

N60087.AR.002148
NAS BRUNSWICK
5090.3a

FINAL SUMMARY INITIAL BASELINE EXTRACTABLE PETROLEUM HYDROCARBONS AND
VOLATILE PETROLEUM HYDROCARBONS GROUNDWATER SAMPLING LETTER REPORT
OLD NAVY FUEL FARM NAS BRUNSWICK ME
01/01/2011
ECOR SOLUTIONS

**Final
Summary Initial Baseline EPH and VPH
Groundwater Sampling
Letter Report
Old Navy Fuel Farm
Naval Air Station Brunswick, Maine**



Prepared for

Department of the Navy
Naval Facilities Engineering Command
4911 South Broad Street
Philadelphia, Pennsylvania 19112-1303

Contract Number N62472-03-D-0802
Contract Task Order 0172

January 2011

ECOR Solutions, Inc.
1075 Andrew Drive, Suite I
West Chester, Pennsylvania 19380

**Final
Summary Initial Baseline EPH and VPH
Groundwater Sampling
Letter Report
Old Navy Fuel Farm
Naval Air Station Brunswick, Maine**



Prepared for

Department of the Navy
Naval Facilities Engineering Command
4911 South Broad Street
Philadelphia, Pennsylvania 19112-1303

Prepared By:

A handwritten signature in black ink, appearing to read "Alexander Easterday".

Al Easterday, P.G.
Senior Project Manager
ECC
Marlborough, Massachusetts

Prepared By:

A handwritten signature in black ink, appearing to read "Gina M. Calderone".

Gina Calderone, P.G., C.P.G.
Senior Hydrogeologist
ECC
Marlborough, Massachusetts

QUALITY REVIEW STATEMENT

Contract No. N62472-03-D-0802

ECC Project No.: 5561.004

Contract Task Order No. 0172

Activity: Naval Air Station, Brunswick, Maine

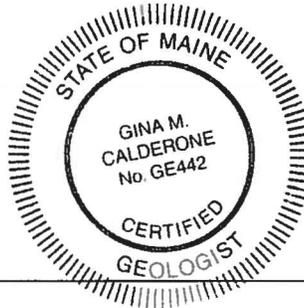
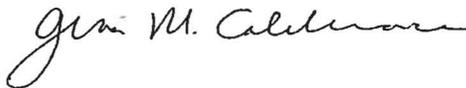
Description/Deliverable: *Final Summary Initial Baseline EPH and VPH Groundwater Sampling Letter Report, Old Navy Fuel Farm, Naval Air Station Brunswick, Maine*

ECC CTO Senior Project Manager: Alexander C. Easterday, P.G.

As per State of Maine Department of Professional and Financial Regulations, Title 32 Chapter 73, Law, the sections of this document related to the site geological and hydrogeological conditions and any related geological interpretive content have been reviewed by the undersigned State of Maine Certified Geologist.

This statement is based upon the review of the undersigned conducted during the preparation of this report.

State of Maine Geologist Reviewer:



1/14/11

Gina M. Calderone, P.G., C.P.G.
State of Maine Certified Geologist (No. GE442)
ECC Senior Hydrogeologist

Date

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1-1
1.1	Site Description.....	1-1
1.2	Site Geologic and Hydrogeologic Conditions	1-2
1.3	Historical Petroleum Bulk Storage and Environmental Investigation Summary	1-2
1.4	Summary of Remedial Programs at the Old Navy Fuel Farm.....	1-3
1.4.1	Biosparging System Operation (August 1996 to December 1998).....	1-3
1.4.2	Soil Vapor Extraction/Air Sparging System Operation (March 1999 to July 1999).....	1-4
1.4.3	Remedial Soil Excavation Program.....	1-4
1.5	Groundwater Sampling Events	1-5
1.5.1	Summary of Past Upgradient and Downgradient Groundwater Monitoring.....	1-5
1.5.2	Initial Baseline EPH and VPH Groundwater Sampling	1-5
1.6	Report Organization.....	1-6
2.0	EPH and VPH BASELINE SAMPLING PLAN.....	2-1
2.1	Groundwater Monitoring	2-1
2.1.1	Sampling Locations	2-1
2.1.2	EPH and VPH Baseline Groundwater Sampling.....	2-1
2.1.3	Sampling Parameters	2-2
2.2	Decontamination and Investigation – Derived Waste	2-2
3.0	SAMPLING RESULTS.....	3-1
3.1	Water Level Gauging.....	3-1
3.2	EPH and VPH Baseline Groundwater Monitoring.....	3-1
3.2.1	Volatile Petroleum Hydrocarbons	3-1
3.2.2	Extractable Petroleum Hydrocarbons	3-1
3.3	Data Quality Review.....	3-1
4.0	CONCLUSIONS and RECOMMENDATIONS.....	4-1
4.1	Conclusions.....	4-1
4.1.1	Water Level Gauging.....	4-1
4.1.2	EPH and VPH Baseline Groundwater Sampling Conclusions	4-1
4.2	Recommendations.....	4-1
5.0	REFERENCES.....	5-1

APPENDICES

- APPENDIX A Field Records of Well Gauging, Purging, and Sampling Forms
APPENDIX B Data Validation Memos and Laboratory Analytical Results (Form I's and MEDEP EDD format)
APPENDIX C Responses to Regulator Comments and Follow-Up Comments

FIGURES

- Figure 1 Site Location
Figure 2 Site Plan
Figure 3 Interpreted Groundwater Surface Map, June 2010
Figure 4 Analytical Results, June 2010

TABLES

- Table 3-1 Groundwater Measurements and Elevations, June 2010
Table 3-2 Water Quality Data, June 2010
Table 3-3 Groundwater Analytical EPH and VPH Results Summary, June 2010
Table 4-1 Summary of Historical Detections of MTBE and Total BTEX

LIST OF ABBREVIATIONS AND ACRONYMS

AS	air sparge
BTEX	benzene, toluene, ethylbenzene, and xylenes
C	carbon
°C	degrees Celsius
DoD	Department of Defense
EA	EA Science Engineering and Technology Inc.
ECC	Environmental Chemical Corporation
EDD	electronic data deliverable
ELAP	Environmental Laboratory Program
EPA	U.S. Environmental Protection Agency
EPH	extractable petroleum hydrocarbon
DRO	diesel range organics
Ft/Ft	feet per feet
FWE	Foster Wheeler Environmental
GAC	granulated activated carbon
GMP	Groundwater Monitoring Plan
GRO	gasoline range organics
HRP	HRP Associates Inc.
IDW	investigation derived waste
LNAPL	light non-aqueous phase liquid
LTMP	Long-Term Monitoring Plan
MDL	method detection limit
MADEP	Massachusetts Department of Environmental Protection
MEDEP	Maine Department of Environmental Protection
MEG	maximum exposure guidelines
MEDHS	Maine Department of Human Services
µg/L	micrograms per liter
µmhos/cm	micromhos per centimeter
mg/kg	milligram per kilogram
mg/L	milligrams per liter
mV	millivolt
MS/MSD	matrix spike/matrix spike duplicate
MTBE	methyl tert-butyl ether
MW	monitoring well
NAS	Naval Air Station
NTU	nephelometric turbidity units
ONFF	Old Navy Fuel Farm
PRG	petroleum remediation guideline
OBG	O'Brien and Gere Engineering Inc.
SpC	specific conductivity
SU	standard units
SVE	soil vapor extraction
TPH	total petroleum hydrocarbon

ECC	
UST	underground storage tank
VOC	volatile organic compounds
VPH	volatile petroleum hydrocarbon
YSI	Yellow Springs Instruments

1.0 INTRODUCTION

Under Contract No. N62472-03-D-0802, Engineering Field Activity Northeast, Naval Facilities Engineering Command (NAVFAC) issued Contract Task Order No. 0172 to ECOR Solutions, Inc. (ECOR), which contracted ECC to conduct extractable petroleum hydrocarbon (EPH) and volatile petroleum hydrocarbon (VPH) baseline sampling at the Old Navy Fuel Farm (ONFF), Naval Air Station Brunswick, Maine (NAS Brunswick). NAS Brunswick is located south of the Androscoggin River and south of State Route 1 between State Routes 24 and 123. NAS Brunswick is an active base, owned and operated by the Federal Government through the Department of the Navy (Navy). The ONFF (the “Site”) is located on the northeast portion of NAS Brunswick (**Figure 1**).

A Final Letter Sampling Plan (ECC 2010) was prepared by ECC to obtain groundwater data from all existing monitoring wells located around and outside of the ONFF boundary (see **Figure 2**) utilizing the new Maine Department of Environmental Protection (MEDEP) petroleum analytical methods to establish the off-Site baseline groundwater EPH and VPH levels. This data will be then used in accordance with the applicability requirements of *Remediation Guidelines for Petroleum Contaminated Sites in Maine* (MEDEP 2009) to support decisions regarding the initiation, implementation, or termination of remediation of discharges from underground oil storage facilities and dissolved phase contaminated groundwater.

As referenced in the Final Letter Sampling Plan (ECC 2010), the baseline EPH and VPH sampling and synoptic gauging of all monitoring wells was performed in accordance with the Groundwater Monitoring Plan (GMP) prepared by EA Engineering, Science, and Technology (EA 2000a) to support the Navy's overall strategy for remediation at the ONFF at NAS Brunswick.

This report summarizes the June 2010 groundwater EPH and VPH baseline sampling that was completed to monitor groundwater petroleum concentrations by the MEDEP’s new analytical methods and recently finalized petroleum guidance (MEDEP 2009).

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 (**Figure 2**). The topography of the area is characterized as level and exhibits little relief. Surface features consist of two baseball fields, grass, and paved access roads. The ball fields were installed during the construction seasons of 2002 and 2003. The Site is located greater than 2,000 ft from the Town of Brunswick public water supply well. The shallow aquifer on-Site, which has been determined by past analytical methods MEDEP gasoline range organic (GRO) and diesel range organics (DRO) to be impacted by petroleum, is not used as a potable water supply source.

1.2 SITE GEOLOGIC AND HYDROGEOLOGIC CONDITIONS

Previous hydrogeologic investigations (O'Brien & Gere Engineers, Inc. (OBG) 1990, 1992) revealed that the Site is underlain by a sandy unit (Upper Sand), which forms a shallow overburden saturated zone. The Upper Sand is continuous and underlain by a glacio-marine silty clay unit (designated as the Presumpscot Formation by the Maine Geologic Survey), which acts as an aquitard. The Upper Sand ranges in thickness from 2.5 to 9.0 ft with thicker zones located at the northwest section of the Site. The groundwater surface occurs in the Upper Sand, and shallow groundwater flow is generally to the southeast, parallel to the surface drainage. The hydraulic gradient during the June 2010 baseline sampling was approximately 0.017 feet per foot (ft/ft), which is consistent with past Site groundwater studies yielding an average gradient of 0.014 ft/ft (EA 1998a). See **Figure 3** for groundwater surface contours.

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, T-102, T-103, T-104, and T-105. USTs T-101, T-102, and T-103, which were 100,000-gallon capacity tanks used for storage of petroleum sludge, unleaded gasoline, and aviation gasoline, respectively. USTs T-104 and T-105 were both 25,000-gallon capacity tanks used for storage of ethylene glycol. The newer, eastern Fuel Farm, included four USTs, previously identified as USTs T-202, T-203, T-204, and T-205. Each of these USTs was a 567,000-gallon capacity tank used for storage of JP-5. At some time prior to April 1990, USTs T-101 through T-103 were taken out of service. All remaining USTs and appurtenant pumps and piping, were removed from the ONFF during facility decommissioning completed in 1993.

Previous environmental investigations (OBG 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 UST T-202 toward the south-southeast and consisted primarily of benzene, toluene, ethylbenzene, and xylene (collectively BTEX) compounds. In November 1991, a supplemental groundwater investigation confirmed the presence of this dissolved-phase hydrocarbon plume (OBG 1992).

In October and November 1993, HRP Associates, Inc., of Plainville, Connecticut (HRP), completed a groundwater investigation at the ONFF following facility decommissioning and associated UST removals, with the exception of T-202 and T-203 (HRP 1993). The results of the groundwater investigation indicated that the dissolved-phase BTEX plume located in the eastern Fuel Farm had exhibited a significant reduction in total BTEX concentrations 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 November 1993. However, the maximum dissolved-phase BTEX concentration in the source area decreased from greater than 20,000 micrograms per liter

ECC

(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 Site has occurred, since the USTs were taken out of service.

It should be noted that groundwater samples collected by both OBG and HRP during the period of 1990 to 1993 indicated the presence of a separate, dissolved-phase hydrocarbon release area in the western Fuel Farm (west of 7th Street). However at the time, insufficient samples were collected to delineate the extent of this western plume.

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 (SVE)/air sparge (AS) system as a biosparging system (i.e., low-flow air injection without vapor extraction) during the period of August 1996 to December 1998
- Active SVE/AS system operation (with product recovery) during March 1999 to July 1999
- Biosparging system operation during September 1999 to August 2000
- Remedial excavation of residual source area soils during September 2000 to November 2000.

The following sections provide brief summaries of each remedial program outlined above. Off-Site downgradient and upgradient groundwater monitoring is summarized in Section 1.5.

1.4.1 Biosparging System Operation (August 1996 to December 1998)

A SVE/AS system for remediation of vadose and saturated zone hydrocarbon contamination at the ONFF was designed by HRP and installed by OHM, Inc. in early 1996. In June 1996, a pre-start investigation was conducted, during which time it was found that the water table elevation was at or above the level of the lateral SVE intake screens, preventing proper operation of the SVE system. Since effective operation of the SVE system was not possible, the Navy obtained approval from the 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 SVE screens and AS wells throughout the eastern and western dissolved-phase plume areas.

The biosparging system was operated until December 1998, at which point the system was deactivated to allow completion of system modifications for SVE operations. Based on a comparison of the results from groundwater samples, collected prior to and following this biosparging period, a measurable reduction in both the extent and concentration of dissolved-phase BTEX concentrations was exhibited throughout the ONFF. This observation is supported

by five additional groundwater sampling events, conducted bi-annually, during the biosparging system operational period (EA 1997a, 1997b, 1998b, 1998c, 2000b).

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

In an effort to increase the effectiveness of active remedial operations at the ONFF, modifications were made to allow operation of the SVE 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 modifications were completed during the period of October 1998 - March 1999. The SVE/AS system was activated on 9 March 1999 and continued operation until 16 July 1999, when the vapor-phase granular activated carbon (GAC) emission treatment system became saturated. During the active SVE/AS 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 AS and vadose zone air entrainment) is likely to have occurred but was not quantified.

Following the rapid saturation of the vapor-phase GAC 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 (e.g., September 1999 to September 2000), the biosparging system was re-activated.

1.4.3 Remedial Soil Excavation Program

From 9 August 1999 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 FWE (FWE 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 2000 to 7 November 2000, FWE removed approximately 14,677 tons of petroleum-impacted soil from the Site. Confirmatory sampling results of the excavation bottom and sidewall samples indicated that residual petroleum-impacted soil remained on-Site at concentrations up to 840 milligrams per kilogram (mg/Kg) total petroleum hydrocarbon (TPH) (reported as cumulative TPH-DRO and TPH-GRO).

During the test pitting and soil excavation process, the existing SVE/AS 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 one monitoring well upgradient of the Site, MW-NASB-062, and only monitoring wells located at or downgradient of the ONFF fence line. These monitoring wells are used to assess the potential for offsite migration of dissolved-phase petroleum compounds.

1.5 GROUNDWATER SAMPLING EVENTS

The GMP purpose is to monitor groundwater quality and document the changes in contaminants of concern in the groundwater (EA 2000a); the Final Letter Sampling Plan (ECC 2010) purpose is to establish the initial baseline EPH and VPH groundwater levels from all existing monitoring wells located around and outside of the Site. With the decommissioning of on-Site monitoring wells the focus of the groundwater monitoring is to monitor potential migration of dissolved-phase petroleum downgradient from the Site boundary.

1.5.1 Summary of Past Upgradient and Downgradient Groundwater Monitoring

Following completion of the remedial soil excavation program, groundwater samples have been collected from monitoring wells located south of Avenue B (i.e off-Site) and upgradient of the Site, during 18 events between December 2000 and April 2009 (EA 2004a, 2004b, 2004c, and 2004d and ECC 2005, 2006, 2007, 2009a, and 2009b) following the GMP (EA 2000a) sampling and analytical methods.

All groundwater sampling events have followed the GMP (EA 2000a), as amended by monitoring event report project recommendations agreed to by MEDEP in written comment responses. The GMP listed 17 monitoring wells (MW-NASB-044, MW-NASB-046, MW-NASB-049, MW-NASB-051, MW-NASB-054, MW-NASB-058, MW-NASB-061R, MW-NASB-062, MW-NASB-098, 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) to be sampled and gauged. In 2000, MW-NASB-044 was removed during the ONFF soil remedial actions. MW-NASB-044 was not replaced, as it was located in the source area within the ONFF, and the soil removal eliminated that source, as agreed to by MEDEP.

In 2003, to make way for the construction of a ball field at the ONFF, MW-NASB-054, MW-NASB-061R, and MW-NASB-213 were decommissioned. In 2003, MW-NASB-701, MW-NASB-702, and MW-NASB-703 were installed to further delineate the plume, as agreed to by MEDEP.

In the 2004 monitoring event report six monitoring wells, MW-NASB-046, MW-NASB-049, MW-NASB-206, MW-NASB-209R, MW-NASB-244, and MW-NASB-245, were recommended for gauging only, without any further sampling. The recommendation to eliminate sample collection from these six monitoring wells was agreed to by MEDEP.

In fall 2007, snow removal operations irreparably damaged and made unusable MW-NASB-701 and MW-NASB-703.

1.5.2 Initial Baseline EPH and VPH Groundwater Sampling

In early-2009, the MEDEP announced changes in the analytical methods to be used to evaluate petroleum contaminated sites, so the Fall 2009 groundwater monitoring event was postponed

until the new petroleum methods were promulgated. In late December 2009 MEDEP released the new guidance for petroleum contaminated sites, *Remediation Guidelines for Petroleum Contaminated Sites in Maine* (MEDEP Dec 2009).

MEDEP's recently promulgated *Remediation Guidelines for Petroleum Contaminated Sites in Maine* (MEDEP Dec 2009) requires petroleum analysis by significantly more selective and sensitive analytical methods with more extensive analyte reporting requirements than those used previously by MEDEP and required by GMP (EA 2000a). The Massachusetts Department of Environmental Protection (MADEP) EPH Method Revision 1.1 [May 2004] and MADEP VPH Method Revision 1.1 [May 2004] are now required to determine compliance with the Tier Guidelines (MEDEP 2009) for reporting petroleum hydrocarbon fractions and petroleum target compounds, and these methods are replacing the MEDEP's former GRO and DRO analytical methods (respectively, MEDEP 4.1.27 and MEDEP 4.1.25). Because of the differences in analytical sensitivity, selectivity, and reported analytes between the former and current MEDEP petroleum analytical methods, all existing monitoring wells, monitored or gauged as part of the MEDEP approved modifications to the GMP (EA 2000a), were sampled and analyzed to obtain baseline VPH and EPH groundwater data.

In June 2010, EPH and VPH baseline groundwater sampling was conducted according to the Final Letter Sampling Plan (ECC 2010) pursuant to the requirements established in the recently promulgated *Remediation Guidelines for Petroleum Contaminated Sites in Maine* (MEDEP 2009).

1.6 REPORT ORGANIZATION

This Summary Initial Baseline EPH and VPH Groundwater Sampling Letter Report details the findings and conclusion of the June 2010 baseline sampling. This section provides an introduction and background of the remedial programs, past groundwater monitoring, and baseline EPH and VPH sampling activities at the Site. Section 2.0 details the June 2010 baseline sampling. Section 3.0 presents the results of the June 2010 baseline sampling. Section 4.0 presents conclusions and recommendations based on the results. Section 5.0 presents the reference material used to create this report. **Appendix A** includes the Field Record of Well Gauging, Purging, and Sampling Forms. The data validation memos and laboratory analytical results (MEDEP electronic data deliverables (EDDs) and Form I's) are provided in **Appendix B**. **Appendix C** includes the Navy's responses to regulator comments and follow-up comments, which will be included with the final report.

2.0 EPH AND VPH BASELINE SAMPLING PLAN

2.1 GROUNDWATER MONITORING

2.1.1 Sampling Locations

Fourteen monitoring wells located on the Site were sampled between 2 and 4 June 2010: MW-NASB-046, MW-NASB-049, MW-NASB-051, MW-NASB-058, MW-NASB-062, MW-NASB-098, MW-NASB-206, MW-NASB-207, MW-NASB-208BR, MW-NASB-209R, MW-NASB-210, MW-NASB-244, MW-NASB-245, and MW-NASB-702. MW-NASB-701 and MW-NASB-703 were damaged and not sampled. See **Figure 4** for the well locations.

2.1.2 EPH and VPH Baseline Groundwater Sampling

Prior to sampling, measurement and recording of groundwater elevations was conducted at the operational 14 Site wells and one Site 17 monitoring well, MW-NASB-065 at the request of MEDEP, on June 2, 2010. Groundwater monitoring wells MW-NASB-701 and MW-NASB-703 were damaged by snow removal activities and were not gauged or sampled during the June 2010 event.

An oil/water interface probe was utilized to assess the presence or absence of light, non-aqueous phase liquid (LNAPL) on the groundwater surface. During the June 2010 sampling event, no LNAPL was detected in the groundwater monitoring wells at the Site.

During the sampling events, one groundwater sample was collected via low-flow sampling methods from each of the groundwater monitoring wells listed in Section 2.1.1. All monitoring wells were sampled in accordance with the GMP (EA 2000a) and GMP standard operating procedure (SOP) *SOP No. 1 – Groundwater Sampling by Low-Flow Purge and Sampling Method*. Sampling was completed using a Grundfos® pump with dedicated tubing.

Prior to purging, the initial static water level was measured in the well using a water-level indicator. During purging, the water level was measured every 3 to 10 minutes.

During purging, water quality parameters (pH, turbidity, specific conductance [SpC], temperature, oxidation-reduction potential [ORP], and dissolved oxygen [DO]) were measured and recorded every 3 to 10 minutes using a water quality meter and flow-through cell until stabilization and the minimum purge volume (equal to the stabilized drawdown volume plus the tubing volume) was removed. Stabilization of the above parameters was defined as follows:

- pH \pm 10% standard units (SU)
- turbidity < 10 nephelometric turbidity unit (NTU)
- SpC \pm 10 % microsiemens per centimeter (μ S/cm)
- ORP \pm 10% millivolt (mV)

- DO \pm 10 % milligrams per liter (mg/L)

Instruments used to monitor stabilization parameters were calibrated daily before sampling and instrument readings were checked at the end of the day against the calibration standards. It should be noted that salinity was not recorded on the calibration logs, as this reading, measured with the conductivity probe, is reflected in the record of SpC.

Following purging, the well tubing was removed from the flow-through cell and samples were collected directly from the discharge end of the tubing. All sample containers were filled by allowing the discharge to flow gently down the inside of the container with minimal turbulence.

Two field duplicate samples, 1-matrix spike/matrix spike duplicate, 1-equipment blank, and tripblank(s) (only for VPH analysis) were collected. One rinsate blank was collected from the non-dedicated Grundfos[®] pump.

2.1.3 Sampling Parameters

The groundwater samples collected were analyzed by Accutest Laboratory of Marlborough, MA, which is a Department of Defense (DoD) Environmental Laboratory Program (ELAP) and certified by the Maine Department of Human Services (MEDHS), for the following :

- Extractable petroleum hydrocarbons (EPH) by MADEP EPH Method Revision 1.1 (May 2004).
- Volatile petroleum hydrocarbons (VPH) by MADEP EPH Method Revision 1.1 (May 2004).

The EPH and VPH analytical results for petroleum target compounds and carbon fraction ranges of groundwater samples collected during this baseline sampling were screened using Table 1 Tier 1 Statewide Ground Water and Drinking Water Remediation Guidelines for Petroleum Related Compounds that is in *Remediation Guidelines for Petroleum Contaminated Sites in Maine* (MEDEP 2009).

Laboratory analytical results are provided in **Appendix B**. The laboratory analytical results are presented as laboratory data reporting sheets (Form I's) and in the MEDEP EDD format.

2.2 DECONTAMINATION AND INVESTIGATION – DERIVED WASTE

All water quality meters and water level meters were decontaminated by washing the instruments with Alconox[®] and rinsing with deionized water prior to and after use. Liquid investigative-derived waste (IDW) from sampling of the groundwater at each of the Site wells was pumped into 5-gallon buckets during sampling activities. The buckets were taken to Building 50 (the groundwater treatment plant) for disposal. IDW was mixed with the influent plant water and cycled through the groundwater treatment plant.

3.0 SAMPLING RESULTS

3.1 WATER LEVEL GAUGING

During the June 2010 sampling event, monitoring wells at the Site and one Site 17 monitoring well, MW-NASB-065 at the request of MEDEP, were gauged on June 2, 2010 prior to sampling as presented in Section 2.1.2. A interpretive groundwater table contour map was developed from the June 2010 gauging data. The gauging data is presented in **Table 3-1**. The interpreted groundwater table contour map is presented in **Figure 3**.

3.2 EPH AND VPH BASELINE GROUNDWATER MONITORING

A summary of groundwater water quality data (discussed in Section 2.1.2) is provided in **Table 3-2**. The following sub-sections summarize the off-Site groundwater results obtained from the June 2010 initial baseline sampling.

3.2.1 Volatile Petroleum Hydrocarbons

All VPH aliphatic (Carbon [C] 5-C8 and C9-12) and aromatic (C9-C10) petroleum hydrocarbon fractions ranges in all 14 groundwater baseline samples were non-detect and below the Tier I (MEDEP 2009) screening criteria. All petroleum target compounds (benzene, toluene, ethylbenzene, xylenes [BTEX], naphthalene, and methyl tert-butyl ether [MTBE]), were non-detect in groundwater samples, except for a detection of 1 µg/L of MTBE (Tier I screening criteria 35 µg/L) in the field duplicate groundwater sample result collected at MW-NASB-098. A summary of the VPH groundwater data for the June 2010 baseline sampling is presented in **Table 3-3** and shown on **Figure 4**.

3.2.2 Extractable Petroleum Hydrocarbons

All EPH aliphatic (C9-C18 and C19-36) and aromatic (C11-C22) petroleum hydrocarbon fractions ranges in all 14 groundwater baseline samples were non-detect and below the Tier I (MEDEP 2009) screening criteria. All petroleum target compounds (acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, 2-methylnaphthalene, phenanthrene, and pyrene), were non-detect in groundwater samples. A summary of the EPH groundwater data for the June 2010 baseline sampling is presented in **Table 3-3** and shown on **Figure 4**.

3.3 DATA QUALITY REVIEW

The June 2010 data validation reports are presented in **Appendix B**. This section will summarize the VPH trip blank, rinsate blank, MS/MSD, and two field duplicate results. The VPH trip blank was non-detect for all petroleum hydrocarbon ranges and all petroleum target compounds. The rinsate blank was non-detect all VPH and EPH petroleum hydrocarbon ranges

ECC

and petroleum target compounds, which shows that proper equipment decontamination procedures were followed. The MS/MSD results for all VPH and EPH petroleum hydrocarbon ranges and petroleum target compounds were within limits, which indicates that there were no matrix interferences. The two field duplicate results for VPH and EPH petroleum hydrocarbon ranges and petroleum target compounds were within limits, which show that samples were collected in a reproducible manner, except for a low-level MTBE (1 µg/L) detection in one field duplicate not detected in the associated field sample.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

4.1.1 Water Level Gauging

The results of the water level gauging completed during June 2010 indicate that the shallow groundwater flow direction is generally toward the southeast across the Site with an approximate hydraulic gradient of 0.017 ft/ft. LNAPL was not present in the groundwater monitoring wells gauged during the baseline sampling.

4.1.2 EPH and VPH Baseline Groundwater Sampling Conclusions

The results of the EPH and VPH baseline groundwater sampling and analysis conducted in June 2010 identified the following:

- EPH groundwater results were screened against Tier 1 statewide groundwater and drinking water remediation guidelines (MEDEP 2009). There were no EPH exceedences of the applicable Tier 1 guidelines (MEDEP 2009), and all EPH petroleum hydrocarbon ranges and petroleum target compound results were non-detect.
- VPH groundwater results were screened against Tier 1 statewide groundwater and drinking water remediation guidelines (MEDEP 2009). There were no VPH exceedences of the applicable Tier 1 Guidelines (MEDEP 2009), and all VPH petroleum hydrocarbon ranges were non-detect and all petroleum target compound results were non-detect except for MTBE (1 µg/L) detected in one field duplicate sample.
- Based on this sampling event, there does not appear to be any significant off-Site migration of petroleum related contaminants from the Old Navy Fuel Farm Site using the analytical protocols specified by the Maine DEP 2009 Petroleum Guidance.

4.2 RECOMMENDATIONS

The following recommendation is based on the results of EPH and VPH baseline sampling:

- Stakeholders should discuss the appropriate groundwater Tier (1, 2, or 3) Guidelines (MEDEP 2009) to be selected for the Site, as suggested in the Final Letter Sampling Plan (ECC 2010) once the EPH and VPH baseline groundwater data is further evaluated.
- While there is no indication that significant off-Site migration of petroleum impacted groundwater is occurring, additional investigation of the Old Navy Fuel Farm (ONFF) itself, may be warranted based on previous discussions with the Maine DEP and to insure

ECC

that on-Site groundwater and soil conditions are evaluated sufficiently to support future use of the ONFF property.

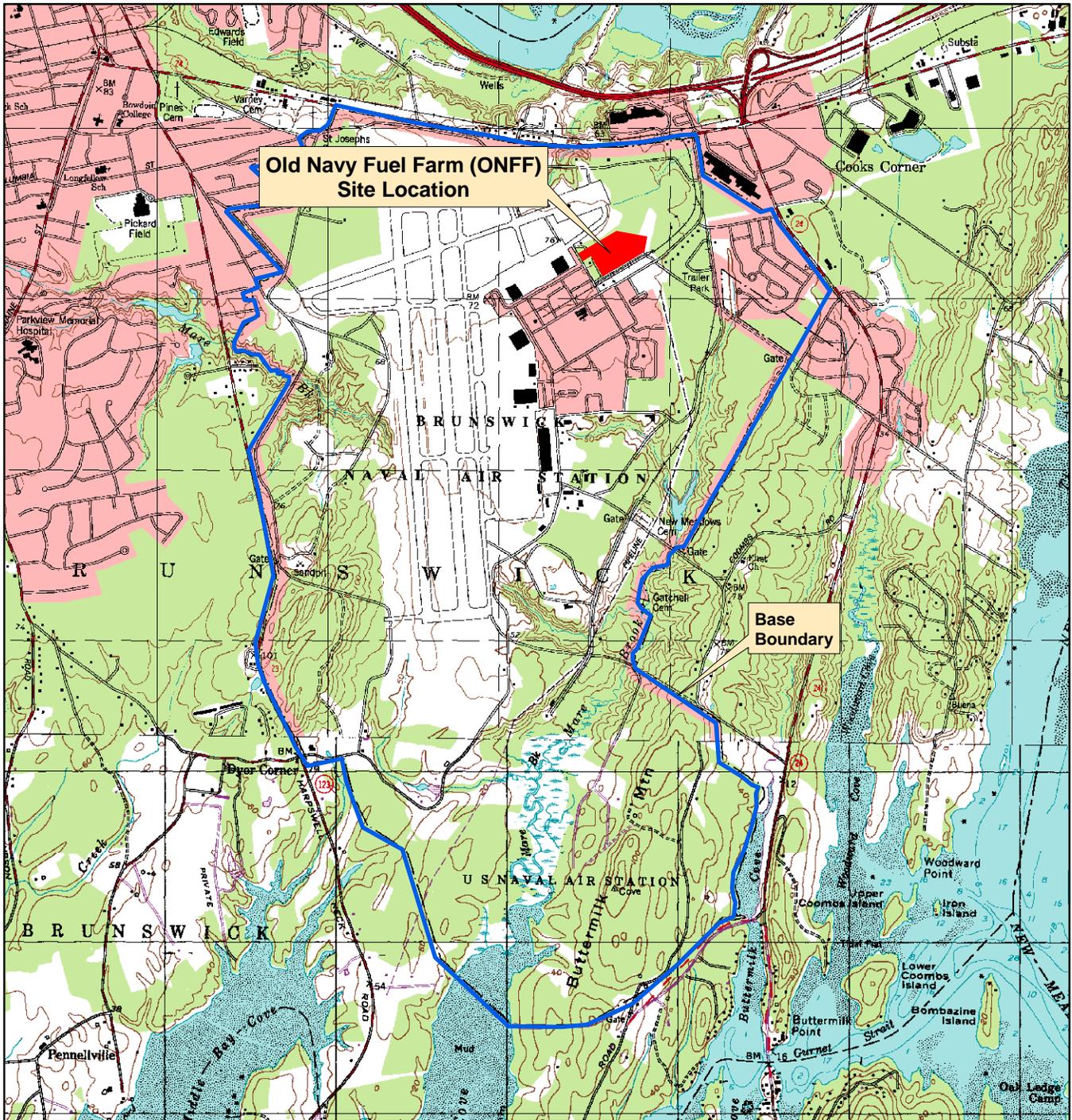
5.0 REFERENCES

- EA Engineering, Science, and Technology, Inc. (EA). 1997a. Summary Report, Biosparging System Operations at Old Navy Fuel Farm, August-December 1996, Naval Air Station, Brunswick, Maine. April.
- EA. 1997b. Summary Report, Biosparging System Operations at Old Navy Fuel Farm, January - June 1997, Naval Air Station, Brunswick, Maine. September.
- EA. 1998a. Results of Bi-Monthly Monitoring Well Gauging Program Conducted at Buildign 95, Old Navy Fuel Farm, and Site 7 Naval Air Station, Brunswick, Maine. August
- EA. 1998b. Summary Report, Biosparging System Operations at Old Navy Fuel Farm, July - December 1997, Naval Air Station, Brunswick, Maine. July.
- EA. 1998c. Summary Report, Biosparging System Operations at Old Navy Fuel Farm, January - June 1998, Naval Air Station, Brunswick, Maine. November.
- EA. 2000a. Groundwater Monitoring Plan, Old Navy Fuel Farm, Naval Air Station, Brunswick, Maine. December.
- EA. 2000b. Summary Report Biosparging System Operations at Old Navy Fuel Farm, July-December 1998, Naval Air Station, Brunswick, Maine. February.
- EA. 2000c. Direct-Push Investigation at the Old Navy Fuel Farm, Naval Air Station, Brunswick, Maine. April.
- EA. 2001. Letter Report of Monitoring Well Decommissioning Conducted at the Old Navy Fuel Farm in April 2001, Naval Air Station, Brunswick, Maine. August.
- EA. 2002. BIOSCREEN Modeling of Total Petroleum Hydrocarbons at the Old Navy Fuel Farm, Naval Air Station, Brunswick, Maine.
- EA. 2004a. Groundwater Monitoring Report for Six Sampling Events at the Old Navy Fuel Farm, Naval Air Station, Brunswick, Maine. March.
- EA. 2004b. Groundwater Monitoring Report for the September 2003 Sampling Event, Old Navy Fuel Farm, Naval Air Station, Brunswick, Maine. May.
- EA. 2004c. Summary of Monitoring Well Installation conducted on 15 and 16 March 2004 at the Old Navy Fuel Farm, Naval Air Station, Brunswick, Maine. April.
- EA. 2004d. Groundwater Monitoring Report for the March 2004 Sampling Event at Old Navy Fuel Farm, Naval Air Station, Brunswick, Maine. May.

ECC

- ECC. 2005. Final Groundwater Monitoring Report for the September 2004 and March 2005 Sampling Events. April.
- ECC. 2006. Final Groundwater Monitoring Report for the 2005 Sampling Events Old Navy Fuel Farm Naval Air Station Brunswick, Maine. July
- ECC. 2007. Final Groundwater Monitoring Report for the 2006 Sampling Events Old Navy Fuel Farm Naval Air Station Brunswick, Maine. November.
- ECC. 2009a. Final Groundwater Monitoring Report 2007 Sampling Events, Old Navy Fuel Farm, Naval Air Station Brunswick, Maine. May.
- ECC. 2009b. Final Groundwater Monitoring Report April 2008 and October 2008 Sampling Events Old Navy Fuel Farm Naval Air Station Brunswick, Maine. September.
- ECC. 2010. Final Letter Sampling Plan, Naval Air Station, Brunswick, Maine. June.
- Foster Wheeler Environmental Corporation. 2001. Final Report for Remediation of the Old Navy Fuel Farm. Naval Air Station, Brunswick, Maine. Contract No. N62472-99-D-0032, Contract Task Order No. 003. January.
- HRP Associates, Inc. 1993. Report of Air Sparging/Soil Vapor Pilot Extraction Tests and Related Investigations. Old Fuel Farm, Brunswick Naval Air Station, Brunswick, Maine. December.
- MEDEP. 2009. Remediation Guidelines for Petroleum Contaminated Sites in Maine. December.
- O'Brien & Gere Engineers, Inc. 1990. Design and Installation of Underground Storage Tank Monitoring System, Naval Air Station Fuel Farm, Brunswick, Maine. Prepared for Department of the Navy, NA VFAC, Northern Division. April.
- O'Brien & Gere Engineers, Inc. 1992. Remedial Investigation, Fuel Farm, Naval Air Station, Brunswick, Maine. Department of the Navy, NA VFAC, Northern Division. July.
- United States Environmental Protection Agency (U.S. EPA). 2000. Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells. Boston, MA.

FIGURES



Contract No.	N150.700		
Description	Old Navy Fuel Farm (ONFF) Site Location		
Coordinate system	NAD 1983, UTM, Zone 19 N in meters		
Sources	NavalBase Boundary provided by Navy.		
Date	19-JUL-2010	Rev.	App. By
DB	C. Guido		
CB	J. Kiker		
AB			



- Legend**
- NASB Brunswick Boundary
 - ONFF Boundary

Figure 1

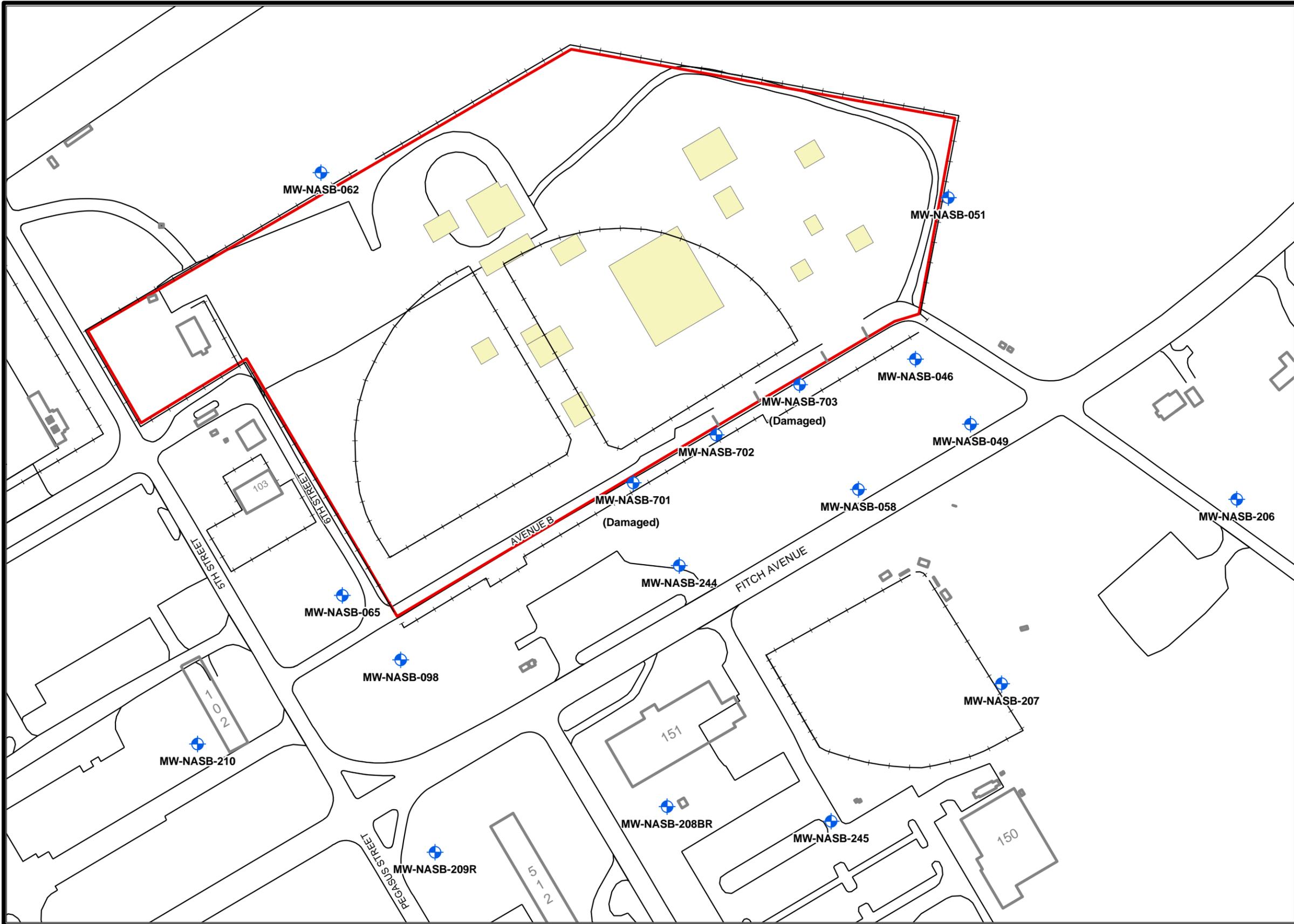
**Site Location
Old Navy Fuel Farm**

Naval Air Station
Brunswick, Maine

C:\NAVY_GIS\TO16_ONFF\MapDocuments\Fig1_VPHEPH_SiteLocus.mxd

0 650 1,300 2,600 Feet

C:\NAVY_GIS\TO16_ONFF\MapDocuments\Fig2_VPHEPH_SitePlan.mxd



Contract No.	N150.700			
Description	ONFF, NAS Brunswick, ME			
Coordinate System	NAD 1983, UTM, Zone 19 N in meters			
Sources	Naval Base Boundary provided by Navy.			

Date	9-JUN-2010	Rev.	Date	Approved
Drawn	C. Guido			
Checked	J. Donovan			
Approved				

Legend

- Monitoring Well
- Fence
- ONFF Extent of Excavation
- Site Boundary

0 75 150 300 Feet

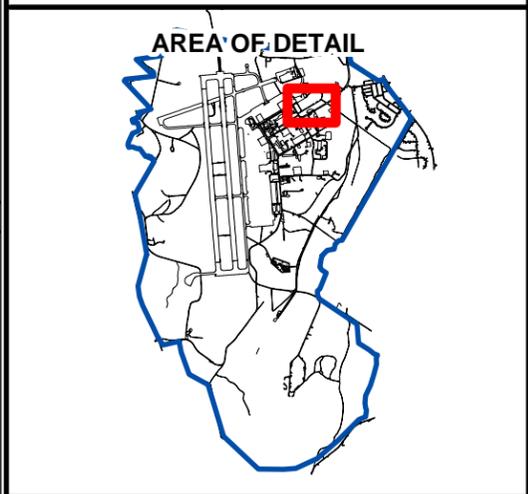
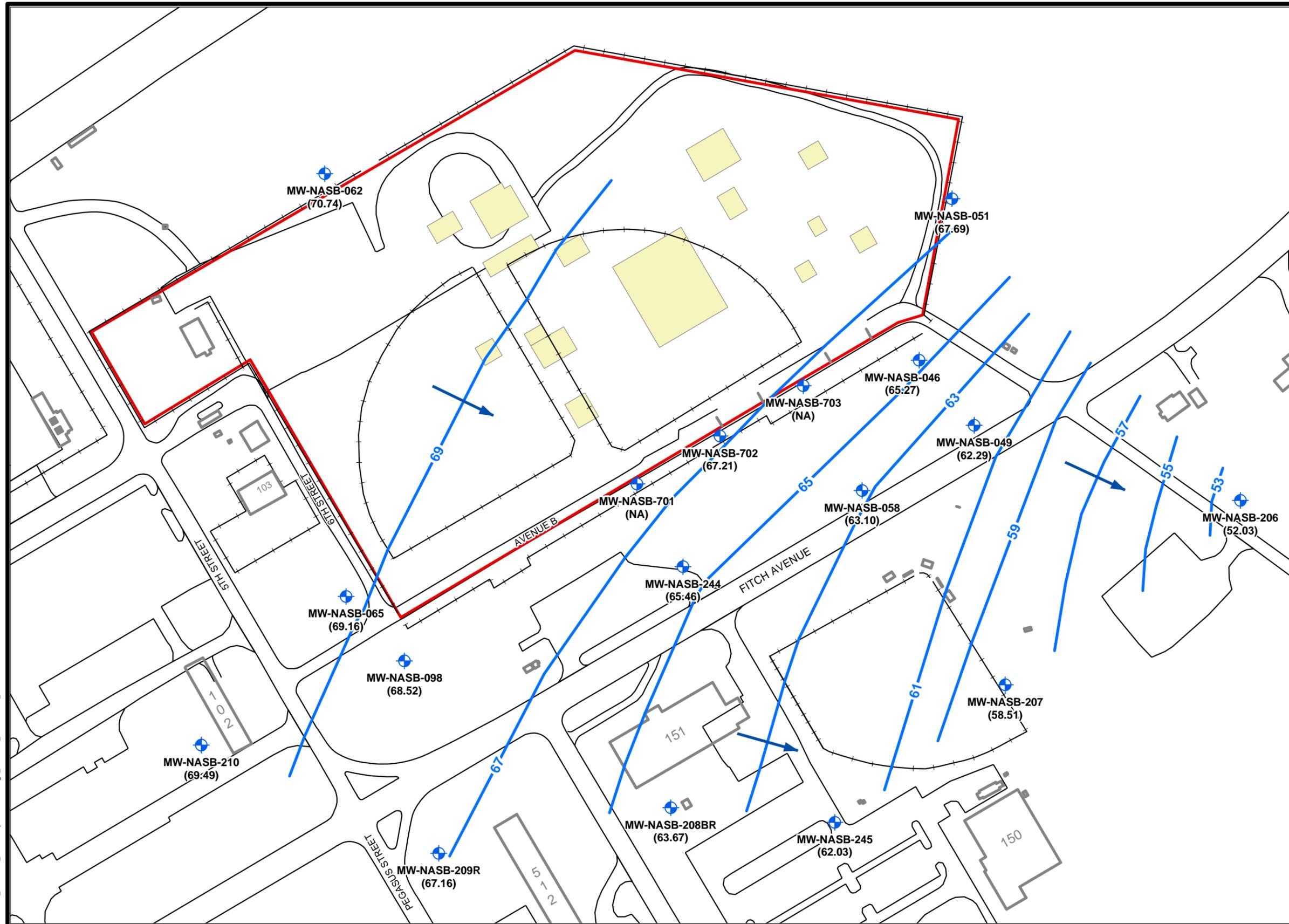


Figure 2

Site Plan
Old Navy Fuel Farm

Naval Air Station
 Brunswick, Maine

C:\NAVY_GISTO16_ONFF\MapDocuments\Fig3_VPHEPH_GWContours_Jun2010.mxd



Contract No.	N150.700			
Description	ONFF, NAS Brunswick, ME			
Coordinate System	NAD 1983, UTM, Zone 19 N in meters			
Sources	Naval Base Boundary provided by Navy.			

Date	19-JUL-2010	Rev.	Date	Approved
Drawn	C. Guido			
Checked	J. Kiker			
Approved				

Legend

- MW-NASB-046 (65.27) Monitoring Well (Groundwater Elevation, ft MSL)
- Groundwater Flow Direction
- Groundwater Contour (ft MSL)
- Fence
- ONFF Extent of Excavation
- Site Boundary

0 75 150 300 Feet

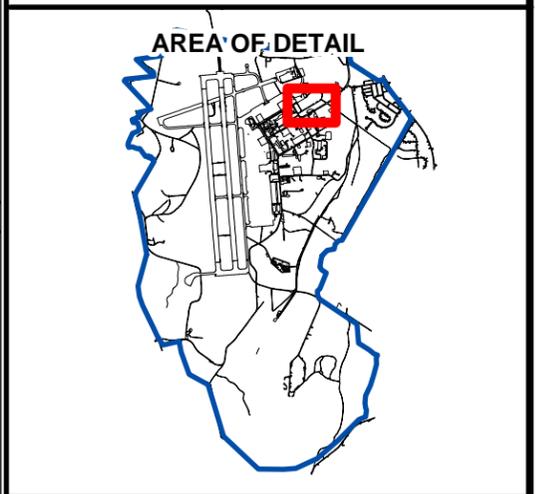
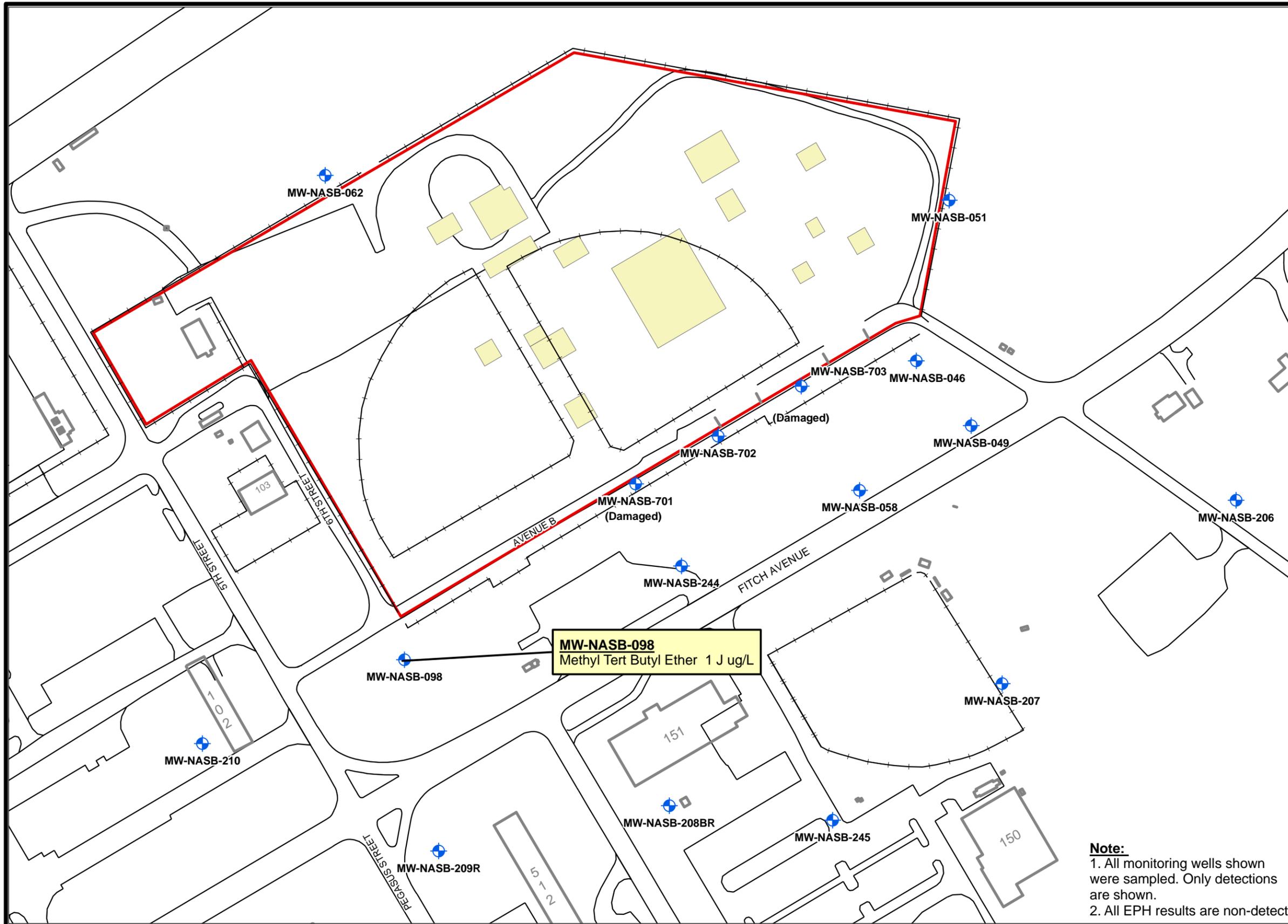


Figure 3

**Interpreted Groundwater Surface Contour Map
June 2010
Old Navy Fuel Farm**

Naval Air Station
Brunswick, Maine

C:\NAVY_GISTO16_ONFF\MapDocuments\Fig4_VPHEPH_ResultsJun2010.mxd



Contract No.	N150.700			
Description	ONFF, NAS Brunswick, ME			
Coordinate System	NAD 1983, UTM, Zone 19 N in meters			
Sources	Naval Base Boundary provided by Navy.			

Date	19-JUL-2010	Rev.	Date	Approved
Drawn	C. Guido			
Checked	J. Kiker			
Approved				

Legend

- Monitoring Well
- Fence
- ONFF Extent of Excavation
- Site Boundary

0 75 150 300 Feet

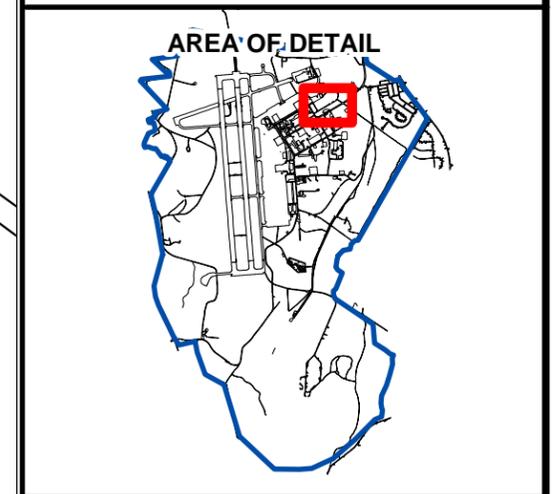


Figure 4

**Analytical Results
June 2010
Old Navy Fuel Farm**

Naval Air Station
Brunswick, Maine

Note:
1. All monitoring wells shown were sampled. Only detections are shown.
2. All EPH results are non-detect.

TABLES

**TABLE 3-1
 GROUNDWATER MEASUREMENTS AND ELEVATIONS
 JUNE 2010
 OLD NAVY FUEL FARM
 NAVAL AIR STATION BRUNSWICK**

Location	Measuring Point Elevation (ft NAVD 88)	June 2010		
		Date	Depth to Water ⁽¹⁾ (ft)	Groundwater Elevation (ft NAVD 88)
MW-NASB-046	71.30	6/2/10	6.03	65.27
MW-NASB-049	68.29	6/2/10	6.00	62.29
MW-NASB-051	73.41	6/2/10	5.72	67.69
MW-NASB-058	69.80	6/2/10	6.70	63.10
MW-NASB-062	80.73	6/2/10	9.99	70.74
MW-NASB-065	74.29	6/2/10	5.13	69.16
MW-NASB-098	76.53	6/2/10	8.01	68.52
MW-NASB-206	59.01	6/2/10	6.98	52.03
MW-NASB-207	66.22	6/2/10	7.71	58.51
MW-NASB-208BR	69.85	6/2/10	6.18	63.67
MW-NASB-209R	72.94	6/2/10	5.78	67.16
MW-NASB-210	77.55	6/2/10	8.06	69.49
MW-NASB-244	70.73	6/2/10	5.27	65.46
MW-NASB-245	67.51	6/2/10	5.48	62.03
MW-NASB-701	74.41	6/2/10	NA ⁽²⁾	NA ⁽²⁾
MW-NASB-702	73.63	6/2/10	6.42	67.21
MW-NASB-703	72.97	6/2/10	NA ⁽²⁾	NA ⁽²⁾
Notes: ft = feet NA = not available NAVD 88 = North American Vertical Datum 1988 (1) Depth to water is the distance in feet from the measuring point (top of riser) to the water. (2) Well damaged.				

Naval Air Station
 Brunswick, Maine

Summary Initial Baseline EPH and VPH
 Groundwater Sampling Letter Report
 Old Navy Fuel Farm

**TABLE 3-2
 WATER QUALITY DATA
 JUNE 2010
 OLD NAVY FUEL FARM
 NAVAL AIR STATION BRUNSWICK**

WELL	DATE	TIME (24-hour)	Cumulative Volume Purged (liters)	Temperature (°C)	pH (std)	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Purge Rate (ml/min)
MW-NASB-046	06/03/10	14:20	15	12.81	6.1	260	1.32	100	3	300
MW-NASB-049	06/03/10	15:20	10.8	12.22	5.75	226	2.70	-18	0	240
MW-NASB-051	06/02/10	12:55	14	10.72	5.77	64	0.56	50	0	300
MW-NASB-058	06/02/10	15:00	12	11.42	6.16	170	0.31	95	0	300
MW-NASB-062	06/02/10	15:55	12.0	11.12	5.25	89	1.50	217	0	300
MW-NASB-098	06/02/10	16:50	12.15	10.32	5.81	138	0.27	74	2	270
MW-NASB-206	06/03/10	16:15	9.46	16.17	5.79	216	0.59	93	4	220
MW-NASB-207	06/03/10	09:25	13.5	13.60	6.23	442	4.39	96	3	300
MW-NASB-208BR	06/03/10	11:40	38.4	15.92	6.15	520	0.32	-10	9	320
MW-NASB-209R	06/04/10	10:05	7.8	15.58	6.29	317	0.62	-2	3	200
MW-NASB-210	06/03/10	12:55	13.5	13.85	5.9	127	1.88	139	3	300
MW-NASB-244	06/03/10	16:55	8.32	14.62	4.84	80	5.43	210	0	260
MW-NASB-245*	06/04/10	09:10	4	15.89	5.58	717	0.95	-5	39	100
MW-NASB-701	06/03/10	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-NASB-702	06/04/10	11:10	14.7	16.94	5.99	163	1.47	120.0	8	350
MW-NASB-703	06/03/10	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
 °C = degrees Celsius
 DO = dissolved oxygen
 mg/L = milligrams per liter
 ml/min = milliliters per minute
 mS/cm = millisiemens per centimeter
 mV = millivolts
 NA = not applicable

NTU = nephelometric turbidity units
 ORP = oxidation-reduction potential
 Spec. Cond. = specific conductivity
 std = standard units
 * = insufficient water to continue low-flow process, grab sample

TABLE 3-3
 GROUNDWATER EPH and VPH ANALYTICAL RESULTS SUMMARY
 JUNE 2010
 OLD NAVY FUEL FARM
 NAVAL AIR STATION BRUNSWICK

Chemical	Tier I Guideline (µg/L)	MW NASB 046	MW NASB 049	MW NASB 051	MW NASB 058	MW NASB 062	MW NASB 098	MW NASB 098 DUP	MW NASB 206	MW NASB 207	MW NASB 208BR	MW NASB 209R	MW NASB 244	MW NASB 245	MW NASB 702	MW NASB 702 DUP	ONFF RINSATE BLANK
VPH (µg/L) MADEP EPH Method Revision 1.1																	
BENZENE	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
ETHYLBENZENE	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
METHYL TERT BUTYL ETHER	35	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
TOLUENE	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
M,P-XYLENE	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
O-XYLENE	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
C9- C10 AROMATICS	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
C5- C8 ALIPHATICS	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
C9- C12 ALIPHATICS	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
EPH (µg/L) MADEP EPH Method Revision 1.1																	
aliphatic (C9-C18)	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
aliphatic (C19-36)	10,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
aromatic (C11-C22)	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
acenaphthene	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
acenaphthylene	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
anthracene	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
benzo(a)anthracene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
benzo(a)pyrene	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
benzo(b)fluoranthene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
benzo(g,h,i)perylene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
benzo(k)fluoranthene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
chrysene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
dibenz(a,h)anthracene	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
fluoranthene	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
fluorene	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
indeno(1,2,3-cd)pyrene	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
2-methylnaphthalene	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
phenanthrene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
pyrene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
Notes:																	
MW-701 and MW-703 were damaged in 2007 and were not sampled in the June 2010 sampling event.																	
DUP = Field duplicate sample																	
J = Estimated Value																	
U = Undetected Value																	
ND = Not Detected																	
Bold type denotes analyte detection.																	
Shaded boxes denote exceedances of Tier 1 Guideline																	

**TABLE 4-1
 SUMMARY OF HISTORICAL DETECTIONS
 OF MTBE AND TOTAL BTEX
 OLD NAVY FUEL FARM
 NAVAL AIR STATION BRUNSWICK**

WELL	DATE	MTBE	TOTAL BTEX
MW-NASB-051	10-Jul-96	2.1	ND
MW-NASB-051	7-Aug-96	4.8	1.2
MW-NASB-051	4-Dec-96	1 U	ND
MW-NASB-051	24-Jun-97	1 U	ND
MW-NASB-051	10-Dec-97	1 U	ND
MW-NASB-051	17-Jun-98	1 U	2
MW-NASB-051	8-Dec-98	1 U	5
MW-NASB-051	15-Jun-99	0.5 U	ND
MW-NASB-051	16-Dec-99	0.5 U	ND
MW-NASB-051	14-Jun-00	0.5 U	ND
MW-NASB-051	13-Dec-00	0.5 U	ND
MW-NASB-051	5-Oct-01	1 U	ND
MW-NASB-051	25-Apr-02	1 U	ND
MW-NASB-051	26-Sep-02	2 U	ND
MW-NASB-051	16-Apr-03	2 U	ND
MW-NASB-051	16-Sep-03	2 U	ND
MW-NASB-051	31-Mar-04	2 U	ND
MW-NASB-051	14-Sep-04	1 U	ND
MW-NASB-051	10-Mar-05	1 U	ND
MW-NASB-051	4-Oct-05	1 U	ND
MW-NASB-051	26-May-06	1 U	ND
MW-NASB-051	26-Oct-06	1 U	ND
MW-NASB-051	15-Oct-07	1 U	ND
MW-NASB-051	29-Nov-07	1 U	ND
MW-NASB-051	16-Apr-08	1 U	ND
MW-NASB-051	23-Oct-08	1 U	ND
MW-NASB-051	2-Jun-10	1 U	ND
MW-NASB-058	10-Jul-96	1 U	ND
MW-NASB-058	4-Dec-96	1 U	ND
MW-NASB-058	24-Jun-97	1 U	ND
MW-NASB-058	10-Dec-97	1 U	ND
MW-NASB-058	17-Jun-98	4	2
MW-NASB-058	8-Dec-98	1 U	8
MW-NASB-058	15-Jun-99	0.5 U	ND
MW-NASB-058	17-Dec-99	0.5 U	ND
MW-NASB-058	14-Jun-00	0.5 U	ND
MW-NASB-058	11-Dec-00	0.5 U	ND
MW-NASB-058	8-May-01	0.5 U	ND
MW-NASB-058	5-Oct-01	1 U	ND
MW-NASB-058	24-Apr-02	1 U	ND
MW-NASB-058	26-Sep-02	2 U	ND
MW-NASB-058	15-Apr-03	2 U	ND
MW-NASB-058	16-Sep-03	2 U	ND
MW-NASB-058	1-Apr-04	2 U	ND
MW-NASB-058	14-Sep-04	1 U	ND
MW-NASB-058	11-Mar-05	1 U	ND
MW-NASB-058	5-Oct-05	1 U	ND
MW-NASB-058	30-May-06	1 U	ND
MW-NASB-058	27-Oct-06	1 U	ND
MW-NASB-058	15-Oct-07	1 U	ND
MW-NASB-058	27-Nov-07	1 U	ND
MW-NASB-058	16-Apr-08	1 U	ND
MW-NASB-058	23-Oct-08	1 U	ND
MW-NASB-058	2-Jun-10	1 U	ND

ECC

WELL	DATE	MTBE	TOTAL BTEX
MW-NASB-062	10-Jul-96	1 U	ND
MW-NASB-062	4-Dec-96	1 U	ND
MW-NASB-062	24-Jun-97	1 U	ND
MW-NASB-062	10-Dec-97	1 U	ND
MW-NASB-062	17-Jun-98	1 U	ND
MW-NASB-062	8-Dec-98	1 U	6
MW-NASB-062	15-Jun-99	0.5 U	ND
MW-NASB-062	16-Dec-99	0.5 U	ND
MW-NASB-062	11-Dec-00	0.5 U	ND
MW-NASB-062	5-Oct-01	1 U	ND
MW-NASB-062	25-Apr-02	1 U	ND
MW-NASB-062	26-Sep-02	2 U	ND
MW-NASB-062	16-Apr-03	2 U	ND
MW-NASB-062	16-Sep-03	2 U	ND
MW-NASB-062	31-Mar-04	2 U	ND
MW-NASB-062	14-Sep-04	1 U	ND
MW-NASB-062	10-Mar-05	1 U	ND
MW-NASB-062	5-Oct-05	1 U	ND
MW-NASB-062	30-May-06	1 U	ND
MW-NASB-062	26-Oct-06	1 U	ND
MW-NASB-062	15-Oct-07	1 U	ND
MW-NASB-062	28-Nov-07	1 U	ND
MW-NASB-062	17-Apr-08	1 U	ND
MW-NASB-062	23-Oct-08	1 U	ND
MW-NASB-062	2-Jun-10	1 U	ND
MW-NASB-098	14-Jun-00	0.5 U	ND
MW-NASB-098	11-Dec-00	0.5 U	ND
MW-NASB-098	8-May-01	0.5 U	ND
MW-NASB-098	5-Oct-01	0.87 J	ND
MW-NASB-098	24-Apr-02	1 U	ND
MW-NASB-098	26-Sep-02	5.3	ND
MW-NASB-098	14-Apr-03	15	ND
MW-NASB-098	16-Sep-03	16	ND
MW-NASB-098	28-Mar-04	4	ND
MW-NASB-098	15-Sep-04	3.2	ND
MW-NASB-098	11-Mar-05	5.95	ND
MW-NASB-098	5-Oct-05	0.44 J	ND
MW-NASB-098	30-May-06	1 U	ND
MW-NASB-098	26-Oct-06	1 U	ND
MW-NASB-098	8-Oct-07	1 U	ND
MW-NASB-098	26-Nov-07	1 U	ND
MW-NASB-098	16-Apr-08	1 U	ND
MW-NASB-098	23-Oct-08	1 UJ	ND
MW-NASB-098	2-Jun-10	1 J	ND
MW-NASB-207	14-Jun-00	0.5 U	ND
MW-NASB-207	11-Dec-00	0.5 U	ND
MW-NASB-207	8-May-01	0.5 U	1.7
MW-NASB-207	5-Oct-01	1 U	ND
MW-NASB-207	25-Apr-02	1 U	ND
MW-NASB-207	25-Sep-02	2 U	ND
MW-NASB-207	14-Apr-03	2 U	ND
MW-NASB-207	17-Sep-03	2 U	ND
MW-NASB-207	30-Mar-04	2 U	ND
MW-NASB-207	14-Sep-04	1 U	ND
MW-NASB-207	10-Mar-05	1 U	ND
MW-NASB-207	6-Oct-05	1 U	ND
MW-NASB-207	26-May-06	1 U	ND
MW-NASB-207	27-Oct-06	1 U	ND
MW-NASB-207	15-Oct-07	1 U	ND
MW-NASB-207	27-Nov-07	1 U	ND
MW-NASB-207	17-Apr-08	1 U	ND
MW-NASB-207	23-Oct-08	1 U	ND
MW-NASB-207	3-Jun-10	1 U	ND

ECC

WELL	DATE	MTBE	TOTAL BTEX
MW-NASB-208BR	14-Jun-00	0.5 U	6.3
MW-NASB-208BR	11-Dec-00	0.5 U	ND
MW-NASB-208BR	8-May-01	0.5 U	1.8
MW-NASB-208BR	24-Apr-02	1 U	ND
MW-NASB-208BR	26-Sep-02	2 U	0.77
MW-NASB-208BR	15-Apr-03	2 U	1.4
MW-NASB-208BR	18-Sep-03	2 U	4
MW-NASB-208BR	30-Mar-04	2 U	ND
MW-NASB-208BR	15-Sep-04	1 U	ND
MW-NASB-208BR	14-Mar-05	1 U	ND
MW-NASB-208BR	6-Oct-05	1 U	ND
MW-NASB-208BR	24-May-06	1 U	ND
MW-NASB-208BR	27-Oct-06	1 U	ND
MW-NASB-208BR	11-Oct-07	1 U	ND
MW-NASB-208BR	26-Nov-07	1 U	ND
MW-NASB-208BR	17-Apr-08	1 U	ND
MW-NASB-208BR	24-Oct-08	1 U	ND
MW-NASB-208BR	3-Jun-10	1 U	ND
MW-NASB-210	10-Jun-99	0.5 U	ND
MW-NASB-210	11-Dec-00	0.5 U	ND
MW-NASB-210	8-May-01	0.5 U	ND
MW-NASB-210	5-Oct-01	1 U	36
MW-NASB-210	25-Apr-02	1 U	ND
MW-NASB-210	24-Sep-02	2 U	ND
MW-NASB-210	13-Apr-03	2 U	ND
MW-NASB-210	16-Sep-03	2 U	ND
MW-NASB-210	28-Mar-04	2 U	ND
MW-NASB-210	15-Sep-04	1 U	ND
MW-NASB-210	11-Mar-05	1 U	ND
MW-NASB-210	6-Oct-05	1 U	ND
MW-NASB-210	24-May-06	1 U	ND
MW-NASB-210	27-Oct-06	1 U	ND
MW-NASB-210	8-Oct-07	1 U	ND
MW-NASB-210	28-Nov-07	1 U	ND
MW-NASB-210	17-Apr-08	1 U	ND
MW-NASB-210	24-Oct-08	1 U	ND
MW-NASB-210	3-Jun-10	1 U	ND
MW-NASB-701	1-Apr-04	2 U	ND
MW-NASB-701	14-Sep-04	1 U	ND
MW-NASB-701	8-Mar-05	1 U	ND
MW-NASB-701	4-Oct-05	1 U	ND
MW-NASB-701	25-May-06	0.63 J	ND
MW-NASB-701	26-Oct-06	1 U	ND
MW-NASB-701	Oct-07	NA	NA
MW-NASB-701	Nov-07	NA	NA
MW-NASB-701	Apr-08	NA	NA
MW-NASB-701	Oct-08	NA	NA
MW-NASB-701	Jun-10	NA	NA
MW-NASB-702	1-Apr-04	2 U	ND
MW-NASB-702	14-Sep-04	1 U	ND
MW-NASB-702	8-Mar-05	1 U	ND
MW-NASB-702	3-Oct-05	1 U	ND
MW-NASB-702	25-May-06	1 U	ND
MW-NASB-702	25-Oct-06	1 U	ND
MW-NASB-702	4-Oct-07	1 U	ND
MW-NASB-702	28-Nov-07	1 U	ND
MW-NASB-702	16-Apr-08	1 U	ND
MW-NASB-702	24-Oct-08	1 U	ND
MW-NASB-702	4-Jun-10	1 U	ND

ECC

WELL	DATE	MTBE	TOTAL BTEX
MW-NASB-703	1-Apr-04	2 U	ND
MW-NASB-703	14-Sep-04	1 U	ND
MW-NASB-703	8-Mar-05	1 U	ND
MW-NASB-703	4-Oct-05	1 U	ND
MW-NASB-703	25-May-06	1 U	ND
MW-NASB-703	25-Oct-06	1 U	ND
MW-NASB-703	Oct-07	NA	NA
MW-NASB-703	Nov-07	NA	NA
MW-NASB-703	Apr-08	NA	NA
MW-NASB-703	Oct-08	NA	NA
MW-NASB-703	Jun-10	NA	NA

APPENDIX A

Field Records of Well Gauging, Purging, and Sampling Forms

6/1/10

(62)
NASB

65°, overcast, Rain

1100- ELL (David Corneau) on site @ NAS Brunswick to perform Groundwater Sampling @ Old Navy Fuel Farm (ONFF).

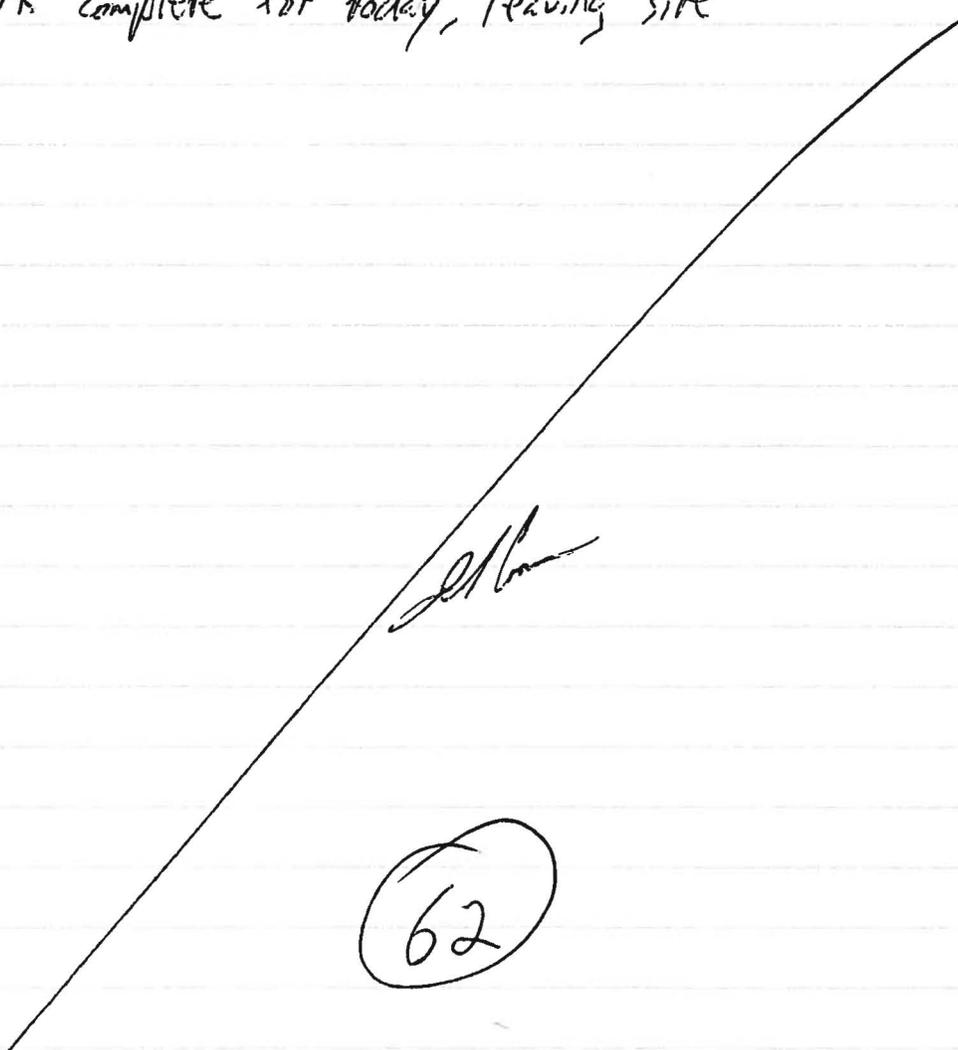
- Received sample containers, FedEx, from Accutest Labs.

- Picked up sampling equipment from Pine Environmental.

Prepped sample containers, equipment for sampling activities.

Reviewed scope of work and printed out field forms.

1700- work complete for today, leaving site


Signature
(62)

(63)

6/2/10

NASB

65° overcast

0800 - ECC (David Compeau) on site @ NAS Brunswick to continue sampling activities @ ONFF.

Calibrate Sampling Equipment

1030 - Perform gauging/well inspection activities.

Groundwater Samples Collected from ONFF:

MW-NASB-051

MW-NASB-058

MW-NASB-062

MW-NASB-098

*FD = MW-NASB-DUP2 ^{unable to use} ~~unable to use~~
unable to use Grundfos pump due to well damage. ~~unable to use~~
used peristaltic pump. Refer to low-flow sheet.

Problems with rented Grundfos controller. Acquired new rental through Pine Environmental.

ordered tubing for MW-NASB-046, MW-NASB-049, MW-NASB-206, MW-NASB-244, MW-NASB-245, and MW-NASB-209R. Tubing will arrive 1100 6/3/10.

Post Calibrate Sampling Equipment

1900 - work complete for today, leaving site.



(63)

6/3/10

NASB (64)

60° Rain

0700 - ECC (David Gmeu) on site @ NAS Brunswick to continue Sampling Activities @ ONFF.

Calibrate Sampling Equipment

Groundwater Samples Collected from ONFF:

MW-NASB-207

MW-NASB-208BR

MW-NASB-210

MW-NASB-046

MW-NASB-049

MW-NASB-206

MW-NASB-244

unable to collect samples @ MW-NASB-701 and MW-NASB-703. Blockage at approx 5 feet at both locations. Possibly due to snowplow, vehicle, or lawn mowing equipment. No water present. Refer to Low Flow sheets.

Received tubing from Pine Environmental for wells with no tubing. Dedicated new tubing by placing in Labeled Trash Bag. Each well has a dedicated Trash Bag, Labeled, with tubing for that well cut to length.

Post Calibrate Sampling Equipment

1900 - work complete for today, leaving site.


(64)

6/4/10

(65) (65)
NASB

75° Partly cloudy

0700. ECC (David Comeau) on site at NAS Brunswick to continue and complete sampling activities @ ONFF.

Calibrate Sampling Equipment

Groundwater Samples Collected from ONFF:

MW-NASB-245 - (went ^{Dry during} recharge, then collected samples. low flow process. waited for)

MW-NASB-209R

MW-NASB-702

* FD = MW-NASB-Dup1 * MS/MSD

Collected Rinsate Blank on nondedicated pump utilized for sampling. Equipment was decontaminated before and after use @ each location.

Rinsate Blank ID = ONFF-Rinsate Blank.

Post Calibrate Sampling Equipment

Rented sampling equipment delivered to Pine Environmental.

All samples Delivered to Accutest Labs.

This completes sampling activities @ ONFF.


(65)
(65)



CHAIN OF CUSTODY

Accutest Job #:
 Accutest Control #:

Client Information	Facility Information	Analytical Information
Name: Environmental Chemical Corporation Address: 33 Boston Post Road West Suite 340 City: Marlborough, MA 01752 Phone #: 508-229-2270	Project Name: Old Navy Fuel Farm Location: NASB Brunswick, Maine Project No.: FAX #: 508-229-7737	Analytical Parameters: TCL VOC (BTEX + MTBE, 8260B) EDB (50.41) TPH GRO (Maine 4.2.17) TPH DRO (Maine 4.1.25) METHANE Alkalinity, Sulfate, Nitrate Ferrous Iron TOTAL ORGANIC CARBON EPH (MADEP -EPH-04-1.1) VPH (MADEP -EPH-04-1.1)

Field ID / Point of Collection	Collection			Matrix	# of bottles	Preservation					TCL VOC (BTEX + MTBE, 8260B)	EDB (50.41)	TPH GRO (Maine 4.2.17)	TPH DRO (Maine 4.1.25)	METHANE	Alkalinity, Sulfate, Nitrate	Ferrous Iron	TOTAL ORGANIC CARBON	EPH (MADEP -EPH-04-1.1)	VPH (MADEP -EPH-04-1.1)
	Date	Time	Sampled By			HCL	NaS2O3	HNO3	H2SO4	None										
INFF-QT1	6/2/10	1000	DC	GW	2	X														X
IW-NASB-051	6/2/10	1255	DC	GW	6	X													X	X
IW-NASB-058	6/2/10	1500	DC	GW	6	X													X	X
IW-NASB-062	6/2/10	1555	DC	GW	6	X													X	X
IW-NASB-098	6/2/10	1650	DC	GW	6	X													X	X
IW-NASB-DUP2	6/2/10	00:00		GW	6	X													X	X
IW-NASB-207	6/3/10	0925	DC	GW	6	X													X	X
IW-NASB-208BR	6/3/10	1140	DC	GW	6	X													X	X
IW-NASB-210	6/3/10	1255	DC	GW	6	X													X	X
IW-NASB-046	6/3/10	1420	DC	GW	6	X													X	X
IW-NASB-049	6/3/10	1520	DC	GW	6	X													X	X
IW-NASB-206	6/3/10	1615	DC	GW	6	X													X	X

Turnaround Information	Data Deliverable Information	Comments / Remarks
------------------------	------------------------------	--------------------

<input type="checkbox"/> 21 Day Standard <input type="checkbox"/> 14 Day <input type="checkbox"/> 7 Days EMERGENCY <input type="checkbox"/> Other _____ (Days)	Approved By: _____ RUSH TAT is for FAX data Data unless previously approved.	<input type="checkbox"/> NJ Reduced <input type="checkbox"/> NJ Full <input type="checkbox"/> FULL CLP <input type="checkbox"/> Disk Deliverable <input type="checkbox"/> Other (Specify) _____	<input type="checkbox"/> Commercial "A" <input type="checkbox"/> Commercial "B" <input type="checkbox"/> ASP Category B <input type="checkbox"/> State Forms	Page 1 of 2 # of Cooler = 6 EPH Analysis: Carbon Ranges, PAH Target Compounds
--	--	---	---	---

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	6/7/10 0905	1	2		2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserved where applica	On Ice:
5		5		<input type="checkbox"/>	<input checked="" type="checkbox"/>

1.8, 1.4, 2.8
2.7, 1.3, 1.7



CHAIN OF CUSTODY

Accutest Job #:
 Accutest Control #:

Client Information	Facility Information	Analytical Information
Name: Environmental Chemical Corporation Address: 33 Boston Post Road West, Suite 340 City: Marlborough, MA 01752 Phone: 508-229-2270	Project Name: Old Navy Fuel Farm Location: NASB Brunswick, Maine Project No.: FAX #: 508-229-7737	Analytical Parameters: TCL VOC (BTEX + MTBE, 8260B) EDB (50.41) TPH GRO (Maine 4.2.17) TPH DRO (Maine 4.1.25) METHANE Alkalinity, Sulfate, Nitrate Ferrous Iron TOTAL ORGANIC CARBON EPH (MADEP -EPH-04-1.1) VPH (MADEP -EPH-04-1.1)

Field ID / Point of Collection	Collection			Matrix	# of bottles	Preservation					TCL VOC (BTEX + MTBE, 8260B)	EDB (50.41)	TPH GRO (Maine 4.2.17)	TPH DRO (Maine 4.1.25)	METHANE	Alkalinity, Sulfate, Nitrate	Ferrous Iron	TOTAL ORGANIC CARBON	EPH (MADEP -EPH-04-1.1)	VPH (MADEP -EPH-04-1.1)
	Date	Time	Sampled By			HCL	Na2S2O3	HNO3	H2SO4	None										
IW-NASB-244	6/3/10	1655	DC	GW	6	X												X	X	
IW-NASB-245	6/4/10	0910	DC	GW	6	X												X	X	
IW-NASB-209R	6/4/10	1005	DC	GW	6	X												X	X	
IW-NASB-702	6/4/10	1110	DC	GW	6	X												X	X	
IW-NASB-702-MS	6/4/10	1110	DC	GW	6	X												X	X	
IW-NASB-702-MSD	6/4/10	1110	DC	GW	6	X												X	X	
IW-NASB-DUP1	6/4/10	00:00	DC	GW	6	X												X	X	
NFF-Rinsate blank	6/4/10	1400	DC	GW	6	X												X	X	

Turnaround Information	Data Deliverable Information	Comments / Remarks
<input type="checkbox"/> 21 Day Standard <input type="checkbox"/> 14 Day <input type="checkbox"/> 7 Days EMERGENCY <input type="checkbox"/> Other _____ (Days)	<input type="checkbox"/> NJ Reduced <input type="checkbox"/> NJ Full <input type="checkbox"/> FULL CLP <input type="checkbox"/> Disk Deliverable <input type="checkbox"/> Other (Specify) _____	<input type="checkbox"/> Commercial "A" <input type="checkbox"/> Commercial "B" <input type="checkbox"/> ASP Category B <input type="checkbox"/> State Forms

Page 2 of 2 # of Cooler = 6
 EPH Analysis: Carbon Ranges, PAH Target Compounds

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1 <i>[Signature]</i>	Date Time: 6/7/10 0905	Received By: 1 <i>[Signature]</i>	Relinquished By: 2	Date Time:	Received By:
Relinquished by Sampler: 3	Date Time:	Received By: 3 <i>[Signature]</i>	Relinquished By: 4	Date Time:	Received By:
Relinquished by Sampler: 5	Date Time:	Received By: 5	Seal #	Preserved where applica <input type="checkbox"/>	On Ice: <input type="checkbox"/>

FIELD RECORD OF WELL GAUGING

Well Identification Number	Well Lock Status	Stick Up or F.M.	Well Physical Condition	VOC Concentrations		PVC Casing Elevation (ft)	Well Diameter (inches)	Total Depth of Well (ft)	Installed Depth of Well (ft)	Depth to Water Sep-09 (ft)	Depth to Water Jun-10 (ft)	Water Table Elev Apr-10 (ft MSL)	Dedicated Pump X = In Well O = In Plant
				Ambient Air (ppm)	Well Mouth (ppm)								
ONFF													
MW-NASB-046	Locked	Stick Up	O.K.	0	0	71.30	2	15.65	NA	—	6.03	—	0
MW-NASB-049	Locked	Stick Up	O.K.	0	0	68.29	2	12.77	NA	—	6.00	—	0
MW-NASB-051	Locked	Stick Up	O.K.	0	0	73.41	2	15.95	NA	—	5.72	—	0
MW-NASB-058	Locked	Stick Up	O.K.	0	0	69.80	2	16.30	NA	—	6.70	—	0
MW-NASB-062	Locked	Stick Up	OK	0	0	80.73	2	16.83	NA	—	9.99	—	0
MW-NASB-065	Locked	Stick up	OK	0	0	74.29	2	10.55	NA	—	5.13	—	X
MW-NASB-098	Locked	Stick Up	Bent *	0	0	76.53	2	16.20	NA	—	8.01	—	X Tubing
MW-NASB-206	see comment	Stick Up	O.K.	0	0	59.01	2	11.66	NA	—	6.98	—	0
MW-NASB-207	Locked	Stick Up	O.K.	0	0	66.22	2	18.00	NA	—	7.71	—	0
MW-NASB-208BR	Flush Mount	F.M.	O.K.	0	0	69.85	2	19.85	NA	—	6.18	—	0
MW-NASB-209R	Flush mount	F.M.	O.K.	0	0	72.94	2	10.25	NA	—	5.78	—	0
MW-NASB-210	Locked	Stick Up	OK	0	0	77.55	2	16.89	NA	—	8.06	—	0
MW-NASB-244	Flush mount	F.M.	O.K.	0	0	70.73	2	9.94	NA	—	5.27	—	0
MW-NASB-245	Flush mount	F.M.	OK	0	0	67.51	2	9.94	NA	—	5.98	—	0
MW-NASB-701	Locked	Stick Up	Blockage	0	0	74.41	2	5.72	NA	—	Dry *	—	0
MW-NASB-702	Locked	Stick Up	O.K.	0	0	73.63	2	15.11	NA	—	7.58	—	0
MW-NASB-703	Lock Tab	Stick Up	Blockage	0	0	72.97	2	5.55	NA	—	Dry †	—	0

Comments:

* MW-NASB-098 is bent. possibly due to lawn mower or Drill rig. able to collect sample with peristaltic pump, not groundfos due to bend.

- * MW-NASB-701 - Blockage @ 5.72'
- X MW-NASB-703 - Blockage @ 5.55'
- MW-NASB-206 = unable to lock due to casing settled causing riser to be higher unable to lock.
- MW-NASB-244 ; MW-NASB-245 unable to Bolt cover Flush due to Road Box settling causing riser to be too high.



INSTRUMENT CALIBRATION LOG

Project/Site Name: NASB, ME. ONFF

Date 6/2/10

Weather 65° overcast

Calibrated By David Gmeuv

Instrument YSI 650 MDS
YSI 6820

Serial Number 02A0841 AB
3524

Parameters	Morning Calibration	Calibration Temp	Afternoon Cal Check	Comments
Conductivity (uS/cm ^o)	1413	20.02	1371	
pH (7)	7.00	20.16	7.05	
pH (4)	4.00	20.32	3.96	
pH (10)	10.02	20.27	9.97	
ORP (mV)	240	20.29	243.0	
Dissolved Oxygen (%)	100.6	18.92	103.5	
Zero Dissolved Oxygen (mg/L)	9.28 ^{0.03}	18.92 ^{20.22}	0.13	
Barometric Pressure (mmHg)	767.2	18.92	755.1	



INSTRUMENT CALIBRATION LOG

Project/Site Name: NASB, ME. ONFF

Date 6/3/10

Weather 60° Rain

Calibrated By David Comen

Instrument YSI 650 MDS
YSI 6820

Serial Number 02 A0 841 AB
3524

Parameters	Morning Calibration	Calibration Temp	Afternoon Cal Check	Comments
Conductivity (uS/cm ^o)	1413	20.44	1414	
pH (7)	7.00	20.93	6.99	
pH (4)	4.00	20.93	4.06	
pH (10)	10.00	20.99	10.02	
ORP (mV)	240	20.82	241.7	
Dissolved Oxygen (%)	99.4	19.86	98.5	
Zero Dissolved Oxygen (mg/L)	0.10	20.11	0.13	
Barometric Pressure (mmHg)	755.1	19.86	757.9	



INSTRUMENT CALIBRATION LOG

Project/Site Name: NASB, ME. ONFK

Date 6/4/10

Weather 70° clear sky

Calibrated By David Comeau

Instrument YSI 650 MDS
YSI 6820

Serial Number 02A0841A/B
3524

Parameters	Morning Calibration	Calibration Temp	Afternoon Cal Check	Comments
Conductivity (uS/cm ²)	1413	19.65	1410	
pH (7)	7.06	20.02	7.06	
pH (4)	4.00	19.95	4.02	
pH (10)	10.00	20.01	9.98	
ORP (mV)	240	20.07	241.7	
Dissolved Oxygen (%)	99.7	19.55	98.2	
Zero Dissolved Oxygen (mg/L)	0.12	18.87	0.15	
Barometric Pressure (mmHg)	757.9	19.55	755.0	

APPENDIX B

**Data Validation Memos and Laboratory Analytical Results
(Form I's and MEDEP EDD Format)**



Region I, EPA-NE ORGANIC REGIONAL DATA ASSESSMENT

LAB NAME: Accutest Lab
SDG #: M91970
EPA-NE DV TIER LEVEL: II
SITE NAME: Old Navy Fuel Farm NAS Brunswick

Number of SAMPLES/MATRIX: 14 samples, 2-FD, and 1 trip blank/all aqueous samples.
VALIDATION CONTRACTOR: ECC
VALIDATOR'S NAME: Jackson Kiker
DV Completion Date: 28 July 2010.
Date Sampled: 2-4 June 2010

ANALYTICAL DATA QUALITY SUMMARY

Table with 4 columns: Item Number, VPH, EPH, and a blank column. Rows 1-16 list various quality control items and their results.

O = Data had no problems or were qualified due to minor contractual problems; M = Data were qualified due to major/systemic MPC exceedences; Z = Data were rejected as unusable due to major contractual problems.

ACTION ITEMS: (Z items): None.

AREAS OF CONCERN: (M items):

EPH: Surrogate: low 1-chlorooctadecane: J detects and UJ non-detects in sample 14. Breakthrough and LCS: naphthalene (NP) and 2-methylnaphthalene (2-MNP) %R>5%. All NP and 2-MNP qualified UJ. LCS %R<LCL for NP and 2-MNP.

VPH: none. Comments: VPH naphthalene results were non-detect, which shows marginal EPH naphthalene breakthrough (re-confirmed) did not impact EPH results.



Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	Work Order Number
Tier II Modified	Groundwater	HCl	5 coolers – 2.8, 2.3, 1.4, 2.7, 1.7 and 1.3 °C	Accutest Laboratories, Marlborough, MA	M91970

Field Identification of Samples Evaluated:

MW-NASB-046	M91970-10
MW-NASB-049	M91970-11
MW-NASB-206	M91970-12
MW-NASB-244	M91970-13
MW-NASB-245	M91970-14
MW-NASB-209R	M91970-15
MW-NASB-702	M91970-16
MW-NASB-DUP-1	M91970-17
ONFF-RINSATE BLANK	M91970-18
MW-NASB-051	M91970-2
MW-NASB-058	M91970-3
MW-NASB-062	M91970-4
MW-NASB-098	M91970-5
MW-NASB-DUP2	M91970-6
MW-NASB-207	M91970-7
MW-NASB-208BR	M91970-8
MW-NASB-210	M91970-9
MW-NASB-046	M91970-10
MW-NASB-049	M91970-11

Note: the last two digits in the lab sample number is used below to describe the field sample.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inventory	QUAL BIAS
COC	1) Unbroken custody (accept or if broken R) 2) Temp ≤ 6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature. J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C. Sample custody transferred from Field Team Leader to lab sample courier. Unbroken Chain of Custody. Sample preservation within limits. No samples qualified.	X	-
Holding Time	1) 14 Days to analysis –detects, UJ or R –nondetects (function of time)	All samples extracted and analyzed within holding times. No samples qualified.	X	-
TripBlank	1) no detects >MRL	Tripblank was non-detect.	X	-
Initial Cal Multipoint (instrument evaluation)	2) Correct calibration stds per method	Instrument GAB21 All RRF's within MPC limits; %RSD < 25% or COD > 0.99 for all EPHs. Acceptable fit.	X	-



REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inventory	QUAL BIAS	
Initial Cal (Linearity)	%RSD < 20% use average RF for calibration %RSD > 20% use least squares COD (r2) > 0.990 or correlation coefficient r > 0.995 or alternatively mean %RSD < 20% for all target analytes, with no analyte %RSD > 30% or %RSD < 30% each target analyte	Instrument GAB21 %RSD < 15% or All calibrations are acceptable.	X	-	
CCV	1) QAPP: 2% of initial calib. curve 2) Qualification-J detects, R or UJ NDs	Instrument GAB21 all other compounds had associated CCV %D's within MPC limits. No samples qualified.	X	-	
2 nd Source ICV	%R (between ICV and Ical) analytes %D ≤ 25%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Instrument MAGCBG ICV %D's within MPC limits. No samples qualified.	X	-	
Lab Blanks (method)	1) analytes < lab QL (contract lab)	Method blank was non-detect for all COCs. No samples qualified.	X	-	
Equip Blank	< 5x (< 10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Rinsate blank non-detect for all VPH analytes	X	-	
Surrogates	Surrogates; Qualification: >UCL J –detects, %R < 10% J –detects, R –NDs, %R > 10% but < 39% J-detects, UJ NDs	Surrogates and percent recoveries are within method limits.	X	-	
LCS Recovery	1) 40-140% 10% and < LCL% J detects, UJ –NDs >UCL% J detects < 10% R NDs, J-detects	LCS recoveries are within MPC limits.	X	-	
LCS/LCSD	1) RPD < 25%	All LCS RPD's are less than 25%.	X	-	
MS Recovery	1) 50-150% (if MS > 4X native levels) Qualification of MS sample: < 10% J detects, R NDs > 10% and < 70% J detects, UJ -NDs > 130% J detects	Sample 16 MS/MSD %R in limits. No matrix interference evident.	X	-	
MS/MSD RPD	RPD < 50% for analytes 5X the MRL. (this QC check is discretionary)	Sample 16 MS/MSD %RPD acceptable. Lab precision is acceptable.	X		
Laboratory Sample Replicate	RPD < 50% (not required by updated EPH SOP)	NA	-	-	



REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inventory	QUAL BIAS
Field Dup RPD	1) RPD ≤ 50% water; ≤ 50% soil for Results > 2X PQL (FD pair only) J-detects (both > 2X PQL) 2) If one >2X PQL, other ND, J-detections, UJ non-detect	Field duplicate sample pairs: <u>FD Field Sample</u> 17 16 6 5 All results in FD pair 17/.16. FD pair 6/5: MTBE detected in field duplicate at just above the Reporting limit, which is the low-level standard, and not detected in the field sample. This MTBE results may be a false positive	X	MTBE Qualify as J in sample 6 and UJ in sample 5.
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	NA	-	-
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL - J -detects (estimated)	No samples required dilution. All reporting limits were less than Tier I Guidelines.	X	-
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems Evaluate sampling errors – field contamination, sample hold times	<u>Analytical Error Evaluation:</u> Laboratory precision is acceptable, as the LCS/LCSD RPD are within limits, except for NP and 2-MP due to breakthrough (results confirmed by re-fractionation). . Laboratory accuracy is acceptable for all compounds (except NP and 2-MNP) and hydrocarbon ranges. The method blank was non-detect. Surrogate low in sample 14. Overall laboratory precision and accuracy are acceptable, but accuracy should be considered low. ICAL; within MPC (linear calibration per laboratory notes). ICV: within MPC for %drift. CCV: within MPC limits. <u>Sampling Error Evaluaiton:</u> Field duplicate sample pairs: <u>FD Field Sample</u> 17 16 6 5 All results in FD pair 17/.16. FD pair 6/5: MTBE detected in field duplicate at just above the Reporting limit, which is the low-level standard, and not detected in the field sample. This MTBE results may be a false positive All results in FD pair were non-detect.	X	-



REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inventory	QUAL BIAS	
		Overall sampling precision is acceptable Trip blank and rinsate blank had non-detect results for all VPH compounds.			



Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	Work Order Number
Tier II Modified	Groundwater	HCl	5 coolers – 2.8, 2.3, 1.4, 2.7, 1.7 and 1.3 °C	Accutest Laboratories, Marlborough, MA	M91970

Field Identification of Samples Evaluated:

MW-NASB-046	M91970-10
MW-NASB-049	M91970-11
MW-NASB-206	M91970-12
MW-NASB-244	M91970-13
MW-NASB-245	M91970-14
MW-NASB-209R	M91970-15
MW-NASB-702	M91970-16
MW-NASB-DUP-1	M91970-17
ONFF-RINSATE BLANK	M91970-18
MW-NASB-051	M91970-2
MW-NASB-058	M91970-3
MW-NASB-062	M91970-4
MW-NASB-098	M91970-5
MW-NASB-DUP2	M91970-6
MW-NASB-207	M91970-7
MW-NASB-208BR	M91970-8
MW-NASB-210	M91970-9
MW-NASB-046	M91970-10
MW-NASB-049	M91970-11

Note: the last two digits in the lab sample number is used below to describe the field sample.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inventory	QUAL BIAS
COC	1) Unbroken custody (accept or if broken R) 2) Temp ≤ 6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature. J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C. Sample custody transferred from Field Team Leader to lab sample courier. Unbroken Chain of Custody. Sample preservation within limits. No samples qualified.	X	-
Holding Time	1) 14 Days to prep. 40 days to analysis – detects, UJ or R –nondetects (function of time)	All samples extracted and analyzed within holding times. No samples qualified.	X	-
Initial Cal Multipoint (instrument evaluation)	1) Correct calibration stds per method	Instrument MAGCBG All RRF's within MPC limits; %RSD < 15% or COD > 0.99 for all EPHs. Acceptable fit.	X	-
Initial Cal (Linearity)	%RSD < 20% use average RF for calibration %RSD > 20% use least squares COD (r2) > 0.990 or correlation coefficient r > 0.995 or alternatively mean %RSD < 20% for all target analytes, with no analyte %RSD > 30% or %RSD < 30% each target analyte	Instrument MAGCBG %RSD < 15% or All calibrations are acceptable.	X	-



REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inventory	QUAL BIAS	
CCV	1) QAPP: 2% of initial calib. curve 2) Qualification-J detects, R or UJ NDs	Instrument Instrument MAGCBG All other compounds had associated CCV %D's within MPC limits. No samples qualified.	X	-	
2 nd Source ICV	%R (between ICV and Ical) analytes %D ≤ 25%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Instrument MAGCBG ICV %D's within MPC limits. No samples qualified.	X	-	
Lab Blanks (method)	1) analytes <lab QL (contract lab)	Method blank was non-detect for all COCs. No samples qualified.	X	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Equipment blank was non-detect for all analytes.	X	-	
Surrogates	Surrogates; Chloro-octadecane 40-140% Ortho-terphenyl 40-140% Fractionation Surrogates: 2-Fluorobiphenyl 40-140% 2-Bromonaphthalene 40-140% Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R>10% but <39% J-detects, UJ NDs	Surrogates and percent recoveries are within method limits, except for low %R <LCL for 1-chlorooctadecane which was low in the MS and in sample 14. . Fractionation Surrogates were in limits for samples	X	Non-detects in sample 14 qualified UJ	
LCS Recovery	1) 40-140% 10% and <LCL% J detects, UJ –NDs >UCL% J detects <10% R NDs, J-detects	LCS recoveries are within MPC limits, except for naphthalene (NP) and 2-methylnaphthalene (2-MNP)	X	2-MNP and NP qualified UJ in all samples	
LCS/LCSD	1) RPD<25%	All LCS RPD's are less than 25% ,except for NP and 2-MNP. Laboratory precision is acceptable.	X	2-MNP and NP qualified UJ in all samples -	
MS Recovery	1) 50-150% (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >130% J detects	Sample 16 MS/MSD %R in limits. No matrix interference evident.	X	-	
MS/MSD RPD	RPD<50% for analytes 5X the MRL. (this QC check is discretionary)	Sample 16 MS/MSD %RPD acceptable. Lab precision is acceptable.	X		
Laboratory Sample Replicate	RPD<50% (not required by updated EPH SOP)	NA	-	-	



REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inventory	QUAL BIAS
Field Dup RPD	1) RPD ≤ 50% water; ≤ 50% soil for Results > 2X PQL (FD pair only) J-detects (both > 2X PQL) 2) If one >2X PQL, other ND, J-detections, UJ non-detect	Field duplicate sample pairs: <u>FD</u> <u>Field Sample</u> 17 16 6 5 All results in FD pair were non-detect. Overall sampling precision is acceptable	X	-
Naphthalene breakthrough check	<5% in aliphatic range	All breakthrough checks >5% for NP and 2-MNP, which indicates breakthrough. Potential low bias for NP, but VPH analysis was also non-detect for this compound. Also potential for high bias in aliphatic range carbons, but these were non-detect. Breakthrough accounts for the LCS and LCSD NP and 2-MNP results being out of MPC.	X	2-MNP and NP qualified UJ in all samples.
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	NA	-	-
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL - J -detects (estimated)	No samples required dilution. All reporting limits were less than Tier I Guidelines.	X	-
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems Evaluate sampling errors – field contamination, sample hold times	<u>Analytical Error Evaluation:</u> Laboratory precision is acceptable, as the LCS/LCSD RPD are within limits, except for NP and 2-MP due to breakthrough (results confirmed by re-fractionation). . Laboratory accuracy is acceptable for all compounds (except NP and 2-MNP) and hydrocarbon ranges. The method blank was non-detect. Surrogate low in sample 14. Overall laboratory precision and accuracy are acceptable, but accuracy should be considered low. ICAL; within MPC (linear calibration per laboratory notes). ICV: within MPC for %drift. CCV: within MPC limits. <u>Sampling Error Evaluation:</u> Field duplicate sample pairs: <u>FD</u> <u>Field Sample</u> 17 16 6 5 All results in FD pair were non-detect. Overall sampling precision is acceptable Rinsate blank was non-detect, so there was no apparent cross contamination.	X	-



REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inventory	QUAL BIAS	

Report of Analysis

3.1
3

Client Sample ID: ONFF-QT1		Date Sampled: 06/02/10
Lab Sample ID: M91970-1		Date Received: 06/07/10
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: MADEP VPH REV 1.1		
Project: Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58135.D	1	06/08/10	AP	n/a	n/a	GAB3210
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	91%		70-130%
615-59-8	2,5-Dibromotoluene	91%		70-130%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-051	Date Sampled:	06/02/10
Lab Sample ID:	M91970-2	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG19316.D	1	07/23/10	WZ	06/16/10	OP21658	GBG617
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		40-140%
321-60-8	2-Fluorobiphenyl	86%		40-140%
3386-33-2	1-Chlorooctadecane	58%		40-140%
580-13-2	2-Bromonaphthalene	74%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-NASB-058		Date Sampled: 06/02/10
Lab Sample ID: M91970-3		Date Received: 06/07/10
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: MADEP VPH REV 1.1		
Project: Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58137.D	1	06/08/10	AP	n/a	n/a	GAB3210
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	80%		70-130%
615-59-8	2,5-Dibromotoluene	80%		70-130%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-058	Date Sampled:	06/02/10
Lab Sample ID:	M91970-3	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG19317.D	1	07/23/10	WZ	06/16/10	OP21658	GBG617
Run #2							

Run #	Initial Volume	Final Volume
Run #1	990 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	5.1	ug/l	
208-96-8	Acenaphthylene	ND	5.1	5.1	ug/l	
120-12-7	Anthracene	ND	5.1	5.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	5.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	5.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	5.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	5.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	5.1	ug/l	
218-01-9	Chrysene	ND	5.1	5.1	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.1	5.1	ug/l	
206-44-0	Fluoranthene	ND	5.1	5.1	ug/l	
86-73-7	Fluorene	ND	5.1	5.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	5.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	5.1	ug/l	
91-20-3	Naphthalene	ND	5.1	5.1	ug/l	
85-01-8	Phenanthrene	ND	5.1	5.1	ug/l	
129-00-0	Pyrene	ND	5.1	5.1	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		40-140%
321-60-8	2-Fluorobiphenyl	76%		40-140%
3386-33-2	1-Chlorooctadecane	49%		40-140%
580-13-2	2-Bromonaphthalene	70%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-NASB-062	
Lab Sample ID: M91970-4	Date Sampled: 06/02/10
Matrix: AQ - Ground Water	Date Received: 06/07/10
Method: MADEP VPH REV 1.1	Percent Solids: n/a
Project: Brunswick Naval Air Station, Brunswick, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58138.D	1	06/08/10	AP	n/a	n/a	GAB3210
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	84%		70-130%
615-59-8	2,5-Dibromotoluene	83%		70-130%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-062	Date Sampled:	06/02/10
Lab Sample ID:	M91970-4	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG19318.D	1	07/23/10	WZ	06/16/10	OP21658	GBG617
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		40-140%
321-60-8	2-Fluorobiphenyl	76%		40-140%
3386-33-2	1-Chlorooctadecane	54%		40-140%
580-13-2	2-Bromonaphthalene	64%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-NASB-098	
Lab Sample ID: M91970-5	Date Sampled: 06/02/10
Matrix: AQ - Ground Water	Date Received: 06/07/10
Method: MADEP VPH REV 1.1	Percent Solids: n/a
Project: Brunswick Naval Air Station, Brunswick, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58139.D	1	06/08/10	AP	n/a	n/a	GAB3210
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	103%		70-130%
615-59-8	2,5-Dibromotoluene	100%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-098	Date Sampled:	06/02/10
Lab Sample ID:	M91970-5	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG19319.D	1	07/23/10	WZ	06/16/10	OP21658	GBG617
Run #2							

Run #	Initial Volume	Final Volume
Run #1	980 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	5.1	ug/l	
208-96-8	Acenaphthylene	ND	5.1	5.1	ug/l	
120-12-7	Anthracene	ND	5.1	5.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	5.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	5.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	5.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	5.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	5.1	ug/l	
218-01-9	Chrysene	ND	5.1	5.1	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.1	5.1	ug/l	
206-44-0	Fluoranthene	ND	5.1	5.1	ug/l	
86-73-7	Fluorene	ND	5.1	5.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	5.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	5.1	ug/l	
91-20-3	Naphthalene	ND	5.1	5.1	ug/l	
85-01-8	Phenanthrene	ND	5.1	5.1	ug/l	
129-00-0	Pyrene	ND	5.1	5.1	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%		40-140%
321-60-8	2-Fluorobiphenyl	78%		40-140%
3386-33-2	1-Chlorooctadecane	49%		40-140%
580-13-2	2-Bromonaphthalene	69%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-DUP2	Date Sampled:	06/02/10
Lab Sample ID:	M91970-6	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58169.D	1	06/09/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.0	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	75%		70-130%
615-59-8	2,5-Dibromotoluene	72%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-DUP2	Date Sampled:	06/02/10
Lab Sample ID:	M91970-6	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG19320.D	1	07/23/10	WZ	06/16/10	OP21658	GBG617
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		40-140%
321-60-8	2-Fluorobiphenyl	85%		40-140%
3386-33-2	1-Chlorooctadecane	64%		40-140%
580-13-2	2-Bromonaphthalene	69%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-207	Date Sampled:	06/03/10
Lab Sample ID:	M91970-7	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58170.D	1	06/09/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	73%		70-130%
615-59-8	2,5-Dibromotoluene	70%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

37
3

Client Sample ID: MW-NASB-207		Date Sampled: 06/03/10
Lab Sample ID: M91970-7		Date Received: 06/07/10
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: MADEP EPH REV 1.1 SW846 3510C		
Project: Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG19321.D	1	07/23/10	WZ	06/16/10	OP21658	GBG617
Run #2							

Run #	Initial Volume	Final Volume
Run #1	990 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	5.1	ug/l	
208-96-8	Acenaphthylene	ND	5.1	5.1	ug/l	
120-12-7	Anthracene	ND	5.1	5.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	5.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	5.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	5.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	5.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	5.1	ug/l	
218-01-9	Chrysene	ND	5.1	5.1	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.1	5.1	ug/l	
206-44-0	Fluoranthene	ND	5.1	5.1	ug/l	
86-73-7	Fluorene	ND	5.1	5.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	5.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	5.1	ug/l	
91-20-3	Naphthalene	ND	5.1	5.1	ug/l	
85-01-8	Phenanthrene	ND	5.1	5.1	ug/l	
129-00-0	Pyrene	ND	5.1	5.1	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		40-140%
321-60-8	2-Fluorobiphenyl	84%		40-140%
3386-33-2	1-Chlorooctadecane	49%		40-140%
580-13-2	2-Bromonaphthalene	77%		40-140%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-208BR	Date Sampled:	06/03/10
Lab Sample ID:	M91970-8	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58171.D	1	06/09/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	75%		70-130%
615-59-8	2,5-Dibromotoluene	72%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-208BR	Date Sampled:	06/03/10
Lab Sample ID:	M91970-8	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG19323.D	1	07/23/10	WZ	06/16/10	OP21658	GBG617
Run #2							

Run #	Initial Volume	Final Volume
Run #1	970 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	5.2	ug/l	
208-96-8	Acenaphthylene	ND	5.2	5.2	ug/l	
120-12-7	Anthracene	ND	5.2	5.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	5.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	5.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	5.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	5.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	5.2	ug/l	
218-01-9	Chrysene	ND	5.2	5.2	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.2	5.2	ug/l	
206-44-0	Fluoranthene	ND	5.2	5.2	ug/l	
86-73-7	Fluorene	ND	5.2	5.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	5.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	5.2	ug/l	
91-20-3	Naphthalene	ND	5.2	5.2	ug/l	
85-01-8	Phenanthrene	ND	5.2	5.2	ug/l	
129-00-0	Pyrene	ND	5.2	5.2	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	60%		40-140%
321-60-8	2-Fluorobiphenyl	70%		40-140%
3386-33-2	1-Chlorooctadecane	49%		40-140%
580-13-2	2-Bromonaphthalene	61%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-210	Date Sampled:	06/03/10
Lab Sample ID:	M91970-9	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18193.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		40-140%
321-60-8	2-Fluorobiphenyl	77%		40-140%
3386-33-2	1-Chlorooctadecane	42%		40-140%
580-13-2	2-Bromonaphthalene	62%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-046	Date Sampled:	06/03/10
Lab Sample ID:	M91970-10	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58173.D	1	06/09/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	79%		70-130%
615-59-8	2,5-Dibromotoluene	74%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-046	Date Sampled:	06/03/10
Lab Sample ID:	M91970-10	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18194.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	950 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	5.3	ug/l	
208-96-8	Acenaphthylene	ND	5.3	5.3	ug/l	
120-12-7	Anthracene	ND	5.3	5.3	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	5.3	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	5.3	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	5.3	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	5.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	5.3	ug/l	
218-01-9	Chrysene	ND	5.3	5.3	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.3	5.3	ug/l	
206-44-0	Fluoranthene	ND	5.3	5.3	ug/l	
86-73-7	Fluorene	ND	5.3	5.3	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	5.3	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	5.3	ug/l	
91-20-3	Naphthalene	ND	5.3	5.3	ug/l	
85-01-8	Phenanthrene	ND	5.3	5.3	ug/l	
129-00-0	Pyrene	ND	5.3	5.3	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	110	110	ug/l	
	C9-C18 Aliphatics	ND	110	110	ug/l	
	C19-C36 Aliphatics	ND	110	110	ug/l	
	C11-C22 Aromatics	ND	110	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		40-140%
321-60-8	2-Fluorobiphenyl	68%		40-140%
3386-33-2	1-Chlorooctadecane	48%		40-140%
580-13-2	2-Bromonaphthalene	58%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-049	Date Sampled:	06/03/10
Lab Sample ID:	M91970-11	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58174.D	1	06/09/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	72%		70-130%
615-59-8	2,5-Dibromotoluene	70%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-049	Date Sampled:	06/03/10
Lab Sample ID:	M91970-11	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18195.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	970 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	5.2	ug/l	
208-96-8	Acenaphthylene	ND	5.2	5.2	ug/l	
120-12-7	Anthracene	ND	5.2	5.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	5.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	5.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	5.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	5.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	5.2	ug/l	
218-01-9	Chrysene	ND	5.2	5.2	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.2	5.2	ug/l	
206-44-0	Fluoranthene	ND	5.2	5.2	ug/l	
86-73-7	Fluorene	ND	5.2	5.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	5.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	5.2	ug/l	
91-20-3	Naphthalene	ND	5.2	5.2	ug/l	
85-01-8	Phenanthrene	ND	5.2	5.2	ug/l	
129-00-0	Pyrene	ND	5.2	5.2	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	62%		40-140%
321-60-8	2-Fluorobiphenyl	60%		40-140%
3386-33-2	1-Chlorooctadecane	43%		40-140%
580-13-2	2-Bromonaphthalene	49%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-206	Date Sampled:	06/03/10
Lab Sample ID:	M91970-12	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58175.D	1	06/09/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	80%		70-130%
615-59-8	2,5-Dibromotoluene	76%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-NASB-206		Date Sampled: 06/03/10
Lab Sample ID: M91970-12		Date Received: 06/07/10
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: MADEP EPH REV 1.1 SW846 3510C		
Project: Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18196.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	970 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	5.2	ug/l	
208-96-8	Acenaphthylene	ND	5.2	5.2	ug/l	
120-12-7	Anthracene	ND	5.2	5.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	5.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	5.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	5.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	5.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	5.2	ug/l	
218-01-9	Chrysene	ND	5.2	5.2	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.2	5.2	ug/l	
206-44-0	Fluoranthene	ND	5.2	5.2	ug/l	
86-73-7	Fluorene	ND	5.2	5.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	5.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	5.2	ug/l	
91-20-3	Naphthalene	ND	5.2	5.2	ug/l	
85-01-8	Phenanthrene	ND	5.2	5.2	ug/l	
129-00-0	Pyrene	ND	5.2	5.2	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		40-140%
321-60-8	2-Fluorobiphenyl	74%		40-140%
3386-33-2	1-Chlorooctadecane	43%		40-140%
580-13-2	2-Bromonaphthalene	63%		40-140%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-NASB-244	
Lab Sample ID: M91970-13	Date Sampled: 06/03/10
Matrix: AQ - Ground Water	Date Received: 06/07/10
Method: MADEP VPH REV 1.1	Percent Solids: n/a
Project: Brunswick Naval Air Station, Brunswick, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58176.D	1	06/09/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	79%		70-130%
615-59-8	2,5-Dibromotoluene	74%		70-130%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-244	Date Sampled:	06/03/10
Lab Sample ID:	M91970-13	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18198.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	990 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	5.1	ug/l	
208-96-8	Acenaphthylene	ND	5.1	5.1	ug/l	
120-12-7	Anthracene	ND	5.1	5.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	5.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	5.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	5.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	5.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	5.1	ug/l	
218-01-9	Chrysene	ND	5.1	5.1	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.1	5.1	ug/l	
206-44-0	Fluoranthene	ND	5.1	5.1	ug/l	
86-73-7	Fluorene	ND	5.1	5.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	5.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	5.1	ug/l	
91-20-3	Naphthalene	ND	5.1	5.1	ug/l	
85-01-8	Phenanthrene	ND	5.1	5.1	ug/l	
129-00-0	Pyrene	ND	5.1	5.1	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		40-140%
321-60-8	2-Fluorobiphenyl	72%		40-140%
3386-33-2	1-Chlorooctadecane	45%		40-140%
580-13-2	2-Bromonaphthalene	68%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-NASB-245	
Lab Sample ID: M91970-14	Date Sampled: 06/04/10
Matrix: AQ - Ground Water	Date Received: 06/07/10
Method: MADEP VPH REV 1.1	Percent Solids: n/a
Project: Brunswick Naval Air Station, Brunswick, ME	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58177.D	1	06/10/10	AP	n/a	n/a	GAB3211
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	71%		70-130%
615-59-8	2,5-Dibromotoluene	70%		70-130%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-245	Date Sampled:	06/04/10
Lab Sample ID:	M91970-14	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18199.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	950 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	5.3	ug/l	
208-96-8	Acenaphthylene	ND	5.3	5.3	ug/l	
120-12-7	Anthracene	ND	5.3	5.3	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	5.3	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	5.3	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	5.3	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	5.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	5.3	ug/l	
218-01-9	Chrysene	ND	5.3	5.3	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.3	5.3	ug/l	
206-44-0	Fluoranthene	ND	5.3	5.3	ug/l	
86-73-7	Fluorene	ND	5.3	5.3	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	5.3	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	5.3	ug/l	
91-20-3	Naphthalene	ND	5.3	5.3	ug/l	
85-01-8	Phenanthrene	ND	5.3	5.3	ug/l	
129-00-0	Pyrene	ND	5.3	5.3	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	110	110	ug/l	
	C9-C18 Aliphatics	ND	110	110	ug/l	
	C19-C36 Aliphatics	ND	110	110	ug/l	
	C11-C22 Aromatics	ND	110	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	57%		40-140%
321-60-8	2-Fluorobiphenyl	67%		40-140%
3386-33-2	1-Chlorooctadecane	35% ^a		40-140%
580-13-2	2-Bromonaphthalene	51%		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-209R	Date Sampled:	06/04/10
Lab Sample ID:	M91970-15	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58178.D	1	06/10/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	94%		70-130%
615-59-8	2,5-Dibromotoluene	90%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-NASB-209R	
Lab Sample ID: M91970-15	Date Sampled: 06/04/10
Matrix: AQ - Ground Water	Date Received: 06/07/10
Method: MADEP EPH REV 1.1 SW846 3510C	Percent Solids: n/a
Project: Brunswick Naval Air Station, Brunswick, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18200.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		40-140%
321-60-8	2-Fluorobiphenyl	69%		40-140%
3386-33-2	1-Chlorooctadecane	48%		40-140%
580-13-2	2-Bromonaphthalene	57%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-702	Date Sampled:	06/04/10
Lab Sample ID:	M91970-16	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58181.D	1	06/10/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	102%		70-130%
615-59-8	2,5-Dibromotoluene	97%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-NASB-702	Date Sampled:	06/04/10
Lab Sample ID:	M91970-16	Date Received:	06/07/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18201.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		40-140%
321-60-8	2-Fluorobiphenyl	68%		40-140%
3386-33-2	1-Chlorooctadecane	43%		40-140%
580-13-2	2-Bromonaphthalene	48%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-NASB-DUP-1		
Lab Sample ID: M91970-17		Date Sampled: 06/04/10
Matrix: AQ - Ground Water		Date Received: 06/07/10
Method: MADEP EPH REV 1.1 SW846 3510C		Percent Solids: n/a
Project: Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18202.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		40-140%
321-60-8	2-Fluorobiphenyl	70%		40-140%
3386-33-2	1-Chlorooctadecane	40%		40-140%
580-13-2	2-Bromonaphthalene	59%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ONFF-RINSATE BLANK	
Lab Sample ID: M91970-18	Date Sampled: 06/04/10
Matrix: AQ - Ground Water	Date Received: 06/07/10
Method: MADEP VPH REV 1.1	Percent Solids: n/a
Project: Brunswick Naval Air Station, Brunswick, ME	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB58180.D	1	06/10/10	AP	n/a	n/a	GAB3211
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	3.0	ug/l	
108-88-3	Toluene	ND	2.0	2.0	ug/l	
	m,p-Xylene	ND	2.0	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	50	ug/l	
	C5- C8 Aliphatics	ND	50	50	ug/l	
	C9- C12 Aliphatics	ND	50	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	83%		70-130%
615-59-8	2,5-Dibromotoluene	79%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ONFF-RINSATE BLANK		
Lab Sample ID:	M91970-18	Date Sampled:	06/04/10
Matrix:	AQ - Ground Water	Date Received:	06/07/10
Method:	MADEP EPH REV 1.1 SW846 3510C	Percent Solids:	n/a
Project:	Brunswick Naval Air Station, Brunswick, ME		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG18203.D	1	06/26/10	JD	06/16/10	OP21658	GBG594
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	100	ug/l	
	C9-C18 Aliphatics	ND	100	100	ug/l	
	C19-C36 Aliphatics	ND	100	100	ug/l	
	C11-C22 Aromatics	ND	100	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	56%		40-140%
321-60-8	2-Fluorobiphenyl	54%		40-140%
3386-33-2	1-Chlorooctadecane	51%		40-140%
580-13-2	2-Bromonaphthalene	44%		40-140%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

APPENDIX C

Responses to Regulator Comments

**Response to Comments Received from MEDEP
Ms. Claudia Sait, MEDEP RPM on November 8, 2010
Comments Addressed via email on January 13, 2011**

>>> "Sait, Claudia B" <Claudia.B.Sait@maine.gov> 11/8/2010 3:46 PM >>>

Here are a few comments on the "Summary Initial Baseline EPH and VPH Groundwater Sampling Letter Report –Old Navy Fuel Farm" (Aug 2010).

1. Please add a Maine Certified Geologist Stamp/signature to support the interpretation of groundwater flow. *Response: The State of Maine PG page has been added to the Final Summary Report.*
2. MEDEP does not have boring or well logs for MW-NASB-210, MW-NASB-209R, MW-NASB-244, MW-NASB-245 or MW-NASB-207. If Navy can provide these they would help support interpretation of the offsite data. Based on the shallow clay (5-7 feet bgs) noted in other logs there appears to be little saturated transmissive soil to the south and east of the site. These conditions may also have helped reduce the offsite migration of the plume. *Response: ECC does not have these boring logs in our database or in our GIS.*
3. From the Section 4.2 recommendations – Although this round of sampling did not show significant down-gradient impacts to groundwater, previous site data has varied significantly from round to round, so an additional round may be needed. However MEDEP supports completing an evaluation of the site itself prior to determining whether an additional round is warranted. The investigation approach has been discussed multiple times, and data from the source areas is needed, in particular to assess whether there is any residual in the western portion of the site. Data in the source areas is also needed to support potential transfer of the property. *Response: The EPH/VPH current round of data will be evaluated along with the previous site data and conditions to determine if any additional sampling or investigation is warranted in the source areas. The Navy is still planning to conduct the direct-push source area investigation at the ONFF.*

Claudia Sait
Maine Department of Environmental Protection
Federal Facilities Unit
(207) 287-7713
claudia.b.sait@maine.gov