears on the COC unless otherwise notified.

Your prompt response is appreciated.

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0110473

Work Order Summary

CLIENT:	Mr. Al Easterday EA Engineering 175 Middlesex Turnpike Bedford, MA 01730	**BILL TO:**	Mr. Al Easterday EA Engineering 175 Middlesex Turnpike Bedford, MA 01730
PHONE:	781-275-8846 x209	**P.O. #**	
FAX:	781-275-7253	**PROJECT #**	29600.35 Fuel Farm
DATE RECEIVED:	10/25/01	**CONTACT:**	Betty Chu
DATE COMPLETED:	11/7/01		

FRACTION #	NAME	TEST
01A	MW-NASB-206	Mod RSK-175
02A	MW-NASB-207	Mod RSK-175
03A	FF-Dup 1	Mod RSK-175
04A	MW-NASB-062	Mod RSK-175
05A	LCS	Mod RSK-175
06A	Lab Blank	Mod RSK-175

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 11/07/01

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Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567, LA - AI 30763
Name of Accrediting Agency: NELAP/State of New York Department of Health, Scope of Accreditation : Non Potable Water
Accreditation number :11291, Effective date: 6/7/01, Expiration date: 4/1/02

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified RSK 175
EA Engineering
Workorder# 0110473

Four VOA Vial-40 mL samples were received on October 25, 2001. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID and for Hydrogen using GC/TCD. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is baked and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Receiving Notes

The chain of custody information for sample MW-NASB-207 did not match the entry on the sample tag. The client was notified and the information on the chain of custody was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-206

ID#: 0110473-01A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103010	Date of Collection:	10/24/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102604, analyzed on 10/26/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-207

ID#: 0110473-02A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103011	Date of Collection:	10/24/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.029
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102605, analyzed on 10/26/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: FF-Dup 1

ID#: 0110473-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103012	Date of Collection:	10/24/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.017
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102606, analyzed on 10/26/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-062

ID#: 0110473-04A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103013	Date of Collection:	10/24/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102607, analyzed on 10/26/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0110473-05A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	%Recovery
Methane	0.010	97
Hydrogen	0.20	110

Hydrogen reported from file 7102602, analyzed on 10/26/01, DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0110473-06A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102603, analyzed on 10/26/01, DF=1.

Container Type: NA - Not Applicable

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CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: AL EASTERDAY
Company: EA Engineering
Address: 175 Middlesex Trnpk City: Bed Ford State: MA Zip: 01730
Phone: (781) 275-8846 FAX: (781) 275-7253
Collected By: Signature: Brian D. Anderson

Project info:
P.O. #
Project #: 29600.35
Project Name: Fuel Farm

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	MW-NASB-206	10/24/01	Methane			
01AH	MW-NASB-206	10/24/01	~~Methane~~ Hydrogen			
02A	MW-NASB-207	10/24/01	Methane			
02AH	MW-NASB-207	10/24/01	Hydrogen			
03A	FF-Dup 1	10/24/01	Methane			
03AH	FF-Dup 1	10/24/01	Hydrogen			
04A	MW-NASB-062	10/24/01	Methane			
04AH	MW-NASB-062	10/24/01	Hydrogen			

Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
Brian D. Anderson 10/24/01 16:00	Laura A. Thomas ATC 10-25-01 09:15

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEX	8284 3164 5669	JJ	2.0	Good	(Yes) No None	0110473

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0110473

Work Order Summary

CLIENT:	Mr. Al Easterday EA Engineering 333 Turnpike Road (Route 9) Southborough Technology Park Southborough, MA 01772	**BILL TO:**	Mr. Al Easterday EA Engineering 333 Turnpike Road (Route 9) Southborough Technology Park Southborough, MA 01772
PHONE:	508-485-2982 x209	**P.O. #**	
FAX:	508-485-5742	**PROJECT #**	29600.35 Fuel Farm
DATE RECEIVED:	10/25/2001	**CONTACT:**	Betty Chu
DATE COMPLETED:	11/7/2001		

FRACTION #	NAME	TEST
01A	MW-NASB-206	Mod RSK-175
02A	MW-NASB-207	Mod RSK-175
03A	FF-Dup 1	Mod RSK-175
04A	MW-NASB-062	Mod RSK-175
05A	LCS	Mod RSK-175
06A	Lab Blank	Mod RSK-175

MW-NASB-206
MW-NASB-207
MW-062
~~10/2001~~
October 01

CERTIFIED BY: Linda S. Freeman DATE: 11/07/01

Laboratory Director

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified RSK 175
EA Engineering
Workorder# 0110473

Four VOA Vial-40 mL samples were received on October 25, 2001. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID and for Hydrogen using GC/TCD. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is baked and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Requirement	*RSK 175*	*ATL Modifications*
Sample Collection	Collect sample in 60 mL crimp-top vial.	Collect sample in 40 mL VOA vial.
Headspace Generation	Headspace is generated in 60 mL sample vial by displacing volume of liquid with Helium. The amount of liquid should be 10% of sample volume in bottle, up to 10 mL.	5.0 mL of sample is displaced with 5.0 mL Nitrogen and transferred to a Nitrogen purged and capped autosampler vial. Headspace is then generated in the autosampler vial.
Sample Preparation	Sample is shaken 5 min. to equilibrate analyte between headspace and liquid phase.	Prior to injection, autosampler shakes sample for 15 min. while heating to 40°C.
Headspace Injection	Syringe injection of 300 mL headspace into GC.	Autosampler pressurizes sample to fill 1.0 mL loop with headspace sample.
Calibration and Quantitation	Direct injections of gas phase standards are used to obtain a Calibration Curve. Henry's Law is used to calculate mg of gas per Liter of water. Calculation requires recording total volume of serum bottle and headspace, and sample temperature.	Calibration standards are prepared by addition of a gaseous spike solution to clean water. Response factors are calculated for each level of a multi point calibration, and the mean is used to calculate quantitation for each target analyte.
Initial Calibration Curve (ICAL)	Linear regression	% RSD <= 30%, use average RF to quantify results
Lab Blanks	Blank subtraction is performed.	No blank subtraction; Lab Blank must be less than the Reporting Limit.
Specified Detectors	FID or ECD	FID or TCD

Receiving Notes

The chain of custody information for sample MW-NASB-207 did not match the entry on the sample tag. The client was notified and the information on the chain of custody was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-206

ID#: 0110473-01A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103010	Date of Collection:	10/24/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 02:25 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102604, analyzed on 10/26/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-207

ID#: 0110473-02A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103011	Date of Collection:	10/24/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 02:49 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.029
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102605, analyzed on 10/26/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: FF-Dup 1

ID#: 0110473-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103012	Date of Collection:	10/24/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 03:13 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	0.017
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102606, analyzed on 10/26/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-062

ID#: 0110473-04A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103013	Date of Collection:	10/24/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 03:37 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102607, analyzed on 10/26/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0110473-05A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01 10:30 AM

Compound	%Rec very
Methane	97
Hydrogen	110

Hydrogen reported from file 7102602, analyzed on 10/26/01, DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0110473-06A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name: 7103003	Date of Collection: NA
Dil. Factor: 1.00	Date of Analysis: 10/30/01 10:54 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102603, analyzed on 10/26/01, DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

SAMPLE RECEIPT SUMMARY

WORKORDER 0110525

Client
Mr. Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Phone
781-275-8846 x209

Fax
781-275-7253

Date Promised: 11/08/01
Date Completed:
Date Received: 10/26/01
PO#:
Project#: 2960035 Fuel Farm

Total $: $ 400.00
Logged By: KCB

Sales Rep: RMW

Fraction	Sample #	Analysis	Collected	Amount$
01A	MW-NASB-210	Mod RSK-175	10/25/01	$125.00
02A	MW-NASB-244	Mod RSK-175	10/25/01	$75.00
03A	MW-NASB-209R	Mod RSK-175	10/25/01	$75.00
04A	MW-NASB-245	Mod RSK-175	10/25/01	$125.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Fuel Farm/3592

BILL TO: Mr. Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Analysis Code: HeadSp

REMARKS Mod. RSK-175 (Methane & H2): samples 01A and 04A
Mod. RSK-175 (H2): samples 02A and 03A

Reporting Method: Mod. RSK-175 (Methane & H2)

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

AIR TOXICS LTD.

Method : Mod. RSK-175 (Methane & H2)

Compound	Rpt. Limit (uG/mL)
Methane	0.010
Hydrogen	0.20

AIR TOXICS LTD.

Method : Mod. RSK-175 (H2)

Compound	Rpt. Limit (uG/mL)
Hydrogen	0.20

0110525

[redacted] Air Toxics LTD
180 Blue Ravine Rd.
Folsom CA 95630

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 1 of 1

Client: EA Engineering
Contact: Al Easterday
Phone #: (781) 275-8846
Fax #: (781) 275-7252
Address: 175 Middlesex Tnpk
City: Bedford
State: MA
Zip Code: 01730
Purchase Order #:
Proj. Name / No.: Fuel Farm / 29600 35
~~Katahdin Quote #~~
Bill (If different than above):
Address:
Sampler (Print / Sign): Brian D Andersen / Brian D Andersen
Copies To:

LAB USE ONLY
WORK ORDER #:
~~KATAHDIN~~ PROJECT MANAGER:
REMARKS:
SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C: ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Hydrogen No pres.	Methane w HCL	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N
01A	MW-NASB-210	10/25/01 / 1100	Ground Water	4	X	X										
02A	MW-NASB-244	10/25/01 / 1115	Ground water	2	X											
03A	MW-NASB-209R	10/25/01 / 1125	Ground water	2	X											
04A	MW-NASB-245	10/25/01 / 1330	GW	4	X	X										
		/														
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		/														

CUSTODY SEAL INTACT? Y N NONE TEMP 4.5°C

COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Brian Andersen	10/25 1500				
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	10/26/01 1000	Kelly Bluette			

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABARATORY

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: EA Engineering
ATTENTION: Mr. Al Easterday
FAX #: 781-275-7253
FROM: Sample Receiving
Workorder #: 0110525
# of pages (Including Cover): 5

10/29/01

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Betty Chu at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

Mod. RSK-175 (Methane & H2): samples 01A and 04A
Mod. RSK-175 (H2): samples 02A and 03A

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0110525

Work Order Summary

CLIENT:	Mr. Al Easterday EA Engineering 175 Middlesex Turnpike Bedford, MA 01730	**BILL TO:**	Mr. Al Easterday EA Engineering 175 Middlesex Turnpike Bedford, MA 01730
PHONE:	781-275-8846 x209	**P.O. #**	
FAX:	781-275-7253	**PROJECT #**	2960035 Fuel Farm
DATE RECEIVED:	10/26/01	**CONTACT:**	Betty Chu
DATE COMPLETED:	11/7/01		

FRACTION #	NAME	TEST
01A	MW-NASB-210	Mod RSK-175
02A	MW-NASB-244	Mod RSK-175
03A	MW-NASB-209R	Mod RSK-175
04A	MW-NASB-245	Mod RSK-175
05A	LCS	Mod RSK-175
06A	Lab Blank	Mod RSK-175

CERTIFIED BY: Linda J. Freeman

Laboratory Director

DATE: 11/08/01

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Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567, LA - AI 30763
Name of Accrediting Agency: NELAP/State of New York Department of Health, Scope of Accreditation : Non Potable Water
Accreditation number :11291, Effective date: 6/7/01, Expiration date: 4/1/02

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified RSK 175
EA Engineering
Workorder# 0110525

Four VOA Vial-40 mL samples were received on October 26, 2001. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID and for Hydrogen using GC/TCD. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is baked and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-210

ID#: 0110525-01A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103004	Date of Collection:	10/25/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102904, analyzed on 10/29/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-244

ID#: 0110525-02A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102905	Date of Collection:	10/25/01
Dil. Factor:	1.00	Date of Analysis:	10/29/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Hydrogen	0.20	Not Detected

Sample MW-NASB-244 was analyzed for Hydrogen only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-209R

ID#: 0110525-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102906	Date of Collection:	10/25/01
Dil. Factor:	1.00	Date of Analysis:	10/29/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Hydrogen	0.20	Not Detected

Sample MW-NASB-244 was analyzed for Hydrogen only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-245

ID#: 0110525-04A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103005	Date of Collection:	10/25/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	8.6
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102907, analyzed on 10/29/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0110525-05A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	%Recovery
Methane	0.010	97
Hydrogen	0.20	107

Hydrogen reported from file 7102902, analyzed on 10/29/01, DF=1.

Container Type: NA - Not Applicable

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0110525-06A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102903, analyzed on 10/29/01, DF=1.

Container Type: NA - Not Applicable

0110525

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Folsom CA 95630 –
Fax (207) 775-4029

CHAIN of CUSTODY

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Page 1 of 1

Client	Contact	Phone #	Fax #
EA Engineering	Al Easterday	(781) 275-8846	(781) 275-725-

Address: 175 Middlesex Trnpk City: Bedford State: MA Zip Code: 01730

Purchase Order #: Proj. Name / No.: Fuel Farm / 29600 35 ~~Katahdin Quote #~~

Bill (if different than above): Address:

Sampler (Print / Sign): Brian D Andersen / Brian D Andersen Copies To:

LAB USE ONLY WORK ORDER #:

~~KATAHDIN~~ PROJECT MANAGER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Filt. ☐Y ☒N Hydrogen No pres.	Filt. ☐Y ☒N Methane w HCL	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
01A	MW-NASB-210	10/25/01 / 1100	Ground water	4	x	x								
02A	MW-NASB-244	10/25/01 / 1115	Ground water	2	x									
03A	MW-NASB-204R	10/25/01 / 1125	Ground water	2	x									
04	MW-NASB-245	10/25/01 / 1330	GW	4	x	x								
		/												
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CUSTODY SEAL INTACT? (Y) N NONE TEMP 4.5°C

COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Brian Andersen	10/25 1500				
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	10/26/01 1000	Kelly Bluette			

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ORIGINAL

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0110525

Work Order Summary

CLIENT:	Mr. Al Easterday EA Engineering 333 Turnpike Road (Route 9) Southborough Technology Park Southborough, MA 01772	**BILL TO:**	Mr. Al Easterday EA Engineering 333 Turnpike Road (Route 9) Southborough Technology Park Southborough, MA 01772
PHONE:	508-485-2982 x209	**P.O. #**	
FAX:	508-485-5742	**PROJECT #**	2960035 Fuel Farm
DATE RECEIVED:	10/26/2001	**CONTACT:**	Betty Chu
DATE COMPLETED:	11/7/2001		

FRACTION #	NAME	TEST
01A	MW-NASB-210	Mod RSK-175
02A	MW-NASB-244	Mod RSK-175
03A	MW-NASB-209R	Mod RSK-175
04A	MW-NASB-245	Mod RSK-175
05A	LCS	Mod RSK-175
06A	Lab Blank	Mod RSK-175

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 11/08/01

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
Modified RSK 175
EA Engineering
Workorder# 0110525

Four VOA Vial-40 mL samples were received on October 26, 2001. The laboratory performed analysis via Modified RSK 175 for Methane using GC/FID and for Hydrogen using GC/TCD. The method involves placing an aliquot of the sample in a headspace vial. The vial is then placed into HP7694 Headspace Autosampler equipped with oven, shaker and 1 mL sample loop. Sample is baked and then equilibrated at 40°C for 15 minutes with high agitation. Finally, a direct injection of the headspace is performed. See the data sheets for the reporting limits for each compound.

Requirement	*RSK 175*	*ATL Modifications*
Sample Collection	Collect sample in 60 mL crimp-top vial.	Collect sample in 40 mL VOA vial.
Headspace Generation	Headspace is generated in 60 mL sample vial by displacing volume of liquid with Helium. The amount of liquid should be 10% of sample volume in bottle, up to 10 mL.	5.0 mL of sample is displaced with 5.0 mL Nitrogen and transferred to a Nitrogen purged and capped autosampler vial. Headspace is then generated in the autosampler vial.
Sample Preparation	Sample is shaken 5 min. to equilibrate analyte between headspace and liquid phase.	Prior to injection, autosampler shakes sample for 15 min. while heating to 40°C.
Headspace Injection	Syringe injection of 300 mL headspace into GC.	Autosampler pressurizes sample to fill 1.0 mL loop with headspace sample.
Calibration and Quantitation	Direct injections of gas phase standards are used to obtain a Calibration Curve. Henry's Law is used to calculate mg of gas per Liter of water. Calculation requires recording total volume of serum bottle and headspace, and sample temperature.	Calibration standards are prepared by addition of a gaseous spike solution to clean water. Response factors are calculated for each level of a multi point calibration, and the mean is used to calculate quantitation for each target analyte.
Initial Calibration Curve (ICAL)	Linear regression	% RSD <= 30%, use average RF to quantify results
Lab Blanks	Blank subtraction is performed.	No blank subtraction; Lab Blank must be less than the Reporting Limit.
Specified Detectors	FID or ECD	FID or TCD

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the detection limit.

M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-210

ID#: 0110525-01A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103004	Date of Collection:	10/25/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 11:59 AM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	Not Detected
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102904, analyzed on 10/29/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-244

ID#: 0110525-02A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7102905	Date of Collection:	10/25/01
Dil. Factor:	1.00	Date of Analysis:	10/29/01 02:27 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Hydrogen	0.20	Not Detected

Sample MW-NASB-244 was analyzed for Hydrogen only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-209R

ID#: 0110525-03A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	**7102906**	**Date of Collection:**	**10/25/01**
Dil. Factor:	**1.00**	**Date of Analysis:**	**10/29/01 02:37 PM**

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Hydrogen	0.20	Not Detected

Sample MW-NASB-244 was analyzed for Hydrogen only.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: MW-NASB-245

ID#: 0110525-04A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103005	Date of Collection:	10/25/01
Dil. Factor:	1.00	Date of Analysis:	10/30/01 12:23 PM

Compound	Rpt. Limit (ug/ml)	Amount (ug/ml)
Methane	0.010	8.6
Hydrogen	0.20	Not Detected

Hydrogen reported from file 7102907, analyzed on 10/29/01, DF=1.

Container Type: VOA Vial-40 mL

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0110525-05A

MODIFIED METHOD RSK-175 GC/FID/TCD

File Name:	7103002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/30/01 10:30 AM

Compound	%Recovery
Methane	97
Hydrogen	107

Hydrogen reported from file 7102902, analyzed on 10/29/01, DF=1.

Container Type: NA - Not Applicable

ESS Laboratory

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Page 1 of 2

Turn Time ___ Standard (2 Weeks) Other _____
If faster than 5 days, prior approval by laboratory is required # _____

Electronic Deliverables ___ Yes ___ No

ESS LAB PROJECT ID

State where samples were collected from: MA RI CT NH NJ NY (ME) USACE Other _____

Formats _____

Special Detection Limits

Co. Name	Project #	Project Name (20 Char. or less)
EA Engineering	29600.35	BNAS - Fuel Farm

Contact Person	Address
Al Easterday	175 Middlesex Tpk

City	State	Zip	PO#
Bedford ~~175 Middlesex Tpk~~	MA	01730	29600.35

Telephone #	Fax #	Email Address
(781) 275-8846	(781) 275-7253	

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX + MTBE	GRO	DRO	Alk, Cl, NO3, Sulfate									
	4/24/02	1145		X	GW	FF-MW098	8	V/G/P	X	X	X	X									
	4/24/02	1410		X	GW	FF-MW244	8	V/G/P	X	X	X	X									
	4/24/02	1550		X	GW	FF-MW058	8	V/G/P	X	X	X	X									
	4/24/02	1505		X	GW	FF-MW208	8	V/G/P	X	X	X	X									
	4/24/02	1220		X	GW	FF-MW209R	8	V/G/P	X	X	X	X									
	4/24/02	—		X	GW	FF-MWXD1	8	V/G/P	X	X	X	X									
	4/25/02	1045		X	GW	FF-MW046	8	V/G/P	X	X	X	X									
	4/25/02	0845		X	GW	FF-MW049	8	V/G/P	X	X	X	X									
	4/25/02	0850		X	GW	FF-MW245	8	V/G/P	X	X	X	X									
	4/25/02	1045		X	GW	FF-MW207	8	V/G/P	X	X	X	X									

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: _____

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Shawn Sullivan	4/24/02 0930						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

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CHAIN OF CUSTODY

Turn Time ___ Standard (2 Weeks) Other ___
If faster than 5 days, prior approval by laboratory is required # ___

Electronic Deliverables ___ Yes ___ No

ESS LAB PROJECT ID

State where samples were collected from:
MA RI CT NH NJ NY (ME) USACE Other ___

Formats ___

Special Detection Limits

Co. Name: EA Engineering	Project #: 29600.35	Project Name (20 Char. or less): BNAS-Fuel Farm	
Contact Person: Al EASTERDAY	Address: 175 Middlesex TPK		
City: Bedford	State: MA	Zip: 01730	PO#: 29600.35
Telephone #: (781) 275-8846	Fax #: (781) 275-7253	Email Address	

Analysis Required: BTEX +MTBE; GRO; DRO; Alk, Cl, NO3, Sulfate

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX +MTBE	GRO	DRO	Alk, Cl, NO3, Sulfate
	4/25/02	1310		X	GW	FF-MW054	8	G/V/P	X	X	X	X
	4/25/02	1435		X	GW	FF-MW062	8	G/V/P	X	X	X	X
	4/25/02	1340		X	GW	FF-MW206	8	G/V/P	X	X	X	X
	4/25/02	1635		X	GW	FF-MW210	8	G/V/P	X	X	X	X
	4/24/02	1145			W	FF-TB1	2	V	X			

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: ___
Cooler Temp: ___

Internal Use Only
[ ] Pickup
[ ] Technicians ___

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	4/25/02 0930						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

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Page 1 of 1

Turn Time ___ Standard (2 Weeks) Other _____
If faster than 5 days, prior approval by laboratory is required # _____

Electronic Deliverables ___ Yes ___ No

ESS LAB PROJECT ID

State where samples were collected from:
MA RI CT NH NJ NY (ME) USACE Other _____

Formats _____

Special Detection Limits

Co. Name: EA Engineering	Project #: 29600.35	Project Name (20 Char. or less): NASB-ONSF	
Contact Person: Al Easterday	Address: 175 Middlesex Tpk		
City: Bedford, State: MA	Zip: 01730	PO#: 29600.35	
Telephone #: (781) 275-8846	Fax #: (781) 275-7253	Email Address	

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	Analysis Required: Nitrates
	5/6/02	1025		X	GW	FF-MW-209RR	1	P	X
	5/6/02	1055		X	GW	FF-MW-208R	1	P	X
	5/6/02	1105		X	GW	FF-MW-245R	1	P	X
	5/6/02	1155		X	GW	FF-MW-207R	1	P	X
	5/6/02	1230		X	GW	FF-MW-206R	1	P	X

Post-it® Fax Note 7671 | Date 7/12/02 | # of pages ▶ 7
To Al Easterday | From Mark Carver
Co./Dept. | Co.
Phone # | Phone #
Fax # | Fax #

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Solid D-Sludge WW-Waste | Types F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: _____

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments: R designates resample

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Mark A. Carver	5/6/02 1400						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

ESS Laboratory

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CHAIN OF CUSTODY

Page 1 of 1

Turn Time ___ Standard (2 Weeks) Other ___
If faster than 5 days, prior approval by laboratory is required # ___

Electronic Deliverables ___ Yes ___ No
Formats ___

ESS LAB PROJECT ID

Special Detection Limits

State where samples were collected from: MA RI CT NH NJ NY ME USACE Other ___

Co. Name: EA Engineering	Project #: 29600	Project Name (20 Char. or less): DASBF-QMSR	
Contact Person: AL Easterday	Address: 1175 Middlesex Tpk		
City: Bedford	State: MA	Zip: 01730	PO#: 29600.35
Telephone #: (781) 275-8846	Fax #: (781) 275-7253	Email Address	

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	Nitrates	
	4/30/02	0955		*	GW	FF-MW-244R	1	P	*	*
	4/30/02	1045		*	GW	FF-MW-09R	1	P	*	
	4/30/02	1325		*	GW	FF-MW-05MR	1	P	*	
	5/1/02	1138		x	GW	FF-MW-046R	1	P	x	
	5/1/02	1510		x	GW	FF-MW-210R	1	P	x	
	5/1/02	—		x	GW	FF-MW-XD4	1	P	x	

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: ___
Cooler Temp: ___

Internal Use Only
[ ] Pickup
[ ] Technicians ___

Comments: Resample

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Mark Co[illegible]	5/1/02 11600						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

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Division of Thielsch Engineering, Inc.
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CHAIN OF CUSTODY

Turn Time X Standard (2 Weeks) Other ____
If faster than 5 days, prior approval by laboratory is required # ____

Electronic Deliverables ___ Yes ___ No
Formats ____

ESS LAB PROJECT ID

Special Detection Limits

State where samples were collected from:
MA RI CT NH NJ NY (ME) USACE Other ____

Co. Name: EA Engineering	Project #: 29600.35 6812	Project Name (20 Char. or less): ONFF-BNAS	
Contact Person: Al Easterday	Address: 175 Middlesex Tpk		
City: Bedford	State: MA	Zip: 01730	PO#: 29600.35
Telephone #: (781) 275-8846	Fax #: (781) 275-7253	Email Address:	

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	Nitrates NO3	DRO
	4/30/02	1350		X	GW	FF-MW062R	5	G/P	X	X
	4/30/02	1430		X	GW	FF-MW098R	1	P	X	
	4/30/02	1530		X	GW	FF-MW058R	1	P	X	

Analysis Required

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: ____
Cooler Temp: ____

Internal Use Only
[ ] Pickup
[ ] Technicians ____

Comments:
R designates resample

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	4/30/02 1600						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.thielsch.com

CHAIN OF CUSTODY

Page _____ of _____

Turn Time ___ Standard (2 Weeks) Other _____
If faster than 5 days, prior approval by laboratory is required # _____

Electronic Deliverables ___ Yes ___ No
Formats _____

ESS LAB PROJECT ID

Special Detection Limits

State where samples were collected from:
MA RI CT NH NJ NY ME USACE Other _____

Co. Name	Project #	Project Name (20 Char. or less)
EA Engineering	29600.35	BNAS - Fuel Farm

Contact Person	Address
Al Easterday	175 Middlesex Tpk

City	State	Zip	PO#
Bedford ~~175 Middlesex Tpk~~	MA	01730	29600.35

Telephone #	Fax #	Email Address
(781) 275-8846	(781) 275-7253	

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX + MTBE	GRO	DRO	Alk, Cl, NO_3, Sulfate											
	4/24/02	1145		+	GW	FF-MW098	8	V/G/P	+	+	+	+											
	4/24/02	1410		+	GW	FF-MW244	8	V/G/P	+	+	+	+											
	4/24/02	1550		+	GW	FF-MW058	8	V/G/P	+	+	+	+											
	4/24/02	1505		+	GW	FF-MW208	8	V/G/P	+	+	+	+											
	4/24/02	1220		+	GW	FF-MW209R	8	V/G/P	+	+	+	+											
	4/24/02	—		+	GW	FF-MWXD1	8	V/G/P	+	+	+	+											
	4/25/02	1045		X	GW	FF-MW046	8	V/G/P	X	X	X	X											
	4/25/02	0845		X	GW	FF-MW049	8	V/G/P	X	X	X	X											
	4/25/02	0850		X	GW	FF-MW245	8	V/G/P	X	X	X	X											
	4/25/02	1045		X	GW	FF-MW207	8	V/G/P	X	X	X	X											

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: _____
Cooler Temp: _____

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

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CHAIN OF CUSTODY

Page 2 of 2

Turn Time ___ Standard (2 Weeks) Other ___
If faster than 5 days, prior approval by laboratory is required # ___

Electronic Deliverables ___ Yes ___ No
Formats ___

ESS LAB PROJECT ID

Special Detection Limits

State where samples were collected from:
MA RI CT NH NJ NY (MB) USACE Other ___

Co. Name: EA Engineering
Project #: 29600.35
Project Name (20 Char. or less): BNAS-Fuel Farm
Contract Person: Al EASTERDAY
Address: 175 Middlesex TPK
City: Bedford
State: MA
Zip: 01730
PO#: 29600.35
Telephone #: (781) 275-8846
Fax #: (781) 275-7253
Email Address:

Analysis Required

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX +MTBE	GRO	DRO	Alk, Cl, NO3, Sulfate
	4/25/02	1310		X	G W	FF-MW054	8	G/P	X	X	X	X
	4/25/02	1435		X	G W	FF-MW062	8	G/P	X	X	X	X
	4/25/02	1340		X	G W	FF-MW206	8	G/P	X	X	X	X
	4/25/02	1635		X	G W	FF-MW210	8	G/P	X	X	X	X
	4/24/02	1145			W	FF-TB1	2	V	X			

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ___ Yes ___ No
Seals Intact ___ Yes ___ No NA: ___
Cooler Temp: ___

Internal Use Only
[ ] Pickup
[ ] Technicians ___

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

ESS Laboratory

Division of Thielsch Engineering, Inc.

May 13, 2002

Al Easterday
EA Engineering
175 Middlesex Turnpike
Bedford, MA 01730

Dear Al Easterday:

We appreciate this opportunity to provide you with our analytical services. ESS Laboratory is committed to providing the highest quality service. Our dedication to each client includes responsiveness to emergencies, dependable, well-written reports, and client services, which include the availability of all analysts to answer your inquiries.

Enclosed is your data report. The invoice for this project is being forwarded to your Accounts Payable Department unless other arrangements have previously been made with the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department. We value our continued relationship and look forward to hearing from you in the future.

Sincerely,

ESS LABORATORY

Laurel Stoddard
Laboratory Director

Enclosure

HJL

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REQUEST FOR SUMMARY ANALYTICAL DATA

With all analytical task orders for the Navy, please provide the following summary information:

Laboratory Name: Ess laboratory

Project Number: 2916 00.35

ess lab id # 02024043 1

Matrices	Analytes	Method Numbers	Quantity	Unit Costs
grand water	Al Valinity	301.1	14	12.00
G.W.	chloride	325.3	14	16.00
G.W.	D.R.O	4.1.25	14	85.00
G.W.	GRO	4.2.17	14	85.00
G.W.	Sulfate	375.4	14	16.00
G.W.	mtbe + Btex	8020 by 8260	14	56.00

Scheduled Turnaround Time: 5 day

Actual Turnaround Time: 8 day

This information should be submitted at the time of analytical data delivery and should be delivered to the CTO manager who will 'cc' the PMO QA/QC officer Mr. Joel Lazzeri.

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

CLIENT: EA Engineering
CLIENT PROJECT ID: BNAS-FUEL FARM
ESS PROJECT ID: 02040431

Sample Receipt
14 Ground Water samples and 1 Trip Blank were received on April 29, 2002 for the analysis specified on the enclosed Chain of Custody Record. Sample bottle for sample 02040431-12 DRO broke during sample receipt. Nitrates were cancelled for this project.

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan.

No unusual observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.

Laurel Stoddard/Eric Baanante
Laboratory Director/Operations Manager

5/17/02
Date

HJL

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW098

ESS Project ID: 02040431
ESS Sample ID: 02040431-01
Date Sampled: 4/24/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**25**	mg/L	2	04/29/02	310.1	JDR
Chloride	**8**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**8**	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: _____ Date: 5/7/02

JJG

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002

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW098
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-01
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: _____ Date: 5/2/02

Page 1 of 1

MDP

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003

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW098
Date Sampled: 4/24/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-01
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 970 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	**0.03 J**	0.11	0.03

MDL = Method Detection Limit.
ND = Not Detected above MDL.

MRL = Method Reporting Limit.
J = Estimated value, below MRL.

Approved by: _____ Date: 5/7/2

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW098
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-01
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: VP

Date: 5/7/02

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MLP 005

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW244

ESS Project ID: 02040431
ESS Sample ID: 02040431-02
Date Sampled: 4/24/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	ND	mg/L	2	04/29/02	310.1	JDR
Chloride	**8**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**12**	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KP

Date: 5/7/02

JJG

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW244
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-02
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: _____ Date: 5/2/02

MDP

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW244
Date Sampled: 4/24/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-02
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 970 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	**0.03 J**	0.11	0.03

MRL = Method Reporting Limit.
J = Estimated value, below MRL.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: 5/7/02

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW244
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-02
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: KW

Date: 5/7/02

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MLP

009

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW058

ESS Project ID: 02040431
ESS Sample ID: 02040431-03
Date Sampled: 4/24/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**12**	mg/L	2	04/29/02	310.1	JDR
Chloride	ND	mg/L	3	04/30/02	325.2	JDR
Sulfate	**13**	mg/L	10	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 5/7/02

JJG

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW058
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-03
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: _____ Date: 5/2/02

Page 1 of 1

MDP

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW058
Date Sampled: 4/24/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-03
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 990 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	**0.04 J**	0.11	0.03

MDL = Method Detection Limit.
ND = Not Detected above MDL.

MRL = Method Reporting Limit.
J = Estimated value, below MRL.

Approved by: _____ Date: 5/7/02

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW058
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-03
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: KM

Date: 5/7/02

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MLP 013

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW208

ESS Project ID: 02040431
ESS Sample ID: 02040431-04
Date Sampled: 4/24/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**123**	mg/L	10	04/29/02	310.1	JDR
Chloride	**23**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**10**	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 5/7/02

JJG

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW208
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-04
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: _____ Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW208
Date Sampled: 4/24/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-04
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	**0.04 J**	0.11	0.03

MRL = Method Reporting Limit.
J = Estimated value, below MRL.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: 5/7/02

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW208
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-04
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: [illegible]

Date: 5/7/02

MLP

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW209R

ESS Project ID: 02040431
ESS Sample ID: 02040431-05
Date Sampled: 4/24/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**104**	mg/L	10	04/29/02	310.1	JDR
Chloride	**44**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**18**	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: IP

Date: 5/7/02

JJG

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW209R
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-05
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: _____ Date: 5/2/02

Page 1 of 1

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW209R
Date Sampled: 4/24/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-05
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: D Date: 5/7

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW209R
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-05
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: KD

Date: 5/10/02

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MLP 021

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MWXD1

ESS Project ID: 02040431
ESS Sample ID: 02040431-06
Date Sampled: 4/24/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**26**	mg/L	2	04/29/02	310.1	JDR
Chloride	**8**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**9**	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: VP

Date: 5/7/02

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MWXD1
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-06
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: MD

Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MWXD1
Date Sampled: 4/24/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-06
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 970 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MWXD1
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-06
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: WD

Date: 5/7/02

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MLP 025

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW046

ESS Project ID: 02040431
ESS Sample ID: 02040431-07
Date Sampled: 4/25/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**110**	mg/L	10	04/29/02	310.1	JDR
Chloride	**3**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**98**	mg/L	30	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: VP

Date: 5/7/02

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW046
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-07
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: _____ Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW046
Date Sampled: 4/25/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-07
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 990 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	**0.04 J**	0.11	0.03

MDL = Method Detection Limit.
ND = Not Detected above MDL.

MRL = Method Reporting Limit.
J = Estimated value, below MRL.

Approved by: _____ Date: 5/7/02

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW046
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-07
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: VD

Date: 5/7/02

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MLP 029

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW049

ESS Project ID: 02040431
ESS Sample ID: 02040431-08
Date Sampled: 4/25/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**15**	mg/L	2	04/29/02	310.1	JDR
Chloride	**7**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**31**	mg/L	10	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 5/7/02

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EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW049
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-08
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: MD

Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW049
Date Sampled: 4/25/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-08
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: 5/7/02

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW049
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-08
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: VP

Date: 5/7/02

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW245

ESS Project ID: 02040431
ESS Sample ID: 02040431-09
Date Sampled: 4/25/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**205**	mg/L	10	04/29/02	310.1	JDR
Chloride	**131**	mg/L	15	04/30/02	325.2	JDR
Sulfate	**47**	mg/L	20	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KP

Date: 5/7/02

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW245
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-09
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: rd

Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW245
Date Sampled: 4/25/02
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-09
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: _____

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW245
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-09
Units: mg/L
Dilution: 1
Percent Solid: N/A.
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: KP

Date: 5/7/02

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MLP 037

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW207

ESS Project ID: 02040431
ESS Sample ID: 02040431-10
Date Sampled: 4/25/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**199**	mg/L	10	04/29/02	310.1	JDR
Chloride	**13**	mg/L	3	04/30/02	325.2	JDR
Sulfate	ND	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KD

Date: 5/7/02

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW207
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-10
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: MD

Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW207
Date Sampled: 4/25/02
Analyst: EP
Date Analyzed: 5/3/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-10
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: 5/7

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW207
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-10
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: [signature]

Date: 5/7/02

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MLP 041

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW051

ESS Project ID: 02040431
ESS Sample ID: 02040431-11
Date Sampled: 4/25/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**23**	mg/L	2	04/29/02	310.1	JDR
Chloride	**4**	mg/L	3	04/30/02	325.2	JDR
Sulfate	ND	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: VD

Date: 5/7/02

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW051
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-11
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: MD

Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW051
Date Sampled: 4/25/02
Analyst: EP
Date Analyzed: 5/3/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-11
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 990 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: 5/7/

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW051
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-11
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: VW

Date: 5/7/02

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW062

ESS Project ID: 02040431
ESS Sample ID: 02040431-12
Date Sampled: 4/25/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**12**	mg/L	2	04/29/02	310.1	JDR
Chloride	**11**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**10**	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KP

Date: 5/7/02

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW062
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-12
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: MD

Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW062
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-12
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: KP

Date: 5/7/02

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW206

ESS Project ID: 02040431
ESS Sample ID: 02040431-13
Date Sampled: 4/25/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**47**	mg/L	2	04/29/02	310.1	JDR
Chloride	**12**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**11**	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: KP

Date: 5/7/02

JJG

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW206
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-13
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: MD

Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW206
Date Sampled: 4/25/02
Analyst: EP
Date Analyzed: 5/3/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-13
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: 5/7

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW206
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-13
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: [illegible]

Date: 5/7/02

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CERTIFICATE OF ANALYSIS

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW210

ESS Project ID: 02040431
ESS Sample ID: 02040431-14
Date Sampled: 4/25/02

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Alkalinity as CaCO3	**17**	mg/L	2	04/29/02	310.1	JDR
Chloride	**6**	mg/L	3	04/30/02	325.2	JDR
Sulfate	**14**	mg/L	5	04/29/02	375.4	PLH

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: MP

Date: 5/7/02

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW210
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-14
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: MP

Date: 5/2/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW210
Date Sampled: 4/25/02
Analyst: EP
Date Analyzed: 5/3/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-14
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: 5/7/02

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW210
Date Sampled: 4/25/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-14
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: [signature]

Date: 5/7/02

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-TB1
Date Sampled: 4/24/02
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: 02040431-15
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: MP

Date: 5/2/02

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QUALITY CONTROL SECTION

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B Surrogate Report

Client Name: EA Engineering

Client Project ID: BNAS-FUEL FARM

ESS Project ID: 02040431

Lab ID (Dilution Factor)	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
02040431-01MS (1x)	106	110	108
02040431-01MSD (1x)	106	109	108
02040431-01 (1x)	102	106	98
02040431-02 (1x)	101	105	97
02040431-03 (1x)	103	104	96
02040431-04 (1x)	100	106	97
02040431-05 (1x)	102	105	96
02040431-06 (1x)	103	105	96
02040431-07 (1x)	103	104	97
02040431-08 (1x)	103	105	97
02040431-09 (1x)	102	105	97
02040431-10 (1x)	103	105	98
02040431-11 (1x)	104	105	97
02040431-12 (1x)	101	107	97
02040431-13 (1x)	102	105	96
02040431-14 (1x)	103	105	95
02040431-15 (1x)	102	104	95
VMG050102B2 (1x)	101	105	97

Surrogate	Limits
1,2-Dichloroethane-d4	70 - 130
Toluene-d8	70 - 130
4-Bromofluorobenzene	70 - 130

Approved by: _____ Date: 5/2/02

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: VMG050102B2
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Test Name	Result	MRL
Benzene	ND	1
Ethylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Toluene	ND	1
Xylenes (Total)	ND	2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: N

Date: 5/2/2

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: Laboratory Control Sample
Date Sampled: N/A
Analyst: MD
Date Analyzed: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: VMG050102C2
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 10 ml

Compound	Spike Added	LCS Concentration	LCS Percent Recovery	QC Recovery Limits
Benzene	25	**27**	108	60-140
Ethylbenzene	25	**26.7**	107	80-120
Methyl tert-Butyl Ether	25	**24.6**	98	60-140
Toluene	25	**27.3**	109	60-140
Xylenes (Total)	75	**83**	111	60-140

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: _____ Date: 5/2/02

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B
Matrix Spike Report

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW098MS

ESS Project ID: 02040431
ESS Sample ID: 02040431-01MS
Units: µg/L

Compound Name	Spike Added	MS Conc.	MS % Recovery	Recovery Limits
Benzene	25	25.1	100	70-130
Toluene	25	25	100	70-130

Approved By: MP Date: 5/2/02

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CERTIFICATE OF ANALYSIS

EPA Method 8021B by EPA Method 8260B
Matrix Spike Duplicate Report

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW098MSD

ESS Project ID: 02040431
ESS Sample ID: 02040431-01MSD
Units: µg/L

Compound Name	Spike Added	MSD Conc.	MSD % Recovery	RPD	Recovery Limits	RPD Limits
Benzene	25	25.5	102	2	70-130	25
Toluene	25	25.3	101	1	70-130	25

RPD = Relative Percent Deviation.

Approved By: _____ Date: 6/2/2

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics Surrogate Report

Client Name: EA Engineering

Client Project ID: BNAS-FUEL FARM

ESS Project ID: 02040431

Lab ID (Dilution Factor)	O-Terphenyl
02040431-01 (1x)	76
02040431-02 (1x)	76
02040431-03 (1x)	79
02040431-04 (1x)	73
02040431-05 (1x)	71
02040431-06 (1x)	74
02040431-07 (1x)	79
02040431-08 (1x)	76
02040431-09 (1x)	77
02040431-10 (1x)	79
02040431-11 (1x)	78
02040431-13 (1x)	80
02040431-14 (1x)	73
02050006-01MS (1x)	86
02050006-01MSD (1x)	102
GCO50102B5 (1x)	72
GCO50102B51BS (1x)	83
GCO50102B52BS (1x)	82

Surrogate	Limits
O-Terphenyl	50 - 150

Approved by: EP

Date: 5/6/02

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CERTIFICATE OF ANALYSIS

Diesel Range Organics
Maine Method 4.1.25

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: EP
Date Analyzed: 5/1/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: GC050102B5
Units: mg/L
Dilution: 1
Percent Solids: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL	MDL
Diesel Range Organics	ND	0.11	0.03

MRL = Method Reporting Limit.

MDL = Method Detection Limit.
ND = Not Detected above MDL.

Approved by: _____ Date: 5/7/2

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: GCO50102B51BS
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	20	**15.9**	80	50-150

ND = Not Detected above MDL.

Approved By: EP

Date: 5/6/02

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Diesel Range Organics

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: Blank Spike
Date Sampled: N/A
Analyst: EP
Date Analyzed: 5/2/02
Date Prepped: 5/1/02

ESS Project ID: 02040431
ESS Sample ID: GCO50102B52BS
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Compound	Spike Added	BS Concentration	BS Percent Recovery	QC Recovery Limits
Diesel Range Organics	20	**14.6**	73	50-150

ND = Not Detected above MDL.

Approved By: EP Date: 5/6/02

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17 Surrogate Report

Client Name: EA Engineering

Client Project ID: BNAS-FUEL FARM

ESS Project ID: 02040431

Lab ID (Dilution Factor)	4-Bromofluorobenzene
02040431-01MS (1x)	88
02040431-01MSD (1x)	88
02040431-01 (1x)	91
02040431-02 (1x)	92
02040431-03 (1x)	91
02040431-04 (1x)	90
02040431-05 (1x)	91
02040431-06 (1x)	92
02040431-07 (1x)	89
02040431-08 (1x)	92
02040431-09 (1x)	90
02040431-10 (1x)	88
02040431-11 (1x)	90
02040431-12 (1x)	92
02040431-13 (1x)	90
02040431-14 (1x)	93
VGB050202B1 (1x)	90

Surrogate	Limits
4-Bromofluorobenzene	75 - 125

Approved by: _____ Date: 5/7/02

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: Method Blank
Date Sampled: N/A
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: VGB050202B1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
Gasoline Range Organics	ND	0.05

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: D

Date: 5/7/02

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: Laboratory Control Sample
Date Sampled: N/A
Analyst: MD
Date Analyzed: 5/2/02

ESS Project ID: 02040431
ESS Sample ID: VGB050202LCS1
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound	Spike Added	LCS Concentration	LCS Percent Recovery	QC Recovery Limits
Gasoline Range Organics	0.5	**0.5**	100	75-125

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: VP

Date: 5/7/02

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MLP 070

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17
Matrix Spike Report

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW098MS

ESS Project ID: 02040431
ESS Sample ID: 02040431-01MS
Units: mg/L

Compound Name	Spike Added	MS Conc.	MS % Recovery	Recovery Limits
Gasoline Range Organics	500	363	73	70-130

Approved By: VD

Date: 5/7/08

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CERTIFICATE OF ANALYSIS

Gasoline Range Organics MEDEP 4.2.17
Matrix Spike Duplicate Report

Client Name: EA Engineering
Client Project ID: BNAS-FUEL FARM
Client Sample ID: FF-MW098MSD

ESS Project ID: 02040431
ESS Sample ID: 02040431-01MSD
Units: mg/L

Compound Name	Spike Added	MSD Conc.	MSD % Recovery	RPD	Recovery Limits	RPD Limits
Gasoline Range Organics	500	375	75	3	70-130	25

RPD = Relative Percent Deviation.

Approved By: MD Date: 5/7/08

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ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Navy Installation Restoration QA Program
Soil and Water

Rhode Island: A-179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP):
Drinking Water: 242400-C
Wastewater: 242400-D

New York (NELAP): 11313
Potable Water
Non Potable Water
Solid and Hazardous Waste

United States Department of Agriculture
Soil Permit: S-54210

New Jersey (NELAP) RI002
Potable Water
Non Potable Water
Solid and Hazardous Waste

ESS Laboratory

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CHAIN OF CUSTODY

Page 1 of 2

Turn Time ___ Standard (2 Weeks) Other ___
If faster than 5 days, prior approval by laboratory is required # ___

Electronic Deliverables ___ Yes ___ No
Formats ___

ESS LAB PROJECT ID 02C40431
Special Detection Limits

State where samples were collected from:
MA RI CT NH NJ NY (ME) USACE Other ___

Co. Name: EA Engineering	Project #: 29600.35	Project Name (20 Char. or less): BNAS - Fuel Farm	
Contact Person: Al Easterday	Address: 175 Middlesex Tpk		
City: Bedford ~~Bl 175 Middlesex~~ Tpk	State: MA	Zip: 01730	PO#: 29600.35
Telephone #: (781) 275-8846	Fax #: (781) 275-7253	Email Address:	

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX + MTBE	GRO	DRO	Alk, Cl, NO_3, Sulfate
1	4/24/02	1145		X	GW	FF-MW098	8	V/G/P	X	X	X	X
2	4/24/02	1410		X	GW	FF-MW244	8	V/G/P	X	X	X	X
3	4/24/02	1550		X	GW	FF-MW058	8	V/G/P	X	X	X	X
4	4/24/02	1505		X	GW	FF-MW208	8	V/G/P	X	X	X	X
5	4/24/02	1220		X	GW	FF-MW209R	8	V/G/P	X	X	X	X
6	4/24/02	—		X	GW	FF-MWXD1	8	V/G/P	X	X	X	X
7	4/25/02	1045		X	GW	FF-MW046	8	V/G/P	X	X	X	X
8	4/25/02	0845		X	GW	FF-MW049	8	V/G/P	X	X	X	X
9	4/25/02	0850		X	GW	FF-MW245	8	V/G/P	X	X	X	X
10	4/25/02	1045		X	GW	FF-MW207	8	V/G/P	X	X	X	X

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ✓ Yes ___ No NA: ___
Cooler Temp: 3.5

Internal Use Only
[ ] Pickup
[ ] Technicians ___

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Karen Spaulding	4/26/02 0930	[signature] 4/29/02 13[illegible]					
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

074

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.thielsch.com

CHAIN OF CUSTODY

Turn Time ___ Standard (2 Weeks) Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
MA RI CT NH NJ NY (MP) USACE Other _____

Electronic Deliverables ___ Yes ___ No
Formats _____

ESS LAB PROJECT ID 0204043
Special Detection Limits

Co. Name	Project #	Project Name (20 Char. or less)
EA Engineering	29600.35	BNAS-Fuel Farm

Contact Person	Address
Al EASTERDAY	175 Middlesex TPK

City	State	Zip	PO#
Bedford	MA	01730	29600.35

Telephone #	Fax #	Email Address
(781) 275-8846	(781) 275-7253	

Analysis Required

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Number of Containers	Type of Containers	BTEX +MTBE	GRO	DRO	Alk, Cl, NO3, Sulfate										
11	4/25/02	1310		X	GW	FF-MW054	8	G/V/P	X	X	X	X										
12	4/25/02	1435		X	GW	FF-MW062	8	G/V/P	X	X	X	X										
13	4/25/02	1340		X	GW	FF-MW206	8	G/V/P	X	X	X	X										
14	4/25/02	1635		X	GW	FF-MW210	8	G/V/P	X	X	X	X										
15	4/24/02	1145			W	FF-TB1	2	V	X													

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ✓ Yes ___ No NA: _____
Cooler Temp: 3.5

Internal Use Only
[ ] Pickup
[ ] Technicians _____

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	4/25/02 0930	[signature]	4/24/02 13:11				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

5

MICROSEEPS

University of Pittsburgh Applied Research Center
220 William Pitt Way, Pittsburgh, PA 15238
(412) 826-5245
FAX (412) 826-3433

FAX COVER SHEET

DATE: 9/30

NO. OF PAGES:

FAX NO.: 508.485.5742

TO: Russell Shute

COMPANY: EA

FROM: DEBBIE HALLO

← PO 204518 →

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P0204548

1 of 2

CHAIN - OF - CUSTODY RECORD

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No. : (412) 826-3433

Company : EA Engineering
Co. Address : 175 Middlesex Tpk, Bedford, MA 01730
Proj. Manager: Al Easteedy
Proj. Location: Brunswick Naval Air Station
Proj. Number: 29600.35
Phone # : (781) 275-8846 Fax # : (781) 275-7253

Sampler's signature : Brian W. Anderson

Results to : Al Easteedy, 175 Middlesex Tpk, Bedford MA 01730
Invoice to : "Same As Results"

Parameters Requested: Hydrogen

	Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	Hydrogen	Remarks
01	FF-098	Stripping Cell - Grand water	4/24/02	1145		X	1	X	
02	FF-244	Stripping Cell - GW	4/24/02	1410		X	1	X	
03	FF-058	Stripping Cell - GW	4/24/02	1550		X	1	X	
04	FF-208	Stripping Cell - GW	4/24/02	1505		X	1	X	
05	FF-209R	Stripping Cell - GW	4/24/02	1220		X	1	X	
06	FF-051	Stripping Cell - GW	4/25/02	1310		X	1	X	
07	FF-207	Stripping cell - GW	4/25/02	1110		X	1	X	
08	FF-049	Stripping cell - GW	4/25/02	0845		X	1	X	
09	FF-046	Stripping Cell - GW	4/25/02	1045		X	1	X	
10	FF-062	Stripping Cell - GW	4/25/02	1435		X	1	X	
11	FF-206	Stripping Cell - GW	4/25/02	1340		X	1	X	
12	FF-210	Stripping Cell - GW	4/25/02	1635		X	1	X	

Cooler ID | Cooler Temp.

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Michael Wilson	EA Engineering	4/25/02	0930	Tracy L. Day	Microseeps	4-27-02	1145
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
				Romanyo	Microseeps	4/29/02	843
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

PO204548

2 of 2

CHAIN - OF - CUSTODY RECORD

Phone: (412) 826-5245 **Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238** Fax No.: (412) 826-3433

Company : EA Engineering
Co. Address : 175 Middlesex TPK, Bedford, MA 01730
Proj. Manager: Al Easterday
Proj. Location: Brunswick Naval Air Station
Proj. Number: 29600.35
Phone # : (781) 275-8846 **Fax # :** (781) 275-7253

Sampler's signature : Brian D. Anderson

Results to : Al Easterday, 175 Middlesex TPK, Bedford MA 01730
Invoice to : Same as Results

Cooler ID	Cooler Temp.

	Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	Parameters Requested: Hydrogen	Remarks
3	FF-H2XD1	~~FP-H2XD1~~ Stripping Well - GW	11/25/02	—		X	1	X	

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
				[signature]	Microseeps	11/25/02	843
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

MICROSEEPS

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike

Bedford, MA 01730

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Sample Identification

Lab Sample #	Client Sample ID
P0204548-01	FF-098
P0204548-02	FF-244
P0204548-03	FF-058
P0204548-04	FF-208
P0204548-05	FF-209R
P0204548-06	FF-Q51
P0204548-07	FF-207
P0204548-08	FF-049
P0204548-09	FF-046
P0204548-10	FF-062
P0204548-11	FF-206
P0[illegible]548-12	FF-210
P0[illegible]548-13	FF-H2XD1

Approved By: Rebecca J Hans

NOTES:SAMPLES WERE REC'D SAT 4/27/02, BUT NOT LOGGED IN UNTIL MON 4/29/02 DUE TO A POWER OUTAGE. RP

220 William Pitt Way, Pittsburgh, PA 15238 • Phone (412) 826-5245, Fax (412) 826-3433

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-01

Sample Description	Matrix	Sampled Date/Time	Received
FF-098	Vapor	24 Apr. 02 11:45	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	1.4	0.030	nM	AM20GAX	bc	5/1/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-02

Sample Description	Matrix	Sampled Date/Time	Received
FF-244	Vapor	24 Apr. 02 14:10	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.69	0.030	nM	AM20GAX	bc	5/1/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-03

Sample Description	Matrix	Sampled Date/Time	Received
FF-058	Vapor	24 Apr. 02 15:50	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.42	0.030	nM	AM20GAX	bc	5/1/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-04

Sample Description	Matrix	Sampled Date/Time	Received
FF-208	Vapor	24 Apr. 02 15:05	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.54	0.030	nM	AM20GAX	bc	5/1/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-05

Sample Description	Matrix	Sampled Date/Time	Received
FF-209R	Vapor	24 Apr. 02 12:20	29 Apr. 02

Analyt (s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.44	0.030	nM	AM20GAX	bc	5/1/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-06

Sample Description	Matrix	Sampled Date/Time	Received
FF-Q51	Vapor	25 Apr. 02 13:10	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.67	0.030	nM	AM20GAX	bc	5/1/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-07

Sample Description	Matrix	Sampled Date/Time	Received
FF-207	Vapor	25 Apr. 02 11:10	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Dat
RiskAnalysis						
Vapor						
Hydrogen	0.56	0.030	nM	AM20GAX	bc	5/1/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-08

Sample Description	Matrix	Sampled Date/Time	Received
FF-049	Vapor	25 Apr. 02 8:45	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.58	0.030	nM	AM20GAX	bc	5/1/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-09

Sample Description	Matrix	Sampled Date/Time	Received
FF-046	Vapor	25 Apr. 02 10:45	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.50	0.030	nM	AM20GAX	bc	5/2/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-10

Sample Description	Matrix	Sampled Date/Time	Received
FF-062	Vapor	25 Apr. 02 14:35	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.42	0.030	nM	AM20GAX	bc	5/2/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-11

Sample Description	Matrix	Sampled Date/Time	Received
FF-206	Vapor	25 Apr. 02 13:40	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.58	0.030	nM	AM20GAX	bc	5/2/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-12

Sample Description	Matrix	Sampled Date/Time	Received
FF-210	Vapor	25 Apr. 02 16:35	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.36	0.030	nM	AM20GAX	bc	5/2/02

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 175 Middlesex Turnpike
Bedford, MA 01730

Lab Sample #: P0204548-13

Sample Description	Matrix	Sampled Date/Time	Received
FF-H2XD1	Vapor	25 Apr. 02	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.71	0.030	nM	AM20GAX	bc	5/2/02

MICROSEEPS

University of Pittsburgh Applied Research Center
220 William Pitt Way, Pittsburgh, PA 15238
(412) 826-5245
FAX (412) 826-3433

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DATE: 9/25

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TO: Russell Shute

COMPANY: EA

FROM: DEBBIE HALLO

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Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road

Southborough, MA 01722

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Laboratory Results

Total pages in data package: _____

Lab Sample #	Client Sample ID
P0204548-01	FF-098
P0204548-02	FF-244
P0204548-03	FF-058
P0204548-04	FF-208
P0204548-05	FF-209R
P0204548-06	FF-Q51
P0204548-07	FF-207
P0204548-08	FF-049
P0204548-09	FF-046
P0204548-10	FF-062
P0204548-11	FF-206
P0204548-12	FF-210
P0204548-13	FF-H2XD1

Microseeps test results meet all the requirements of the NELAC standards.

Approved By: _____

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

NOTES:SAMPLES WERE REC'D SAT 4/27/02, BUT NOT LOGGED IN UNTIL MON 4/29/02 DUE TO A POWER OUTAGE.
RP

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-01

Sample Description	Matrix	Sampled Date/Time	Received
FF-098	Vapor	24 Apr. 02 11:45	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	1.4	0.030	nM	AM20GAX	bc	5/1/02

N - NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-02

Sample Description	Matrix	Sampled Date/Time	Received
FF-244	Vapor	24 Apr. 02 14:10	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.69	0.030	nM	AM20GAX	bc	5/1/02

NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-03

Sample Description	Matrix	Sampled Date/Time	Received
FF-058	Vapor	24 Apr. 02 15:50	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.42	0.030	nM	AM20GAX	bc	5/1/02

N - NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-04

Sample Description	Matrix	Sampled Date/Time	Received
FF-208	Vapor	24 Apr. 02 15:05	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.54	0.030	nM	AM20GAX	bc	5/1/02

N - NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-05

Sample Description	Matrix	Sampled Date/Time	Received
FF-209R	Vapor	24 Apr. 02 12:20	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.44	0.030	nM	AM20GAX	bc	5/1/02

N - NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-06

Sample Description	Matrix	Sampled Date/Time	Received
FF-Q51	Vapor	25 Apr. 02 13:10	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.67	0.030	nM	AM20GAX	bc	5/1/02

N - NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-07

Sample Description	Matrix	Sampled Date/Time	Received
FF-207	Vapor	25 Apr. 02 11:10	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.56	0.030	nM	AM20GAX	bc	5/1/02

N - NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-08

Sample Description	Matrix	Sampled Date/Time	Received
FF-049	Vapor	25 Apr. 02 8:45	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.58	0.030	nM	AM20GAX	bc	5/1/02

N - NBLAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-09

Sample Description	Matrix	Sampled Date/Time	Received
FF-046	Vapor	25 Apr. 02 10:45	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.50	0.030	nM	AM20GAX	bc	5/2/02

N - NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-10

Sample Description	Matrix	Sampled Date/Time	Received
FF-062	Vapor	25 Apr. 02 14:35	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.42	0.030	nM	AM20GAX	bc	5/2/02

NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-11

Sample Description	Matrix	Sampled Date/Time	Received
FF-206	Vapor	25 Apr. 02 13:40	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.58	0.030	nM	AM20GAX	bc	5/2/02

N - NBLAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-12

Sample Description	Matrix	Sampled Date/Time	Received
FF-210	Vapor	25 Apr. 02 16:35	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.36	0.030	nM	AM20GAX	bc	5/2/02

N - NELAC certified analysis

Order #: P0204548
Report Date: 05/06/02
Client Proj Name: Brunswick Naval Air Station
Client Proj #: 29600.35

Client Name: EA Engineering
Contact: Al Easterday
Address: 333 Turnpike Road
Southborough, MA 01722

Lab Sample #: P0204548-13

Sample Description	Matrix	Sampled Date/Time	Received
FF-H2XD1	Vapor	25 Apr. 02	29 Apr. 02

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Vapor						
Hydrogen	0.71	0.030	nM	AM20GAX	bc	5/2/02

N - NELAC certified analysis