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SITE INVESTIGATION REPORT FOR FOUR AREAS OF POTENTIAL INTEREST AND SUPPLEMENTAL GROUNDWATER CHARACTERIZATION OF BUILDINGS 225 AND 252

NAS BRUNSWICK ME

1/1/2014

TETRA TECH

Site Investigation Report
for
Four Areas of Potential Interest
and
Supplemental Groundwater Characterization of Buildings 225 and 252

Naval Air Station Brunswick
Brunswick, Maine

Naval Facilities Engineering Command Mid-Atlantic
Contract Number N62470-08-D-1001
Contract Task Order WE49

January 2014

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SITE INVESTIGATION REPORT
FOR
FOUR AREAS OF POTENTIAL INTEREST
AND
SUPPLEMENTAL GROUNDWATER CHARACTERIZATION OF
BUILDINGS 225 AND 252

NAVAL AIR STATION BRUNSWICK
BRUNSWICK, MAINE

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION - NAVY (CLEAN) CONTRACT

Submitted to:
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Contract Number N62470-08-D-1001
Contract Task Order WE49

JANUARY 2014

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CERTIFICATION

By affixing my seal to the "*Site Investigation Report for Four Areas of Potential Interest and Supplemental Groundwater Characterization of Buildings 225 and 252, Former Naval Air Station Brunswick, Brunswick, Maine*," prepared by Tetra Tech and dated January 2014, I am certifying that the geologic information and interpretations herein are true and correct to the best of my knowledge. I further certify that I am licensed to practice in the State of Maine and that it is within my professional expertise to verify the correctness of the information.

STATE OF MAINE
TIMOTHY S. EVANS
GE505
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01/10/14

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ACRONYMS

AOPI	Area of Potential Interest
bgs	below ground surface
CCME	Canadian Council of Ministers of the Environment
CLEAN	Comprehensive Long-Term Environmental Action Navy
COC	chemical of concern
Eco SSL	ecological soil screening level
EPA	United States Environmental Protection Agency
EPH	extractable petroleum hydrocarbons
ERP	Environmental Restoration Program
GPR	ground-penetrating radar
GPS	global positioning system
GSE	ground support equipment
IAS	Initial Assessment Study
MADEP	Massachusetts Department of Environmental Protection
MCL	Maximum Contaminant Level
MEDEP	Maine Department of Environmental Protection
MEG	Maximum Exposure Guideline
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Command
ng/m^3	nanogram per cubic meter
NOAA	National Oceanic and Atmospheric Administration
ORNL	Oak Ridge National Laboratory
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonic acid
PID	photoionization detector
RAG	Remedial Action Guideline
RSL	Regional Screening Level
SIM	Selected Ion Monitoring
SQuirt	Screening Quick Reference Table
SSL	Soil Screening Level
SVOC	semivolatile organic compound
TAL	Target Analyte List

TCE	trichloroethene
Tetra Tech	Tetra Tech NUS, Inc.
UPL	upper prediction limit
UST	underground storage tank
VI	vapor intrusion
VPH	volatile petroleum hydrocarbons
VOC	volatile organic compound

1.0 INTRODUCTION

This Site Investigation Report has been prepared by Tetra Tech NUS, Inc. (Tetra Tech) for Naval Facilities Engineering Command (NAVFAC) Mid-Atlantic under Contract Task Order (CTO) WE49 of the Comprehensive Long-Term Environmental Action Navy (CLEAN), Contract Number N62470-08-D-1001, which is part of the Navy's Environmental Restoration Program (ERP). This report summarizes the activities and results associated with the screening-level investigations conducted in fall 2010 at the following four Areas of Potential Interest (AOPIs) at Naval Air Station (NAS) Brunswick, Maine (see Figure 1-1):

- Mercury Disposal Area
- West Fire Training Area
- Helipad Area
- Former Buildings 7 and 10

In addition, supplemental groundwater screening was conducted at Buildings 225 and 252 as part of the overall field investigation.

The objective of the AOPI investigation was to determine whether additional environmental studies are warranted at the five AOPIs. Field work was performed in general accordance with the final Work Plan (Tech Tech, 2010b). Modifications were made in the field to adjust to actual field conditions encountered. Background information, field investigation activities, results, and recommendations for the Mercury Disposal Area, West Fire Training Area, Helipad Area, Former Buildings 7 and 10, and Building 225 and 252 are summarized in Sections 2 through 6, respectively.

Soil analytical results were compared to the more stringent of United States Environmental Protection Agency (EPA) and Maine Department of Environmental Protection (MEDEP) direct contact and groundwater protection screening criteria [Regional Screening Levels (RSLs) and Remedial Action Guidelines (RAGs), respectively] or the minimum ecological criterion (surface soil only), unless an NAS Brunswick background 95-percent upper prediction limit (UPL) was available and was greater than the minimum of these values (see below). Subsurface soil results were not compared to ecological screening criteria based on an assumed lack of exposure. The following hierarchy was used for selecting ecological screening levels, in order of preference:

- The more stringent of the plant, invertebrate, or wildlife Ecological Soil Screening Levels (Eco SSLs) (EPA, 2008).

- Canadian Council and Ministers of the Environment (CCME) Recommended Canadian Soil Quality Guidelines (2006) and supporting documents.

- The more stringent of the Oak Ridge National Laboratory (ORNL) plant or invertebrate benchmarks (Efroymson et al., 1997a and 1997b).

- The more stringent of National Oceanographic and Atmospheric Administration (NOAA) Screening Quick Reference Tables (SQuiRTs) surface soil benchmarks (Buchman, 2008).

For polynuclear aromatic hydrocarbons (PAHs) (surface soil only) and metals, the minimum EPA, MEDEP, and ecological criterion was replaced by the appropriate NAS Brunswick base-wide background 95-percent UPL value if the background value was greater than the minimum screening criteria.

Groundwater analytical results were compared to the more stringent of EPA tap water RSLs and MEDEP RAGs for residential exposure to groundwater, or to the applicable NAS Brunswick background 95-percent UPLs, if available and if greater than the lesser of the RSL and RAG.

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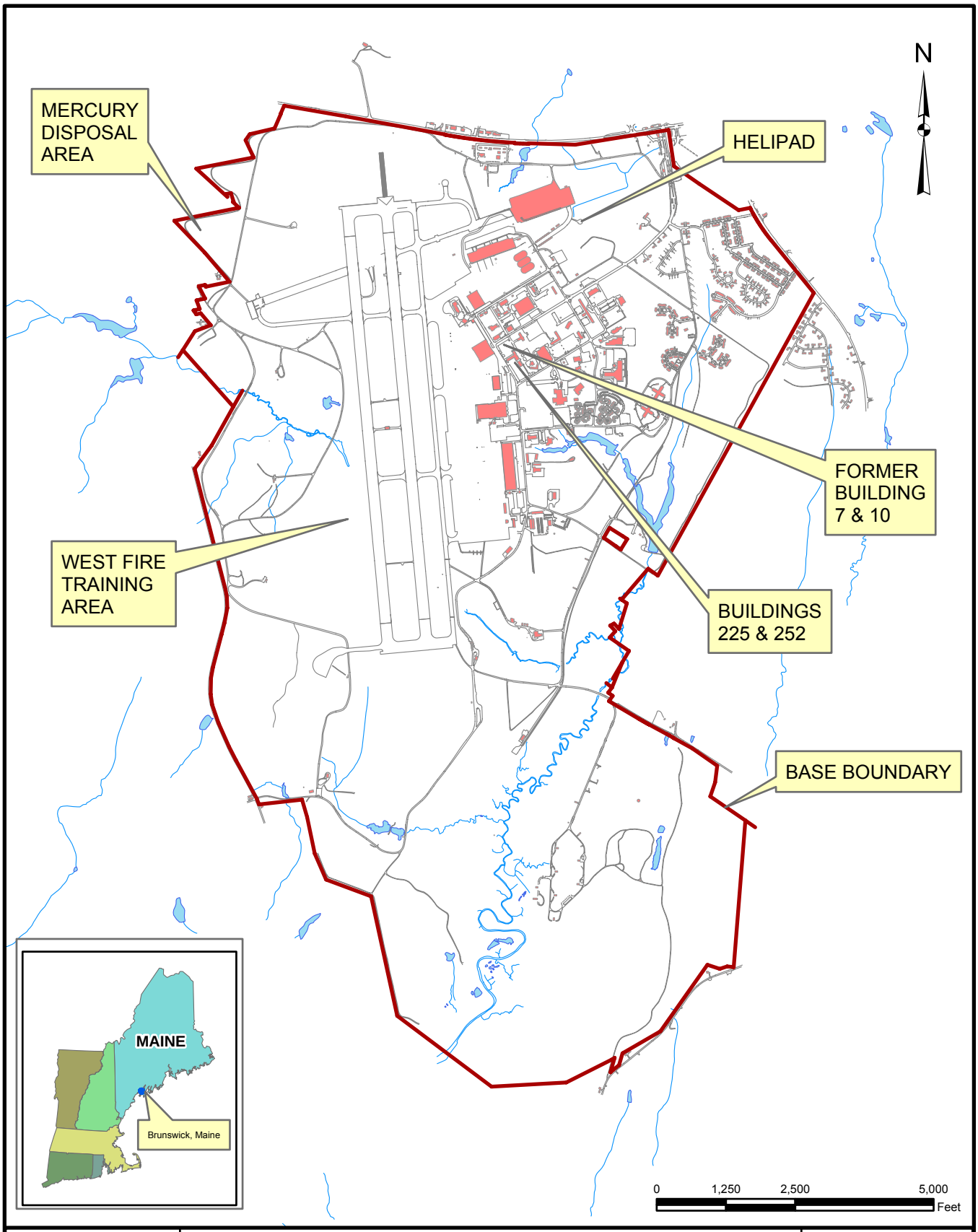

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SITE LOCATION MAP

MERCURY DISPOSAL AREA, HELIPAD, WEST FIRE TRAINING AREA

AND FORMER BUILDINGS 7 AND 10

NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	AS NOTED
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FIGURE NUMBER	1-1

2.0 MERCURY DISPOSAL AREA

The following sections summarize background information, field investigation activities, results, and recommendations based on the results of the Mercury Disposal Area investigation.

2.1 BACKGROUND

The Mercury Disposal Area is located in a wooded area near the northwestern edge of the installation boundary, west of Wilson Avenue and south of Pollard Avenue. As reported by a local resident in the area, a pool of a shiny metallic substance (presumed to be mercury) was observed in 1967 in a shallow depression at this location. On May 13, 2010, Tetra Tech, MEDEP and NAS Brunswick personnel performed a site visit of the area and used a hand-held global positioning system (GPS) unit to record the coordinates of three shallow depressions that were investigated. The surficial and near-surface geology of the area consists of the Upper Sand and Transition units.

2.2 FIELD INVESTIGATION ACTIVITIES

Soil and groundwater samples were collected at the Mercury Disposal Area at three boring locations (NASB-MDA-SB01 through MDA-SB03) and analyzed for mercury. Table 2-1 presents a summary of samples collected, and Figure 2-1 presents the locations sampled at the Mercury Disposal Area during the AOPI investigation.

In accordance with the Work Plan, at 1-foot intervals in each boring, MEDEP personnel conducted mercury vapor screening with a Lumex® RA-915+ mercury vapor analyzer. Screening results from the Lumex® were used to select soil samples for mercury analysis by EPA Method 7471B. MEDEP also screened approximately 12 shallow depressions in the area with a Lumex® RA-915, and only one of the locations had a significant response. SB03 was moved to this location. A total of eight soil samples were collected, two from SB01, two from SB02, and four from SB03 (Table 2-1). Soil boring logs and soil sample log sheets are presented in Appendix A.

One temporary monitoring well was installed at each of the three boring locations (MDA-MW01 through MDA-MW03), and one groundwater sample was collected from each temporary well (Table 2-1). All groundwater samples collected were analyzed for mercury by EPA Method 7470A. Groundwater sample log sheets are presented in Appendix A-5, and groundwater elevation data and groundwater field parameter data are presented in Appendix A, Table A-1 and Table A-2, respectively.

2.3 RESULTS

Soil boring logs indicate that the Upper Sand (mostly fine to medium sand with silt) was present in the Mercury Disposal Area from the surface to depths ranging from 12 to 22.5 feet below ground surface (bgs) and was underlain by the Transition Unit (mostly interbedded mixtures of fine to medium sand and silt). A clay/silt layer with a thickness of 0.4 foot was observed at SB01 at approximately 20 feet bgs and at SB02 from approximately 26 feet bgs; this layer was not encountered at SB03.

Depths to groundwater at the three temporary well locations were approximately 12 to 13 feet bgs (Table A-1). Based on the three water levels and associated groundwater elevations at the Mercury Disposal Area, groundwater flow appears to be eastward, as shown on Figure 2-2.

Lumex® field screening results noted on the boring logs indicated that mercury was not detected [at a detection limit of 10 nanograms per cubic meter (ng/m^3)] in any soil screening samples collected from soil borings SB01 and SB02. Lumex® mercury concentrations at SB03 were as follows:

- Less than 200 ng/m^3 at 0.5 foot bgs
- 1,000 to 3,200 ng/m^3 at 20 feet bgs
- 30 ng/m^3 at 16, 26, 29, and 31 feet

Soil samples were collected above the water table at SB01 and above the clay/silt layer at SB01 and SB02. At SB03, soil samples were collected from four depth intervals where Lumex® mercury readings were elevated (0 to 1, 11 to 12, 19 to 20, and 29 to 30 feet). Mercury was only detected in the surface soil sample (0 to 1 foot bgs) from SB03 at a concentration of 0.74 mg/kg (average), greater than the Upper Sand surface soil background UPL of 0.1 mg/kg (see Figure 2-3). The detected concentration slightly exceeded EPA's risk-based groundwater protection (soil-to-groundwater leachability) Soil Screening Level (SSL) (included in the RSL table) but not EPA or MEDEP residential criteria or the minimum ecological criterion. Mercury was not detected in subsurface soil or groundwater samples.

Table 2-2 presents a summary of data for the single positive detection of mercury in surface and subsurface soil samples. A table was not generated for groundwater because mercury was not detected in temporary well samples. Appendix B-1 includes the complete soil analytical results, and Appendix B-2 includes complete groundwater analytical results.

2.4 RECOMMENDATIONS

Because mercury was detected at a low concentration, less than the applicable residential criteria, in only one surface soil sample and was not detected in groundwater, no further action is recommended for the Mercury Disposal Area.

TABLE 2-1

SOIL AND GROUNDWATER SAMPLE SUMMARY - MERCURY DISPOSAL AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID	SAMPLE INTERVAL (ft bgs)	GEOLOGIC UNIT	ANALYSIS
SOIL			
NASB-MDA-SB-SB01-1112	11 - 12	Upper Sand	Mercury
NASB-MDA-SB-SB01-1819	18 - 19	Upper Sand	Mercury
NASB-MDA-SB-SB02-1011	10 - 11	Upper Sand	Mercury
NASB-MDA-SB-SB02-2728	27 - 28	Transition	Mercury
NASB-MDA-SB-SB03-0001	0 - 1	Upper Sand	Mercury
NASB-MDA-SB-SB03-1112	11 - 12	Upper Sand	Mercury
NASB-MDA-SB-SB03-1920	19 - 20	Transition	Mercury
NASB-MDA-SB-SB03-2930	29 - 30	Transition	Mercury
GROUNDWATER			
NASB-MDA-GW01	14.5 - 19.5	Upper Sand	Mercury
NASB-MDA-GW02	18 - 28	Transition	Mercury
NASB-MDA-GW03	24 - 34	Transition	Mercury

ft bgs - Feet below ground surface.

TABLE 2-2

SURFACE SOIL DETECTIONS - MERCURY DISPOSAL AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Residential		Protection of Groundwater			Ecological (Source)[3]	NAS Brunswick Background 95% UPL[4]	Minimum Screening Criterion[5]	NASB-MDA-SB-SB03 (0 to 1 ft bgs)		
	EPA RSL[1]	Maine RAG[2]	MCL-Based SSL[1]	Risk-Based SSL[1]	Leaching to GW RAG[2]				Sample	Duplicate	Average
Mercury (mg/kg)	10	51	0.1	0.033	NC	12 (3b)	0.12	0.12	**0.55**	**0.93**	**0.74**

1 EPA Regional Screening Levels (RSLs) for elemental mercury from http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table, November 2013.
2 Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances, May 2013. Values presented are for "Mercuric chloride and other inorganic mercury compounds" because there are no RAGs for metallic or elemental mercury.
3 The following hierarchy was used for selecting the ecological screening level in order of preference:
- 3a The lesser of the plant, invertebrate, or wildlife EPA Ecological Soil Screening Levels (Eco SSL) (2008).
- 3b Canadian Council and Ministers of the Environment Recommended Canadian Soil Quality Guidelines (CCME, 2006) and supporting documents.
- 3c The lesser of the Oak Ridge National Laboratory (ORNL) plant or invertebrate benchmarks (Efroymson et al., 1997a, 1997b).
- 3d Lesser of National Oceanographic and Atmospheric Administration (NOAA) Screening Quick Reference Tables (SQuiRT) surface soil benchmarks (Buchman, 2008).

4 95% upper prediction limit (UPL) for Upper Sand surface soil from Table 4-5 of the Background Study for Naval Air Station Brunswick (Tetra Tech, 2012).
5 Greater of the NAS Brunswick background value (Tetra Tech, 2012) and the minimum of other screening values.

EPA - United States Environmental Protection Agency.
RSL - Regional Screening Level.
SSL - Soil Screening Level.
Shaded values exceed the minimum screening criterion.

MCL - Maximum Contaminant Level.
NC - No criterion.
ft bgs - Foot below ground surface.

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Legend

Soil Boring/Groundwater Sample Location

0 50 100 200 Feet

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SAMPLE LOCATION MAP
MERCURY DISPOSAL AREA
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	
AS NOTED	
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2-1	

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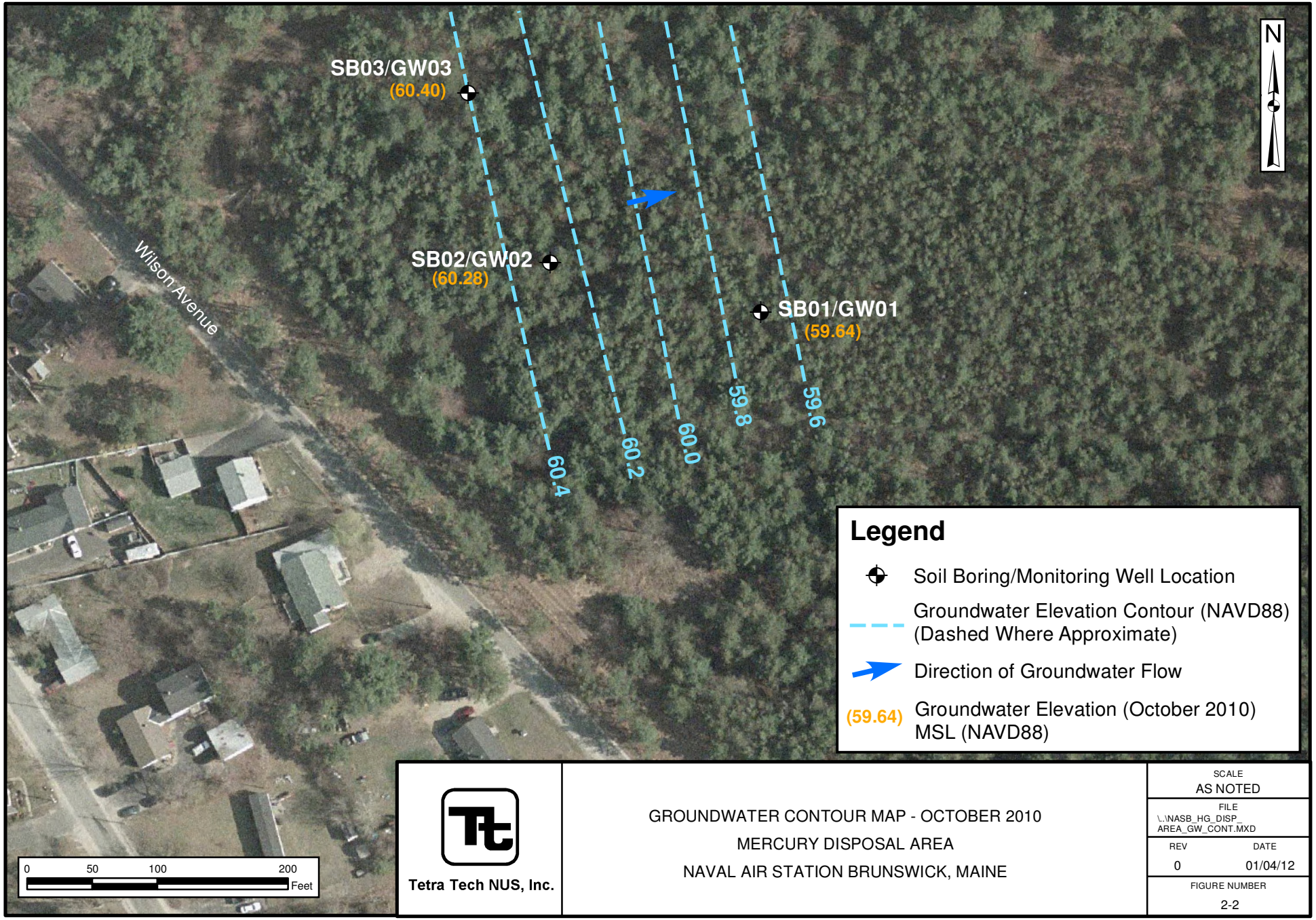

Tetra Tech NUS, Inc.

GROUNDWATER CONTOUR MAP - OCTOBER 2010
MERCURY DISPOSAL AREA
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	AS NOTED
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REV	0
DATE	01/04/12
FIGURE NUMBER	2-2

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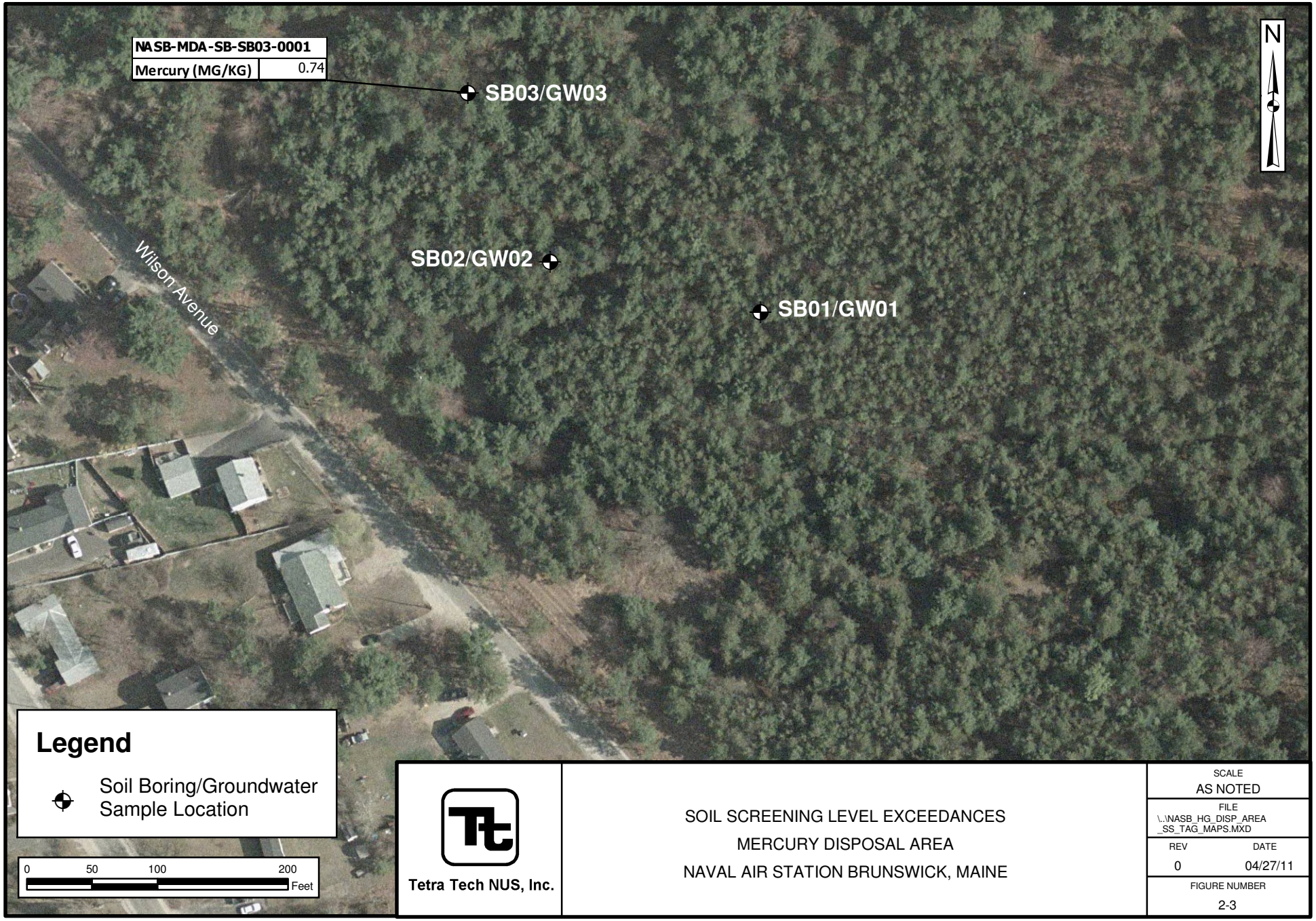


Tetra Tech NUS, Inc.

SOIL SCREENING LEVEL EXCEEDANCES
MERCURY DISPOSAL AREA
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	AS NOTED
FILE	\..\NASB_HG_DISP_AREA _SS_TAG_MAPS.MXD
REV	0
DATE	04/27/11
FIGURE NUMBER	2-3

3.0 WEST FIRE TRAINING AREA

The following sections summarize background information, field investigation activities, results, and recommendations based on the results of the West Fire Training Area investigation.

3.1 BACKGROUND

The West Fire Training Area is located approximately 300 feet west of the runway and 900 east of Building 64. According to a former NAS employee, waste solvents and fuels were historically collected and placed in a steel tank (estimated 100-gallon capacity) and attached to a trailer, which when filled was transported to a concrete pad referred to as the West Fire Training Area where the waste liquid was ignited and the response time determined for the NAS fire department to extinguish the fire (the existence of this alleged former fire training area has not been verified by current NAS personnel). On May 13, 2010, Tetra Tech, MEDEP, and NAS Brunswick personnel conducted a site visit for the West Fire Training Area. The concrete pad or remnants of the pad were not found during the site visit. Based on field observations and historical aerial photograph review, two potential locations were identified for investigation.

The geology at this area consists of interbedded fine sand, and silt (Transition Unit), and/or clay (Presumpscot Clay). The depth to groundwater is less than 5 feet bgs. The groundwater flow direction is probably toward the southeast based on topography and surface drainage patterns.

3.2 FIELD INVESTIGATION ACTIVITIES

Soil and groundwater samples were collected at the West Fire Training Area to determine whether past activities had impacted environmental media. Table 3-1 presents a summary of samples collected, and Figure 3-1 presents the locations sampled at the West Fire Training Area during the AOPI investigation.

A total of 10 borings (SB01 through SB10), five in each of the two areas where the former West Fire Training Area was suspected to be located, were advanced during the AOPI investigation. Soil boring logs and soil sample log sheets are presented in Appendix A. One surface soil (SS) sample and one subsurface soil (SB) sample were collected at each boring location and analyzed for volatile organic compounds (VOCs) by EPA SW-846 Method 8260B, semivolatile organic compounds (SVOCs) by EPA SW-846 Method 8270C/Selected Ion Monitoring (SIM), and extractable petroleum hydrocarbons (EPH)/volatile petroleum hydrocarbons (VPH) by the Massachusetts Department of Environmental Protection (MADEP) Method.

Due to the subsurface geologic conditions encountered (clay encountered close to the surface with narrow lenses of silt and sand too thin to install a well), only one temporary monitoring well (FTA-MW08) was installed at the West Fire Training Area (with EPA and MEDEP concurrence), and one groundwater sample collected from this location (Table 3-1). Due to a lack of water volume in MW08, the groundwater sample was collected over a 4-day period. Water quality measurements were not collected due to a lack of water volume, but one well volume was removed prior to sampling. The groundwater sample was analyzed for VOCs by EPA SW-846 Method 8260B, SVOCs by EPA SW-846 Method 8270C/SIM, EPH/VPH by the MADEP Method, and perfluorooctanoic acid (PFOA)/perfluorooctane sulfonic acid (PFOS) by Method 8321A. PFOA and PFOS analyses were added because these chemicals can be components in fire-fighting foams.

Groundwater sample log sheets are included in Appendix A-5, and groundwater elevations and groundwater field parameter data are presented in Appendix A, Table A-1, and Table A-2, respectively.

3.3 RESULTS

Soil boring logs at the two possible locations of the West Fire Training Area primarily noted a clay unit with lesser amounts of silt. At three locations (FTA-SB-SB08, FTA-SB-SB09 and FTA-SB-SB10), one or two lenses of fine sand up to 0.3 foot thick was present. At FTA-SB-SB02, 0.5 foot of fine to medium sand at the ground surface overlies the clay and silt unit. A temporary well was installed at SB08 to collect a groundwater sample from two sand lenses encountered at this location.

Tables 3-2 and 3-3 present summaries of data for all parameters detected at least once in surface and subsurface soil samples, respectively, and Table 3-4 summarizes detected concentrations in groundwater samples. Complete soil analytical data are presented in Appendix B-1, and complete groundwater data are presented in Appendix B-2.

Trace levels of VOCs and SVOCs were detected in surface soil samples from the West Fire Training Area (see Table 3-2). 4-Nitroaniline was detected at two locations (SB02 and SB05) at concentrations greater than the minimum screening criterion (risk-based groundwater protection SSL) but less than the EPA residential RSL (no RAG is available). Concentrations of PAHs in surface soil were less than minimum screening criteria. West Fire Training Area soil exceedances are presented on Figure 3-2.

VOCs and SVOCs were also detected in subsurface soil (see Table 3-3). The naphthalene concentration in the duplicate sample from SB02 (4 to 5 feet bgs) exceeded the minimum screening criterion (risk-based groundwater protection SSL of 0.47 µg/kg) but was significantly less than EPA and Maine residential criteria. Naphthalene was not detected in the other duplicate pair sample.

Groundwater results for the temporary monitoring well installed at the West Fire Training Area are summarized in Table 3-4. There were no exceedances of EPA MCLs or Maine residential groundwater RAGs.

3.4 RECOMMENDATIONS

Considering the low frequencies of detection and low concentrations detected in soil (less than residential screening criteria) and the lack of groundwater impacts, no further investigation is recommended for the West Fire Training Area. An appropriate path forward for the West Fire Training Area will be determined based on future discussions and consensus among the Navy, EPA, and MEDEP.

TABLE 3-1

SOIL AND GROUNDWATER SAMPLE SUMMARY - WEST FIRE TRAINING AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID	SAMPLE INTERVAL (ft bgs)	GEOLOGIC UNIT	ANALYSIS
SOIL			
NASB-FTA-SS-SS01-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB01-0405	4 - 5	Transition	
NASB-FTA-SS-SS02-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB02-0405	4 - 5	Transition	
NASB-FTA-SS-SS03-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB03-0405	4 - 5	Transition	
NASB-FTA-SS-SS04-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB04-0405	4 - 5	Transition	
NASB-FTA-SS-SS05-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB05-0405	4 - 5	Transition	
NASB-FTA-SS-SS06-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB06-0809	8 - 9	Transition	
NASB-FTA-SS-SS07-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB07-0809	8 - 9	Transition	
NASB-FTA-SS-SS08-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB08-0809	8 - 9	Transition	
NASB-FTA-SS-SS09-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB09-0809	8 - 9	Transition	
NASB-FTA-SS-SS10-0001	0 - 1	Transition	VOCs, SVOCs, EPH, VPH
NASB-FTA-SB-SB10-0607	6 - 7	Transition	
GROUNDWATER			
NASB-FTA-GW08	10.5 - 11.5	Transition	VOCS, VPH, SVOCs, EPH, Metals, PFOA/PFOS

VOCs - Volatile organic compounds.
VPH - Volatile petroleum hydrocarbons.
EPH - Extractable petroleum hydrocarbons.
SVOCs - Semivolatile organic compounds.
PFOA/PFOS - Perfluorooctanoic acid/perfluorooctane sulfonic acid.
ft bgs - Feet below ground surface.

TABLE 3-2

SURFACE SOIL DETECTIONS - WEST FIRE TRAINING AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Residential		Protection of Groundwater			Ecological (Source)[3]	NAS Brunswick Background 95% UPL[4]	Minimum Screening Criterion[5]	NASB-FTA-SB-	
	EPA RSL[1]	Maine RAG[2]	MCL-Based SSL[1]	Risk-Based SSL[1]	Leaching to GW RAG[2]				SS01	SS02
Volatile Organic Compounds (µg/kg)										
BROMOMETHANE	7300	240000	NC	1.8	NC	235 (3d)	NC	1.8	1 U	1.3 U
METHYL ACETATE	78000000	NC	NC	3200	NC	NC	NC	3200	1 U	1.3 U
TETRACHLOROETHENE	22000	1000000	2.3	4.4	2700	9920 (3d)	NC	2.3	1 U	0.46 J
Semivolatile Organic Compounds (µg/kg)										
4-NITROANILINE	24000	NC	NC	1.4	NC	21900 (3d)	NC	1.4	301 U	**169 J**
BIS(2-ETHYLHEXYL) PHTHALATE	35000	770000	1400	1100	NC	925 (3d)	NC	925	301 U	185 J
ACENAPHTHYLENE	3400000[6]	7500000	NC	4100[6]	170000	29000	NC	4100	6 U	4.1 J
ANTHRACENE	17000000	10000000	NC	42000	2400000	29000 (3a)	6.1	29000	1.6 J	6 U
BENZO(A)ANTHRACENE	150	2600	NC	10	10000000	1100 (3a)	16.9	16.9	6 U	6 U
BENZO(A)PYRENE	15	260	240	3.5	10000000	1100 (3a)	23.5	23.5	2.4 J	3.3 J
BENZO(B)FLUORANTHENE	150	2600	NC	35	10000000	1100 (3a)	40.4	40.4	1.6 J	4.1 J
BENZO(G,H,I)PERYLENE	1700000[6]	3700000	NC	9500[6]	10000000	1100 (3a)	15.1	1100	2.4 J	2.5 J
BENZO(K)FLUORANTHENE	1500	26000	NC	350	10000000	1100 (3a)	13.6	350	2.4 J	1.6 J
CHRYSENE	15000	260000	NC	1100	10000000	1100 (3a)	22.6	1100	2.4 J	3.3 J
DIBENZO(A,H)ANTHRACENE	15	260	NC	11	10000000	1100 (3a)	10.6	10.6	2.4 J	6 U
FLUORANTHENE	2300000	5000000	NC	70000	10000000	29000 (3a)	16.7	29000	1.6 J	4.9 J
INDENO(1,2,3-CD)PYRENE	150	2600	NC	200	10000000	1100 (3a)	28.2	150	4 J	3.3 J
PHENANTHRENE	1700000[6]	3700000	NC	9500[6]	97000	2900 (3a)	8.9	2900	1.6 J	2.5 J
PYRENE	1700000	3700000	NC	9500	10000000	1100 (3a)	15.4	1100	3.2 J	5.8 J

TABLE 3-2

SURFACE SOIL DETECTIONS - WEST FIRE TRAINING AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Minimum Screening Criterion[5]	NASB-FTA-SB-							
		SS03	SS04	SS05	SS06	SS07	SS08	SS09	SS10
Volatile Organic Compounds (µg/kg)									
BROMOMETHANE	1.8	0.88 U	1.2 U	1 U	1.3 U	1.1 U	0.57 J	1.1 U	1.4 U
METHYL ACETATE	3200	0.88 U	1.2 U	1 U	1.3 U	1.1 J	3.2	1.1 U	1.4 U
TETRACHLOROETHENE	2.3	0.88 U	1.2 U	1 U	0.47 J	1.1 U	1.5 U	1.1 U	1.4 U
Semivolatile Organic Compounds (µg/kg)									
4-NITROANILINE	1.4	302 U	302 U	**172 J**	314 U	309 U	298 U	309 U	303 U
BIS(2-ETHYLHEXYL) PHTHALATE	925	58 J	302 U	315 U	34 J	309 U	298 U	309 U	30 J
ACENAPHTHYLENE	4100	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1.6 J
ANTHRACENE	29000	6 U	6 U	6 U	6 U	6 U	6 U	1.6 J	6 U
BENZO(A)ANTHRACENE	16.9	6 U	6 U	6 U	6 U	6 U	6 U	3.3 J	6 U
BENZO(A)PYRENE	23.5	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
BENZO(B)FLUORANTHENE	40.4	1.6 J	6 U	6 U	6 U	6 U	6 U	6 U	1.6 J
BENZO(G,H,I)PERYLENE	1100	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1.6 J
BENZO(K)FLUORANTHENE	350	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
CHRYSENE	1100	6 U	6 U	6 U	6 U	6 U	6 U	3.3 J	6 U
DIBENZO(A,H)ANTHRACENE	10.6	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
FLUORANTHENE	29000	2.4 J	6 U	1.7 J	6 U	6 U	6 U	6 U	3.2 J
INDENO(1,2,3-CD)PYRENE	150	1.6 J	0.8 J	0.8 J	0.8 J	6 U	6 U	6 U	1.6 J
PHENANTHRENE	2900	1.6 J	6 U	1.7 J	6 U	6 U	6 U	2.5 J	1.6 J
PYRENE	1100	3.2 J	1.6 J	1.7 J	6 U	6 U	6 U	6 U	3.2 J

1 EPA Regional Screening Levels (RSLs) from http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table, November 2013.
2 Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances, May 2013.
3 See Table 2-2 for the hierarchy was used to select ecological screening levels.
  3a Eco SSLs (EPA, 2008).
  3b CCME Recommended Canadian Soil Quality Guidelines (2006).
  3c ORNL plant or invertebrate benchmarks (Efroymson et al., 1997a and 1997b).
  3d NOAA SQuiRT surface soil benchmarks (Buchman, 2008).
4 95% upper prediction limit (UPL) for Transition surface soil from Table 4-5 of the Background Study for Naval Air Station Brunswick (Tetra Tech, 2012).
5 Greater of the NAS Brunswick background value (Tetra Tech, 2012) and minimum of other screening values.
6 Pyrene used as a surrogate for benzo(g,h,i)perylene and phenanthrene, and acenaphthene used as a surrogate for acenaphthylene.

EPA - United States Environmental Protection Agency.
RSL - Regional Screening Level.
SSL - Soil Screening Level.
MCL - Maximum Contaminant Level.
Shaded values exceed the minimum screening criterion.

NC - No criterion.
U - Not detected at assocated detection limit.
J - Estimated concentration.

TABLE 3-3

SUBSURFACE SOIL DETECTIONS - WEST FIRE TRAINING AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Residential		Protection of Groundwater			Minimum Screening Criterion	NASB-FTA-
	EPA RSL[1]	Maine RAG[2]	MCL-Based SSL[1]	Risk-Based SSL[1]	Leaching to GW RAG[2]		SB01 4 to 5 ft bgs
Volatile Organic Compounds (µg/kg)							
1,2,3-TRICHLOROBENZENE	49000	1700000	NC	15	NC	15	0.78 J
TETRACHLOROETHENE	22000	1000000	2.3	4.4	2700	2.3	0.61 J
TOLUENE	5000000	10000000	690	590	8100	590	1 U
Polynuclear Aromatic Hydrocarbons (µg/kg)							
ACENAPHTHENE	3400000	7500000	NC	4100	170000	4100	6 U
ACENAPHTHYLENE	3400000[6]	7500000	NC	4100[6]	68000	4100	6 U
ANTHRACENE	17000000	10000000	NC	42000	2400000	42000	6 U
BENZO(A)PYRENE	15	260	240	3.5	10000000	3.5	6 U
BENZO(B)FLUORANTHENE	150	2600	NC	35	10000000	35	6 U
BENZO(G,H,I)PERYLENE	1700000[6]	3700000	NC	9500[6]	10000000	9500	6 U
BENZO(K)FLUORANTHENE	1500	26000	NC	350	10000000	350	6 U
CHRYSENE	15000	260000	NC	1100	10000000	1100	6 U
DIBENZO(A,H)ANTHRACENE	15	260	NC	11	10000000	11	6 U
FLUORANTHENE	2300000	5000000	NC	70000	10000000	70000	6 U
FLUORENE	2300000	5000000	NC	4000	120000	4000	6 U
INDENO(1,2,3-CD)PYRENE	150	2600	NC	200	10000000	150	6 U
NAPHTHALENE	3600	2500000	NC	0.47	1700	0.47	6 U
PHENANTHRENE	1700000[3]	3700000	NC	9500[3]	97000	9500	6 U
PYRENE	1700000	3700000	NC	9500	10000000	9500	6 U
Semivolatile Organic Compounds (µg/kg)							
BIS(2-ETHYLHEXYL) PHTHALATE	35000	770000	1400	1100	NC	1100	28 J

TABLE 3-3

SUBSURFACE SOIL DETECTIONS - WEST FIRE TRAINING AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Minimum Screening Criterion	NASB-FTA-						
		SB02 4 to 5 ft bgs			SB03 4 to 5 ft bgs	SB04 4 to 5 ft bgs	SB05 4 to 5 ft bgs	SB06 8 to 9 ft bgs
		Sample	Duplicate	Average				
Volatile Organic Compounds (µg/kg)								
1,2,3-TRICHLOROBENZENE	15	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U
TETRACHLOROETHENE	2.3	0.44 J	0.54 J	0.49 J	1 U	0.57 J	0.88 U	0.33 J
TOLUENE	590	0.23 J	1.3 U	0.23 J	1 U	1.2 U	0.88 U	0.87 U
Polynuclear Aromatic Hydrocarbons (µg/kg)								
ACENAPHTHENE	4100	3.3 J	6 U	3.3 J	6 U	6 U	6 U	6 U
ACENAPHTHYLENE	4100	3.3 J	6 U	3.3 J	6 U	6 U	6 U	6 U
ANTHRACENE	42000	1.6 J	6 U	1.6 J	6 U	6 U	6 U	6 U
BENZO(A)PYRENE	3.5	2.5 J	6 U	2.5 J	6 U	2.6 J	6 U	6 U
BENZO(B)FLUORANTHENE	35	2.5 J	6 U	2.5 J	6 U	2.6 J	6 U	6 U
BENZO(G,H,I)PERYLENE	9500	2.5 J	6 U	2.5 J	6 U	6 U	6 U	6 U
BENZO(K)FLUORANTHENE	350	3.3 J	6 U	3.3 J	6 U	6 U	6 U	6 U
CHRYSENE	1100	2.5 J	6 U	2.5 J	6 U	3.4 J	6 U	6 U
DIBENZO(A,H)ANTHRACENE	11	2.5 J	6 U	2.5 J	6 U	3.4 J	6 U	6 U
FLUORANTHENE	70000	2.5 J	6 U	2.5 J	6 U	1.7 J	2.5 J	3.3 J
FLUORENE	4000	1.6 J	6 U	1.6 J	6 U	6 U	6 U	6 U
INDENO(1,2,3-CD)PYRENE	150	4.9 J	6 U	4.9 J	6 U	6 U	0.8 J	1.6 J
NAPHTHALENE	0.47	6 U	**4.2 J**	**4.2 J**	6 U	6 U	6 U	6 U
PHENANTHRENE	9500	1.6 J	6 U	1.6 J	6 U	6 U	1.6 J	2.5 J
PYRENE	9500	3.3 J	6 U	3.3 J	6 U	1.7 J	3.3 J	3.3 J
Semivolatile Organic Compounds (µg/kg)								
BIS(2-ETHYLHEXYL) PHTHALATE	1100	30 J	317 U	30 J	29 J	321 U	317 U	28 J

TABLE 3-3

SUBSURFACE SOIL DETECTIONS - WEST FIRE TRAINING AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Minimum Screening Criterion	NASB-FTA-					
		SB07 8 to 9 ft bgs	SB08 8 to 9 ft bgs	SB09 8 to 9 ft bgs			SB10 6 to 7 ft bgs
				Sample	Duplicate	Average	
Volatile Organic Compounds (µg/kg)							
1,2,3-TRICHLOROBENZENE	15	1.5 U	1.1 U	1.2 U	1.3 U	1.25 U	1.5 U
TETRACHLOROETHENE	2.3	1.5 U	1.1 U	1.2 U	0.68 J	0.68 J	1.5 U
TOLUENE	590	1.5 U	1.1 U	1.2 U	0.21 J	0.21 J	1.5 U
Polynuclear Aromatic Hydrocarbons (µg/kg)							
ACENAPHTHENE	4100	6 U	7 U	7 U	7 U	7 U	6 U
ACENAPHTHYLENE	4100	6 U	7 U	7 U	7 U	7 U	6 U
ANTHRACENE	42000	6 U	7 U	7 U	7 U	7 U	6 U
BENZO(A)PYRENE	3.5	6 U	1.8 J	7 U	7 U	7 U	6 U
BENZO(B)FLUORANTHENE	35	6 U	1.8 J	7 U	7 U	7 U	6 U
BENZO(G,H,I)PERYLENE	9500	6 U	7 U	7 U	7 U	7 U	6 U
BENZO(K)FLUORANTHENE	350	6 U	1.8 J	7 U	7 U	7 U	6 U
CHRYSENE	1100	6 U	7 U	7 U	7 U	7 U	6 U
DIBENZO(A,H)ANTHRACENE	11	6 U	7 U	7 U	7 U	7 U	6 U
FLUORANTHENE	70000	6 U	6.2 J	7 U	7 U	7 U	6 U
FLUORENE	4000	6 U	7 U	7 U	7 U	7 U	6 U
INDENO(1,2,3-CD)PYRENE	150	6 U	1.8 J	7 U	7 U	7 U	0.8 J
NAPHTHALENE	0.47	6 U	7 U	7 U	7 U	7 U	6 U
PHENANTHRENE	9500	6 U	4.4 J	1.7 J	7 U	1.7 J	6 U
PYRENE	9500	6 U	5.3 J	7 U	7 U	7 U	6 U
Semivolatile Organic Compounds (µg/kg)							
BIS(2-ETHYLHEXYL) PHTHALATE	1100	313 U	331 U	48 J	35 J	41.5 J	297 U

Subsurface soil samples were not compared to ecological screening criteria based on lack of expected exposure.
1 EPA Regional Screening Levels (RSLs) from http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table, November 2013.
2 Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances, May 2013.
3 Pyrene used as a surrogate for benzo(g,h,i)perylene and phenanthrene, and acenaphthene used as a surrogate for acenaphthylene.

EPA - United States Environmental Protection Agency.
SSL - Soil Screening Level.
NC - No criterion.
MCL - Maximum Contaminant Level.
Shaded values exceed minimum screening criteria.

U - Not detected at assocated detection limit.
J - Estimated concentration.
ft bgs - Feet below ground surface.

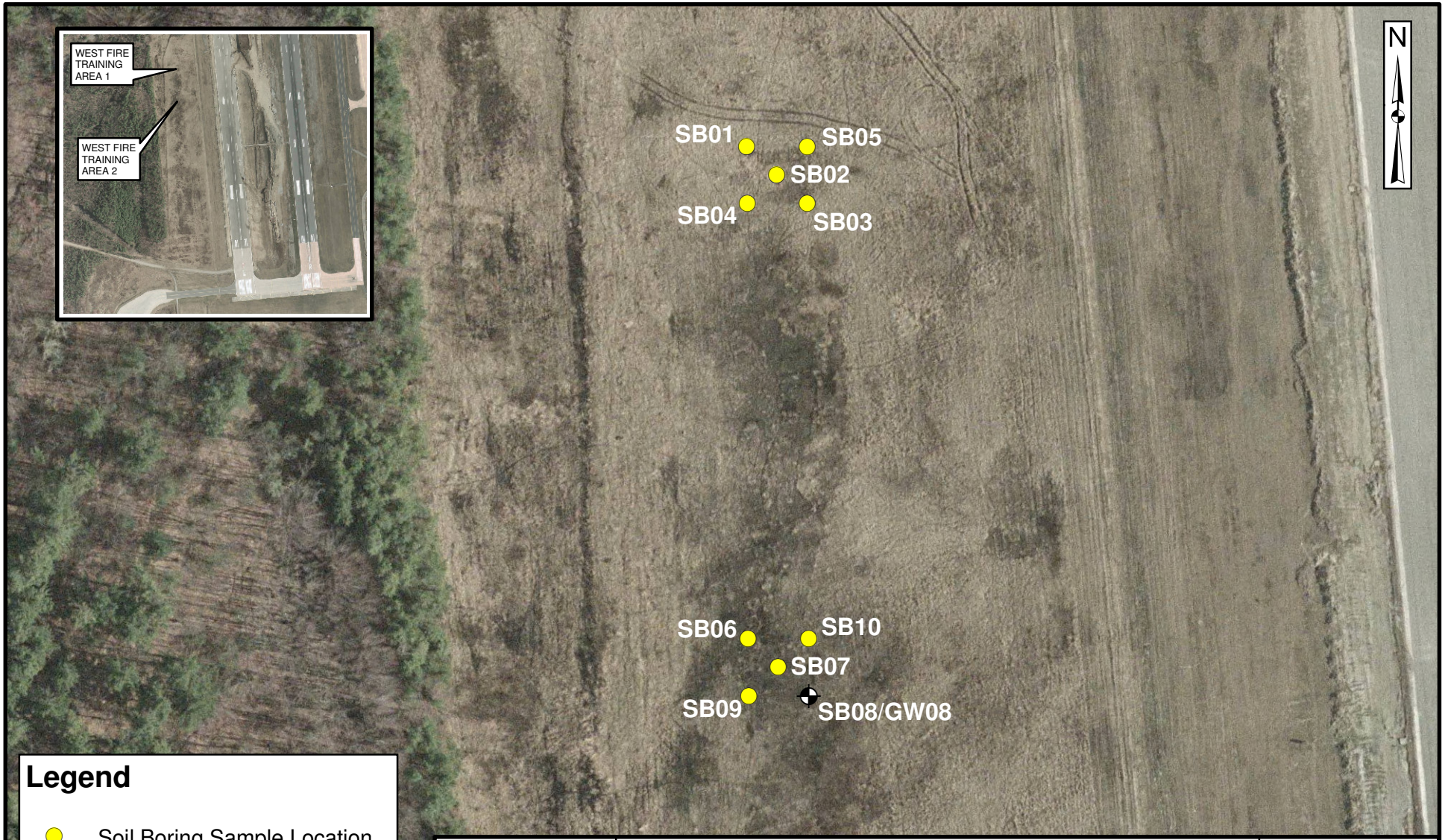
TABLE 3-4

GROUNDWATER DETECTIONS - WEST FIRE TRAINING AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	EPA MCL[1]	Maine Residential Groundwater RAG[2]	NAS Brunswick Background 95% UPL[3]	NASB-FTA-MW08
VOLATILE ORGANIC COMPOUNDS (µg/L)				
METHYLENE CHLORIDE	5	40	NC	2 J
SEMIVOLATILE ORGANIC COMPOUNDS (µg/L)				
CAPROLACTAM	NC	NC	NC	1.6 J
METALS (µg/L)				
ALUMINUM	NC	7000	3660	430
ARSENIC	10	10	13.8	2.2 J
BARIUM	2000	1000	43.3	13
CALCIUM	NC	NC	21800	31000
COPPER	1300	500	13.9	1.9 J
IRON	NC	5000	5090	680
MAGNESIUM	NC	NC	13600	10000
MANGANESE	NC	500	547	460
NICKEL	NC	20	7.1	2.3 J
POTASSIUM	NC	NC	3340	4800
SODIUM	NC	20000	31600	11000

1 EPA Drinking Water Standards and Health Advisories Maximum Contaminant Levels (MCLs), October 2009.
2 Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances, May 2013.
3 Transition Unit 95% upper prediction limits (UPLs) from Table 5-5 of the Background Study (Tetra Tech, 2012).
J - Estimated concentration.
NC - No criterion.

I:\02330\RI.DF\NASB_FTA_SAMP_LOC.MXD DWM 02/15/11



Legend

- Soil Boring Sample Location
- Soil Boring/ Groundwater Sample Location

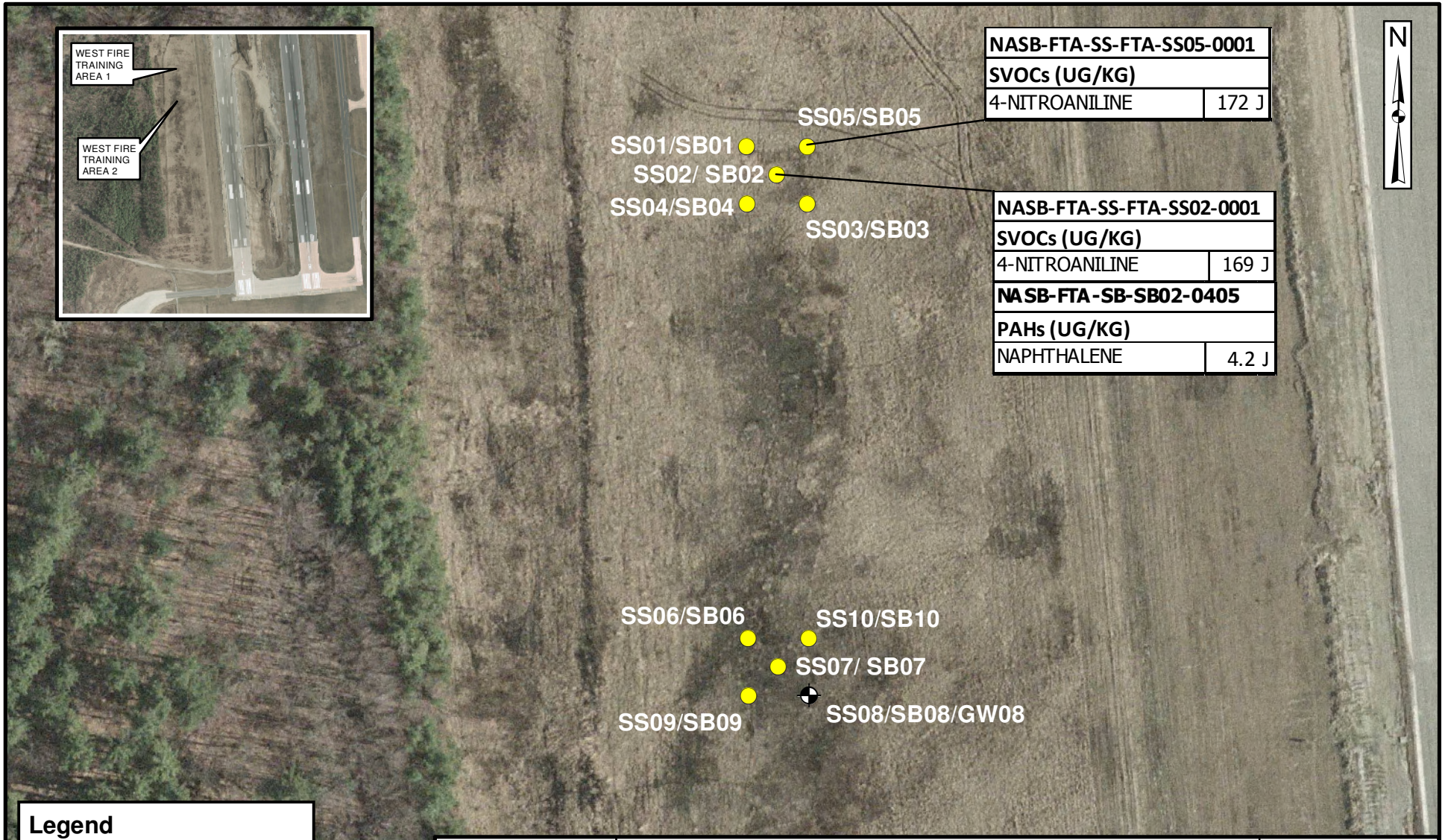
0 50 100 200 Feet

Tetra Tech NUS, Inc.

SAMPLE LOCATION MAP
WEST FIRE TRAINING AREA
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	
AS NOTED	
FILE	
\..\NASB_FTA_SAMP_LOC.MXD	
REV	DATE
0	02/15/11
FIGURE NUMBER	
3-1	

BOS I:\02330\RI.DF\NASB_FTA_SO_TAG_MAPS_R010914.MXD 01/09/14 DWM/SP



NASB-FTA-SS-FTA-SS05-0001	
SVOCs (UG/KG)	
4-NITROANILINE	172 J

NASB-FTA-SS-FTA-SS02-0001	
SVOCs (UG/KG)	
4-NITROANILINE	169 J
NASB-FTA-SB-SB02-0405	
PAHs (UG/KG)	
NAPHTHALENE	4.2 J

Legend

- Soil Boring Sample Location
- Soil Boring/ Groundwater Sample Location

0 50 100 200 Feet

Tetra Tech NUS, Inc.

SOIL SCREENING LEVEL EXCEEDANCES
WEST FIRE TRAINING AREA
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	
AS NOTED	
FILE	
\..\NASB_FTA_SO_TAG_MAPS.MXD	
REV	DATE
0	04/27/11
FIGURE NUMBER	
3-2	

4.0 HELIPAD AREA

The following sections summarize background information, field investigation activities, results, and recommendations based on the results of the Helipad Area investigation.

4.1 BACKGROUND

The Helipad Area is located along the western edge of closed taxiway 8, southeast of the new fuel farm, and approximately 500 feet east of Building 660. The helipad is a circular concrete pad approximately 120 feet in diameter, and prior to excavation activities at the site in December 2012, two low berms encompassed approximately two-thirds of the pad. According to NAS personnel, the helipad was historically used as a sandblasting area. On May 13, 2010, Tetra Tech, MEDEP, and NAS Brunswick personnel conducted a site visit at the Helipad Area. No blast media or paint chips were observed during the site visit. The concrete pad was cracked, and some soil was present in a slight depression in the vicinity of the center of the pad. The area was used to chip wood and store wood chips prior to December 2012 excavation activities.

4.2 FIELD INVESTIGATION ACTIVITIES

Fifteen surface soil samples were collected from locations on the pad, just outside of the pad boundary, within the inner berm around the pad perimeter, and within the outer berm. Soil boring logs and soil sample log sheets are presented in Appendix A. Table 4-1 presents a summary of samples collected, and Figure 4-1 presents the locations sampled at the Helipad Area during the AOPI investigation.

Soil samples collected on the pad itself were concentrated in low points such as cracks and the central depression and were collected within a 1-foot by 1-foot area. All other surface soil samples were collected from 0 to 1 foot bgs. No work plan deviations, including no relocation of proposed samples, were required due to the storage of wood chips on the site or for any other reasons. All soil samples collected at the Helipad Area were analyzed for polychlorinated biphenyls (PCBs) by EPA SW-846 Method 8082 and for Target Analyte List (TAL) Metals by EPA SW-846 Methods 6010C and 7471B.

4.3 RESULTS

Sample logs from the Helipad Area indicate that surface soil generally consisted of fine to medium sand with silt and organic matter, which is similar to Upper Sand surface soil.

Soil analytical data for samples collected during the AOPI investigation are summarized in Table 4-2, and complete analytical data are presented in Appendix B-1. As presented in Table 4-2, numerous metals

and Aroclor-1254 were detected in surface soil samples collected in 2010 at the Helipad Area. Concentrations of analytes exceeding minimum screening criteria are presented on Figure 4-2 and included 12 metals and Aroclor-1254. With the exception of arsenic, all concentrations were less than EPA and Maine residential criteria. Arsenic concentrations ranged from 2.5 to 12 mg/kg and averaged 6.1 mg/kg, exceeding EPA and Maine residential criteria, although the site-wide average concentration only slightly exceeded the NAS Brunswick background UPL (5.6 mg/kg) for Upper Sand surface soil. The maximum arsenic concentration was also less than the Maine undeveloped background RAG of 16 mg/kg (a rural developed background RAG is not available). Other metals concentrations were less than residential criteria, but concentrations of 12 metals (arsenic, barium, cadmium, chromium, cobalt, copper, iron, lead, nickel, thallium, vanadium, and zinc) exceeded MCL- or risk-based SSLs and/or minimum ecological criteria. Concentrations of Aroclor-1254 in 3 of 15 samples exceeded EPA's MCL-based groundwater protection SSL but were less than the residential RSL and RAG.

4.4 RECOMMENDATIONS

For metals with 95-percent UPL background values as minimum screening criteria, site concentrations were generally less than or only slightly greater than background values or exceedances were infrequent. Other metals and a PCB (Aroclor-1254) generally had infrequent exceedances of EPA's protection-of-groundwater SSLs, but EPA and Maine residential criteria were not exceeded. However, based on MEDEP concerns about the potential for greater contaminant concentrations in bermed soils due to possible localized accumulations of paint chips from former sandblasting operations, the Navy completed a soil removal action at the site in December 2012. During 2012 excavation activities, soil comprising the inner and outer berms was removed, and accumulated soil was removed from the concrete pad. A total of approximately 60 tons of soil were removed and properly disposed of off site. Fifteen post-excavation surface soil samples (0 to 6 inches bgs from a 3-inch by 3-inch area) were collected, including five samples from the edge of the concrete pad, five samples from what was formerly the inner berm area, and five samples from what was formerly the outer berm area. Evaluation of the post-excavation data is ongoing, and an appropriate path forward for the Helipad Area will be determined based on these results and future discussions and consensus among the Navy, EPA, and MEDEP.

TABLE 4-1

SOIL SAMPLE SUMMARY - HELIPAD AREA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK

SAMPLE ID	SAMPLE INTERVAL (ft bgs)	GEOLOGIC UNIT	ANALYSIS
SOIL			
NASB-HA-SS01-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS02-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS03-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS04-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS05-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS06-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS07-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS08-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS09-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS10-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS11-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS12-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS13-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS14-0001	0 - 1	Upper Sand	PCBs, Metals
NASB-HA-SS15-0001	0 - 1	Upper Sand	PCBs, Metals

ft bgs - Feet below ground surface.
PCBs - Polychlorinated biphenyls.

TABLE 4-2

SURFACE SOIL DETECTIONS - HELIPAD AREA
AREAS OF POTENTIAL INTEREST INVESTIGATIONS
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Residential		Industrial		Protection of Groundwater			Ecological (Source)[3]	NAS Brunswick Background 95% UPL[4]	Minimum Screening Criterion[5]	NASB-HA- SS01		
	EPA RSL[1]	Maine RAG[2]	EPA RSL[1]	Maine RAG[2]	MCL-Based SSL[1]	Risk-Based SSL[1]	Leaching to GW RAG[2]				Sample	Duplicate	Average
METALS (mg/kg)													
ALUMINUM	77000	34000	990000	61000	NC	55000	NC	pH>5.5 (3a)	13600	34000	8600	8100	8350
ARSENIC	0.39	0.14	1.6	4.2	0.29	0.0013	NC	18 (3a)	5.6	5.6	**8.8**	**6.9**	**7.85**
BARIUM	15000	6800	190000	10000	82	300	NC	330 (3a)	15	82	29	33	31
BERYLLIUM	160	68	2000	120	3.2	58	NC	21 (3a)	0.57	3.2	0.35	0.36	0.355
CADMIUM	70	2.1	800	3.9	0.38	1.4	NC	0.36 (3a)	0.048	0.36	0.15	0.14	0.145
CALCIUM	NC	NC	NC	NC	NC	NC	NC	NC	444	NC	2200 J	2100 J	2150 J
CHROMIUM[7]	120000	10000	120000	100000	NC	$9.9X10^7$	NC	26 (3a)	16.2	26	22	18	20
COBALT	23	10	300	100	NC	0.49	NC	13 (3a)	5.2	5.2	5.2	4.5	4.85
COPPER	3100	480	41000	870	46	51	NC	28 (3a)	6.8	28	18	12	15
IRON	55000	24000	720000	43000	NC	640	NC	5<pH<8 (3a)	15000	15000	14000	11000	12500
LEAD	400	170	800	560	14	NC	NC	11 (3a)	18	18	**21**	**19**	**20**
MAGNESIUM	NC	NC	NC	NC	NC	NC	NC	NC	1950	NC	3500 J	3300 J	3400 J
MANGANESE	1800	820	23000	1500	NC	57	NC	220 (3a)	267	267	180	170	175
MERCURY	5.6	10	34	100	0.1	0.03	NC	12 (3b)	0.1	0.1	0.01 J	0.012 J	0.011 J
NICKEL	1500	100	20000	190	NC	48	NC	38 (3a)	9.8	38	20	16	18
POTASSIUM	NC	NC	NC	NC	NC	NC	NC	NC	940	NC	1700	1800	1750
SODIUM	NC	NC	NC	NC	NC	NC	NC	NC	54.2	NC	140	150	145
THALLIUM	NC	2.7	NC	27	0.14	NC	NC	1.4 (3b)	NC	0.14	**0.15 J**	0.14 J	**0.145 J**
VANADIUM	390	240	5200	430	NC	180	NC	7.8 (3a)	27.9	27.9	21 J	20 J	20.5 J
ZINC	23000	10000	310000	10000	NC	680	NC	46 (3a)	15.9	46	34	33	33.5
POLYCHLORINATED BIPHENYLS (µg/kg)													
AROCLOR-1254	220	490[6]	740	1200[6]	NC	8.8	NC	33000 (3b)	NC	8.8	18 U	18 U	18 U

TABLE 4-2

SURFACE SOIL DETECTIONS - HELIPAD AREA
AREAS OF POTENTIAL INTEREST INVESTIGATIONS
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Minimum Screening Criterion[5]	NASB-HA-							
		SS02	SS03	SS04	SS05	SS06	SS07	SS08	SS09
METALS (mg/kg)									
ALUMINUM	55000	9500	4700	7300	5700	8300	9300	5700	9100
ARSENIC	5.6	**6.5**	2.5	4.1	**7.7**	**12**	5.2	3.8	**5.7**
BARIUM	82	69	17	58	36	32	47	51	41
BERYLLIUM	3.2	0.45	0.25	0.42	0.35	0.33	0.34	0.25	0.37
CADMIUM	0.36	**0.37**	0.084 J	**0.46**	**0.79**	0.21	0.33	0.23	0.12
CALCIUM	NC	5500 J	1300 J	5100 J	2500 J	1900 J	3200 J	1700 J	1800 J
CHROMIUM[7]	26	24	7.4	19	12	17	23	9.8	20
COBALT	5.2	4.9	2.7	3.4	3.3	4.6	4.5	3.2	**7.1**
COPPER	28	16	6.4	13	12	11	13	7	18
IRON	15000	**18000**	7100	13000	8100	11000	12000	7700	12000
LEAD	18	18	5.5	**20**	**24**	11	**20**	7.4	9.5
MAGNESIUM	NC	3000 J	1500 J	2000 J	1700 J	2700 J	3200 J	1700 J	3600 J
MANGANESE	267	210	100	190	140	180	210	120	160
MERCURY	0.1	0.017 J	0.013 J	0.015 J	0.022 J	0.017 J	0.042	0.0089 U	0.0094 U
NICKEL	38	19	7.4	14	11	14	16	10	29
POTASSIUM	NC	1600	760	960	710	1500	1800	960	1400
SODIUM	NC	340	97	300	170	160	170	110	210
THALLIUM	0.14	0.11 J	0.075 J	0.069 J	0.13 J	0.13 J	**0.18 J**	0.093 J	0.13 J
VANADIUM	27.9	24 J	12 J	16 J	15 J	21 J	25 J	13 J	21 J
ZINC	46	**54**	19	**75**	28	27	**56**	20	29
POLYCHLORINATED BIPHENYLS (µg/kg)									
AROCLOR-1254	8.8	18 U	18 U	**88**	18 U	**34 J**	20 U	**203**	18 U

TABLE 4-2

SURFACE SOIL DETECTIONS - HELIPAD AREA
AREAS OF POTENTIAL INTEREST INVESTIGATIONS
NAVAL AIR STATION BRUNSWICK, MAINE

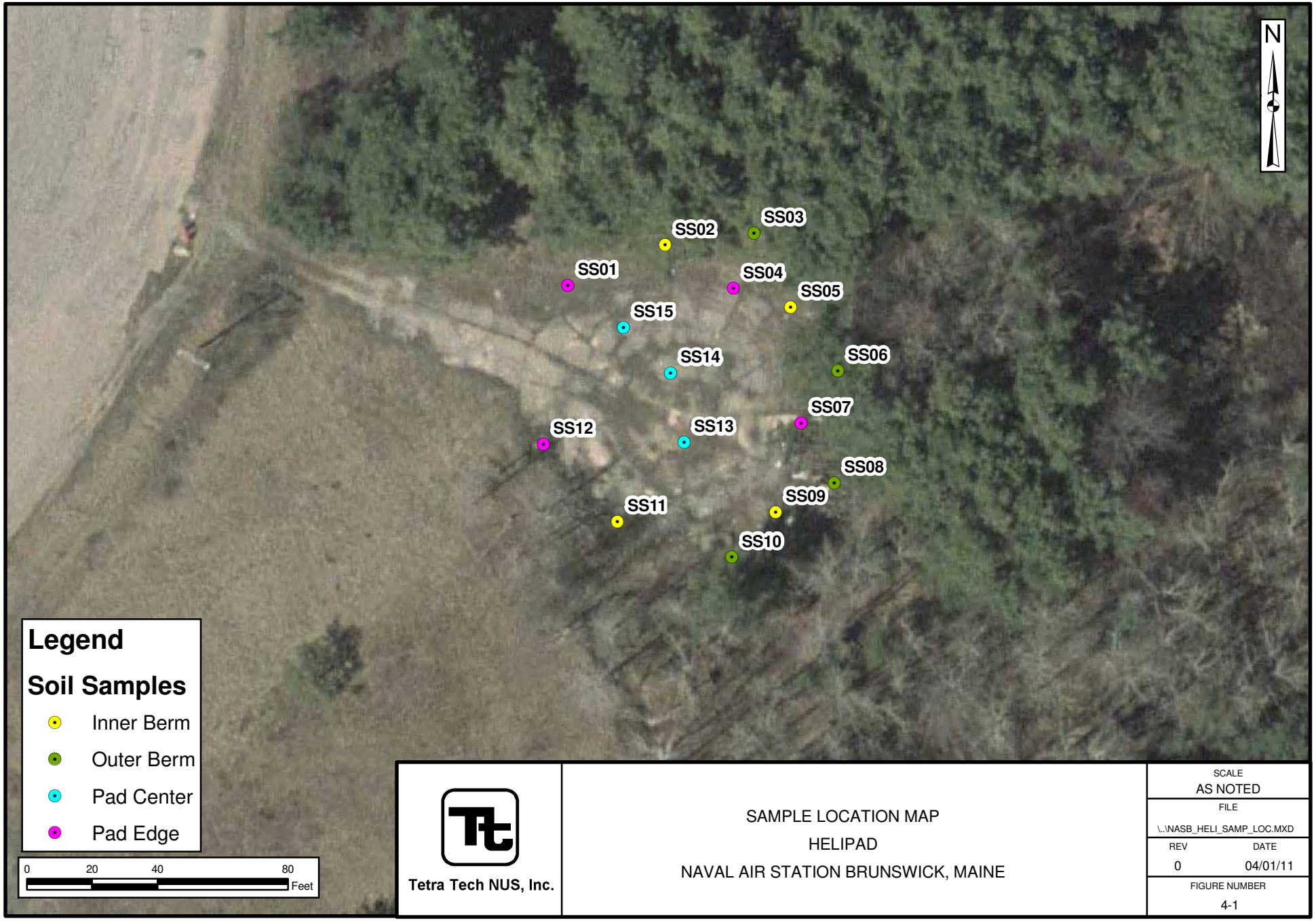
Parameter	Minimum Screening Criterion[5]	NASB-HA-							
		SS10	SS11	SS12	SS13			SS14	SS15
					Sample	Duplicate	Average		
METALS (mg/kg)									
ALUMINUM	55000	5800	8700	8000	7300	7300	7300	7700	11000
ARSENIC	5.6	5	**6.6**	**6.4**	**5.7**	**5.8**	**5.75**	5.2	**7.3**
BARIUM	82	23	38	54	**120 J**	37 J	78.5 J	**350**	**640**
BERYLLIUM	3.2	0.29	0.38	0.31	0.3	0.3	0.3	0.33	0.52
CADMIUM	0.36	**1.3**	0.091 J	0.14	0.25	0.29	0.27	**0.85**	0.33
CALCIUM	NC	1700 J	2100 J	5400 J	5800 J	5800 J	5800 J	3000 J	4700 J
CHROMIUM[7]	26	12	16	**29**	17	18	17.5	**37**	**38**
COBALT	5.2	3.2	4.4	4.4	3.8	3.9	3.85	4.6	**5.5**
COPPER	28	8.3	11	8.6	9.4	10	9.7	25	16
IRON	15000	8100	11000	11000	13000	10000	11500	11000	**17000**
LEAD	18	9.1	8.1	8.8	11	13	12	**93**	**48**
MAGNESIUM	NC	2000 J	2600 J	3500 J	2700 J	2800 J	2750 J	2600 J	3500 J
MANGANESE	267	130	170	160	180	180	180	180	210
MERCURY	0.1	0.0099 U	0.017 J	0.012 J	0.012 J	0.0099 U	0.0085 J	0.024	0.01 J
NICKEL	38	10	13	18	13	15	14	15	20
POTASSIUM	NC	1100	1300	2200	1400	1300	1350	1300	2000
SODIUM	NC	130	260	210	190	180	185	180	460
THALLIUM	0.14	0.11 J	0.12 J	0.13 J	0.12 J	0.1 J	0.11 J	0.12 J	0.13 J
VANADIUM	27.9	15 J	20 J	23 J	19 J	18 J	18.5 J	21 J	**29 J**
ZINC	46	24	23	38	33	34	33.5	**48**	**150**
POLYCHLORINATED BIPHENYLS (µg/kg)									
AROCLOR-1254	8.8	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U

1 EPA Regional Screening Levels (RSLs) from http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table, November 2010.
2 Maine Remedial Action Guidelines (RAGs) for Contaminated Soils, January 2010.
3 See Table 2-2 for the hierarchy used to select ecological screening levels. 3a - Eco SSLs (EPA, 2008). 3b - CCME Recommended Canadian Soil Quality Guidelines (2006). 3c - ORNL plant or invertebrate benchmarks (Efroymson et al., 1997a and 1997b). 3d NOAA SQuiRT surface soil benchmarks (Buchman, 2008).
4 95% Upper prediction limits (UPLs) for Upper Sand surface soil Table 4-5 of the Background Study for Naval Air Station Brunswick (Tetra Tech, 2011).
5 Greater of the NAS Brunswick background value (Tetra Tech, 2011) or the minimum of other screening values.
6 Maine RAG is for total PCBs.
7 Chromium value is for chromium III.

EPA - United States Environmental Protection Agency.
RSL - Regional Screening Level.
SSL - Soil Screening Level.
MCL - Maximum Contaminant Level.
Shaded values exceed the minimum screening criterion.

NC - No criterion.
U - Not detected at assocated detection limit.
J - Estimated concentration.

I:\02330\RI.DF\NASB_HELI_SAMP_LOC.MXD DWM 04/01/11

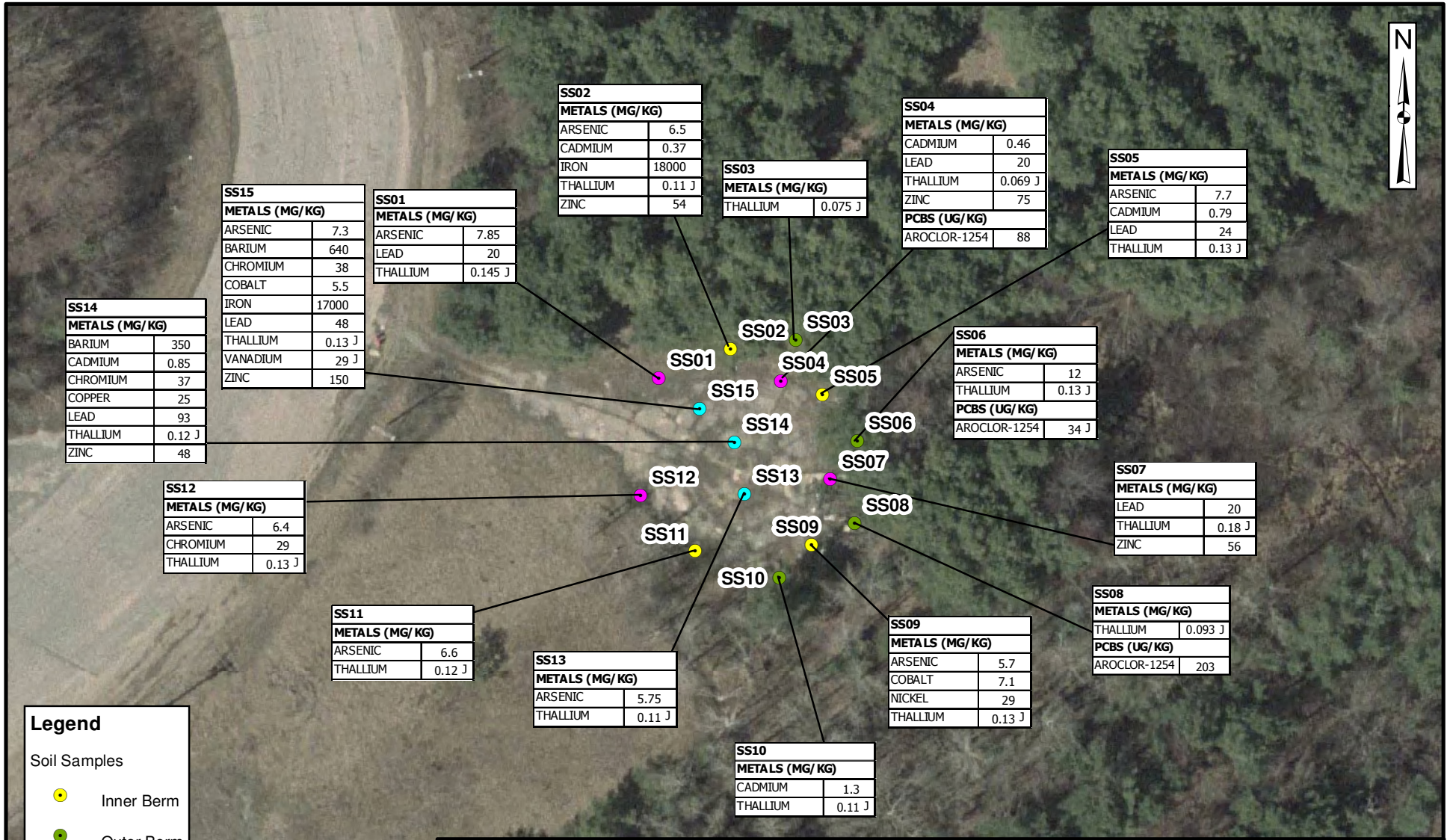


Tetra Tech NUS, Inc.

SAMPLE LOCATION MAP
HELIPAD
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	AS NOTED
FILE	\..\NASB_HELI_SAMP_LOC.MXD
REV	0
DATE	04/01/11
FIGURE NUMBER	4-1

BOS I:\02330\RI.DF\NASB_HELI_SS_TAG_MAPS.MXD 01/09/14 DWM/SP



SS02	
METALS (MG/KG)	
ARSENIC	6.5
CADMIUM	0.37
IRON	18000
THALLIUM	0.11 J
ZINC	54

SS03	
METALS (MG/KG)	
THALLIUM	0.075 J

SS04	
METALS (MG/KG)	
CADMIUM	0.46
LEAD	20
THALLIUM	0.069 J
ZINC	75
PCBS (UG/KG)	
AROCLOR-1254	88

SS05	
METALS (MG/KG)	
ARSENIC	7.7
CADMIUM	0.79
LEAD	24
THALLIUM	0.13 J

SS06	
METALS (MG/KG)	
ARSENIC	12
THALLIUM	0.13 J
PCBS (UG/KG)	
AROCLOR-1254	34 J

SS07	
METALS (MG/KG)	
LEAD	20
THALLIUM	0.18 J
ZINC	56

SS08	
METALS (MG/KG)	
THALLIUM	0.093 J
PCBS (UG/KG)	
AROCLOR-1254	203

SS09	
METALS (MG/KG)	
ARSENIC	5.7
COBALT	7.1
NICKEL	29
THALLIUM	0.13 J

SS10	
METALS (MG/KG)	
CADMIUM	1.3
THALLIUM	0.11 J

SS11	
METALS (MG/KG)	
ARSENIC	6.6
THALLIUM	0.12 J

SS12	
METALS (MG/KG)	
ARSENIC	6.4
CHROMIUM	29
THALLIUM	0.13 J

SS13	
METALS (MG/KG)	
ARSENIC	5.75
THALLIUM	0.11 J

SS14	
METALS (MG/KG)	
BARIUM	350
CADMIUM	0.85
CHROMIUM	37
COPPER	25
LEAD	93
THALLIUM	0.12 J
ZINC	48

SS15	
METALS (MG/KG)	
ARSENIC	7.3
BARIUM	640
CHROMIUM	38
COBALT	5.5
IRON	17000
LEAD	48
THALLIUM	0.13 J
VANADIUM	29 J
ZINC	150

SS01	
METALS (MG/KG)	
ARSENIC	7.85
LEAD	20
THALLIUM	0.145 J

Tetra Tech NUS, Inc.

SURFICIAL SOIL SAMPLE EXCEEDANCES
HELIPAD
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE	
AS NOTED	
FILE	
\..\NASB_HELI_SS_TAG_MAPS.MXD	
REV	DATE
0	04/27/11
FIGURE NUMBER	
4-2	

5.0 FORMER BUILDINGS 7 AND 10

The following sections summarize background information, field investigation activities, results, and recommendations based on the results of the former Buildings 7 and 10 investigation.

5.1 BACKGROUND

Former Buildings 7 and 10 were located within a current parking lot southeast of the intersection of Orion Street and Fitch Avenue (see Figure 5-1). The lot is presently being used for motorcycle certification classes.

Building 7 was built in the early 1940s and was identified as a garage and fire station on a 1943 public works drawing and 1946 and 1956 station maps. The 1946 map shows the location of a pump and two tanks south of Building 7. Based on a 1966 facilities list, the building was being used at that time by Public Works/Aircraft Maintenance Department for ground support equipment (GSE). Building 7 was still being used for GSE vehicle maintenance in 1983, per the Initial Assessment Study (IAS) (Roy F. Weston, 1983). The shop used lubricating oils, hydraulic fluid, petroleum distillates, solvents, ethylene glycol, and hydrochloric and sulfuric acids. Empty containers were reportedly disposed of in a dumpster. Two 3,000-gallon underground storage tanks (USTs) were located south of Building 7. The IAS reported that in the past, waste oil/solvent mixtures from the hangars were disposed of in these waste oil tanks. The contents of tanks were removed by a private contractor for reuse and recycling. Pertinent historical site features in the Buildings 7 and 10 area are shown on Figure 5-1.

Navy records indicate that one of the 3,000-gallon USTs (SN-10045-002) was installed in 1943, removed in 1988, and contained lubricating oil. Records of removal for the other 3,000-gallon UST were not found. Based on review of air emissions reports, Building 7 contained a cold solvents parts cleaner (naphtha), blast booth, and welding area. Building 7 was demolished in approximately 1992. Per demolition drawings, a pad-mounted transformer was located outside at the northwestern corner of the building. An oil-water separator on the southern side was cited to be demolished. Navy records reviewed do not indicate when the transformer was removed or whether it contained PCBs. Based on the age and history of the building, this transformer may have contained PCBs at some point.

Building 10 was constructed in the early 1940s and is noted as an enclosed shed on 1943, 1946, 1951, and 1952 station maps. It was likely renovated in the early 1950s, and on a 1956 station map, it is identified as a garage. In 1966, a building and structure list indicates that it was used for shops and storage. A 1982 plan shows specifications for renovations. The plan notes a fire equipment shop, electric shop with a battery charging area and new acid neutralization pit, paint storage area, paint shop

with spray paint booth, blast room, body shop, riggers' shop, wash bay with floor drain, two tire shops, and transportation dispatch office. Emissions reports from 1991 indicate that large aircraft air conditioners were serviced in Building 10, which had a Freon reclaiming unit, welding area, paint booth, blast booth, mechanical shop, and preventative maintenance area.

Building 10 was demolished in approximately 1992. Per demolition drawings, a pad-mounted transformer was located outside on the eastern side of the building. The abandoned transformer enclosure and electrical lines associated with it were slated for demolition along with the building. Per the Navy transformer database, three PCB-containing transformers associated with Building 10 were removed in December 1991. After demolition of Buildings 7 and 10, the parcel has been used as a parking lot.

In 2009, the Navy received information indicating that in the 1970s, a pit (approximately 6 to 8 feet deep) located inside former Building 7 was used for disposal of hydraulic and fuel oils. It was also alleged that the USTs outside had leaked and that batteries were drained into a pit in Building 10. Navy environmental personnel indicated that a pit in a battery locker was connected to the sanitary sewer line, but that may have been after 1982 renovations.

5.2 FIELD INVESTIGATION ACTIVITIES

Surface geophysical surveys using a magnetometer (EM31) and ground-penetrating radar (GPR) were completed at Former Buildings 7 and 10 to better characterize underground structures in the vicinity. Geophysical survey results helped to better define the locations of the Buildings 7 and 10 foundations, possible UST locations, and the former transformer pad in the southeastern corner of the area. Based on geophysical results, some soil boring locations were relocated slightly to avoid contact with underground utilities and other buried structures. In addition to locating features such as foundations, utilities, and metallic objects related to the former pumps located between Buildings 7 and 10, GPR data indicated the possible presence of a single small UST south of Building 7, near the historical locations of the pump and USTs. An EM31 anomaly was also noted near the interpreted UST but appeared offset from it. Complete geophysical survey results, including a map showing the location of the suspected UST, are presented in Appendix C. Based on the results indicating a possible UST, additional field activities were conducted in May 2011 to investigate the geophysical anomalies detected during AOPI fieldwork. Based on observations made during excavation activities, the anomaly was caused by four pieces of buried metal pipe, possibly part of the former UST system, at 3 to 4 feet bgs. After these pieces were removed, the excavation was extended an additional 2 feet in depth; no other buried metal was found. No visual evidence of contamination and no odors were observed during excavation activities (Tetra Tech, 2011).

Eleven soil borings (NASB-B7/10-SB01 through SB11) were advanced at Former Buildings 7 and 10. Table 5-1 presents a summary of samples collected, and Figure 5-1 presents the locations sampled at

Former Buildings 7 and 10 during the AOPI investigation. Soil boring logs and soil sample log sheets are presented in Appendix A. A total of 12 surface soil samples were collected from eight locations, and two subsurface soil samples were collected from each soil boring. Surface soil samples included four 0- to 1-foot samples (SS01 through SS04) around the existing transformer pad in the northwestern corner of the site and eight samples at four locations (0 to 1 and 1 to 2 feet at each location) (SS05 through SS08) around the former transformer pad in the southeastern corner of the site. Subsurface soil samples were collected throughout the site per the rationales presented in Table 5-1.

All surface soil samples were analyzed for PCBs by EPA SW-846 Method 8082A. All subsurface soil samples were analyzed for VOCs by EPA SW-846 Method 8260B, SVOCs by EPA SW-846 Method 8270C/8270C SIM and EPH/VPH by the MADEP Method. Soil samples collected from borings B7/10-SB01, SB05, and SB06 were also analyzed for TAL metals by EPA SW-846 Methods 6010C and 7471B. Because of holding time exceedances, original SVOC results were rejected for 16 subsurface soil samples from eight locations (SB01, SB02, SB04, SB05, and SB08 through SB11). These samples were recollected in December 2010 and analyzed for SVOCs using the methodology as for the prior samples, except that they were collected from the same depths as the original samples to maintain consistency with results for other parameters.

A total of 10 temporary monitoring wells, seven shallow and three deep, were installed at seven locations at Former Buildings 7 and 10 (co-located with SB01 through SB07). Shallow wells only were installed at NASB-B7/10-MW01, MW02, MW04, and MW07, and shallow and deep well pairs were installed at MW03, MW05, and MW06. Well screen intervals were selected based on photoionization detector (PID) screening results. If no significant PID readings were observed, shallow wells were screened at the water table and deep wells were screened just above the first silt-clay of the Transition Unit. Screened intervals are provided in Table 5-1.

One groundwater sample was collected from each temporary monitoring well and analyzed for VOCs by EPA SW-846 Method 8260B, SVOCs by EPA SW-846 Method 8270C/8270C SIM, EPH/VPH by the MADEP Method, and TAL metals by EPA SW-846 Methods 6010C and 7471B. Groundwater sample log sheets are provided in Appendix A-5, and groundwater elevations and groundwater field parameter data are presented in Appendix A, Table A-1, and Table A-2, respectively.

5.3 RESULTS

Soil boring logs for all borings indicate that the Upper Sand, Transition Unit, and Presumpscot Clay are present beneath the former Building 7 and 10 area. The Upper Sand extended to a depth of 18 to 28 feet, and the underlying Transition Unit was encountered to a depth ranging from 35 to 55 feet. The

clay unit ranged from the base of the Transition Unit to the end of the borings, which ranged from 40 to 60 feet bgs.

Depths to groundwater in the seven shallow wells ranged from 6.15 to 7.33 feet bgs (see Table A-1). Based on these water levels and associated groundwater elevations, groundwater flow is to the south-southwest in the Former Buildings 7 and 10 area (see Figure 5-2).

Table 5-2 includes results for parameters detected at least once in subsurface soil samples. Only the December 2010 SVOC resampling data are provided in this table. Complete soil analytical data, including rejected SVOC results, are presented in Appendix B-1. PCBs, the only surface soil analytical parameters, were not detected in surface soil samples (SS01 through SS08) from the Former Buildings 7 and 10 area. Analytes detected in subsurface soil samples from the Building 7 and 10 area included VOCs, SVOCs, EPH, VPH, and metals. Because the former Buildings 7 and 10 are in an industrial area of the base and future land use is expected to be limited to industrial/commercial activities, soil sample concentrations were compared to industrial RSLs and RAGs in addition to groundwater protection/leachability criteria and background values. Residential RSLs and RAGs are presented in Table 5-2 for information purposes only. Concentrations of analytes exceeding screening criteria (as discussed above and in Table 5-3) are presented on Figure 5-2 and discussed below.

All VOC detections in Buildings 7 and 10 subsurface soil samples were at concentrations significantly less than industrial (and residential) RSLs and RAGs. VOCs detected in one or more samples at concentrations greater than groundwater protection SSLs include 1,4-dichlorobenzene, benzene, chlorobenzene, ethylbenzene, PCE, and trichloroethene (TCE). Maximum concentrations of 15 of 18 VOCs were detected in the 11- to 12-foot sample from SB08, located within the footprint of former Building 7 near the former cold solvent parts cleaner. The detections were significantly less than RSLs/RAGs, and only concentrations of five VOCs in this sample exceeded soil-to-groundwater screening levels. The maximum concentration of benzene was detected in the 39- to 40-foot sample from SB06, located just south of former Building 10 near the former locations of the mechanic shop and acid neutralization tank. Maximum concentrations of PCE and TCE were detected in the 6- to 7-foot sample from SB09, located between former Buildings 7 and 10 near the former pumps and tanks.

Eight PAHs were detected in subsurface soil samples at concentrations exceeding screening criteria, which is not unexpected because the site is an asphalt-paved parking lot in a historically industrial area. Maximum concentrations of the PAHs (except fluorene, 2-methylnaphthalene, and naphthalene) were detected in the 6- to 7-foot bgs sample from SB05, located near the southwestern corner of the former Building 10 location. The SB05 6- to 7-foot sample was the only sample with an industrial screening level exceedance. In this sample, the concentration of benzo(a)pyrene exceeded the industrial RSL. In

addition, concentrations of several PAHs exceeded risk-based and/or MCL-based SSLs, and the concentration of naphthalene in one sample exceeded the Maine leaching-to-groundwater RAG.

Concentrations of arsenic exceeded the residential RSL and RAG and groundwater protection criteria, but all concentrations were less than the NAS Brunswick Upper Sand and Transition subsurface soil background 95-percent UPLs of 5.6 and 15 mg/kg, respectively. Concentrations of cobalt, iron, manganese, nickel, and thallium also exceeded EPA's risk-based groundwater protection SSLs. For cobalt, iron, and manganese, site-wide average concentrations (4.78, 11,800, and 222 mg/kg, respectively) were less than background values, and individual concentrations exceeded background concentrations by less than a factor of two. The site-wide average concentration of nickel is 12.3 mg/kg, slightly greater than the background concentration of 9.8 mg/kg but less than the EPA risk-based groundwater protection SSL (minimum screening criterion). Thallium concentrations in all of the samples for which it was analyzed exceeded EPA's MCL-based groundwater protection SSL. No background value is available for thallium. None of the cobalt, iron, manganese, nickel, or thallium concentrations exceeded industrial (or residential) RSLs/RAGs.

Table 5-3 presents groundwater data for parameters detected at least once in Buildings 7 and 10 samples, and complete groundwater data are presented in Appendix B-2. Metals and several organic compounds were detected in groundwater. Organics detected in excess of MCLs/residential groundwater RAGs included benzene, cis-1,2-dichloroethene, PCE, and benzo(a)pyrene. Benzene was detected in 3 of 10 samples at concentrations ranging from 1.3 to 7.4 µg/L, and concentrations in two samples exceeded the MCL (5 µg/L) and residential groundwater RAG (4 µg/L). PCE was detected in 6 of 10 samples at concentrations ranging from 0.31 to 19 µg/L, and concentrations in three samples exceeded the MCL (5 µg/L). All PCE concentrations were less than the residential RAG of 40 µg/L. Benzo(a)pyrene was only detected in 1 of 10 samples at a concentration (0.065 µg/L) greater than the residential RAG of 0.05 µg/L.

Concentrations of aluminum, iron, manganese, nickel, and sodium in unfiltered groundwater exceeded minimum screening criteria. Aluminum, iron, manganese, and nickel concentrations exceeded screening criteria in the sample from GW05D. Concentrations of iron in three other samples and sodium in two other samples exceeded screening criteria. A filtered sample was collected from GW05D because the turbidity was elevated at the time of sampling, which indicated the presence of particulates in the sample. Iron may scavenge trace metals; therefore, the trace metal exceedances may be associated with the particulates rather than dissolved in groundwater. In the filtered sample, only the iron concentration exceeded the minimum screening criterion.

5.4 RECOMMENDATIONS

Soil impacts in the Buildings 7 and 10 area are limited and are primarily PAHs observed at one boring location (SB05, 6 to 7 feet bgs). This was the only location where industrial EPA RSLs were exceeded; there were no exceedances of Maine RAGs. In addition, the SB05-0607 sample was one of only two samples with exceedances of residential criteria (five PAHs). In the other sample, SB05-0607, the naphthalene concentration exceeded the residential RSL. Exceedances of soil-to-groundwater screening criteria were observed more frequently; however, the exceedances were generally minor, and for PAHs and metals, concentrations exceeding soil-to-groundwater criteria were less than background values for NAS Brunswick. A small-scale groundwater remediation action is under consideration for the Buildings 7 and 10 area to address VOCs in groundwater. An area-wide investigation of low VOC detections in groundwater is planned by the Navy, including the Buildings 7 and 10 area. The results of this investigation will be used by the Navy to determine to path forward for groundwater, in consultation with EPA and MEDEP.

In the draft version of this report, it was recommended that the possible presence of an UST be confirmed through test pit excavation or other direct means and that the UST be removed if found to be present. This work was conducted in May 2011, and based on the results of that investigation and removal of the buried metal concluded to have caused the geophysical anomalies, no additional activities associated with the former UST are required.

TABLE 5-1

SOIL AND GROUNDWATER SAMPLE SUMMARY
FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST SCREENING INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID	SAMPLE INTERVAL (ft bgs)	GEOLOGIC UNIT	ANALYSIS	RATIONALE
SOIL				
NASB-B7/10-SS01-0001	0 - 1	Transition	PCBs	Evaluate PCBs in surface soil north, east, south, and west of transformer pad located NW of Building 7.
NASB-B7/10-SS02-0001	0 - 1	Transition		
NASB-B7/10-SS03-0001	0 - 1	Transition	PCBs	
NASB-B7/10-SS04-0001	0 - 1	Transition		
NASB-B7/10-SS05-0001	0 - 1	Upper Sand	PCBs	Evaluate PCBs in surface/shallow soil at former transformer pad E of Building 10.
NASB-B7/10-SS05-0102	1 - 2	Upper Sand		
NASB-B7/10-SS06-0001	0 -1	Upper Sand	PCBs	
NASB-B7/10-SS06-0102	1 -2	Upper Sand		
NASB-B7/10-SS07-0001	0 -1	Upper Sand	PCBs	
NASB-B7/10-SS07-0102	1 - 2	Upper Sand		
NASB-B7/10-SS08-0001	0 - 1	Upper Sand	PCBs	
NASB-B7/10-SS08-0102	1 - 2	Upper Sand		
NASB-B7/10-SB01-0607[(1)]	6 - 7	Upper Sand	VOCs, VPH, SVOCs, EPH, Metals	Upgradient of Buildings 7 /10
NASB-B7/10-SB01-3435[(1)]	34 - 35	Transition		
NASB-B7/10-SB02-0708[(1)]	7 - 8	Upper Sand	VOCs, VPH, SVOCs, EPH	Downgradient of western part of Building 7 where vehicle maintenance was conducted
NASB-B7/10-SB02-3940[(1)]	39 - 40	Transition		
NASB-B7/10-SB03-1415	14 - 15	Upper Sand	VOCs, VPH, SVOCs, EPH	In the vicinity of historical USTs south of Building 7
NASB-B7/10-SB03-3334	33 - 34	Transition		
NASB-B7/10-SB04-0607[(1)]	6 - 7	Upper Sand	VOCs, VPH, SVOCs, EPH	Downgradient of western part of Building 7 where vehicle maintenance was conducted
NASB-B7/10-SB04-3839[(1)]	38-39	Transition		
NASB-B7/10-SB05-0607[(1)]	6 - 7	Upper Sand	VOCs, VPH, SVOCs, EPH, Metals	Cross-gradient of former acid neutralization pit in western part of Building 10
NASB-B7/10-SB05-4041[(1)]	40 - 41	Transition		
NASB-B7/10-SB06-0607	6 - 7	Upper Sand	VOCs, VPH, SVOCs, EPH, Metals	Downgradient of former acid neutralization pit in western part of Building 10
NASB-B7/10-SB06-3940	39 - 40	Transition		

TABLE 5-1

SOIL AND GROUNDWATER SAMPLE SUMMARY
FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST SCREENING INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID	SAMPLE INTERVAL (ft bgs)	GEOLOGIC UNIT	ANALYSIS	RATIONALE
SOIL (CONTINUED)				
NASB-B7/10-SB07-0910	9 - 10	Upper Sand	VOCs, VPH, SVOCs, EPH	Downgradient of former paint booth in eastern part of Building 10 and in vicinity of former USTs south of Building 7
NASB-B7/10-SB07-1819	18 - 19	Transition		
NASB-B7/10-SB08-1112(1)	11 - 12	Upper Sand	VOCs, VPH, SVOCs, EPH	In the vicinity of former man pit at Building 7
NASB-B7/10-SB08-3940(1)	39 - 40	Transition		
NASB-B7/10-SB09-0607(1)	6 - 7	Upper Sand	VOCs, VPH, SVOCs, EPH	Downgradient of historical USTs south of Building 7
NASB-B7/10-SB09-2021(1)	20 - 21	Transition		
NASB-B7/10-SB10-0506(1)	5 - 6	Upper Sand	VOCs, VPH, SVOCs, EPH	Downgradient of historical USTs south of Building 7
NASB-B7/10-SB10-2122(1)	21 - 22	Transition		
NASB-B7/10-SB11-0708(1)	7 - 8	Upper Sand	VOCs, VPH, SVOCs, EPH	Downgradient of the eastern end of Building 7 that was removed prior to demolition of Building 10 and remainder of Building 7
NASB-B7/10-SB11-3940(1)	39 - 40	Transition		
GROUNDWATER				
NASB-B7/10-GW01	7 - 17	Upper Sand	VOCs, SVOCs, EPH, VPH, Metals	Upgradient of Buildings 7 /10
NASB-B7/10-GW02	8 - 18	Upper Sand	VOCs, SVOCs, EPH, VPH, Metals	Downgradient of western part of Building 7 where vehicle maintenance was conducted
NASB-B7/10-GW03S	9.5 - 19.5	Upper Sand	VOCs, SVOCs, EPH, VPH, Metals	In the vicinity of historical USTs south of Building 7
NASB-B7/10-GW03D	25 - 35	Transition	VOCs, SVOCs, EPH, VPH, Metals	
NASB-B7/10-GW04	7 - 17	Upper Sand	VOCs, SVOCs, EPH, VPH, Metals	In the vicinity of historical USTs south of Building 7
NASB-B7/10-GW05S	7 - 17	Upper Sand	VOCs, SVOCs, EPH, VPH, Metals	Cross-gradient of former acid neutralization pit in western part of Building 10
NASB-B7/10-GW05D	31 - 41	Transition	VOCs, SVOCs, EPH, VPH, Metals	
NASB-B7/10-GW06S	7 - 17	Upper Sand	VOCs, SVOCs, EPH, VPH, Metals	Downgradient of former acid neutralization pit in western part of Building 10
NASB-B7/10-GW06D	30 - 40	Transition	VOCs, SVOCs, EPH, VPH, Metals	
NASB-B7/10-GW07	8 - 18	Upper Sand	VOCs, SVOCs, EPH, VPH, Metals	Downgradient of former paint booth in eastern part of Building 10

ft bgs - Feet below ground surface.
VOCs - Volatile organic compounds.
EPH - Extractable petroleum hydrocarbons.
VPH - Volatile petroleum hydrocarbons.
SVOCs - Semivolatile organic compounds.
PCBs - Polychlorinated biphenyls.

1 Noted samples were recollected in December 2010 and reanlyzed for SVOCs only because original results were rejected due to holding time exceedances.

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Residential		Industrial		Protection of Groundwater			Lesser of Upper Sand and Transition Background 95% UPL[3]	Screening Criterion[4]	NASB-B7/10-SB01[5] 6 to 7 ft bgs		
	EPA RSL[1]	Maine RAG[2]	EPA RSL[1]	Maine RAG[2]	MCL-Based SSL[1]	Risk-Based SSL[1]	Leaching to GW RAG[2]			Sample	Duplicate	Average
VOLATILE ORGANIC COMPOUNDS (µg/kg)												
1,2,3-TRICHLOROBENZENE	49000	1700000	490000	420000	NC	15	NC	NC	15	0.47 U	0.43 U	0.45 U
1,2-DICHLOROBENZENE	1900000	5100000	9800000	10000000	580	270	11000	NC	270	0.47 U	0.43 U	0.45 U
1,3-DICHLOROBENZENE	NC	34000	NC	340000	NC	NC	75	NC	75	0.47 U	0.43 U	0.45 U
1,4-DICHLOROBENZENE	2400	2600000	12000	8800000	72	0.4	4300	NC	0.4	0.47 U	0.43 U	0.45 U
2-BUTANONE	28000000	10000000	200000000	10000000	NC	1000	NC	NC	1000	4.7 U	4.3 U	4.5 U
ACETONE	61000000	10000000	630000000	10000000	NC	2400	NC	NC	2400	7.3 U	6.9 U	7.1 U
BENZENE	1100	85000	5400	150000	2.6	0.2	510	NC	0.2	0.47 U	0.43 U	0.45 U
CARBON DISULFIDE	820000	10000000	3700000	10000000	NC	210	NC	NC	210	0.47 U	0.43 U	0.45 U
CHLOROBENZENE	290000	3400000	1400000	10000000	68	49	1100	NC	49	0.47 U	0.43 U	0.45 U
CIS-1,2-DICHLOROETHENE	160000	340000	2000000	3400000	21	8.2	140	NC	8.2	0.47 U	0.43 U	0.45 U
ETHYLBENZENE	5400	1300000	27000	4300000	780	1.5	810	NC	1.5	0.47 U	0.43 U	0.45 U
ISOPROPYLBENZENE	2100000	NC	11000000	NC	NC	640	NC	NC	640	0.47 U	0.43 U	0.45 U
M+P-XYLENES	590000[6]	10000000[7]	2500000[6]	10000000[7]	NC	180[6]	26000[7]	NC	180	0.47 U	0.43 U	0.45 U
METHYL CYCLOHEXANE	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.47 U	0.43 U	0.45 U
O-XYLENE	690000	10000000[7]	3000000	10000000[7]	NC	190	26000[7]	NC	190	0.47 U	0.43 U	0.45 U
TETRACHLOROETHENE	22000	**1000000**	**110000**	**10000000**	**2.3**	**4.4**	**2700**	NC	2.3	0.47 U	0.43 U	0.45 U
TOLUENE	5000000	10000000	45000000	10000000	690	590	8100	NC	590	0.47 U	0.43 U	0.45 U
TRICHLOROETHENE	910	**85000**	**6400**	**140000**	**1.8**	0.16	230	**0.49**	**0.16**	0.47 U	0.43 U	0.45 U
POLYNCULEAR AROMATIC HYDROCARBONS (µg/kg)												
2-METHYLNAPHTHALENE	230000	500000	2200000	600000	NC	140	3600	NC	140	3.01 J	6 U	3.01 J
ACENAPHTHENE	3400000	7500000	33000000	9800000	NC	4100	170000	NC	4100	2.02 J	6 U	2.02 J
ACENAPHTHYLENE	3400000[8]	7500000	33000000[8]	10000000	NC	4100[8]	68000	NC	4100	2.47 J	6 U	2.47 J
ANTHRACENE	17000000	10000000	170000000	3800000	NC	42000	2400000	NC	42000	1.76 J	6 U	1.76 J
BENZO(A)ANTHRACENE	150	2600	2100	35000	NC	10	10000000	NC	10	6 U	6 U	6 U
BENZO(A)PYRENE	15	260	210	**3500**	**240**	3.5	10000000	NC	3.5	6 U	6 U	6 U
BENZO(B)FLUORANTHENE	150	2600	2100	35000	NC	35	10000000	NC	35	1.24 J	6 U	1.24 J
BENZO(G,H,I)PERYLENE	1700000[8]	3700000	17000000[8]	10000000	NC	9500[8]	10000000	NC	9500	1.16 J	6 U	1.16 J
BENZO(K)FLUORANTHENE	1500	26000	21000	350000	NC	350	10000000	NC	350	6 U	6 U	6 U
CHRYSENE	15000	260000	210000	3500000	NC	1100	10000000	NC	1100	1.32 J	6 U	1.32 J
DIBENZO(A,H)ANTHRACENE	15	260	210	3500	NC	11	10000000	NC	11	6 U	6 U	6 U
FLUORANTHENE	2300000	5000000	22000000	10000000	NC	70000	10000000	NC	70000	2.21 J	1.11 J	1.66
FLUORENE	2300000	5000000	22000000	10000000	NC	4000	120000	NC	4000	2.05 J	6 U	2.05 J
INDENO(1,2,3-CD)PYRENE	150	2600	2100	35000	NC	200	10000000	NC	150	1.44 J	6 U	1.44 J
NAPHTHALENE	3600	2500000	18000	10000000	NC	0.47	1700	NC	0.47	**3.36 J**	6 U	**3.36 J**
PHENANTHRENE	1700000[8]	3700000	17000000[8]	8900000	NC	9500[8]	97000	NC	9500	3.21 J	1.01 J	2.11
PYRENE	1700000	3700000	17000000	10000000	NC	9500	10000000	NC	9500	2.37 J	1.02 J	1.695

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Residential		Industrial		Protection of Groundwater			Upper Sand Background 95% UPL[3]	Screening Criterion[4]	NASB-B7/10-SB01[5] 6 to 7 ft bgs		
	EPA RSL[1]	Maine RAG[2]	EPA RSL[1]	Maine RAG[2]	MCL-Based SSL[1]	Risk-Based SSL[1]	Leaching to GW RAG[2]			Sample	Duplicate	Average
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)												
BENZALDEHYDE	7800000	NC	100000000	NC	NC	330	NC	NC	330	276 U	279 U	277.5 U
BIS(2-ETHYLHEXYL) PHTHALATE	35000	770000	120000	2100000	1400	1100	NC	NC	1100	276 U	279 U	277.5 U
DIBENZOFURAN	78000	130000	1000000	950000	NC	110	NC	NC	110	148 U	150 U	149 U
EXTRACTABLE PETROLEUM HYDROCRABONS (mg/kg)												
C11-C22 AROMATICS	NC	750	NC	5500	NC	NC	460	NC	460	29.9 U	30.2 U	30.05 U
C19-C36 ALIPHATICS	NC	10000	NC	10000	NC	NC	10000	NC	10000	29.9 U	30.2 U	30.05 U
C9-C18 ALIPHATICS	NC	2700	NC	10000	NC	NC	10000	NC	2700	29.9 U	30.2 U	30.05 U
VOLATILE PETROLEUM HYDROCARBONS (mg/kg)												
C9-C10 AROMATICS	NC	750	NC	5500	NC	NC	75	NC	75	0.63 U	0.66 U	0.645 U
C9-C12 ALIPHATICS	NC	2700	NC	10000	NC	NC	10000	NC	2700	3.15 U	3.3 U	3.225 U
METALS (mg/kg)												
ALUMINUM	77000	170000	990000	310000	NC	23000	NC	13600	23000	4800	4600	4700
ARSENIC	0.61	1.4	2.4	4.2	0.29	0.0013	NC	5.6	5.6	1.9	2.1	2
BARIUM	15000	10000	190000	10000	82	120	NC	15	82	13	12	12.5
BERYLLIUM	160	340	2000	620	3.2	13	NC	0.57	3.2	0.27	0.25	0.26
CADMIUM	70	11	800	19	0.38	0.52	NC	0.048	0.38	0.057 U	0.055 U	0.056 U
CALCIUM	NC	NC	NC	NC	NC	NC	NC	1180	NC	750	760	755
CHROMIUM[9]	120000	10000	1500000	10000	NC	$2.8X10^7$	NC	16.2	10000	7.8	7.6	7.7
COBALT	23	51	300	510	NC	0.21	NC	5.2	5.2	2.8	2.6	2.7
COPPER	3100	2400	41000	4300	46	22	NC	6.8	22	6.1	5.7	5.9
IRON	55000	120000	720000	220000	NC	270	NC	15000	15000	8500	8100	8300
LEAD	400	340	800	950	14	NC	NC	3.4	14	2.3	2.3	2.3
MAGNESIUM	NC	NC	NC	NC	NC	NC	NC	1950	NC	1900	1800	1850
MANGANESE	1800	4100	23000	7400	NC	21	NC	267	267	98	87	92.5
NICKEL	1500	510	20000	930	NC	20	NC	9.8	20	7.1	6.4	6.75
POTASSIUM	NC	NC	NC	NC	NC	NC	NC	940	NC	880	830	855
SODIUM	NC	NC	NC	NC	NC	NC	NC	54.1	NC	120	130	125
THALLIUM	0.78	NC	10	NC	0.14	0.01	NC	NC	0.01	**0.092 J**	**0.081 J**	**0.0865**
VANADIUM	390	1200	5100	2200	NC	63	NC	27.9	63	14	14	14
ZINC	23000	10000	310000	10000	NC	290	NC	15.9	290	16	15	15.5

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Screening Criterion[4]	NASB-B7/10-										
		SB01[5]	SB-02[5]		SB-03		SB-04[5]				SB-05[5]	
		34 to 35 ft bgs	7 to 8 ft bgs	39 to 40 ft bgs	14 to 15 ft bgs	33 to 34 ft bgs	6 to 7 ft bgs			38 to 39 ft bgs	6 to 7 ft bgs	40 to 41 ft bgs
							Sample	Duplicate	Average			
VOLATILE ORGANIC COMPOUNDS (µg/kg)												
1,2,3-TRICHLOROBENZENE	15	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
1,2-DICHLOROBENZENE	270	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
1,3-DICHLOROBENZENE	75	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
1,4-DICHLOROBENZENE	0.4	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
2-BUTANONE	1000	3.5 J	5.4 U	4.7 U	5.2 U	2.5 J	6.3 U	4.7 U	5.5 U	4 J	5.1 U	3.6 J
ACETONE	2400	29 U	9.4 U	17 U	9.9 U	47 U	11 U	9.3 U	10.15 U	31 U	6 U	27 U
BENZENE	0.2	**0.29 J**	1.1 U	0.95 U	1 U	**0.83 J**	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
CARBON DISULFIDE	210	1	1.1 U	1.7 J	1 U	0.26 J	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.7 J
CHLOROBENZENE	49	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
CIS-1,2-DICHLOROETHENE	8.2	0.51 U	1.1 U	0.95 U	1 U	0.65 J	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
ETHYLBENZENE	1.5	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
ISOPROPYLBENZENE	640	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
M+P-XYLENES	180	0.51 U	2.2 U	1.9 U	2.1 U	1.6 U	0.63 U	0.47 U	0.55 U	0.7 U	2.1 U	2.3 U
METHYL CYCLOHEXANE	NC	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
O-XYLENE	190	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
TETRACHLOROETHENE	2.3	0.51 U	1.7 J	0.95 U	1 U	0.33 J	1.1 U	**2.6**	1.575	0.7 U	**5 J**	1.1 U
TOLUENE	590	0.51 U	1.1 U	0.95 U	1 U	0.82 U	0.63 U	0.47 U	0.55 U	0.7 U	1 U	1.1 U
TRICHLOROETHENE	0.16	0.51 U	1.1 U	0.95 U	1 U	0.16 J	0.63 U	0.47 U	0.55 U	0.7 U	0.15 J	1.1 U
POLYNCULEAR AROMATIC HYDROCARBONS µg/kg)												
2-METHYLNAPHTHALENE	140	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	9.97 J	6 U
ACENAPHTHENE	4100	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	15.5	6 U
ACENAPHTHYLENE	4100	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	138	6 U
ANTHRACENE	42000	1.26 J	6 U	2.43 J	6 U	2.4 J	6 U	6 U	6 U	6 U	113	6 U
BENZO(A)ANTHRACENE	10	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	**448**	6 U
BENZO(A)PYRENE	3.5	6 U	6 U	6 U	6 U	6.5 U	6 U	6 U	6 U	6 U	**292**	6 U
BENZO(B)FLUORANTHENE	35	6 U	1.32 J	4.36 J	6 U	6.5 U	1.32 J	1.46 J	1.39	2.19 J	**429**	6 U
BENZO(G,H,I)PERYLENE	9500	6 U	1.71 J	1.41 J	6 U	6 U	0.901 J	6 U	0.901 J	2.46 J	217	0.997 J
BENZO(K)FLUORANTHENE	350	6 U	6 U	1.78 J	6 U	6 U	6 U	6 U	6 U	1.84 J	121	6 U
CHRYSENE	1100	0.957 J	1.19 J	3.45 J	6 U	6 U	1.13 J	1.29 J	1.21	1.46 J	338	6 U
DIBENZO(A,H)ANTHRACENE	11	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1.66 J	**52.2**	6 U
FLUORANTHENE	70000	1.67 J	2.21 J	10.2 J	6 U	8.1 U	1.94 J	2.66 J	2.3	6 U	619	6 U
FLUORENE	4000	6 U	6 U	1.16 J	6 U	1.6 J	6 U	6 U	6 U	6 U	42.3	6 U
INDENO(1,2,3-CD)PYRENE	150	0.858 J	0.907 J	1.9 J	6 U	8.1 U	0.924 J	0.887 J	0.9055	3.37 J	**279**	1.08 J
NAPHTHALENE	0.47	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	**8.15 J**	6 U
PHENANTHRENE	9500	3.31 J	2.28 J	7.96 J	6 U	5.7 J	2.25 J	2.12 J	2.185	6 U	436	6 U
PYRENE	9500	1.5 J	2.15 J	8.19 J	6 U	6 U	2.01 J	3.23 J	2.62	1.24 J	662	6 U

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Screening Criterion[4]	NASB-B7/10-										
		SB01[5]	SB-02[5]		SB-03		SB-04[5]				SB-05[5]	
		34 to 35 ft bgs	7 to 8 ft bgs	39 to 40 ft bgs	14 to 15 ft bgs	33 to 34 ft bgs	6 to 7 ft bgs			38 to 39 ft bgs	6 to 7 ft bgs	40 to 41 ft bgs
							Sample	Duplicate	Average			
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)												
BENZALDEHYDE	330	311 U	297 U	308 U	288 U	306 U	285 U	289 U	287 U	317 U	98 J	313 U
BIS(2-ETHYLHEXYL) PHTHALATE	1100	311 U	297 U	308 U	288 U	306 U	285 U	289 U	287 U	317 U	264 U	313 U
DIBENZOFURAN	110	167 U	159 U	165 U	155 U	164 U	153 U	155 U	154 U	170 U	16 J	168 U
EXTRACTABLE PETROLEUM HYDROCRABONS (mg/kg)												
C11-C22 AROMATICS	460	32 U	28.3 U	32 U	31.2 U	32.3 U	29.9 U	30.4 U	30.15 U	32.8 U	30.4 U	32.8 U
C19-C36 ALIPHATICS	10000	32 U	28.3 U	32 U	31.2 U	32.3 U	29.9 U	30.4 U	30.15 U	32.8 U	30.4 U	32.8 U
C9-C18 ALIPHATICS	2700	32 U	28.3 U	32 U	31.2 U	32.3 U	29.9 U	30.4 U	30.15 U	32.8 U	30.4 U	32.8 U
VOLATILE PETROLEUM HYDROCARBONS (mg/kg)												
C9-C10 AROMATICS	75	0.74 U	0.61 U	0.76 U	0.71 U	0.72 U	0.81 U	0.69 U	0.75 U	0.8 U	0.7 U	0.88 U
C9-C12 ALIPHATICS	2700	3.7 U	3.05 U	3.8 U	3.55 U	3.6 U	4.05 U	3.45 U	3.75 U	4 U	3.5 U	4.4 U
ALUMINUM	23000	5600	NA	NA	NA	NA	NA	NA	NA	NA	6900	9500
ARSENIC	5.6	1.8	NA	NA	NA	NA	NA	NA	NA	NA	2.3	4.2
BARIUM	82	24	NA	NA	NA	NA	NA	NA	NA	NA	55 J	39 J
BERYLLIUM	3.2	0.23	NA	NA	NA	NA	NA	NA	NA	NA	0.27	0.37
CADMIUM	0.38	0.035 J	NA	NA	NA	NA	NA	NA	NA	NA	0.043 J	0.034 J
CALCIUM	NC	1800	NA	NA	NA	NA	NA	NA	NA	NA	910	3000
CHROMIUM[9]	10000	13	NA	NA	NA	NA	NA	NA	NA	NA	18 J	20 J
COBALT	5.2	3.8	NA	NA	NA	NA	NA	NA	NA	NA	3.7 J	**6.7 J**
COPPER	22	6.9	NA	NA	NA	NA	NA	NA	NA	NA	5.9	13
IRON	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	9100	**17000**
LEAD	14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.9	4.5
MAGNESIUM	NC	2800	NA	NA	NA	NA	NA	NA	NA	NA	2900 J	4700 J
MANGANESE	267	150	NA	NA	NA	NA	NA	NA	NA	NA	140 J	**300 J**
NICKEL	20	9.9	NA	NA	NA	NA	NA	NA	NA	NA	12 J	16 J
POTASSIUM	NC	1800	NA	NA	NA	NA	NA	NA	NA	NA	2100 J	2800 J
SODIUM	NC	180	NA	NA	NA	NA	NA	NA	NA	NA	170 J	250 J
THALLIUM	0.01	**0.12 J**	NA	NA	NA	NA	NA	NA	NA	NA	**0.13 J**	**0.19 J**
VANADIUM	63	16	NA	NA	NA	NA	NA	NA	NA	NA	17 J	27 J
ZINC	290	23	NA	NA	NA	NA	NA	NA	NA	NA	27 J	35 J

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Screening Criterion[4]	NASB-B7/10-					
		SB-06		SB-07		SB-08[5]	
		6 to 7 ft bgs	39 to 40 ft bgs	9 to 10 ft bgs	18 to 19 ft bgs	11 to 12 ft bgs	39 to 40 ft bgs
VOLATILE ORGANIC COMPOUNDS (µg/kg)							
1,2,3-TRICHLOROBENZENE	15	1.2 U	1.2 U	1.1 U	1.1 U	0.97 J	1.1 U
1,2-DICHLOROBENZENE	270	1.2 U	1.2 U	1.1 U	1.1 U	49	1.1 U
1,3-DICHLOROBENZENE	75	1.2 U	1.2 U	1.1 U	1.1 U	13	1.1 U
1,4-DICHLOROBENZENE	0.4	1.2 U	1.2 U	1.1 U	1.1 U	**31**	1.1 U
2-BUTANONE	1000	6 U	2 J	5.3 U	5.3 U	15	5.7 U
ACETONE	2400	22 U	31 U	18 U	22 U	67	8.3 J
BENZENE	0.2	1.2 U	**1.6 J**	1.1 U	1.1 U	1.3 U	1.1 U
CARBON DISULFIDE	210	1.2 U	1.2 U	0.83 J	1.1 U	1.9 J	1.1 U
CHLOROBENZENE	49	1.2 U	1.2 U	1.1 U	1.1 U	**56**	1.1 U
CIS-1,2-DICHLOROETHENE	8.2	1.2 U	0.43 J	1.1 U	1.1 U	4.9	1.1 U
ETHYLBENZENE	1.5	1.2 U	1.2 U	1.1 U	1.1 U	**2.7**	1.1 U
ISOPROPYLBENZENE	640	1.2 U	1.2 U	1.1 U	1.1 U	1.5 J	1.1 U
M+P-XYLENES	180	2.4 U	2.4 U	2.1 U	2.1 U	6.9	2.3 U
METHYL CYCLOHEXANE	NC	1.2 U	1.2 U	1.1 U	1.1 U	1.7 J	1.1 U
O-XYLENE	190	1.2 U	1.2 U	1.1 U	1.1 U	4.9	1.1 U
TETRACHLOROETHENE	2.3	1.1 J	1.2 U	1.1 U	1.1 U	**12**	1.1 U
TOLUENE	590	1.2 U	1.2 U	1.1 U	1.1 U	1.2 J	1.1 U
TRICHLOROETHENE	0.16	1.2 U	1.2 U	1.1 U	1.1 U	**1.3 J**	1.1 U
POLYNCULEAR AROMATIC HYDROCARBONS µg/kg)							
2-METHYLNAPHTHALENE	140	6 U	6 U	6 U	6 U	**3600**	6 U
ACENAPHTHENE	4100	6 U	6 U	6 U	6 U	6 U	1.1 J
ACENAPHTHYLENE	4100	6 U	6 U	6 U	6 U	6 U	12.1
ANTHRACENE	42000	6 U	6 U	6 U	6 U	47.5	2.83 J
BENZO(A)ANTHRACENE	10	6 U	6 U	6 U	6 U	6 U	**12.4**
BENZO(A)PYRENE	3.5	6 U	6 U	6 U	6 U	6 U	11.4 U
BENZO(B)FLUORANTHENE	35	6 U	6 U	6 U	6 U	6 U	9.43 J
BENZO(G,H,I)PERYLENE	9500	6 U	6 U	6 U	6 U	6 U	8.83 J
BENZO(K)FLUORANTHENE	350	6 U	6 U	6 U	6 U	6 U	4.14 J
CHRYSENE	1100	6 U	6 U	6 U	6 U	37.6	5.42 J
DIBENZO(A,H)ANTHRACENE	11	6 U	6 U	6 U	6 U	6 U	2.65 J
FLUORANTHENE	70000	6 U	6 U	6 U	6 U	82.7	5.76 J
FLUORENE	4000	6 U	6 U	6 U	6 U	135	1.93 J
INDENO(1,2,3-CD)PYRENE	150	7 U	7.9 U	6 U	6 U	6 U	9.9 J
NAPHTHALENE	0.47	6 U	6 U	6 U	6 U	**3870**	6 U
PHENANTHRENE	9500	1.6 J	6 U	1.6 J	6 U	226	2.96 J
PYRENE	9500	6 U	6 U	6 U	6 U	150	11.2 J

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Screening Criterion[4]	NASB-B7/10-					
		SB-06		SB-07		SB-08[5]	
		6 to 7 ft bgs	39 to 40 ft bgs	9 to 10 ft bgs	18 to 19 ft bgs	11 to 12 ft bgs	39 to 40 ft bgs
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)							
BENZALDEHYDE	330	293 U	295 U	297 U	283 U	315 U	301 U
BIS(2-ETHYLHEXYL) PHTHALATE	1100	293 U	295 U	297 U	283 U	865	301 U
DIBENZOFURAN	110	157 U	158 U	159 U	152 U	169 U	161 U
EXTRACTABLE PETROLEUM HYDROCRABONS (mg/kg)							
C11-C22 AROMATICS	460	30.7 U	32.3 U	30.7 U	30.7 U	103	32.6 U
C19-C36 ALIPHATICS	10000	30.7 U	32.3 U	30.7 U	30.7 U	714	32.6 U
C9-C18 ALIPHATICS	2700	30.7 U	32.3 U	30.7 U	30.7 U	201 J	32.6 U
VOLATILE PETROLEUM HYDROCARBONS (mg/kg)							
C9-C10 AROMATICS	75	0.8 U	0.7 U	0.68 U	0.71 U	64.8	0.77 U
C9-C12 ALIPHATICS	2700	4 U	3.5 U	3.4 U	3.55 U	66.9	3.83 U
METALS (mg/kg)							
ALUMINUM	23000	5600 J	11000 J	NA	NA	NA	NA
ARSENIC	5.6	1.4	3.8	NA	NA	NA	NA
BARIUM	82	14 J	48 J	NA	NA	NA	NA
BERYLLIUM	3.2	0.24	0.5	NA	NA	NA	NA
CADMIUM	0.38	0.037 J	0.054 J	NA	NA	NA	NA
CALCIUM	NC	880 J	3000 J	NA	NA	NA	NA
CHROMIUM[9]	10000	7.6	25	NA	NA	NA	NA
COBALT	5.2	3.3	**8.5**	NA	NA	NA	NA
COPPER	22	5 J	18 J	NA	NA	NA	NA
IRON	15000	6100 J	**19000 J**	NA	NA	NA	NA
LEAD	14	2.8 J	6.5 J	NA	NA	NA	NA
MAGNESIUM	NC	1800 J	5500 J	NA	NA	NA	NA
MANGANESE	267	150 J	**500 J**	NA	NA	NA	NA
NICKEL	20	7.1	**22**	NA	NA	NA	NA
POTASSIUM	NC	800	3200	NA	NA	NA	NA
SODIUM	NC	94 J	260 J	NA	NA	NA	NA
THALLIUM	0.01	**0.091 J**	**0.18 J**	NA	NA	NA	NA
VANADIUM	63	13	32	NA	NA	NA	NA
ZINC	290	16 J	44 J	NA	NA	NA	NA

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Screening Criterion[4]	NASB-B7/10-							
		SB-09[5]				SB-10[5]		SB-11[5]	
		6 to 7 ft bgs			20 to 21 ft bgs	5 to 6 ft bgs	21 to 22 ft bgs	7 to 8 ft bgs	39 to 40 ft bgs
		Sample	Duplicate	Average					
VOLATILE ORGANIC COMPOUNDS (µg/kg)									
1,2,3-TRICHLOROBENZENE	15	0.75 J	1.1 J	0.925	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
1,2-DICHLOROBENZENE	270	0.72 J	0.64 J	0.68	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
1,3-DICHLOROBENZENE	75	0.34 J	0.29 J	0.315	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
1,4-DICHLOROBENZENE	0.4	0.39 J	0.36 J	0.375	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
2-BUTANONE	1000	4.5 U	6.8 U	5.65 U	6.4 U	5.5 U	6.1 J	4.7 U	4.7 U
ACETONE	2400	8.8 J	4.3 J	6.55	22	3.2 J	29	2.7 J	40
BENZENE	0.2	0.9 U	1.4 U	1.15 U	1.3 U	1.1 U	**0.28 J**	0.93 U	1.1 U
CARBON DISULFIDE	210	0.9 U	1.7 J	1.075	0.63 J	1.1 U	1.8 J	0.93 U	1.1 J
CHLOROBENZENE	49	0.9 U	1.4 U	1.15 U	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
CIS-1,2-DICHLOROETHENE	8.2	4.3	1.5 J	2.9	0.39 J	1.1 U	0.55 J	0.93 U	1.1 J
ETHYLBENZENE	1.5	0.9 U	1.4 U	1.15 U	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
ISOPROPYLBENZENE	640	0.9 U	1.4 U	1.15 U	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
M+P-XYLENES	180	1.8 U	2.7 U	2.25 U	2.6 U	2.2 U	1.9 U	1.9 U	2.3 U
METHYL CYCLOHEXANE	NC	0.9 U	1.4 U	1.15 U	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
O-XYLENE	190	0.9 U	1.4 U	1.15 U	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
TETRACHLOROETHENE	2.3	**31**	**31**	**31**	1.3 U	1.1 U	0.94 U	**5.2**	1.1 U
TOLUENE	590	0.9 U	1.4 U	1.15 U	1.3 U	1.1 U	0.94 U	0.93 U	1.1 U
TRICHLOROETHENE	0.16	**1.8**	**0.94 J**	**1.37**	**0.49 J**	1.1 U	0.14 J	0.93 U	1.1 U
POLYNCULEAR AROMATIC HYDROCARBONS µg/kg)									
2-METHYLNAPHTHALENE	140	6 U	2.64 J	2.64 J	6 U	6 U	6 U	6 U	6 U
ACENAPHTHENE	4100	6 U	4.29 J	4.29 J	6 U	6 U	6 U	6 U	6 U
ACENAPHTHYLENE	4100	6 U	18.2	10.6	6 U	6 U	6 U	6 U	6 U
ANTHRACENE	42000	6 U	10.5 J	6.75	6 U	1.54 J	6 U	3.11 J	6 U
BENZO(A)ANTHRACENE	10	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
BENZO(A)PYRENE	3.5	6 U	**14.2**	**8.6**	6 U	6 U	6 U	7.91 U	6 U
BENZO(B)FLUORANTHENE	35	2.49 J	14.7	8.595	6 U	4.72 J	6 U	7.74 J	6 U
BENZO(G,H,I)PERYLENE	9500	1.39 J	10.8 J	6.095	6 U	2.41 J	6 U	3.44 J	6 U
BENZO(K)FLUORANTHENE	350	6 U	5.84 J	5.84 J	6 U	2.14 J	6 U	2.95 J	6 U
CHRYSENE	1100	1.87 J	9.29 J	5.58	6 U	2.95 J	6 U	5.39 J	6 U
DIBENZO(A,H)ANTHRACENE	11	6 U	1.86 J	1.86 J	6 U	6 U	6 U	6 U	6 U
FLUORANTHENE	70000	4.19 J	19.3	11.745	6 U	7.38 J	6 U	17.4	6 U
FLUORENE	4000	6 U	6.75 J	4.875	6 U	1.26 J	6 U	1.16 J	6 U
INDENO(1,2,3-CD)PYRENE	150	1.7 J	12.4	7.05	6 U	2.9 J	6 U	4.65 J	6 U
NAPHTHALENE	0.47	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
PHENANTHRENE	9500	3.91 J	15.7	9.805	6 U	5.04 J	6 U	10 J	6 U
PYRENE	9500	3.84 J	19	11.42	6 U	6.56 J	6 U	13.4	6 U

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Screening Criterion[4]	NASB-B7/10-							
		SB-09[5]				SB-10[5]		SB-11[5]	
		6 to 7 ft bgs			20 to 21 ft bgs	5 to 6 ft bgs	21 to 22 ft bgs	7 to 8 ft bgs	39 to 40 ft bgs
		Sample	Duplicate	Average					
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)									
BENZALDEHYDE	330	103 J	100 J	101.5	296 U	284 U	316 U	311 U	308 U
BIS(2-ETHYLHEXYL) PHTHALATE	1100	293 U	285 U	289 U	296 U	284 U	316 U	311 U	308 U
DIBENZOFURAN	110	157 U	153 U	155 U	159 U	152 U	169 U	167 U	165 U
EXTRACTABLE PETROLEUM HYDROCRABONS (mg/kg)									
C11-C22 AROMATICS	460	29.9 U	31.2 U	30.55 U	31.2 U	29.4 U	33.1 U	31 U	31.8 U
C19-C36 ALIPHATICS	10000	29.9 U	31.2 U	30.55 U	31.2 U	29.4 U	33.1 U	31 U	31.8 U
C9-C18 ALIPHATICS	2700	29.9 U	31.2 U	30.55 U	31.2 U	29.4 U	33.1 U	31 U	31.8 U
VOLATILE PETROLEUM HYDROCARBONS (mg/kg)									
C9-C10 AROMATICS	75	0.77 U	0.79 U	0.78 U	0.72 U	0.6 U	0.77 U	0.72 U	0.68 U
C9-C12 ALIPHATICS	2700	3.87 U	3.96 U	3.915 U	3.62 U	3.01 U	3.87 U	3.61 U	3.4 U
METALS (mg/kg)									
ALUMINUM	23000	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC	5.6	NA	NA	NA	NA	NA	NA	NA	NA
BARIUM	82	NA	NA	NA	NA	NA	NA	NA	NA
BERYLLIUM	3.2	NA	NA	NA	NA	NA	NA	NA	NA
CADMIUM	0.38	NA	NA	NA	NA	NA	NA	NA	NA
CALCIUM	NC	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM[9]	10000	NA	NA	NA	NA	NA	NA	NA	NA
COBALT	5.2	NA	NA	NA	NA	NA	NA	NA	NA
COPPER	22	NA	NA	NA	NA	NA	NA	NA	NA
IRON	15000	NA	NA	NA	NA	NA	NA	NA	NA
LEAD	14	NA	NA	NA	NA	NA	NA	NA	NA
MAGNESIUM	NC	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	267	NA	NA	NA	NA	NA	NA	NA	NA
NICKEL	20	NA	NA	NA	NA	NA	NA	NA	NA
POTASSIUM	NC	NA	NA	NA	NA	NA	NA	NA	NA
SODIUM	NC	NA	NA	NA	NA	NA	NA	NA	NA
THALLIUM	0.01	NA	NA	NA	NA	NA	NA	NA	NA
VANADIUM	63	NA	NA	NA	NA	NA	NA	NA	NA
ZINC	290	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 5-2

SUBSURFACE SOIL DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Industrial criteria are appropriate for comparion to data from former Buildings 7 and 10; residential criteria are presented for information only.

1 EPA Regional Screening Levels (RSLs) from http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table, November 2013.
2 Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances, May 2013.
3 Values are the lesser of the 95% upper prediction limits (UPLs) for Upper Sand and Transition subsurface soil from Table 4-5 of the Background Study for Naval Air Station Brunswick (Tetra Tech, 2012).
4 For organics, minimum values excluding residential criteria. For inorganics, greater of the NAS Brunswick background value (Tetra Tech, 2012) and the minimum of other screening values.
5 Data presented are from samples recollected/reanalyzed in December 2010 (original results rejected due to holding time exceedances).
6 Values are for m-xylene.
7 Values are for xylene.
8 Pyrene used as a surrogate for benzo(g,h,i)perylene and phenanthrene, and acenaphthene used as a surrogate for acenaphthylene.
9 Chromium value is for chromium III.

EPA - United States Environmental Protection Agency.
RSL - Regional Screening Level.
SSL - Soil Screening Level.
MCL - Maximum Contaminant Level.
Shaded values exceed the minimum screening criterion.

NC - No criterion.
U - Not detected at assocated detection limit.
J - Estimated concentration.

TABLE 5-3

GROUNDWATER DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	EPA MCL[1]	Maine Residential Groundwater RAG[2]	NAS Brunswick Background 95% UPL[3]	Minimum Screening Criterion[4]	NASB-B7/10-				
					MW01	MW02	MW03S	MW03D	MW04
VOLATILE ORGANIC COMPOUNDS (µg/L)									
1,2-DICHLOROBENZENE	600	200	NC	200	0.5 U	0.81 J	0.5 U	0.5 U	0.5 U
1,3-DICHLOROBENZENE	NC	1	NC	1	0.5 U	0.27 J	0.5 U	0.5 U	0.5 U
1,4-DICHLOROBENZENE	75	70	NC	70	0.5 U	0.57 J	0.5 U	0.5 U	0.5 U
1,4-DIOXANE	NC	4	NC	4	0.5 UR	0.5 UR	0.5 UR	0.62 J	0.5 UR
BENZENE	5	4	NC	4	0.5 U	0.5 U	0.5 U	1.3	0.5 U
CHLOROBENZENE	100	100	NC	100	0.5 U	0.23 J	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	70	10	NC	10	0.5 U	**16**	0.5 U	2.4	0.5 U
CYCLOHEXANE	NC	NC	NC	NC	0.5 U	0.5 U	0.5 U	0.14 J	0.5 U
METHYL CYCLOHEXANE	NC	NC	NC	NC	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	5	40	NC	5	0.5 U	**8.6**	**19**	0.5 U	1.1
TRICHLOROETHENE	5	4	NC	4	0.5 U	2.6	0.5 U	0.87 J	0.5 U
POLYNUCLEAR AROMATIC HYDROCARBONS (µg/L)									
ACENAPHTHENE	NC	400	NC	400	0.05 U	0.014 J	0.05 U	0.05 U	0.006 J
ANTHRACENE	NC	2000	NC	2000	0.05 U	0.01 J	0.05 U	0.009 J	0.05 U
BENZO(A)PYRENE	0.2	0.05	NC	0.05	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
SEMIVOLATILE ORGANIC COMPOUNDS (µg/L)									
BIS(2-ETHYLHEXYL) PHTHALATE	6	30	NC	6	2 U	2 U	2 U	4.7	2 U
CAPROLACTAM	NC	NC	NC	NC	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
EXTRACTABLE PETROLEUM HYDROCARBONS (µg/L)									
C11-C22 AROMATICS	NC	200	NC	200	150 U	149 U	148 U	146 U	148 U
C19-C36 ALIPHATICS	NC	10000	NC	10000	200 U	199 U	197 U	195 U	197 U
C9-C18 ALIPHATICS	NC	700	NC	700	200 U	199 U	197 U	195 U	197 U
VOLATILE PETROLEUM HYDROCARBONS (µg/L)									
C9-C10 AROMATICS	NC	200	NC	200	10 U	15	10 U	10 U	10 U
TOTAL METALS (µg/L)									
ALUMINUM	NC	7000	1930	7000	50 U	290	330	520	50 U
ARSENIC	10	10	13.8	13.8	1.3 U	3.8	1.5 J	1.4 J	1.3 U
BARIUM	2000	1000	43.3	1000	9.4	25	37	20	12
BERYLLIUM	4	10	0.27	4	0.25 U	0.25 U	0.25 U	0.15 J	0.25 U

TABLE 5-3

GROUNDWATER DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	EPA MCL[1]	Maine Residential Groundwater RAG[2]	NAS Brunswick Background 95% UPL[3]	Minimum Screening Criterion[4]	NASB-B7/10-				
					MW01	MW02	MW03S	MW03D	MW04
TOTAL METALS (µg/L) (continued)									
CALCIUM	NC	NC	9640	NC	10000	16000	24000	8400	11000
CHROMIUM	100[5]	10000[6]	NC	100	2.5 U	2.5 U	2.5 J	3.5 J	2.5 U
COBALT	NC	10	2.4	10	0.18 U	1.4	1.4	1.4	0.4 U
COPPER	1300	500	1.5	500	1.1 U	1.1 U	4.4 J	1.1 J	1.1 U
IRON	NC	5000	2100	5000	44 U	4200	400	**20000**	44 U
LEAD	15[7]	10	0.66	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MAGNESIUM	NC	NC	2270	NC	910	2000	3800	2700	1200
MANGANESE	NC	500	173	500	17	380	180	450	23
NICKEL	NC	20	4.1	20	2 U	4.7 J	2 J	3.4 J	2 U
POTASSIUM	NC	NC	1790	NC	1100	2600	6400	1700	1600
SODIUM	NC	20000	31600	31600	**47000**	23000	19000	**34000**	19000
VANADIUM	NC	200	5.6	200	3.2 U	3.2 U	4.2 J	4.2 J	3.2 U
ZINC	NC	2000	6.1	2000	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
DISSOLVED METALS (µg/L)									
ARSENIC	10	10	NC	10	NA	NA	NA	NA	NA
BARIUM	2000	1000	36.6	1000	NA	NA	NA	NA	NA
CALCIUM	NC	NC	11700	NC	NA	NA	NA	NA	NA
COBALT	NC	10	1.8	10	NA	NA	NA	NA	NA
IRON	NC	5000	526	5000	NA	NA	NA	NA	NA
MAGNESIUM	NC	NC	2250	NC	NA	NA	NA	NA	NA
MANGANESE	NC	500	432	500	NA	NA	NA	NA	NA
NICKEL	NC	20	2.7	20	NA	NA	NA	NA	NA
POTASSIUM	NC	NC	1790	NC	NA	NA	NA	NA	NA
SODIUM	NC	20000	31200	31200	NA	NA	NA	NA	NA

TABLE 5-3

GROUNDWATER DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Minimum Screening Criterion[4]	NASB-B7/10-								
		MW05S			MW05D	MW06S	MW06D			MW07
		Sample	Duplicate	Average			Sample	Duplicate	Average	
VOLATILE ORGANIC COMPOUNDS (µg/L)										
1,2-DICHLOROBENZENE	200	0.32 J	0.42 J	0.37	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-DICHLOROBENZENE	1	0.34 J	0.43 J	0.385	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DICHLOROBENZENE	70	0.5 U	0.22 J	0.22 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DIOXANE	4	0.5 UR	0.5 UR	0.5 R	0.5 UR	0.5 UR	0.5 UR	0.5 UR	0.5 R	0.5 UR
BENZENE	4	0.5 U	0.5 U	0.5 U	**7.4**	0.5 U	**5.5**	**5.5**	**5.5**	0.5 U
CHLOROBENZENE	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	10	0.5 U	0.5 U	0.5 U	3.1	0.5 U	3.5	3.5	3.5	0.5 U
CYCLOHEXANE	NC	0.5 U	0.5 U	0.5 U	1.6	0.5 U	1.2	1.5	1.35	0.5 U
METHYL CYCLOHEXANE	NC	0.5 U	0.5 U	0.5 U	0.19 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	5	0.64 J	0.7 J	0.67	0.5 U	**6.5**	0.5 U	0.5 U	0.5 U	0.31 J
TRICHLOROETHENE	4	0.5 U	0.5 U	0.5 U	0.52 J	0.5 U	0.68 J	0.56 J	0.62	0.5 U
POLYNUCLEAR AROMATIC HYDROCARBONS (µg/L)										
ACENAPHTHENE	400	0.05 U	0.05 U	0.05 U	0.05 U	0.011 J	0.026 J	0.05 U	0.026 J	0.05 U
ANTHRACENE	2000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.013 J	0.05 U	0.013 J	0.05 U
BENZO(A)PYRENE	0.05	0.05 U	0.05 U	0.05 U	0.05 U	**0.065 J**	0.05 U	0.05 U	0.05 U	0.05 U
SEMIVOLATILE ORGANIC COMPOUNDS (µg/L)										
BIS(2-ETHYLHEXYL) PHTHALATE	6	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
CAPROLACTAM	NC	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ
EXTRACTABLE PETROLEUM HYDROCARBONS (µg/L)										
C11-C22 AROMATICS	200	149 U	149 U	149 U	152 UJ	149 U	148 U	147 U	147.5 U	147 U
C19-C36 ALIPHATICS	10000	198 U	199 U	198.5 U	202 UJ	198 U	197 U	196 U	196.5 U	196 U
C9-C18 ALIPHATICS	700	198 U	199 U	198.5 U	202 UJ	198 U	197 U	196 U	196.5 U	196 U
VOLATILE PETROLEUM HYDROCARBONS (µg/L)										
C9-C10 AROMATICS	200	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
TOTAL METALS (µg/L)										
ALUMINUM	7000	50 U	50 U	50 U	**15000**	50 U	240	180	210	290
ARSENIC	13.8	5.1	4.9	5	7.5	1.3 U	2.1 J	1.7 J	1.9	1.3 U
BARIUM	1000	18	17	17.5	81	35	16	16	16	25
BERYLLIUM	4	0.25 U	0.25 U	0.25 U	0.86	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U

TABLE 5-3

GROUNDWATER DETECTIONS - FORMER BUILDINGS 7 AND 10
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Minimum Screening Criterion[4]	NASB-B7/10-								
		MW05S			MW05D	MW06S	MW06D			MW07
		Sample	Duplicate	Average			Sample	Duplicate	Average	
TOTAL METALS (µg/L)										
CALCIUM	NC	8400	8400	8400	15000	17000	9200	9300	9250	18000
CHROMIUM	100	2.5 U	2.5 U	2.5 U	37	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
COBALT	10	0.57	0.57	0.57	8.2	1.6	1.8	1.7	1.75	0.73
COPPER	500	1.1 U	1.1 U	1.1 U	25	1.1 U	1.1 U	1.1 U	1.1 U	1.3 J
IRON	5000	**6100**	**6200**	**6150**	**46000**	550	**20000**	**21000**	**20500**	1500
LEAD	10	0.5 U	0.5 U	0.5 U	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MAGNESIUM	NC	950	950	950	8600	2300	2700	2800	2750	2100
MANGANESE	500	100	100	100	**730**	94	330	350	340	93
NICKEL	20	2 U	2 U	2 U	**26**	4.1 J	3.9 J	3.4 J	3.65	2.8 J
POTASSIUM	NC	1900	1900	1900	6100	3300	1900	1900	1900	1700
SODIUM	31600	28000	28000	28000	27000	22000	29000	29000	29000	19000
VANADIUM	200	3.2 U	3.2 U	3.2 U	39	3.2 U	3.8 J	3.4 J	3.6	3.2 U
ZINC	2000	8.4 U	8.4 U	8.4 U	45	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
DISSOLVED METALS (µg/L)										
ARSENIC	10	NA	NA	NA	4.8	NA	NA	NA	NA	NA
BARIUM	1000	NA	NA	NA	14	NA	NA	NA	NA	NA
CALCIUM	NC	NA	NA	NA	14000	NA	NA	NA	NA	NA
COBALT	10	NA	NA	NA	0.94	NA	NA	NA	NA	NA
IRON	5000	NA	NA	NA	**29000**	NA	NA	NA	NA	NA
MAGNESIUM	NC	NA	NA	NA	4200	NA	NA	NA	NA	NA
MANGANESE	500	NA	NA	NA	490	NA	NA	NA	NA	NA
NICKEL	20	NA	NA	NA	2.9 J	NA	NA	NA	NA	NA
POTASSIUM	NC	NA	NA	NA	2100	NA	NA	NA	NA	NA
SODIUM	31200	NA	NA	NA	25000	NA	NA	NA	NA	NA

1 EPA Drinking Water Standards and Health Advisories Maximum Contaminant Levels (MCLs), October 2009.
2 Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances, May 2013.
3 Lesser of Upper Sand and Transition 95% upper prediction limits (UPLs) from Table 5-5 of the Background Study (Tetra Tech, 2012).
4 Greater of the NAS Brunswick background 95% UPL and minimum of MCL/MEG.
5 Criterion is for chromium III.
6 Criterion is for total chromium.
7 EPA Action Level as included on MCL table.

U - Not detected at associated detection limit.
J - Estimated concentration.
R - Rejected.
Shaded values exceed the minimum screening criterion.

NC - No criterion.
NA - Not analyzed.

I:\02330\RI.DF\NASB_BLDG_7,10,225&252_SAMP_LOCS.MXD DWM 04/27/11

Tetra Tech NUS, Inc.

SAMPLE LOCATION MAP

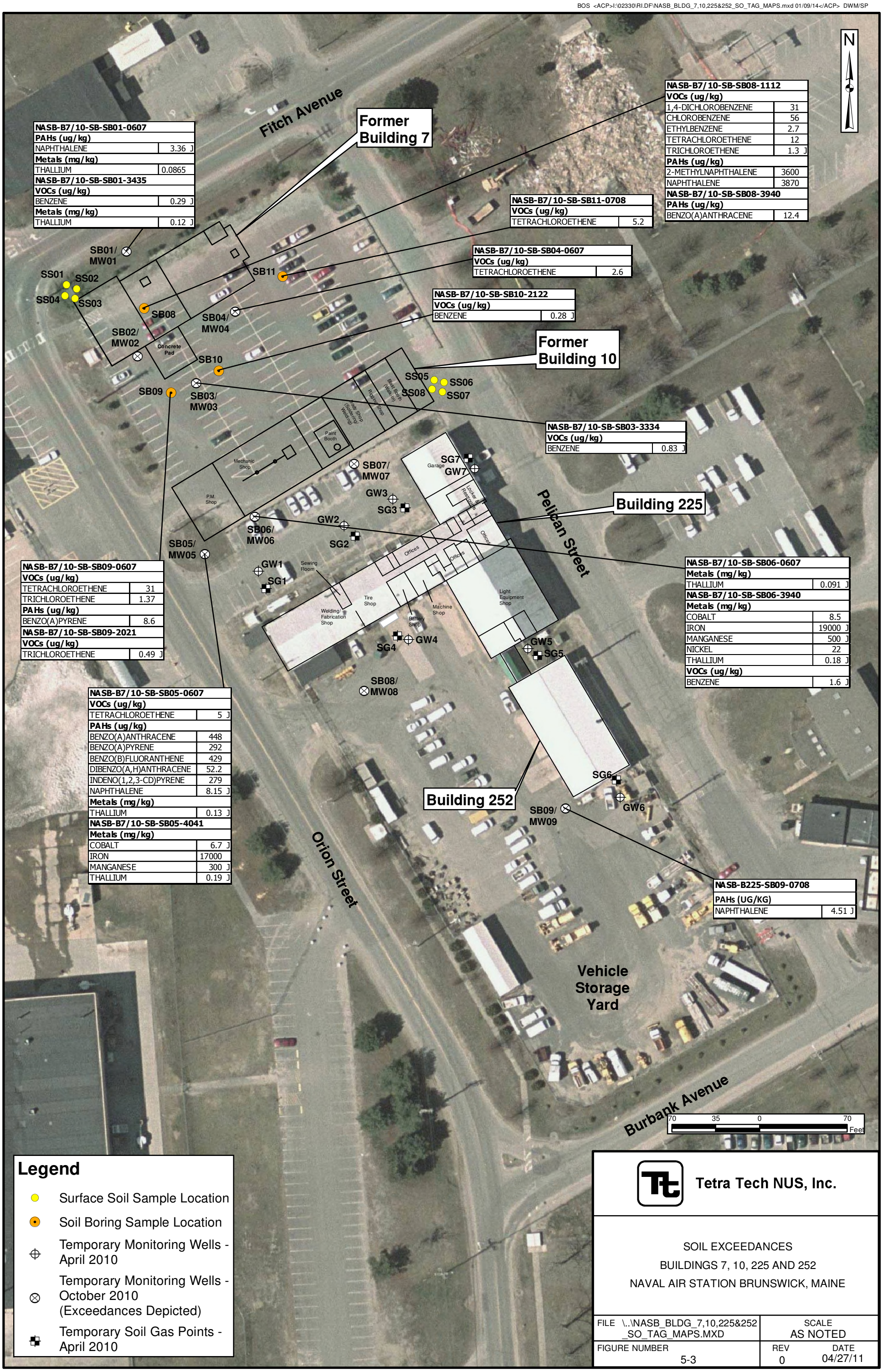
BUILDINGS 7, 10, 225 AND 252

NAVAL AIR STATION BRUNSWICK, MAINE

FILE \..\NASB_BLDG_7,10,225&252_SAMP_LOCS.MXD	SCALE AS NOTED
FIGURE NUMBER 5-1	REV 0 / DATE 04/27/11

BOS I:\02330\RI.DF\NASB_BLDG_7,10,225&252_GW_CONT.mxd 01/09/14 DWM/SP

BOS <ACP>I:\02330\RI.DF\NASB_BLDG_7,10,225&252_SO_TAG_MAPS.mxd 01/09/14</ACP> DWM/SP



NASB-B7/10-SB-SB01-0607	
PAHs (ug/kg)	
NAPHTHALENE	3.36 J
Metals (mg/kg)	
THALLIUM	0.0865
NASB-B7/10-SB-SB01-3435	
VOCs (ug/kg)	
BENZENE	0.29 J
Metals (mg/kg)	
THALLIUM	0.12 J

NASB-B7/10-SB-SB08-1112	
VOCs (ug/kg)	
1,4-DICHLOROBENZENE	31
CHLOROBENZENE	56
ETHYLBENZENE	2.7
TETRACHLOROETHENE	12
TRICHLOROETHENE	1.3 J
PAHs (ug/kg)	
2-METHYLNAPHTHALENE	3600
NAPHTHALENE	3870
NASB-B7/10-SB-SB08-3940	
PAHs (ug/kg)	
BENZO(A)ANTHRACENE	12.4

NASB-B7/10-SB-SB11-0708	
VOCs (ug/kg)	
TETRACHLOROETHENE	5.2

NASB-B7/10-SB-SB04-0607	
VOCs (ug/kg)	
TETRACHLOROETHENE	2.6

NASB-B7/10-SB-SB10-2122	
VOCs (ug/kg)	
BENZENE	0.28 J

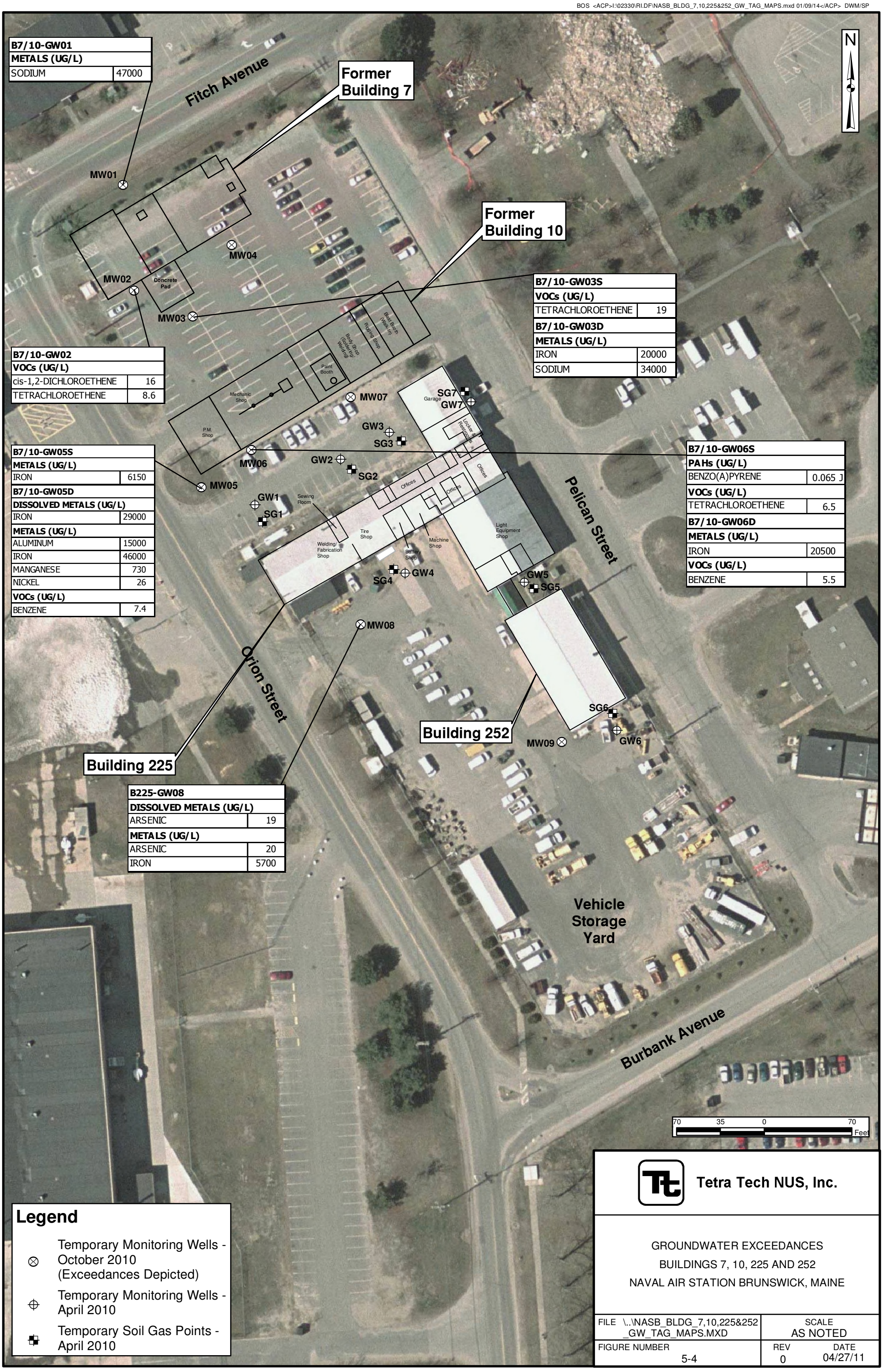
NASB-B7/10-SB-SB03-3334	
VOCs (ug/kg)	
BENZENE	0.83 J

NASB-B7/10-SB-SB09-0607	
VOCs (ug/kg)	
TETRACHLOROETHENE	31
TRICHLOROETHENE	1.37
PAHs (ug/kg)	
BENZO(A)PYRENE	8.6
NASB-B7/10-SB-SB09-2021	
VOCs (ug/kg)	
TRICHLOROETHENE	0.49 J

NASB-B7/10-SB-SB06-0607	
Metals (mg/kg)	
THALLIUM	0.091 J
NASB-B7/10-SB-SB06-3940	
Metals (mg/kg)	
COBALT	8.5
IRON	19000 J
MANGANESE	500 J
NICKEL	22
THALLIUM	0.18 J
VOCs (ug/kg)	
BENZENE	1.6 J

NASB-B7/10-SB-SB05-0607	
VOCs (ug/kg)	
TETRACHLOROETHENE	5 J
PAHs (ug/kg)	
BENZO(A)ANTHRACENE	448
BENZO(A)PYRENE	292
BENZO(B)FLUORANTHENE	429
DIBENZO(A,H)ANTHRACENE	52.2
INDENO(1,2,3-CD)PYRENE	279
NAPHTHALENE	8.15 J
Metals (mg/kg)	
THALLIUM	0.13 J
NASB-B7/10-SB-SB05-4041	
Metals (mg/kg)	
COBALT	6.7 J
IRON	17000
MANGANESE	300 J
THALLIUM	0.19 J

NASB-B225-SB09-0708	
PAHs (UG/KG)	
NAPHTHALENE	4.51 J



B7/10-GW01	
METALS (UG/L)	
SODIUM	47000

B7/10-GW02	
VOCs (UG/L)	
cis-1,2-DICHLOROETHENE	16
TETRACHLOROETHENE	8.6

B7/10-GW03S	
VOCs (UG/L)	
TETRACHLOROETHENE	19
B7/10-GW03D	
METALS (UG/L)	
IRON	20000
SODIUM	34000

B7/10-GW05S	
METALS (UG/L)	
IRON	6150
B7/10-GW05D	
DISSOLVED METALS (UG/L)	
IRON	29000
METALS (UG/L)	
ALUMINUM	15000
IRON	46000
MANGANESE	730
NICKEL	26
VOCs (UG/L)	
BENZENE	7.4

B7/10-GW06S	
PAHs (UG/L)	
BENZO(A)PYRENE	0.065 J
VOCs (UG/L)	
TETRACHLOROETHENE	6.5
B7/10-GW06D	
METALS (UG/L)	
IRON	20500
VOCs (UG/L)	
BENZENE	5.5

B225-GW08	
DISSOLVED METALS (UG/L)	
ARSENIC	19
METALS (UG/L)	
ARSENIC	20
IRON	5700

6.0 BUILDINGS 225 AND 252

The following sections summarize background information, field investigation activities, results, and recommendations based on the results of the Buildings 225 and 252 supplemental investigation.

6.1 BACKGROUND

Buildings 225 and 252, located in the north-central portion of NAS Brunswick, were previously used as an automotive equipment maintenance facility by the NAS Brunswick Public Works Department. The 3.4-acre parcel that includes these buildings is bordered to the southwest by Orion Street, to the northeast by Pelican Street, to the southeast by Burbank Avenue, and to the northwest by a parking lot (see Figure 5-1). Buildings 225 and 252, located in the northeastern portion of the parcel, are connected by a covered walkway. Much of the area surrounding the two buildings is paved, except for a narrow band (approximately 12 feet wide) along the northern side of Building 225 and a small area (approximately 30 feet by 40 feet) between Buildings 225 and 252 west of Pelican Street. Currently, Buildings 225 and 252 are unoccupied.

Building 225, constructed in 1953, is a slab-on-grade structure occupying approximately 15,500 square feet. The interior space includes service bays, a garage, welding/fabrication shop, tire shop, battery shop, offices, and locker room. The facility has not been active since the early 2000s, except for use of the space for storage. Building 252, constructed in 1957 as an auto hobby shop, was originally at a different location at NAS Brunswick (off Burbank Street). In 1990, the structure was disassembled and relocated to the current location. The building is a slab-on-grade structure approximately 102 feet long by 50 feet wide. Most of the interior space was configured for vehicle service bays. A small restroom area is located in the southeastern corner of the building.

The Buildings 225 and 252 facility was used by the NAS Brunswick Public Works Department for general maintenance and repair. According to the NAS Brunswick Environmental Department, Building 225 was used as a repair shop for light trucks and cars, and Building 252 was used for heavy equipment repair. The facility included a machine shop/carburetor cleaning system and a battery storage and repair area.

The only documented release occurred from an in-ground hydraulic lift in the Building 225 garage in April 1995. Hydraulic oil and surrounding soil were removed from beneath the building and disposed of at the Commercial Paving and Recycling facility in Scarborough, Maine. This work was completed under the supervision of MEDEP, and no further action was required at the site. A former 3,000-gallon waste oil UST was previously located along the southern side of Building 225.

In April 2010, a vapor intrusion (VI) screening assessment was conducted in the vicinity of Buildings 225 and 252. Soil gas and groundwater sampling locations are depicted on Figure 5-1. The only VOC detections in groundwater were PCE at a concentration of 0.6 µg/L (GW1) and acetone (a common laboratory contaminant) at a concentration of 2.2 µg/L (GW7). These concentrations were significantly less than EPA's Vapor Intrusion Target Concentrations for Workers.

MEDEP Soil Gas Targets were not exceeded at any of the soil gas sample locations. EPA's industrial air RSLs were slightly exceeded for two analytes at the SG1 and SG4 locations only. Benzene concentrations at soil gas sample locations SG4 and SG1 slightly exceeded its RSL, and the PCE concentration in the sample collected from the SG1 location (90 µg/m^3) exceeded its RSL (21 µg/m^3). Based on the results of this VI investigation, it was concluded that a significant source of VOC vapors was not present in the vicinity of Buildings 225 and 252 (Tetra Tech, 2010a).

6.2 FIELD INVESTIGATION ACTIVITIES

Two subsurface soil samples and two groundwater samples from temporary wells were collected during the AOPI investigation at Buildings 225 and 252. Soil boring logs, well construction logs, and soil sample log sheets are included in Appendix A. Table 6-1 presents a summary of samples collected, and Figure 5-1 presents the sampling locations. Groundwater data collected during this investigation supplemented data collected during the October 2010 VI study.

One sample subsurface soil was collected from each of two soil borings (NASB-B225-SB08 and SB09) and analyzed for VOCs by EPA SW-846 Method 8260B, SVOCs by EPA SW-846 Method 8270C/8270C SIM, and EPH/VPH by the MADEP Method. Because of holding time exceedances, original SVOC results were rejected for the Buildings 225 and 252 samples. These samples were recollected in December 2010 and analyzed for SVOCs as above. The SVOC resampling data are presented in Table 6-2 for these samples.

Two temporary monitoring wells were installed at Buildings 225 and 252 (NASB-B225-MW08 and MW09), and one groundwater sample was collected from each temporary monitoring well. The groundwater samples were analyzed for VOCs by EPA SW-846 Method 8260B, SVOCs by EPA SW-846 Method 8270C/8270C SIM, EPH/VPH by the MADEP Method, and TAL metals by EPA SW-846 Methods 6010C and 7471B. Groundwater sample log sheets are included in Appendix A-5, and groundwater elevations and groundwater field parameter data are presented in Appendix A, Table A-1, and Table A-2, respectively.

6.3 RESULTS

Because the former Buildings 225 and 252 are in an industrial area of the base and future land use is expected to be limited to industrial/commercial activities, soil sample concentrations were compared to industrial RSLs and RAGs in addition to groundwater protection criteria and background values. Residential RSLs and RAGs are presented in Table 6-2 for information purposes only. Concentrations of analytes in soil and groundwater exceeding screening criteria (as discussed above) are presented on Figures 5-2 and 5-3, respectively, and discussed below. Buildings 225 and 252 soil data are summarized in Table 6-2, and complete soil analytical data are presented in Appendix B-1. Buildings 225 and 252 groundwater data are summarized in Table 6-3, and complete groundwater data are presented in Appendix B-2.

Buildings 225 and 252 soil boring logs indicated that the Upper Sand, Transition Unit, and Presumpscot Clay are present at both boring locations. The Upper Sand extended to a depth of 8 to 18 feet, and the Transition Unit underlay the Upper Sand to a depth ranging from 20 to 38 feet. The clay unit ranged from the base of the Transition Unit to the total depth of the borings, which ranged from 30 to 40 feet bgs.

Depths to groundwater at the two well locations were 4.62 and 6.71 feet bgs (Table A-1). The two wells and groundwater elevations were added to Figure 5-2 for completion of the groundwater contour map across the Building 225/252 area (Figure 5-2). The groundwater elevations at B225-MW08 and MW09, in combination with the Buildings 7 and 10 wells, are consistent with a south-southwesterly groundwater flow direction.

Trace levels of one VOC and a number of PAHs were detected in subsurface soil at Building 225 (Tables 6-2). The naphthalene concentration in the SB09 sample (7 to 8 feet bgs) (4.51 µg/kg) exceeded the minimum screening criterion (EPA risk-based groundwater protection SSL of 0.47 µg/kg) but was several orders of magnitude less than EPA and Maine industrial criteria (Figure 5-3).

Only trace levels of PAHs and a number of metals were detected in groundwater at Building 225 (Table 6-3); there were no VOC, EPH, or VPH detections. In the sample from GW08, total and dissolved arsenic concentrations (20 and 19 µg/L, respectively) exceeded the MCL and residential groundwater RAG, and the total iron concentration (5,700 µg/L) exceeded the RAG (there is no MCL for iron) (see Figure 5-4). Concentrations in groundwater from MW09 were less than MCLs and residential RAGs.

6.4 RECOMMENDATIONS

Only trace levels of organics (all significantly less than screening criteria with one exception) were detected in soil and groundwater in the two borings/wells installed as part of this AOPI investigation. With

the exception of arsenic in one well, all metals concentrations were less than screening criteria. Based on the overall lack of contamination in environmental media and the expected future industrial use of the property, no further investigation is recommended for the Buildings 225 and 252 area. An appropriate path forward for this area will be determined based on future discussions and consensus among the Navy, EPA, and MEDEP.

TABLE 6-1

SOIL AND GROUNDWATER SAMPLE SUMMARY - BUILDINGS 225 AND 252
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID	SAMPLE INTERVAL (ft bgs)	GEOLOGIC UNIT	ANALYSIS
SOIL			
NASB-B225-SB08-0910[(1)]	9 - 10	Upper Sand	VOCs, SVOCs, EPH, VPH
NASB-B225-SB09-0708[(1)]	7 - 8	Upper Sand	VOCs, SVOCs, EPH, VPH
GROUNDWATER			
NASB-B225-GW08	28 - 38	Transition	VOCs, SVOCs, EPH, VPH, Metals
NASB-B225-GW09	5 - 15	Upper Sand/Transition	VOCs, SVOCs, EPH, VPH, Metals

ft bgs - Feet below ground surface.
VOCs - Volatile organic compounds.
EPH - Extractable petroleum hydrocarbons.
VPH - Volatile petroleum hydrocarbons.
SVOCs - Semivolatile organic compounds.

1 Noted samples were recollected in December 2010 and reanlyzed for SVOCs only because original results were rejected due to holding time exceedances.

TABLE 6-2

SUBSURFACE SOIL DETECTIONS - BUILDINGS 225 AND 252
AREAS OF POTENTIAL INTEREST SCREENING INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	Residential		Industrial		Protection of Groundwater			Minimum Screening Criterion[3]	NASB-B225-	
	EPA RSL[1]	Maine RAG[2]	EPA RSL[1]	Maine RAG[2]	MCL-Based SSL[1]	Risk-Based SSL[1]	Leaching to GW RAG[2]		SB08 9 to 10 ft bgs	SB09 7 to 8 ft bgs
VOLATILE ORGANIC COMPOUNDS (µg/kg)										
BROMOMETHANE	7300	240000	32000	930000	NC	1.8	NC	1.8	0.95 U	0.2 J
POLYNUCLEAR AROMATIC HYDROCARBONS (µg/kg)										
2-METHYLNAPHTHALENE	230000	500000	2200000	600000	NC	140	3600	140	6 U	4.78 J
ACENAPHTHENE	3400000	7500000	33000000	9900000	NC	4100	170000	4100	6 U	3.28 J
ACENAPHTHYLENE	3400000[4]	7500000	33000000[4]	11000000	NC	4100[4]	68000	4100	6 U	2.75 J
ANTHRACENE	17000000	10000000	170000000	3800000	NC	42000	2400000	42000	6 U	2.64 J
BENZO(B)FLUORANTHENE	150	2600	2100	35000	NC	35	10000000	35	1.28 J	1.33 J
BENZO(G,H,I)PERYLENE	1700000[4]	3700000	17000000[4]	10000000	NC	9500[4]	10000000	9500	1.26 J	1.06 J
CHRYSENE	15000	260000	210000	3500000	NC	1100	10000000	1100	1.17 J	1.33 J
FLUORANTHENE	2300000	5000000	22000000	10000000	NC	70000	10000000	70000	1.57 J	2.76 J
FLUORENE	2300000	5000000	22000000	10000000	NC	4000	120000	4000	6 U	3.32 J
INDENO(1,2,3-CD)PYRENE	150	2600	2100	35000	NC	200	10000000	150	1.07 J	1.54 J
NAPHTHALENE	3600	2500000	18000	10000000	NC	0.47	1700	0.47	6 U	**4.51 J**
PHENANTHRENE	1700000[4]	3700000	17000000[4]	8900000	NC	9500[4]	97000	9500	2.64 J	4.05 J
PYRENE	1700000	3700000	17000000	10000000	NC	9500	10000000	9500	1.64 J	2.64 J

SSL - Soil Screening Level.
MCL - Maximum Contaminant Level.
NC - No criterion.
U - Not detected at assocated detection limit.
J - Estimated concentration.
Shaded values exceed the minimum screening criterion.
Industrial criteria are appropriate for comparion to data from former Buildings 225 and 252; residential criteria are presented for information only.
Data presented are from samples recollected/reanalyzed in December 2010 (original results rejected due to holding time exceedances).

1 EPA Regional Screening Levels (RSLs) from http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table, November 2013.
2 Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances, May 2013. Industrial values are the lesser of commercial and construction worker RAGs.
3 Minimum criteria excluding residential criteria.
4 Pyrene used as a surrogate for benzo(g,h,i)perylene and phenanthrene, and acenaphthene used as a surrogate for acenaphthylene.

TABLE 6-3

GROUNDWATER DETECTIONS - BUILDINGS 225 AND 252
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Parameter	EPA MCL[1]	Maine Residential Groundwater RAG[2]	NAS Brunswick Background 95% UPL[3]	Screening Criterion[4]	NASB-B225-		
					GW08		GW09
					Total	Dissolved	
POLYNUCLEAR AROMATIC HYDROCARBONS (µg/L)							
ACENAPHTHENE	NC	400	NC	400	0.018 J	NA	0.02 J
ANTHRACENE	NC	2000	NC	2000	0.03 J	NA	0.011 J
CHRYSENE	NC	50	NC	50	0.024 J	NA	0.05 U
FLUORENE	NC	300	NC	300	0.071 J	NA	0.05 U
PHENANTHRENE	NC	NC	NC	NC	0.19	NA	0.05 U
METALS (µg/L)							
ALUMINUM	NC	7000	1930	7000	4300	210	420
ARSENIC	10	10	13.8	13.8	**20**	**19**	4
BARIUM	2000	1000	43.3	1000	38	17	26
BERYLLIUM	4	10	0.27	4	0.26 J	0.25 U	0.25 U
CALCIUM	NC	NC	9640	NC	18000	18000	34000
CHROMIUM	100[5]	10000[6]	NC	100	9.4	2.5 U	2.6 J
COBALT	NC	10	2.4	10	2.8	0.68 U	0.24 U
COPPER	1300	500	1.5	500	6.6	1.1 U	1.1 U
IRON	NC	5000	2100	5000	**5700**	800	1700
LEAD	15[7]	10	0.66	10	2.4	0.50 U	0.50 U
MAGNESIUM	NC	NC	2270	NC	5300	4100	3500
MANGANESE	NC	500	173	500	160	92	180
NICKEL	NC	20	4.1	20	7.9	2.1 J	2 U
POTASSIUM	NC	NC	1790	NC	7600	6800	8300
SODIUM	NC	20000	31600	31600	13000	13000	12000
VANADIUM	NC	200	4.6	200	9.6 J	3.2 U	3.3 J
ZINC	NC	2000	6.1	2000	15 J	8.4 U	8.4 U

1 EPA Drinking Water Standards and Health Advisories Maximum Contaminant Level (MCL), October 2009.
2 Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances, May 2013.
3 Lesser of Upper Sand and Transition 95% upper prediction limits (UPLs) from Table 5-5 of the Background Study for Naval Air Station Brunswick (Tetra Tech, 2012).
4 Greater of the NAS Brunswick background 95% UPL and minimum of MCL/RAG.
5 Criterion is for total chromium.
6 Criterion is for chromium III.
7 EPA Action Level as included on MCL table.

Shaded values exceed MCLs or RAGs, or for metals, background values if they are greater than MCLs/RAGs.

U - Not detected at associated detection limit.
J - Estimated concentration.
NC - No criterion.
NA - Not analyzed.

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APPENDIX A

FIELD FORMS

TABLE A-1
GROUNDWATER ELEVATION DATA
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Well ID	Date	Elevation of Ground Surface (ft amsl)	Elevation of Top of PVC Casing (ft amsl)	Screened Interval (ft bgs)	Depth to Groundwater (ft BTOR)	Groundwater Elevation (ft amsl)
Mercury Disposal Area						
MDA-MW01	10/26/2010	72.03	72.94	14.5 - 19.5	13.30	59.64
MDA-MW02	10/26/2010	73.47	75.73	18 - 28	15.45	60.28
MDA-MW03	10/26/2010	73.21	75.13	24 - 34	14.73	60.40
Fire Training Area						
FTA-MW08	10/28/2010	58.40	61.19	10.5 - 11.5	2.50	58.69
Buildings 7 and 10						
B7/10-MW01	10/26/2010	68.73	68.53	7 - 17	7.33	61.20
B7/10-MW02	10/26/2010	67.53	67.14	8 - 18	7.11	60.03
B7/10-MW03S	10/26/2010	66.88	66.54	9.5 - 19.5	6.46	60.08
B7/10-MW03D	10/26/2010	66.88	66.50	25 - 35	6.15	60.35
B7/10-MW04	10/26/2010	67.85	67.48	7 - 17	6.76	60.72
B7/10-MW05S	10/26/2010	65.87	65.58	7 - 17	6.62	58.96
B7/10-MW05D	10/26/2010	65.87	65.51	31 - 41	6.36	59.15
B7/10-MW06S	10/26/2010	66.45	66.15	7 - 17	6.71	59.44
B7/10-MW06D	10/26/2010	66.45	66.07	30 - 40	6.59	59.48
B7/10-MW07	10/26/2010	66.32	66.03	8 - 18	6.39	59.64
Buildings 225 and 252						
B225-MW08	10/26/2010	65.44	65.06	28 - 38	6.71	58.35
B225-MW09	10/26/2010	63.23	62.94	5 - 15	4.62	58.32

Elevations relative to North American Vertical Datum 1988.
BTOR - Below top of PVC well riser.
ft amsl - feet above mean sea level.
ft bgs - feet below ground surface.

TABLE A-2
GROUNDWATER PARAMETER DATA SUMMARY
AREAS OF POTENTIAL INTEREST INVESTIGATION
NAVAL AIR STATION BRUNSWICK, MAINE

Well ID	Sample Date	Sample Time	Water Depth Below MP (ft)	Purge Rate (mL/min)	Cum. Volume Purged (gal)	Temp (^oC)	Spec. Cond. (µS/cm)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)
Mercury Disposal Area											
NASB-MDA-GW01	10/26/2010	1650	13.3	150	4.5	10.61	17	5.97	35.9	3.15	7.72
NASB-MDA-GW02	10/26/2010	1605	15.48	125	1.7	10.42	22	5.38	299.2	10.82	9.3
NASB-MDA-GW03	10/26/2010	1505	14.73	150	1.2	10.74	67	5.68	64.2	11.71	9.98
Fire Training Area											
NASB-FTA-MW08[1]	10/29/2010	1430	NR	NR	NR	NR	NR	NR	NR	NR	NR
Buildings 7 & 10											
NASB-B7/10-GW01	10/28/2010	1030	7.29	150	1.6	11.35	276	4.3	265.6	6.75	2.24
NASB-B7/10-GW02	10/28/2010	1720	7.05	150	4.4	15.72	197	6	-78.8	0.75	3.45
NASB-B7/10-GW03S	10/28/2010	1020	6.44	200	3	12.34	274	5.55	17	0.97	3.11
NASB-B7/10-GW03D	10/27/2010	1625	6.4	150	4	15.38	262	5.73	-111.3	1.81	4.2
NASB-B7/10-GW04	10/28/2010	1140	6.73	180	NR	17.04	156	5.76	23.4	3.68	4.31
NASB-B7/10-GW05S	10/27/2010	1200	6.59	140	1.8	15.53	199	5.86	75.8	2.04	4.45
NASB-B7/10-GW05D	10/27/2010	1710	6.55	160	5	14.33	271	6.13	-37.8	4.75	277
NASB-B7/10-GW06S	10/27/2010	1220	6.7	200	1.5	17.36	237	5.74	22.1	1.91	7.03
NASB-B7/10-GW06D	10/27/2010	915	6.7	150	3	15.52	271	6.04	-145.6	1.87	9.8
NASB-B7/10-GW07	10/27/2010	950	6.35	140	1.8	17.19	205	5.67	135.4	3.02	9.37
Building 225											
NASB-B225-GW08	10/29/2010	1045	6.29	150	5	14.04	174	5.42	-25.6	0.82	103.9
NASB-B225-GW09	10/29/2010	925	4.4	150	2.8	16.48	244	6.25	-116.4	0.57	4.33

1 Grab sample collected due to limited volume and recovery.
NA - Not applicable
NR - Not recorded
^oC - Degrees Centigrade
µS/cm - MicroSiemens per centimeter
DO - Dissolved oxygen
ft bgs - Feet below ground surface
gal - Gallons
mg/L - Milligrams per liter
mL/min - Milliliters per minute
MP - Measuring point
mV - Millivolts
NTU - Nephelometric turbidity units
ORP - Oxidation-reduction potential

A-1 SOIL BORING LOGS

BORING LOG FOR: NASB-AOPI: MDA-SB-SB01
PROJECT NO.: CTO-WE09 / 112G02330-SI.SI.SI
LOGGED BY: T.Rojahn, C.Fellows
DRILLED BY (Company/Driller): MAI / S.Brown, P.Prescott
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: MDA-SB01
START DATE: 10/5/10
COMPLETION: DATE: 10/5/10
MON. WELL NO.: MDA-MW01
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = ~~FID, (PPM)~~ Lumex Nanograms per cubic meter.
0										
		3.0 / 5.0			loose	Dark Brown	0.0-0.7 - Organics, fine sand and silt	OL ~~OH~~ OFS	Dry	Lumex = <3
2					loose	tan	0.7-3.0 - Sand (f-m)	SP		
		/					↓		↓	
4										
		3.5 / 5.0					↓		↓	Lumex <6
6					loose	tan	0.0-3.5 - Sand (f-m)	SP	Dry	
		/					↓		↓	
8										
		/					↓		↓	
10										
		4.0 / 5.0	NASB-MDA-SB-SB01-1112 1050		loose	tan.	0.0-4.0 - Sand (f-m) trace coarse	SP	Moist at 12'	Lumex <10
12							↓		↓	
		/	Lab QC				↓		↓	
14										
		5.0 / 5.0					↓		wet / saturated at 15'	
16					loose	tan	0.0-3.7 - Sand (f-m)	SP		Lumex ≤ NG

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS: WL ~ 13.29 ft btoc
OTHER OBSERVATIONS: * Background readings for Lumex reading

BORING NO.: MDA-SB01

Tetra Tech NUS, Inc.

PAGE: 1 OF 3

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: MDA-SB-SB01	BORING NO.:	MDA-SB01
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/5/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/5/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	MDA-MW01
GRD. SURFACE ELEVATION:		CHECKED BY:	
TRANSCRIBED BY:		ELEVATION FROM:	

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
16									wet	
18		/								
20		/	MBB-MDA-SB-SB01-1814 1100		loose	orange/brown	3.7-4.2- Sand(f-m)	SP		
					Dense/Sl.Dense	Brown	4.2-4.6- Clay w/ silt 4.6-5.0- Sand(f-m)	CL/SP		
22		5.0/5.0			Sl.Dense	tan	0.0-2.7- Sand (f-m) some oxidation	SP		Lmax=<10
24		/			Sl.Dense	Brown	2.7-5.0- bedding of sand(f) and silt trace clay	SM		
26		5.0/5.0			soft	Brown	0.0-0.7- Sand (f-m) 0.7-2.4- Sand(f) some silt	SP/SM		Lmax=<5
28		/			Sl.Dense	Brown	2.4-3.6- Sand(f) and silt	SM		
30		/			Sl.Dense	orange/Brown	3.6-4.0- Sand (f) some oxidation 4.0-5.0- Sand (f) trace silt	SW/SM		
32		5.0/5.0			soft	Brown	0.0-3.9- Sand (f) some silt	SM		Lmax=<5

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: MDA-SB01

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: MDA-SB-SB01	BORING NO.:	MDA-SB01
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/5/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/5/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	MDAMW01
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY:

ELEVATION FROM:

DEPTH (FEET) 32	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
									Wet	
34		4.3 ~~3.6~~ 5.0 (CFB)			Dense	Orange/ Brown	3.9-5.0- Sand (f) ~~trace~~ some Silt	SM		
							Some brown nodules at 4.5' size of medium sand			
36					Soft	Brown	0.0-3.3- Sand (f) and Silt	SM		Lmax=<5
38					Sl. Dense	Brown	3.3-3.6- Silt w/ Sand (f)	SM		
					loose	Brown	3.6-4.2- Sand (f) and Silt	SM		
40					Sl. Dense	Brown.	4.2-4.3- Silt w/ Sand (f)	SM		
				EOB @ 40'						

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: MDA-SB01

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: MDA-SB02	BORING NO.:	MDA-SB02
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/4/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/4/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	MDA-AAW02
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY:

ELEVATION FROM:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0		~~2.3~~ 1.7/5.0 CFS		4	loose	Brown	0.0-0.5 - organic silt and sand (f)	OL ~~OM~~ CFS	Dry	Lumex-<10
1					loose	tan	0.5-1.7 - sand (m) some fine	SP		
2		/								
3		/								
4		/								
5		/								
6		3.2/5.0			loose	tan	0.0-3.2 - sand (f-m)	SP	Dry	Lumex-<10
7		/								
8		/								

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	15.4 ft btor - taken after well installation
OTHER OBSERVATIONS:	- No Hg detections

BORING NO. MDA-SB02

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI: MDA-SB02
PROJECT NO.: CTO-WE09 / 112G02330-SI.SI.SI
LOGGED BY: T.Rojahn, C.Fellows
DRILLED BY (Company/Driller): MAI / S.Brown, P.Prescott
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: MDA-SB02
START DATE: 10/4/10
COMPLETION: DATE: 10/4/10
MON. WELL NO.: MDA-MW02
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
8									Dry	
10		/	-SB-							
19		2.7 / 5.0	NASB-MDA-SB02-1011 1100		loose	tan	0.0-2.7- sand (f-m)	SP	Moist at 11.7'	Lumes=<10
12		/								
13		/								
14		/								
15		/								
16		4.2 / 5.0			sl. Dense	tan	0.0-3.0- sand (f-m) trace silt	SP	wet at 15'	Lumes<10
18		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO. NASB02

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: MDA-SB02	BORING NO.:	MDA-SB02
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/4/10
LOGGED BY:	T.Rojahn, C.Fellows,	COMPLETION: DATE:	10/4/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	MDA-MW02
GRD. SURFACE ELEVATION:		CHECKED BY:	
TRANSCRIBED BY:		ELEVATION FROM:	

DEPTH (FEET) 18	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA *METHOD* = [FID, (PPM)]
					Sl. Dense	tan	3.0-4.7- sand (f-m) and silt	SM	wet	
19										
20										
		4.4/50			loose	tan	0.0-2.3- sand (f) and silt	SM		Lmeter <10
21										
22										
					Dense	tan	2.3-3.5- sand (f) and silt, trace clay	SM		
23										
24					Dense	tan/Brown	3.5-4.4- sand (f) and silt some clay. Layer of oxidation at 4.1'.	SM		
25										
		5.0/5.0			loose	tan	0.0-3.6- sand (f-m)	SP		Lmeter <10

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO. MDA-SB02	PAGE: 3 OF 5

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI: MDA-SB02
PROJECT NO.: CTO-WE09 / 112G02330-SI.SI.SI
LOGGED BY: T.Rojahn, C.Fellows
DRILLED BY (Company/Driller): MAI / S.Brown, P.Prescott
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: MDA-SB02
START DATE: 10/4/10
COMPLETION: DATE: 10/4/10
MON. WELL NO.: MDA-MW02
CHECKED BY:

DEPTH (FEET) 26	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA *METHOD* = [FID, (PPM)]
27		/					↓		wet	
28		/	NASB-MDA-SB02-2728 1120		Dense	tan	3.6-4.0-Clay w/ silt	CL		
29		/					↓			
30		/			loose	tan	4.0-5.0-Sand (f-m)	SP		
31		5.0/5.0			loose	tan	0.0-5.0-Sand (f-m)	SP		Lumex-<10
32		/								
33		/								
34		/					↓		↓	

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO. MDA-SB02

Tetra Tech NUS, Inc.

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: MDA SB02		BORING NO.: MDA-SB02
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI		START DATE: 10/4/10
LOGGED BY:	T.Rojahn, C.Fellows	TRANSCRIBED BY:	COMPLETION: DATE: 10/4/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott		MON. WELL NO.: MDA-MW02
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
34									wet	
35										
		5.0 / 5.0			St.Dense	tan	0.0-3.5- Sand (f-m)	SP		Limex= <10
36										
37										
					St.Dense	tan	3.5-4.0 - thin laminations of sand and silt and clay	SM		
38					St.Dense	tan	4.0-5.0 - Sand (f-m)	SP		
39										
40										
				EOB @ 40'						

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:	Set well from 18'-28'	BORING NO. MDA-SB02	PAGE: 5 OF 5

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: MDA-SB-SB03	BORING NO.:	MDA-SB-SB03
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/4/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/4/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	MDA-MW03
GRD. SURFACE ELEVATION:		CHECKED BY:	
	TRANSCRIBED BY:		
	ELEVATION FROM:		

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = ~~PID, (PPM)~~
0										
		2.1 / 5.0	NASB-MDA-SB SB03-0001 1330	loose	~~Pack~~ Brown	Dark Brown	0.0 - 0.3 - organics/loam	~~PT~~ OM	Dry	Lmex >200
2						tan	0.3 - 1.5 - sand(f) some sand(m)	SP		nanograms per ~~cubic meter~~ at 0.5 ft
		/	NASB-MDA-SB-DUP01-100410		loose	tan	1.5 - 2.1 - sand(f-m)	SP		
4							↓			
		3.0 / 5.0								
6					loose	tan	0.0 - 3.0 - sand (f-m)	SP	Dry	Lmex - <10
		/					↓			
8										
		/								
10							↓			
		2.4 / 5.0			loose	tan	0.0 - 2.0 - sand (f-m)	SP	Dry	Lmex - 1000-3200 at 2 ft.
12							↓			
		/	NASB-MDA-SB-SB03-1112 1350							
14					Sl. Dense	tan.	2.0-2.4 - sand (f) and silt oxidized layer	SM		
		/					↓			
16										

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:	14.8 - ft bgs. - taken in well after installation		
OTHER OBSERVATIONS:	Set well at 24'-34'	BORING NO. MDA-SB03	PAGE: 1 OF 3

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: MDA-SB03		BORING NO.: MDA-SB03
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI		START DATE: 10/4/10
LOGGED BY:	T.Rojahn, C.Fellows,	TRANSCRIBED BY:	COMPLETION: DATE: 10/4/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott		MON. WELL NO.: MDA-MW03
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

DEPTH (FEET) 16	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = ~~FID, (PPM)~~ Lumex
18		4.0 / 5.0			Sl.Dense	tan	0.0-4.0- Sand (f) and silt	SM	moist	30 @ 16'
20		/	NASB-MDA-SB-SB03-1920				↓			200 @ 20'
22		5.0 / 5.0	1540		Sl.Dense	tan	0.0-5.0- Sand (f) and silt	SM	moist	
24		/					↓			<10 @ 24'
26		5.0 / 5.0			Sl.Dense	tan	0.0-5.0- Sand (f) and silt trace clay	SM	wet @ 25'	30 @ 26'
28		/					↓			
30		/	NASB-MDA-SB-SB03-2030				↓			30 @ 29'
32		5.0 / 5.0	1550		Sl.Dense	tan	0.0-4.4-Sand (f-m)	SP	wet	30 @ 31'

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: MDA-SB03	PAGE: 2 OF 3

TINUS Form 0018

BORING LOG FOR: NASB-AOPI: MDA-SB-SB03
PROJECT NO.: CTO-WE09 / 112G02330-SI.SI.SI
LOGGED BY: T.Rojahn, C.Fellows
DRILLED BY (Company/Driller): MAI / S.Brown, P.Prescott
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: MDA SB03
START DATE: 10/4/10
COMPLETION: DATE: 10/4/10
MON. WELL NO.: MDA-SB03 MW03
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION (CFS)	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
32										
		/			Dense	Brown	4.4-4.8- ~~Silt and~~ Clay w/silt trace Sand(f)	CL		Lenex-<10
34							4.8-5.0 - Sand (fm)	SP		
		5.0/5.0					↓			
36					S.Dense	Brown	0.0-4.0- Sand (f-m)	SP	Wet	Lenex=<10
		/					↓			
38										
		/			Dense	Brown	4.0-5.0- Sand (f) some silt	SM		Lenex-<10
40							↓			
		/		EOB @ 40'						
		/								
		/								
		/								
		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO. MDA-SB03

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI: FTA-SB-SB01
PROJECT NO.: CTO-WE09 / 112G02330-SI.SI.SI
LOGGED BY: T.Rojahn, C.Fellows
DRILLED BY (Company/Driller): MAI / S.Brown, P.Prescott
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: FTA-SB01
START DATE: 10/5/10
COMPLETION: DATE: 10/5/10
MON. WELL NO.: N/A
CHECKED BY:

S-Screening
H-Head Space

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
		4.0 / 5.0	NASB-FTA-S-SB01 1450	-0001	very Dense	Brown	0.0-4.0- clay and (CFS) with silt some organics in top 1 inch	CL	moist WL difficult to determine b/c material is very dense.	S/H PID-0/0
2										PID-0/0
		/	NASB-FTA-SB-SB01 1500	-0405						PID-0/0
4										PID=0/0
		/								PID-0/0
6					Soft	Gray	0.0-2.1- Clay	CL	wet	PID=0/0
		/								PID=0/0
8					loose	Brown	2.1-2.2 - sand (f-m) loose	SP		PID=0/0
		/			Soft	Gray	2.2-5.0- Clay	CL		PID=0/0
10										PID-0/0
		/		EOB @ 10'						
		/								
		/								
		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: FTA-SB01

Tetra Tech NUS, Inc.

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TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: FTA-SB-SB02	BORING NO.:	FTA-SB02
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/6/10
LOGGED BY:	T.Rojahn, C.Fellows,	COMPLETION: DATE:	10/6/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	N/A
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

S=Screening
H-headspace

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
0		4.3 / 5.0	NASB-FTA-SS-SS02-0001 0830		loose	Dark Brown	0.0-0.4-organic silts	OH (CFS) ~~OM~~	~~Dry~~ Moist	S/H/ 0/0
2					St. Dense	Brown	0.4-0.5-sand (f-m)	SP	Difficult to determine WL	0/0
		/	NASB-FTA-SB-SB02-0405 0845		V. Dense	Brown	0.5-4.3-Clay with silt	CL	b/c of density.	0/0
4							↓		↓	0/0
		/	NASB-FTA-~~SB~~-DLP01-100610 (2.5)				↓		↓	0/0
6					(CFS) ~~Soft Gray/Br~~	Brown/ Gray	0.0-0.6-Clay trace silt	CL	↓	0/0
		/			V. Soft	Gray	0.6-5.0-Clay	CL	↓	0/0
8							↓		↓	0/0
		/					↓		↓	0/0
10							↓		↓	0/0
		/		EOB @ 10'						
		/								
		/								

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: FTA-SB02

PAGE: 1 OF 1

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI: FTA-SB-SB03
PROJECT NO.: CTO-WE09 / 112G02330-SI.SI.SI
LOGGED BY: T.Rojahn, C.Fellows
DRILLED BY (Company/Driller): MAI / S.Brown, P.Prescott
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:

ELEVATION FROM:

BORING NO.: FTA-SB03
START DATE: 10/6/10
COMPLETION: DATE: 10/6/10
MON. WELL NO.: N/A
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD (CFS)	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
0		3.9 / 5.0	NASB-FTA-SSESS03-0001 0900		~~Brown~~ loose	Dark Brown	0.0-0.1 - organic silts	OM	Moist *Difficult to determine WL due to density.	S/H 0/0
2					very dense	Brown	0.1-3.9 - Clay w/ silt trace fine sand	SM		0/0
		/	NASB-FTA-SB-SB03-0405 0915				↓			0/0
4										0/0
		5.0 / 5.0					↓			0/0
6					soft	Gray	0.0-5.0 - Clay	CL		0/0
		/					↓			0/0
8										0/0
		/								0/0
10							↓		↓	0/0
		/		EOB @ 10'						
		/								
		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: FTA-SB03

Tetra Tech NUS, Inc.

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TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: FTA-SB-SB04	BORING NO.:	FTA-SB04
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/5/10
LOGGED BY:	T.Rojahn, C.Fellows	TRANSCRIBED BY:	COMPLETION: DATE: 10/5/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	N/A
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

S=screening
H-Head space

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0										S/H
		3.8 / 5.0	MASB-FTA-SS-SB04-0001 1545		very Dense	Brown	0.0-3.8- Clay and Silt some oxidation at 2.8.	SM	Moist wet	PID=0/0
2										PID=0/0
		/					~~2.8-3.8-~~ CPB			PID=0/0
4			MASB-FTA-SB-SB04-0405 1600							PID=0/0
		5.0 / 5.0							Very wet	PID=0/0
6					Soft	Gray	- 6.0-5.0- clay	CL.		PID=0/0
		/								PID=0/0
8										PID=0/0
		/								PID=0/0
10										PID=0/0
		/		EOB @ 10'						
		/								
		/								

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: FTA-SB04	PAGE: 1 OF 1

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: FTA-SB-SB05	BORING NO.:	FTA-SB05
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/5/10
LOGGED BY:	T.Rojahn, C.Fellows,	COMPLETION: DATE:	10/5/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	N/A
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
		2.3 / 5.0	NASB-FTA-SB-SB05-0001 1415		Dense	Brown/ Gray	0.0-0.1- Clay w/ silt trace sand (f) some organics.	CL	Wet	S/H PID=0/0
2							0.1-5.0- Clay w/ silt	CL		PID=0/0
		/								PID=0/0
4										PID=0/0
		5.0 / 5.0	NASB-FTA-SB-SB05-0405 1430							PID=0/0
6					Dense	Gray	0.0-5.0- Clay trace silt	CL		PID=0/0
		/								PID=0/0
8										PID=0/0
		/								PID=0/0
10										PID=0/0
		/		EOB 10'						
		/								
		/								

SC Screening H-Head Space

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

BORING NO.: FTA-SB05

Tetra Tech NUS, Inc.

PAGE: 1 OF 1

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: FTA-SB-SB06	BORING NO.:	FTA-SB06
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/6/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/6/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	N/A
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
		3.6 / 5.0	NASB-FTA-SS-SS06-0001 1345		loose/ V.Dense	Brown	0.0-0.1-organic silt and sand (f) 0.1-3.6-silt w/ clay	OH/SM	wet at surface	S/H 0/0
2										0/0
		/								0/0
4										0/0
		4.0 / 4.0								0/0
6										0/0
		3.6 /	NASB-FTA-SB-SB06-0806 1400 LabQC		Sl Dense	Brown	0.0-4.0-clay some silt	SM		0/0
8					Soft	Gray	4.0-5.0-clay	CL		0/0
		/								0/0
10										0/0
		/		EOB @ 10'						
		/								
		/								

S-Screening
H-Headspace

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: FTA-SB06	PAGE: 1 OF 1

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI: FTA-SB-SB07
PROJECT NO.: CTO-WE09 / 112G02330-SI.SI.SI
LOGGED BY: T.Rojahn, C.Fellows
DRILLED BY (Company/Driller): MAI / S.Brown, P.Prescott
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: FTA-SB07
START DATE: 10/6/10
COMPLETION: DATE: 10/6/10
MON. WELL NO.: N/A
CHECKED BY:

S= Screening
H= headspace

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)] S/H
		4.5 / 5.0	NASB-FTA-SS-SS07-0001 1100		Soft	Brown	0.0-0.1-Organics 0.1-0.3- Sand(m) some(f)	OM / SW	wet at surface	0/0
2					V. Dense	Brown	0.3-3.0 - Silt w/ clay	SM		0/0
		/			Sh. Dense	Brown	3.0-5.0 - Clay some silt			0/0
4							↓			0/0
		/								0/0
6					~~Sh. Dense~~ Soft	Brown	0.0-2.0 - Clay w/ silt	CL		0/0
		4.0 / 4.0	NASB-FTA-SB-SB07-0809 1115		Soft	Gray	2.0-3.0 - Clay w/ silt, trace sand(f)	CL		0/0
8					Soft	Gray/ orange	3.0-9.9 - sand(f) and silt, oxidation at 3.1 and 3.3	SM		0/0
		/			Soft	Gray	3.9-4.0 - Clay	CL	↓	0/0
10				Refusal @ 9'						
		/								
		/								
		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: FTA-SB07

Tetra Tech NUS, Inc.

PAGE: 1 OF 1

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: FTA-SB-SB08	BORING NO.:	FTA-SB08
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/6/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/6/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	FTA-MW08
GRD. SURFACE ELEVATION:		CHECKED BY:	
TRANSCRIBED BY:		ELEVATION FROM:	

S-Screening
H-Headspace

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
		4.6	NASB-FTA-SS-SB08-0001 1030		Sl. Dense	Brown	0.0-0.5- organic Clay and Silt.	OM	wet	S/H 0/0
2		/5.0			V. Dense		0.5-3.0 - Silt w/ Clay	SM	~~was difficult to determine~~	0/0
		/			Sl. Dense		3.0-5.0- Clay ~~some~~ Silt some	CL	CFS	0/0
4										0/0
		5.0/								0/0
6		5.0			V. Dense	Brown	0.0-1.5- Silt w/ clay	SM		0/0
		/	NASB-FTA-SS-SB08-0809 1045		Soft	Brown	1.5-4.0- Clay w/ silt and sand(f)	SM		0/0
8					Soft	Gray	4.0-4.5- Clay	CL		0/0
		/			loose	orange/ Brown	4.5-4.6- sand(f)	SW		0/0
10					Soft	gray	4.6-~~5.0~~ 4.7- Clay	CL		0/0
		/		EOB @ 10'	loose	gray	4.7-5.0- Sand(f) some silt	SM.		
		/								
		/								

TYPE OF DRILLING RIG:	Geoprobe	Tetra Tech NUS, Inc.	
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:	BORING NO.: FTA-SB08	PAGE:	OF

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: FTA-SB-SB09	BORING NO.:	FTA-SB09
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/6/10
LOGGED BY:	T.Rojahn, C.Fellows,	COMPLETION: DATE:	10/6/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
0		4.0/5.0	NASB-FTA-SB-SS09-0001 1245		Dense	Brown	0.0-0.2 - Organic silt and Clay	OH	Wet at surface.	S/H 0/0
2					V. Dense	Brown	0.2-4.0 - ~~Clay with silt~~ Silt w/ Clay (CFS)	SM		0/0
		/								0/0
4										0/0
		5.0/5.0								0/0
6				(CFS)	~~Soft Brown~~	Brown	0.0-3.4 - Clay with silt	CL		0/0
		/	NASB-FTA-SB-SB09-0809 1300		Soft	~~Brown Gray~~ Brown (CFS)	3.4-4.5 - Clay ~~some~~ (CFS) silt, trace sand(f)	CL		0/0
8					Soft	Gray	4.5-5.0 - Clay	CL		0/0
		/	NASB-FTA-~~SB~~-DUP02-100610 (CFS)							0/0
10										0/0
		/		EOB @ 10'						
		/								
		/								

S-screening
H-headspace

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: FTA-SB09

PAGE: 1 OF 1

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: FTA-SB10	BORING NO.:	FTA-SB10
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/6/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/6/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

S - Screening
H - Headspace

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
0		5.0 / 5.0	NASB-FTA-SS-SS10-0001 1000		Soft	Brown	0.0-0.2- organics silt w/ clay	SM	wet	S/H 0/0
2					V. Dense	Brown	0.2-5.0 - ~~Clay~~ Clay and silt (OFS)	SM		0/0
		/								0/0
4										0/0
		3.8 / 5.0	→ Clay expanded in sleeve so 3.8 of recovery but hit refusal at 8'.							0/0
6					V. Dense	Brown	0.0-2.0 Clay w/ silt, trace fine sand (OFS)	SM		0/0
		/	NASB-FTA-SB-SB10-~~0108~~ 0607 1015		Soft	Brown	2.0-3.0- ~~clay w/ sand (f) some silt~~ sand(f) with clay, some silt	SM		0/0
8					Soft	Gray	3.0-3.8- clay, sand(f) layer at 3.6	CL		0/0
		/	Sample collected from 6.5 to 7.5	Refusal @ 8'						
		/								
		/								
		/								

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: FTA-SB10

PAGE: 1 OF 1

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI- B7/10 - SB01	BORING NO.:	B7/10-SB01
PROJECT NO.:	112G02330	START DATE:	10/13/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/13/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	B7/10-MW01
GRD. SURFACE ELEVATION:		CHECKED BY:	
TRANSCRIBED BY:		ELEVATION FROM:	

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
0		3.0/5.0		SM		Brn	Silty SAND (f-m)	SM	Grass ontop	0.0	0.1
				SP			f-m SAND (1 piece gravel at 1' bgs)	SP		0.0	0.1
		/								0.0	0.1
										0.0	0.2
5		3.5/5.0				orange Brn				0.0	0.2
						Brn			Wet @ ~7.5' bgs	0.0	0.2
		/	NASB-B7/10-SB-SB01-0607 + Dup: NASB-B7/10-Dup01-01310 @0915							0.0	0.2
										0.0	0.2
		4.0/5.0				Gray/Brn				0.0	0.3
10										0.0	0.2
		/							saturated	0.0	0.0
										0.0	0.1
		/								0.0	0.1
										0.0	0.1
15		4.0/5.0				Gray				0.0	0.1
										0.0	0.1

TYPE OF DRILLING RIG:	Geoprobe	Tetra Tech NUS, Inc.	
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B7/10-SB01	PAGE: 1 OF 3

B7/10 - ~~SB01~~ MW01 installed - screened 7-17' bgs

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB01
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB01
START DATE: 10/13/10
COMPLETION: DATE: 10/13/10
MON. WELL NO.: B7/10-MW01
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
		/		SP			SAND f-m	SP	saturated	0.0	0.2
										0.0	0.5
		3.5/5.0								0.0	0.4
20						orange				0.0	0.2
		/								0.0	0.4
										0.0	0.6
		/				Gray	Silty SAND (VF)	SM		0.0	0.8
				SM						0.0	0.6
25		2.5/5.0								0.0	0.5
										0.0	0.6
		/								0.0	0.9
										0.0	1.8
		1.5/5.0								0.0	1.7
30										0.0	~~0.5~~ SEH
		/								0.0	0.5
										0.0	

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB01

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI- B7/10-SB01		BORING NO.: B7/10-SB01
PROJECT NO.:	112G02330		START DATE: 10/13/10
LOGGED BY:	C.Fellows / S. Hill	TRANSCRIBED BY:	COMPLETION: DATE: 10/13/10
DRILLED BY (Company/Driller):	MAI / S. Brown		MON. WELL NO.: B7/10-(NW01)
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
				SM			Silty SAND(VF)	SM	Saturated	S 0.0 / H
										0.0
35			NASB-B7/10-SB-SB01-3435 @ 1010				silt increases			0.0 / 0.6
				NR			35-50 No recovery		SB ~~0.0~~	
							soft clay in shoe		SB ~~0.0~~	
				50' bgs EOB						

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B7/10-SB01	PAGE: 3 OF 3

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10 -SB02
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10 - SB02
START DATE: 10/12/10
COMPLETION: DATE: 10/12/10
MON. WELL NO.: B7/10 - MW02
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
0											
		2.5/5.0				Blk	Asphalt/Subbase			0.0	1.6
				SP		Brn	SAND f-m	SP		0.0	
		/								0.0	0.9
										0.0	
5		2.5/5.0				Black Red/Orange				0.0	0.8
										0.0	0.3
		/	NASB-B7/10-SB-SB02-0708 @ 13:15							0.0	
									Wet @ 8' bgs	0.0	0.2
		3.0/5.0				Gray/Brn				0.0	
10										0.0	1.1
		3.0/5.0								0.0	1.8
						Brn				0.0	1.5
		/								0.0	
										0.0	
15		4.0/5.0				Gray/Brn				0.0	0.2
										0.0	0.5

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB02

Tetra Tech NUS, Inc.

PAGE: 1 OF 4

TINUS Form 0018

B7/10-MW02 @ 8-18' bgs

BORING LOG FOR:	NASB-AOPI- B7/10-SB02	BORING NO.:	B7/10-SB02
PROJECT NO.:	112G02330	START DATE:	10/12/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/12/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	B7/10-MW02
GRD. SURFACE ELEVATION:		CHECKED BY:	
	TRANSCRIBED BY:		
	ELEVATION FROM:		

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
		/		SP		Gray Brn	SAND-f-m	SP	Saturated	0.0	0.5
										0.0	1.6
		3.5/5.0								0.0	0.3
20										0.0	0.3
		/				Gray				0.0	0.4
				SC			Clayey SAND	SC		0.0	0.4
		/								0.0	0.5
				SP			SAND w/little silt	SP		0.0	0.8
25		4.0/5.0		ML			SILT w/little f-Sand	ML		0.0	0.7
				SP			SAND(f) w/little silt	SP		0.0	0.5
		/								0.0	0.6
										0.0	0.7
		4.0/5.0								0.0	0.6
30										0.0	0.4
		/		CL			31.5 CLAY w/little Sand	CL		0.0	0.3
				SP			SAND w/little silt	SP		0.0	0.4

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB02

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10 - SB02
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10 - SB02
START DATE: 10/12/10
COMPLETION: DATE: 10/12/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]	
				SP				SP		S 0.0	H 0.8
		/									
				SC	soft		Clayey SAND	SC		0.0	1.0
35		2.0/5.0		SP			SAND (F) w/little silt	SP		0.0	0.6
										0.0	0.7
		/								0.0	
										0.0	0.5
		/	NASB-B7/10-SB-SB02-3940 @1425							0.0	
40										0.0	0.5
		/		NR			No Recovery 40-55 (assumed to be soft clay)	NR			
		/									
		/									
		/									

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB02

Tetra Tech NUS, Inc.

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10 -SB02
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10 - SB02
START DATE: 10/12/10
COMPLETION: DATE: 10/12/10
MON. WELL NO.: B7/10 - MW 02
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]	
							No Recovery			S	H
50		/									
		/									
		/									
		/									
55		5.0 / 5.0									
				CL	V.Soft	Gray	CLAY	CL		0.0	1.4
		/								0.0	2.0
										0.0	3.8
		/								0.0	0.7
60										0.0	0.8
		/		EOB							
		/									

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10 - SB02

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: B7/10-SB03	BORING NO.:	B7/10-SB03
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/7/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/7/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	
	TRANSCRIBED BY:		
	ELEVATION FROM:		

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S-screening H-headspace
		3.4/5.0			loose	Black/Brown	0.0-1.0 - asphalt pieces, sand(f-m)	GP	Dry	S/H 0/2.3
2					loose sl.Den	Brown	1.0-2.0 - Sand (f-m) some coarse sand some gravel	SP		0/0.5
		/			sl.dense	Brown	2.0-3.4 - sand (f-m) some bedding of sand(f) and silt - black in color	SP		0/1.0
4							↓			0/1.5
		3.6/5.0					↓			0/2.1
6					loose	Brown	0.0-3.6 - sand (f-m) - oxidation at 2.3	SP	Moist	0/0.6
		/					↓			0/0.2
8							↓			0/0.2
		/					↓			0/0.2
10							↓			0/0.0
		5.0/5.0			loose	Brown	0.0-5.0 - sand (f-m), oxidation at 4.2-4.4.	SP	Moist	0/0.4
12							↓			0/0.2
		/					↓			0/0.6
14							↓			0/0.0
		5.0/5.0	NASB-B7/10-SB-SB03-1415 1530		loose	Brown	0.0-4.5 - sand (f-m), bedding from 3.5-4.5, some oxidation at 4.4.	SP	wet @ 15'	0/0.0
16										0/0.2

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	Shallow Well WL= , Deep Well WL=
OTHER OBSERVATIONS:	Set Shallow well at 9.5-19.5 ft bgs, Deep well at 25-35 ft bgs

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB03

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI:		BORING NO.: B7/10-SB03
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI		START DATE: 10/7/10
LOGGED BY:	T.Rojahn, C.Fellows	TRANSCRIBED BY:	COMPLETION: DATE: 10/7/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott		MON. WELL NO.:
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

S-Screenin
H-Headspa

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
16										Silt 0 / 0.1
18										0 / 0.6
					Soft	Gray	4.5-5.0 - Silt w/clay, trace fine sand.	SM	wet	0 / 0.7
20										0 / 0.3
		5.0 / 5.0			v.Soft	Gray	0.0-0.7- silty sand(f)	SM		0 / 0
22							0.7-1.8- Silt w/ Clay			0 / 0
							1.8-3.1- silty sand(f)	SM		0 / 0
24							3.1-5.0- Silt w/ clay and Sand(f)	SM		0 / 0
		3.6 / 5.0								0 / 0.1
26					Sl.Dense	Gray	0.0-2.9 - sand(f)	SP		0 / 0
										0 / 0.1
28										0 / 0.1
							2.9-3.6- sandy(f) silt	SM		0 / 0.8
30										0 / 0.6
		5.0 / 5.0			Sl.Dense	Gray	0.0-3.5 - sand(f) some silt	SM		0 / 0.4
32										0 / 0.8

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B7/10-SB03	PAGE: 2 OF 3

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: B7/10-SB03		BORING NO.: B7/10-SB03
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI		START DATE: 10/7/10
LOGGED BY:	T.Rojahn, C.Fellows,	TRANSCRIBED BY:	COMPLETION: DATE: 10/7/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott		MON. WELL NO.:
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

DEPTH (FEET) 32	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)] S-Screening H-Headspace
					Soft	Gray	3.5-4.1- Clay with silt trace sand(f)	CL	saturated	0 Silt / 0.4
34		/	NASB B7/10-SB-SB03-3334 1545		↓	↓	4.1-4.6- Sand (f) and silt	SM		0 / 1.0
		/			↓	↓	4.6-5.0 - Clay w/silt	CL		0 / 0.5
36		/			soft	Gray	0.0-2.5- Sand(f) w/silt	SM		0 / 0.1
		/			↓	↓				0 / 0
38		/			↓	↓	2.5-5.0- Clay w/silt trace sand(f)	CL		0 / 0
		/			↓	↓	↓			0 / 0
40		/			↓	↓	↓ (PB)			0 / 0
		3.8 / 5.0			vl Soft	Gray	0.0-3.8 - ~~silt w/ clay and sand(f)~~	SM		0 / 1.9
42					↓	↓	Clay w/ silt and sand(f)			0 / 0.1
		/			↓	↓				0 / 0.9
44		/			↓	↓				0 / 0.8
		/			↓	↓			↓	0 / 1.0
46		/		EOB @ 45'						
		/								

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B7/10-SB03	PAGE: 3 OF 3

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI-~~SB~~ B7/10-SB04		
PROJECT NO.:	112G02330		
LOGGED BY:	C.Fellows / S. Hill	TRANSCRIBED BY:	
DRILLED BY (Company/Driller):	MAI / S. Brown		
GRD. SURFACE ELEVATION:		ELEVATION FROM:	

BORING NO.:	B7/10-SB04
START DATE:	10/13/10
COMPLETION: DATE:	10/13/10
MON. WELL NO.:	B7/10-~~SB~~ MW04
CHECKED BY:	

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
		3.0/5.0		Asphalt		Blk	Asphalt/Sub base			0.0	0.8
				SP			SAND- f-m	SP		0.0	0.2
		/								0.0	0.3
			@1155							0.0	0.2
5		4.0/5.0	NASB-B7/10-SB-SB04-0607 +DUP NASB-B7/10-DUP02-101310			~~Orange~~ Brn	oxidation			0.0	0.2
						Brn/Gray				0.0	0.2
		/							Wet at 7.5' bgs	0.0	0.2
										0.0	0.1
		4.0/5.0					~~Silty SAND (vf)~~ SETH	~~SM~~ SETH		0.0	0.3
10										0.0	0.2
		/		SP			SAND (vf) little silt	SP	Saturated	0.0	0.2
										0.0	0.3
		/								0.0	0.2
				SP		~~Blk from 13.5-13.6~~ Orange 3	SAND (f-m)	SP		0.0	0.3
15		4.5/5.0								0.0	0.2
										0.0	0.2

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B7/10-SB04	PAGE: 1 OF 4

TtNUS Form 0018

Installed B7/10-MW04 @ 7-17' bgs

BORING LOG FOR:	NASB-AOPI- B7/10-SB04	BORING NO.:	B7/10-SB04
PROJECT NO.:	112G02330	START DATE:	10/13/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/13/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	B7/10-MW04
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY:

ELEVATION FROM:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
		/		SP		orange	SAND (f-m)	SP	Saturated	0.0	0.1
							↓			0.0	0.2
		4.0/5.0								0.0	0.5
20				~~ML~~ ~~CL~~ ~~ML~~		Gray	SILT ~~CLAY~~ SILT/w little sand	~~ML~~ ~~CL~~ ML		0.0	0.7
		/		SM			SILTY SAND	SM		0.0	0.3
							Alternating beds of silt/clay	SC/SM		0.0	0.6
		/					and sand			0.0	0.8
							↓			0.0	1.4
25		3.5/5.0		SP		Gray	SAND (VF)	SP		0.0	1.2
							↓			0.0	1.0
		/								0.0	1.6
										0.0	0.8
		4.5/5.0		SM		Gray	Silty SAND (VF)	SM		0.0	1.8
30							↓			0.0	0.8
		/								0.0	0.3
				CL		Gray	CLAY	CL		0.0	0.6

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: B7/10/-SB04

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI- B7/10 - SB04	BORING NO.:	B7/10 - SB04
PROJECT NO.:	112G02330	START DATE:	10/13/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/13/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	B7/10 - MW04
GRD. SURFACE ELEVATION:		CHECKED BY:	
TRANSCRIBED BY:		ELEVATION FROM:	

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
		/		SM		Gray	Silty SAND	SM		~~0.0~~	1.3
										0.0	0.9
35		3.5/5.0		CL ~~CLAY~~ SM			CLAY ~~CLAY~~ Silty SAND	CL ~~CL~~ SM		0.0	0.8
										0.0	0.1
		/	NASB-B7/10-SB-SB04-3839 @ 1300							0.0	0.5
										0.0	0.3
		/								0.0	0.1
40				CL		Gray	CLAY	CL		0.0	0.2
		/		NR			No Recovery				
		/									
45											
		/		CL		Gray	CLAY	CL		0.0	2.0
		/								0.0	1.5
										0.0	1.1

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: B7/10 - SB04

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI-B7/10-SB04
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB04
START DATE: 10/13/10
COMPLETION: DATE: 10/13/10
MON. WELL NO.: B7/10-MW04
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
				CL		Gray	CLAY- v.soft	CL		S 0.0 / H 1.6
50				SM			Silty SAND	SM		0.0 / 0.8
							50-55 No Recovery			
				EOB @ 55'						

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB04

Tetra Tech NUS, Inc.

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI- B7/10-SB05	BORING NO.:	B7/10-SB05
PROJECT NO.:	112G02330	START DATE:	10/12/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/12/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	B7/10-MW05S & B7/10 MW05D
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]	
0	NA										
		3.0/5.0		Asphalt		Blk Brn	0-0.5 Asphalt/Subbase 0.5-5' Fine-Med SAND w/Trace gravel	SP	Dry	0.0	1.8
				SP						0.0	~~0.0~~ 1.8
		/								0.0	~~0.0~~
										0.0	1.6
5		2.0/5.0								0.0	1.8
							SAA			0.0	
		/	NASB-B7/10-SB-SB05-0607 @ 1125 ms/MSD						7.5' Wet	0.0	3.1
										0.0	2
		1.0/5.0					little oxidation			0.0	2.7
10										0.0	
		/					SAA		Saturated	0.0	1.8
										0.0	
		/								3.9	9.6
						Dark Brn	SAND f-m - wood pieces	SP		0.0	
15		5.0/5.0					little clay			0.0	
						Dk Brn	F-M SAND (mica)	SP		0.0	3.3

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB05

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI- B7/10 -SB05	BORING NO.:	B7/10-SB05
PROJECT NO.:	112G02330	START DATE:	10/2/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/12/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	B7/10-MW055 & B7/10-MW0
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
		/		SP			SAA		Saturated	0.2 1.2
						~~Brn~~	~~SEH F-M SAND~~ SEH			
						Brn	F-M SAND	SP		0.0 7.1
		5.0/5.0		SM		Gray/Brn	Silty F SAND	SM		0.0 3.4
20				SP		Gray/Brn	F-M SAND	SP		0.0 2.4
		/				Gray	f-m SAND			0.0 0.7
										0.0 0.9
		/		CL			Clay (22.5-23)	CL	soft	0.0 0.5
				SC			Clayey SAND (23-23.5)	SC		
				CL			Clay	CL	soft	0.0 1.3
25		4.0/5.0		ML			Silt	ML		0.0 0.8
				CL/ML			Clayey Silt	CL/ML	soft-med stiff	0.0 0.9
		/								0.0 2.5
										0.0 2.0
		5.0/5.0								0.0 3.4
30				SP			SAND (f) with silt beds	SP		0.0 2.3
		/								0.0 1.3
				CL			Clay	CL	soft	0.0 1.5

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB05

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10 -SB05
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10 -SB05
START DATE: 10/12/10
COMPLETION: DATE: 10/12/10
MON. WELL NO.: B7/10-~~MW05S~~+B7/10-MW05D
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S / H
2				CL		Gray				
		/		SP			SAND-f w/Trace Silt	SP	Saturated	0.0 / 2.4
				CL			CLAY	CL		0.0 / 1.9
35		5.0/5.0		SM			Silty SAND	SM		0.0 / 0.9
							↓			0.0 / 0.9
		/		CL			CLAY	CL		0.0 / 1.4
				SC			Clayey SAND	SC		0.0 / 1.9
				CL			Clay	CL		0.0 / 2.0
40		5.0/10.0	NASB-B7/10-SB-SB05-4041@ 1140	SP			SAND w/little silt (and some silt beds)	SP		1.0 / 3.4
							↓			0.0 / 1.2
		/		CL			Clay	CL	Soft	0.0
		/		↓			↓			0.0 / 0.9
										0.0
		/								0.0 / 1.6
										0.0
		/								0.0 / 2.5
										0.0

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: B7/10 - SB05 PAGE: 3 OF 4

TtNUS Form 0018

Set MWl's @ 7-17
31-41

BORING LOG FOR: NASB-AOPI- B7/10-SB05
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB05
START DATE: 10/12/10
COMPLETION: DATE: 10/12/10
MON. WELL NO.: B7/10-MW05S-B7/10-MW05D
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA *METHOD* = [FID, (PPM)]
										1.0
50		0.0/10.0		Silt			Silt	ML		
		/		NR			No recovery			
		/								
		/								
		/								
60		/								
		/		EOB						
		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB05

Tetra Tech NUS, Inc.

PAGE: 4 OF 4

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: B7/10-SB06		BORING NO.: B7/10-SB06
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI		START DATE: 10/8/10
LOGGED BY:	T.Rojahn, C.Fellows	TRANSCRIBED BY:	COMPLETION: DATE: 10/8/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott		MON. WELL NO.:
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)] S-Screening Headspace
		2.0 / 5.0		(PS)	~~Black~~ loose	Black	0.0-0.5- asphalt pieces, sand (f-m)	GP	Dry	0 / 0.1
2				(PS)	~~Brown~~ loose	Brown	5.0-2.0- sand (f-m) some gravel.	GP		0 / 0.1
		/								0 / 0.5
4										0 / 0.6
		5.0 / 5.0								0 / 0.6
6			NASB-B7/10-SB-SB06-0607 1115		loose	Gray/ white	0.0-0.2- concrete pieces-sand(f)		Dry	0 / 0.2
		/			loose	Brown	0.2-5.0- sand (f-m), lense of oxidation at 1.3.	SP		0 / 0.7
8									Moist at 7 ft	0 / 0.9
		5.0 / 5.0								0 / 1.1
10					loose	Brown	0.0-5.0 - sand (f-m)	SP	wet at 10'	0 / 1.1
		/								0 / 0.9
12										0 / 0.9
		/								0 / 0.8
14										0 / 0.8
		5.0 / 5.0								0 / 0.6
16					loose	Brown	0.0-5.0- sand (f-m), trace silt from 2.5-3.0	SP		0 / 0.9

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:	Shallow well to be installed @ 7-17 ft bgs. Deep well from 30-40 ft bgs.	BORING NO.: B7/10-SB06	PAGE: 1 OF 4

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI: B7110-SB06
PROJECT NO.: CTO-WE09 / 112G02330-SI.SI.SI
LOGGED BY: T.Rojahn, C.Fellows,
DRILLED BY (Company/Driller): MAI / S.Brown, P.Prescott
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7110-SB06
START DATE: 10/8/10
COMPLETION: DATE: 10/8/10
MON. WELL NO.:
CHECKED BY:

S-Screening
H-Headspace

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
16									wet	Silt 0/0.9
18		/								0/0.7
										0/0.8
20		/								0/1.4
		5.0/5.0			Soft	Brown	0.0-0.3- Sand (f-m)	SP		0/0.6
22					soft	Gray	0.3-2.0- Silt w/ Sand(f)	SM		0/0.9
		/			V. Soft		2.0-3.0- Silt w/ Sand(f) trace clay	SM		0/1.3
24							3.0-5.0- Silt w/ sand (f)	SM		0/1.2
		5.0/5.0								0/1.2
26					Soft	Gray	0.0-5.0- sandy(f) silt	SM		0/0.5
		/								0/0.7
28										0/0.8
		/								0/0.7
30										0/0.7
		3.0/5.0			V. soft	Gray	0.0-3.0- Silty Sand(f)	SM		0/0.9
32										0/1.2

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7110-SB06

Tetra Tech NUS, Inc.

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: B7/10-SB06	BORING NO.:	B7/10-SB06
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/7/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/7/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

DEPTH (FEET) 32	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S-screening H-Headspace
									wet	S/H 0 / 0.9
34										0 / 1.4
		4.2 / 5.0								0 / 1.3
36					v.soft	Gray	0.0 - 0.4 - silty sand(f)	SM		0 / 0.6
							0.4 - 3.0 - sandy(f) silt trace clay	SM		0 / 1.4
38							3.0 - 4.2 - silty sand(f)			0 / 1.2
		0.0 / 5.0	NASB-B7/10-SB-SB06-3440 1130							0 / 1.2
40							No Recovery			NA / NA
										NA / NA
42										NA / NA
										NA / NA
44										NA / NA
		5.0 / 5.0								NA / NA
46					v.soft	Gray	0.0 - 3.0 - clay trace silt	CL		0 / 1.0
										0 / 1.7
48										0 / 1.6

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B7/10-SB06	PAGE: 3 OF 4

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: B7/10-SB06	BORING NO.:	B7/10-SB06
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/7/10
LOGGED BY:	T.Rojahn, C.Fellows	COMPLETION: DATE:	10/7/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

S-Screening
H-Headspace

DEPTH (FEET) 48	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
		/			soft	Gray	3.0-5.0 - silty sand(f)	SM	wet	0 / 1.6
50							↓			0 / 0.8
		5.0 / 5.0			vi soft	Gray	0.0-1.5 - silt some sand(f)	SM		0 / 1.0
52							↓			0 / 1.0
		/					1.5-4.5 - Clay trace sand(f)	CL		0 / 1.0
54							↓			0 / 1.2
		2.5 / 5.0			↓	↓	4.5-5.0 - silt w/ Clay some sand(f)	SM		0 / 1.2
56					vi soft	gray	0.0-2.5 - Clay	CL		0 / 1.7
		/					↓			0 /
58										0 / 1.6
		/								0 / 1.9
60							↓			0 /
		/		EOB @ 60'						
		/								

TYPE OF DRILLING RIG:	Geoprobe	Tetra Tech NUS, Inc.	
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:	BORING NO.: B7/10-SB06	PAGE: 4 OF 4	

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: B7810-SB07		BORING NO.: B7810-SB07
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI		START DATE: 10/7/10
LOGGED BY:	T.Rojahn, C.Fellows	TRANSCRIBED BY:	COMPLETION: DATE: 10/7/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott		MON. WELL NO.:
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

S=Screening
H-headspace

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S/H
0										
		3.2/5.0			loose	Black	0.0-0.6 - asphalt, gravel, sand(f)	GP	Dry	0/0
2					loose	Dark Brown	0.6-1.5 - sand(f-m) and gravel	GP		0/0
		/			loose	Brown	1.5-2.5 - Sand(f-m) some gravel	SW		0/0
4					loose	white/ Gray	2.5-3.2 - Sand (f-m) and gravel some sand(med) → degraded concrete.	SW		0/0
		3.8/5.0					↓		↓	0/0
6					loose	white/ Gray	0.0-1.2 - degraded concrete - sand(f) gravel broken concrete pieces.	GP		0/0
		/			loose	Brown	1.2-3.8 - Sand(f-m)	SP	moist	0/0
8										0/0
									↓	0/0
10		4.2/5.0	MASB-B7/10-SB-SB07-0910 1230		loose	Brown/ orange	0.0-3.8 Sand(f-m), oxidation from 1.8 to 3.0.	SP		0/0
		/							Wet at 10ft	0/0
12										0/0
		/			Sl. Dense	Brown	3.0-3.5 - sand(f) and silt laminations ~~from 3.0-3.5~~ (thin 1/4")	SM		0/0
14					loose	Brown	3.5-4.2 - Sand (f-m)	SP		0/0
		5.0/5.0								0/0
16					loose	Brown	0.0-3.7 - Sand (f-m)	SP	↓	0/0

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:	WL = Ca. 5' bgs		
OTHER OBSERVATIONS:	Set well from 8-18 ft bgs. → water table well.	BORING NO.: B7810-SB07	PAGE: 1 OF 3

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI: B7&10 - SB07		BORING NO.: B7&10 - SB07
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI		START DATE: 6/7/10
LOGGED BY:	T.Rojahn, C.Fellows	TRANSCRIBED BY:	COMPLETION: DATE: 6/7/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott		MON. WELL NO.:
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

S - Steady
H - Hydrostatic

DEPTH (FEET) 16	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
									wet/saturated	S/H 0/0
18		/	NASB-B7/10-SB-SB07-1819 1245		Sl.Dense	Brown/orange	3.7-4.1- Sand(f) trace silt, oxidation	SW		0/0
		/			Soft	Gray	4.1-5.0- Sandy(f) silt trace clay	SM		0/0
20							↓			0/0.2
		5.0/5.0			Soft	Gray	0.0-~~4.0~~-3.0- Sandy (f) silt	SM		0/0
22					soft	Gray	3.0-4.0- Clay w/ silt			0/0
		/								0/0
24					Sl.Dense	Brown	4.0-5.0- Sand(f)	SW		0/0
		4.5/5.0					↓			0/0
26		5.0/5.0			Soft	orange/brown	0.0-3.2- Sand(f) oxidized	SW		0/0
		/			Soft	Gray	3.2-4.3- Sand(f) some silt some clay at 3.4.	SM		0/0
28					Soft	Brown/Gray	4.3-4.5- Sand(f) and silt	SM		0/0
		5.0/5.0					↑			0/0
30							↓			0/0
		/			Soft	Gray	0-1.5- Sand(f) trace silt	SW		0/0
32					Soft	Gray	1.5-2.2- Clay w/ silt some sand(f)	SM	↓	0/0

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: SB07	PAGE: 2 OF 3

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI: B7810-SB07	BORING NO.:	B7810-SB07
PROJECT NO.:	CTO-WE09 / 112G02330-SI.SI.SI	START DATE:	10/7/10
LOGGED BY:	T.Rojahn, C.Fellows,	COMPLETION: DATE:	10/7/10
DRILLED BY (Company/Driller):	MAI / S.Brown, P.Prescott	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY:

ELEVATION FROM:

S-Screening
H-Headspace

DEPTH (FEET) 32	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [PID, (PPM)]
		/			Soft	Gray	2.2-3.5- Sand(f) and silt w/ Clay	SM	Saturated	0 S/H 0
34					↓	↓	3.5-3.8- Clay w/ silt	CL	↓	0 / 0
		5.0/5.0			↓	↓	3.8-5.0- Sand(f) and silt	SM	↓	0 / 0
36					V.Soft	Gray	0.0-4.1- Sand(f) silt	SM	↓	0 / 0.4
		/			↓	↓	4.1-5.0- silt w/ clay some sand(f)	SM	↓	0 / 0.8
38					↓	↓			↓	0 / 0.4
		/			↓	↓			↓	0 / 0.5
40					↓	↓			↓	0 / 0.1
		5.0/5.0			V.Soft	Gray	0.0-4.4- Clay - Sandy(f) clay lense at 1.2 ~~and~~	CL	↓	0 / 0.3
42							↓		↓	0 / 0.4
		/			Soft	Gray	4.4-5.0- sandy(f) silt, trace clay	SM	↓	0 / 0.4
44							↓		↓	0 / 0.4
		/					↓		↓	0 / 0.2
46				EOB @ 45'						
		/								
48										

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: B7810-SB07

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI- B7/10 - SB08	BORING NO.:	B7/10-SB08
PROJECT NO.:	112G02330	START DATE:	10/13/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/14/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	
		TRANSCRIBED BY:	
		ELEVATION FROM:	

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S / H
0										
		3.0/5.0				Blk	Asphalt			0.1 / 2.5
				SP		Brn	F-M SAND	SP		0.0 / 1.8
		/								0.0 / 0.8
										0.0 / 0.8
5		1.0/5.0							2nd Attempt refusal @ 4.5' (moved ~3' East)	0.0 / 0.8
										0.0
		/							1st Attempt refusal @ 6'	0.0 / 1.8
							Concrete			0.0
		3.5/5.0								0.0 / 1.9
10				SP/GP			Gravelly SAND	SP/GP		0.0
		/	NASB - B7/10-SB-SB08-0112 @ 1125						Staining & odor @ 11' bgs	16.4 / 12.4
				SP			SAND f-m	SP		0.0 / 1.2
		/								0.0 / 3.7
										0.0 / 2.8
15		5.0/5.0								0.0 / 2.7
						Orange Brn				0.2 / 5.8

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB08

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB08
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB08
START DATE: 10/14/10
COMPLETION: DATE: 10/14/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
				SP		orange Brn	SAND - f-m	SP	Saturated	S 0.0 / H 5.8
		/					↓			0.0 / 2.4
		4.5/5.0				orange	SAND VF (oxidation) banding			0.0 / 2.2
20						Gray				0.0 / 2.1
		/								0.0 / 1.6
										0.0 / 3.1
		/								0.0 / 3.0
										0.0 / 1.6
25		4.5/5.0		SM			Silty SAND (VF)	SM		0.0 / 2.5
				SP			SAND VF	SP		0.0 / 1.2
		/								0.0 / 0.6
							↓			0.0 / 1.9
		/		SM			Silty SAND w/little clay	SM		0.0 / 2.5
30				SP			SAND VF	SP		0.0 / 1.7
		/								0.0 / 1.4
							↓			0.0 / 1.7

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB08

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB08
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. ~~Brown~~
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB08
START DATE: 10/14/10
COMPLETION: DATE: 10/14/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]	
						Gray				S 0.0	H 1.2
										0.0	1.7
35		3.0/5.0		SM			Silty SAND	SM		0.0	0.7
				~~CL~~	~~Soft~~		~~CLAY~~/ SAND-VF	~~CL~~		0.0	0.9
							↓			0.0	0.8
				SM			Silty SAND w/Clay beds	SM		0.0	1.2
		3.0/50	NASB_B7/10-SB-SB08-3940 Q1215				↓			0.0	1.6
40										0.0	0.8
				CL	Soft		CLAY	CL		0.0	1.4
										0.0	2.6
							↓			0.0	2.9
										0.0	3.3
45		5.0/5.0								0.0	1.7

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB08

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI-
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB08
START DATE: 10/14/10
COMPLETION: DATE: 10/18/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
				CL	Soft	Gray		CL		
50		4.0/5.0					small silt layers @ 54.5 & 55' bgs			
		/								
		/								
55		/								
				EOB						
		/								
		/								
		/								
		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB08

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB09
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB09
START DATE: 10/14/10
COMPLETION: DATE: 10/14/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0		3.5/5.0				Blk	Asphalt			0.0 / 0.7
				SP/GP		Brn	gravelly SAND (f-m)	SP/GP		0.0 / 1.0
		/								0.0 / 1.5
				SP			SAND (f-m)	SP		0.0 / 1.9
5		2.5/5.0								0.0 / 1.6
										0.0 / 2.3
		/	NASB-B7/10-SB-SB09-0607 @1500	OFS						0.0 / 2.7
										0.0 / 1.4
		5.0/5.0	NASB-B7/10-DUP01-101410			Gray Brn	(oxidation banding)		wet @~7' bgs	0.0 / 1.9
10										0.0 / 5.2
		/								0.5 / 2.8
										0.0 / 1.8
		/								0.0 / 1.5
										0.0 / 2.0
15		4.0/5.0				Orange				0.0 / 1.6
										0.0 / 1.9

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB10

TINUS Form 0018

BORING LOG FOR: NASB-AOPI-B7/10-SB09
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB09
START DATE:
COMPLETION: DATE: 10/4/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID (PPM)] S	H
		/		SP		orange Brn	SAND fm	SP		0.0	0.6
										0.0	1.2
		5.0/5.0								0.0	1.0
20						Gray Brn				0.0	0.2
		/	NASB-B7/10-SB-SB09-20021 @1535							0.0	0.6
				CL	Soft		CLAY	CL		0.0	1.5
		/								0.0	1.6
										0.0	0.8
25		5.0/5.0		SP			Silty SAND (VF)	SP		0.0	0.5
										0.0	0.6
		/								0.0	1.8
										0.0	2.4
		5.0/5.0								0.0	2.5
30							small clay beds			0.0	1.8
		/								0.0	0.9
										0.0	1.4

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB09

Tetra Tech NUS, Inc.

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB09
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB09
START DATE: 10/14/10
COMPLETION: DATE: 10/14/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
		/		SM		Gray	Silty SAND	SM		0.0 / 0.8
										0.0 / 1.8
35		4.5/5.0					small Clay beds			0.0 / 0.8
										0.0 / 1.8
		/								0.0 / 3.7
										0.0 / 4.1
		5.0/5.0		CL	Soft		CLAY	CL		0.0 / 1.6
40										0.0 / 0.8
		/								0.0 / 2.3
										0.0 / 5.7
		/								0.0 / 1.9
										0.0 / 3.1
45		/								0.0 / 2.7
				EOB						
		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB09

Tetra Tech NUS, Inc.

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/12SB10
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB10
START DATE: 10/14/10
COMPLETION: DATE: 10/14/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET) 0	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
		2.5/5.0				BK	Asphalt			0.0 / 1.5
				SP/GP		Brn	Gravelly SAND	SP/GP		0.0
		/				↓	↓			0.0 / 1.4
						White	Concrete - pulverized	concrete		0.0 / 2.4
5		4.5/5.0	NASB-B7/10-SB-SB10-0506 @1320	SP		Brn	SAND - f - m	SP		0.0 / 2.5
									wet @ 5' bgs	0.0 / 2.1
		/				Gray Brn				0.0 / 2.3
										0.0 / 3.6
		4.8/5.0								0.0 / 2.7
10						orange	banding			0.0 / 2.1
		/				orange/ Brn				0.0 / 2.4
						Gray/ Brn				0.0 / 2.3
		/				(some blk banding)				0.0 / 1.7
										0.0 / 1.8
15		4.8/5.0				orange				0.0
										0.0 / 0.6

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB10

Tetra Tech NUS, Inc.

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB1D
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB1D
START DATE: 10/14/10
COMPLETION: DATE: 10/14/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
		/		SP		Orange	SAND - f - m	SP		0.0	1.7
						Gray Brn				0.0	2.4
		4.5/5.0				Gray				0.0	1.6
20				SM		Orange Gray	Silty SAND	SM		0.0	1.2
		/	NASB-B7/10-SB-SB10-2022 @ 1400	SP		Orange Brn	SAND f-m	SP		0.0	1.8
										0.0	3.2
		/		SM		Gray	Silty SAND (VF) w/ small clay beds	SM		0.0	3.6
										0.0	2.4
25		4.5/5.0								0.0	1.7
				SP			SAND (VFF)	SP		0.0	2.1
		/								0.0	4.6
										0.0	2.8
		4.0/5.0		SM			Silty SAND (VF)	SM		0.0	3.5
30										0.0	0.8
		/		SP			SAND (VF-F)	SP		0.0	1.6
										0.0	0.9

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB1D

Tetra Tech NUS, Inc.

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB10
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. ~~Brown~~
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB10
START DATE: 10/14/10
COMPLETION: DATE: 10/14/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
				SP		Grey		SP		S 0.0 / H 1.8
										0.0 / 2.8
				SC			Clayey SAND	SC		
35		4.5 / 5.0		Sm			Silty SAND (vf)	Sm		0.0 / 2.7
										0.0
										0.0
										0.0
		5.0 / 5.5								0.0
40				CL			CLAY	CL		
45										
				Sm			Silty SAND w/small bed layers	Sm		

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB10

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI- B7/10-SB10		BORING NO.: B7/10-SB10
PROJECT NO.:	112G02330		START DATE: 10/14/10
LOGGED BY:	C.Fellows / S. Hill	TRANSCRIBED BY:	COMPLETION: DATE: 10/14/10
DRILLED BY (Company/Driller):	MAI / S. Brown		MON. WELL NO.:
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA *METHOD* = [FID, (PPM)]
		50/5.0		SM			silty SAND	SM		
50				CL			CLAY w/small ~~traces~~ of sand	CL		
		/								
		/								
55		5.0/5.0								
		/								
		/								
60										
		/		EOB						
		/								

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B7/10-SB10	PAGE: 4 OF 4

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB11
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB11
START DATE: 10/13/10
COMPLETION: DATE: 10/14/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	#
0				Asphalt		Blk	Asphalt - subbase				
		3.0/5.0		SP		Brown	SAND f-m	SP		0.0	2.1
										0.0	
		/								0.0	1.6
										0.0	1.2
5		3.5/5.0		SM		orange/Brn	Silty SAND (oxidized)	SM		0.0	1.0
										0.0	1.5
		/		SP			SAND f-m	SP		0.0	1.5
										0.0	2.1
		4.5/5.0	NASB-B7/10-SB-SB11-0708 @0850			Gray Brown			Wet @ ~8' bgs	0.0	1.2
10									Saturated	0.0	1.1
		/								0.0	0.8
										0.0	2.0
		/								0.0	2.3
										0.0	3.0
15		4.5/5.0				Orange				0.0	1.9
										0.0	1.1

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB11

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI- B7/10-SB11	BORING NO.:	B7/10-SB11
PROJECT NO.:	112G02330	START DATE:	10/18/10
LOGGED BY:	C.Fellows / S. Hil	COMPLETION: DATE:	10/18/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	
TRANSCRIBED BY:		ELEVATION FROM:	

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
		/		SP		Orange Brown	SAND (f-m)	SP	Saturated	0.0	
						Gray Brn				0.0	2.1
		4.5/5.0		CL	soft	Gray	CLAY -	CL		0.0	5.7
20				SM		Gray	Silty VF SAND w/small clay beds	SM		0.0	2.7
		/				Gray	Silty VF SAND	SM		0.0	2.3
				SC/SM	soft		Clayey/Silty SAND	SC/SM		0.0	0.5
		/		SM			Silty VF SAND w/little clay	SM		0.0	2.1
										0.0	2.3
25		4.5/5.0		SP		Brn/Gray	VF SAND	SP		0.0	2.0
						Gray	very small (~0.1') clay @ 27'			0.0	1.3
		/								0.0	1.6
										0.0	2.7
		4.5/5.0								0.0	3.0
30							~~Silty~~ SCH SAND VF-F	SAMP		0.0	2.6
		/								0.0	2.0
										0.0	0.8

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B7/10-SB11	PAGE: 2 OF 4

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB11
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB11
START DATE: 10/18/10
COMPLETION: DATE: 10/18/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S	H
				SP		Gray	SAND vf-f			0.0	2.6
		/					↓			0.0	2.9
35		4.5/5.0		SM			Silty SAND	SM		0.0	3.8
							↓			0.0	2.4
		/								0.0	1.8
				SC			Clayey SAND	SC		0.0	2.5
		5.0/5.0		SM			Silty SAND	SM		0.0	4.3
40							↓			0.0	4.4
		/					CLAY	CL		0.0	4.1
							↓			0.0	0.8
		/	NASB-B7/10-SB-SB11-3940 @ 0950							0.0	2.1
				SM			Silty SAND w/little Clay	SM		0.0	2.9
45		4.0/5.0		SC	Soft		Clayey SAND - Trace Shell	SC		0.0	3.2
							↓			0.0	3.0
		/								0.0	
										0.0	

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: B7/10-SB11

TINUS Form 0018

BORING LOG FOR: NASB-AOPI- B7/10-SB11
PROJECT NO.: 112G02330
LOGGED BY: C.Fellows / S. Hill
DRILLED BY (Company/Driller): MAI / S. Brown
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: B7/10-SB11
START DATE: 10/18/10
COMPLETION: DATE: 10/18/10
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
		4.0/5.0				Gray				0.0
50				SM			Silty SAND	SM		0.0
		/		CL	soft		CLAY	CL		
				SP			SAND VF	SP		
		/		CL	soft		CLAY	CL		
							↓	↓		
55		/		SP			SAND VF	SP		
				CL	soft		CLAY	CL		
		/					↓	↓		
		/								
60										
		/		EOB @ 60'						
		/								

TYPE OF DRILLING RIG: Geoprobe
METHOD OF ADVANCING BORING: DPT
METHOD OF SOIL SAMPLING: Dual Tube
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: B7/10-SB11

Tetra Tech NUS, Inc.

TtNUS Form 0018

BORING LOG FOR:	NASB-AOPI- ~~B7/10~~ B225 - MW08	BORING NO.:	~~B7/10~~ B225 - MW08
PROJECT NO.:	112G02330	START DATE:	10/20/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/20/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	~~B7/10~~ - MW08
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0		3.0/5.0				Blk/gray	Asphalt & Subbase			0.0 / 4.4
				SP (upper sand)		Brn	SAND (f-m)	SP		0.0 / 3.8
		/					↓			0.0 / 6.2
						DK Brn / Orange/Brn	SAND (f-m) w/ little silt / SAND			0.0 / 2.6
5		3.0/5.0					↓			0.0
										0.0 / 8.6
		/							wet @ ~7' bgs	0.0 / 7.7
										0.0 / 6.1
		4.5/5.0	NASB-B225-SB-SB08-0910 @1150							0.0 / 5.4
10						Brn/Orange				0.0 / 9.2
		/								0.0 / 5.2
										0.0 / 6.1
		~~4.5~~ EH								0.0 / 6.8
							↓			0.0 / 6.2
15		4.5/5.0				Gray	SAND VF-F			0.0 / 6.3
						Brn	SAND f-m			0.0 / 4.4

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	Plastic bag background 2.2 ppm
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: ~~B7/10~~ B225 - MW08

PAGE: 1 OF 3

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI- B225-SB08		BORING NO.: NASB-B225-SB08
PROJECT NO.:	112G02330		START DATE:
LOGGED BY:	C.Fellows / S. Hill	TRANSCRIBED BY:	COMPLETION: DATE:
DRILLED BY (Company/Driller):	MAI / S. Brown		MON. WELL NO.:
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)] S / H
										0.0 / 4.8
		/		↓		Gray	SAND f-m			0.0 / 7.1
		3.5/		SM (transition unit)			Silty SAND (silt increases w/depth)	SM		0.0 / 4.8
20										0.0 / 6.9
		/		SP			SAND (vf-f)	SP		0.0 / 6.6
							↓			0.0 / 5.8
		/					Silty SAND	SM		0.0 / 2.9
				SM						0.0 / 3.5
25		4.0/		SP			SAND f-vf	SP		0.0 / 4.9
		5.0		SC/SM			Silty/Clayey SAND	SC/SM		0.0 / 2.4
				SP			SAND vf-f	SP		0.0 / 3.4
		/					↓			0.0 / 5.5
										0.0 / 7.7
30		0.0/0.0		SM/SC			Clayey/Silty SAND	SM/SC		0.0 / 8.0
				SM		Silty	SAND	SM		
		/					No Recovery			

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B225-SB08	PAGE: 2 OF 3

TINUS Form 0018

BORING LOG FOR:	NASB-AOPI- B225-SB08	BORING NO.:	NASB-B225-SB-SB08-
PROJECT NO.:	112G02330	START DATE:	10/20/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/20/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY:

ELEVATION FROM:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
		/					No Recovery			
			Tossed SEH				↓			
35		5.0/5.0	~~NASB-B225-SB-SB08-3637~~ @ 1155	SP		Gray	SAND VF-F	SP		0.0 23.3
		/	~~NASB-B225-SEH SB-SB08-3738~~ @ 1200				small clay seams ↓			0.0 13.8
										0.0 14.8
		/		CL			Clay w/ little Silt, Sand ↓	CL		0.0 8.6
40										0.0 9.2
		/		EOB @ 40'						
		/								
		/								
		/								

TYPE OF DRILLING RIG:	Geoprobe
METHOD OF ADVANCING BORING:	DPT
METHOD OF SOIL SAMPLING:	Dual Tube
METHOD OF ROCK CORING:	N/A
GROUNDWATER LEVELS:	
OTHER OBSERVATIONS:	

Tetra Tech NUS, Inc.

BORING NO.: ~~B7/10~~ B225-MW08

PAGE: 3 OF 3

TINUS Form 0018

MW08 installed at ~~8-18'~~ 28-38' bgs

BORING LOG FOR:	NASB-AOPI- B225-SB09		BORING NO.: B225-SB09
PROJECT NO.:	112G02330		START DATE: 10/20/10
LOGGED BY:	C.Fellows / S. Hill	TRANSCRIBED BY:	COMPLETION: DATE: 10/20/10
DRILLED BY (Company/Driller):	MAI / S. Brown		MON. WELL NO.:
GRD. SURFACE ELEVATION:		ELEVATION FROM:	CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]	
0											
		2.5/5.0					Asphalt - Subbase			1.5	4.4
				SP		Brn	SAND f-m	SP		0.0	
		/		upper sand						0.0	1.0
						Dk red/ Brn -	maroonish		wet @ 4' bgs	0.0	
5		4.5/5.0								0.0	5.7
						Brn				0.0	3.2
		/	NASB-B225-SB-SB09-0708 @1345 (transition int)							0.0	8.2
										0.0	1.3
		4.0/5.0		CL/ML		Gray	CLAY w/silt	CL/ML	Saturated	0.0	6.2
10										0.0	7.3
				SM			Silty SAND	SM		0.0	5.7
		/		CL			CLAY w/some silt	CL		0.0	7.1
				SP			SAND f-vf w/ little silt	SP		0.0	4.4
		/								0.0	3.4
				CL			CLAY	CL		0.0	6.7
				SP			SAND f-vf	SP		0.0	4.4
15		/					small clay layer				

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B225-SB09	PAGE: 1 OF 2

TINUS Form 0018

Installed 111W09- 5-15' bgs

BORING LOG FOR:	NASB-AOPI- B225 -SB09	BORING NO.:	B225 - SB09
PROJECT NO.:	112G02330	START DATE:	10/20/10
LOGGED BY:	C.Fellows / S. Hill	COMPLETION: DATE:	10/20/10
DRILLED BY (Company/Driller):	MAI / S. Brown	MON. WELL NO.:	
GRD. SURFACE ELEVATION:		CHECKED BY:	

TRANSCRIBED BY: _____

ELEVATION FROM: _____

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
		/		SP		Gray	SAND vf-f	SP		0.0 / 4.5
										0.0 / 1.9
		4.0/5.0		SM			Silty SAND	SM		0.0 / 18
20										0.0
		/		CL (Clay unit)			CLAY	CL		0.0 / 2.8
										0.0 / 12.8
		/								0.0 / 6.5
										0.0 / 4.3
25		5.0/5.0								0.0 / 5.3
							occasional sand			0.0
		/					seam (26', 28', 29' ~ 0.1' each)			0.0 / 3.7
										0.0
		/								0.0 / 6.2
30										0.0 / 3.7
		/		EOB @ 30'						

TYPE OF DRILLING RIG:	Geoprobe		Tetra Tech NUS, Inc.
METHOD OF ADVANCING BORING:	DPT		
METHOD OF SOIL SAMPLING:	Dual Tube		
METHOD OF ROCK CORING:	N/A		
GROUNDWATER LEVELS:			
OTHER OBSERVATIONS:		BORING NO.: B225-SB09	PAGE: 2 OF 2

TINUS Form 0018

A-2 SOIL SAMPLE LOGS

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB01-0607R
Sample Location: SB01
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/07/10 Time: 0940 Method: DPT / ~~Dual Tube~~ Macro Monitor Reading (ppm):	06-07	tan	sand f-m, dry (Potential fill)

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

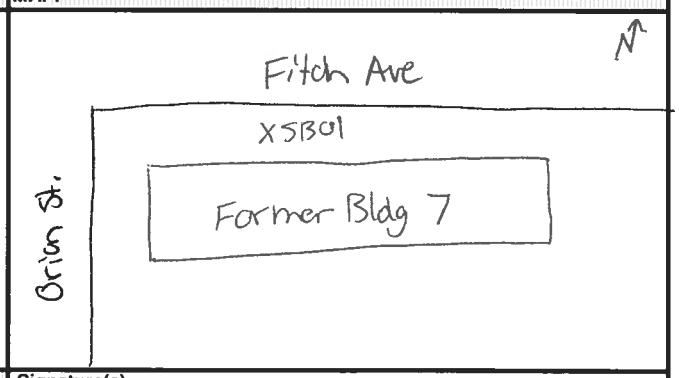
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

- SB01 location in grassy area between Fitch Ave. and Former Bldg 7 foundation.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
	* NASB-B7/10-DUP01-120710

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:
Project No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-MDH-SB-SB01-1112
Sample Location: SB01-1112
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/10 Time: 1050 Method: DPT / Dual Tube Monitor Reading (ppm): <10	11-12	tan	sand (f-m) trace sand (c) moist at 12'

Lumex (nanogram per color meter)

COMPOSITE SAMPLE DATA:

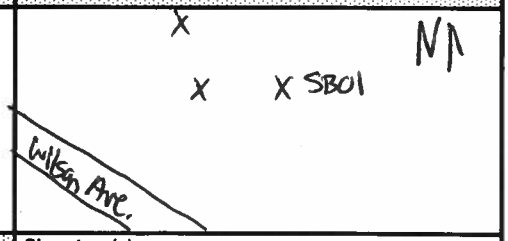
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Hg only	1 x 4oz jar	Yes	
	(Triple volume for Lab QC) 3 x 4oz		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
Yes	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:
Project No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-MDA SB01-1819
Sample Location: SB01-1819
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/10			
Time: 1100			
Method: DPT / Dual Tube	18-19	orange/ brown	Sand (f-m) - wet
Lumex → Monitor Reading (ppm): <10			

COMPOSITE SAMPLE DATA:

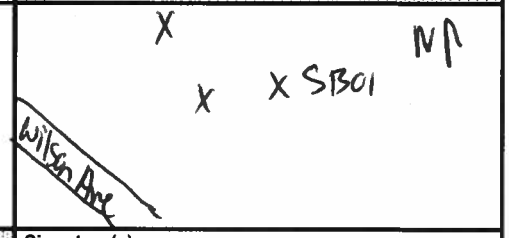
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Hg only	4oz jar	YES	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:
Project No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MA013-MDA-SB-SB02-1011
Sample Location: SB02-1011
Sampled By: CES
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/4/10 Time: 1100 Method: Dual tube / DPT Monitor Reading (ppm): <10	10-11	tan	Sand (f-m) moist at 11.7'

Lumex →

COMPOSITE SAMPLE DATA:

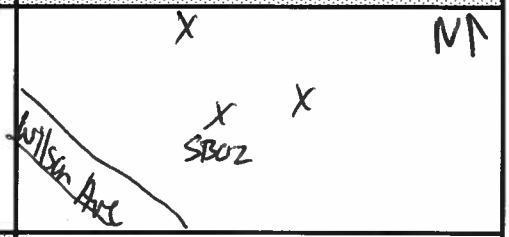
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Hg only	4oz jar	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: _____
Project No.: _____

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other: _____
[] QA Sample Type: _____

Sample ID No.: NASB-MDA-SB-SB02-2728
Sample Location: SB02-2728
Sampled By: CFS
C.O.C. No.: _____

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/4/10 Time: 1120 Method: DPT / Dual Tube Lumex → Monitor Reading (ppm): <10	27-28	tan	Clay w/ Silt wet

COMPOSITE SAMPLE DATA:

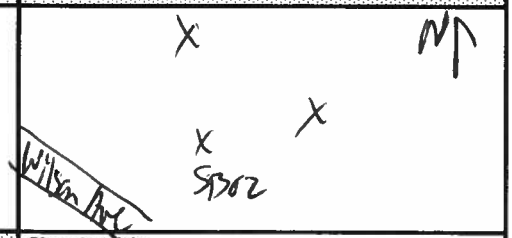
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Hg Only	4oz jar	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:
Project No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MASB-MDA-SBSD03-0001
Sample Location: SD03-0001
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/4/10 Time: 1330 Method: DPT / Dual Tube Lumex → Monitor Reading (ppm): 7200	00-01	Dark Brown / tan	0.0-0.3 - organics / loam 0.3-1.0 - Sand(f) some Sand(m) - Dry

COMPOSITE SAMPLE DATA:

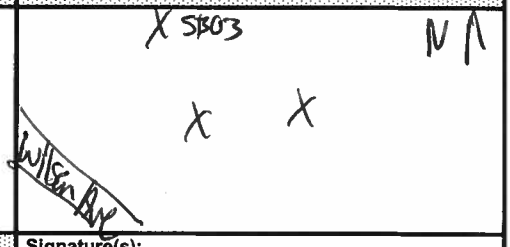
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Hg Only	4oz jar	YES	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	MASB-MDA-SB-DUP01-100410

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:
Project No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-MDA-SD-SB03-1112
Sample Location: SB03-1112
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 10/4/10
Time: 1350
Method: DPT / Dual Tube
Lumex → Monitor Reading (ppm): 1000-3200

Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
11-12	tan	sand (f-m)

COMPOSITE SAMPLE DATA:

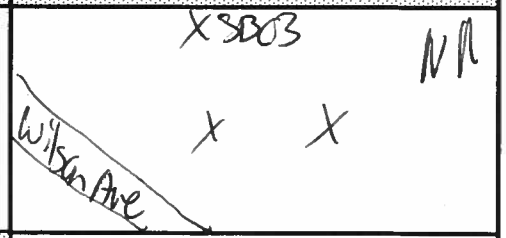
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Hg Only	4oz jar	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:
Project No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NABTS-MDA-SB-S1303-1920
Sample Location: S1303-1920
Sampled By: CB
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 10/4/10
Time: 1540
Method: DPT / Dual Tube
Monitor Reading (ppm): 200 (Lumex)

Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
19-20	tan	Sand (f) and Silt moist

COMPOSITE SAMPLE DATA:

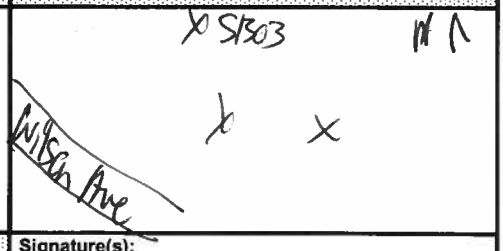
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Hg Only	4oz jar	yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:
Project No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NFSB3-MDA-SB-SB303-2930
Sample Location: SB303-2930
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/4/10 Time: 1550 Method: DPT / Dual Tube Monitor Reading (ppm): 30	29-30	tan	Sand (f) and silt trace clay wet

Lemex →

COMPOSITE SAMPLE DATA:

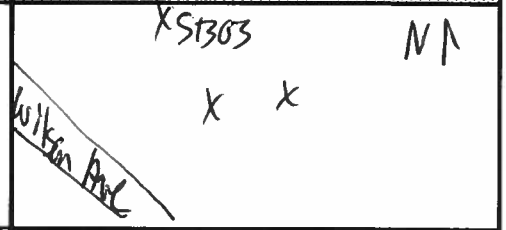
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Hg only	4oz jar	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

Sample ID No.: NASB-FTA-SS01-0001
Sample Location: SB01
Sampled By: CPS
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/10 Time: 1450 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	00-01	Brown	Clay and Silt some organics moist

COMPOSITE SAMPLE DATA:

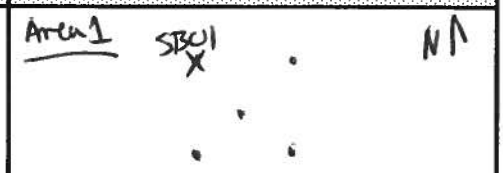
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1x 4oz jar	Yes	
VPH	2x 40ml vial	Yes	
VOC	4x 40ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTOWE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB FTA-SB01-0405
Sample Location: SB01
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/10 Time: 1500 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	04-05	Brown	Clay and silt Moist

COMPOSITE SAMPLE DATA:

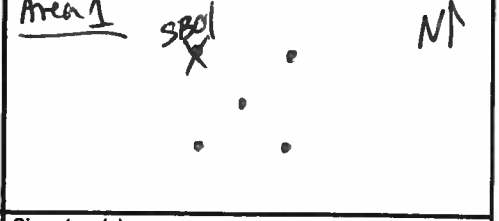
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4oz jar	YES	
VPH	2 x 40ml vial	YES	
VOC	4 x 40ml vial	YES	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB ACP1
Project No.: CTO WE09

Sample ID No.: NASB-FTA-SS02-0001
Sample Location: SB02
Sampled By: CFS
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 (F3) Time: ~~10/6/10~~ 0830 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	00-01	Dark Brown / Brown	0.0-0.4 - organic silts 0.4-0.5 - sand (f-m) 0.5-1.0 - Clay with silt moist

COMPOSITE SAMPLE DATA:

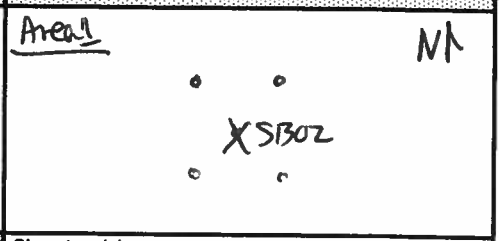
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vial	Yes	
VOC	4 x 40 ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTOWE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-FTA-SB02-0405
Sample Location: SB02
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 0845 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	04-05	Brown	Clay with Silt-moist

COMPOSITE SAMPLE DATA:

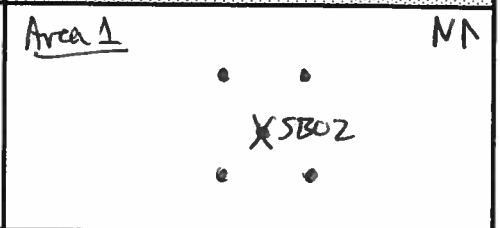
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4oz jar	Yes	
VPH	2 x 40ml vial	Yes	
VOC	4 x 40ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-FTA-DUP01-100610

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB ACP1
Project No.: CTO WE09

Sample ID No.: NASB-FTA-SS03-0001
Sample Location: SB03
Sampled By: CFS
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10	00-01	Dark Brown/ Brown	0.0-0.1 - Organic silts 0.1-1.0 - Clay w/ silt trace sand(f)
Time: 0900			
Method: Dual Tube/DPT			
Monitor Reading (ppm): 0.0			

COMPOSITE SAMPLE DATA:

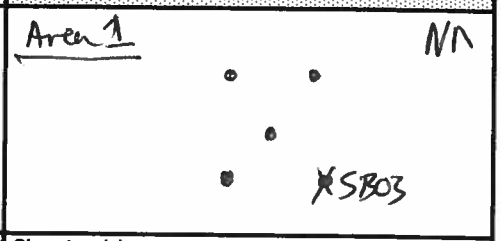
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4oz jar	Yes	
VOA	2 x 40ml vial	Yes	
VOC	4 x 40ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-FTA-SB03-0405
Sample Location: SB03
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 0915 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	04-05	Brown	Clay with silt trace sand (f) moist

COMPOSITE SAMPLE DATA:

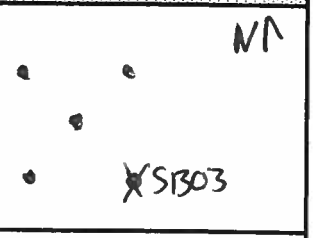
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH + SVOC	1 x 4 oz jar	Yes	
VOA	2 x 40 ml vial	Yes	
VOC	4 x 40 ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTOWE09

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: NASBFTA-SS04-0001
Sample Location: SB04
Sampled By: CPS
C.O.C. No.:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/10 Time: 1545 Method: DPT/Dual Tube Monitor Reading (ppm):	00-01	Brown	0.0-1.0-Clay and silt

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1x 4oz jar	Yes	
VPH	2x 40ml vial	Yes	
VOC	4x 40ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-FTA-SB04-0405
Sample Location: SB04
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/10 Time: 1600 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	04-05	Brown	Clay and silt - wet

COMPOSITE SAMPLE DATA:

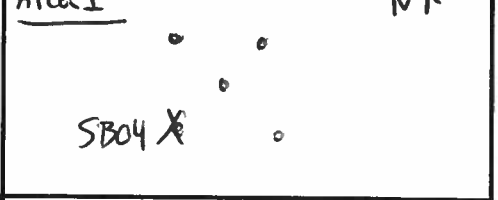
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1x 4oz jar	Yes	
VPH	2x 40ml vial	Yes	
VOC	4x 40ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB ACP1
Project No.: CTO WE09

Sample ID No.: NASB-FTA-SB05-0001
Sample Location: SB05
Sampled By: CFB
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/10 Time: 1415 Method: Dual Tube/DPT Monitor Reading (ppm): 0.0	00-01	Brown/Gray	0.0-0.1 - clay with silt trace sand (F) some organics 0.1-1.0 - clay with silt - wet

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1x 4oz jar	YES	
VPH	2x 40ml vial	YES	
VOC	4x 40ml vial	YES	

OBSERVATIONS / NOTES:

MAP:

Area 1

NA

SB05

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB ACP1
Project No.: CTOWE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB FTA SB05-0405
Sample Location: SB05
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/10 Time: 1430 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	04-05	Brown / Gray	Clay with silt - wet

COMPOSITE SAMPLE DATA:

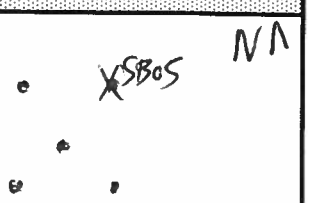
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1x 4oz jar	Yes	
VPH	2x 40ml vial	Yes	
VOC	4x 40ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB- ACP1
Project No.: CTO WE09

Sample ID No.: NASB-PTA-SB06-0001
Sample Location: SB06
Sampled By: CFS
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1345 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	00-01	Brown	0.0-0.1 - organic silt and sand (f) 0.1-1.0 - silt with clay

COMPOSITE SAMPLE DATA:

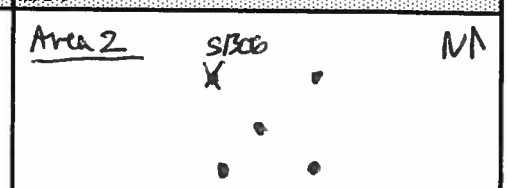
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vial	Yes	
VOC	4 x 40 ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB- ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-ETA-SB06-0809
Sample Location:
Sampled By:
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1400 Method: DPT/Dual Tube Monitor Reading (ppm): 0.0	08-09	Brown	Clay some silt - wet

COMPOSITE SAMPLE DATA:

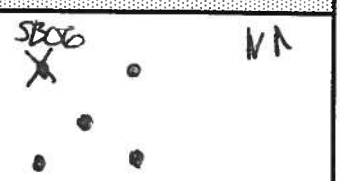
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	3 x 4 oz jar	Yes	
VOH	6 x 40 ml vial	Yes	
VOC	12 x 40 ml vial	Yes	
	Collect 3x volume for Lab QC		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
Yes	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB ACP1
Project No.: CTO WE09

Sample ID No.: NASB-FTA-SS07-0001
Sample Location: SB07
Sampled By: CFS
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date: 10/6/10
Time: 1100
Method: PPT / Dual Tube
Monitor Reading (ppm): 0.0

Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
00-01	Brown	0.0-0.1 - Organics 0.1-0.3 - Sand(m), some(f) sand 0.3-1.0 - silt with clay

COMPOSITE SAMPLE DATA:

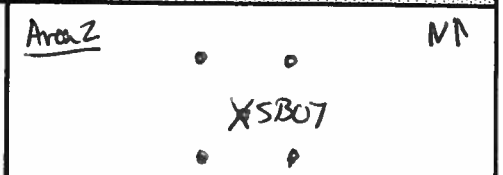
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vials	Yes	
VOC	4 x 40 ml vials	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTOWE09

Sample ID No.: NASB-FTA-SB07-0809
Sample Location: SB07
Sampled By: CFS
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1115 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	08-09	gray/ orange	Sand(f) and silt - wet some oxidation

COMPOSITE SAMPLE DATA:

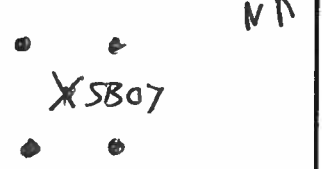
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	yes	
VPH	2 x 40 ml vial	yes	
VOC	4 x 40 ml vial	yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTOWE09

Sample ID No.: NASB-FTA-SS08-0001
Sample Location: SB08
Sampled By: CFS
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1030 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	00-01	Brown	0.0-0.5 - organic clay and silt 0.5-1.0 - silt with clay

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4oz jar	Yes	
VPH	2 x 40ml vial	Yes	
VOC	4 x 40ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:

Area 2

N

X SB08

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-FTA-SB08-0809
Sample Location: SB08
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1045 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	08-09	Brown	Clay with silt and sand(f)

COMPOSITE SAMPLE DATA:

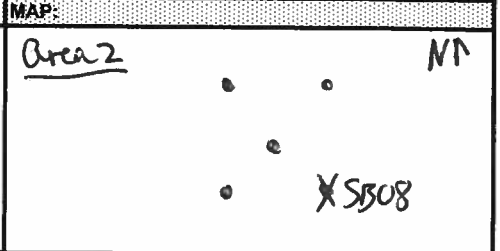
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vial	Yes	
VOC	4 x 40 ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

Sample ID No.: NASB-PTA-SB09-0001
Sample Location: SB09
Sampled By: CFS
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1245 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	00-01	Brown	0.0-0.2 - organic silt and clay 0.2-1.0 - silt with clay - wet

COMPOSITE SAMPLE DATA:

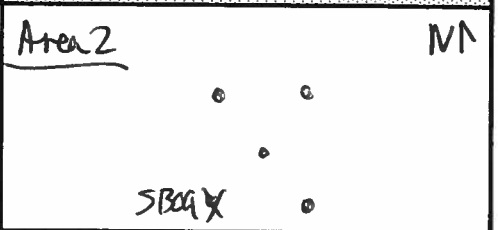
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	YES	
VPH	2 x 40ml vial	YES	
VOC	4 x 40ml vial	YES	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTOWE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-FTA-SB09-0809
Sample Location: SB09
Sampled By: CB
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1300 Method: DPT / Rad Tube Monitor Reading (ppm): 0.0	08-09	Brown	Clay some clay, trace sand (f) wet

COMPOSITE SAMPLE DATA:

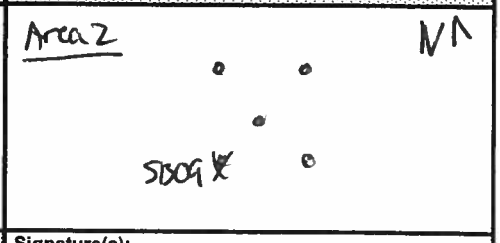
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1x 4oz jar	Yes	
VPH	2x 40 ml vial	Yes	
VOC	4x 40 ml vial	Yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-FTA-DUP02-100610

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

Sample ID No.: NASB FTA SS SB10-0001
Sample Location: SB10
Sampled By: CES
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1000 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	00-01	Brown	0.0-0.2 - Organic silt w/ clay wet 0.2-1.0 - Clay and Silt

COMPOSITE SAMPLE DATA:

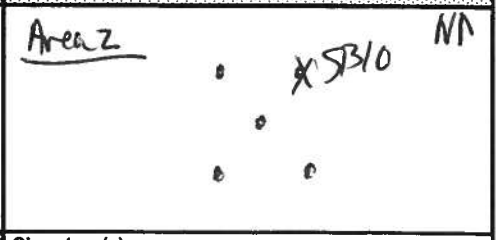
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4oz jar		
VPH	2 x 40ml vial		
VOC	4 x 40ml vial		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB- ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB PTA-SB10-0607
Sample Location: SB10
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/10 Time: 1015 Method: DPT / Dual Tube Monitor Reading (ppm): 60	06-07	Brown	Clay with silt trace sand (f) wet

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VOC	2 x 40ml vial	Yes	
VOC	4 x 40ml vial	Yes	

OBSERVATIONS / NOTES:

* Sample collected from 6.5-7.5 ft interval.

MAP:

Area 2

NA

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB01-0607
Sample Location: SB01
Sampled By: ~~CFS~~ SHill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 0815 Method: DPT / Dual Tube Monitor Reading (ppm): 0.2	06-07	Brown	Sand (f-m) moist

COMPOSITE SAMPLE DATA:

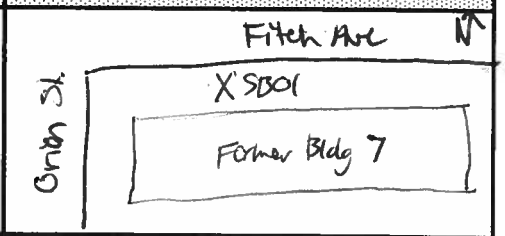
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4oz jar	YES	
VPH	2 x 40 ml vial	↓	
VOC	4 x 40 ml vial		
Metals	1 x 4oz jar		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-B7/10-DUP01-101310

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS01-0001
Sample Location: HA-SS01
Sampled By: T. ROJAHN
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 0830 Method: DIS TROWEL Monitor Reading (ppm): —	0-1'	Dark Brown	Sand (f-m) some silt, some organics, dry

COMPOSITE SAMPLE DATA:

Date: TR ~~10-05-10~~	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCBs	1x 4oz jar	Yes	
TAL metals	1x 4oz jar	Yes	

OBSERVATIONS / NOTES:

Relatively flat with grasses & herbs

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-HA-DUP01-100510

Signature(s): Terry Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS02-0001
Sample Location: HA-SS02
Sampled By: T. ROJAHN
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 0900 Method: DIS TROWEL Monitor Reading (ppm):	0-1'	Dark Brown	sand (f-m) some silt, some organics, Dry

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCBs	1x 4oz jar	Yes	
TAL metals	1x 4oz jar	Yes	

OBSERVATIONS / NOTES:

Elevated BERM w/ GRASSES & HERBS

MAP:

Circle if Applicable:

MS/MSD —

Duplicate ID No.: —

Signature(s): Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS03-0001
Sample Location: HA-SS03
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 0912 Method: DIS TROWEL Monitor Reading (ppm):	0-1'	Dark Brown	sand (f-m) some silt, some organics, dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	1 x 4oz jar	Yes	
TAL Metals	1 x 4oz jar	Yes	

OBSERVATIONS / NOTES:

Slightly ELEVATED BERM W/ PINE NEEDLES

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): Terry Rojahn

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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS04-0001
Sample Location: HA-SS04
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1105 Method: DIS TROWEL Monitor Reading (ppm):	SEE NOTES ~~PA~~ TR	Dark Brown	Sand (f) some silt, pine needles, Dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCBs	1 x 4oz jar	Yes	
TAL metals	1 x 4oz jar	Yes	

OBSERVATIONS / NOTES:

Soil in cracks of concrete

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): Terry Rojahn

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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS05-0001
Sample Location: HA-SS05
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 0930 Method: DIS. TROWEL Monitor Reading (ppm):	0-1'	Dark Brown	sand(f-m) some silt, twigs, dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	1x 4oz jar	Yes	
TAL Metals	1x 4oz jar	Yes	

OBSERVATIONS / NOTES:

Slightly ELEVATED w/ GRASSES, HERBS & PINE NEEDLES

MAP:

Circle if Applicable:

MS/MSD —

Duplicate ID No.: —

Signature(s): Terry Rojahn

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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

[x] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-HA-SS06-0001
Sample Location: HA-SS06
Sampled By: T. ROJAHN
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 0945 Method: DIS. TROWEL Monitor Reading (ppm):	0-1'	Dark Brown	Sand(f) some silt, pine needles dry

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCBs	1x 4oz jar	Yes	
TAL metals	1x 4oz jar	Yes	

OBSERVATIONS / NOTES:

ELEVATED BERM w/ GRASSES & HERBS

MAP:

Circle if Applicable:

MS/MSD ___

Duplicate ID No.: ___

Signature(s): Terry Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS07-0001
Sample Location: HA-SS07
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1000 Method: DIS TROWEL Monitor Reading (ppm):	0-1'	Dark Brown	sand (f-m) some silt, some organics, dry

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCBs	1x 4oz jar	Yes	
TAL metals	1x 4o jar	Yes	

OBSERVATIONS / NOTES:

RELATIVELY FLAT W/ GRASSES & HERBS

MAP:

Circle if Applicable:

MS/MSD —

Duplicate ID No.: —

Signature(s): Terry Rojahn

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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS08-0001
Sample Location: HA-SS08
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1015 Method: DIS TROWEL Monitor Reading (ppm):	0-1'	Brown	sand (f-m) trace gravel subrounded, dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	2x 4oz jar	Yes	
TAL metals	2x 4oz jar	Yes	

OBSERVATIONS / NOTES:

SET BACK FROM PAD - MOUND w/ GRASSES & HERBS

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
YES	—

Signature(s): Tey Rojahn

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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS09-0001
Sample Location: HA-SS09
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1030 Method: DIS. TROWEL Monitor Reading (ppm):	0-1'	Brown	sand(f-m), some pine needles dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	1x 4oz jar	Yes	
TAL Metals	1x 4oz jar	Yes	

OBSERVATIONS / NOTES:

ELEVATED BERM W / GRASSES & HERBS

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): Tony Rojahn

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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS10-0001
Sample Location: HA-SS10
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1045 Method: DIS TROWEL Monitor Reading (ppm):	0-1'	Brown	Sand (f-m) trace silt, dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCBs	1 x 4oz jar	YES	
TAL Metals	1 x 4oz jar	YES	

OBSERVATIONS / NOTES:

ELEVATED BERM W/ GRASSES & HERBS

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): Terry Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-HA-SS11-0001
Sample Location: HA-SS11
Sampled By: T. ROJAHN
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1055 Method: DIS TROWEL Monitor Reading (ppm):	0-1	Dark Brown	Sand (f-m) trace silt, Dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCBs	1 x 4oz jar	Yes	
TAL metals	1 x 4oz jar	Yes	

OBSERVATIONS / NOTES:

ELEVATED BERM W/ GASSES & HERBS

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-HA-SS12-0001
Sample Location: HA-SS12
Sampled By: T. ROJAHN
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1105 Method: DIS TROWEL Monitor Reading (ppm):	0-1'	Dark Brown	Sand (f-m) trace silt, trace gravel, dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	1 x 4oz jar	YES	
TAL Metals	1 x 4oz jar	YES	

OBSERVATIONS / NOTES:

Slight slope toward pad w/ GRASSES & HERBS NEXT to WOOD CHIP Pile.

MAP:

Circle if Applicable:

MS/MSD: —

Duplicate ID No.: —

Signature(s): Tony Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS13-0001
Sample Location: HA-SS13
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1330 Method: DIS TROWEL Monitor Reading (ppm):	SEE NOTES	Dark Brown	Sand (f-m) trace silt, trace gravel, some organics, dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	1 x 4oz jar	Yes	
TAL Metals	1 x 4oz jar	Yes	

OBSERVATIONS / NOTES:

COLLECTED SOIL IN CRACKED CONCRETE

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-HA-DUP02-100510

Signature(s): Terry Rojahn

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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 112G02330

Sample ID No.: NASB-HA-SS14-0001
Sample Location: HA-SS14
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1350 Method: DIS. TROWEL Monitor Reading (ppm):	SEE NOTES	Dark Brown	Sand (f) some silt, trace gravel, dry

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	1x 4oz jar	Yes	
TAL Metals	1x 4oz jar	Yes	

OBSERVATIONS / NOTES:

COLLECTED SOIL FROM CRACKED CONCRETE

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): Terry Rojahn

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAS BRUNSWICK
Project No.: 10-05-10

Sample ID No.: NASB-HA-SS15-0001
Sample Location: HA-SS15
Sampled By: T. ROJAHN
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-05-10 Time: 1410 Method: DIS TROWEL Monitor Reading (ppm):	SEE NOTES	Dark Brown	Sand (f) some silt - loam organics, dry.

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	1 x 4oz jar	Yes	
TAL Metals	1 x 4oz jar	Yes	

OBSERVATIONS / NOTES:

COLLECTED SOIL IN CRACKED CONCRETE ON PAD

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

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SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7110-SS-SS01-0001
Sample Location: SS01
Sampled By: TR
C.O.C. No.: 102010

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-20-10 Time: 1300 Method: Corer Monitor Reading (ppm): –	0-1'	BRN	BRN silty SAND, DRY some org. mat.

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	Terra Core		
SVOC/EPH	4 oz glass		
VPH	40 ml vial - MeOH		
PCB	4oz JAR	X	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS02-0001
Sample Location: SS02
Sampled By: T. ROJAHN
C.O.C. No.: 102010

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-20-10 Time: 1320 Method: CORER Monitor Reading (ppm): —	0-1'	BRN	Silty SAND, DRY SOME org. mat

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	Terra Core		
SVOC/EPH	4 oz glass		
VPH	40 ml vial - MeOH		
PCBs	4oz JAR	X	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB - B 7/10 - SS - SS03 - 0001
Sample Location: SS03
Sampled By: T. ROJAHN
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-20-10 Time: 1330 Method: CORER Monitor Reading (ppm): —	0-1'	BRN	BRN Silty SAND, DRY SOME ORG MAT

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	Terra Core		
SVOC/EPH	4 oz glass		
VPH	40 ml vial - MeOH		
PCBs	4 oz JAR	X	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB - B7/10-SS 5504-0001
Sample Location: 5504
Sampled By: T. ROJAHN
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-20-10 Time: 1340 Method: CORER Monitor Reading (ppm): —	0-1'	BRN	Silty SAND, DRY SOME ORG. MAT.

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	Terra Core		
SVOC/EPH	4 oz glass		
VPH	40 ml vial - MeOH		
PCB	(2) 4oz JARS	X	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD YES

Duplicate ID No.: _____

Signature(s): T. Rojahn

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SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS05-0
Sample Location: NASB-B7/10-SS05
Sampled By: SEH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1410 Method: DPT Monitor Reading (ppm):	0-1	Brown	SAND w/ little gravel

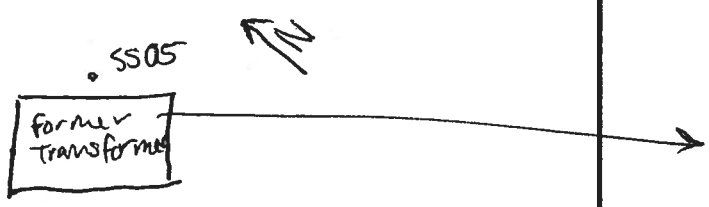
COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	4 oz jar	YES	

OBSERVATIONS / NOTES:



MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS05-010
Sample Location: NASB-B7/10-SS05
Sampled By: SGL
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1415 Method: DPT Monitor Reading (ppm): 0-0	01-02	Brown	SAND w/ little gravel

COMPOSITE SAMPLE DATA:

	~~Time~~	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	4 oz jar	yes	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS06-0001
Sample Location: NASB-B7/10-SS06
Sampled By: SEH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1420 Method: DPT Monitor Reading (ppm): 0.0	0-1	Brown	SAND w/trace gravel

COMPOSITE SAMPLE DATA:

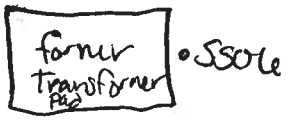
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	4 oz jar	yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS06-0102
Sample Location: NASB-B7/10-SS06
Sampled By: SEH
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1425 Method: DPT Monitor Reading (ppm): 0.0	01-02	Brown	SAND w/ Trace gravel

COMPOSITE SAMPLE DATA:

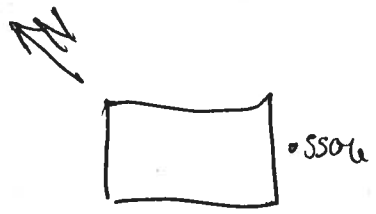
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	4 oz jar	yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS07-0001
Sample Location: NASB-B7/10-SS07
Sampled By: SH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1440 Method: DPT Monitor Reading (ppm): 0.0	0-1	Brown	SAND w/ little gravel

COMPOSITE SAMPLE DATA:

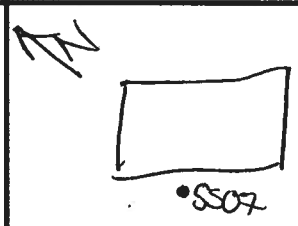
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	4 oz jar	yes	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS07-0102
Sample Location: NASB-B7/10-SS07
Sampled By: SEH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/3/10 Time: 1425 Method: DPT Monitor Reading (ppm): 0.0	01-02	Brown	SAND w/ little gravel

COMPOSITE SAMPLE DATA:

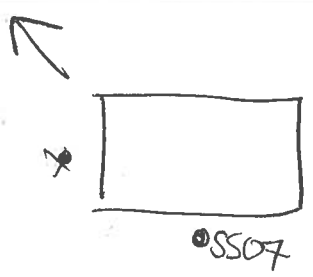
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	4 oz jar	YES	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-B7/10-DUP03-101310

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS08-0001
Sample Location: NASB-B7/10-SS08
Sampled By: SEH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1455 Method: DPT Monitor Reading (ppm): 0.0	0-1	Brown	SAND w/trace gravel

COMPOSITE SAMPLE DATA:

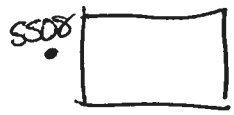
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	4 oz jar	YES	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Former Buildings 7 and 10
Project No.: 112G02330

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SS-SS08-0002
Sample Location: NASB-B7/10-SS08
Sampled By: SEH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1500 Method: DPT Monitor Reading (ppm): 6.0	1-2	Brown	SAND w/Trace Gravel

COMPOSITE SAMPLE DATA:

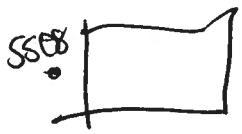
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
PCB	4 oz jar	YES	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7110-SB-SB01-3435
Sample Location: SB01
Sampled By: EFS S Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1010 Method: DPT / Bucl Tube Monitor Reading (ppm): 0.6	34-35	Gray	Silty sand - saturated

COMPOSITE SAMPLE DATA:

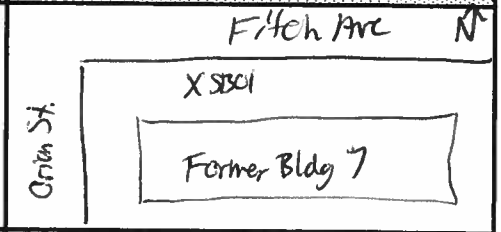
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4oz jar	Yes	
Metals	1 x 4oz jar	↓	
VOC	2 x 40 ml vial	↓	
VPH	2 x 40 ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOP1
Project No.: CTOWE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB02-0708
Sample Location: SB02
Sampled By: S. Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/12/10 Time: 1315 Method: DPT/Pocal Tube Monitor Reading (ppm): 0.2	07-08	Brown/ Orange	sand (f-m)

COMPOSITE SAMPLE DATA:

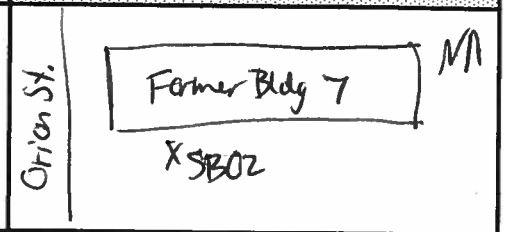
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1x 4oz jar	yes	
VPH	2 x 40ml vial	↓	
VOC	4 x 40ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB- ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7110-SB-SB02-39-40
Sample Location: SB02
Sampled By: S. Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/12/10 Time: 1425 Method: DPT / Dual Tube Monitor Reading (ppm): 0.5	39-40	Gray	Sand (f) with silt

COMPOSITE SAMPLE DATA:

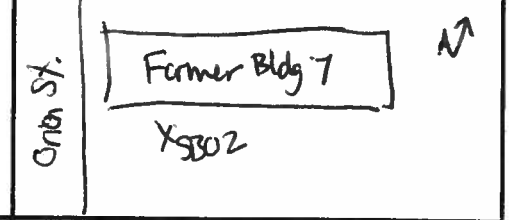
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vial	↓	
VOC	4 x 40 ml vial		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB03-1415
Sample Location: SB03
Sampled By: S. Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/7/10 Time: 1530 Method: DPT / Dual Tube Monitor Reading (ppm): 0.2	14-15	Brown	Sand (fn) - moist

COMPOSITE SAMPLE DATA:

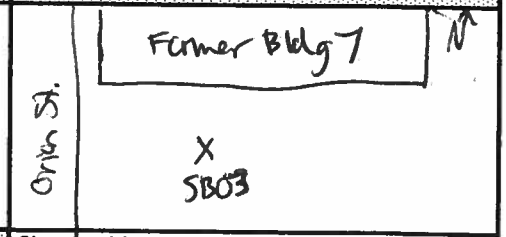
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4 oz jar		
VPH	2 x 40 ml vial		
VOC	4 x 40 ml vial		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTOWE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB03-3334
Sample Location: SB03
Sampled By: SHH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/7/10 Time: 1345 Method: DPT / Dual Tube Monitor Reading (ppm): 1.0	33-34	Gray	Clay with silt trace sand(f) saturated

COMPOSITE SAMPLE DATA:

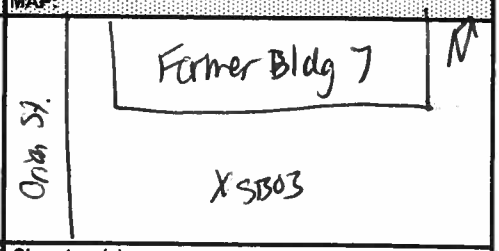
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vial	↓	
VOC	4 x 40 ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB04-0607
Sample Location: SB04
Sampled By: S. Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1155 Method: DPT / Dual Tube Monitor Reading (ppm): 0.2	06-07	Brown / Gray	Sand (f-m) moist

COMPOSITE SAMPLE DATA:

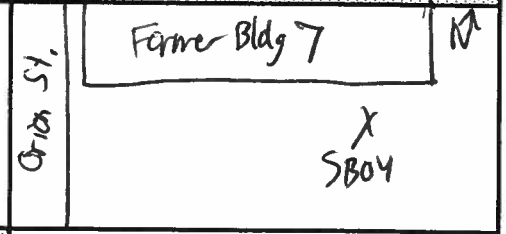
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4 oz jar	yes	
VPH	2 x 40ml vial		
VOC	4 x 40ml vial		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-B7/10-DUP02-101310

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB04-3839
Sample Location: SB04
Sampled By: S Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/13/10 Time: 1300 Method: DPT / Dual Tube Monitor Reading (ppm): 0.5	38-39	Gray	~~Clay~~ Silty Sand - wet (FB)

COMPOSITE SAMPLE DATA:

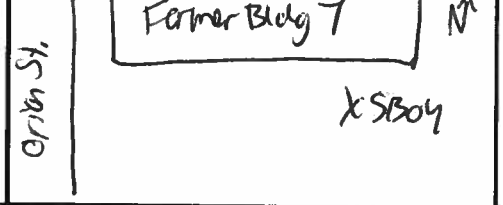
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	yes	
VPH	2 x 40ml vial	↓	
VOC	4 x 40ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B710-SB-SB05-0607
Sample Location: SB05
Sampled By: S.H
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/12/10	06-07	Brown	Sand (f-m) trace gravel - moist
Time: 1125			
Method: DPT / Dual Tube			
Monitor Reading (ppm): 3.1			

COMPOSITE SAMPLE DATA:

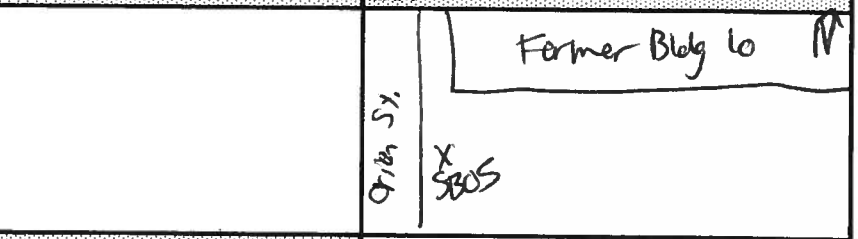
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar → 3	YES	
Metals	1 x 4 oz jar → 3	↓	
VPH	2 x 40 ml vial → 6	↓	
VOC	4 x 40 ml vial → 12	↓	
	(Collect 3 x volume for Lab QC)		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
YES	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB ACP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB05-40@41
Sample Location: SB05
Sampled By: Smith
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/12/10 Time: 1140 Method: DPT / Dual tube Monitor Reading (ppm): 3.4	40-41	Gray	Sand with silt some bedding saturated

COMPOSITE SAMPLE DATA:

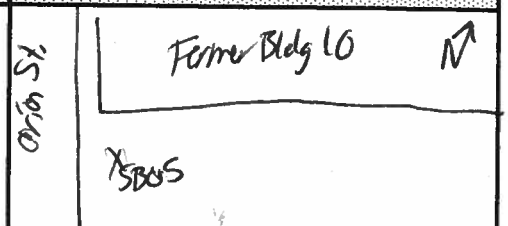
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EDH / SVOC	1 x 4 oz jar	Yes	
Metals	1 x 4 oz jar	↓	
VPH	2 x 40 ml vial	↓	
VOC	4 x 40 ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-AOP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7110-SB-SB06-0607
Sample Location: SB06
Sampled By: (CFS) ~~S.HHH~~ C. Fellows
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/8 Time: 1115 Method: DPT/Dual Tube Monitor Reading (ppm): 0.7	06-07	Brown	Sand (f-m) moist

COMPOSITE SAMPLE DATA:

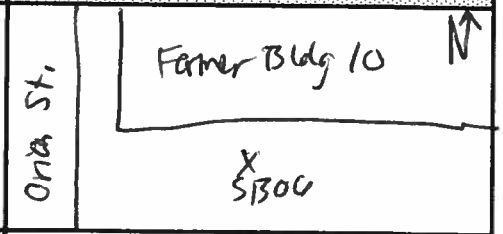
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1x 4oz jar	Yes	
VPH	2x 40ml vial	↓	
VOC	4x 40ml vial	↓	
Metals	1x 4oz jar	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-ACPI
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB06-3940
Sample Location: SB06
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/7/10 Time: 1130 Method: DPT/Direct Push Monitor Reading (ppm): 1.2	39-40	Gray	Silty Sand - wet

COMPOSITE SAMPLE DATA:

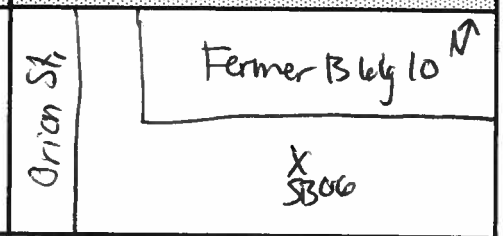
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1x 4 oz jar	yes	
Metals	1x 4 oz jar	↓	
VPH	2x 40 ml vial	↓	
VOC	4x 40 ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-AOPL
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB07-0910
Sample Location: SB07
Sampled By: CES
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/7/10 Time: 1230 Method: DPT/Dual Tube Monitor Reading (ppm): 0.0	09-10	Brown	Sand (f-m) moist

COMPOSITE SAMPLE DATA:

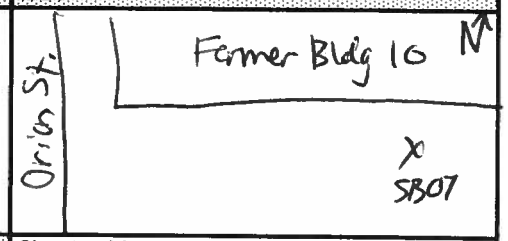
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1x 4oz jar	Yes	
VPH	2x 40ml vial	↓	
VOC	4x 40ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-AOP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB07-1819
Sample Location: SB07
Sampled By: CFS
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/7/10 Time: 1245 Method: DPT / Dual Tube Monitor Reading (ppm): 0.0	18-19	Brown/ orange	sand(f) trace silt some oxidation - wet

COMPOSITE SAMPLE DATA:

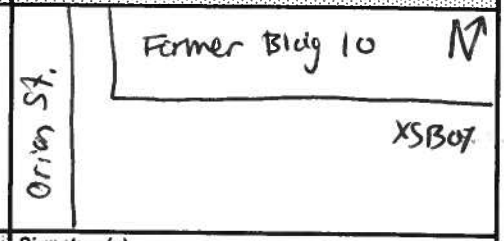
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1x 4oz jar	Yes	
VPH	2x 40ml vial	↓	
VOC	4x 40ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-AOP11
Project No.: CTO WE04

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB08-1112
Sample Location: SB08
Sampled By: S. Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/14/10	11-12	Brown	gravelly sand - Dry
Time: 1125			
Method: DPT / Dual Tube			
Monitor Reading (ppm): 1 to 4			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

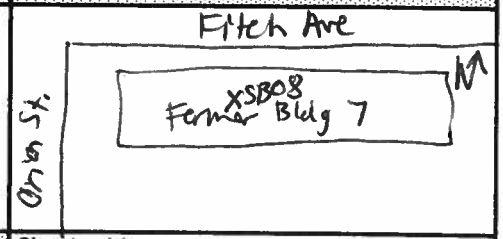
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1x 4 oz jar	YES	
VPH	2x 40ml vial	↓	
VOC	4x 40ml vial	↓	

OBSERVATIONS / NOTES:

Staining & odor at 11' bgs.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOP 1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7110-SB-SB08-3940
Sample Location: SB08
Sampled By: S. Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/14/10 Time: 1215 Method: DPT/Dual tube Monitor Reading (ppm): 1.6	39-40	Gray	Silty Sand with clay beds Saturated

COMPOSITE SAMPLE DATA:

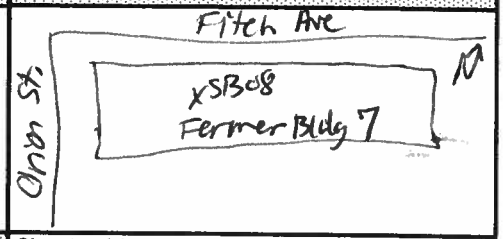
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	yes	
VPH	2 x 40 ml vial	↓	
VOC	4 x 40 ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-AOP1
Project No.: CTO WE09

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7110-SB-SB09-0607
Sample Location: SB09
Sampled By: SHAH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/14/10 Time: 1500 Method: DPT / Dual Tube Monitor Reading (ppm): 2.7	06-07	Brown	Sand f-m - moist

COMPOSITE SAMPLE DATA:

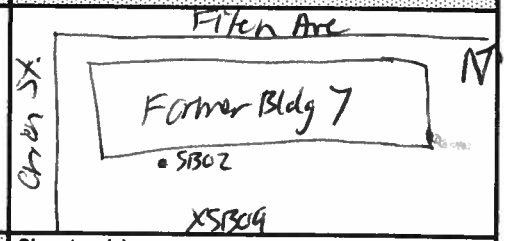
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vial	↓	
VOC	4 x 40 ml vial		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-B7110-DUP01-101410

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-AOP1
Project No.: CTO WE04

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB04-2021
Sample Location: SB04
Sampled By: SHH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/14/10 Time: 1535 Method: DPT/Dual Tube Monitor Reading (ppm): 0.6	20-21	Gray/Brown	Sand (f-m) - Saturated

COMPOSITE SAMPLE DATA:

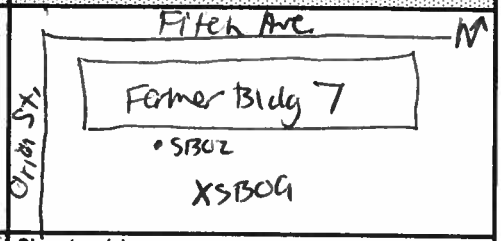
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vial	↓	
VOC	4 x 40 ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-AOP1
Project No.: CTO WE04

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB10-0506
Sample Location: SB10
Sampled By: S. Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/14/10 Time: 1320 Method: DPT/Dual Tube Monitor Reading (ppm): 2.1	05-06	Brown	Sand (fine) moist

COMPOSITE SAMPLE DATA:

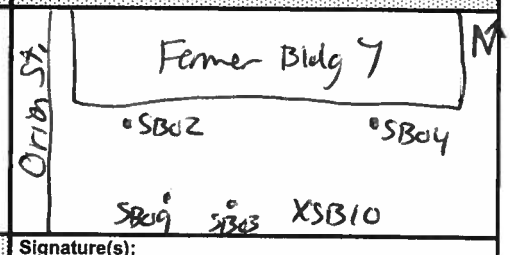
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1x 4oz jar	Yes	
VPH	2x 40ml vial	↓	
VOC	4x 40ml vial		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOP1
Project No.: CTO WE09

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB10-2122
Sample Location: SB10
Sampled By: S.Hill
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/14/10 Time: 1400 Method: DPT / Dual Tube Monitor Reading (ppm): 3.2	21-22	Orange / Brown	Sand (f-m) Saturated

COMPOSITE SAMPLE DATA:

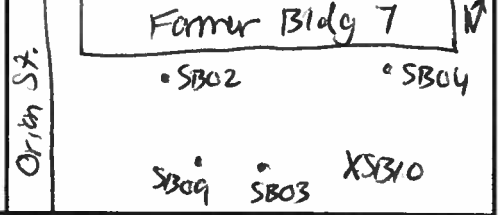
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH/SVOC	1 x 4oz jar	YES	
VPH	2 x 40ml vial	↓	
VOC	4 x 40ml vial		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOP1
Project No.: CTO WE04

Sample ID No.: NASB-B7110-SB-SB11-0708
Sample Location: SB11
Sampled By: SLH'11
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/14/10 Time: 0850 Method: DPT / Dual Tube Monitor Reading (ppm): 21	07-08	orange / Brown	Sand (f-m) - moist

COMPOSITE SAMPLE DATA:

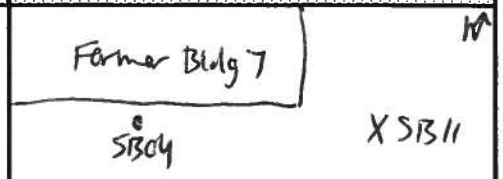
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4oz jar	Yes	
VPH	2 x 40ml vial	↓	
VOC	4 x 40ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB01-3435R
Sample Location: SB 01
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/7 /10 (CP)	34-35	Gray	Sand f some silt, saturated
Time: ~~0950~~ 1215			
Method: DPT / ~~Dual Tube~~ Macro			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	(YES) / NO	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB02-0708R
Sample Location: SB02
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 12/7/10	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.) Moist
Time: 1250	07-08	Lt. Brown/Orange	Sand (f-m) - bottom 3 in orange/brown with some asphalt pieces/grains (black grains/specs.) v. small
Method: DPT / ~~Dual Tube~~/Macro			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

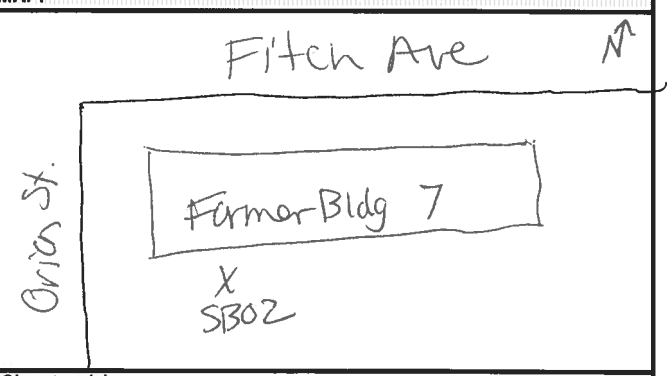
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs 1PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB02-3940 R
Sample Location: SB 02
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 12/7/10	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1315	39-40	Gray	Clay with silt, trace sand(f), saturated
Method: DPT / ~~Dual Tube~~ Macro			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

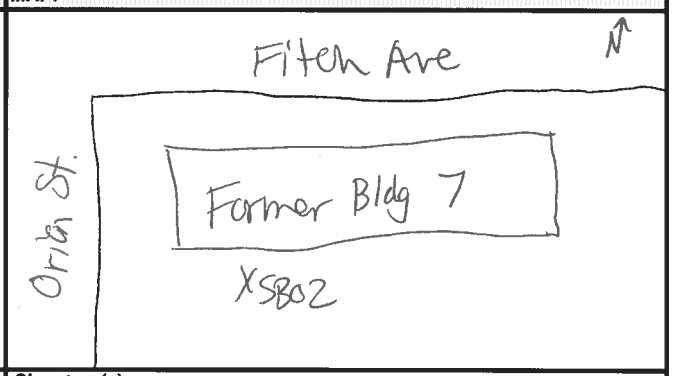
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB04-0607R
Sample Location: SB 04
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/7/10 Time: 1345 Method: DPT / ~~Dual Tube~~ Macro Monitor Reading (ppm):	06-07	Lt. Brown	Sand (f-m) some gray/black particles on bottom 3 in, dry

COMPOSITE SAMPLE DATA:

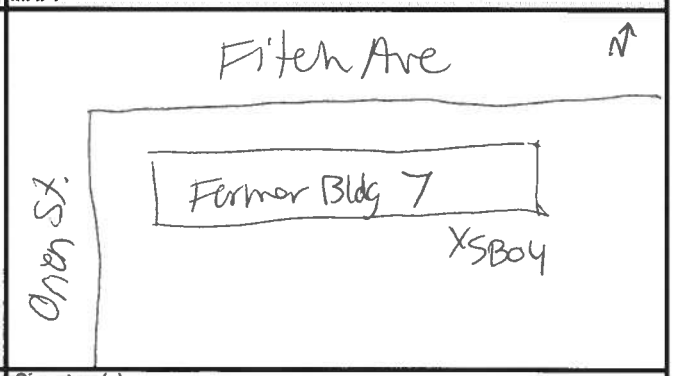
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.: (SVOC's Only)
—	x NASB-B7/10-DUP02-120710

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB04-3839R
Sample Location: SB 04
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 12/7 /10	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1400	38-39	Gray	Clay with silt trace sand (f), saturated.
Method: DPT / ~~Dual Tube~~ Macro			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB05-0607R
Sample Location: SB 05
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 12/8/10	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1115	06-07	Lt Brown	Sand (f-m) some coarse, trace gravel
Method: DPT / ~~Dual Tube~~ Macro			Dry
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

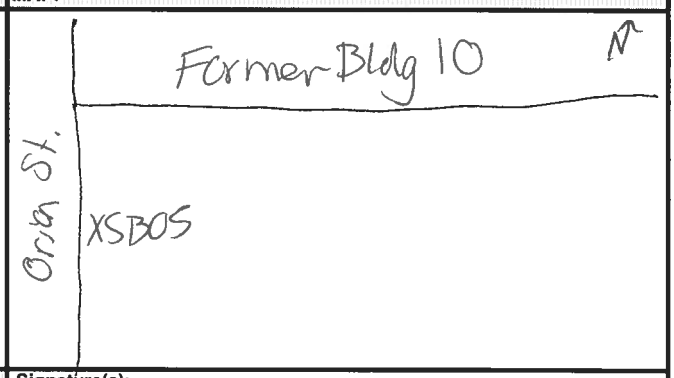
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	
		X 3 for		
		Lab QC		

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
YES	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB05-4041R
Sample Location: SB 05
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 12/ 8/10	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1130	40-41	Gray	Silt and sand (f) saturated
Method: DPT / ~~Dual Tube~~ Macro			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

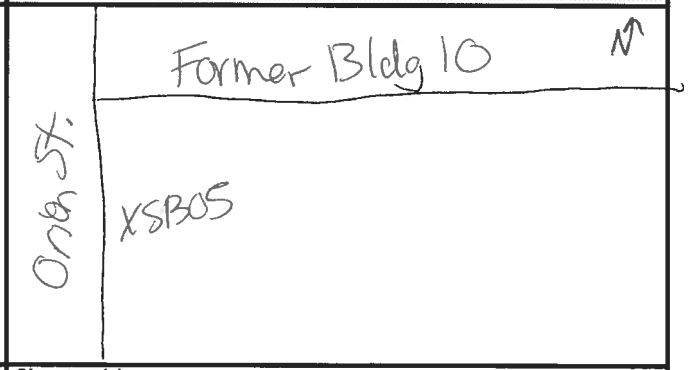
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	(YES) / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB08-1112-R
Sample Location: SB08
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 12/7/10	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1440	11-12	park Brown	Sand (m and coarse) some gravel (~1in) subrounded some organic material wet clump of pine needles, wood pieces.
Method: DPT / ~~Dual Tube~~ Macro			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

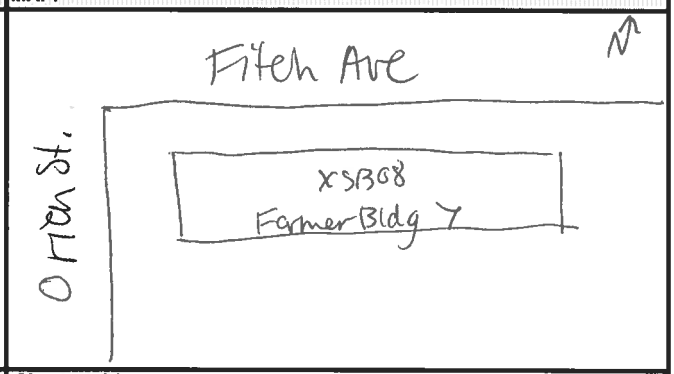
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

*Petroleum-like odor
- Found pine needles - still green.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB08-3940R
Sample Location: SB 08
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

CFB

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: ~~12/7/10~~ 12/8/10 Time: ~~1545~~ 1030 Method: DPT / ~~Dual Tube~~ Monitor Reading (ppm):	39-40	Gray	Clay with silt, saturated,

COMPOSITE SAMPLE DATA:

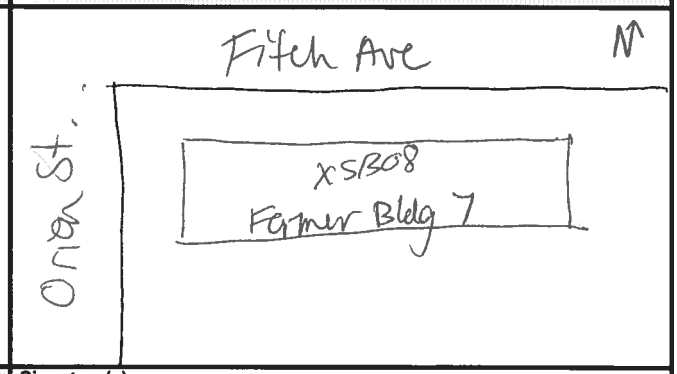
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB09-0607R
Sample Location: SB09
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 12/8/10	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0830	06-07	Lt. Brown	Sand (f-m) moist
Method: DPT / ~~Dual Tube~~ Macro			→ some dark brown/black
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

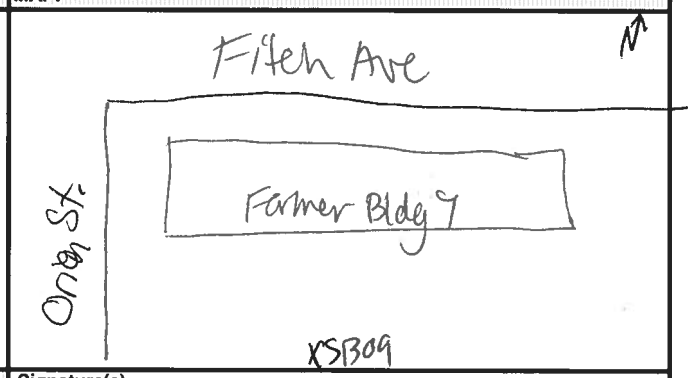
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs /PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	NASB-B7/10-DUP01-120810

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB09-2021R
Sample Location: SB 09
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/8/10 Time: 0845 Method: DPT / ~~Dual Tube~~ Manual Monitor Reading (ppm):	20-21	Gray	Silt with Sand (f), saturated.

COMPOSITE SAMPLE DATA:

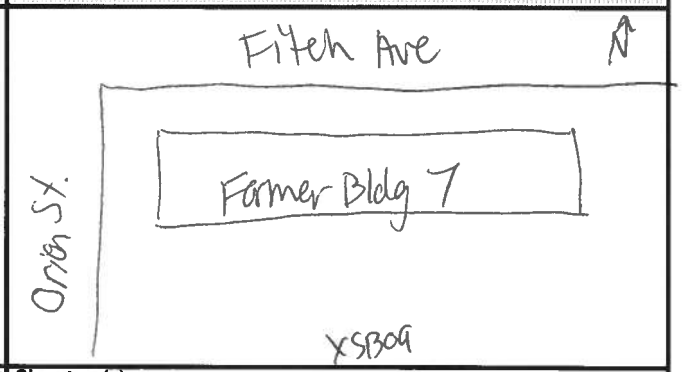
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB10-0506R
Sample Location: SB10
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/8/10 Time: 0600 Method: DPT / ~~Dual Tube~~ Macro Monitor Reading (ppm):	05-06	Lt Brown	Sand (f-m) (some black residue/specs of fine grain on outer portion of soil core), Dry

COMPOSITE SAMPLE DATA:

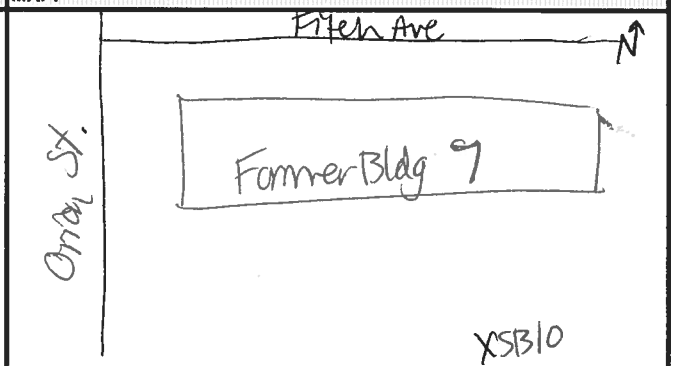
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / DAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB10-2122 R
Sample Location: SB 10
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/8/10 Time: 0915 Method: DPT / ~~Dual Tube~~ Macro Monitor Reading (ppm):	21-22	Gray	0-0.5 - Sand(f) with silt, saturated 0.5-1.0 - silt some sand(f) trace clay, saturated

COMPOSITE SAMPLE DATA:

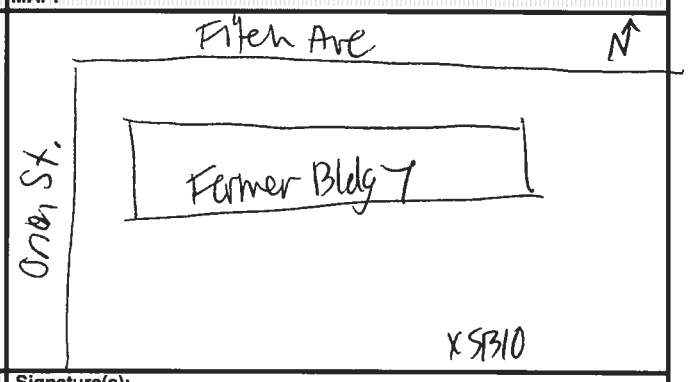
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB11-0708R
Sample Location: SB11
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/8/10 Time: 0930 Method: DPT / ~~Dual Tube~~ / Macro Monitor Reading (ppm):	07-08	Dark Brown / ~~Dark~~ Brown	0.0-0.3 - Sand (f) trace fine organic fibers - Dark Brown 0.3-1.0 - Sand. (f-m)

COMPOSITE SAMPLE DATA:

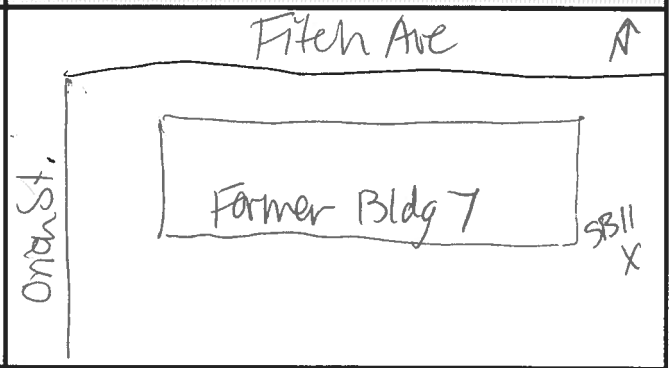
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B7/10, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-SB-SB 11-3940R
Sample Location: SB 11
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 12/8/10	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0950 Method: DPT / ~~Dual Tube~~ Macro Monitor Reading (ppm):	39-40	Gray	silt with sand (f) some clay, saturated / soupy

COMPOSITE SAMPLE DATA:

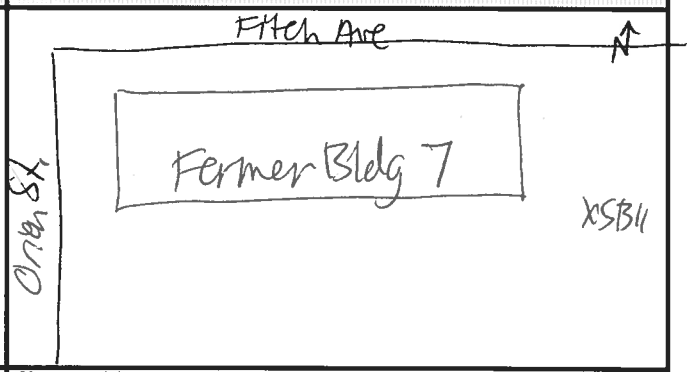
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	(YES) NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B225, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B225-SB-SB08-0910 R
Sample Location: SB 08
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/8/10 Time: 1155 Method: DPT / ~~Dual Tube~~ Macro Monitor Reading (ppm):	09-10	Lt Brown	Sand (fine) moist, some darker brown specs/ fine grain on outer core.

COMPOSITE SAMPLE DATA:

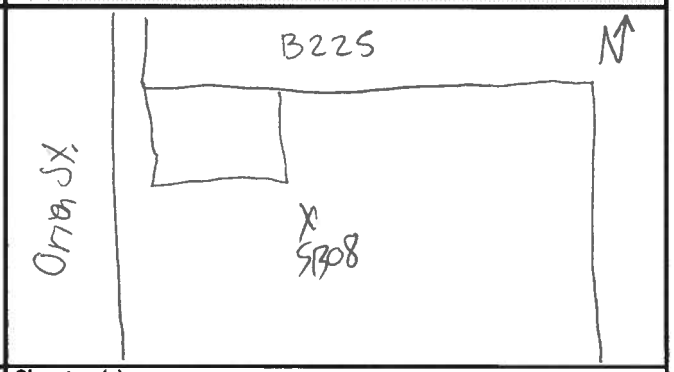
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASB-AOPI-B225, Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: NASB-B225-SB-SB09-0708R
Sample Location: SB 09
Sampled By: Fellows
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 12/8 /10 Time: 1205 Method: DPT / ~~Dual Tube~~ Manual Monitor Reading (ppm):	07-08	Dark Brown / tan	0-0.8- Sand (f-m) 0.8-1.0- Sand (m) some fine

COMPOSITE SAMPLE DATA:

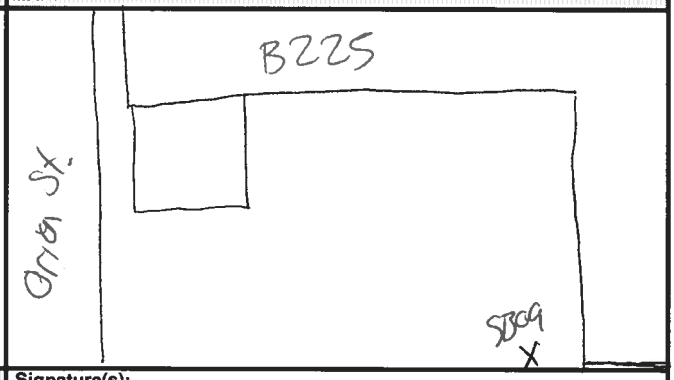
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected	Other
SVOCs / PAH	Cool 4° C,	1 x 4 oz wide mouth glass jar	YES / NO	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NASB-AOP1
Project No.: CTO WE09

Sample ID No.: NASB-1371/10-SB-SB11-3940
Sample Location: SB11
Sampled By: SLHAL
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/14/10 Time: 0950 Method: DPT / Dual Tube Monitor Reading (ppm): 4.4	39-40	Gray	Silty Sand - Saturated

COMPOSITE SAMPLE DATA:

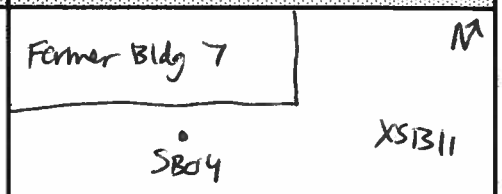
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
EPH / SVOC	1 x 4 oz jar	Yes	
VPH	2 x 40 ml vial	↓	
VOC	4 x 40 ml vial	↓	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

A-3 WELL CONSTRUCTION LOGS

921-2587
Gate 4

OVERBURDEN MONITORING WELL CONSTRUCTION LOG — **TETRA TECH NUS, INC.**

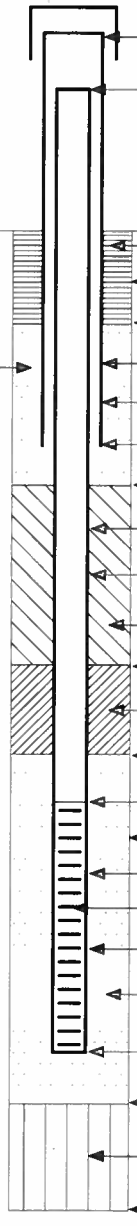
PROJECT NAME: NASB- AOP1 - Mercury Disposal Area
PROJECT NO: 112G02330
PROJECT LOCATION: Brunswick, ME
WELL NO: MDA- MW01
CLIENT: U.S. Navy
BORING NO: MDA-SB01
CONTRACTOR: Tetra Tech
DRILLER: NAI- S. Braun
BORING LOCATION:
LOGGED BY: C. Fellows
DATE: 10/5/10
CHECKED BY:
DATE:

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	2.6'
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	(RS) ~~2.55'~~ 2.4'
TYPE OF SURFACE SEAL	Bentonite Chips (med)
DIA. SURFACE SEAL BGS (In.)	4 in
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	6 in
I.D. OF PROTECTIVE CASING (In.)	3.5"
TYPE OF PROTECTIVE CASING	Steel Guard Pipe
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	2.4'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	(RS) ~~2.4~~ 3.5'
RISER PIPE (In.) I.D.: 1" O.D.:	1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (med)
DEPTH TOP OF SEAL (Ft.)	3.5
TYPE OF SEAL	Bentonite Chips (med)
DEPTH BOTTOM OF SEAL (Ft.)	12.5
DEPTH TOP OF PERVIOUS SECTION (Ft.)	14.5
DIAMETER OF BOREHOLE (In.)	3.25'
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot openings
PERVIOUS SECTION (In.) I.D.: 1" O.D.:	2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	19.5
DEPTH BOTTOM OF FILTER PACK (Ft.)	19.5
TYPE OF BACKFILL BELOW FILTER PACK	Natural Collapse
END OF BORING (Ft.)	40'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

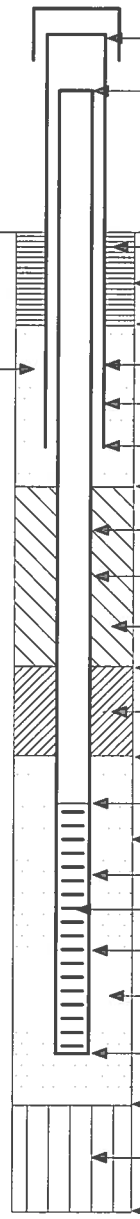
OVERBURDEN MONITORING WELL CONSTRUCTION LOG — **TETRA TECH NUS, INC.**

PROJECT NAME: NASB- AOP1- Mercury Disposal Area.
PROJECT LOCATION: Brunswick, ME
CLIENT: U.S. Navy
CONTRACTOR: Tetra Tech
DRILLER: MAI - S. Braun
LOGGED BY: C. Fellows
DATE: 10/4/10
CHECKED BY:
DATE:

PROJECT NO: 112G02330
WELL NO: MDA-MW02
BORING NO: MDA-SB02
BORING LOCATION:

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING
ELEVATION TOP OF RISER PIPE
GROUND ELEVATION



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	2.8'
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	2.65'
TYPE OF SURFACE SEAL	Bentonite Chips (med) ~~Temp Well → No surface seal~~
DIA. SURFACE SEAL BGS (In.)	~~N/A~~ 6 in
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	~~N/A~~ 6 in
I.D. OF PROTECTIVE CASING (In.)	3.5 in
TYPE OF PROTECTIVE CASING	Steel Guard Pipe
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	2.2
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	3.5'
RISER PIPE (In.) I.D.: 1" O.D.:	1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (med.
DEPTH TOP OF SEAL (Ft.)	3.5'
TYPE OF SEAL	Bentonite Chips (med)
DEPTH BOTTOM OF SEAL (Ft.)	16'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	18'
DIAMETER OF BOREHOLE (In.)	3.25'
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" slot openings
PERVIOUS SECTION (In.) I.D.: 1" O.D.:	2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica sand 20/40
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	28'
DEPTH BOTTOM OF FILTER PACK (Ft.)	28'
TYPE OF BACKFILL BELOW FILTER PACK	natural collapse ~~No Backfill~~
END OF BORING (Ft.)	40'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

OVERBURDEN MONITORING WELL CONSTRUCTION LOG — **TETRA TECH NUS, INC.**

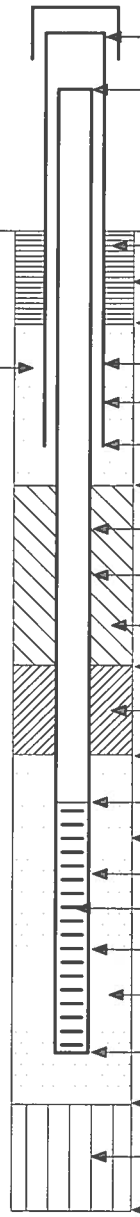
PROJECT NAME: MASS AOIP - Mercury Disposal Area
PROJECT NO: 112G02330
PROJECT LOCATION: Brunswick, ME
WELL NO: MDA-MW03
CLIENT: U.S. Navy
BORING NO: MDA-SB03
CONTRACTOR: Tetra Tech
DRILLER: MAI - S. Braun
BORING LOCATION:
LOGGED BY: C. Fellows
DATE: 10/4/10
CHECKED BY:
DATE:

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION

SAND DRAIN LAYER



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	2.3
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	2.1
TYPE OF SURFACE SEAL	Bentonite Chips (med) ~~Temp. well~~
DIA. SURFACE SEAL BGS (In.)	6 in
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	6 in.
I.D. OF PROTECTIVE CASING (In.)	3.5"
TYPE OF PROTECTIVE CASING	Steel Guard Pipe
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	2.7
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	3.5'
RISER PIPE (In.) I.D.: 1" O.D.:	1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (med)
DEPTH TOP OF SEAL (Ft.)	3.5'
TYPE OF SEAL	Bentonite Chips (med)
DEPTH BOTTOM OF SEAL (Ft.)	22'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	24'
DIAMETER OF BOREHOLE (In.)	3.25'
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" slot openings
PERVIOUS SECTION (In.) I.D.: 1" O.D.:	2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand 20-40
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	34'
DEPTH BOTTOM OF FILTER PACK (Ft.)	34'
TYPE OF BACKFILL BELOW FILTER PACK	Natural Collapse
END OF BORING (Ft.)	40'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

OVERBURDEN MONITORING WELL CONSTRUCTION LOG — **TETRA TECH NUS, INC.**

PROJECT NAME: NASB-ADP1 - Fire Training Area
PROJECT NO: 112G0233D
PROJECT LOCATION: Brunswick, ME
WELL NO: FTA-MW08
CLIENT: US Navy
BORING NO: FTA-MW08
CONTRACTOR: Tetra Tech
DRILLER: MAI - S. Brown
BORING LOCATION:
LOGGED BY: C. Fellows / S. Hill
DATE: 10/6/10 - 10/19/10
CHECKED BY:
DATE:

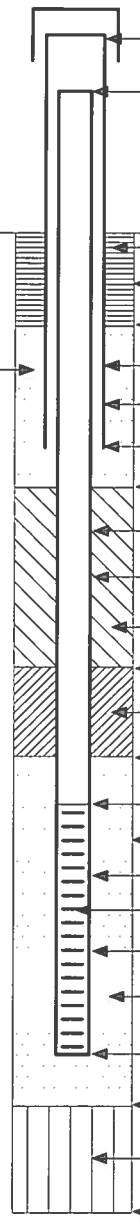
PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION

SAND DRAIN LAYER



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	2.5'
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	2.5'
TYPE OF SURFACE SEAL	Bentonite Chips (med)
DIA. SURFACE SEAL BGS (In.)	6"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	6"
I.D. OF PROTECTIVE CASING (In.)	N/A
TYPE OF PROTECTIVE CASING	N/A
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	N/A
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	N/A
RISER PIPE (In.) I.D.: 1" O.D.: 1.25"	
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (med)
DEPTH TOP OF SEAL (Ft.)	Surface
TYPE OF SEAL	Bentonite Chips (med)
DEPTH BOTTOM OF SEAL (Ft.)	8.5'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	10.5'
DIAMETER OF BOREHOLE (In.)	3.25'
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot openings
PERVIOUS SECTION (In.) I.D.: 1" O.D.: 2.4"	
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	11.5
DEPTH BOTTOM OF FILTER PACK (Ft.)	11.5
TYPE OF BACKFILL BELOW FILTER PACK	Natural collapse / Bedrock
END OF BORING (Ft.)	11.5

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB-ADP1-B7/10	PROJECT NO:	112G02330
PROJECT LOCATION:	NAS - Brunswick, ME	WELL NO:	B7/10-MW01
CLIENT:	US Navy	BORING NO:	B7/10-SB01
CONTRACTOR:	Tetra Tech	DRILLER:	MAI-S. Brown
LOGGED BY:	S. Hill	DATE:	10/13/10
CHECKED BY:		DATE:	

BORING LOCATION:

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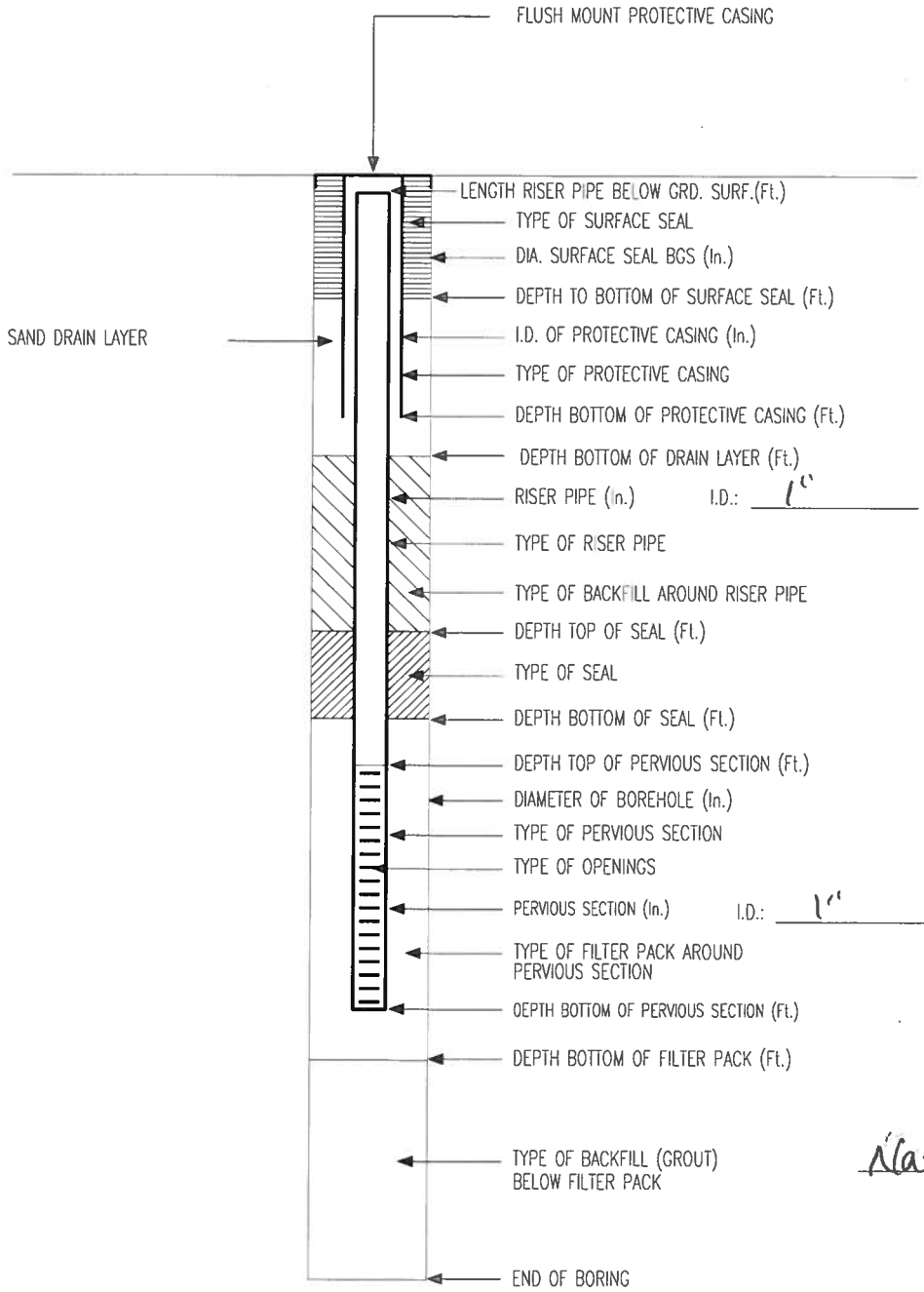

LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Rover flushmount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1"	O.D.: 1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chip (med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chip (med)
DEPTH BOTTOM OF SEAL (Ft.)	5'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	7'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1"	O.D.: 2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	17'
DEPTH BOTTOM OF FILTER PACK (Ft.)	17'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse
END OF BORING	50'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB-ADPI-B7/10	PROJECT NO:	42G02330
PROJECT LOCATION:	NAS-Brunswick, ME	WELL NO:	B7/10-MW02
CLIENT:	US Navy	BORING NO:	B7/10-SB02
CONTRACTOR:	Tetra Tech	DRILLER:	MAI-S.Brown
LOGGED BY:	S.Hill	DATE:	10/2/10
CHECKED BY:		DATE:	
		BORING LOCATION:	

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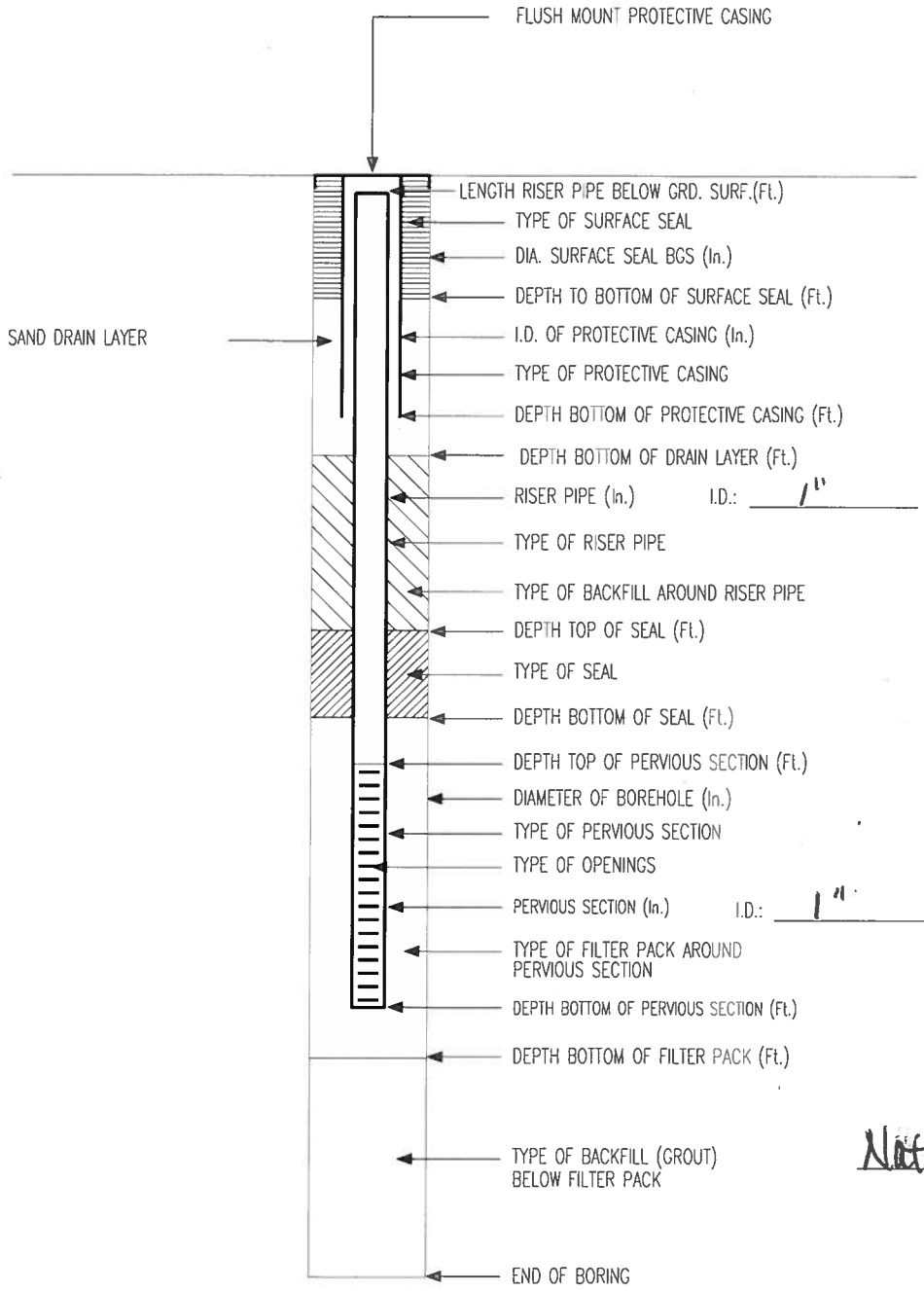


LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Rover flushmount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1"	O.D.: 1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (Med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chip (Med)
DEPTH BOTTOM OF SEAL (Ft.)	6'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	8'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1"	O.D.: 2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	18'
DEPTH BOTTOM OF FILTER PACK (Ft.)	18'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural collapse
END OF BORING	60'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

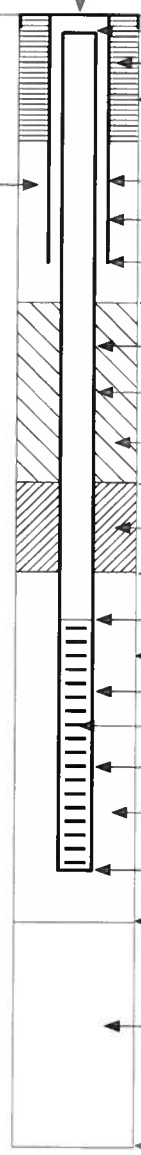
TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB-AOP1-B7/10	PROJECT NO:	112G02330
PROJECT LOCATION:	NAS Brunswick, ME	WELL NO:	B7/10-MW03S
CLIENT:	U.S. Navy	BORING NO:	B7/10-SB03
CONTRACTOR:	Tetratech	BORING LOCATION:	
DRILLER:	MAI - S. Braun		
LOGGED BY:	C. Pellas	DATE:	10/8/10
CHECKED BY:		DATE:	

PAGE: 1 OF 1



LENGTH RISER PIPE BELOW GRD. SURF. (~~Ft.~~) in	3.75"
TYPE OF SURFACE SEAL	Concrete pad
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25'
TYPE OF PROTECTIVE CASING	Roverflush mount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1" O.D.:	1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chips (med)
DEPTH BOTTOM OF SEAL (Ft.)	7.5
DEPTH TOP OF PERVIOUS SECTION (Ft.)	9.5'
DIAMETER OF BOREHOLE (In.)	3.25'
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot openings
PERVIOUS SECTION (In.) I.D.: 1" O.D.:	2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	19.5'
DEPTH BOTTOM OF FILTER PACK (Ft.)	19.5'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse.
END OF BORING	45'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB-AOP1 - B7/10	PROJECT NO:	112G02330
PROJECT LOCATION:	NAS Brunswick	WELL NO:	B7/10-MW03 D
CLIENT:	U.S. Navy	BORING NO:	B7/10-SB03
CONTRACTOR:	Tetratech	BORING LOCATION:	
DRILLER:	MAI - S. Braun		
LOGGED BY:	C. Pellows	DATE:	10/8/10
CHECKED BY:		DATE:	

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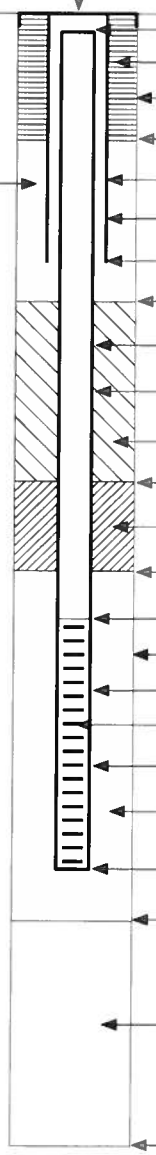


GROUND ELEVATION

WL=6.4

SAND DRAIN LAYER

FLUSH MOUNT PROTECTIVE CASING	
LENGTH RISER PIPE BELOW GRD. SURF. (Ex.) in	3.25"
TYPE OF SURFACE SEAL	Concrete pad.
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Rover Flush Mount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1"	O.D.: 1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chips (med)
DEPTH BOTTOM OF SEAL (Ft.)	23'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	25'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot openings
PERVIOUS SECTION (In.) I.D.: 1"	O.D.: 2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	35'
DEPTH BOTTOM OF FILTER PACK (Ft.)	35'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse
END OF BORING	45'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

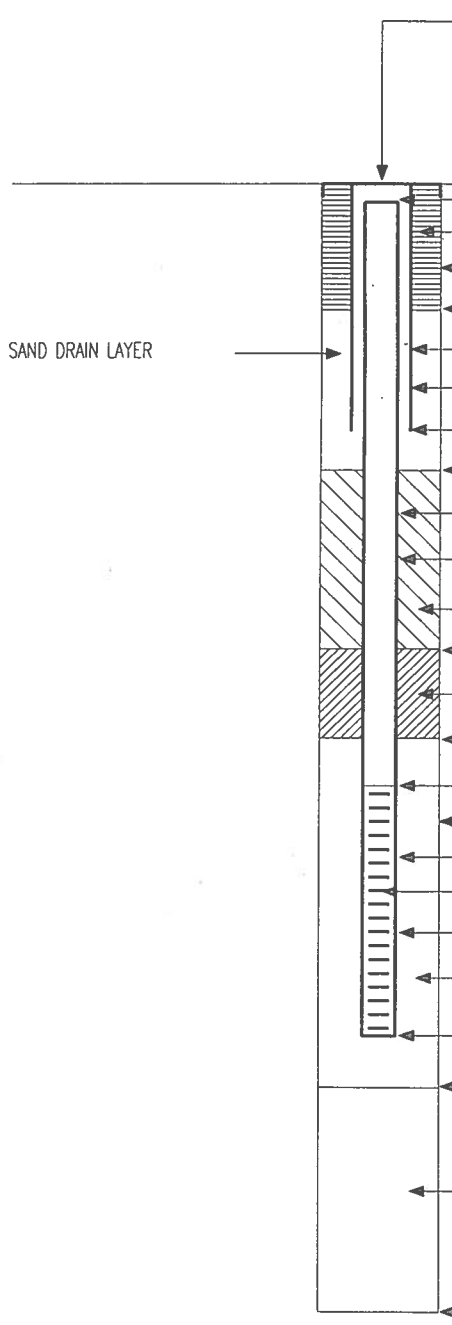
TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB- AOP1 - B7/10	PROJECT NO:	112G02330
PROJECT LOCATION:	NAS - Brunswick, ME	WELL NO:	NASB-B7/10-MW04
CLIENT:	US Navy	BORING NO:	B7/10-SB04
CONTRACTOR:	Tetra Tech	DRILLER:	MAI-S. Brown
LOGGED BY:	S. Hill	DATE:	10/13/10
CHECKED BY:		DATE:	
BORING LOCATION:			

PAGE: 1 OF 1



LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Rover flushmount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1" O.D.:	1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chips (med
DEPTH BOTTOM OF SEAL (Ft.)	5'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	7'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1" O.D.:	2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	17'
DEPTH BOTTOM OF FILTER PACK (Ft.)	17'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural collapse
END OF BORING	55

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation indicates that Surveyed Ground Elevation is NOT Available.

TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB-A0P1-B7/10	PROJECT NO:	112G02330
PROJECT LOCATION:	NAS Brunswick, ME	WELL NO:	B7/10-MW05D
CLIENT:	US Navy	BORING NO:	B7/10-SB05
CONTRACTOR:	Tetra Tech	DRILLER:	MAI-S. Brown
LOGGED BY:	S. Hill	DATE:	10/12/10
CHECKED BY:		DATE:	

BORING LOCATION:

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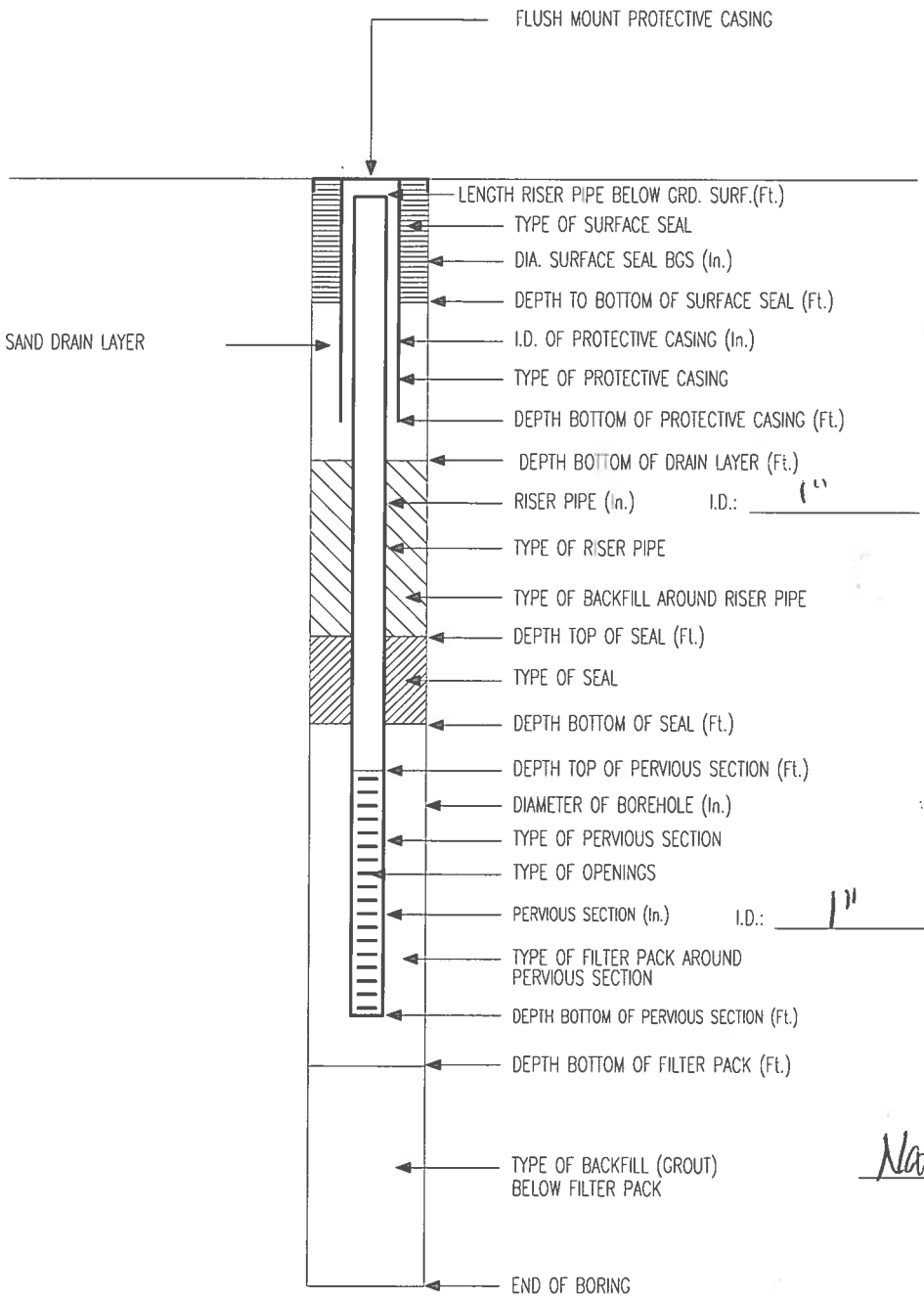

LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	concrete
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Roverflush mount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1"	O.D.: 1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite chips (med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite chips (med)
DEPTH BOTTOM OF SEAL (Ft.)	29'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	31'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1"	O.D.: 2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	41'
DEPTH BOTTOM OF FILTER PACK (Ft.)	41'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural collapse
END OF BORING	60'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB-AOP1-B7/10	PROJECT NO:	112602380
PROJECT LOCATION:	NAS Brunswick, ME	WELL NO:	B7/10-MW05S
CLIENT:	US Navy	BORING NO:	B7/10-SB05
CONTRACTOR:	Tetra Tech	BORING LOCATION:	
DRILLER:	MAI-S. Brown		
LOGGED BY:	S-Hill	DATE:	10/12/10
CHECKED BY:		DATE:	

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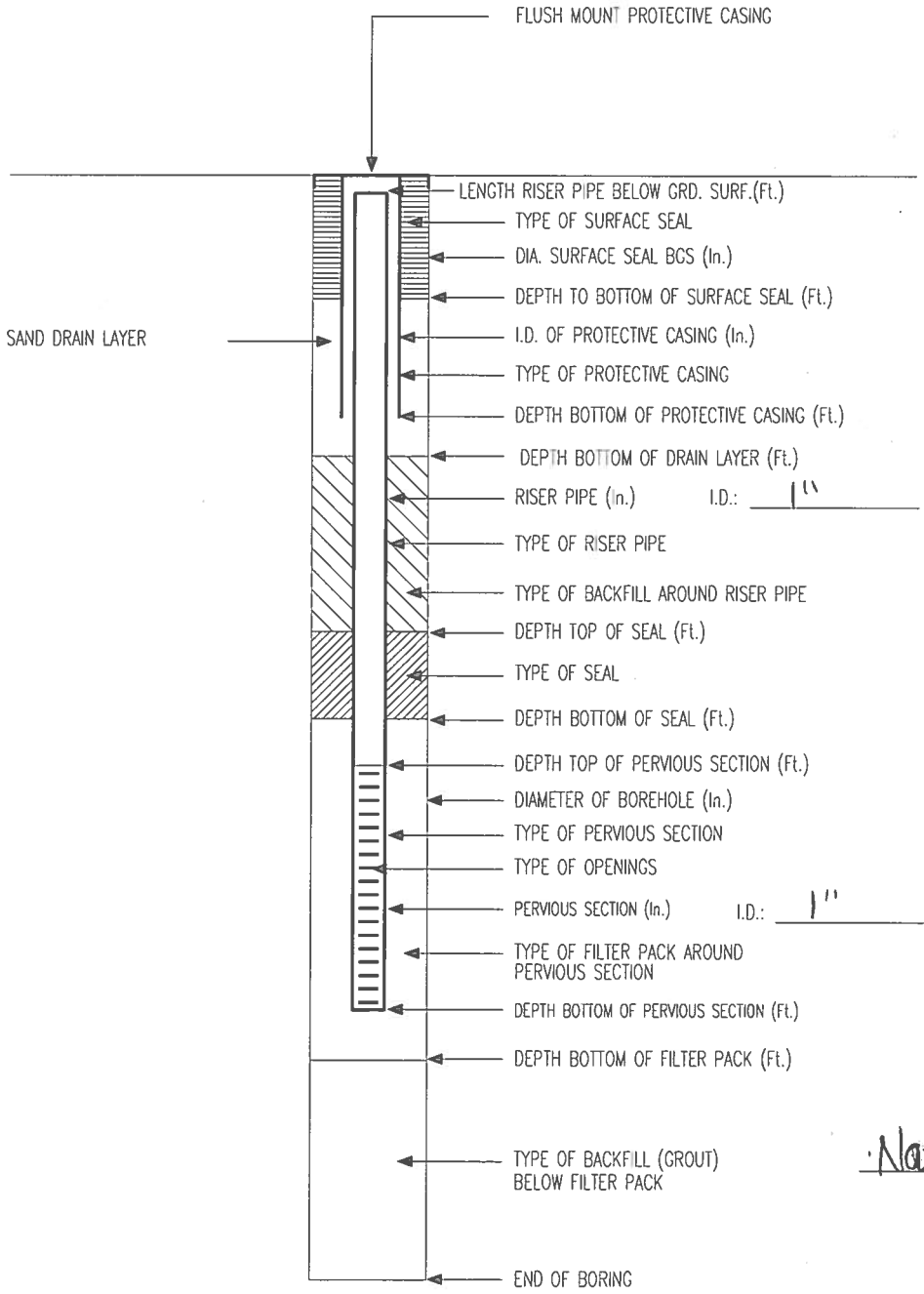


LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	concrete
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Rover flush mount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1" O.D.:	1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (Med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chips (Med)
DEPTH BOTTOM OF SEAL (Ft.)	5'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	7'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1" O.D.:	2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	17'
DEPTH BOTTOM OF FILTER PACK (Ft.)	17'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse
END OF BORING	60'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

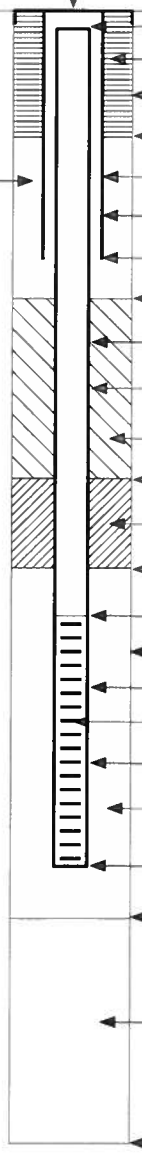
TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB-AOP1-B7/10	PROJECT NO:	112G02330
PROJECT LOCATION:	NAS Brunswick, ME	WELL NO:	B7/10-MW06S
CLIENT:	US Navy	BORING NO:	B7/10-SB06
CONTRACTOR:	Tetra Tech	DRILLER:	MEI-S. Braun
LOGGED BY:	S. Hill	DATE:	10/12/10
CHECKED BY:		DATE:	
BORING LOCATION:	(SB logged By CBS)		

PAGE: 1 OF 1



LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	Concrete pad
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Roverflush mount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1"	O.D.: 1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite chips (mud)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chips (mud)
DEPTH BOTTOM OF SEAL (Ft.)	5'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	7'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1"	O.D.: 2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	17'
DEPTH BOTTOM OF FILTER PACK (Ft.)	17'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse
END OF BORING	60'

GENERAL NOTE:

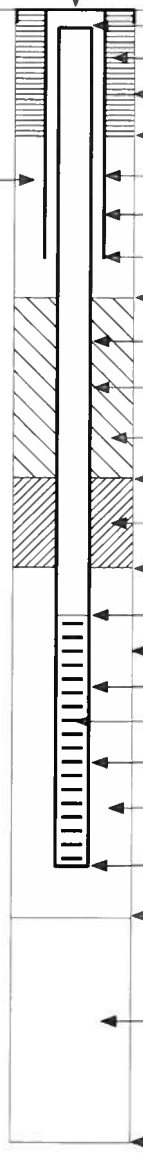
1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB - AOPI - B7/10	PROJECT NO:	112G02337
PROJECT LOCATION:	NAS Brunswick, ME	WELL NO:	B7/10-MW10LD
CLIENT:	US Navy	BORING NO:	B7/10-SB06
CONTRACTOR:	Tetra Tech	DRILLER:	MAI - S. Braun
LOGGED BY:	S. Hill	DATE:	10/12/10
CHECKED BY:		DATE:	
BORING LOCATION:	(SB logged By CSS)		
PAGE:	1 OF 1		



DTW =

FLUSH MOUNT PROTECTIVE CASING	
GROUND ELEVATION	
LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	concrete pad
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
SAND DRAIN LAYER	
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Rover Flush mount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1" O.D.:	1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite chips (Med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite chips (Med)
DEPTH BOTTOM OF SEAL (Ft.)	28'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	30'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1" O.D.:	2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	40'
DEPTH BOTTOM OF FILTER PACK (Ft.)	40'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse
END OF BORING	60'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

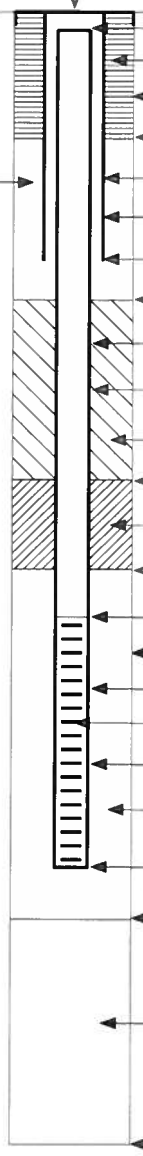
TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB-AOPI-B7/10	PROJECT NO:	112G02330
PROJECT LOCATION:	NAS Brunswick, ME	WELL NO:	B7/10-MW07
CLIENT:	U.S. Navy	BORING NO:	B7/10-SB07
CONTRACTOR:	Tetra Tech	DRILLER:	MH-C. Braun
LOGGED BY:	C. Fellows	DATE:	10/8/10
CHECKED BY:		DATE:	
BORING LOCATION:			

PAGE: 1 OF 1



GROUND ELEVATION

WL = 6.5' bgs.

SAND DRAIN LAYER

LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	3"
TYPE OF SURFACE SEAL	Concrete pad.
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3"
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	Roverflushmount -
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1'	O.D.: 1.25
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (hed)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chips (hed)
DEPTH BOTTOM OF SEAL (Ft.)	6'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	8'
DIAMETER OF BOREHOLE (In.)	3.25'
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010" slot openings
PERVIOUS SECTION (In.) I.D.: 1"	O.D.: 2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	18'
DEPTH BOTTOM OF FILTER PACK (Ft.)	18'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse
END OF BORING	45'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

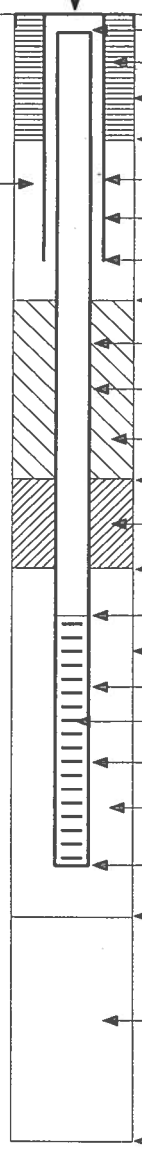
TETRA TECH NUS INC.

PROJECT NAME:	NASB- AOP1-B225- MW08	PROJECT NO:	112G02330
PROJECT LOCATION:	NAS - Brunswick, ME	WELL NO:	B225 - MW08
CLIENT:	US Navy	BORING NO:	B225-MW08
CONTRACTOR:	Tetra Tech	DRILLER:	MAI - S. Brown
LOGGED BY:	S. Hill	DATE:	10/20/10
CHECKED BY:		DATE:	
		BORING LOCATION:	

PAGE: 1 OF 1

GROUND ELEVATION 65.44

Riser Elev. 65.06



LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	concrete
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3'
I.D. OF PROTECTIVE CASING (In.)	3.25"
TYPE OF PROTECTIVE CASING	flushmount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1"	O.D.: 1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite Chips (med)
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite Chips (med)
DEPTH BOTTOM OF SEAL (Ft.)	26'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	28'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1"	O.D.: 2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	38'
DEPTH BOTTOM OF FILTER PACK (Ft.)	38'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse
END OF BORING	40'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

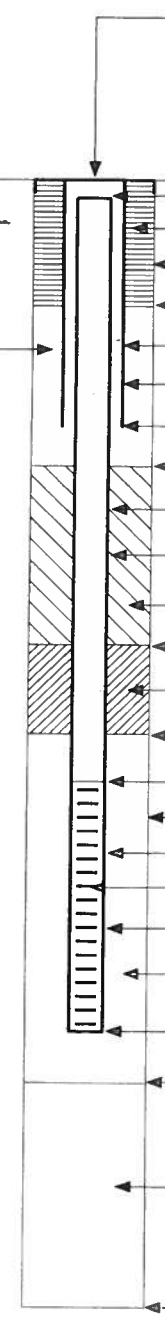
TtNUS Form 0058

FLUSH MOUNT MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS INC.

PROJECT NAME:	NASB - AOPI - B225	PROJECT NO:	112G02330
PROJECT LOCATION:	NASB - Brunswick, ME	WELL NO:	B225-MW09
CLIENT:	US Navy	BORING NO:	B225-MW09
CONTRACTOR:	Tetra Tech	DRILLER:	MAL-S. Brown
LOGGED BY:	S. Hill	DATE:	10/20/10
CHECKED BY:		DATE:	
BORING LOCATION:			

PAGE: 1 OF 1



GROUND ELEVATION: 63.23

Riser Elev. 62.94

LENGTH RISER PIPE BELOW GRD. SURF.(Ft.)	
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	8"
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	3'
I.D. OF PROTECTIVE CASING (In.)	3.25
TYPE OF PROTECTIVE CASING	Flushmount
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	0.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	1'
RISER PIPE (In.) I.D.: 1"	O.D.: 1.25"
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Bentonite chips (me
DEPTH TOP OF SEAL (Ft.)	1'
TYPE OF SEAL	Bentonite chips (med
DEPTH BOTTOM OF SEAL (Ft.)	3'
DEPTH TOP OF PERVIOUS SECTION (Ft.)	5'
DIAMETER OF BOREHOLE (In.)	3.25"
TYPE OF PERVIOUS SECTION	schedule 40 PVC
TYPE OF OPENINGS	0.010" Slot
PERVIOUS SECTION (In.) I.D.: 1"	O.D.: 2.4"
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Silica Sand (20-40)
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	15'
DEPTH BOTTOM OF FILTER PACK (Ft.)	15'
TYPE OF BACKFILL (GROUT) BELOW FILTER PACK	Natural Collapse
END OF BORING	30'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation Indicates that Surveyed Ground Elevation is NOT Available.

TtNUS Form 0058

A-4 WELL DEVELOPMENT LOGS

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MDA-MW01

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: — DEV

DATE: 10-11-10

WEATHER: MILD & SUNNY

PERSONNEL: T. ROJAHN

PID - 0.0 ppm TD = 21.74

Well Screen Depth: 11.74 / 21.74 ft. ~~bgs~~ TOC

H&S Monitoring Instrument Reading 0.0 ppm

Pump Type/Material: PERISTALTIC 1" Ø / PVC

Pump Intake Depth: Bottom

Total Purge Volume = 3.2 (gal)

Data Recorded By: T. ROJAHN

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1430	20.57	0	TR ~~200~~	–	–	–	–	–	START DEV.
1440	7.22	2000	200	10.01	6.39	0.024	6.72	261	TANISH
1450	–	4000	200	9.71	6.25	0.022	6.82	185	SL. Cloudy
1500	–	6000	200	9.66	6.15	0.020	6.85	60.8	V.SL. "
1510	–	8000	200	9.63	6.12	0.020	6.83	39.8	CLEAR
1515	–	9000	200	9.62	6.12	0.020	7.29	23.7	CLEAR
1520	–	10000	200	9.65	6.10	0.019	7.32	18.8	CLEAR
1525	–	11000	200	9.61	6.08	0.019	7.28	21.0	CLEAR
1530	–	12000	200	9.58	6.07	0.019	7.25	12.8	CLEAR

Possible WL Malfuction Low Sp. Con.

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MDA-MW02

PROJECT: NASB-AOPI:
PROJECT NO.: CTO WE09 / 112G02330
SAMPLE ID: — DEV.

DATE: 10-11-10
WEATHER: MILD & SUNNY
PERSONNEL: T. ROJAHN
TD: ~~29.57~~ 30.65

Well Screen Depth: 20.65 / 30.65 ft. ~~bgs~~ tor
H&S Monitoring Instrument Reading 0.0

Pump Type/Material: PERISTALTIC / PVC
Pump Intake Depth: Bottom

Total Purge Volume = 4.8 (gal)
Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1625	–	0	0	–	–	–	–	>1000	START DEV - BRN CLEARED OUT + MUCK ON WELL Bottom ~1ft
1635	–	4000	400	–	–	–	–	112	V.SL Cloudy
1645	–	8000	400	9.07	6.24	0.021	9.15	68.5	" " "
1655	–	12000	400	8.71	6.10	0.020	8.30	32.0	CLEAR
1705	–	16000	400	8.64	6.08	0.020	8.28	10.2	CLEAR
1710	–	18000	400	8.63	6.07	0.020	8.16		

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MDA - WM03

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: —— DEV.

DATE: 10-11-10

WEATHER: MILD & SUNNY

PERSONNEL: T. ROJAHN

TD = 35.95'

Well Screen Depth: 25.95 / 35.95 ft. ~~bgs~~ TOC

H&S Monitoring Instrument Reading 0.0

Pump Type/Material: PERISTALTIC / 1" PVC

Pump Intake Depth: BOTTOM

Total Purge Volume = 3.4 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1545	—	TR 420	0	—	—	—	—	>1000	BRN
1555	—	500	5000	8.88	6.06	0.061	8.08	4.65	CLEAR
1600	—	400	7000	9.06	6.00	0.060	8.14	3.35	CLEAR
1605	—	400	9000	9.14	5.93	0.060	8.24	4.53	CLEAR
1610	—	400	11000	9.11	5.90	0.060	8.28	2.23	CLEAR
1615	—	400	13000	9.05	5.89	0.060	8.27	1.37	CLEAR

W.L. METER MAL-FUCTION

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW07

PROJECT: NASB-AOPI: B7/10-MW01
PROJECT NO.: CTO WE09 / 112G02330
SAMPLE ID: N/A
initial DTW 7.18

DATE: 10/21/10
WEATHER: cool; cloudy
PERSONNEL: S. Hill

Well Screen Depth: 7 / 17 ft. bgs
H&S Monitoring Instrument Reading 0.0 ppm

Pump Type/Material: —
Pump Intake Depth: —

Total Purge Volume = ~6 (gal)
Data Recorded By: SEH

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0920	7.18	Start purge	—	—	—	—	—	—	Sweep screen
0932	7.20	7800	650	17.07	5.46	371	4.38	17.4	
0940	7.20	12440	580	17.05	5.14	334	4.79	6.0	
0950	7.20	18240	580	17.14	5.12	348	4.09	0.78	
1000	7.20	23040	480	17.05	5.14	345	4.66	0.29	end purge

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW025

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV

DATE: 10-21-10

WEATHER: OVERCAST TEMP 51°

PERSONNEL: T. ROJAHN

Well Screen Depth: 7.6 / 17.6 ft. ~~bgs~~ toc

H&S Monitoring Instrument Reading 0.2

Pump Type/Material: PERISTALTIC / PVC

Pump Intake Depth: Bottom

Total Purge Volume = 5.9 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0910	7.02	0	0	—	—	—	—	—	BRN
0920	7.10	5000	500	16.05	6.06	0.208	2.43	163	LT TAN
0930	7.10	10,000	500	16.05	5.91	0.203	4.78	25.2	CLEAR
0940	7.10	15000	500	16.08	5.88	0.202	6.28	10.07	CLEAR
0950	7.10	20000	500	16.11	5.86	0.201	6.23	5.25	CLEAR
0955	7.10	22500	500	16.09	5.83	0.200	6.34	4.14	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW035

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV

DATE: 10-20-10

WEATHER: SUNNY & MILD (60's)

PERSONNEL: T. ROJAHN

TD = 19.25

Well Screen Depth: 9.25 / 19.25 ft. ~~bgs~~ toc

H&S Monitoring Instrument Reading 0.6

Pump Type/Material: PERISTALTIC / PVC

Pump Intake Depth: BOTTOM

Total Purge Volume = 5.3 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1400	6.30	0	0	—	—	—	—	—	BRN
1410	6.35	5,000	500	17.85	5.63	0.299	3.15	11.0	CLEAR
1420	6.35	10,000	500	18.07	5.61	0.297	1.53	3.27	CLEAR
1430	6.35	15,000	500	18.08	5.62	0.293	1.70	2.13	CLEAR
1440	6.35	20,000	500	18.11	5.62	0.285	1.83	2.15	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW03D

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV

DATE: 10-20-10

WEATHER: SUNNY & 60's (mild)

PERSONNEL: T. ROJAHN

TD = 34.3

Well Screen Depth: 24.3 / 34.3 ft. ~~bgs~~ toc

H&S Monitoring Instrument Reading 0.5

Pump Type/Material: Peristaltic

Pump Intake Depth: Bottom

Total Purge Volume = 8.2 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1255	6.06	0	0	—	—	—	—	—	GRAY
1305	6.74	6000	600	13.83	5.82	0.264	6.61	60.4	V.Sl. Cloudy
1315	6.74	11000	500	13.71	5.70	0.260	4.97	18.5	CLEAR
1325	6.74	16000	500	13.67	5.60	0.257	4.80	12.7	CLEAR
1335	6.74	21000	500	13.59	5.82	0.254	4.95	8.19	CLEAR
1345	6.74	26000	500	13.63	5.69	0.252	4.40	5.15	CLEAR
1355	6.74	31000	500	13.59	5.67	0.256	4.10	3.25	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW04S

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV

DATE: 10-21-10

WEATHER: OVERCAST (50°S)

PERSONNEL: T. ROJAHN

Well Screen Depth: 6.7 / 16.7 ft. bgs

H&S Monitoring Instrument Reading 0.2

Pump Type/Material: PERISTALTIC / PVC

Pump Intake Depth: BOTTOM

Total Purge Volume = 5.9 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1000	6.59	0	0	—	—	—	—	—	BRN
1010	6.70	5000	500	17.52	5.55	0.180	6.53	1.55	CLEAR
1020	6.72	10 000	500	17.51	5.55	0.181	6.97	5.23	CLEAR
1030	6.72	15 000	500	17.50	5.58	0.180	7.69	1.81	CLEAR
1040	6.72	20000	500	17.52	5.58	0.180	7.78	1.22	CLEAR
1045	6.72	22500	500	17.55	5.58	0.180	7.54	1.00	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW05S

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV

DATE: 10-20-10

WEATHER: Sunny & Cool

PERSONNEL: T. Rojahn

TD= 16.5

Well Screen Depth: 6.5 / 16.5 ft. ~~bgs~~ TOR

H&S Monitoring Instrument Reading 0.1

Pump Type/Material: Peristaltic / PVC

Pump Intake Depth: Bottom

Total Purge Volume = 5.3 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1040	6.54	0	0	—	—	—	—	—	BRN
1050	6.65	4500	450	15.26	6.09	0.205	0.72	5.99	CLEAR
1100	6.65	9000	450	15.39	6.06	0.205	0.48	1.73	CLEAR
1110	6.65	13500	450	15.42	6.04	0.205	0.45	1.06	CLEAR
1120	6.65	18000	450	15.43	6.03	0.205	0.63	0.82	CLEAR
1125	6.65	20250	450	15.44	6.03	0.205	0.62	2.04	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW05D

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV.

DATE: 10-20-10

WEATHER: SUNNY & COOL

PERSONNEL: T. ROJAHN

TD = 40.6

Well Screen Depth: 30.6 / 40.6 ft. ~~bgs~~ TOR

H&S Monitoring Instrument Reading 0.1

Pump Type/Material: PERISTALTIC / PVC

Pump Intake Depth: Bottom

Total Purge Volume = 7.9 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0935	6.22	0	0	—	—	—	—	—	GRAY
0945	7.26	5000	500	13.01	6.35	0.288	0.78	167	SI Cloudy
0955	7.35	10000	500	12.98	5.88	0.280	1.90	21.6	CLEAR
1005	7.35	15000	500	12.94	5.61	0.278	1.75	11.7	CLEAR
1015	7.35	20000	500	12.94	6.17	0.274	2.16	9.82	CLEAR
1025	7.35	25,000	500	12.93	6.12	0.272	2.10	8.76	CLEAR
1035	7.35	30,000	500	12.93	6.08	0.271	2.02	8.39	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW06S

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV.

DATE: 10-18-10

WEATHER: Sunny & Cool

PERSONNEL: S. Hill / T. Roiahni

TD: 16.6

Well Screen Depth: 6.6 / 16.6 ft. ~~bgs~~ TOP

H&S Monitoring Instrument Reading 0.0

Pump Type/Material: PVC / Peristaltic

Pump Intake Depth: Bottom

Total Purge Volume = 5.3 (gal)

Data Recorded By: TD

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1700	6.51	0	0	—	—	—	—	—	BRN
1725	6.55	10000	400	17.76	5.59	0.225	101 ~~5.59~~ (TR)	273	CLEAR
1735	6.55	14000	400	17.56	5.60	0.219	0.66	1.54	CLEAR
1745	6.55	18000	400	17.74	5.61	0.222	0.45	0.20	CLEAR
1750	6.55	20000	400	17.80	5.59	0.222	0.42	0.25	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW06D

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV.

DATE: 10-18-10

WEATHER: Cool & CLEAR

PERSONNEL: S. Hill / T. Rojahn

TD = 39.4

Well Screen Depth: 29.4 / 39.4 ft. ~~bgs~~ TOR

H&S Monitoring Instrument Reading 0.1

Pump Type/Material: Peristaltic / PVC

Pump Intake Depth: Bottom

Total Purge Volume = 7.9 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1800	6.40	0	0	—	—	—	—	290	Lt Tan
1810	7.20 (R)	5000	500	13.18	5.98	0.248	0.73	71.8	V.Sl Cloudy
1820	7.20	10000	500	13.16	5.93	0.244	0.56	41.6	CLEAR
1830	7.20	15000	500	13.16	5.92	0.241	0.55	29.4	CLEAR
1840	7.20	20000	500	13.12	5.63	0.237	0.47	25.1	CLEAR
1850	7.20	25000	500	13.08	5.96	0.234	0.50	16.2	CLEAR
1900	7.20	30000	500	13.06	5.96	0.237	0.52	8.11	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B7/10-MW07S

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV.

DATE: 10-19-10

WEATHER: SUNNY & COOL

PERSONNEL: T. ROSAHN

TD = 17.65

Well Screen Depth: 7.65 / 17.65 ft. ~~bgs~~ TOC

H&S Monitoring Instrument Reading 0.1

Pump Type/Material: PERISTALTIC / PVC

Pump Intake Depth: BOTTOM

Total Purge Volume = 5.3 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0930	6.20	0	0	–	–	–	–	–	BRN
0940	6.29	5000	500	17.75	6.00	0.235	2.39	64.8	V.Sl. Cloudy
0950	6.29	10000	500	18.08	5.88	0.236	1.06	16.3	CLEAR
1000	6.29	15000	500	18.27	5.88	0.239	1.05	8.51	CLEAR
1010	6.29	20000	500	18.16	5.88	0.239	1.08	1.95	CLEAR

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B225- MW108

PROJECT: NASB-AOPI:B225
PROJECT NO.: CTO WE09 / 112G02330
SAMPLE ID: ——

DATE: 10/22/10
WEATHER: cool/Sunny
PERSONNEL: S. Hill

Well Screen Depth: 28 / 38 ft. bgs
H&S Monitoring Instrument Reading 0.0 ppm

Pump Type/Material: peristaltic
Pump Intake Depth: bottom

Total Purge Volume = 11.5 (gal)
Data Recorded By: SEH

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0910	6.35	begin	pumping						
0925	8.20		510	13.50	7.41	271	2.79	140	
0935	8.10		510	13.30	7.14	254	1.66	60.1	
0945	8.15		510	13.27	7.07	251	1.78	27.8	
0955	8.15		510	13.18	7.12	247	1.76	12.3	
1005	8.15		510	12.91	7.12	249	1.73	5.63	
1015	8.15		510	13.00	7.19	252	1.42	3.04	
1025	8.15			19.94	7.13	249	1.63	2.18	

TtNUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: B225-MW09

PROJECT: NASB-AOPI:

PROJECT NO.: CTO WE09 / 112G02330

SAMPLE ID: DEV.

DATE: 10-22-10

WEATHER: Sunny (Temp 40°)

PERSONNEL: T. ROJAHN

TD - 14.35

Well Screen Depth: 4.35 / 14.35 ft. ~~bgs~~ TOR

H&S Monitoring Instrument Reading 0.1

Pump Type/Material: PERISTALTIC / PVC

Pump Intake Depth: BOTTOM

Total Purge Volume = 6.2 (gal)

Data Recorded By: TR

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0905	4.54	0	0	–	–	–	–	–	GRAY
0915	4.80	6000	600	18.33	6.16	0.275	0.25	42.4	CLEAR
0925	4.80	11000	500	18.34	6.15	0.276	0.14	32.2	CLEAR
0935	4.80	16000	500	18.36	6.15	0.277	0.02	20.6	CLEAR
0945	4.80	21000	500	18.36	6.12	0.277	0.36	15.8	CLEAR
0950	4.80	23500	500	18.40	6.10	0.277	0.45	10.1	CLEAR

TtNUS Form 0013

A-5 LOW-FLOW PURGE DATA SHEETS AND GROUNDWATER SAMPLE LOGS

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Mercury Disposal Area
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-MDA-GW01
Sample Location: GW01
Sampled By: C. WARINO
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity PPT (%)	Other ORP
Date: 10/26/10								
Time: 1650								
Method: BLADDER PUMP	CLEAR	5.97	17	10.61	7.72	3.15	0.01	35.9

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/26/10								
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 21.56								
Static Water Level (WL): 13.30								
One Casing Volume(gal/L): 1.12								
Start Purge (hrs): 1555								
End Purge (hrs): 1650								
Total Purge Time (min): 115								
Total Vol. Purged (gal/L): 17.25								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Mercury	HNO34°C	1 - 250 mL HDPE	X

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.: DUP Ø1 102610

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MERCURY DISPOSAL AREA
PROJECT NUMBER: 112602330

WELL ID.: GW01
DATE: 10/26/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1555	13.30	150	5.97	19	553	3.33	12.00	32.9	0.01	CLOUDY
1600	13.30	150	5.95	19	550	3.27	11.82	30.0	0.01	
1605	13.30	150	6.07	18	308	3.45	11.37	19.9	0.01	
1610	13.30	150	6.03	16	193	3.22	11.29	22.2	0.01	
1615	13.30	150	5.99	15	110	3.19	11.15	26.6	0.01	
1620	13.30	150	5.97	15	69.6	3.10	11.09	30.4	0.01	
1625	13.30	150	5.95	17	65.3	3.09	11.07	32.6	0.01	
1635	13.30	150	5.97	17	33.8	3.13	10.71	34.9	0.01	CLEAR
1645	13.30	150	5.97	17	10.93	3.15	10.62	35.9	0.01	
1650	13.30	150	5.97	17	7.72	3.15	10.61	35.9	0.01	SAMPLED

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Mercury Disposal Area
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MDA-MW102
Sample Location: MDA-MW102
Sampled By: SEH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 10/26/10								
Time: 1605								
Method: Bladder (LF)	Clear	5.38	22	10.42	0.3	10.82	—	

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/26/10								
Method: LF	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 30.6								
Static Water Level (WL): 15.45								
One Casing Volume(gal/L): 3.76								
Start Purge (hrs): 1500								
End Purge (hrs): 1605								
Total Purge Time (min): 65								
Total Vol. Purged (gal/L): 6.50								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Mercury	HNO3 4°C	1 - 250 mL HDPE	YES

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD — Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NASB- Mercury Disposal Area
PROJECT NUMBER: 112G02330
WELL ID.: MDA-MW02
DATE: 10/26/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments Total V. Purged mL
1500	15.45	Begin purge								
1510	15.50	120	6.79	0.27	74.4	11.04	11.35	277.0		1200
1520	15.50	125	5.78	23	38.2	10.61	10.90	292.6		2450
1530	15.48	125	5.54	23	26.6	10.60	10.68	297.1		3700
1540	15.48	125	5.42	22	17.3	10.66	10.66	299		4950
1550	15.48	125	5.37	22	12.5	10.75	10.46	300.9		5200
1600	15.48	125	5.38	22	9.3	10.82	10.42	299.2		6450
1605	collect sample									

SIGNATURE(S):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Mercury Disposal Area
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB - MDA - GW03
Sample Location: MW03
Sampled By: CW
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity PPT	Other ORP
Date: 10/26/10								
Time: 1505								
Method: BLADDER PUMP	CLEAR	5.68	0.7	10.74	9.98	11.71	0.04	64.2

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/26/10								
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 35.78								
Static Water Level (WL): 14.73								
One Casing Volume(gal/L): 0.861	(3.3L)							
Start Purge (hrs): 1435								
End Purge (hrs): 1505								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 4.5 L								

$5 \times 3.3L = 5.75L$

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Mercury	HNO3 4°C	1 - 250 mL HDPE	X
		MS/MSD 2 x 250 mL HDPE	

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD X

Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MERCURY DISPOSAL AREA
PROJECT NUMBER: 112602330

WELL ID.: MW03
DATE: 10/26/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1435	14.73	150	6.20	95	101.7	12.65	12.04	40.7	0.04	CLOUDY
1440	14.73	150	6.12	96	100.9	12.51	11.54	43.8	0.04	↓
1445	14.73	150	5.92	70	62.3	12.89	11.14	52.6	0.04	CLEAR
1450	14.73	150	5.83	68	41.5	12.01	10.97	55.4	0.04	↓
1455	14.73	150	5.73	68	26.4	11.85	10.82	59.2	0.04	↓
1500	14.73	150	5.69	67	16.7	11.78	10.76	63.7	0.04	↓
1505	14.73	150	5.68	67	9.98	11.71	10.74	64.2	0.04	SAMPLED

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-GW01
Sample Location: NASB-B7/10-MW10
Sampled By: SEH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 10/28/10								
Time: 1030								
Method: Bladder	Clear	4.30	2760	16.35	2.24	6.75	—	

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/28/10								
Method: Bladder	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 16.94								
Static Water Level (WL): 7.29								
One Casing Volume(gal/L): 2.4								
Start Purge (hrs): 0825								
End Purge (hrs): 0905								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): 6								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	18 - 40ml Vials	yes
SVOCs	4°C	6 - 1 L Amber Bottles	yes
VPH	HCl/4°C	9 - 40ml Vials	yes
EPH	4°C	6 - 1 L Amber Bottles	yes
TAL Metals	HNO3/4°C	3 - 250 mL HDPE	yes

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
yes	

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NASB
PROJECT NUMBER: 112G02330

WELL ID.: NASB-B2/10-MW01
DATE: 10/28/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0825	7.29	Start	Purge							
0835		150	4.38	277	34.2	7.05	16.23	236.6	—	
0845		150	4.29	335	12.3	6.83	16.28	250.9		
0855		150	4.31	277	9.49	6.76	16.28	260.2		5250
0900		150	4.30	279	3.94	6.74	16.33	262.8		
0905		150	4.30	276	2.24	6.75	16.35	265.6		End of purge
1030	collect sample									

SIGNATURE(S):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-GW02
Sample Location: GW02
Sampled By: GW
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (PSU)	Other ORP
Date: 10/28/10								
Time: 1720								
Method: BLADDER PUMP	CLEAR	6.00	197	15.72	3.45	0.75	0.11	-78.8

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/28/10								
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 2.8								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 17.51								
Static Water Level (WL): 7.05								
One Casing Volume(gal/L): 1.4								
Start Purge (hrs): 1530								
End Purge (hrs): 1720								
Total Purge Time (min): 110								
Total Vol. Purged (gal/L): 16.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	6 ~~8~~ - 40ml Vials	X
SVOCs	4°C	2 - 1 L Amber Bottles	X
VPH	HCl/4°C	3 - 40ml Vials	X
EPH	4°C	2 - 1 L Amber Bottles	X
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	X

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s): [illegible]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: BUILDING 7 & 10
PROJECT NUMBER: 112G02330

WELL ID.: GW02
DATE: 10/28/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ~~ppt~~	Comments
1530	7.05	150	6.08	224	1346	2.14	17.44	1.2	0.12	BROWN / CLOUDY
1535	7.05	150	6.03	209	1331	1.53	17.21	1.1	0.12	
1540	7.05	150	6.01	201	985	1.17	16.97	-13.9	0.11	
1545	7.05	150	6.01	200	350	1.04	16.81	-47.3	0.11	CLOUDY
1555	7.05	150	6.01	201	166	0.96	16.62	-65.1	0.11	
1605	7.05	150	6.03	205	185	0.88	16.24	-76.2	0.12	
1615	7.05	150	6.02	201	100.4	0.85	16.06	-74.6	0.12	
1625	7.05	150	6.02	200	34.3	0.83	16.00	-76.8	0.12	
1635	7.05	150	6.01	200	27.9	0.81	15.95	-77.3	0.11	
1645	7.05	150	6.01	199	16.1	0.79	15.91	-77.6	0.11	
1655	7.05	150	6.01	198	14.9	0.78	15.84	-77.8	0.11	
1705	7.05	150	6.01	198	9.71	0.77	15.79	-77.9	0.11	
1715	7.05	150	6.01	197	5.73	0.75	15.73	-78.5	0.11	
1720	7.05	150	6.00	197	3.45	0.75	15.72	-78.8	0.11	CLEAR - SAMPLED

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10 - GW035
Sample Location: GW035 S
Sampled By: G WARING
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/28/10	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	PPT (%)	ORP
Method: BLADDER PUMP	CLEAR	5.55	2.74	17.34	3.11	0.92	0.15	17.0

PURGE DATA:

Date: 10/28/10	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 1.0								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 19.20								
Static Water Level (WL): 6.41								
One Casing Volume(gal/O): 2.0								
Start Purge (hrs): 0825								
End Purge (hrs): 0920								
Total Purge Time (min): 55								
Total Vol. Purged (gal/O): 21.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	6 ~~8~~ - 40ml Vials	X
SVOCs	4°C	2 - 1 L Amber Bottles	X
VPH	HCl/4°C	3 - 40ml Vials	X
EPH	4°C	2 - 1 L Amber Bottles	X
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	X

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
–	–

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: BUILDING 7 & 10
PROJECT NUMBER: 112602330

WELL ID.: GW03 S
DATE: 10/28/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0825	6.41	200	5.69	291	3471	3.08	17.56	5.5	0.16	CLOUDY/BROWN
0830	6.44	200	5.63	290	2333	2.37	17.68	11.6	0.16	CLOUDY/TAN
0835	6.44	200	5.59	279	789	1.64	17.40	13.6	0.16	↓
0840	6.44	200	5.56	277	214	1.41	17.38	15.7	0.16	
0845	6.44	200	5.55	278	108.2	1.47	17.34	16.2	0.16	
0855	6.44	200	5.55	274	61.1	1.30	17.38	17.2	0.15	SL. CLOUDY
0905	6.44	200	5.54	274	21.5	1.14	17.28	16.8	0.15	CLEAR
0900	6.44	200	5.54	274	14.4	1.09	17.22	16.6	0.15	
0910	6.44	200	5.55	274	10.25	0.99	17.36	17.1	0.15	
0920	6.44	200	5.55	274	3.11	0.97	17.34	17.0	0.15	CLEAR SAMPLED

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-GW03D
Sample Location: MW03D
Sampled By: CLWARWD
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity PPT	Other ORP
Date: 10/27/10								
Time: 1625								
Method: BLADDER PUMP	CLEAR	5.73	262	15.38	4.21	1.81	0.15	-111.3

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/27/10								
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 1.1								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 33.99								
Static Water Level (WL): 6.12								
One Casing Volume(gal/L): 4.3L								
Start Purge (hrs): 1435								
End Purge (hrs): 1695								
Total Purge Time (min): 110								
Total Vol. Purged (gal/L): 15.3 L								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	6 ~~8~~ - 40ml Vials	X
SVOCs	4°C	2 - 1 L Amber Bottles	X
VPH	HCl/4°C	3 - 40ml Vials	X
EPH	4°C	2 - 1 L Amber Bottles	X
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	X

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):
—	—	

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: BLDG 7 & 10
PROJECT NUMBER: 112G02330

WELL ID.: MW03D
DATE: 10/27/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1435	6.12	150	6.21	249	54.5	3.04	16.93	-66.1	0.14	CLOUDY
1440	6.32	150	5.90	260	136	1.72	16.25	-76.1	0.15	
1445	6.32	150	5.85	264	172	1.14	15.96	-81.6	0.15	
1455	6.40	150	5.83	266	205	1.04	15.64	-94.5	0.16	
1505	6.40	150	5.81	265	137	0.37	15.46	-99.4	0.16	
1515	6.40	150	5.82	266	87.9	1.46	15.58	-102.2	0.16	
1525	6.40	150	5.82	265	60.6	1.31	15.53	-105.8	0.15	
1535	6.40	150	5.82	264	48.4	1.09	15.46	-108.2	0.15	
1545	6.40	150	5.82	263	40.0	1.66	15.56	-110.7	0.15	
1555	6.40	150	5.78	263	33.5	3.41	15.48	-110.9	0.15	CLEAR
1605	6.40	150	5.78	262	23.1	1.81	15.38	-111.5	0.15	
1615	6.40	150	5.75	262	12.3	1.80	15.39	-111.8	0.15	
1625	6.40	150	5.73	262	4.28	1.81	15.38	-111.3	0.15	CLEAR SAMPLED

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-GW04
Sample Location: MW04
Sampled By: C. WARLAND
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity PPT (%)	Other ORP
Date: 10/28/10								
Time: 1140								
Method: BLADDER PUMP	CLEAR	5.76	156	17.04	4.31	3.68	0.09	23.4

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/28/10								
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 1.4								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 16.60								
Static Water Level (WL): 6.73								
One Casing Volume(gal/L): 1.4								
Start Purge (hrs): 1110								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	6 ~~8~~ - 40ml Vials	X
SVOCs	4°C	2 - 1 L Amber Bottles	X
VPH	HCl/4°C	3 - 40ml Vials	X
EPH	4°C	2 - 1 L Amber Bottles	X
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	X

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: BUILDINGS 7 & 10
PROJECT NUMBER: 112602330

WELL ID.: MW04
DATE: 10/28/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1110	6.73	180	5.75	164	168	4.26	17.17	19.0	0.09	CLOUDY
1115	6.73	180	5.76	156	29.4	3.71	17.10	21.8	0.09	CLEAR
1120	6.73	180	5.76	156	9.86	3.67	17.14	22.1	0.09	
1125	6.73	180	5.76	156	8.11	3.66	17.11	22.6	0.09	
1130	6.73	180	5.76	155	7.06	3.67	17.09	22.9	0.09	
1135	6.73	180	5.76	155	6.45	3.68	17.06	23.2	0.09	
1140	6.73	180	5.76	156	4.31	3.68	17.04	23.4	0.09	CLEAR SAMPLED

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-MW055
Sample Location: NASB-B7/10-MW055
Sampled By: SEH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 10/27/10								
Time: 1200								
Method: LF - Bladder	Clear	5.86	199	15.53	4.45	204	—	

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/27/10								
Method: LF	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 5.0								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 16.45								
Static Water Level (WL): 6.59								
One Casing Volume(gal/D): 2.4								
Start Purge (hrs): 1110								
End Purge (hrs): 1200								
Total Purge Time (min): 50								
Total Vol. Purged (gal/D): 7								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	3 - 40ml Vials	yes
SVOCs	4°C	2 - 1 L Amber Bottles	yes
VPH	HCl/4°C	3 - 40ml Vials	yes
EPH	4°C	2 - 1 L Amber Bottles	yes
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	yes

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD —

Duplicate ID No.: NASB-B7/10-DUP02-102710

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NASB
PROJECT NUMBER: 112G02330

WELL ID.: 87/10- MW055
DATE: 10/27/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1110	6.59	begin purge								
1120		140	5.92	286	138	3.76	15.69	67.0		
1130		140	5.86	199	35.1	2.30	15.60	72.8		
1140		140	5.87	200	10.69	2.15	15.58	74.0		
1150		140	5.86	199	4.45	2.04	15.53	75.8		
1200	collect sample + DUP02									

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-GW05D
Sample Location: NASB-B7/10-MW05D
Sampled By: SEH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 10/27/10								
Time: 1710								
Method: Bladder - LF								

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/27/10								
Method: LF	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 3.0								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): ~~11.53~~ 10.51								
Static Water Level (WL): 6.29								
One Casing Volume(gal/L): 8.4								
Start Purge (hrs): 1505								
End Purge (hrs): 1710								
Total Purge Time (min): 125								
Total Vol. Purged (gal/L): 19.2								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	6 ~~3~~ - 40ml Vials	yes
SVOCs	4°C	2 - 1 L Amber Bottles	yes
VPH	HCl/4°C	3 - 40ml Vials	yes
EPH	4°C	2 - 1 L Amber Bottles	yes
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	yes
TAL Metals - Field filtered	HNO_3	1-250 mL HDPE	yes

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NASB - B7/10
PROJECT NUMBER: 12902330

WELL ID.: NASB - B7/10 - MW05D
DATE: 10/27/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1505	6.29	begin	purge							
1515	6.60	160	6.35	296	991	11.50	14.90	-33		
1525	6.55	160	6.32	292	973	9.10	14.62	-38.1		
1535	6.85	160	6.29	287	742	3.81	14.52	-39.2		
1545	6.55	150	6.27	289	514	3.78	14.91	-40.9		
1555		150	6.25	285	552	3.99	14.66	-39.3		
1605		150	6.21	280	324	4.12	14.52	-39.2		
1615	6.55	160	6.20	280	464	4.90	14.48	-40.2		
1625		160	6.18	274	422	4.89	14.39	-39.7		
1635		160	6.15	275	229	5.52	14.38	-38.8		
1645		160	6.14	273	225	5.79	14.35	-38.2		
1655		160	6.14	272	251	151	14.31	-37.8		
1705		160	6.13	271	277	4.75	14.33	-37.8		
1710	Collect	Sample								

SIGNATURE(S): [signature]

PAGE___OF___

*Since turbidity did not go down collected an additional metals field filtered

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NAS13-B7/10-GW06S
Sample Location: MW06S
Sampled By: G. WARIND
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity PPT ~~(%)~~	Other ORP
Date: 10/27/10								
Time: 1220								
Method: BLADDER PUMP	CLEAR	5.74	237	17.36	7.03	1.91	0.13	22.1

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/27/10								
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 0.9								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 16.51								
Static Water Level (WL): 6.70								
One Casing Volume (gal/L): 0.41 GAL								
Start Purge (hrs): 1150								
End Purge (hrs): 1220								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 5.75								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	3 - 40ml Vials	X
SVOCs	4°C	2 - 1 L Amber Bottles	X
VPH	HCl/4°C	3 - 40ml Vials	X
EPH	4°C	2 - 1 L Amber Bottles	X
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	X

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
–	–

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: BLDG. 7 & 10
PROJECT NUMBER: 112602330

WELL ID.: MW005
DATE: 10/27/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1150	6.70	150	5.85	240	110	8.06	17.12	49.4	0.13	CLOUDY
1155	6.70	200	5.73	232	65.6	2.66	17.32	46.5	0.13	↓
1200	6.70	200	5.73	232	30.4	2.17	17.37	40.1	0.13	CLEAR
1205	6.70	200	5.73	233	15.1	2.03	17.34	32.1	0.13	↓
1210	6.70	200	5.74	236	8.02	1.97	17.34	23.2	0.13	↓
1215	6.70	200	5.74	237	7.16	1.94	17.34	23.0	0.13	↓
1220	6.70	200	5.74	237	7.03	1.91	17.36	22.1	0.13	CLEAR SAMPLED

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-GW06D
Sample Location: MW 06D
Sampled By: C. WARNO
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/27/10	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity PPT (%)	Other ORP
Time: 0915								
Method: BLADDER PUMP	CLEAR	6.04	271	15.57	9.80	1.87	0.16	-145.6

PURGE DATA:

Date: 10/27/10	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 0.5								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 39.32								
Static Water Level (WL): 6.49								
One Casing Volume (gal/L): 1.4 GAL								
Start Purge (hrs): 0755								
End Purge (hrs): 0915								
Total Purge Time (min): 80								
Total Vol. Purged (gal/L) 12								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	3 - 40ml Vials	X
SVOCs	4°C	2 - 1 L Amber Bottles	X
VPH	HCl/4°C	3 - 40ml Vials	X
EPH	4°C	2 - 1 L Amber Bottles	X
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	X

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
–	NASB-B7/10-DUP01-102710

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: BLDG. 7 & 10
PROJECT NUMBER: 112602330

WELL ID.: MW06D
DATE: 10/27/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0755	6.49	150	6.28	264	31.8	7.74	15.81	-82.3	0.15	CLEAR
0800	6.59	150	6.18	275	84.8	3.15	15.63	-111.0	0.16	↓
0805	6.68	150	6.17	276	195	1.96	15.55	-125.1	0.16	CLOUDY
0810	6.70	150	6.14	274	227	1.66	15.50	-129.3	0.16	
0815	6.70	150	6.13	272	206	1.82	15.49	-130.7	0.16	
0820	6.70	150	6.12	272	187	1.51	15.51	-131.9	0.16	
0825	6.70	150	6.10	270	137	1.56	15.50	-132.3	0.16	
0830	6.70	150	6.09	271	94.3	1.60	15.50	-135.6	0.16	
0845	6.70	150	6.08	272	61.6	1.65	15.50	-138.1	0.16	↓
0850	6.70	150	6.07	273	36.7	1.72	15.50	-141.3	0.16	CLEAR
0855	6.70	150	6.08	273	30.0	1.98	15.52	-142.7	0.16	
0905	6.70	150	6.07	273	18.9	1.81	15.74	-145.2	0.16	
0915	6.70	150	6.04	271	9.80	1.87	15.57	-145.6	0.16	↓ SAMPLED

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B7/10-GW07
Sample Location: NASB-B7/10-MW07
Sampled By: S. Hill
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 6/22/10								
Time: 0950								
Method: Bladder	Clear	5.07	205	17.19	9.37	3.02	—	

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 6/22/10								
Method: LF	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): ~~0~~ 49								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 17.53								
Static Water Level (WL): 6.35								
One Casing Volume(gal/L): 2.5								
Start Purge (hrs): 0800								
End Purge (hrs): 0950								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L): 7.00								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	3 - 40ml Vials	yes
SVOCs	4°C	2 - 1 L Amber Bottles	yes
VPH	HCl/4°C	3 - 40ml Vials	yes
EPH	4°C	2 - 1 L Amber Bottles	yes
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	yes

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: B7/10
PROJECT NUMBER: 112G02330

WELL ID.: NASB-B7/10-MW07
DATE: 10/27/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments Total Purge
0800	6.35	Start purge								
0813		140	5.62	205	140	2.91	17.08	124.0		
0820		140	5.62	204	89.8	2.89	17.08	128.0		
0830		140	5.63	206	64.4	2.86	17.10	129.7		
0840	6.35	140	5.66	207	51.8	2.81	17.12	129.3		
0850		140	5.65	204	74.3	2.85	17.18	131.0		
0900		140	5.67	206	44.0	2.75	17.24	130.9		
0910		140	5.605	205	27.4	2.87	17.26	133.1		
0920		140	5.66	204	15.8	2.98	17.20	133.8		
0930		140	5.66	205	12.5	3.04	17.19	134.2		
0940		140	5.67	205	9.37	3.02	17.19	135.4		2000
0950	Collect sample									

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 7 and 10
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-B225-MW08
Sample Location: NASB-B225-MW08
Sampled By: SEH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 10/29/10								
Time: 1045								
Method: Bladder	Clear	5.42	174	14.04	103.9	0.82	—	

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/29/10								
Method: Bladder	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 0.7								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 38'								
Static Water Level (WL): 6.29								
One Casing Volume(gal/L):								
Start Purge (hrs): 0840								
End Purge (hrs): 1045								
Total Purge Time (min): 125								
Total Vol. Purged (gal/L): 18.75								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	6 - 40ml Vials	yes
SVOCs	4°C	2 - 1 L Amber Bottles	yes
VPH	HCl/4°C	3 - 40ml Vials	yes
EPH	4°C	2 - 1 L Amber Bottles	yes
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	yes
TAL Metals	" "	" " Field filtered *	yes

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

* Turbidity did not go below 100 NTU so a field filtered metals was collected.

Circle if Applicable:

MS/MSD — Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NASB- B225
PROJECT NUMBER: 112G02330

WELL ID.: B225- MW08
DATE: 10/29/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0840	6.29	Start	purge							
0900		150	7.00	225	445	2.55	12.49	-117.0	—	
0910		150	6.88	240	304	1.65	13.25	-118.6		
0920		150	6.52	234	235	1.03	13.52	-96.0		
0930		150	5.77	195	212	1.60	13.66	-47.0		
0940		150	5.53	178	190	1.14	13.38	-31.3		
0950		150	5.44	173	147	0.93	13.46	-24.2		
1000		150	5.43	171	148	0.84	13.41	-23.2		
1010		150	5.43	172	148	0.80	13.52	-23.8		
1020		150	5.43	173	118	0.77	13.77	-23.3		
1030		150	5.42	173	106.3	0.78	13.94	-24.0		
1040		150	5.42	175	103.9	0.82	14.04	-25.6		
1045	collect sample									

SIGNATURE(S):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building ~~7 and 10~~ 225
Project No.: 112G02330

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: NASB-~~B225~~-GW09
Sample Location: MW09
Sampled By: C. WARNO
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity ~~(%)~~ PPT	Other ORP
Date: 10/29/10								
Time: 0925								
Method: BLADDER PUMP	CLEAR	6.25	244	16.48	4.33	0.57	0.14	-116.4

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/29/10								
Method: BLADDER PUMP	See Low Flow Purge Sheet for Details							
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 14.27								
Static Water Level (WL): 4.40								
One Casing Volume(gal/L): 1.4								
Start Purge (hrs): 0815								
End Purge (hrs): 0925								
Total Purge Time (min): 70								
Total Vol. Purged (gal/L): 10.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl/4°C	6 ~~3~~ - 40ml Vials	X
SVOCs	4°C	2 - 1 L Amber Bottles	X
VPH	HCl/4°C	3 - 40ml Vials	X
EPH	4°C	2 - 1 L Amber Bottles	X
TAL Metals	HNO3/4°C	1 - 250 mL HDPE	X

OBSERVATIONS / NOTES:

1" MW = 0.041 gal/ft
2" MW = 0.163 gal/ft
4" MW = 0.653 gal/ft

Circle if Applicable:

MS/MSD	Duplicate ID No.:
–	–

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 276
PROJECT NUMBER: 112602330

WELL ID.: MW09
DATE: 10/24/10

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0815	4.40	150	6.51	218	133	5.78	12.61	-77.2	0.13	CLOUDY
0820	4.40	150	6.39	223	1341	5.06	13.71	-78.5	0.14	
0825	4.40	150	6.33	213	2944	3.15	13.84	-84.6	0.14	
0835	4.40	150	6.27	240	250	1.01	16.05	-107.2	0.14	
0845	4.40	150	6.26	241	250	0.80	16.28	-112.8	0.14	
0855	4.40	150	6.26	242	34.4	0.69	16.38	-114.4	0.14	CLEAR
0905	4.40	150	6.25	243	16.2	0.63	16.46	-115.3	0.14	
0915	4.40	150	6.25	244	8.18	0.58	16.49	-116.3	0.14	
0925	4.40	150	6.25	244	4.33	0.57	16.48	-116.4	0.14	CLEAR SAMPLED

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NASB - AOPIs Brunswick, ME
Project No.: 112G02330 / CTO WE09

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No. NASB FTA-MW08
Sample Location: MW08 / SB08
Sampled By: Rojahn/Hill/
C.O.C. No.:
Type of Sample:
[X] Low / Moderate Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	Temp (°C)	S.C. (µS/cm)	DO (mg/L)	pH (S.U.)	ORP (mv)	Turbidity (NTU)	Other
Date: 10/29/10								
Time: 1430								
Method: Grab								

PURGE DATA:

Date:	Volume	Temp	S.C.	DO	pH	ORP	Turbidity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material	See separate low-flow purge data sheet							
Type: 1.5 or 2 inch / PVC								
Total Well Depth (TD):								
Static Water Level (WL):								
Well or Sat. Scrn. Vol. (gal):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
PFOA / PFOS	4°C	1 X liter glass amber	Yes / No
VOC	HCL 4°C	6 x 40 ml vial	Yes / No
VPH	HCL 4°C	3 x 40 ml vial	Yes / No
GRO	4°C	2 x 1 liter amber	Yes / No
EPH	HCL 4°C	2 x 1 liter amber	Yes / No
metals	HNO_3, 4°C	1 x 250 ml poly	Yes / No
			Yes / No
			Yes / No

OBSERVATIONS / NOTES:

Visual evidence of contamination - yes or no If yes, describe:

Olfactory evidence of contamination - yes or no If yes, describe:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

A-6 CHAIN-OF-CUSTODY FORMS

Cha. Of stody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G-02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Rose
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): Chuck Rose

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Container Key
P=plastic G=glass

	Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
	NASB-MDA-SB-SB02-1011	10/4/10	1100	Hg only	X	X						S	1	G		
	NASB-MDA-SB-SB02-2728		1120		X	X							1			
D1	NASB-MDA-SB-SB03-0001		1330		X	X							1			
	NASB-MDA-SB-SB03-1112		1350		X	X							1			
	NASB-MDA-SB-DUP01-100410		—		X	X							1			MDA-SB03-0001
	NASB-MDA-SB-SB03-1920		1540		X	X							1			
	NASB-MDA-SB-SB03-2930		1550		X	X							1			
	NASB-MDA-SB-SB01-1112	10/5/10	1050		X	X							3			
	NASB-MDA-SB-SB01-1819		1100		X	X							1			
	NASB-MDA-RB01-100610	10/6/10	0700	Hg only		X	X					Aq	1	P		10/06/10 CFS

Email Results to:

Tumaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]
LabQC → NASB-MDA-SB-SB01-1112
NASB-MDA-SB-DUP01-100410 → SB03-0001

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☒ DOD* ☒ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☒ ME
☐ CT
☐ RI
Other: _____

State Standard: _____
(eg. S-1 or GW-1)
EDD Required: Y* N
Type: ADAPT

Received By: Time: Date:
Received By: Time: Date:
Received By: Time: Date:
Relinquished By Sampler: Date:
Relinquished By: Date:
Relinquished By: Date:

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Page ___ of ___

TETRA TECH NUS, INC.

CHAIN OF CUSTODY | NUMBER 26686 | PAGE 1 OF ____

PROJECT NO: 112G02330

FACILITY: NASB

SAMPLERS (SIGNATURE)

PROJECT MANAGER: J. Orient

PHONE NUMBER: 412-921-7090

LABORATORY NAME AND CONTACT: Analitics - Kate

FIELD OPERATIONS LEADER

PHONE NUMBER

ADDRESS

CARRIER/WAYBILL NUMBER

CITY, STATE: Portsmith, NH

STANDARD TAT ☒

RUSH TAT ☐

☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): P

PRESERVATIVE USED: HNO3

TYPE OF ANALYSIS: Mercury

DATE YEAR 2010	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	Mercury	COMMENTS
10/27	1505	NASB-MDA-GW03	MW03	NA	NA	GW	G	3	3	Run MS/MSD
	1605	NASB-MDA-GW02	MW02					1	1	
	1650	NASB-MDA-GW01	MW01					1	1	DI
	00:00	NASB-MDA-DUP01-102708	QC					1	1	

1. RELINQUISHED BY	DATE 10/27/10	TIME 12:30	1. RECEIVED BY	DATE 10/27/10	TIME 1230
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: Cooler temp @ 2.5°C

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

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analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NASB Brunswick
Company: Tetra Tech NUS, Inc.
Contact: Chuck Race
Address: 55 Jonspin rd
Wilmington, MA 01887
Phone: 1-978-658-7899 PO# Quote #
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract

Container Key
P=plastic G=glass

Preservation

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	DI H_2O Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-FTA-SS-SS05-0001	10/5/10	1415	EPH/SVOC	X	X						S	1	G		
↓	↓	↓	VPH		X				X		↓	2	↓		
↓	↓	↓	VOC (low) *		X				X	X	↓	4	↓		
NASB-FTA-SB-SB05-0405	↓	1430	EPH/SVOC	X	X						↓	1	↓		
↓	↓	↓	VPH		X				X		↓	2	↓		
↓	↓	↓	VOC (low) *		X				X	X	↓	4	↓		
NASB-FTA-SS-SS01-0001	↓	1450	EPH/SVOC	X	X						↓	1	↓		
↓	↓	↓	VPH		X				X		↓	2	↓		
↓	↓	↓	VOC (low *		X				X	X	↓	4	↓		
NASB-FTA-SB-SB01-0405	↓	1500	EPH/SVOC	X	X						↓	1	↓		
↓	↓	↓	VPH		X				X		↓	2	↓		

Email Results to:

Comments / Instructions:
*VOC (low) - 2 with DI H_2O, 1 with MEOH, 1 for % solids.

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☐ DOD* ☐ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☐ ME
☐ CT
☐ RI
Other: _____

State Standard: _____
(eg. S-1 or GW-1)

EDD Required: Y* N
Type: _____

Received By: Time: Date: Relinquished By Sampler:
Received By: Time: Date: Relinquished By:
Received By: Time: Date: Relinquished By:

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analytics environmental laboratory LLC

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Portsmouth, NH 03801
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Fax (603) 430-2151

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 12602330 Proj. Name: CTOWE49, AOPI NAS Brunswick
Company: Tetra Tech NUS, Inc.
Contact: Chuck Race.
Address: 55 Jonspin rd
Wilmington, MA 01887
Phone: 1-978-658-7899 PO# Quote #
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract

Container Key
P=plastic G=glass

Preservation

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	DI H_2O Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-FTA-SB-SB01-0405	10/5/10	1500	VOC (low)*		X					X	S	4	G		
NASB-FTA-SS-SS04-0004	↓	1545	EPH / SVOC	X	X						↓	1	↓		
↓	↓	↓	VPH		X				X		↓	2	↓		
↓	↓	↓	VOC (low)*		X					X	↓	4	↓		
NASB-FTA-SB-SB04-0405	↓	1600	EPH / SVOC	X	X						↓	1	↓		
↓	↓	↓	VPH		X				X		↓	2	↓		
↓	↓	↓	VOC (low)*		X					X	↓	4	↓		
NASB-FTA-TB01-100510	↓	1400	VPH		X				X			1	G		
↓	↓	↓	VOC (low)		X				X			1	↓		
↓	↓	↓	VOC (low)	X	X							1	↓		

Email Results to: _____

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:
* VOC (low) - 2 with DI H_2O, 1 with MEOH, 1 for % solids.

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☐ DOD* ☐ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☐ ME
☐ CT
☐ RI
Other: _____

State Standard: _____
(eg. S-1 or GW-1)

EDD Required: Y* N
Type: _____

Received By: Time: Date: Relinquished By Sampler:
Received By: Time: Date: Relinquished By:
Received By: Time: Date: Relinquished By:

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Phone (603) 436-5111
Fax (603) 430-2151

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112G0230 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Preservation: Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
* NASB-FTA-TB01-100610	10/6	0730	VOC	X	X					X	QC	1	G		
↓	↓	↓	VOC		X				X		QC	1	↓		
			VPH		X				X		QC	1			

OS 10/6/10

Email Results to: _____

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]
* TRIP BLANK

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☒ DOD* ☒ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☒ ME
☐ CT
☐ RI
Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N
Type: ADAPT

Received By: Time: Date: Relinquished By Sampler:
Received By: Time: Date: Relinquished By:
Received By: Time: Date: Relinquished By:

Analytics\AEL Documents\AEL COC

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analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

For Analytics Use Only Rev. 5 06/18/08

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
SSB-TR															
NASB-FTA-SS02-0001	10/6	0830	EPH/SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC (TR)	~~X~~	X				X		S	1			
			VPH		X				X		S	1			
SB-			% Solid	X	X						S	2			
D1 NASB-FTA-SB02-0405		0845	EPH/SVOC	X	X						S	1			
			VOC	X	X					X	S	2			
			VOC (TR)	~~X~~	X				X		S	1			
			VPH		X				X		S	1			
			% Solid	X	X						S	2			
			(TR)												

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [x] DOD*
- [x] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [x] ME
- [ ] CT
- [ ] RI

Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N

Type: ADAPT

Received By: Time: Date: Relinquished By Sampler:

Received By: Time: Date: Relinquished By:

Received By: Time: Date: Relinquished By:

Analytics\AEL Documents\AEL COC

Chain of Custody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [illegible]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

For Analytics Use Only Rev. 5 06/18/08

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	NaOH Other	Matrix	Container number/type		pH	Analytics Sample #
~~SSB-TR~~ NASB-FTA-SS03-0001	10/6	0900	EPH/SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC TR	~~X~~	X				X		S	1			
			VPH		X				X		S	1			
SB-			% Solid	X	X						S	2			
NASB-FTA-SB03-0405		0915	EPH/SVOC	X	X						S	1			
			VOC	X	X					X	S	2			
			VOC TR	~~X~~	X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
			TR												

Received By: Time: Date:
Received By: Time: Date:
Received By: Time: Date:
Relinquished By Sampler:
Relinquished By:
Relinquished By:

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☒ DOD* ☒ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☒ ME
☐ CT
☐ RI
Other: _____

State Standard: _____ (eg. S-1 or GW-1)
EDD Required: Y* N
Type: ADAPT

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Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Pace
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [illegible]

Matrix Key:
C = Concrete
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X = Other

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Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
~~SS~~ TR															
NASB-FTA-SS10-0001	10/6	1000	EPH / SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC TR	~~X~~	X				X		S	1			
			VPH		X				X		S	1			
SB-			% SOLID	X	X						S	2			
NASB-FTA-SB10-0607		1015	EPH / SVOC	X	X						S	1			
			VOC	X	X					X	S	2			
			VOC TR	~~X~~	X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
			TR												

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☒ DOD* ☒ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☒ ME
☐ CT
☐ RI
Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N
Type: ADAPT

Received By: Time: Date:
Received By: Time: Date:
Received By: Time: Date:
Relinquished By Sampler:
Relinquished By:
Relinquished By:

Analytics\AEL Documents\AEL COC

Chai f (tody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [illegible]

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For Analytics Use Only Rev. 5 06/18/08

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5) Labels checked by: _____

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	DI Other	Matrix	Container number/type		pH	Analytics Sample #
SSB-TR															
NASB-FTA-SS08-0001	9/6	1030	EPH / SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC TR	X	X				X		S	1			
			VPH		X				X		S	1			
SB-			% SOLID	X	X						S	2			
NASB-FTA-SB08-0809		1045	EPH / SVOC	X	X						S	1			
			VOC	X	X					X	S	2			
			VOC TR	X	X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
			TR												

Email Results to: _____

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [x] DOD*
- [x] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [x] ME
- [ ] CT
- [ ] RI

Other: _____

State Standard: _____
(eg. S-1 or GW-1)

EDD Required: Y* N
Type: ADAPT

Received By: | Time: | Date: | Relinquished By Sampler:
Received By: | Time: | Date: | Relinquished By:
Received By: | Time: | Date: | Relinquished By:

Analytics\AEL Documents\AEL COC

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analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Rose
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [illegible]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

For Analytics Use Only Rev. 5 06/18/08
Samples were:
1) Shipped or hand-delivered
2) Temp blank °C
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	DI Other	Matrix	Container number/type		pH	Analytics Sample #
~~SSB-TR~~ NASB-FTA-SS07-0001	10/6	1100	EPH / SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC (TR)	~~X~~	X				X		S	1			
			VPH		X				X		S	1			
SB-			% SOLID	X	X						S	2			
NASB-FTA-SB07-0809		1115	EPH / SVOC	X	X						S	1			
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
			(TR)												

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
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☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☒ DOD* ☒ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☒ ME
☐ CT
☐ RI
Other:

State Standard:
(eg. S-1 or GW-1)
EDD Required: Y* N
Type: ADAPT

Received By: Time: Date: Relinquished By Sampler:
Received By: Time: Date: Relinquished By:
Received By: Time: Date: Relinquished By:

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3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Rae
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

	Station Identification	Sample Date	Sample Time	Analysis	Unpres	4°C	HNO_3	H_2SO_4	HCL	Methanol	DI Other	Matrix	Container number/type		pH	Analytics Sample #
	NASB-FTA-SS-SS09-0001	10/6	1245	EPH / SVOC	X	X						S	1	G		
				VOC	X	X					X	S	2			
				VOC		X				X		S	1			
				VPH		X				X		S	1			
				% SOLID	X	X						S	2			
D2	NASB-FTA-SB-SB09-0809	10/6	1300	EPH / SVOC	X	X						S	1			
				VOC	X	X					X	S	2			
				VOC		X				X		S	1			
				VPH		X				X		S	1			
				% SOLID	X	X						S	2			
				TR												

Email Results to: _____

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] CTRCP*
- [x] DOD*
- [ ] Standard
- [ ] Level II*
- [ ] Level III*
- [x] Level IV*

State:
- [ ] NH
- [ ] MA
- [x] ME
- [ ] CT
- [ ] RI

Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N

Type: ADAPT

Received By:	Received By:	Received By:
Time:	Time:	Time:
Date:	Date:	Date:
Relinquished By Sampler:	Relinquished By:	Relinquished By:

Analytics\AEL Documents\AEL COC

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Phone (603) 436-5111
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Samples were:
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3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112602330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [illegible]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-FTA-SS-SS06-0001	10/6	1345	EPH/SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
* NASB-FTA-SB SB06-0809	10/6	1400	EPH/SVOC	X	X						S	3			
			VOC	X	X					X	S	6			
			VOC		X				X		S	3			
			VPH		X				X		S	3			
			% SOLID	X	X						S	4			
			TR												

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]
* RUN MS/MSD

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] CTRCP*
- [x] DOD*
- [ ] Level II*
- [ ] Level III*
- [x] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [x] ME
- [ ] CT
- [ ] RI

Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N

Type: ADAPT

Received By: Time: Date: Relinquished By Sampler:

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Analytics\AEL Documents\AEL COC

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Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-FTA-DUP01-100610	10/6	—	EPH / SVOC	X	X						S	1	G		FTA-SB02-0405
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
NASB-FTA-DUP02-100610		—	EPH / SVOC	X	X						S	1			FTA-SB09-0809
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
			TR												

Received By: Received By: Received By:
Time: Time: Time:
Date: Date: Date:
Relinquished By Sampler: Relinquished By: Relinquished By:

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- [ ] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]
DUP01 → NASB-FTA-SB-SB02-0405
DUP02 → NASB-FTA-SB-SB09-0809

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [x] DOD*
- [x] Level IV*
- [ ] Standard

State:
- [ ] NH
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Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N
Type: ADAPT

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Contact: Chuck Race
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Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [illegible]

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Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4°C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-AOPI-TB01-100610	10/6	1720	VOC		X			X			AQ	2	G		
NASB-FTA-RB01-100610	10/6	1730	VOC		X			X			AQ	3			
			VPH		X			X			AQ	3			
			SVOC	X	X						AQ	2			
			EPH		X			X			AQ	2			
NASB-AOPI-FB01-100610	10/6	1745	VOC		X			X			AQ	3			
			VPH		X			X			AQ	3			
			SVOC	X	X						AQ	2			
			EPH		X			X			AQ	2			
			PCB	X	X						AQ	2			
			TAL METALS		X	X					AQ	1	P		

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [x] DOD*
- [x] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
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- [ ] RI

Other:

State Standard: (eg. S-1 or GW-1)

EDD Required: Y* N
Type: ADAPT

Received By: Time: Date: Relinquished By Sampler:
Received By: Time: Date: Relinquished By:
Received By: Time: Date: Relinquished By:

:A TECH NUS, INC. CHAIN OF CUSTODY NUMBER PAGE ___ OF ___

PROJECT NO: 112G02334	SITE NAME: NASB	PROJECT MANAGER AND PHONE NUMBER: J. Orient 412-921-7090	LABORATORY NAME AND CONTACT: Test America; Nilo Ligi
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER AND PHONE NUMBER: T. Kojahn " "	ADDRESS: 880 Riverside PKY
		CARRIER/WAYBILL NUMBER: 8735 5965 9685	CITY, STATE: West Sacramento, CA 95605

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G)
PRESERVATIVE USED

TYPE OF ANALYSIS: PFOA/PFOS (8321A) 4°C G

DATE YEAR 2010	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	PFOA/PFOS (8321A) 4°C G								COMMENTS
10/29	1430	NASB-FTA-MW08	Grd	G	1	1								
↓	1200	NASB-AOP1-RB01-102910	Aq	QA/QC	1	1								

1. RELINQUISHED BY	DATE 10/29/10	TIME 1700	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

3/99
FORM NO. TtNUS-001

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER 4181

PROJECT NO: 112G02330	FACILITY: NAS BRUNSWICK	PROJECT MANAGER: CHUCK RASE	PHONE NUMBER: 603-770-6580	LABORATORY NAME AND CONTACT: ANALYTICS ENV. LAB LLC
SAMPLERS (SIGNATURE): Tony Rojahn		FIELD OPERATIONS LEADER: T. ROJAHN	PHONE NUMBER: 412 921 8857	ADDRESS: 195 COMMERCE WAY
		CARRIER/WAYBILL NUMBER: LAB PICK UP		CITY, STATE: Portsmouth NH 03801

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2010	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOCS 40ml Vial	VPH 40ml Vial	SVOC 1L AMBER	EPH 1L AMBER	METALS 250 HDPE				COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	G	G	A				
PRESERVATIVE USED									4°C HCl	4°C HCl	4°C	4°C HCl	4°C HNO3				
TYPE OF ANALYSIS																	
10/29	1400	NASB-FTA-TB01-101110	QC	-	-	QC	G	2	2								TRIP BLANK
10/29	1430	NASB-FTA-MW08	FTA MW08	-	-	GW	G	14	6	3	2	2	1				

1. RELINQUISHED BY	DATE 11/02/10	TIME 1410	1. RECEIVED BY	DATE 11/02/10	TIME 1410
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

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analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

For Analytics Use Only Rev. 5 06/18/08

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Pace
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): Terry Rogal

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

	Station Identification	Sample Date	Sample Time	Analysis	Preservation: Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
D1	NASB-HA-SS01-0001	10-5-10	0830	PCBs	X	X						S	1	4oz JAR		
D1	NASB-HA-SS01-0001	10-5-10	0830	TAL METALS	X	X						S	1	"		
	NASB-HA-SS02-0001	10-5-10	0900	PCBs	X	X						S	1	"		
	NASB-HA-SS02-0001	10-5-10	0900	TAL METALS	X	X						S	1	"		
	NASB-HA-SS03-0001	10-5-10	0912	PCBs	X	X						S	1	"		
	NASB-HA-SS03-0001	10-5-10	0912	TAL METALS	X	X						S	1	"		
	NASB-HA-SS05-0001	10-5-10	0930	PCBs	X	X						S	1	"		
	NASB-HA-SS05-0001	10-5-10	0930	TAL METALS	X	X						S	1	"		
	NASB-HA-SS06-0001	10-5-10	0945	PCBs	X	X						S	1	"		
	NASB-HA-SS06-0001	10-5-10	0945	TAL METALS	X	X						S	1	"		
	NASB-HA-SS07-0001	10-5-10	1000	PCBs	X	X						S	1	"		

Received By: Time: Date: Relinquished By Sampler:
Received By: Time: Date: Relinquished By:
Received By: Time: Date: Relinquished By:

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☒ DOD* ☒ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☒ ME
☐ CT
☐ RI
Other: _____

State Standard: _____
(eg. S-1 or GW-1)

EDD Required: Y* N
Type: ADAPT

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Page ___ of ___

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Preservation: Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-HA-SS07-0001	10-5-10	1000	TAL METALS	X	X						S	1	4oz JAR		
NASB-HA-SS08-0001	10-5-10	1015	PCBs	X	X						S	2	"		MS/MSD
NASB-HA-SS08-0001	10-5-10	1015	TAL METALS	X	X						S	2	"		" "
NASB-HA-SS09-0001	10-5-10	1030	PCB	X	X						S	1	"		
NASB-HA-SS09-0001	10-5-10	1030	TAL METALS	X	X						S	1	"		
NASB-HA-SS10-0001	10-5-10	1045	PCBs	X	X						S	1	"		
NASB-HA-SS10-0001	10-5-10	1045	TAL METALS	X	X						S	1	"		
NASB-HA-SS11-0001	10-5-10	1055	PCBs	X	X						S	1	"		
NASB-HA-SS11-0001	10-5-10	1055	TAL METALS	X	X						S	1	"		
NASB-HA-SS12-0001	10-5-10	1105	PCBs	X	X						S	1	"		
NASB-HA-SS12-0001	10-5-10	1105	TAL METALS	X	X						S	1	"		

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]
Lab QC @ SS08

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☒ DOD* ☒ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☒ ME
☐ CT
☐ RI
Other: _____

State Standard: _____
(eg. S-1 or GW-1)

EDD Required: Y* N
Type: ADAPT

Received By: Time: Date: Relinquished By Sampler:
Received By: Time: Date: Relinquished By:
Received By: Time: Date: Relinquished By:

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Page ___ of ___

Cha Of stody Form

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195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

For Analytics Use Only Rev. 5 06/18/08

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-HA-SS04-0001	10-5-10	1305	PCBs	X	X						S	1	4oz JAR		
NASB-HA-SS04-0001	10-5-10	1305	TAL METALS	X	X						S	1	"		
D2 NASB-HA-SS13-0001	10-5-10	1330	PCBs	X	X						S	1	"		
D2 NASB-HA-SS13-0001	10-5-10	1330	TAL METALS	X	X						S	1	"		
NASB-HA-SS14-0001	10-5-10	1350	PCBs	X	X						S	1	"		
NASB-HA-SS14-0001	10-5-10	1350	TAL METALS	X	X						S	1	"		
NASB-HA-SS15-0001	10-5-10	1410	PCBs	X	X						S	1	"		
NASB-HA-SS15-0001	10-5-10	1410	TAL METALS	X	X						S	1	"		
NASB-HA-DUP01-100510	100510	0000	PCBs	X	X						S	1	"		HA-SS01-0001
NASB-HA-DUP01-100510	100510	0000	TAL METALS	X	X						S	1	"		" "
NASB-HA-DUP02-100510	100510	0000	PCBs	X	X						S	1	"		HA-SS13-0001

Email Results to:

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [x] DOD*
- [x] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [x] ME
- [ ] CT
- [ ] RI

Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N

Type: ADAPT

Received By: Time: Date:
Received By: Time: Date:
Received By: Time: Date:
Relinquished By Sampler:
Relinquished By:
Relinquished By:

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Page ____ of ____

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Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: CTO WE49, AOPI NAS Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 658-7899 PO# Quote # TTN09271001
Sampler (Signature): Terry Rogal

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

For Analytics Use Only Rev. 5 06/18/08

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-HA-DUP02-100510	10-5-10	0000	TAL METALS	X	X						S	1	4oz JAR		HA-5513-0001
NASB-HA-RB01-100510	10-5-10	1445	PCBs	X	X						AQ	2	1L AMBER		
NASB-HA-RB01-100510	10-5-10	1445	TAL METALS		X	X					AQ	1	250ml HDPE		

CFS 10/16/10

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:
[TAL Metals by 6020/7471A, Hg by 7471A]

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] CTRCP*
- [x] DOD*
- [ ] Standard
- [ ] Level II*
- [ ] Level III*
- [x] Level IV*

State:
- [ ] NH
- [ ] MA
- [x] ME
- [ ] CT
- [ ] RI

Other:

State Standard: (eg. S-1 or GW-1)

EDD Required: Y* N
Type: ADAPT

Received By: Time: Date:
Received By: Time: Date:
Received By: Time: Date:
Relinquished By Sampler:
Relinquished By:
Relinquished By:

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112G02330 Proj. Name:
Company: Tetra Tech NUS
Contact:
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) PO# Quote #
Sampler (Signature):

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Preservation: Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7110-TB01-100710	10/7	0730	VOC	X	X					X	QC	1	G		
↓	↓	↓	VOC		X				X		QC	1	↓		
			VPH		X				X		QC	1	↓		

Received By: Time: Date: Relinquished By Sampler:

Received By: Time: Date: Relinquished By:

Received By: Time: Date: Relinquished By:

Email Results to:

Turnaround Time (TAT)
- ☐ 24hr*
- ☐ 48hr*
- ☐ 72hr*
- ☐ 5 Days*
- ☐ 10 Days

*Fee may apply; lab approval required

Comments / Instructions:

Project Requirements:
*Fee may apply

Report Type:
- ☐ MCP*
- ☐ Level II*
- ☐ CTRCP*
- ☐ Level III*
- ☐ DOD*
- ☐ Level IV*
- ☐ Standard

State:
- ☐ NH
- ☐ MA
- ☐ ME
- ☐ CT
- ☐ RI

Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N

Type: _____

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112G02330 Proj. Name: NAS BRUNSWICK
Company: Tetra Tech NUS
Contact:
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) PO# Quote #
Sampler (Signature):

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other TR	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7/10-SB-SB07-0910	10/7	1230	EPH / SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
NASB-B7/10-SB-SB07-1819	10/7	1245	EPH / SVOC	X	X						S	1			
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
			TR												

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☐ DOD* ☐ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☐ ME
☐ CT
☐ RI
Other: _____

State Standard: _____
(eg. S-1 or GW-1)

EDD Required: Y* N
Type: _____

Received By: Received By: Received By:
Time: Time: Time:
Date: Date: Date:
Relinquished By Sampler: Relinquished By: Relinquished By:

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2) Temp blank °C _____
3) Received in good condition Y or N
4) pH checked by: _____
5) Labels checked by: _____

Project#: 112G02330 Proj. Name: NAS BRUNSWICK
Company: Tetra Tech NUS
Contact:
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) PO# Quote #
Sampler (Signature):

Matrix Key:
C = Concrete
WP = Wipe
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DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	DI	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7/10-SB-SB03-1415	10/7	1530	EPH / SVOC	X	X							S	1	G		
			VOC	X	X						X	S	2			
			VOC		X				X			S	1			
			VPH		X				X			S	1			
			% SOLID	X	X							S	2			
NASB-B7/10-SB-SB03-3334	10/7	1545	EPH / SVOC	X	X							S	1			
			VOC	X	X						X	S	2			
			VOC		X				X			S	1			
			VPH		X				X			S	1			
			% SOLID	X	X							S	2			
			TR													

Received By: Received By: Received By:
Time: Time: Time:
Date: Date: Date:
Relinquished By Sampler: Relinquished By: Relinquished By:

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ S Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☐ DOD* ☐ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☐ ME
☐ CT
☐ RI
Other: _____

State Standard: _____ (eg. S-1 or GW-1)

EDD Required: Y* N
Type: _____

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195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112602330 Proj. Name: NAS BRUNSWICK
Company: Tetra Tech NUS
Contact: [illegible]
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 474-8437 PO# Quote #
Sampler (Signature): [illegible]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 2°
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other DT	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7/10-SB-SB06-0607	10/8	1115	EPH /SVOC	X	X						S	1	G		
			VOCs	X	X					X	S	2			
			VOCs		X				X		S	1			
			VPHS		X				X		S	1			
			% SOLID	X	X						S	2			
			TAL METAL	X	X						S	1			
NASB-B7/10-SB-SB06-3940	10/8	1130	EPH /SVOC	X	X						S	1			
			VOCs	X	X					X	S	2			
			VOCs						X		S	1			
			VPHS						X		S	1			
			% SOLIDS	X	X						S	2			

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [ ] DOD*
- [ ] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [ ] ME
- [ ] CT
- [ ] RI

Other:

State Standard: (eg. S-1 or GW-1)

EDD Required: Y* N
Type:

Received By: [illegible]	Received By:	Received By: CP 10/8/10
Time: 1715	Time:	Time:
Date: 10/8/10	Date:	Date:
Relinquished By Sampler: [illegible]	Relinquished By:	Relinquished By:

Analytics\AEL Documents\AEL COC

Chain Of Custody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
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Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: NAS BRUNSWICK
Company: Tetra Tech NUS
Contact: Chck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 474-8437 PO# Quote #
Sampler (Signature): [illegible]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 2
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Preservation: Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7/10-SB-5806-3940	10/8	1130	TAL METALS	X	X						S	1	G		

Comments / Instructions:

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [ ] 10 Days

*Fee may apply; lab approval required

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [ ] DOD*
- [ ] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [ ] ME
- [ ] CT
- [ ] RI

Other:

State Standard: (eg. S-1 or GW-1)

EDD Required: Y* N

Type:

Received By: [signature]	Received By:	Received By: 01/8/10
Time: 1715	Time:	Time:
Date: 10/8/10	Date:	Date:
Relinquished By Sampler: [signature]	Relinquished By:	Relinquished By:

Analytics\AEL Documents\AEL COC

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 2°
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Project#: 112G02330 Proj. Name: NAB Brunswick
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 474-8437 PO# Quote #
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

Preservation

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other PI	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7110-TB01-100710	10/7	0730	VOC	X	X					X	QC	1	G		
↓	↓	↓	VOC		X				X		QC	1	↓		
			VPH		X				X		QC	1			

Received By: Casey Page Time: 1715 Date: 10/8/10
Received By: Time: Date:
Received By: Time: Date: 10/8/10

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☐ DOD* ☐ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☐ ME
☐ CT
☐ RI
Other:

State Standard:
(eg. S-1 or GW-1)

EDD Required: Y* N
Type:

Relinquished By Sampler: [signature] Date: 10/8/10
Relinquished By: Date:
Relinquished By: Date:

Analytics\AEL Documents\AEL COC

Chain Of Custody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: NAS BRUNSWICK
Company: Tetra Tech NUS
Contact: Chuck Rae
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 474 8437 PO# Quote #
Sampler (Signature): [illegible]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

For Analytics Use Only Rev. 5 06/18/08

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 2°
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	DI Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7/10-SB-SB07-0910	10/7	1230	EPH / SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
NASB-B7/10-SB-SB07-1819	10/7	1245	EPH / SVOC	X	X						S	1			
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
			TR												

Comments / Instructions:

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☐ DOD* ☐ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☐ ME
☐ CT
☐ RI
Other:

State Standard:
(eg. S-1 or GW-1)
EDD Required: Y* N
Type:

Relinquished By Sampler	Relinquished By:	Relinquished By:
Date: 10/8/10	Date:	Date:
Time: 1715	Time:	Time:
Received By: Casey Fay	Received By:	Received By: 10/8/10

Analytics\AEL Documents\AEL COC

Chain Of Custody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

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Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 2°
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Project#: 112G02330 Proj. Name: NAS BRUNSWICK
Company: Tetra Tech NUS
Contact: Chuck Race
Address: 55 JONSPIN ROAD
WILMINGTON, MA 01887
Phone: (978) 474-8437 PO# Quote #
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

Container Key
P=plastic G=glass

Preservation

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other DI	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7/10-SB-SB03-1415	10/7	1530	EPH / SVOC	X	X						S	1	G		
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
NASB-B7/10-SB-SB03-3334	10/7	1545	EPH / SVOC	X	X						S	1			
			VOC	X	X					X	S	2			
			VOC		X				X		S	1			
			VPH		X				X		S	1			
			% SOLID	X	X						S	2			
			TR												

Received By: [signature] Time: 1715 Date: 10/8/10 Relinquished By Sampler: [signature]

Received By: Time: Date: Relinquished By:

Received By: CP 10/8/10 Time: Date: Relinquished By:

Email Results to:

Turnaround Time (TAT)
☐ 24hr* ☐ 48hr*
☐ 72hr* ☐ 5 Days*
☐ 10 Days
*Fee may apply; lab approval required

Comments / Instructions:

Project Requirements:
*Fee may apply

Report Type:
☐ MCP* ☐ Level II*
☐ CTRCP* ☐ Level III*
☐ DOD* ☐ Level IV*
☐ Standard

State:
☐ NH
☐ MA
☐ ME
☐ CT
☐ RI
Other:

State Standard:
(eg. S-1 or GW-1)
EDD Required: Y* N
Type:

RA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 101210 PAGE ___ OF ___

PROJECT NO: 112G02330	SITE NAME: NAS BRUNSWICK	PROJECT MANAGER AND PHONE NUMBER: CHUCK RACE (978) 474-8437	LABORATORY NAME AND CONTACT: Analytics Env. Lab LLC
SAMPLERS (SIGNATURE): Terry Rojahn		FIELD OPERATIONS LEADER AND PHONE NUMBER: TERRY ROJAHN (412) 921-8857	ADDRESS: 195 COMMERCE WAY
		CARRIER/WAYBILL NUMBER: LAB PICK UP	CITY, STATE: Portsmouth, NH 03801

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, G, G, G, G

PRESERVATIVE USED: 4°C DI, 4°C MeOH, 4°C MeOH, 4°C, 4°C, 4°C

TYPE OF ANALYSIS

DATE YEAR 2010	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCS 40ml Vial	VOCS 40ml Vial	VPH 40ml Vial	% SOLID 40ml Vial	EPH/SVOC 4oz JAR	TAL METALS 4oz			COMMENTS
10/12	0730	NASB-B7/10-TB01-101210	S	G	3	1	1	1						TRIP BLANK
10/12	1125	NASB-B7/10-SB-SB05-0607	S	G	18	6	3	3	2	2	2			RUN MS/MSD
10/12	1140	NASB-B7/10-SB-SB05-4041	S	G	8	2	1	1	2	1	1			
10/12	1315	NASB-B7/10-SB-SB02-0708	S	G	7	2	1	1	2	1				
10/12	1425	NASB-B7/10-SB-SB02-3940	S	G	7	2	1	1	2	1				

1. RELINQUISHED BY: Terry Rojahn	DATE: 10-13-10	TIME: 11:00	1. RECEIVED BY: Lisa Tourfest	DATE: 10-13-10	TIME: 1100
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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FORM NO. TtNUS-001

:A TECH NUS, INC. CHAIN OF CUSTODY NUMBER 101310-01 PAGE ___ OF ___

PROJECT NO: 112G02330
SITE NAME: NAS BRUNSWICK
PROJECT MANAGER AND PHONE NUMBER: CHUCK RACE (978)474-8437
LABORATORY NAME AND CONTACT: Analytics Env. Lab LLC
SAMPLERS (SIGNATURE): Terry Rojahn
FIELD OPERATIONS LEADER AND PHONE NUMBER: TERRY ROJAHN (412)921-8857
ADDRESS: 195 Commerce Way
CARRIER/WAYBILL NUMBER: LAB PICK UP
CITY, STATE: Portsmouth, NH 03801

STANDARD TAT ☒
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2010	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs 40ml Vials	VOCs 40ml Vials	VPH 40ml Vials	% Solid	EPH/SVOCs 40ml Vials	TAL METALS 4oz JAR	PCBS 4oz JAR	4oz JAR	COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G	G	G	G	G	G	
PRESERVATIVE USED						4°C/DI	4°C/MeOH	4°C/MeOH	4°C	4°C	4°C	4°C		
10/13	0730	NASB-B7/10-TB01-101310	QC	G	3	1	1	1						TRIP BLANK
10/13	0915	NASB-B7/10-SB-SB01-0607	S	G	8	2	1	1	2	1	1			D1
10/13	1010	NASB-B7/10-SB-SB01-3435	S	G	8	2	1	1	2	1	1			
10/13	1155	NASB-B7/10-SB-SB04-0607	S	G	7	2	1	1	2	1				D2
10/13	1300	NASB-B7/10-SB-SB04-3839	S	G	7	2	1	1	2	1				
10/13	0000	NASB-B7/10 ~~SB~~ DUP01-101310 (TR)	S	G	8	2	1	1	2	1	1			SB01-0607
10/13	0000	NASB-B7/10-DUP02-101310	S	G	7	2	1	1	2	1				SB04-0607
10/13	1410	NASB-B7/10-SS-SS05-0001	S	G	1	—	—	—	—	—	(TR) X	1		
10/13	1415	NASB-B7/10-SS-SS05-0102	S	G	1	—	—	—	—	—	—	1		
10/13	1420	NASB-B7/10-SS-SS06-0001	S	G	1	—	—	—	—	—	—	1		
10/13	1425	NASB-B7/10-SS-SS06-0102	S	G	1	—	—	—	—	—	—	1		
10/13	1440	NASB-B7/10-SS-SS07-0001	S	G	1	—	—	—	—	—	—	1		
10/13	1445	NASB-B7/10-SS-SS07-0102	S	G	1	—	—	—	—	—	—	1		D3

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY: Terry Rojahn	10/14/10	1050	1. RECEIVED BY: Lisa Tomlinson	10/14/10	1050
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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FORM NO. TINUS-001

.A TECH NUS, INC. CHAIN OF CUSTODY .NUMBER 101310-02 PAGE 1 OF

PROJECT NO: 112G02330	SITE NAME: NAS BRUNSWICK	PROJECT MANAGER AND PHONE NUMBER: CHUCK RACE (978)474-8437	LABORATORY NAME AND CONTACT: ANALYTICS ENV. LAB LLC
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER AND PHONE NUMBER: TERRY ROSAHN (412) 921-8857	ADDRESS: 195 COMMERCE WAY
		CARRIER/WAYBILL NUMBER: LAB PICK UP	CITY, STATE: PORTSMOUTH, NH 03801

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2010	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	PCBS 4oz JAR	VOCS 40ml VIALS	VPH 40ml VIALS	EPH 1L GLASS AMBER	SVOCS 1L GLASS AMBER	PCBS 1L GLASS AMBER	TAL METALS 250ml HDPE	COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G	G	G	G	P	
PRESERVATIVE USED						4°C	4°C HCL	4°C HCL	4°C HCL	4°C	4°C	4°C HNO3	
10/13	1455	NASB-B7/10-SS-SS08-0001	S	G	1	1							
10/13	1500	NASB-B7/10-SS-SS08-0102	S	G	1	1							
10/13	00.00	NASB-B7/10-DUP03-101310	S	G	1	1							Dup of SS07-0102
10/13	1630	NASB-B7/10-RB01-101310	AQ	G	13	–	3	3	2	2	2	1	

1. RELINQUISHED BY	DATE 10/14/10	TIME 1050	1. RECEIVED BY Lisa Tailfeathers	DATE 10/14/10	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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FORM NO. TINUS 001

A TECH NUS, INC. CHAIN OF CUSTODY NUMBER 101510 PAGE ___ OF ___

PROJECT NO: 112G02330

SITE NAME: NAS BRUNSWICK

PROJECT MANAGER AND PHONE NUMBER: CHUCK RACE (978) 474-8437

LABORATORY NAME AND CONTACT: ANALYTICS ENV. LAB LLC

SAMPLERS (SIGNATURE): Terry Rojahn

FIELD OPERATIONS LEADER AND PHONE NUMBER: TERRY ROJAHN (412) 921-8857

ADDRESS: 195 COMMERCE WAY

CARRIER/WAYBILL NUMBER: LAB PICK UP

CITY, STATE: PORTSMOUTH, NH 03801

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2010	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs 40ml Vial	VOCs 40ml Vial	VPH 40ml Vial	% Solid 40ml Vial	EPH/SVOC 4oz Jar				COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G	G	G				
PRESERVATIVE USED						4°C	DI 4°C	MeOH 4°C	MeOH 4°C	4°C				
10/14	0730	NASB-B7/10-TB01-101410	QC	G	3	1	1	1						TRIP BLANK
10/14	0850	NASB-B7/10-SB-SB11-0708	S	G	7	2	1	1	2	1				
10/14	0950	NASB-B7/10-SB-SB11-3940	S	G	7	2	1	1	2	1				
10/14	1125	NASB-B7/10-SB-SB08-1112	S	G	7	2	1	1	2	1				
10/14	1215	NASB-B7/10-SB-SB08-3940	S	G	7	2	1	1	2	1				
10/14	1320	NASB-B7/10-SB-SB10-0506	S	G	7	2	1	1	2	1				
10/14	1400	NASB-B7/10-SB-SB10-2122	S	G	7	2	1	1	2	1				
10/14	1500	NASB-B7/10-SB-SB09-0607	S	G	7	2	1	1	2	1				DI
10/14	1535	NASB-B7/10-SB-SB09-2021	S	G	7	2	1	1	2	1				
10/14	0000	NASB-B7/10-DUP01-101410	S	G	7	2	1	1	2	1				SB09-101410

1. RELINQUISHED BY: Terry Rojahn	DATE 10-15-10	TIME 1255	1. RECEIVED BY: [signature]	DATE 10/15/10	TIME 12:55
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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FORM NO. TtNUS-001

.A TECH NUS, INC. CHAIN OF CUSTODY .NUMBER 102010 PAGE ___ OF ___

PROJECT NO: 112G02330	SITE NAME: NAS BRUNSWICK	PROJECT MANAGER AND PHONE NUMBER: CHUCK RACE (978) 474-8437	LABORATORY NAME AND CONTACT: ANALYTICS ENV. LAB LLC
SAMPLERS (SIGNATURE): Terry Rojahn		FIELD OPERATIONS LEADER AND PHONE NUMBER: TERRY ROJAHN (412) 921-8857	ADDRESS: 195 COMMERCE WAY
		CARRIER/WAYBILL NUMBER: LAB PICK UP	CITY, STATE: PORTSMOUTH, NH 03801

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2010	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	PCBs 4oz JAR	VOCS 40ml VIAL	VOCS 40ml VIAL	VPH 40ml VIAL	% Solid 40ml VIAL	EPH/SVOC 4oz JAR			COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G	G	G	G			
PRESERVATIVE USED						4°C	4°C/DI	4°C MeOH	4°C MeOH	4°C	4°C			
10/20	1300	NASB-B7/10-SS-5501-0001	S	G	1	1								
10/20	1320	NASB-B7/10-SS-5502-0001	S	G	1	1								
10/20	1330	NASB-B7/10-SS-5503-0001	S	G	1	1								
10/20	1340	NASB-B7/10-SS-5504-0001	S	G	2	2								RUN MS/MSD
10/20	0730	NASB-B225-TB01-102010	QC	G	3	-	1	1	1					TRIP BLANK
10/20	1150	NASB-B225-SB08-0910	S	G	7	-	2	1	1	2	1			
10/20	1345	NASB-B225-SB09-0708	S	G	7	-	2	1	1	2	1			

1. RELINQUISHED BY: Terry Rojahn	DATE 10/20/10	TIME 1610	1. RECEIVED BY: [signature]	DATE 10/20/10	TIME 1610
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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FORM NO. TNUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER

PAGE 1 OF

PROJECT NO: 112G02330	SITE NAME: NASB
PROJECT MANAGER AND PHONE NUMBER: J. Orient 412-921-7090	LABORATORY NAME AND CONTACT: Kate - Analytics
SAMPLERS (SIGNATURE)	FIELD OPERATIONS LEADER AND PHONE NUMBER
	ADDRESS
	CARRIER/WAYBILL NUMBER
	CITY, STATE

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2010	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOC	SVOC	EPH	VPH	TAL Metals				COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G	G	P				
PRESERVATIVE USED						HCl	4°C	HCl	HCl	HNO3				
10/27	0915	NASB-B7/10-GW06D	Aq	G	11	3	2	2	3	1				D1
	0950	NASB-B7/10-GW07			11	3	2	2	3	1				
	1200	NASB-B7/10-GW05S			11	3	2	2	3	1				D2
	00:00	NASB-B7/10-DUP01-102710			11	3	2	2	3	1				Dup of GW06D
	1220	NASB-B7/10-GW06S			11	3	2	2	3	1				
	00:00	NASB-B7/10-DUP02-102710			11	3	2	2	3	1				
↓	0700	NASB-TB01-102710	↓	↓	2	2	—	—	—	—				Dup of GW05S

1. RELINQUISHED BY	DATE 10/27/10	TIME 1534	1. RECEIVED BY Lisa Tourquest	DATE 10/27/10	TIME 1535
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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RA TECH NUS, INC. CHAIN OF CUSTODY NUMBER PAGE 1 OF 1

PROJECT NO:	SITE NAME:	PROJECT MANAGER AND PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G02330	NASB	J. Orien - 412-921-7090	Kate - Analytics
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER AND PHONE NUMBER	ADDRESS
		T. Rojahn 412-921-7090	
		CARRIER/WAYBILL NUMBER	CITY, STATE

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G)
PRESERVATIVE USED

DATE YEAR 2010	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: VOC (HCl)	SVOC (4°C)	EPH (HCl)	VPH (HCl)	TAL Metals (HNO3)	TAL Metals *			COMMENTS
10/27	1625	NASB-B7/10-GW03D	GW	G	14	6	2	2	3	1	—			
10/27	1710	NASB-B7/10-GW05D	↓	↓	~~2~~ 15	6	2	2	3	1	1			
10/28	1020	NASB-B7/10-GW03S	↓	↓	14	6	2	2	3	1	—			
↓	1030	NASB-B7/10-GW01	↓	↓	42	18	6	6	9	3	—			Run MS/MSD
↓	1140	NASB-B7/10-GW04	↓	↓	14	6	2	2	3	1	—			
↓	1720	NASB-B7/10-GW02	↓	↓	14	6	2	2	3	1	—			
10/29	0925	NASB-B~~7/10~~225-GW09	↓	↓	14	6	2	2	3	1	—			
↓	1045	NASB-B225-GW08	↓	↓	15	6	2	2	3	1	1			
↓	1200	NASB-AOP1-RB01-102910	↓	↓	14	6	2	2	3	1	—			Tubing
10/27	1400	NASB-TB02-102710	↓	QC	2	2	—	—	—	—	—			

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	10/29/10	1430	1. RECEIVED BY	10/29/10	1430
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS K Field filtered

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Chain Of Custody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: 112G02330 Proj. Name: CTOWE49-AOP13-B7/10
Company: Tetra Tech NUS
Contact: Chuck Rase / Jeffronient
Address: 250 Andover Street
WILMINGTON, MA 01887
Phone: (978) 474.8416 PO# Quote #
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

For Analytics Use Only Rev. 5 06/18/08
Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 2°
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Preservation: Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
NASB-B7/10-SB-SB01-0607R	12/7/10	0940	SVOCs (with PAHs)	X	X						S	1	G		
" SB01-3435R		1215		X	X							1			
" SB02-0708R		1250		X	X							1			
" SB02-3940R		1315		X	X							1			
" SB04-0607R		1345		X	X							1			
" SB04-3839R		1400		X	X							1			
" SB08-1112R		1440		X	X							1			
~~" SB08-3940R~~		~~1515~~		X	X							1		CFS	
NASB-B7/10-DUP01-120910		—		X	X							1			
NASB-B7/10-DUP02-120710		—		X	X							1			
														CFS	

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [x] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [ ] DOD*
- [ ] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [ ] ME
- [ ] CT
- [ ] RI

Other:

State Standard: (eg. S-1 or GW-1)

EDD Required: Y* N
Type:

Relinquished By Sampler: [signature]	Relinquished By:	Relinquished By:
Date: 12/9/10	Date:	Date: 12/9/10
Time: 1404	Time:	Time:
Received By: [signature]	Received By:	Received By: [signature]

Analytics\AEL Documents\AEL COC

Chain Of Custody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: Proj. Name:
Company: Tetra Tech NUS
Contact:
Address: 250 Andover Street
WILMINGTON, MA 01887
Phone: (978) 474.8416 PO# Quote #
Sampler (Signature): [illegible]

See pg 1

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other

For Analytics Use Only Rev. 5 06/18/08

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 2°C
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
MABB-B7110-SB-SB09-0607R	12/8/10	0830	SVOCs (with PAHs)	X	X						S	1	G		
" -SB09-2021R		0845		X	X							1			
" -SB10-0506R		0900		X	X							1			
" -SB10-2122R		0915		X	X							1			
" -SB11-0708R		0930		X	X							1			
" -SB11-3940R		0950		X	X							1			
" -SB08-3940R		1030		X	X							1			
" -SB05-0607R		1115		X	X							3			
" -SB05-4041R		1130		X	X							1			
MABB-B225-SB08-0910R		1155		X	X							1			
MABB-B225-SB09-0708R		1205		X	X							1			

Comments / Instructions:
MABB-B7110-SB-SB05-0607R is LabQC

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [x] 10 Days

*Fee may apply; lab approval required

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] CTRCP*
- [ ] DOD*
- [ ] Level II*
- [ ] Level III*
- [ ] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [ ] ME
- [ ] CT
- [ ] RI

Other:

State Standard: (eg. S-1 or GW-1)

EDD Required: Y* N

Type:

Relinquished By Samples:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Date: 12/9/10	Date:	Date:	Date:	Date:	Date:
Time: 1404	Time:	Time:	Time:	Time:	Time:

Analytics\AEL Documents\AEL COC

Chain Of Custody Form

analytics environmental laboratory LLC
195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

For Analytics Use Only Rev. 5 06/18/08

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 2°C
3) Received in good condition Y or N
4) pH checked by:
5) Labels checked by:

Project#: Proj. Name:
Company: Tetra Tech NUS
Contact:
Address: 250 Andover Street
WILMINGTON, MA 01887
Phone: (978) 474.8416 PO# Quote #
Sampler (Signature):

see p. 1

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract
X = Other Aq=Aqueous

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Preservation: Unpres	4°C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
MSB-B7/10-DUP01-120810	12/8/10	—	SVOCs (with PAHs)	X	X						S	1	G		
MSB-B7/10-RB01-120810	↓	1300	PAHs	X	X						Aq	2	G		

CPS 12/8/10

Received By: Time: 1404 Date: 12/9/10
Received By: Time: Date:
Received By: Time: Date:

Relinquished By Sampler: Time: Date:
Relinquished By: Time: Date:
Relinquished By: Time: Date:

Email Results to:

Turnaround Time (TAT)
- [ ] 24hr*
- [ ] 48hr*
- [ ] 72hr*
- [ ] 5 Days*
- [X] 10 Days

*Fee may apply; lab approval required

Comments / Instructions:

Project Requirements:
*Fee may apply

Report Type:
- [ ] MCP*
- [ ] Level II*
- [ ] CTRCP*
- [ ] Level III*
- [ ] DOD*
- [ ] Level IV*
- [ ] Standard

State:
- [ ] NH
- [ ] MA
- [ ] ME
- [ ] CT
- [ ] RI

Other:

State Standard: (eg. S-1 or GW-1)

EDD Required: Y* N
Type:

A-7 DAILY SUMMARY FORMS

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		1
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		10
3.	Acetate Liners	200	Each		16
4.	Prepack Monitoring Well Screen	330	Feet		20
5.	Riser Pipe and Annular Materials	670	Feet		68
6.	Protective Casing and ~~Concrete Pad~~	23	Each		2
7.	Flush-Mounted Well Cover	10	Each		
8.	Boring Abandonment (DPT)	1000	Feet		40
9.	Well Abandonment	1000	Feet		1
10.	Drums	12	Each		
				TOTAL	

Authorized Signature: [signature]

Name (print): Chelsea Fellows-Stanley

Title (print): Geologist

Company (print): Tetra Tech

Date: 10/4/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		9
3.	Acetate Liners	200	Each		14
4.	Prepack Monitoring Well Screen	330	Feet		5
5.	Riser Pipe and Annular Materials	670	Feet		22
6.	Protective Casing ~~and Concrete Pad~~	23	Each		1
7.	Flush-Mounted Well Cover	10	Each		
8.	Boring Abandonment (DPT)	1000	Feet		20
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		1
				TOTAL	

Authorized Signature: [signature]

Name (print): Chelsea Fellows-Stanley

Title (print): Geologist

Company (print): Tetra Tech

Date: 10/5/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		8½
3.	Acetate Liners	200	Each		14
4.	Prepack Monitoring Well Screen	330	Feet		
5.	Riser Pipe and Annular Materials	670	Feet		
6.	Protective Casing and Concrete Pad	23	Each		
7.	Flush-Mounted Well Cover	10	Each		
8.	Boring Abandonment (DPT)	1000	Feet		35
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		
				TOTAL	

Authorized Signature: [signature]

Name (print): Chelsea Fellows-Stanley

Title (print): Geologist

Company (print): tetratech

Date: 10/6/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		9
3.	Acetate Liners	200	Each		17
4.	Prepack Monitoring Well Screen	330	Feet		
5.	Riser Pipe and Annular Materials	670	Feet		
6.	Protective Casing and Concrete Pad	23	Each		
7.	Flush-Mounted Well Cover	10	Each		
8.	Boring Abandonment (DPT)	1000	Feet		80
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		1
				TOTAL	

Authorized Signature: [signature]

Name (print): Chelsea Fellows-Stanley

Title (print): Geologist

Company (print): Tetra Tech.

Date: 10/7/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		8
3.	Acetate Liners	200	Each		12
4.	Prepack Monitoring Well Screen	330	Feet		30
5.	Riser Pipe and Annular Materials	670	Feet		75
6.	Protective Casing and Concrete Pad	23	Each		
7.	Flush-Mounted Well Cover	10	Each		3
8.	Boring Abandonment (DPT)	1000	Feet		60
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		
				TOTAL	

Authorized Signature: [signature]

Name (print): Chelsea Fellows-Stanley

Title (print): Geologist

Company (print): Tetra Tech.

Date: 10/8/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		8
3.	Acetate Liners	200	Each		28
4.	Prepack Monitoring Well Screen	330	Feet		50'
5.	Riser Pipe and Annular Materials	670	Feet		83'
6.	Protective Casing and Concrete Pad	23	Each		
7.	Flush-Mounted Well Cover	10	Each		
8.	Boring Abandonment (DPT)	1000	Feet		120'
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		
				TOTAL	

Authorized Signature: _____

Name (print): Shannon Hill

Title (print): Geologist

Company (print): HNUS

Date: 10/12/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		8
3.	Acetate Liners	200	Each	JSM	~~30~~ 27
4.	Prepack Monitoring Well Screen	330	Feet		20'
5.	Riser Pipe and Annular Materials	670	Feet		14'
6.	Protective Casing and Concrete Pad	23	Each		
7.	Flush-Mounted Well Cover	10	Each		7
8.	Boring Abandonment (DPT)	1000	Feet	JSM	~~80~~ 145'
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		
				TOTAL	

Authorized Signature: JSM 10/13/10

Name (print): Shannon Hill

Title (print): Geologist

Company (print): FTNUS

Date: 10/13/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		10
3.	Acetate Liners	200	Each		~~222~~ 4/6
4.	Prepack Monitoring Well Screen	330	Feet		
5.	Riser Pipe and Annular Materials	670	Feet		
6.	Protective Casing and Concrete Pad	23	Each		
7.	Flush-Mounted Well Cover	10	Each		
8.	Boring Abandonment (DPT)	1000	Feet		230
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		
				TOTAL	

Authorized Signature: _____

Name (print): Shannon Hill

Title (print): Geologist

Company (print): TNUS

Date: 10/14/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		7
3.	Acetate Liners	200	Each		30
4.	Prepack Monitoring Well Screen	330	Feet		5'
5.	Riser Pipe and Annular Materials	670	Feet		10'
6.	Protective Casing and Concrete Pad	23	Each		
7.	Flush-Mounted Well Cover	10	Each		
8.	Boring Abandonment (DPT)	1000	Feet		50'
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		1
				TOTAL	

Authorized Signature: _____

Name (print): Shannon Hill

Title (print): Geologist

Company (print): TNUS

Date: 10/19/10

WE 09 and WE49
PRICING SCHEDULE
DRILLING TECHNICAL SPECIFICATION
SITE 7 AND AOPI INVESTIGATION
NAVAL AIR STATION BRUNSWICK – BRUNSWICK, MAINE

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTALS
1a.	Mobilization/Demobilization for Soil Borings/Well Construction	1	Lump sum		
1b.	Mobilization/Demobilization for Well Decommissioning.	1	Lump Sum		
2.	DPT Services	120	Hours		8
3.	Acetate Liners	200	Each		14
4.	Prepack Monitoring Well Screen	330	Feet		20'
5.	Riser Pipe and Annular Materials	670	Feet		33'
6.	Protective Casing and Concrete Pad	23	Each		2
7.	Flush-Mounted Well Cover	10	Each		2
8.	Boring Abandonment (DPT)	1000	Feet		70'
9.	Well Abandonment	1000	Feet		
10.	Drums	12	Each		1
				TOTAL	

Authorized Signature: _____

Name (print): Shannon Hill

Title (print): Geologist

Company (print): T+N US

Date: 10/20/10

APPENDIX B

ANALYTICAL RESULTS

B-1 SOIL ANALYTICAL RESULTS

LOCATION	MDA-SB03		
SAMPLE ID	**NASB-MDA-SB-SB03-0001**	**NASB-MDA-SB-SB03-0001-AVG**	**NASB-MDA-SB-SB03-0001-D**
SAMPLE DATE	**20101004**	**20101004**	**20101004**
SAMPLE CODE	**ORIG**	**AVG**	**DUP**
MATRIX	**SO**	**SO**	**SO**
SAMPLE TYPE	**NORMAL**	**NORMAL**	**NORMAL**
SUBMATRIX	**SS**	**SS**	**SS**
TOP DEPTH	**0**	**0**	**0**
BOTTOM DEPTH	**1**	**1**	**1**
METALS (MG/KG)			
MERCURY	0.55	0.74	0.93

LOCATION	MDA-SB01		MDA-SB02		MDA-SB03		
SAMPLE ID	**NASB-MDA-SB-SB01-1112**	**NASB-MDA-SB-SB01-1819**	**NASB-MDA-SB-SB02-1011**	**NASB-MDA-SB-SB02-2728**	**NASB-MDA-SB-SB03-1112**	**NASB-MDA-SB-SB03-1920**	**NASB-MDA-SB-SB03-2930**
SAMPLE DATE	**20101005**	**20101005**	**20101004**	**20101004**	**20101004**	**20101004**	**20101004**
SAMPLE CODE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
MATRIX	**SO**	**SO**	**SO**	**SO**	**SO**	**SO**	**SO**
SAMPLE TYPE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
SUBMATRIX	**SB**	**SB**	**SB**	**SB**	**SB**	**SB**	**SB**
TOP DEPTH	**11**	**18**	**10**	**27**	**11**	**19**	**29**
BOTTOM DEPTH	**12**	**19**	**11**	**28**	**12**	**20**	**30**
METALS (MG/KG)							
MERCURY	0.009 U	0.011 U	0.0083 U	0.011 U	0.01 U	0.01 U	0.01 U

LOCATION	FTA-SS01	FTA-SS02	FTA-SS03	FTA-SS04	FTA-SS05	FTA-SS06	FTA-SS07	FTA-SS08	FTA-SS09	FTA-SS10
SAMPLE ID	NASB-FTA-SS-SS01-0001	NASB-FTA-SS-SS02-0001	NASB-FTA-SS-SS03-0001	NASB-FTA-SS-SS04-0001	NASB-FTA-SS-SS05-0001	NASB-FTA-SS-SS06-0001	NASB-FTA-SS-SS07-0001	NASB-FTA-SS-SS08-0001	NASB-FTA-SS-SS09-0001	NASB-FTA-SS-SS10-0001
SAMPLE DATE	20101005	20101006	20101006	20101005	20101005	20101006	20101006	20101006	20101006	20101006
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1
EPH MADEP (MG/KG)										
C11-C22 AROMATICS	32.6 U	32.6 U	33.1 U	33.1 U	33.4 U	33.4 U	33.6 U	32.3 U	32.3 U	31.5 U
C11-C22 AROMATICS-UNADJ	32.6 U	32.6 U	33.1 U	33.1 U	33.4 U	33.4 U	33.6 U	32.3 U	32.3 U	31.5 U
C19-C36 ALIPHATICS	32.6 U	32.6 U	33.1 U	33.1 U	33.4 U	33.4 U	33.6 U	32.3 U	32.3 U	31.5 U
C9-C18 ALIPHATICS	32.6 U	32.6 U	33.1 U	33.1 U	33.4 U	33.4 U	33.6 U	32.3 U	32.3 U	31.5 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)										
2-METHYLNAPHTHALENE	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
ACENAPHTHENE	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
ACENAPHTHYLENE	6 U	4.1 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1.6 J
ANTHRACENE	1.6 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1.6 J	6 U
BENZO(A)ANTHRACENE	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	3.3 J	6 U
BENZO(A)PYRENE	2.4 J	3.3 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
BENZO(B)FLUORANTHENE	1.6 J	4.1 J	1.6 J	6 U	6 U	6 U	6 U	6 U	6 U	1.6 J
BENZO(G,H,I)PERYLENE	2.4 J	2.5 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1.6 J
BENZO(K)FLUORANTHENE	2.4 J	1.6 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
CHRYSENE	2.4 J	3.3 J	6 U	6 U	6 U	6 U	6 U	6 U	3.3 J	6 U
DIBENZO(A,H)ANTHRACENE	2.4 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
FLUORANTHENE	1.6 J	4.9 J	2.4 J	6 U	1.7 J	6 U	6 U	6 U	6 U	3.2 J
FLUORENE	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
INDENO(1,2,3-CD)PYRENE	4 J	3.3 J	1.6 J	0.80 J	0.80 J	0.80 J	6 U	6 U	6 U	1.6 J
NAPHTHALENE	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
PHENANTHRENE	1.6 J	2.5 J	1.6 J	6 U	1.7 J	6 U	6 U	6 U	2.5 J	1.6 J
PYRENE	3.2 J	5.8 J	3.2 J	1.6 J	1.7 J	6 U	6 U	6 U	6 U	3.2 J
SEMIVOLATILES (UG/KG)										
1,1-BIPHENYL	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
1,2,4,5-TETRACHLOROBENZENE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
2,2'-OXYBIS(1-CHLOROPROPANE)	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
2,3,4,6-TETRACHLOROPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
2,4,5-TRICHLOROPHENOL	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
2,4,6-TRICHLOROPHENOL	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
2,4-DICHLOROPHENOL	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
2,4-DIMETHYLPHENOL	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
2,4-DINITROPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
2,4-DINITROTOLUENE	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
2,6-DINITROTOLUENE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
2-CHLORONAPHTHALENE	160 U	164 U	161 U	161 U	168 U	167 U	164 U	159 U	165 U	161 U
2-CHLOROPHENOL	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
2-METHYLPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
2-NITROANILINE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
2-NITROPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
3&4-METHYLPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
3,3'-DICHLOROBENZIDINE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
3-NITROANILINE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
4,6-DINITRO-2-METHYLPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
4-BROMOPHENYL PHENYL ETHER	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
4-CHLORO-3-METHYLPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
4-CHLOROANILINE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
4-CHLOROPHENYL PHENYL ETHER	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
4-NITROANILINE	301 U	169 J	302 U	302 U	172 J	314 U	309 U	298 U	309 U	303 U
4-NITROPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
ACETOPHENONE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
ATRAZINE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
BENZALDEHYDE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
BIS(2-CHLOROETHOXY)METHANE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
BIS(2-CHLOROETHYL)ETHER	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
BIS(2-ETHYLHEXYL)PHTHALATE	301 U	185 J	58 J	302 U	315 U	34 J	309 U	298 U	309 U	30 J

LOCATION	FTA-SS01	FTA-SS02	FTA-SS03	FTA-SS04	FTA-SS05	FTA-SS06	FTA-SS07	FTA-SS08	FTA-SS09	FTA-SS10
SAMPLE ID	NASB-FTA-SS-SS01-0001	NASB-FTA-SS-SS02-0001	NASB-FTA-SS-SS03-0001	NASB-FTA-SS-SS04-0001	NASB-FTA-SS-SS05-0001	NASB-FTA-SS-SS06-0001	NASB-FTA-SS-SS07-0001	NASB-FTA-SS-SS08-0001	NASB-FTA-SS-SS09-0001	NASB-FTA-SS-SS10-0001
SAMPLE DATE	20101005	20101006	20101006	20101005	20101005	20101006	20101006	20101006	20101006	20101006
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1
BUTYL BENZYL PHTHALATE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
CAPROLACTAM	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
CARBAZOLE	161 U	166 U	162 U	162 U	169 U	169 U	166 UJ	160 UJ	166 UJ	162 U
DIBENZOFURAN	161 U	166 U	162 U	162 U	169 U	169 U	166 U	160 U	166 U	162 U
DIETHYL PHTHALATE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
DIMETHYL PHTHALATE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
DI-N-BUTYL PHTHALATE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
DI-N-OCTYL PHTHALATE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
HEXACHLOROBENZENE	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
HEXACHLOROBUTADIENE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
HEXACHLOROCYCLOPENTADIENE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
HEXACHLOROETHANE	211 U	216 U	211 U	212 U	221 U	220 U	216 U	209 U	217 U	212 U
ISOPHORONE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
NITROBENZENE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
N-NITROSO-DI-N-PROPYLAMINE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
N-NITROSODIPHENYLAMINE	301 U	309 U	302 U	302 U	315 U	314 U	309 U	298 U	309 U	303 U
PENTACHLOROPHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
PHENOL	421 U	433 U	423 U	423 U	442 U	440 U	433 U	418 U	433 U	424 U
VOLATILES (UG/KG)										
1,1,1-TRICHLOROETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,1,2,2-TETRACHLOROETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,1,2-TRICHLOROETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,1-DICHLOROETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,1-DICHLOROETHENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,2,3-TRICHLOROBENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,2,4-TRICHLOROBENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 UJ	1.5 U	1.1 UJ	1.4 U
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,2-DIBROMOETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,2-DICHLOROBENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 UJ	1.5 U	1.1 UJ	1.4 U
1,2-DICHLOROETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,2-DICHLOROPROPANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,3-DICHLOROBENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,4-DICHLOROBENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
1,4-DIOXANE	16 UR	20 UR	13 UR	18 UR	16 UR	20 UR	16 UR	22 UR	16 UR	21 UR
2-BUTANONE	5.2 U	6.6 U	4.4 U	5.9 U	5.2 U	6.5 U	5.5 U	7.5 U	5.4 U	7 U
2-HEXANONE	5.2 U	6.6 U	4.4 U	5.9 U	5.2 U	6.5 U	5.5 U	7.5 U	5.4 U	7 U
4-METHYL-2-PENTANONE	5.2 U	6.6 U	4.4 U	5.9 U	5.2 U	6.5 U	5.5 U	7.5 U	5.4 U	7 U
ACETONE	7.8 U	28 U	16 U	6.1 U	6.7 U	33 U	6.1 U	8.6 U	14 U	24 U
BENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
BROMOCHLOROMETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
BROMODICHLOROMETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
BROMOFORM	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
BROMOMETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	0.57 J	1.1 U	1.4 U
CARBON DISULFIDE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CARBON TETRACHLORIDE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CHLOROBENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CHLORODIBROMOMETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CHLOROETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CHLOROFORM	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CHLOROMETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CIS-1,2-DICHLOROETHENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CIS-1,3-DICHLOROPROPENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
CYCLOHEXANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
DICHLORODIFLUOROMETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
ETHYLBENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U

LOCATION	FTA-SS01	FTA-SS02	FTA-SS03	FTA-SS04	FTA-SS05	FTA-SS06	FTA-SS07	FTA-SS08	FTA-SS09	FTA-SS10
SAMPLE ID	NASB-FTA-SS-SS01-0001	NASB-FTA-SS-SS02-0001	NASB-FTA-SS-SS03-0001	NASB-FTA-SS-SS04-0001	NASB-FTA-SS-SS05-0001	NASB-FTA-SS-SS06-0001	NASB-FTA-SS-SS07-0001	NASB-FTA-SS-SS08-0001	NASB-FTA-SS-SS09-0001	NASB-FTA-SS-SS10-0001
SAMPLE DATE	20101005	20101006	20101006	20101005	20101005	20101006	20101006	20101006	20101006	20101006
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1
ISOPROPYLBENZENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
M+P-XYLENES	2.1 U	2.6 U	1.8 U	2.4 U	2.1 U	2.6 U	2.2 U	3 U	2.2 U	2.8 U
METHYL ACETATE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 J	3.2	1.1 U	1.4 U
METHYL CYCLOHEXANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 UJ	1.5 U	1.1 UJ	1.4 U
METHYL TERT-BUTYL ETHER	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
METHYLENE CHLORIDE	4.3 U	46 U	4.3 U	6.1 U	3.1 U	56 U	9.6 U	12 U	5.3 U	51 U
O-XYLENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
STYRENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
TETRACHLOROETHENE	1 U	0.46 J	0.88 U	1.2 U	1 U	0.47 J	1.1 U	1.5 U	1.1 U	1.4 U
TOLUENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
TOTAL XYLENES	2.1 U	2.6 U	1.8 U	2.4 U	2.1 U	2.6 U	2.2 U	3 U	2.2 U	2.8 U
TRANS-1,2-DICHLOROETHENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
TRANS-1,3-DICHLOROPROPENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
TRICHLOROETHENE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
TRICHLOROFLUOROMETHANE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
VINYL CHLORIDE	1 U	1.3 U	0.88 U	1.2 U	1 U	1.3 U	1.1 U	1.5 U	1.1 U	1.4 U
VPH MADEP (MG/KG)										
C5-C8 ALIPHATICS	3.66 U	3.26 U	3.54 U	3.58 U	3.65 U	3.66 U	4.25 U	3.67 U	3.7 U	4.24 U
C5-C8 ALIPHATICS-UNADJ	3.66 U	3.26 U	3.54 U	3.58 U	3.65 U	3.66 U	4.25 U	3.67 U	3.7 U	4.24 U
C9-C10 AROMATICS	0.73 U	0.65 U	0.71 U	0.72 U	0.73 U	0.73 U	0.85 U	0.73 U	0.74 U	0.85 U
C9-C12 ALIPHATICS	3.66 U	3.26 U	3.54 U	3.58 U	3.65 U	3.66 U	4.25 U	3.67 U	3.7 U	4.24 U
C9-C12 ALIPHATICS-UNADJ	3.66 U	3.26 U	3.54 U	3.58 U	3.65 U	3.66 U	4.25 U	3.67 U	3.7 U	4.24 U

LOCATION	FTA-SB01	FTA-SB02			FTA-SB03	FTA-SB04	FTA-SB05	FTA-SB06	FTA-SB07	FTA-SB08	FTA-SB09			FTA-SB10
SAMPLE ID	NASB-FTA-SB-SB01-0405	NASB-FTA-SB-SB02-0405	NASB-FTA-SB-SB02-0405-AVG	NASB-FTA-SB-SB02-0405-D	NASB-FTA-SB-SB03-0405	NASB-FTA-SB-SB04-0405	NASB-FTA-SB-SB05-0405	NASB-FTA-SB-SB06-0809	NASB-FTA-SB-SB07-0809	NASB-FTA-SB-SB08-0809	NASB-FTA-SB-SB09-0809	NASB-FTA-SB-SB09-0809-AVG	NASB-FTA-SB-SB09-0809-D	NASB-FTA-SB-SB10-0607
SAMPLE DATE	20101005	20101006	20101006	20101006	20101006	20101005	20101005	20101006	20101006	20101006	20101006	20101006	20101006	20101006
SAMPLE CODE	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
TOP DEPTH	4	4	4	4	4	4	4	8	8	8	8	8	8	6
BOTTOM DEPTH	5	5	5	5	5	5	5	9	9	9	9	9	9	7
EPH MADEP (MG/KG)														
C11-C22 AROMATICS	35 U	34.2 U	34.2 U	34.2 U	32.6 U	34.2 U	32.6 U	32.8 U	32.8 U	35.5 U	34.4 U	35.1 U	35.8 U	32.3 U
C11-C22 AROMATICS-UNADJ	35 U	34.2 U	34.2 U	34.2 U	32.6 U	34.2 U	32.6 U	32.8 U	32.8 U	35.5 U	34.4 U	35.1 U	35.8 U	32.3 U
C19-C36 ALIPHATICS	35 U	34.2 U	34.2 U	34.2 U	32.6 U	34.2 U	32.6 U	32.8 U	32.8 U	35.5 U	34.4 U	35.1 U	35.8 U	32.3 U
C9-C18 ALIPHATICS	35 U	34.2 U	34.2 U	34.2 U	32.6 U	34.2 U	32.6 U	32.8 U	32.8 U	35.5 U	34.4 U	35.1 U	35.8 U	32.3 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)														
2-METHYLNAPHTHALENE	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
ACENAPHTHENE	6 U	3.3 J	3.3 J	6 U	6 U	6 U	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
ACENAPHTHYLENE	6 U	3.3 J	3.3 J	6 U	6 U	6 U	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
ANTHRACENE	6 U	1.6 J	1.6 J	6 U	6 U	6 U	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
BENZO(A)ANTHRACENE	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
BENZO(A)PYRENE	6 U	2.5 J	2.5 J	6 U	6 U	2.6 J	6 U	6 U	6 U	1.8 J	7 U	7 U	7 U	6 U
BENZO(B)FLUORANTHENE	6 U	2.5 J	2.5 J	6 U	6 U	2.6 J	6 U	6 U	6 U	1.8 J	7 U	7 U	7 U	6 U
BENZO(G,H,I)PERYLENE	6 U	2.5 J	2.5 J	6 U	6 U	6 U	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
BENZO(K)FLUORANTHENE	6 U	3.3 J	3.3 J	6 U	6 U	6 U	6 U	6 U	6 U	1.8 J	7 U	7 U	7 U	6 U
CHRYSENE	6 U	2.5 J	2.5 J	6 U	6 U	3.4 J	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
DIBENZO(A,H)ANTHRACENE	6 U	2.5 J	2.5 J	6 U	6 U	3.4 J	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
FLUORANTHENE	6 U	2.5 J	2.5 J	6 U	6 U	1.7 J	2.5 J	3.3 J	6 U	6.2 J	7 U	7 U	7 U	6 U
FLUORENE	6 U	1.6 J	1.6 J	6 U	6 U	6 U	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
INDENO(1,2,3-CD)PYRENE	6 U	4.9 J	4.9 J	6 U	6 U	6 U	0.80 J	1.6 J	6 U	1.8 J	7 U	7 U	7 U	0.8 J
NAPHTHALENE	6 U	6 U	4.2 J	4.2 J	6 U	6 U	6 U	6 U	6 U	7 U	7 U	7 U	7 U	6 U
PHENANTHRENE	6 U	1.6 J	1.6 J	6 U	6 U	6 U	1.6 J	2.5 J	6 U	4.4 J	1.7 J	1.7 J	7 U	6 U
PYRENE	6 U	3.3 J	3.3 J	6 U	6 U	1.7 J	3.3 J	3.3 J	6 U	5.3 J	7 U	7 U	7 U	6 U
SEMIVOLATILES (UG/KG)														
1,1-BIPHENYL	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
1,2,4,5-TETRACHLOROBENZENE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
2,2'-OXYBIS(1-CHLOROPROPANE)	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
2,3,4,6-TETRACHLOROPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
2,4,5-TRICHLOROPHENOL	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
2,4,6-TRICHLOROPHENOL	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
2,4-DICHLOROPHENOL	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
2,4-DIMETHYLPHENOL	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
2,4-DINITROPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
2,4-DINITROTOLUENE	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
2,6-DINITROTOLUENE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
2-CHLORONAPHTHALENE	169 U	164 U	166 U	168 U	159 U	171 U	168 U	166 U	167 U	176 U	174 U	177 U	180 U	158 U
2-CHLOROPHENOL	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
2-METHYLPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
2-NITROANILINE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
2-NITROPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
3&4-METHYLPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
3,3'-DICHLOROBENZIDINE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
3-NITROANILINE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
4,6-DINITRO-2-METHYLPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
4-BROMOPHENYL PHENYL ETHER	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
4-CHLORO-3-METHYLPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
4-CHLOROANILINE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
4-CHLOROPHENYL PHENYL ETHER	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
4-NITROANILINE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
4-NITROPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
ACETOPHENONE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
ATRAZINE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
BENZALDEHYDE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
BIS(2-CHLOROETHOXY)METHANE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
BIS(2-CHLOROETHYL)ETHER	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
BIS(2-ETHYLHEXYL)PHTHALATE	28 J	30 J	30 J	317 U	29 J	321 U	317 U	28 J	313 U	331 U	48 J	41.5 J	35 J	297 U
BUTYL BENZYL PHTHALATE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
CAPROLACTAM	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
CARBAZOLE	170 U	165 U	167.5 U	170 U	161 U	172 UJ	170 U	167 U	168 UJ	177 U	175 UJ	178 U	181 U	159 U
DIBENZOFURAN	170 U	165 U	167.5 U	170 U	161 U	172 U	170 U	167 U	168 U	177 U	175 U	178 U	181 U	159 U
DIETHYL PHTHALATE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
DIMETHYL PHTHALATE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
DI-N-BUTYL PHTHALATE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
DI-N-OCTYL PHTHALATE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
HEXACHLOROBENZENE	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
HEXACHLOROBUTADIENE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
HEXACHLOROCYCLOPENTADIENE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
HEXACHLOROETHANE	222 U	216 U	219 U	222 U	210 U	225 U	222 U	218 U	219 U	232 U	229 U	233 U	237 U	208 U
ISOPHORONE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
NITROBENZENE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
N-NITROSO-DI-N-PROPYLAMINE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U

LOCATION	FTA-SB01	FTA-SB02			FTA-SB03	FTA-SB04	FTA-SB05	FTA-SB06	FTA-SB07	FTA-SB08	FTA-SB09			FTA-SB10
SAMPLE ID	NASB-FTA-SB-SB01-0405	NASB-FTA-SB-SB02-0405	NASB-FTA-SB-SB02-0405-AVG	NASB-FTA-SB-SB02-0405-D	NASB-FTA-SB-SB03-0405	NASB-FTA-SB-SB04-0405	NASB-FTA-SB-SB05-0405	NASB-FTA-SB-SB06-0809	NASB-FTA-SB-SB07-0809	NASB-FTA-SB-SB08-0809	NASB-FTA-SB-SB09-0809	NASB-FTA-SB-SB09-0809-AVG	NASB-FTA-SB-SB09-0809-D	NASB-FTA-SB-SB10-0607
SAMPLE DATE	20101005	20101006	20101006	20101006	20101006	20101005	20101005	20101006	20101006	20101006	20101006	20101006	20101006	20101006
SAMPLE CODE	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
TOP DEPTH	4	4	4	4	4	4	4	8	8	8	8	8	8	6
BOTTOM DEPTH	5	5	5	5	5	5	5	9	9	9	9	9	9	7
N-NITROSODIPHENYLAMINE	317 U	308 U	312.5 U	317 U	300 U	321 U	317 U	311 U	313 U	331 U	327 U	332.5 U	338 U	297 U
PENTACHLOROPHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U
PHENOL	444 U	431 U	437 U	443 U	419 U	450 U	443 U	436 U	438 U	463 U	457 U	465.5 U	474 U	416 U

LOCATION	FTA-SB01	FTA-SB02			FTA-SB03	FTA-SB04	FTA-SB05	FTA-SB06	FTA-SB07	FTA-SB08	FTA-SB09			FTA-SB10
SAMPLE ID	NASB-FTA-SB-SB01-0405	NASB-FTA-SB-SB02-0405	NASB-FTA-SB-SB02-0405-AVG	NASB-FTA-SB-SB02-0405-D	NASB-FTA-SB-SB03-0405	NASB-FTA-SB-SB04-0405	NASB-FTA-SB-SB05-0405	NASB-FTA-SB-SB06-0809	NASB-FTA-SB-SB07-0809	NASB-FTA-SB-SB08-0809	NASB-FTA-SB-SB09-0809	NASB-FTA-SB-SB09-0809-AVG	NASB-FTA-SB-SB09-0809-D	NASB-FTA-SB-SB10-0607
SAMPLE DATE	20101005	20101006	20101006	20101006	20101006	20101005	20101005	20101006	20101006	20101006	20101006	20101006	20101006	20101006
SAMPLE CODE	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
TOP DEPTH	4	4	4	4	4	4	4	8	8	8	8	8	8	6
BOTTOM DEPTH	5	5	5	5	5	5	5	9	9	9	9	9	9	7
VOLATILES (UG/KG)														
1,1,1-TRICHLOROETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,1,2,2-TETRACHLOROETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,1,2-TRICHLOROETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,1-DICHLOROETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,1-DICHLOROETHENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,2,3-TRICHLOROBENZENE	0.78 J	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,2,4-TRICHLOROBENZENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 UJ	1.1 U	1.2 UJ	1.25 U	1.3 U	1.5 U
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,2-DIBROMOETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,2-DICHLOROBENZENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 UJ	1.1 U	1.2 UJ	1.25 U	1.3 U	1.5 U
1,2-DICHLOROETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,2-DICHLOROPROPANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,3-DICHLOROBENZENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,4-DICHLOROBENZENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
1,4-DIOXANE	15 UR	19 UR	19 R	19 UR	15 UR	18 UR	13 UR	13 UR	22 UR	16 UR	18 UR	18.5 R	19 UR	22 UR
2-BUTANONE	5 U	6.4 U	6.45 U	6.5 U	5 U	6 U	4.4 U	4.4 U	7.4 U	5.4 U	6 U	6.2 U	6.4 U	7.5 U
2-HEXANONE	5 U	6.4 U	6.45 U	6.5 U	5 U	6 U	4.4 U	4.4 U	7.4 U	5.4 U	6 U	6.2 U	6.4 U	7.5 U
4-METHYL-2-PENTANONE	5 U	6.4 U	6.45 U	6.5 U	5 U	6 U	4.4 U	4.4 U	7.4 U	5.4 U	6 U	6.2 U	6.4 U	7.5 U
ACETONE	22 U	28 U	27 U	26 U	14 U	26 U	8.8 U	13 U	21 U	21 U	18 U	30 U	42 U	15 U
BENZENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
BROMOCHLOROMETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
BROMODICHLOROMETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
BROMOFORM	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
BROMOMETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CARBON DISULFIDE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CARBON TETRACHLORIDE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CHLOROBENZENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CHLORODIBROMOMETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CHLOROETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CHLOROFORM	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CHLOROMETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CIS-1,2-DICHLOROETHENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CIS-1,3-DICHLOROPROPENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
CYCLOHEXANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
DICHLORODIFLUOROMETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
ETHYLBENZENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
ISOPROPYLBENZENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
M+P-XYLENES	2 U	2.5 U	2.55 U	2.6 U	2 U	2.4 U	1.8 U	1.7 U	3 U	2.2 U	2.4 U	2.5 U	2.6 U	3 U
METHYL ACETATE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
METHYL CYCLOHEXANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 UJ	1.1 U	1.2 UJ	1.25 U	1.3 U	1.5 U
METHYL TERT-BUTYL ETHER	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
METHYLENE CHLORIDE	7 U	40 U	23.8 U	7.6 U	6.2 U	25 U	7.6 U	8.2 U	14 U	7.7 U	12 U	30 U	48 U	12 U
O-XYLENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
STYRENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
TETRACHLOROETHENE	0.61 J	0.44 J	0.49 J	0.54 J	1 U	0.57 J	0.88 U	0.33 J	1.5 U	1.1 U	1.2 U	0.68 J	0.68 J	1.5 U
TOLUENE	1 U	0.23 J	0.23 J	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	0.21 J	0.21 J	1.5 U
TOTAL XYLENES	2 U	2.5 U	2.55 U	2.6 U	2 U	2.4 U	1.8 U	1.7 U	3 U	2.2 U	2.4 U	2.5 U	2.6 U	3 U
TRANS-1,2-DICHLOROETHENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
TRANS-1,3-DICHLOROPROPENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
TRICHLOROETHENE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
TRICHLOROFLUOROMETHANE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
VINYL CHLORIDE	1 U	1.3 U	1.3 U	1.3 U	1 U	1.2 U	0.88 U	0.87 U	1.5 U	1.1 U	1.2 U	1.25 U	1.3 U	1.5 U
VPH MADEP (MG/KG)														
C5-C8 ALIPHATICS	3.81 U	4.24 U	4.025 U	3.81 U	3.83 U	4.06 U	3.94 U	3.71 U	4.4 U	4.18 U	4.95 U	4.405 U	3.86 U	3.83 U
C5-C8 ALIPHATICS-UNADJ	3.81 U	4.24 U	4.025 U	3.81 U	3.83 U	4.06 U	3.94 U	3.71 U	4.4 U	4.18 U	4.95 U	4.405 U	3.86 U	3.83 U
C9-C10 AROMATICS	0.76 U	0.85 U	0.805 U	0.76 U	0.77 U	0.81 U	0.79 U	0.74 U	0.88 U	0.84 U	0.99 U	0.88 U	0.77 U	0.77 U
C9-C12 ALIPHATICS	3.81 U	4.24 U	4.025 U	3.81 U	3.83 U	4.06 U	3.94 U	3.71 U	4.4 U	4.18 U	4.95 U	4.405 U	3.86 U	3.83 U
C9-C12 ALIPHATICS-UNADJ	3.81 U	4.24 U	4.025 U	3.81 U	3.83 U	4.06 U	3.94 U	3.71 U	4.4 U	4.18 U	4.95 U	4.405 U	3.86 U	3.83 U

LOCATION	HA-SS01			HA-SS02	HA-SS03	HA-SS04	HA-SS05	HA-SS06	HA-SS07	HA-SS08	HA-SS09	HA-SS10	HA-SS11	HA-SS12	HA-SS13			HA-SS14	HA-SS15
SAMPLE ID	NASB-HA-SS01-0001	NASB-HA-SS01-0001-AVG	NASB-HA-SS01-0001-D	NASB-HA-SS02-0001	NASB-HA-SS03-0001	NASB-HA-SS04-0001	NASB-HA-SS05-0001	NASB-HA-SS06-0001	NASB-HA-SS07-0001	NASB-HA-SS08-0001	NASB-HA-SS09-0001	NASB-HA-SS10-0001	NASB-HA-SS11-0001	NASB-HA-SS12-0001	NASB-HA-SS13-0001	NASB-HA-SS13-0001-AVG	NASB-HA-SS13-0001-D	NASB-HA-SS14-0001	NASB-HA-SS15-0001
SAMPLE DATE	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005	20101005
SAMPLE CODE	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
TOP DEPTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BOTTOM DEPTH	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
METALS (MG/KG)																			
ALUMINUM	8600	8350	8100	9500	4700	7300	5700	8300	9300	5700	9100	5800	8700	8000	7300	7300	7300	7700	11000
ANTIMONY	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ARSENIC	8.8	7.85	6.9	6.5	2.5	4.1	7.7	12	5.2	3.8	5.7	5	6.6	6.4	5.7	5.75	5.8	5.2	7.3
BARIUM	29	31	33	69	17	58	36	32	47	51	41	23	38	54	120 J	78.5 J	37 J	350	640
BERYLLIUM	0.35	0.355	0.36	0.45	0.25	0.42	0.35	0.33	0.34	0.25	0.37	0.29	0.38	0.31	0.30	0.3	0.30	0.33	0.52
CADMIUM	0.15	0.145	0.14	0.37	0.084 J	0.46	0.79	0.21	0.33	0.23	0.12	1.3	0.091 J	0.14	0.25	0.27	0.29	0.85	0.33
CALCIUM	2200 J	2150 J	2100 J	5500 J	1300 J	5100 J	2500 J	1900 J	3200 J	1700 J	1800 J	1700 J	2100 J	5400 J	5800 J	5800 J	5800 J	3000 J	4700 J
CHROMIUM	22	20	18	24	7.4	19	12	17	23	9.8	20	12	16	29	17	17.5	18	37	38
COBALT	5.2	4.85	4.5	4.9	2.7	3.4	3.3	4.6	4.5	3.2	7.1	3.2	4.4	4.4	3.8	3.85	3.9	4.6	5.5
COPPER	18	15	12	16	6.4	13	12	11	13	7	18	8.3	11	8.6	9.4	9.7	10	25	16
IRON	14000	12500	11000	18000	7100	13000	8100	11000	12000	7700	12000	8100	11000	11000	13000	11500	10000	11000	17000
LEAD	21	20	19	18	5.5	20	24	11	20	7.4	9.5	9.1	8.1	8.8	11	12	13	93	48
MAGNESIUM	3500 J	3400 J	3300 J	3000 J	1500 J	2000 J	1700 J	2700 J	3200 J	1700 J	3600 J	2000 J	2600 J	3500 J	2700 J	2750 J	2800 J	2600 J	3500 J
MANGANESE	180	175	170	210	100	190	140	180	210	120	160	130	170	160	180	180	180	180	210
MERCURY	0.01 J	0.011 J	0.012 J	0.017 J	0.013 J	0.015 J	0.022 J	0.017 J	0.042	0.0089 U	0.0094 U	0.0099 U	0.017 J	0.012 J	0.012 J	0.008475 J	0.0099 U	0.024	0.01 J
NICKEL	20	18	16	19	7.4	14	11	14	16	10	29	10	13	18	13	14	15	15	20
POTASSIUM	1700	1750	1800	1600	760	960	710	1500	1800	960	1400	1100	1300	2200	1400	1350	1300	1300	2000
SELENIUM	0.54 U	0.54 U	0.54 U	0.54 U	0.53 U	0.54 U	0.59 U	0.53 U	0.60 U	0.53 U	0.55 U	0.51 U	0.55 U	0.55 U	0.56 U	0.545 U	0.53 U	0.56 U	0.55 U
SILVER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.11 U	0.10 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
SODIUM	140	145	150	340	97	300	170	160	170	110	210	130	260	210	190	185	180	180	460
THALLIUM	0.15 J	0.145 J	0.14 J	0.11 J	0.075 J	0.069 J	0.13 J	0.13 J	0.18 J	0.093 J	0.13 J	0.11 J	0.12 J	0.13 J	0.12 J	0.11 J	0.10 J	0.12 J	0.13 J
VANADIUM	21 J	20.5 J	20 J	24 J	12 J	16 J	15 J	21 J	25 J	13 J	21 J	15 J	20 J	23 J	19 J	18.5 J	18 J	21 J	29 J
ZINC	34	33.5	33	54	19	75	28	27	56	20	29	24	23	38	33	33.5	34	48	150
PCBS (UG/KG)																			
AROCLOR-1016	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U	16.5 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U
AROCLOR-1221	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U	16.5 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U
AROCLOR-1232	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U	16.5 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U
AROCLOR-1242	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U	16.5 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U
AROCLOR-1248	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U	16.5 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U
AROCLOR-1254	18 U	18 U	18 U	18 U	18 U	88	18 U	34 J	20 U	203	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U
AROCLOR-1260	18 U	18 U	18 UJ	18 U	18 UJ	18 UJ	18 UJ	18 UJ	20 U	16.5 U	18 U	18 U	18 U	18 U	18 UJ	18 U	18 UJ	18 UJ	20 UJ
AROCLOR-1262	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U	16.5 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U
AROCLOR-1268	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U	16.5 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	20 U

LOCATION	B7/10-SS01	B7/10-SS02	B7/10-SS03	B7/10-SS04	B7/10-SS05		B7/10-SS06		B7/10-SS07				B7/10-SS08	
SAMPLE ID	NASB-B7/10-SS-SS01-0001	NASB-B7/10-SS-SS02-0001	NASB-B7/10-SS-SS03-0001	NASB-B7/10-SS-SS04-0001	NASB-B7/10-SS-SS05-0001	NASB-B7/10-SS-SS05-0102	NASB-B7/10-SS-SS06-0001	NASB-B7/10-SS-SS06-0102	NASB-B7/10-SS-SS07-0001	NASB-B7/10-SS-SS07-0102	NASB-B7/10-SS-SS07-0102-D	NASB-B7/10-SS-SS07-0102-D	NASB-B7/10-SS-SS08-0001	NASB-B7/10-SS-SS08-0102
SAMPLE DATE	20101020	20101020	20101020	20101020	20101013	20101013	20101013	20101013	20101013	20101013	20101013	20101013	20101013	20101013
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
TOP DEPTH	0	0	0	0	0	1	0	1	0	1	1	1	0	1
BOTTOM DEPTH	1	1	1	1	1	2	1	2	1	2	2	2	1	2
PCBS (UG/KG)														
AROCLOR-1016	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U
AROCLOR-1221	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U
AROCLOR-1232	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U
AROCLOR-1242	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U
AROCLOR-1248	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U
AROCLOR-1254	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U
AROCLOR-1260	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U
AROCLOR-1262	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U
AROCLOR-1268	18 U	18 U	18 U	20 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U	16.5 U

LOCATION	B7/10-SB01								B7/10-SB02				B7/10-SB03		B7/10-SB04						
SAMPLE ID	NASB-B7/10-SB-SB01-0607	NASB-B7/10-SB-SB01-0607-AVG	NASB-B7/10-SB-SB01-0607-D	NASB-B7/10-SB-SB01-0607R	NASB-B7/10-SB-SB01-0607R-AVG	NASB-B7/10-SB-SB01-0607R-D	NASB-B7/10-SB-SB01-3435R	NASB-B7/10-SB-SB01-3435	NASB-B7/10-SB-SB02-0708	NASB-B7/10-SB-SB02-0708R	NASB-B7/10-SB-SB02-3940R	NASB-B7/10-SB-SB02-3940	NASB-B7/10-SB-SB03-1415	NASB-B7/10-SB-SB03-3334	NASB-B7/10-SB-SB04-0607	NASB-B7/10-SB-SB04-0607-AVG	NASB-B7/10-SB-SB04-0607-D	NASB-B7/10-SB-SB04-0607R	NASB-B7/10-SB-SB04-0607R-AVG	NASB-B7/10-SB-SB04-0607R-D	NASB-B7/10-SB-SB04-3839R
SAMPLE DATE	20101013	20101013	20101013	20101207	20101207	20101207	20101207	20101013	20101012	20101207	20101207	20101012	20101007	20101007	20101013	20101013	20101013	20101207	20101207	20101207	20101207
SAMPLE CODE	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
TOP DEPTH	6	6	6	6	6	6	34	34	7	7	39	39	14	33	6	6	6	6	6	6	38
BOTTOM DEPTH	7	7	7	7	7	7	35	35	8	8	40	40	15	34	7	7	7	7	7	7	39
EPH MADEP (MG/KG)																					
C11-C22 AROMATICS	29.9 U	30.05 U	30.2 U	NA	NA	NA	NA	32 U	28.3 U	NA	NA	32 U	31.2 U	32.3 U	29.9 U	30.15 U	30.4 U	NA	NA	NA	NA
C11-C22 AROMATICS-UNADJ	29.9 U	30.05 U	30.2 U	NA	NA	NA	NA	32 U	28.3 U	NA	NA	32 U	31.2 U	32.3 U	29.9 U	30.15 U	30.4 U	NA	NA	NA	NA
C19-C36 ALIPHATICS	29.9 U	30.05 U	30.2 U	NA	NA	NA	NA	32 U	28.3 U	NA	NA	32 U	31.2 U	32.3 U	29.9 U	30.15 U	30.4 U	NA	NA	NA	NA
C9-C18 ALIPHATICS	29.9 U	30.05 U	30.2 U	NA	NA	NA	NA	32 U	28.3 U	NA	NA	32 U	31.2 U	32.3 U	29.9 U	30.15 U	30.4 U	NA	NA	NA	NA
METALS (MG/KG)																					
ALUMINUM	4800	4700	4600	NA	NA	NA	NA	5600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTIMONY	1.1 U	1.1 U	1.1 U	NA	NA	NA	NA	1.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC	1.9	2	2.1	NA	NA	NA	NA	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BARIUM	13	12.5	12	NA	NA	NA	NA	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BERYLLIUM	0.27	0.26	0.25	NA	NA	NA	NA	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CADMIUM	0.057 U	0.056 U	0.055 U	NA	NA	NA	NA	0.035 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CALCIUM	750	755	760	NA	NA	NA	NA	1800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	7.8	7.7	7.6	NA	NA	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
COBALT	2.8	2.7	2.6	NA	NA	NA	NA	3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
COPPER	5.1	5.9	5.7	NA	NA	NA	NA	6.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IRON	8500	8300	8100	NA	NA	NA	NA	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD	2.3	2.3	2.3	NA	NA	NA	NA	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MAGNESIUM	1900	1850	1800	NA	NA	NA	NA	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	98	92.5	87	NA	NA	NA	NA	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MERCURY	0.0095 U	0.0095 U	0.0095 U	NA	NA	NA	NA	0.012 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NICKEL	7.1	6.75	6.4	NA	NA	NA	NA	9.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POTASSIUM	880	855	830	NA	NA	NA	NA	1800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SELENIUM	0.57 U	0.56 U	0.55 U	NA	NA	NA	NA	0.61 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SILVER	0.11 U	0.11 U	0.11 U	NA	NA	NA	NA	0.12 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SODIUM	120	125	130	NA	NA	NA	NA	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
THALLIUM	0.092 J	0.0865	0.081 J	NA	NA	NA	NA	0.12 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VANADIUM	14	14	14	NA	NA	NA	NA	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZINC	16	15.5	15	NA	NA	NA	NA	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)																					
2-METHYLNAPHTHALENE	6 UR	6 R	6 UR	3.01 J	3.01 J	6 U	6 U	6 UR	5 UR	6 U	6 U	6 UR	6 U	6 U	6 UR	155 R	304 UR	6 U	6 U	6 U	6 U
ACENAPHTHENE	6 UR	6 R	6 UR	2.02 J	2.02 J	6 U	6 U	6 UR	5 UR	6 U	6 U	6 UR	6 U	6 U	6 UR	155 R	304 UR	6 U	6 U	6 U	6 U
ACENAPHTHYLENE	6 UR	6 R	6 UR	2.47 J	2.47 J	6 U	6 U	6 UR	5 UR	6 U	6 U	6 UR	6 U	6 U	6 UR	155 R	304 UR	6 U	6 U	6 U	6 U
ANTHRACENE	6 UR	6 R	6 UR	1.76 J	1.76 J	6 U	1.26 J	6 UR	5 UR	6 U	2.43 J	6 UR	6 U	2.4 J	6 UR	1.18 J	1.18 J	6 U	6 U	6 U	6 U
BENZO(A)ANTHRACENE	6 UR	6 R	6 UR	6 U	6 U	6 U	6 U	6 UR	5 UR	6 U	6 U	6 UR	6 U	6 U	6 UR	155 R	304 UR	6 U	6 U	6 U	6 U
BENZO(A)PYRENE	6 UR	6 R	6 UR	6 U	6 U	6 U	6 U	6 UR	5 UR	6 U	6 U	6 UR	6 U	6.5 U	6 UR	2.74 J	2.74 J	6 U	6 U	6 U	6 U
BENZO(B)FLUORANTHENE	1.06 J	1.25	1.44 J	1.24 J	1.24 J	6 U	6 U	1.2 J	5 UR	1.32 J	4.36 J	6 UR	6 U	6.5 U	6 UR	4.35 J	4.35 J	1.32 J	1.39	1.46 J	2.19 J
BENZO(G,H,I)PERYLENE	1.15 J	1.15 J	6 UR	1.16 J	1.16 J	6 U	6 U	6 UR	5 UR	1.71 J	1.41 J	6 UR	6 U	6 U	6 UR	155 R	304 UR	0.901 J	0.901 J	6 U	2.46 J
BENZO(K)FLUORANTHENE	6 UR	6 R	6 UR	6 U	6 U	6 U	6 U	6 UR	5 UR	6 U	1.78 J	6 UR	6 U	6 U	6 UR	2 J	2 J	6 U	6 U	6 U	1.84 J
CHRYSENE	1.12 J	1.085	1.05 J	1.32 J	1.32 J	6 U	0.957 J	6 UR	5 UR	1.19 J	3.45 J	6 UR	6 U	6 U	6 UR	2.97 J	2.97 J	1.13 J	1.21	1.29 J	1.46 J
DIBENZO(A,H)ANTHRACENE	6 UR	6 R	6 UR	6 U	6 U	6 U	6 U	6 UR	5 UR	6 U	6 U	6 UR	6 U	6 U	6 UR	155 R	304 UR	6 U	6 U	6 U	1.66 J
FLUORANTHENE	1.44 J	1.72	2 J	2.21 J	1.66	1.11 J	1.67 J	6 UR	1.28 J	2.21 J	10.2 J	6 UR	6 U	8.1 U	6 UR	6.15 J	6.15 J	1.94 J	2.3	2.66 J	6 U
FLUORENE	6 UR	6 R	6 UR	2.05 J	2.05 J	6 U	6 U	6 UR	5 UR	6 U	1.16 J	6 UR	6 U	1.6 J	6 UR	155 R	304 UR	6 U	6 U	6 U	6 U
INDENO(1,2,3-CD)PYRENE	1.07 J	0.955	0.84 J	1.44 J	1.44 J	6 U	0.858 J	0.93 J	5 U	0.907 J	1.9 J	6 UR	6 U	8.1 U	6 UR	2.75 J	2.75 J	0.924 J	0.9055	0.887 J	3.37 J
NAPHTHALENE	6 UR	6 R	6 UR	3.36 J	3.36 J	6 U	6 U	6 UR	5 UR	6 U	6 U	6 UR	6 U	6 U	6 UR	155 R	304 UR	6 U	6 U	6 U	6 U
PHENANTHRENE	6 U	6 U	6 U	3.21 J	2.11	1.01 J	3.31 J	6 UR	1.09 J	2.28 J	7.96 J	6 UR	6 U	5.7 J	6 UR	6 U	6 U	2.25 J	2.185	2.12 J	6 U
PYRENE	1.52 J	1.55	1.58 J	2.37 J	1.695	1.02 J	1.5 J	6 UR	6 U	2.15 J	8.19 J	6 UR	6 U	6 U	6 UR	5.37 J	5.37 J	2.01 J	2.62	3.23 J	1.24 J
SEMIVOLATILES (UG/KG)																					
1,1-BIPHENYL	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
1,2,4,5-TETRACHLOROBENZENE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
2,2'-OXYBIS(1-CHLOROPROPANE)	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
2,3,4,6-TETRACHLOROPHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 U	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
2,4,5-TRICHLOROPHENOL	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
2,4,6-TRICHLOROPHENOL	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
2,4-DICHLOROPHENOL	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
2,4-DIMETHYLPHENOL	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
2,4-DINITROPHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 UJ	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
2,4-DINITROTOLUENE	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
2,6-DINITROTOLUENE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
2-CHLORONAPHTHALENE	150 UR	149.5 R	149 UR	147 U	147.5 U	148 U	166 U	165 UR	144 UR	158 U	164 U	156 UR	153 U	163 U	153 UR	150.5 R	148 UR	152 U	153 U	154 U	169 U
2-CHLOROPHENOL	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
2-METHYLPHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 U	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
2-NITROANILINE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
2-NITROPHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 U	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
3&4-METHYLPHENOL	395 UR	393 R	391 UR	NA	NA	NA	NA	434 UR	378 UR	NA	NA	410 UR	404 U	428 U	404 UR	397 R	390 UR	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U

LOCATION	B7/10-SB01								B7/10-SB02				B7/10-SB03		B7/10-SB04						
SAMPLE ID	NASB-B7/10-SB-SB01-0607	NASB-B7/10-SB-SB01-0607-AVG	NASB-B7/10-SB-SB01-0607-D	NASB-B7/10-SB-SB01-0607R	NASB-B7/10-SB-SB01-0607R-AVG	NASB-B7/10-SB-SB01-0607R-D	NASB-B7/10-SB-SB01-3435R	NASB-B7/10-SB-SB01-3435	NASB-B7/10-SB-SB02-0708	NASB-B7/10-SB-SB02-0708R	NASB-B7/10-SB-SB02-3940R	NASB-B7/10-SB-SB02-3940	NASB-B7/10-SB-SB03-1415	NASB-B7/10-SB-SB03-3334	NASB-B7/10-SB-SB04-0607	NASB-B7/10-SB-SB04-0607-AVG	NASB-B7/10-SB-SB04-0607-D	NASB-B7/10-SB-SB04-0607R	NASB-B7/10-SB-SB04-0607R-AVG	NASB-B7/10-SB-SB04-0607R-D	NASB-B7/10-SB-SB04-3839R
SAMPLE DATE	20101013	20101013	20101013	20101207	20101207	20101207	20101207	20101013	20101012	20101207	20101207	20101012	20101007	20101007	20101013	20101013	20101013	20101207	20101207	20101207	20101207
SAMPLE CODE	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
TOP DEPTH	6	6	6	6	6	6	34	34	7	7	39	39	14	33	6	6	6	6	6	6	38
BOTTOM DEPTH	7	7	7	7	7	7	35	35	8	8	40	40	15	34	7	7	7	7	7	7	39
3-METHYLPHENOL	NA	NA	NA	387 U	389 U	391 U	436 U	NA	NA	416 U	431 U	NA	NA	NA	NA	NA	NA	400 U	402.5 U	405 U	444 U
3-NITROANILINE	282 UR	281 R	280 UR	276 UJ	277.5 U	279 UJ	311 UJ	310 UR	270 UR	297 UJ	308 UJ	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 UJ	287 U	289 UJ	317 UJ
4,6-DINITRO-2-METHYLPHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 U	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
4-BROMOPHENYL PHENYL ETHER	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
4-CHLORO-3-METHYLPHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 U	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
4-CHLOROANILINE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
4-CHLOROPHENYL PHENYL ETHER	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
4-NITROANILINE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
4-NITROPHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 U	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
ACETOPHENONE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 UJ	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
ATRAZINE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
BENZALDEHYDE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
BIS(2-CHLOROETHOXY)METHANE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
BIS(2-CHLOROETHYL)ETHER	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
BIS(2-ETHYLHEXYL)PHTHALATE	282 U	281 U	280 U	276 U	277.5 U	279 U	311 U	310 U	270 U	297 U	308 U	293 U	288 U	306 U	288 U	283.5 U	279 U	285 U	287 U	289 U	317 U
BUTYL BENZYL PHTHALATE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
CAPROLACTAM	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
CARBAZOLE	151 UR	150.5 R	150 UR	148 U	149 U	150 U	167 U	166 UR	145 UR	159 U	165 U	157 UR	155 UJ	164 U	155 UR	152 R	149 UR	153 U	154 U	155 U	170 U
DIBENZOFURAN	151 UR	150.5 R	150 UR	148 U	149 U	150 U	167 U	166 UR	145 UR	159 U	165 U	157 UR	155 U	164 U	155 UR	152 R	149 UR	153 U	154 U	155 U	170 U
DIETHYL PHTHALATE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
DIMETHYL PHTHALATE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
DI-N-BUTYL PHTHALATE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 U	297 U	308 U	293 U	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
DI-N-OCTYL PHTHALATE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
HEXACHLOROBENZENE	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
HEXACHLOROBUTADIENE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
HEXACHLOROCYCLOPENTADIENE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 UJ	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
HEXACHLOROETHANE	197 UR	196.5 R	196 UR	194 U	194.5 U	195 U	218 U	217 UR	189 UR	208 U	215 U	205 UR	202 U	214 U	202 UR	198.5 R	195 UR	200 U	201 U	202 U	222 U
ISOPHORONE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
NITROBENZENE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
N-NITROSO-DI-N-PROPYLAMINE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
N-NITROSODIPHENYLAMINE	282 UR	281 R	280 UR	276 U	277.5 U	279 U	311 U	310 UR	270 UR	297 U	308 U	293 UR	288 U	306 U	288 UR	283.5 R	279 UR	285 U	287 U	289 U	317 U
PENTACHLOROPHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 U	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
PHENOL	395 UR	393 R	391 UR	387 U	389 U	391 U	436 U	434 UR	378 UR	416 U	431 U	410 UR	404 U	428 U	404 UR	397 R	390 UR	400 U	402.5 U	405 U	444 U
VOLATILES (UG/KG)																					
1,1,1-TRICHLOROETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,1,2,2-TETRACHLOROETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,1-DICHLOROETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,1-DICHLOROETHENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,2,3-TRICHLOROBENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 UJ	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,2-DIBROMOETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,2-DICHLOROBENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 UJ	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,2-DICHLOROETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,2-DICHLOROPROPANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,4-DICHLOROBENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
1,4-DIOXANE	14 UR	13.5 R	13 UR	NA	NA	NA	NA	15 UR	16 UR	NA	NA	14 UR	16 UR	12 UR	19 UR	16.5 R	14 UR	NA	NA	NA	NA
2-BUTANONE	4.7 U	4.5 U	4.3 U	NA	NA	NA	NA	3.5 J	5.4 U	NA	NA	4.7 U	5.2 U	2.5 J	6.3 U	5.5 U	4.7 U	NA	NA	NA	NA
2-HEXANONE	4.7 U	4.5 U	4.3 U	NA	NA	NA	NA	5.1 U	5.4 U	NA	NA	4.7 U	5.2 U	4.1 U	6.3 U	5.5 U	4.7 U	NA	NA	NA	NA
4-METHYL-2-PENTANONE	4.7 U	4.5 U	4.3 U	NA	NA	NA	NA	5.1 U	5.4 U	NA	NA	4.7 U	5.2 U	4.1 U	6.3 U	5.5 U	4.7 U	NA	NA	NA	NA
ACETONE	7.3 U	7.1 U	6.9 U	NA	NA	NA	NA	29 U	9.4 U	NA	NA	17 U	9.9 U	47 U	11 U	10.15 U	9.3 U	NA	NA	NA	NA
BENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.29 J	1.1 U	NA	NA	0.95 U	1 U	0.83 J	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
BROMOCHLOROMETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
BROMODICHLOROMETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
BROMOFORM	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
BROMOMETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CARBON DISULFIDE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	1	1.1 U	NA	NA	1.7 J	1 U	0.26 J	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CARBON TETRACHLORIDE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CHLOROBENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CHLORODIBROMOMETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CHLOROETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CHLOROFORM	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CHLOROMETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.65 J	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
CYCLOHEXANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
DICHLORODIFLUOROMETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
ETHYLBENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
ISOPROPYLBENZENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
M+P-XYLENES	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	2.2 U	NA	NA	1.9 U	2.1 U	1.6 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
METHYL ACETATE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
METHYL CYCLOHEXANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 UJ	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
METHYLENE CHLORIDE	6.4 U	6.1 U	5.8 U	NA	NA	NA	NA	6.4 U	7.9 U	NA	NA	7.6 U	8.6 U	7.6 U	7.3 U	7.25 U	7.2 U	NA	NA	NA	NA
O-XYLENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
STYRENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
TETRACHLOROETHENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.7 J	NA	NA	0.95 U	1 U	0.33 J	1.1 U	1.575	2.6	NA	NA	NA	NA
TOLUENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
TOTAL XYLENES	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	2.2 U	NA	NA	1.9 U	2.1 U	1.6 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
TRICHLOROETHENE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.16 J	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
VINYL CHLORIDE	0.47 U	0.45 U	0.43 U	NA	NA	NA	NA	0.51 U	1.1 U	NA	NA	0.95 U	1 U	0.82 U	0.63 U	0.55 U	0.47 U	NA	NA	NA	NA
VPH MADEP (MG/KG)																					
C5-C8 ALIPHATICS	3.15 U	3.225 U	3.3 U	NA	NA	NA	NA	3.7 U	3.05 U	NA	NA	3.8 U	3.55 U	3.6 U	4.05 U	3.75 U	3.45 U	NA	NA	NA	NA
C5-C8 ALIPHATICS-UNADJ	3.15 U	3.225 U	3.3 U	NA	NA	NA	NA	3.7 U	3.05 U	NA	NA	3.8 U	3.55 U	3.6 U	4.05 U	3.75 U	3.45 U	NA	NA	NA	NA
C9-C10 AROMATICS	0.63 U	0.645 U	0.66 U	NA	NA	NA	NA	0.74 U	0.61 U	NA	NA	0.76 U	0.71 U	0.72 U	0.81 U	0.75 U	0.69 U	NA	NA	NA	NA
C9-C12 ALIPHATICS	3.15 U	3.225 U	3.3 U	NA	NA	NA	NA	3.7 U	3.05 U	NA	NA	3.8 U	3.55 U	3.6 U	4.05 U	3.75 U	3.45 U	NA	NA	NA	NA
C9-C12 ALIPHATICS-UNADJ	3.15 U	3.225 U	3.3 U	NA	NA	NA	NA	3.7 U	3.05 U	NA	NA	3.8 U	3.55 U	3.6 U	4.05 U	3.75 U	3.45 U	NA	NA	NA	NA

	B7/10-SB05				B7/10-SB06		B7/10-SB07		B7/10-SB08				B7/10-SB09								
NASB-B7/10-SB-SB04-3839	NASB-B7/10-SB-SB05-0607	NASB-B7/10-SB-SB05-0607R	NASB-B7/10-SB-SB05-4041R	NASB-B7/10-SB-SB05-4041	NASB-B7/10-SB-SB06-0607	NASB-B7/10-SB-SB06-3940	NASB-B7/10-SB-SB07-0910	NASB-B7/10-SB-SB07-1819	NASB-B7/10-SB-SB08-1112	NASB-B7/10-SB-SB08-1112R	NASB-B7/10-SB-SB08-3940R	NASB-B7/10-SB-SB08-3940	NASB-B7/10-SB-SB09-0607	NASB-B7/10-SB-SB09-0607-AVG	NASB-B7/10-SB-SB09-0607-D	NASB-B7/10-SB-SB09-0607R	NASB-B7/10-SB-SB09-0607R-AVG	NASB-B7/10-SB-SB09-0607R-D	NASB-B7/10-SB-SB09-2021R	NASB-B7/10-SB-SB09-2021	NASB-B7/10-SB-SB10-0506
20101013	20101012	20101208	20101208	20101012	20101008	20101008	20101007	20101007	20101014	20101207	20101208	20101014	20101014	20101014	20101014	20101208	20101208	20101208	20101208	20101014	20101014
NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL
SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
38	6	6	40	40	6	39	9	18	11	11	39	39	6	6	6	6	6	6	20	20	5
39	7	7	41	41	7	40	10	19	12	12	40	40	7	7	7	7	7	7	21	21	6
32.8 U	30.4 U	NA	NA	32.8 U	30.7 U	32.3 U	30.7 U	30.7 U	103	NA	NA	32.6 U	29.9 U	30.55 U	31.2 U	NA	NA	NA	NA	31.2 U	29.4 U
32.8 U	30.4 U	NA	NA	32.8 U	30.7 U	32.3 U	30.7 U	30.7 U	104	NA	NA	32.6 U	29.9 U	30.55 U	31.2 U	NA	NA	NA	NA	31.2 U	29.4 U
32.8 U	30.4 U	NA	NA	32.8 U	30.7 U	32.3 U	30.7 U	30.7 U	714	NA	NA	32.6 U	29.9 U	30.55 U	31.2 U	NA	NA	NA	NA	31.2 U	29.4 U
32.8 U	30.4 U	NA	NA	32.8 U	30.7 U	32.3 U	30.7 U	30.7 U	201 J	NA	NA	32.6 U	29.9 U	30.55 U	31.2 U	NA	NA	NA	NA	31.2 U	29.4 U
NA	6900	NA	NA	9500	5600 J	11000 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	1.2 U	NA	NA	1.2 U	1.1 U	1.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	2.3	NA	NA	4.2	1.4	3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	55 J	NA	NA	39 J	14 J	48 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	0.27	NA	NA	0.37	0.24	0.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	0.043 J	NA	NA	0.034 J	0.037 J	0.054 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	910	NA	NA	3000	880 J	3000 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	18 J	NA	NA	20 J	7.6	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	3.7 J	NA	NA	6.7 J	3.3	8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	5.9	NA	NA	13	5 J	18 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	9100	NA	NA	17000	6100 J	19000 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	2.9	NA	NA	4.5	2.8 J	6.5 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	2900 J	NA	NA	4700 J	1800 J	5500 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	140 J	NA	NA	300 J	150 J	500 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	0.01 U	NA	NA	0.011 U	0.0095 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	12 J	NA	NA	16 J	7.1	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	2100 J	NA	NA	2800 J	800	3200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	0.58 U	NA	NA	0.62 U	0.54 U	0.59 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	0.12 U	NA	NA	0.12 U	0.11 UJ	0.12 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	170 J	NA	NA	250 J	94 J	260 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	0.13 J	NA	NA	0.19 J	0.091 J	0.18 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	17 J	NA	NA	27 J	13	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	27 J	NA	NA	35 J	16 J	44 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6 UR	3.37 J	9.97 J	6 U	6 UR	6 U	6 U	6 U	6 U	120 J	3600	6 U	6 UR	6 UR	6 R	6 UR	6 U	2.64 J	2.64 J	6 U	6 UR	6 UR
6 UR	4.65 J	15.5	6 U	6 UR	6 U	6 U	6 U	6 U	2.25 J	6 U	1.1 J	6 UR	6 UR	1.37 J	1.37 J	6 U	4.29 J	4.29 J	6 U	6 UR	6 UR
6 UR	85.4 J	138	6 U	6 UR	6 U	6 U	6 U	6 U	7 UR	6 U	12.1	6 UR	6 UR	2.14 J	2.14 J	6 U	10.6	18.2	6 U	6 UR	6 UR
6 UR	24 J	113	6 U	6 UR	6 U	6 U	6 U	6 U	3.98 J	47.5	2.83 J	6 UR	6 UR	1.49 J	1.49 J	6 U	6.75	10.5 J	6 U	6 UR	6 UR
6 UR	230 J	448	6 U	6 UR	6 U	6 U	6 U	6 U	7 UR	6 U	12.4	6 UR	6 UR	6 R	6 UR	6 U	6 U	6 U	6 U	6 UR	6 UR
6 UR	170 J	292	6 U	6 UR	6 U	6 U	6 U	6 U	4.36 J	6 U	11.4 U	6 UR	6 UR	2.48 J	2.48 J	6 U	8.6	14.2	6 U	6 UR	6 UR
6 UR	228 J	429	6 U	6 UR	6 U	6 U	6 U	6 U	5.47 J	6 U	9.43 J	6 UR	1.71 J	2.665	3.62 J	2.49 J	8.595	14.7	6 U	6 UR	6 UR
6 UR	133 J	217	0.997 J	6 UR	6 U	6 U	6 U	6 U	7 U	6 U	8.83 J	6 UR	6 U	6 U	6 U	1.39 J	6.095	10.8 J	6 U	6 UR	6 UR
6 UR	71 J	121	6 U	6 UR	6 U	6 U	6 U	6 U	4.03 J	6 U	4.14 J	6 UR	6 UR	2 J	2 J	6 U	5.84 J	5.84 J	6 U	6 UR	6 UR
6 UR	173 J	338	6 U	6 UR	6 U	6 U	6 U	6 U	7 U	37.6	5.42 J	6 UR	6 U	6 U	6 U	1.87 J	5.58	9.29 J	6 U	6 UR	6 UR
6 UR	30.7 J	52.2	6 U	6 UR	6 U	6 U	6 U	6 U	1.96 J	6 U	2.65 J	6 UR	6 UR	6 R	6 UR	6 U	1.86 J	1.86 J	6 U	6 UR	6 UR
6 UR	213 J	619	6 U	6 UR	6 U	6 U	6 U	6 U	7.32 J	82.7	5.76 J	6 UR	2.06 J	3.475	4.89 J	4.19 J	11.745	19.3	6 U	6 UR	6 UR
6 UR	8.11 J	42.3	6 U	6 UR	6 U	6 U	6 U	6 U	6.97 J	135	1.93 J	6 UR	6 UR	1.29 J	1.29 J	6 U	4.875	6.75 J	6 U	6 UR	6 UR
6 UR	148 J	279	1.08 J	6 UR	7 U	7.9 U	6 U	6 U	7 U	6 U	9.9 J	6 UR	6 U	6 U	6 U	1.7 J	7.05	12.4	6 U	6 UR	6 UR
6 UR	4.6 J	8.15 J	6 U	6 UR	6 U	6 U	6 U	6 U	277 J	3870	6 U	6 UR	6 UR	6 R	6 UR	6 U	6 U	6 U	6 U	6 UR	6 UR
6 UR	37.2 J	436	6 U	6 UR	1.6 J	6 U	1.6 J	6 U	11 J	226	2.96 J	6 UR	1.19 J	1.94	2.69 J	3.91 J	9.805	15.7	6 U	6 UR	6 UR
6 UR	261 J	662	6 U	6 UR	6 U	6 U	6 U	6 U	10.6 J	150	11.2 J	6 UR	6 U	6 U	6 U	3.84 J	11.42	19	6 U	6 UR	6 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
422 UR	403 UR	370 U	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
422 UR	403 UR	370 UR	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
160 UR	153 UR	141 U	167 U	156 UR	156 U	157 U	158 U	151 U	183 UR	168 U	160 U	161 UR	153 UR	153 R	153 UR	156 U	154 U	152 U	157 U	153 UR	148 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
422 UR	403 UR	370 U	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
422 UR	403 UR	370 U	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
422 UR	403 UR	NA	NA	410 UR	410 U	413 U	416 U	397 U	483 UR	NA	NA	423 UR	402 UR	402.5 R	403 UR	NA	NA	NA	NA	402 UR	389 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR

	B7/10-SB05				B7/10-SB06		B7/10-SB07		B7/10-SB08						B7/10-SB09							
NASB-B7/10-SB-SB04-3839	NASB-B7/10-SB-SB05-0607	NASB-B7/10-SB-SB05-0607R	NASB-B7/10-SB-SB05-4041R	NASB-B7/10-SB-SB05-4041	NASB-B7/10-SB-SB06-0607	NASB-B7/10-SB-SB06-3940	NASB-B7/10-SB-SB07-0910	NASB-B7/10-SB-SB07-1819	NASB-B7/10-SB-SB08-1112	NASB-B7/10-SB-SB08-1112R	NASB-B7/10-SB-SB08-3940R	NASB-B7/10-SB-SB08-3940	NASB-B7/10-SB-SB09-0607	NASB-B7/10-SB-SB09-0607-AVG	NASB-B7/10-SB-SB09-0607-D	NASB-B7/10-SB-SB09-0607R	NASB-B7/10-SB-SB09-0607R-AVG	NASB-B7/10-SB-SB09-0607R-D	NASB-B7/10-SB-SB09-2021R	NASB-B7/10-SB-SB09-2021	NASB-B7/10-SB-SB10-0506
20101013	20101012	20101208	20101208	20101012	20101008	20101008	20101007	20101007	20101014	20101207	20101208	20101014	20101014	20101014	20101014	20101208	20101208	20101208	20101208	20101014	20101014
NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL	NORMAL	NORMAL
SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
38	6	6	40	40	6	39	9	18	11	11	39	39	6	6	6	6	6	6	20	20	5
39	7	7	41	41	7	40	10	19	12	12	40	40	7	7	7	7	7	7	21	21	6
NA	NA	370 U	438 U	NA	NA	NA	NA	NA	NA	441 U	422 U	NA	NA	NA	NA	410 U	405 U	400 U	414 U	NA	NA
301 UR	288 UR	264 UJ	313 UJ	293 UR	293 U	295 U	297 U	283 U	345 UR	315 UJ	301 UJ	302 UR	287 UR	287.5 R	288 UR	293 UJ	289 U	285 UJ	296 UJ	287 UR	278 UR
422 UR	403 UR	370 UJ	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
422 UR	403 UR	370 U	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
422 UR	403 UR	370 U	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
301 UR	288 UR	264 U	313 U	293 UR	293 UJ	295 UJ	297 U	283 UJ	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	98 J	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	103 J	101.5	100 J	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
301 U	288 U	264 U	313 U	293 U	293 U	295 U	297 U	283 U	345 U	865	301 U	302 U	287 U	287.5 U	288 U	293 U	289 U	285 U	296 U	287 U	278 U
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
162 UR	154 UR	142 U	168 U	157 UR	157 U	158 U	159 UJ	152 U	185 UR	169 U	161 U	162 UR	154 UR	154 R	154 UR	157 U	155 U	153 U	159 U	154 UR	149 UR
162 UR	154 UR	16 J	168 U	157 UR	157 U	158 U	159 U	152 U	185 UR	169 U	161 U	162 UR	154 UR	154 R	154 UR	157 U	155 U	153 U	159 U	154 UR	149 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 U	264 U	313 U	293 U	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 U	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 UJ	295 UJ	297 U	283 UJ	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
211 UR	201 UR	185 U	219 U	205 UR	205 U	206 U	208 U	198 U	241 UR	221 U	211 U	211 UR	201 UR	201 R	201 UR	205 U	202.5 U	200 U	207 U	201 UR	194 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
301 UR	288 UR	264 U	313 U	293 UR	293 U	295 U	297 U	283 U	345 UR	315 U	301 U	302 UR	287 UR	287.5 R	288 UR	293 U	289 U	285 U	296 U	287 UR	278 UR
422 UR	403 UR	370 U	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
422 UR	403 UR	370 U	438 U	410 UR	410 U	413 U	416 U	397 U	483 UR	441 U	422 U	423 UR	402 UR	402.5 R	403 UR	410 U	405 U	400 U	414 U	402 UR	389 UR
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 UJ	NA	NA	1.1 U	1.2 U	1.2 U	1.1 UJ	1.1 UJ	0.97 J	NA	NA	1.1 U	0.75 J	0.925	1.1 J	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 UJ	NA	NA	1.1 U	1.2 U	1.2 U	1.1 UJ	1.1 UJ	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 UJ	NA	NA	1.1 U	1.2 U	1.2 U	1.1 UJ	1.1 UJ	49	NA	NA	1.1 U	0.72 J	0.68	0.64 J	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	13	NA	NA	1.1 U	0.34 J	0.315	0.29 J	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 UJ	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	31	NA	NA	1.1 U	0.39 J	0.375	0.36 J	NA	NA	NA	NA	1.3 U	1.1 U
21 UR	15 UR	NA	NA	17 UR	18 UR	18 UR	16 UR	16 UR	20 UR	NA	NA	17 UR	13 UR	16.5 R	20 UR	NA	NA	NA	NA	19 UR	17 UR
4 J	5.1 U	NA	NA	3.6 J	6 U	2 J	5.3 U	5.3 U	15	NA	NA	5.7 U	4.5 U	5.65 U	6.8 U	NA	NA	NA	NA	6.4 U	5.5 U
7 U	5.1 U	NA	NA	5.7 U	6 U	5.9 U	5.3 U	5.3 U	6.6 U	NA	NA	5.7 U	4.5 U	5.65 U	6.8 U	NA	NA	NA	NA	6.4 U	5.5 U
7 U	5.1 U	NA	NA	5.7 U	6 U	5.9 U	5.3 U	5.3 U	6.6 U	NA	NA	5.7 U	4.5 U	5.65 U	6.8 U	NA	NA	NA	NA	6.4 U	5.5 U
31 U	6 U	NA	NA	27 U	22 U	31 U	18 U	22 U	67	NA	NA	8.3 J	8.8 J	6.55	4.3 J	NA	NA	NA	NA	22	3.2 J
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.6 J	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.7 J	1.2 U	1.2 U	0.83 J	1.1 U	1.9 J	NA	NA	1.1 U	0.90 U	1.075	1.7 J	NA	NA	NA	NA	0.63 J	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	56	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	0.43 J	1.1 U	1.1 U	4.9	NA	NA	1.1 U	4.3	2.9	1.5 J	NA	NA	NA	NA	0.39 J	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	2.7	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.5 J	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	2.1 U	NA	NA	2.3 U	2.4 U	2.4 U	2.1 U	2.1 U	6.9	NA	NA	2.3 U	1.8 U	2.25 U	2.7 U	NA	NA	NA	NA	2.6 U	2.2 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	0.15 J	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 J	NA	NA	1.1 U	1.8	1.37	0.94 J	NA	NA	NA	NA	0.49 J	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
0.70 U	1 U	NA	NA	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.3 U	NA	NA	1.1 U	0.90 U	1.15 U	1.4 U	NA	NA	NA	NA	1.3 U	1.1 U
4 U	3.5 U	NA	NA	4.4 U	4 U	3.5 U	3.4 U	3.55 U	5.578 U	NA	NA	3.83 U	3.87 U	3.915 U	3.96 U	NA	NA	NA	NA	3.62 U	3.01 U
4 U	3.5 U	NA	NA	4.4 U	4 U	3.5 U	3.4 U	3.55 U	5.578 U	NA	NA	3.83 U	3.87 U	3.915 U	3.96 U	NA	NA	NA	NA	3.62 U	3.01 U
0.80 U	0.70 U	NA	NA	0.88 U	0.80 U	0.70 U	0.68 U	0.71 U	64.8	NA	NA	0.77 U	0.77 U	0.78 U	0.79 U	NA	NA	NA	NA	0.72 U	0.60 U
4 U	3.5 U	NA	NA	4.4 U	4 U	3.5 U	3.4 U	3.55 U	66.9	NA	NA	3.83 U	3.87 U	3.915 U	3.96 U	NA	NA	NA	NA	3.62 U	3.01 U
4 U	3.5 U	NA	NA	4.4 U	4 U	3.5 U	3.4 U	3.55 U	5.578 U	NA	NA	3.83 U	3.87 U	3.915 U	3.96 U	NA	NA	NA	NA	3.62 U	3.01 U

B7/10-SB10			B7/10-SB11			
NASB-B7/10-SB-SB10-0506R	NASB-B7/10-SB-SB10-2122	NASB-B7/10-SB-SB10-2122R	NASB-B7/10-SB-SB11-0708	NASB-B7/10-SB-SB11-0708R	NASB-B7/10-SB-SB11-3940R	NASB-B7/10-SB-SB11-3940
20101208	20101014	20101208	20101014	20101208	20101208	20101014
NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SO	SO	SO	SO	SO	SO	SO
NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SB	SB	SB	SB	SB	SB	SB
5	21	21	7	7	39	39
6	22	22	8	8	40	40
NA	33.1 U	NA	31 U	NA	NA	31.8 U
NA	33.1 U	NA	31 U	NA	NA	31.8 U
NA	33.1 U	NA	31 U	NA	NA	31.8 U
NA	33.1 U	NA	31 U	NA	NA	31.8 U
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
6 U	6 UR	6 U	6 UR	6 U	6 U	6 UR
6 U	6 UR	6 U	6 UR	6 U	6 U	6 UR
6 U	6 UR	6 U	6 UR	6 U	6 U	6 UR
1.54 J	6 UR	6 U	6 UR	3.11 J	6 U	6 UR
6 U	6 UR	6 U	6 UR	6 U	6 U	6 UR
6 U	6 UR	6 U	6 UR	7.91 U	6 U	6 UR
4.72 J	6 UR	6 U	6 UR	7.74 J	6 U	6 UR
2.41 J	6 UR	6 U	6 UR	3.44 J	6 U	6 UR
2.14 J	6 UR	6 U	6 UR	2.95 J	6 U	6 UR
2.95 J	6 UR	6 U	6 UR	5.39 J	6 U	6 UR
6 U	6 UR	6 U	6 UR	6 U	6 U	6 UR
7.38 J	6 UR	6 U	6 UR	17.4	6 U	6 UR
1.26 J	6 UR	6 U	6 UR	1.16 J	6 U	6 UR
2.9 J	6 UR	6 U	6 UR	4.65 J	6 U	6 UR
6 U	6 UR	6 U	6 UR	6 U	6 U	6 UR
5.04 J	6 UR	6 U	6 UR	10 J	6 U	6 UR
6.56 J	6 UR	6 U	6 UR	13.4	6 U	6 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
151 U	165 UR	168 U	152 UR	165 U	164 U	158 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR
NA	435 UR	NA	401 UR	NA	NA	415 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR

B7/10-SB10			B7/10-SB11			
NASB-B7/10-SB-SB10-0506R	NASB-B7/10-SB-SB10-2122	NASB-B7/10-SB-SB10-2122R	NASB-B7/10-SB-SB11-0708	NASB-B7/10-SB-SB11-0708R	NASB-B7/10-SB-SB11-3940R	NASB-B7/10-SB-SB11-3940
20101208	20101014	20101208	20101014	20101208	20101208	20101014
NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SO	SO	SO	SO	SO	SO	SO
NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SB	SB	SB	SB	SB	SB	SB
5	21	21	7	7	39	39
6	22	22	8	8	40	40
398 U	NA	442 U	NA	435 U	431 U	NA
284 UJ	311 UR	316 UJ	286 UR	311 UJ	308 UJ	297 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
284 U	311 U	316 U	286 U	311 U	308 U	297 U
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
152 U	167 UR	169 U	153 UR	167 U	165 U	159 UR
152 U	167 UR	169 U	153 UR	167 U	165 U	159 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 U	311 U	308 U	297 U
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
199 U	218 UR	221 U	200 UR	218 U	216 U	208 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
284 U	311 UR	316 U	286 UR	311 U	308 U	297 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR
398 U	435 UR	442 U	401 UR	435 U	431 U	415 UR

NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	14 UR	NA	14 UR	NA	NA	17 UR
NA	6.1 J	NA	4.7 U	NA	NA	4.7 J
NA	4.7 U	NA	4.7 U	NA	NA	5.7 U
NA	4.7 U	NA	4.7 U	NA	NA	5.7 U
NA	29	NA	2.7 J	NA	NA	40
NA	0.28 J	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	1.8 J	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.55 J	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	1.9 U	NA	1.9 U	NA	NA	2.3 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	6.6 U	NA	7 U	NA	NA	8.4 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	5.2	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	1.9 U	NA	1.9 U	NA	NA	2.3 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.14 J	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U
NA	0.94 U	NA	0.93 U	NA	NA	1.1 U

NA	3.87 U	NA	3.61 U	NA	NA	3.4 U
NA	3.87 U	NA	3.61 U	NA	NA	3.4 U
NA	0.77 U	NA	0.72 U	NA	NA	0.68 U
NA	3.87 U	NA	3.61 U	NA	NA	3.4 U
NA	3.87 U	NA	3.61 U	NA	NA	3.4 U

LOCATION	B225-SB08		B225-SB09	
SAMPLE ID	**NASB-B225-SB08-0910**	**NASB-B225-SB08-0910R**	**NASB-B225-SB09-0708**	**NASB-B225-SB09-0708R**
SAMPLE DATE	**20101020**	**20101208**	**20101020**	**20101208**
SAMPLE CODE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
MATRIX	**SO**	**SO**	**SO**	**SO**
SAMPLE TYPE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
SUBMATRIX	**SB**	**SB**	**SB**	**SB**
TOP DEPTH	**9**	**9**	**7**	**7**
BOTTOM DEPTH	**10**	**10**	**8**	**8**
EPH MADEP (MG/KG)				
C11-C22 AROMATICS	31.5 U	NA	31.5 U	NA
C11-C22 AROMATICS-UNADJ	31.5 U	NA	31.5 U	NA
C19-C36 ALIPHATICS	31.5 U	NA	31.5 U	NA
C9-C18 ALIPHATICS	31.5 U	NA	31.5 U	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)				
2-METHYLNAPHTHALENE	6 UR	6 U	6 UR	4.78 J
ACENAPHTHENE	6 UR	6 U	6 UR	3.28 J
ACENAPHTHYLENE	6 UR	6 U	6 UR	2.75 J
ANTHRACENE	6 UR	6 U	6 UR	2.64 J
BENZO(A)ANTHRACENE	6 UR	6 U	6 UR	6 U
BENZO(A)PYRENE	6 UR	6 U	6 UR	6 U
BENZO(B)FLUORANTHENE	6 UR	1.28 J	6 UR	1.33 J
BENZO(G,H,I)PERYLENE	6 UR	1.26 J	6 UR	1.06 J
BENZO(K)FLUORANTHENE	6 UR	6 U	6 UR	6 U
CHRYSENE	6 UR	1.17 J	6 UR	1.33 J
DIBENZO(A,H)ANTHRACENE	6 UR	6 U	6 UR	6 U
FLUORANTHENE	6 UR	1.57 J	6 UR	2.76 J
FLUORENE	6 UR	6 U	6 UR	3.32 J
INDENO(1,2,3-CD)PYRENE	6 U	1.07 J	6 UR	1.54 J
NAPHTHALENE	6 UR	6 U	6 UR	4.51 J
PHENANTHRENE	6 UR	2.64 J	6 UR	4.05 J
PYRENE	6 UR	1.64 J	6 UR	2.64 J
SEMIVOLATILES (UG/KG)				
1,1-BIPHENYL	294 UR	290 U	296 UR	294 U
1,2,4,5-TETRACHLOROBENZENE	294 UR	290 U	296 UR	294 U
2,2'-OXYBIS(1-CHLOROPROPANE)	205 UR	203 U	207 UR	206 U
2,3,4,6-TETRACHLOROPHENOL	411 UR	406 U	414 UR	412 U
2,4,5-TRICHLOROPHENOL	294 UR	290 U	296 UR	294 U
2,4,6-TRICHLOROPHENOL	205 UR	203 U	207 UR	206 U
2,4-DICHLOROPHENOL	205 UR	203 U	207 UR	206 U
2,4-DIMETHYLPHENOL	205 UR	203 U	207 UR	206 U
2,4-DINITROPHENOL	411 UR	406 U	414 UR	412 U
2,4-DINITROTOLUENE	205 UR	203 U	207 UR	206 U
2,6-DINITROTOLUENE	294 UR	290 U	296 UR	294 U
2-CHLORONAPHTHALENE	156 UR	154 U	157 UR	156 U
2-CHLOROPHENOL	205 UR	203 U	207 UR	206 U
2-METHYLPHENOL	411 UR	406 U	414 UR	412 U
2-NITROANILINE	294 UR	290 U	296 UR	294 U
2-NITROPHENOL	411 UR	406 U	414 UR	412 U
3&4-METHYLPHENOL	411 UR	NA	414 UR	NA
3,3'-DICHLOROBENZIDINE	294 UR	290 U	296 UR	294 U
3-METHYLPHENOL	NA	406 U	NA	412 U
3-NITROANILINE	294 UR	290 UJ	296 UR	294 UJ
4,6-DINITRO-2-METHYLPHENOL	411 UR	406 U	414 UR	412 U

LOCATION	B225-SB08		B225-SB09	
SAMPLE ID	**NASB-B225-SB08-0910**	**NASB-B225-SB08-0910R**	**NASB-B225-SB09-0708**	**NASB-B225-SB09-0708R**
SAMPLE DATE	**20101020**	**20101208**	**20101020**	**20101208**
SAMPLE CODE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
MATRIX	**SO**	**SO**	**SO**	**SO**
SAMPLE TYPE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
SUBMATRIX	**SB**	**SB**	**SB**	**SB**
TOP DEPTH	**9**	**9**	**7**	**7**
BOTTOM DEPTH	**10**	**10**	**8**	**8**
4-BROMOPHENYL PHENYL ETHER	294 UR	290 U	296 UR	294 U
4-CHLORO-3-METHYLPHENOL	411 UR	406 U	414 UR	412 U
4-CHLOROANILINE	294 UR	290 U	296 UR	294 U
4-CHLOROPHENYL PHENYL ETHER	294 UR	290 U	296 UR	294 U
4-NITROANILINE	294 UR	290 U	296 UR	294 U
4-NITROPHENOL	411 UR	406 U	414 UR	412 U
ACETOPHENONE	294 UR	290 U	296 UR	294 U
ATRAZINE	294 UR	290 U	296 UR	294 U
BENZALDEHYDE	294 UR	290 U	296 UR	294 U
BIS(2-CHLOROETHOXY)METHANE	294 UR	290 U	296 UR	294 U
BIS(2-CHLOROETHYL)ETHER	205 UR	203 U	207 UR	206 U
BIS(2-ETHYLHEXYL)PHTHALATE	294 U	290 U	296 U	294 U
BUTYL BENZYL PHTHALATE	294 UR	290 U	296 UR	294 U
CAPROLACTAM	294 UR	290 U	296 UR	294 U
CARBAZOLE	157 UR	155 U	159 UR	158 U
DIBENZOFURAN	157 UR	155 U	159 UR	158 U
DIETHYL PHTHALATE	294 UR	290 U	296 UR	294 U
DIMETHYL PHTHALATE	294 UR	290 U	296 UR	294 U
DI-N-BUTYL PHTHALATE	294 UR	290 U	296 UR	294 U
DI-N-OCTYL PHTHALATE	294 UR	290 U	296 UR	294 U
HEXACHLOROBENZENE	205 UR	203 U	207 UR	206 U
HEXACHLOROBUTADIENE	294 UR	290 U	296 UR	294 U
HEXACHLOROCYCLOPENTADIENE	294 UR	290 U	296 UR	294 U
HEXACHLOROETHANE	205 UR	203 U	207 UR	206 U
ISOPHORONE	294 UR	290 U	296 UR	294 U
NITROBENZENE	294 UR	290 U	296 UR	294 U
N-NITROSO-DI-N-PROPYLAMINE	294 UR	290 U	296 UR	294 U
N-NITROSODIPHENYLAMINE	294 UR	290 U	296 UR	294 U
PENTACHLOROPHENOL	411 UR	406 U	414 UR	412 U
PHENOL	411 UR	406 U	414 UR	412 U
VOLATILES (UG/KG)				
1,1,1-TRICHLOROETHANE	0.95 U	NA	0.94 U	NA
1,1,2,2-TETRACHLOROETHANE	0.95 U	NA	0.94 U	NA
1,1,2-TRICHLOROETHANE	0.95 U	NA	0.94 U	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.95 U	NA	0.94 U	NA
1,1-DICHLOROETHANE	0.95 U	NA	0.94 U	NA
1,1-DICHLOROETHENE	0.95 U	NA	0.94 U	NA
1,2,3-TRICHLOROBENZENE	0.95 U	NA	0.94 U	NA
1,2,4-TRICHLOROBENZENE	0.95 U	NA	0.94 U	NA
1,2-DIBROMO-3-CHLOROPROPANE	0.95 U	NA	0.94 U	NA
1,2-DIBROMOETHANE	0.95 U	NA	0.94 U	NA
1,2-DICHLOROBENZENE	0.95 U	NA	0.94 U	NA
1,2-DICHLOROETHANE	0.95 U	NA	0.94 U	NA
1,2-DICHLOROPROPANE	0.95 U	NA	0.94 U	NA
1,3-DICHLOROBENZENE	0.95 U	NA	0.94 U	NA

LOCATION	B225-SB08		B225-SB09	
SAMPLE ID	**NASB-B225-SB08-0910**	**NASB-B225-SB08-0910R**	**NASB-B225-SB09-0708**	**NASB-B225-SB09-0708R**
SAMPLE DATE	**20101020**	**20101208**	**20101020**	**20101208**
SAMPLE CODE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
MATRIX	**SO**	**SO**	**SO**	**SO**
SAMPLE TYPE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
SUBMATRIX	**SB**	**SB**	**SB**	**SB**
TOP DEPTH	**9**	**9**	**7**	**7**
BOTTOM DEPTH	**10**	**10**	**8**	**8**
1,4-DICHLOROBENZENE	0.95 U	NA	0.94 U	NA
1,4-DIOXANE	14 UR	NA	14 UR	NA
2-BUTANONE	4.7 U	NA	4.7 U	NA
2-HEXANONE	4.7 U	NA	4.7 U	NA
4-METHYL-2-PENTANONE	4.7 U	NA	4.7 U	NA
ACETONE	4.7 U	NA	12 U	NA
BENZENE	0.95 U	NA	0.94 U	NA
BROMOCHLOROMETHANE	0.95 U	NA	0.94 U	NA
BROMODICHLOROMETHANE	0.95 U	NA	0.94 U	NA
BROMOFORM	0.95 U	NA	0.94 U	NA
BROMOMETHANE	0.95 U	NA	0.20 J	NA
CARBON DISULFIDE	0.95 U	NA	0.94 U	NA
CARBON TETRACHLORIDE	0.95 U	NA	0.94 U	NA
CHLOROBENZENE	0.95 U	NA	0.94 U	NA
CHLORODIBROMOMETHANE	0.95 U	NA	0.94 U	NA
CHLOROETHANE	0.95 U	NA	0.94 U	NA
CHLOROFORM	0.95 U	NA	0.94 U	NA
CHLOROMETHANE	0.95 U	NA	0.94 U	NA
CIS-1,2-DICHLOROETHENE	0.95 U	NA	0.94 U	NA
CIS-1,3-DICHLOROPROPENE	0.95 U	NA	0.94 U	NA
CYCLOHEXANE	0.95 U	NA	0.94 U	NA
DICHLORODIFLUOROMETHANE	0.95 U	NA	0.94 U	NA
ETHYLBENZENE	0.95 U	NA	0.94 U	NA
ISOPROPYLBENZENE	0.95 U	NA	0.94 U	NA
M+P-XYLENES	1.9 U	NA	1.9 U	NA
METHYL ACETATE	0.95 U	NA	0.94 U	NA
METHYL CYCLOHEXANE	0.95 U	NA	0.94 U	NA
METHYL TERT-BUTYL ETHER	0.95 U	NA	0.94 U	NA
METHYLENE CHLORIDE	2.5 U	NA	3.6 U	NA
O-XYLENE	0.95 U	NA	0.94 U	NA
STYRENE	0.95 U	NA	0.94 U	NA
TETRACHLOROETHENE	0.95 U	NA	0.94 U	NA
TOLUENE	0.95 U	NA	0.94 U	NA
TOTAL XYLENES	1.9 U	NA	1.9 U	NA
TRANS-1,2-DICHLOROETHENE	0.95 U	NA	0.94 U	NA
TRANS-1,3-DICHLOROPROPENE	0.95 U	NA	0.94 U	NA
TRICHLOROETHENE	0.95 U	NA	0.94 U	NA
TRICHLOROFLUOROMETHANE	0.95 U	NA	0.94 U	NA
VINYL CHLORIDE	0.95 U	NA	0.94 U	NA
VPH MADEP (MG/KG)				
C5-C8 ALIPHATICS	3.43 U	NA	3.23 U	NA
C5-C8 ALIPHATICS-UNADJ	3.43 U	NA	3.23 U	NA
C9-C10 AROMATICS	0.69 U	NA	0.65 U	NA
C9-C12 ALIPHATICS	3.43 U	NA	3.23 U	NA
C9-C12 ALIPHATICS-UNADJ	3.43 U	NA	3.23 U	NA

B-2 GROUNDWATER ANALYTICAL RESULTS

LOCATION	MDA-GW01			MDA-GW02	MDA-GW03
SAMPLE ID	**NASB-MDA-GW01**	**NASB-MDA-GW01-AVG**	**NASB-MDA-GW01-D**	**NASB-MDA-GW02**	**NASB-MDA-GW03**
SAMPLE DATE	**20101026**	**20101026**	**20101026**	**20101026**	**20101026**
SAMPLE CODE	**ORIG**	**AVG**	**DUP**	**NORMAL**	**NORMAL**
MATRIX	**GW**	**GW**	**GW**	**GW**	**GW**
SAMPLE TYPE	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**	**NORMAL**
SUBMATRIX	**GW**	**GW**	**GW**	**GW**	**GW**
METALS (UG/L)					
MERCURY	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U

LOCATION	**FTA-MW08**
SAMPLE ID	**NASB-FTA-MW08**
SAMPLE DATE	**20101029**
SAMPLE CODE	**NORMAL**
MATRIX	**GW**
SAMPLE TYPE	**NORMAL**
SUBMATRIX	**GW**
EPH MADEP (UG/L)	
C11-C22 AROMATICS	152 U
C11-C22 AROMATICS-UNADJ	152 U
C19-C36 ALIPHATICS	203 U
C9-C18 ALIPHATICS	203 U
METALS (UG/L)	
ALUMINUM	430
ANTIMONY	2 U
ARSENIC	2.2 J
BARIUM	13
BERYLLIUM	0.25 U
CADMIUM	0.2 U
CALCIUM	31000
CHROMIUM	2.5 U
COBALT	0.3 U
COPPER	1.9 J
IRON	680
LEAD	0.5 U
MAGNESIUM	10000
MANGANESE	460
MERCURY	0.1 U
NICKEL	2.3 J
POTASSIUM	4800
SELENIUM	1.1 U
SILVER	0.25 U
SODIUM	11000
THALLIUM	0.25 U
VANADIUM	3.2 U
ZINC	8.4 U
MISCELLANEOUS PARAMETERS (NG/L)	
PENTADECAFLUOROOCTANOIC ACID	2 UJ
PERFLUOROOCTANE SULFONIC ACID	2 UJ
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)	
2-METHYLNAPHTHALENE	0.05 U
ACENAPHTHENE	0.05 U
ACENAPHTHYLENE	0.05 U
ANTHRACENE	0.05 U
BENZO(A)ANTHRACENE	0.05 U
BENZO(A)PYRENE	0.05 U
BENZO(B)FLUORANTHENE	0.05 U
BENZO(G,H,I)PERYLENE	0.05 U
BENZO(K)FLUORANTHENE	0.05 U
CHRYSENE	0.05 U
DIBENZO(A,H)ANTHRACENE	0.05 U

LOCATION	FTA-MW08
SAMPLE ID	NASB-FTA-MW08
SAMPLE DATE	20101029
SAMPLE CODE	NORMAL
MATRIX	GW
SAMPLE TYPE	NORMAL
SUBMATRIX	GW
FLUORANTHENE	0.05 U
FLUORENE	0.05 U
INDENO(1,2,3-CD)PYRENE	0.05 U
NAPHTHALENE	0.05 U
PHENANTHRENE	0.05 U
PYRENE	0.05 U
SEMIVOLATILES (UG/L)	
1,1-BIPHENYL	1 U
1,2,4,5-TETRACHLOROBENZENE	1 U
2,2'-OXYBIS(1-CHLOROPROPANE)	1 U
2,3,4,6-TETRACHLOROPHENOL	2.6 U
2,4,5-TRICHLOROPHENOL	2.6 U
2,4,6-TRICHLOROPHENOL	2.6 U
2,4-DICHLOROPHENOL	2.6 U
2,4-DIMETHYLPHENOL	2.6 U
2,4-DINITROPHENOL	2.6 U
2,4-DINITROTOLUENE	1 U
2,6-DINITROTOLUENE	1 U
2-CHLORONAPHTHALENE	1 U
2-CHLOROPHENOL	2.6 U
2-METHYLPHENOL	2.6 U
2-NITROANILINE	1 U
2-NITROPHENOL	2.6 U
3,3'-DICHLOROBENZIDINE	10 U
3-METHYLPHENOL	2.6 U
3-NITROANILINE	1 U
4,6-DINITRO-2-METHYLPHENOL	2.6 U
4-BROMOPHENYL PHENYL ETHER	1 U
4-CHLORO-3-METHYLPHENOL	5.1 U
4-CHLOROANILINE	1 U
4-CHLOROPHENYL PHENYL ETHER	1 U
4-NITROANILINE	1 U
4-NITROPHENOL	2.6 U
ACETOPHENONE	2.6 U
ATRAZINE	1 U
BENZALDEHYDE	1 U
BIS(2-CHLOROETHOXY)METHANE	1 U
BIS(2-CHLOROETHYL)ETHER	1 U
BIS(2-ETHYLHEXYL)PHTHALATE	2.1 U
BUTYL BENZYL PHTHALATE	2.1 U
CAPROLACTAM	1.6 J
CARBAZOLE	1 U
DIBENZOFURAN	1 U
DIETHYL PHTHALATE	2.1 U

LOCATION	**FTA-MW08**
SAMPLE ID	**NASB-FTA-MW08**
SAMPLE DATE	**20101029**
SAMPLE CODE	**NORMAL**
MATRIX	**GW**
SAMPLE TYPE	**NORMAL**
SUBMATRIX	**GW**
DIMETHYL PHTHALATE	2.1 U
DI-N-BUTYL PHTHALATE	2.1 U
DI-N-OCTYL PHTHALATE	2.1 U
HEXACHLOROBENZENE	1 U
HEXACHLOROBUTADIENE	1 U
HEXACHLOROCYCLOPENTADIENE	1 U
HEXACHLOROETHANE	1 U
ISOPHORONE	1 U
NITROBENZENE	1 U
N-NITROSO-DI-N-PROPYLAMINE	1 U
N-NITROSODIPHENYLAMINE	1 U
PENTACHLOROPHENOL	5.1 U
PHENOL	2.6 U

VOLATILES (UG/L)

1,1,1-TRICHLOROETHANE	0.5 U
1,1,2,2-TETRACHLOROETHANE	0.5 U
1,1,2-TRICHLOROETHANE	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U
1,1-DICHLOROETHANE	0.5 U
1,1-DICHLOROETHENE	0.5 U
1,2,3-TRICHLOROBENZENE	0.5 U
1,2,4-TRICHLOROBENZENE	0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U
1,2-DIBROMOETHANE	0.5 U
1,2-DICHLOROBENZENE	0.5 U
1,2-DICHLOROETHANE	0.5 U
1,2-DICHLOROPROPANE	0.5 U
1,3-DICHLOROBENZENE	0.5 U
1,4-DICHLOROBENZENE	0.5 U
1,4-DIOXANE	0.5 UR
2-BUTANONE	5 U
2-HEXANONE	5 U
4-METHYL-2-PENTANONE	5 U
ACETONE	5 U
BENZENE	0.5 U
BROMOCHLOROMETHANE	0.5 U
BROMODICHLOROMETHANE	0.5 U
BROMOFORM	0.5 U
BROMOMETHANE	0.5 U
CARBON DISULFIDE	0.5 U
CARBON TETRACHLORIDE	0.5 U
CHLOROBENZENE	0.5 U
CHLORODIBROMOMETHANE	0.5 U
CHLOROETHANE	0.5 U

LOCATION	**FTA-MW08**
SAMPLE ID	**NASB-FTA-MW08**
SAMPLE DATE	**20101029**
SAMPLE CODE	**NORMAL**
MATRIX	**GW**
SAMPLE TYPE	**NORMAL**
SUBMATRIX	**GW**
CHLOROFORM	0.5 U
CHLOROMETHANE	0.5 U
CIS-1,2-DICHLOROETHENE	0.5 U
CIS-1,3-DICHLOROPROPENE	0.5 U
CYCLOHEXANE	0.5 U
DICHLORODIFLUOROMETHANE	0.5 U
ETHYLBENZENE	0.5 U
ISOPROPYLBENZENE	0.5 U
M+P-XYLENES	0.5 U
METHYL ACETATE	0.5 U
METHYL CYCLOHEXANE	0.5 U
METHYL TERT-BUTYL ETHER	0.5 U
METHYLENE CHLORIDE	2 J
O-XYLENE	0.5 U
STYRENE	0.5 U
TETRACHLOROETHENE	0.5 U
TOLUENE	0.5 U
TOTAL XYLENES	0.5 U
TRANS-1,2-DICHLOROETHENE	0.5 U
TRANS-1,3-DICHLOROPROPENE	0.5 U
TRICHLOROETHENE	0.5 U
TRICHLOROFLUOROMETHANE	0.5 U
VINYL CHLORIDE	0.5 U

VPH MADEP (UG/L)

C5-C8 ALIPHATICS	50 U
C5-C8 ALIPHATICS-UNADJ	50 U
C9-C10 AROMATICS	10 U
C9-C12 ALIPHATICS	50 U
C9-C12 ALIPHATICS-UNADJ	50 U

LOCATION	B7/10-GW01	B7/10-GW02	B7/10-GW03D	B7/10-GW03S	B7/10-GW04	B7/10-GW05D	B7/10-GW05S			B7/10-GW06D			B7/10-GW06S	B7/10-GW07
SAMPLE ID	NASB-B7/10-GW01	NASB-B7/10-GW02	NASB-B7/10-GW03D	NASB-B7/10-GW03S	NASB-B7/10-GW04	NASB-B7/10-GW05D	NASB-B7/10-GW05S	NASB-B7/10-GW05S-AVG	NASB-B7/10-GW05S-D	NASB-B7/10-GW06D	NASB-B7/10-GW06D-AVG	NASB-B7/10-GW06D-D	NASB-B7/10-GW06S	NASB-B7/10-GW07
SAMPLE DATE	20101028	20101028	20101027	20101028	20101028	20101027	20101027	20101027	20101027	20101027	20101027	20101027	20101027	20101027
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
DISSOLVED METALS (UG/L)														
ALUMINUM	NA	NA	NA	NA	NA	50 U	NA	NA	NA	NA	NA	NA	NA	NA
ANTIMONY	NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC	NA	NA	NA	NA	NA	4.8	NA	NA	NA	NA	NA	NA	NA	NA
BARIUM	NA	NA	NA	NA	NA	14	NA	NA	NA	NA	NA	NA	NA	NA
BERYLLIUM	NA	NA	NA	NA	NA	0.25 U	NA	NA	NA	NA	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA
CALCIUM	NA	NA	NA	NA	NA	14000	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	NA	2.5 U	NA	NA	NA	NA	NA	NA	NA	NA
COBALT	NA	NA	NA	NA	NA	0.94	NA	NA	NA	NA	NA	NA	NA	NA
COPPER	NA	NA	NA	NA	NA	1.1 U	NA	NA	NA	NA	NA	NA	NA	NA
IRON	NA	NA	NA	NA	NA	29000	NA	NA	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA
MAGNESIUM	NA	NA	NA	NA	NA	4200	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	490	NA	NA	NA	NA	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA	NA	0.1 U	NA	NA	NA	NA	NA	NA	NA	NA
NICKEL	NA	NA	NA	NA	NA	2.9 J	NA	NA	NA	NA	NA	NA	NA	NA
POTASSIUM	NA	NA	NA	NA	NA	2100	NA	NA	NA	NA	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA	NA	1.1 U	NA	NA	NA	NA	NA	NA	NA	NA
SILVER	NA	NA	NA	NA	NA	0.25 U	NA	NA	NA	NA	NA	NA	NA	NA
SODIUM	NA	NA	NA	NA	NA	25000	NA	NA	NA	NA	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA	NA	0.25 U	NA	NA	NA	NA	NA	NA	NA	NA
VANADIUM	NA	NA	NA	NA	NA	3.2 U	NA	NA	NA	NA	NA	NA	NA	NA
ZINC	NA	NA	NA	NA	NA	8.4 U	NA	NA	NA	NA	NA	NA	NA	NA
EPH MADEP (UG/L)														
C11-C22 AROMATICS	150 U	149 U	146 U	148 U	148 U	152 UJ	149 U	149 U	149 U	148 U	147.5 U	147 U	149 U	147 U
C11-C22 AROMATICS-UNADJ	150 U	149 U	146 U	148 U	148 U	152 UJ	149 U	149 U	149 U	148 U	147.5 U	147 U	149 U	147 U
C19-C36 ALIPHATICS	200 U	199 U	195 U	197 U	197 U	202 UJ	198 U	198.5 U	199 U	197 U	196.5 U	196 U	198 U	196 U
C9-C18 ALIPHATICS	200 U	199 U	195 U	197 U	197 U	202 UJ	198 U	198.5 U	199 U	197 U	196.5 U	196 U	198 U	196 U
METALS (UG/L)														
ALUMINUM	50 U	290	520	330	50 U	15000	50 U	50 U	50 U	240	210	180	50 U	290
ANTIMONY	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
ARSENIC	1.3 U	3.8	1.4 J	1.5 J	1.3 U	7.5	5.1	5	4.9	2.1 J	1.9	1.7 J	1.3 U	1.3 U
BARIUM	9.4	25	20	37	12	81	18	17.5	17	16	16	16	35	25
BERYLLIUM	0.25 U	0.25 U	0.15 J	0.25 U	0.25 U	0.86	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CADMIUM	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
CALCIUM	10000	16000	8400	24000	11000	15000	8400	8400	8400	9200	9250	9300	17000	18000
CHROMIUM	2.5 U	2.5 U	3.5 J	2.5 J	2.5 U	37	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
COBALT	0.18 U	1.4	1.4	1.4	0.4 U	8.2	0.57	0.57	0.57	1.8	1.75	1.7	1.6	0.73
COPPER	1.1 U	1.1 U	1.1 J	4.4 J	1.1 U	25	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.3 J
IRON	44 U	4200	20000	400	44 U	46000	6100	6150	6200	20000	20500	21000	550	1500
LEAD	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MAGNESIUM	910	2000	2700	3800	1200	8600	950	950	950	2700	2750	2800	2300	2100
MANGANESE	17	380	450	180	23	730	100	100	100	330	340	350	94	93
MERCURY	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
NICKEL	2 U	4.7 J	3.4 J	2 J	2 U	26	2 U	2 U	2 U	3.9 J	3.65	3.4 J	4.1 J	2.8 J
POTASSIUM	1100	2600	1700	6400	1600	6100	1900	1900	1900	1900	1900	1900	3300	1700
SELENIUM	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
SILVER	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.2 U	0.225 U	0.25 U	0.25 U	0.25 U
SODIUM	47000	23000	34000	19000	19000	27000	28000	28000	28000	29000	29000	29000	22000	19000
THALLIUM	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
VANADIUM	3.2 U	3.2 U	4.2 J	4.2 J	3.2 U	39	3.2 U	3.2 U	3.2 U	3.8 J	3.6	3.4 J	3.2 U	3.2 U
ZINC	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	45	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)														
2-METHYLNAPHTHALENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.056 U	0.053 U	0.05 U	0.05 U	0.05 U
ACENAPHTHENE	0.05 U	0.014 J	0.05 U	0.05 U	0.006 J	0.05 U	0.05 U	0.05 U	0.05 U	0.026 J	0.026 J	0.05 U	0.011 J	0.05 U
ACENAPHTHYLENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ANTHRACENE	0.05 U	0.01 J	0.009 J	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.013 J	0.013 J	0.05 U	0.05 U	0.05 U
BENZO(A)ANTHRACENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BENZO(A)PYRENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.065 J	0.05 U
BENZO(B)FLUORANTHENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.012 U	0.05 U
BENZO(G,H,I)PERYLENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BENZO(K)FLUORANTHENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
CHRYSENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
DIBENZO(A,H)ANTHRACENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
FLUORANTHENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
FLUORENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INDENO(1,2,3-CD)PYRENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
NAPHTHALENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.089 U	0.0695 U	0.05 U	0.052 U	0.05 U
PHENANTHRENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PYRENE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

LOCATION	B7/10-GW01	B7/10-GW02	B7/10-GW03D	B7/10-GW03S	B7/10-GW04	B7/10-GW05D	B7/10-GW05S			B7/10-GW06D			B7/10-GW06S	B7/10-GW07
SAMPLE ID	NASB-B7/10-GW01	NASB-B7/10-GW02	NASB-B7/10-GW03D	NASB-B7/10-GW03S	NASB-B7/10-GW04	NASB-B7/10-GW05D	NASB-B7/10-GW05S	NASB-B7/10-GW05S-AVG	NASB-B7/10-GW05S-D	NASB-B7/10-GW06D	NASB-B7/10-GW06D-AVG	NASB-B7/10-GW06D-D	NASB-B7/10-GW06S	NASB-B7/10-GW07
SAMPLE DATE	20101028	20101028	20101027	20101028	20101028	20101027	20101027	20101027	20101027	20101027	20101027	20101027	20101027	20101027
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
SEMIVOLATILES (UG/L)														
1,1-BIPHENYL	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4,5-TETRACHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,2'-OXYBIS(1-CHLOROPROPANE)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,3,4,6-TETRACHLOROPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4,5-TRICHLOROPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4,6-TRICHLOROPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-DICHLOROPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-DIMETHYLPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-DINITROPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-DINITROTOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-DINITROTOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-CHLORONAPHTHALENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-CHLOROPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-METHYLPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-NITROANILINE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-NITROPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
3,3'-DICHLOROBENZIDINE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3-METHYLPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
3-NITROANILINE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4,6-DINITRO-2-METHYLPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-BROMOPHENYL PHENYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-CHLORO-3-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U
4-CHLOROANILINE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-CHLOROPHENYL PHENYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-NITROANILINE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-NITROPHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETOPHENONE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ATRAZINE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BENZALDEHYDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BIS(2-CHLOROETHOXY)METHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BIS(2-CHLOROETHYL)ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BIS(2-ETHYLHEXYL)PHTHALATE	2 U	2 U	4.7	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
BUTYL BENZYL PHTHALATE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
CAPROLACTAM	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ
CARBAZOLE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBENZOFURAN	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIETHYL PHTHALATE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
DIMETHYL PHTHALATE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
DI-N-BUTYL PHTHALATE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
DI-N-OCTYL PHTHALATE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
HEXACHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
HEXACHLOROBUTADIENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
HEXACHLOROCYCLOPENTADIENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
HEXACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPHORONE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
NITROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
N-NITROSO-DI-N-PROPYLAMINE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
N-NITROSODIPHENYLAMINE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PENTACHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U
PHENOL	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
VOLATILES (UG/L)														
1,1,1-TRICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-TRICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-TRICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DIBROMO-3-CHLOROPROPANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DIBROMOETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROBENZENE	0.5 U	0.81 J	0.5 U	0.5 U	0.5 U	0.5 U	0.32 J	0.37	0.42 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROPROPANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-DICHLOROBENZENE	0.5 U	0.27 J	0.5 U	0.5 U	0.5 U	0.5 U	0.34 J	0.385	0.43 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DICHLOROBENZENE	0.5 U	0.57 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.22 J	0.22 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DIOXANE	0.5 UR	0.5 UR	0.62 J	0.5 UR	0.5 UR	0.5 UR	0.5 UR	0.5 R	0.5 UR	0.5 UR	0.5 R	0.5 UR	0.5 UR	0.5 UR
2-BUTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-HEXANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	5 U	5 U	5 U	5 U	5.7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

LOCATION	B7/10-GW01	B7/10-GW02	B7/10-GW03D	B7/10-GW03S	B7/10-GW04	B7/10-GW05D	B7/10-GW05S			B7/10-GW06D			B7/10-GW06S	B7/10-GW07
SAMPLE ID	NASB-B7/10-GW01	NASB-B7/10-GW02	NASB-B7/10-GW03D	NASB-B7/10-GW03S	NASB-B7/10-GW04	NASB-B7/10-GW05D	NASB-B7/10-GW05S	NASB-B7/10-GW05S-AVG	NASB-B7/10-GW05S-D	NASB-B7/10-GW06D	NASB-B7/10-GW06D-AVG	NASB-B7/10-GW06D-D	NASB-B7/10-GW06S	NASB-B7/10-GW07
SAMPLE DATE	20101028	20101028	20101027	20101028	20101028	20101027	20101027	20101027	20101027	20101027	20101027	20101027	20101027	20101027
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	ORIG	AVG	DUP	ORIG	AVG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
BENZENE	0.5 U	0.5 U	1.3	0.5 U	0.5 U	7.4	0.5 U	0.5 U	0.5 U	5.5	5.5	5.5	0.5 U	0.5 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMOFORM	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON DISULFIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON TETRACHLORIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROBENZENE	0.5 U	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLORODIBROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	0.5 U	16	2.4	0.5 U	0.5 U	3.1	0.5 U	0.5 U	0.5 U	3.5	3.5	3.5	0.5 U	0.5 U
CIS-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CYCLOHEXANE	0.5 U	0.5 U	0.14 J	0.5 U	0.5 U	1.6	0.5 U	0.5 U	0.5 U	1.2	1.35	1.5	0.5 U	0.5 U
DICHLORODIFLUOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYLBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ISOPROPYLBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
M+P-XYLENES	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL ACETATE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL CYCLOHEXANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.19 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYLENE CHLORIDE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
O-XYLENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
STYRENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	0.5 U	8.6	0.5 U	19	1.1	0.5 U	0.64 J	0.67	0.7 J	0.5 U	0.5 U	0.5 U	6.5	0.31 J
TOLUENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TOTAL XYLENES	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	0.5 U	2.6	0.87 J	0.5 U	0.5 U	0.52 J	0.5 U	0.5 U	0.5 U	0.68 J	0.62	0.56 J	0.5 U	0.5 U
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VINYL CHLORIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VPH MADEP (UG/L)														
C5-C8 ALIPHATICS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
C5-C8 ALIPHATICS-UNADJ	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
C9-C10 AROMATICS	10 U	15	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
C9-C12 ALIPHATICS	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
C9-C12 ALIPHATICS-UNADJ	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

LOCATION	B225-GW08	B225-GW09
SAMPLE ID	NASB-B225-GW08	NASB-B225-GW09
SAMPLE DATE	20101029	20101029
SAMPLE CODE	NORMAL	NORMAL
MATRIX	GW	GW
SAMPLE TYPE	NORMAL	NORMAL
SUBMATRIX	GW	GW
DISSOLVED METALS (UG/L)		
ALUMINUM	210	NA
ANTIMONY	2 U	NA
ARSENIC	19	NA
BARIUM	17	NA
BERYLLIUM	0.25 U	NA
CADMIUM	0.20 U	NA
CALCIUM	18000	NA
CHROMIUM	2.5 U	NA
COBALT	0.68 U	NA
COPPER	1.1 U	NA
IRON	800	NA
LEAD	0.50 U	NA
MAGNESIUM	4100	NA
MANGANESE	92	NA
MERCURY	0.10 U	NA
NICKEL	2.1 J	NA
POTASSIUM	6800	NA
SELENIUM	1.1 U	NA
SILVER	0.25 U	NA
SODIUM	13000	NA
THALLIUM	0.25 U	NA
VANADIUM	3.2 U	NA
ZINC	8.4 U	NA
EPH MADEP (UG/L)		
C11-C22 AROMATICS	146 U	148 U
C11-C22 AROMATICS-UNADJ	146 U	148 U
C19-C36 ALIPHATICS	195 U	197 U
C9-C18 ALIPHATICS	195 U	197 U
METALS (UG/L)		
ALUMINUM	4300	420
ANTIMONY	2 U	2 U
ARSENIC	20	4
BARIUM	38	26
BERYLLIUM	0.26 J	0.25 U
CADMIUM	0.20 U	0.20 U
CALCIUM	18000	34000
CHROMIUM	9.4	2.6 J
COBALT	2.8	0.24 U
COPPER	6.6	1.1 U
IRON	5700	1700
LEAD	2.4	0.50 U
MAGNESIUM	5300	3500
MANGANESE	160	180
MERCURY	0.10 U	0.10 U
NICKEL	7.9	2 U
POTASSIUM	7600	8300
SELENIUM	1.1 U	1.1 U
SILVER	0.25 U	0.25 U
SODIUM	13000	12000
THALLIUM	0.25 U	0.25 U

LOCATION	B225-GW08	B225-GW09
SAMPLE ID	NASB-B225-GW08	NASB-B225-GW09
SAMPLE DATE	20101029	20101029
SAMPLE CODE	NORMAL	NORMAL
MATRIX	GW	GW
SAMPLE TYPE	NORMAL	NORMAL
SUBMATRIX	GW	GW
VANADIUM	9.6 J	3.3 J
ZINC	15 J	8.4 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)		
2-METHYLNAPHTHALENE	0.094 U	0.05 U
ACENAPHTHENE	0.018 J	0.02 J
ACENAPHTHYLENE	0.05 U	0.05 U
ANTHRACENE	0.03 J	0.011 J
BENZO(A)ANTHRACENE	0.05 U	0.05 U
BENZO(A)PYRENE	0.05 U	0.05 U
BENZO(B)FLUORANTHENE	0.05 U	0.05 U
BENZO(G,H,I)PERYLENE	0.05 U	0.05 U
BENZO(K)FLUORANTHENE	0.05 U	0.05 U
CHRYSENE	0.024 J	0.05 U
DIBENZO(A,H)ANTHRACENE	0.05 U	0.05 U
FLUORANTHENE	0.05 U	0.05 U
FLUORENE	0.071 J	0.05 U
INDENO(1,2,3-CD)PYRENE	0.05 U	0.05 U
NAPHTHALENE	0.058 U	0.07 U
PHENANTHRENE	0.19	0.05 U
PYRENE	0.05 U	0.05 U
SEMIVOLATILES (UG/L)		
1,1-BIPHENYL	1 U	1 U
1,2,4,5-TETRACHLOROBENZENE	1 U	1 U
2,2'-OXYBIS(1-CHLOROPROPANE)	1 U	1 U
2,3,4,6-TETRACHLOROPHENOL	2.5 U	2.5 U
2,4,5-TRICHLOROPHENOL	2.5 U	2.5 U
2,4,6-TRICHLOROPHENOL	2.5 U	2.5 U
2,4-DICHLOROPHENOL	2.5 U	2.5 U
2,4-DIMETHYLPHENOL	2.5 U	2.5 U
2,4-DINITROPHENOL	2.5 U	2.5 U
2,4-DINITROTOLUENE	1 U	1 U
2,6-DINITROTOLUENE	1 U	1 U
2-CHLORONAPHTHALENE	1 U	1 U
2-CHLOROPHENOL	2.5 U	2.5 U
2-METHYLPHENOL	2.5 U	2.5 U
2-NITROANILINE	1 U	1 U
2-NITROPHENOL	2.5 U	2.5 U
3,3'-DICHLOROBENZIDINE	10 U	10 U
3-METHYLPHENOL	2.5 U	2.5 U
3-NITROANILINE	1 U	1 U
4,6-DINITRO-2-METHYLPHENOL	2.5 U	2.5 U
4-BROMOPHENYL PHENYL ETHER	1 U	1 U
4-CHLORO-3-METHYLPHENOL	5 U	5 U
4-CHLOROANILINE	1 U	1 U
4-CHLOROPHENYL PHENYL ETHER	1 U	1 U
4-NITROANILINE	1 U	1 U
4-NITROPHENOL	2.5 U	2.5 U
ACETOPHENONE	2.5 U	2.5 U
ATRAZINE	1 U	1 U
BENZALDEHYDE	1 U	1 U
BIS(2-CHLOROETHOXY)METHANE	1 U	1 U

LOCATION	B225-GW08	B225-GW09
SAMPLE ID	NASB-B225-GW08	NASB-B225-GW09
SAMPLE DATE	20101029	20101029
SAMPLE CODE	NORMAL	NORMAL
MATRIX	GW	GW
SAMPLE TYPE	NORMAL	NORMAL
SUBMATRIX	GW	GW
BIS(2-CHLOROETHYL)ETHER	1 U	1 U
BIS(2-ETHYLHEXYL)PHTHALATE	2 U	2 U
BUTYL BENZYL PHTHALATE	2 U	2 U
CAPROLACTAM	2.5 UJ	2.5 UJ
CARBAZOLE	1 U	1 U
DIBENZOFURAN	1 U	1 U
DIETHYL PHTHALATE	2 U	2 U
DIMETHYL PHTHALATE	2 U	2 U
DI-N-BUTYL PHTHALATE	2 U	2 U
DI-N-OCTYL PHTHALATE	2 U	2 U
HEXACHLOROBENZENE	1 U	1 U
HEXACHLOROBUTADIENE	1 U	1 U
HEXACHLOROCYCLOPENTADIENE	1 U	1 U
HEXACHLOROETHANE	1 U	1 U
ISOPHORONE	1 U	1 U
NITROBENZENE	1 U	1 U
N-NITROSO-DI-N-PROPYLAMINE	1 U	1 U
N-NITROSODIPHENYLAMINE	1 U	1 U
PENTACHLOROPHENOL	5 U	5 U
PHENOL	2.5 U	2.5 U
VOLATILES (UG/L)		
1,1,1-TRICHLOROETHANE	0.50 U	0.50 U
1,1,2,2-TETRACHLOROETHANE	0.50 U	0.50 U
1,1,2-TRICHLOROETHANE	0.50 U	0.50 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.50 U	0.50 U
1,1-DICHLOROETHANE	0.50 U	0.50 U
1,1-DICHLOROETHENE	0.50 U	0.50 U
1,2,3-TRICHLOROBENZENE	0.50 U	0.50 U
1,2,4-TRICHLOROBENZENE	0.50 U	0.50 U
1,2-DIBROMO-3-CHLOROPROPANE	0.50 U	0.50 U
1,2-DIBROMOETHANE	0.50 U	0.50 U
1,2-DICHLOROBENZENE	0.50 U	0.50 U
1,2-DICHLOROETHANE	0.50 U	0.50 U
1,2-DICHLOROPROPANE	0.50 U	0.50 U
1,3-DICHLOROBENZENE	0.50 U	0.50 U
1,4-DICHLOROBENZENE	0.50 U	0.50 U
1,4-DIOXANE	0.50 UR	0.50 UR
2-BUTANONE	5 U	5 U
2-HEXANONE	5 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U
ACETONE	5 U	5 U
BENZENE	0.50 U	0.50 U
BROMOCHLOROMETHANE	0.50 U	0.50 U
BROMODICHLOROMETHANE	0.50 U	0.50 U
BROMOFORM	0.50 U	0.50 U
BROMOMETHANE	0.50 U	0.50 U
CARBON DISULFIDE	0.50 U	0.50 U
CARBON TETRACHLORIDE	0.50 U	0.50 U
CHLOROBENZENE	0.50 U	0.50 U
CHLORODIBROMOMETHANE	0.50 U	0.50 U
CHLOROETHANE	0.50 U	0.50 U

LOCATION	B225-GW08	B225-GW09
SAMPLE ID	NASB-B225-GW08	NASB-B225-GW09
SAMPLE DATE	20101029	20101029
SAMPLE CODE	NORMAL	NORMAL
MATRIX	GW	GW
SAMPLE TYPE	NORMAL	NORMAL
SUBMATRIX	GW	GW
CHLOROFORM	0.50 U	0.50 U
CHLOROMETHANE	0.50 U	0.50 U
CIS-1,2-DICHLOROETHENE	0.50 U	0.50 U
CIS-1,3-DICHLOROPROPENE	0.50 U	0.50 U
CYCLOHEXANE	0.50 U	0.50 U
DICHLORODIFLUOROMETHANE	0.50 U	0.50 U
ETHYLBENZENE	0.50 U	0.50 U
ISOPROPYLBENZENE	0.50 U	0.50 U
M+P-XYLENES	0.50 U	0.50 U
METHYL ACETATE	0.50 U	0.50 U
METHYL CYCLOHEXANE	0.50 U	0.50 U
METHYL TERT-BUTYL ETHER	0.50 U	0.50 U
METHYLENE CHLORIDE	2.5 U	2.5 U
O-XYLENE	0.50 U	0.50 U
STYRENE	0.50 U	0.50 U
TETRACHLOROETHENE	0.50 U	0.50 U
TOLUENE	0.50 U	0.50 U
TOTAL XYLENES	0.50 U	0.50 U
TRANS-1,2-DICHLOROETHENE	0.50 U	0.50 U
TRANS-1,3-DICHLOROPROPENE	0.50 U	0.50 U
TRICHLOROETHENE	0.50 U	0.50 U
TRICHLOROFLUOROMETHANE	0.50 U	0.50 U
VINYL CHLORIDE	0.50 U	0.50 U
VPH MADEP (UG/L)		
C5-C8 ALIPHATICS	50 U	50 U
C5-C8 ALIPHATICS-UNADJ	50 U	50 U
C9-C10 AROMATICS	10 U	10 U
C9-C12 ALIPHATICS	50 U	50 U
C9-C12 ALIPHATICS-UNADJ	50 U	50 U

APPENDIX C

GEOPHYSICAL SURVEY REPORT

APPENDIX C
SURFACE GEOPHYSICAL SURVEY
FORMER BUILDINGS 7 AND 10
NAS BRUNSWICK

EQUIPMENT/METHODOLOGY

Tetra Tech NUS, Inc. performed a geophysical survey around the historical locations of Buildings 7 and 10 to search for, and if detected, to locate possible USTs, buried building foundations, and other potential cultural features that might be detectable. TtNUS performed the geophysical investigation using a Geonics EM31-SH (EM31) terrain conductivity meter and a Sensors and Software Noggin Smart Cart ground penetrating radar (GPR) unit equipped with a 250-MHz antenna. Prior to field acquisition, the equipment was set up according to manufacturer's recommendations (calibrations, nulling and operational checks).

The EM31 is a frequency domain electromagnetic (EM) instrument. It generates electromagnetic fields measured as a function of frequency allowing stark differences in terrain conductivity (also termed apparent electrical conductivity) to be differentiated. Two measurement components are typically recorded; quadrature-phase (QP) and in-phase (IP). The QP component is sensitive to metallic and non-metallic components of the ground, while the IP component is predominantly sensitive to metal. The instrument was operated in vertical dipole mode at hip height which takes earth measurements to nominally about 10 feet below ground surface. The EM31 was set to acquire data five times per second as the operator walked at an average walking pace with the boom of the instrument generally perpendicular to the survey line, generating data stations about 1 to 2 feet apart.

GPR is another electromagnetic method, where EM pulses are propagated into the ground, and the reflections of this signal from materials with contrasting electrical properties are subsequently measured. The system can be used to detect both metallic and non-metallic items, though non-metallic items or heavily rusted items sometimes generate weaker or no reflections based on their electrical properties not sufficiently contrasting with soil or fill, thereby possibly making them more difficult or not possible to detect. The GPR system was used to trigger readings by a survey wheel every 1 to 2 inches along the survey lines. Data were recorded digitally, and later downloaded to a computer for data interpretation and archiving.

GEOPHYSICAL SURVEYS

An EM31 survey was performed across the accessible portions of a 245-foot by 265-foot area in the vicinity of former Buildings 7 and 10. A survey grid using tape measures was established in the field, and five foot spaced parallel survey lines were used to survey the site with EM31. Afterwards, data were downloaded and processed in the field to focus a GPR survey on suspicious EM31 anomalies in the former UST and former transformer areas. A GPR survey was conducted across the former UST area using survey lines spaced 2.5 feet apart in two mutually perpendicular directions. The former transformer area was surveyed similarly using no greater than five foot spaced survey lines in one direction and 2.5 foot line spacing in the perpendicular direction. GPR was also conducted in spot locations around the historical locations of the former buildings edges to search for possible buried foundation that could help confirm or determine the former locations of Buildings 7 and 10.

Data and interpretations of the data were tied to semi-permanent site features in the results figures of this report for potential later field reacquisition.

RESULTS AND DISCUSSION

The EM31 survey data are displayed in two color contour figures (Figure 1 and Figure 2) superimposed on a site base plan (aerial image) labeled with historical locations of former site features along with interpretations of both the EM31 and GPR data. Figure 1 shows the EM31 quadrature-phase response, also termed apparent electrical conductivity, and Figure 2 shows the EM31 in-phase response. In a color contour figure, color shades instead of traditional contour lines are used to show data value variations with regard to their geographic position and relation to one another. Color bars are plotted on each figure to provide an indication of instrument readings corresponding to the color shades. Generally, background (non-anomalous) readings are light to middle blue color on the apparent conductivity plot, and green color on the In-Phase plot. Anomalous values range up and down the color bars at varying degrees of instrument response from these background levels. Response amplitude generally depends on materials present and depth of burial. The anomalous response from a particular object is not unique, in that the depth of burial will affect the same object's response values, and therefore the amplitude of anomalous response is controlled both by what is present and its burial depth together. Generally speaking, at the same depth, larger more massive metallic objects will produce higher amplitude anomalous response than smaller metallic objects.

The EM31 apparent electrical conductivity data shown on Figure 1 exhibits a large linear feature crossing the middle part of the site from Pelican Street to Orion Street. This feature is interpreted as a former road extension and/or possible utility corridor. Another large linear pattern was detected all along the Orion Street edge of the site, and this area may contain multiple utilities based on utilities information provided by the Base. Two more, smaller EM linear anomalies are interpreted as possible segments of utilities or pipes shown by a red line symbol on Figures 1 and 2. A linear pattern is also evident along the northern edge of the site underneath the overhead power lines, which may be creating the anomaly in this case. A high amplitude EM anomaly in the vicinity of the former transformer area (eastern portion of the site) is interpreted as possibly representing the former transformer pad, and a high amplitude EM anomaly is also evident in the former UST area. This anomaly in the former UST area is attributed to buried metal, and may be possibly related to the former pumps. One small unidentified buried object is also interpreted from the EM31 data inside the former footprint of Former Building 7 location, and an X symbol shows its location. The In-Phase data shows a faint linear pattern that aligns with the historical location of the northern edge of Former Building 10, and may be attributed to metal at this former foundation edge.

GPR was only focused on suspect EM31 anomalies and in spot locations to search for possible buried building foundation, hence short segments of GPR-inferred features have been interpreted. GPR reflections consistent with that expected for a single small UST were detected south of former Building 7, and the possible UST's location is shown by a green hatched rectangle on Figures 1 and 2 near the historical locations of pump and USTs. An EM31 anomaly is located near the interpreted UST; however, appears offset from it. No other GPR reflections typical of a UST were detected, but it is possible that a former pump reinforced concrete slab or other metal related to the fueling station is present at this EM31 anomaly's location. Figures 3 and 4 show examples of GPR data across and along the long axis of the interpreted UST, respectively. Across the long axis, a curved reflector shape can be seen, and along the long axis a flat reflector shape can be seen in the figures (consistent with typical UST reflections). Both figures show data across the center of the interpreted UST, and a possible small reflector above the UST is interpreted and labeled as a possible fill port.

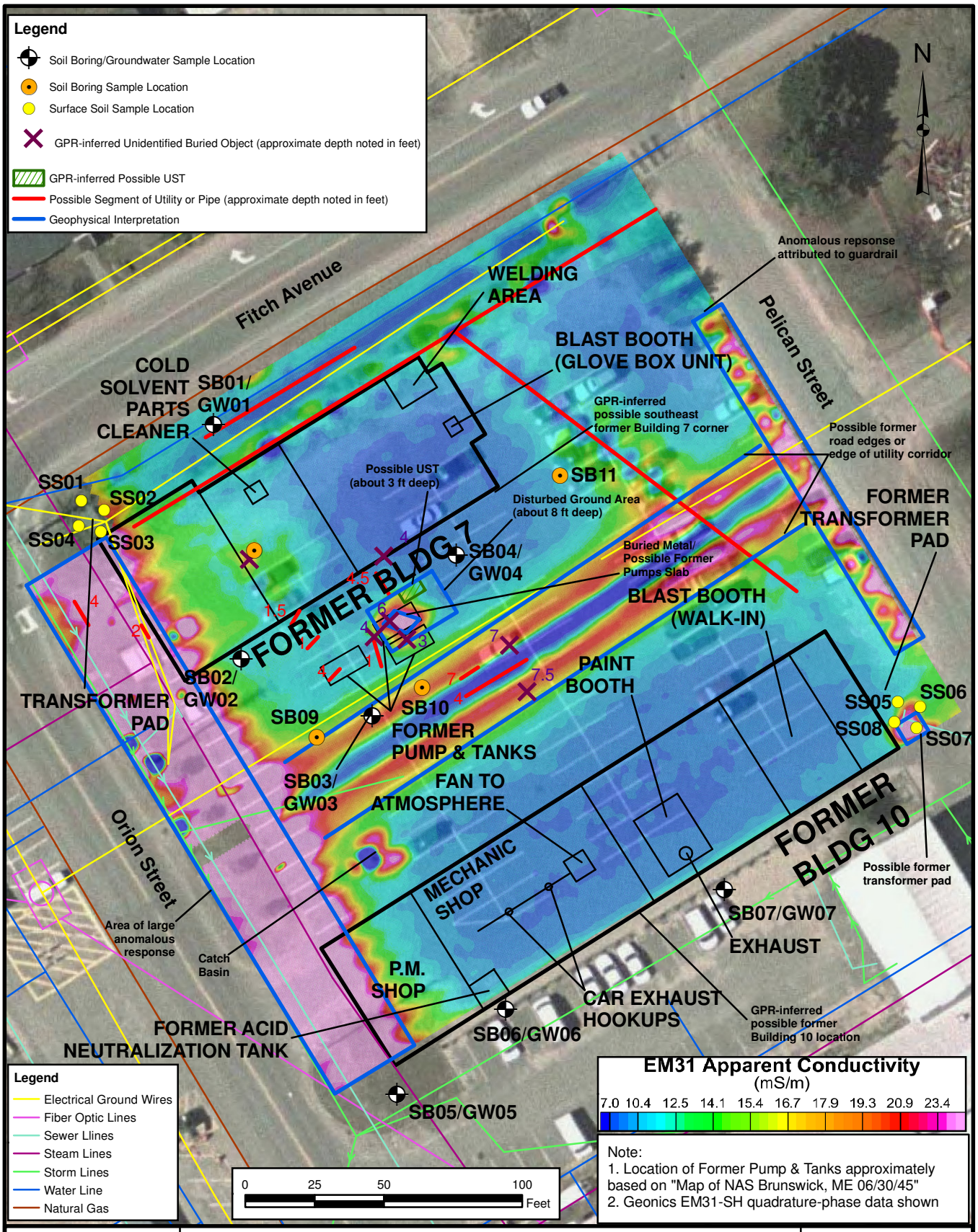
Interpretation of GPR data at spot locations around three sides of the former Building 10 edges appear to support the former location of the building plotted from historical plans. A linear EM31 anomaly is also present along the historical location of the northern end of former Building 10. GPR data in spot locations around building 7 only indicate possible foundation at the historical location of the southeast corner; however, it is possible that other foundation around the footprint is present and was not detected by the methods. EM31 data also does not indicate anomalies in

the vicinity of the former Building 7 foundation; however, given the GPR-inferred southeast corner and using the size information of the former building obtained from historical information, the building's former location can be inferred to be where it has been plotted from historical plans.

EM anomalous response was recorded near a few aboveground metallic objects. This anomalous response has been attributed to the aboveground features. The determination of the presence or absence of *subsurface* objects at these locations may not be possible due to interfering response from the aboveground features themselves; however, this interfering effect on the geophysical survey data is generally considered minimal across the site as a whole because the survey area was generally open and clear, except for a few semi-permanent features of the site (ex. guardrail). No aboveground metallic objects were present near the historical UST area.

GPR signal penetration below ground was generally judged to be good, and is estimated to have been generally about 10 feet using handbook time to approximate depth calculations for typical soils. Numerous shallow GPR-inferred unidentified buried objects are interpreted and shown by an X symbol on Figures 1 and 2. These objects are considered small in size (smaller than a UST).

I:\02330\SI.SI.LR.DR\NASB_BLDG_7&10_QP.MXD DWM 02/25/11



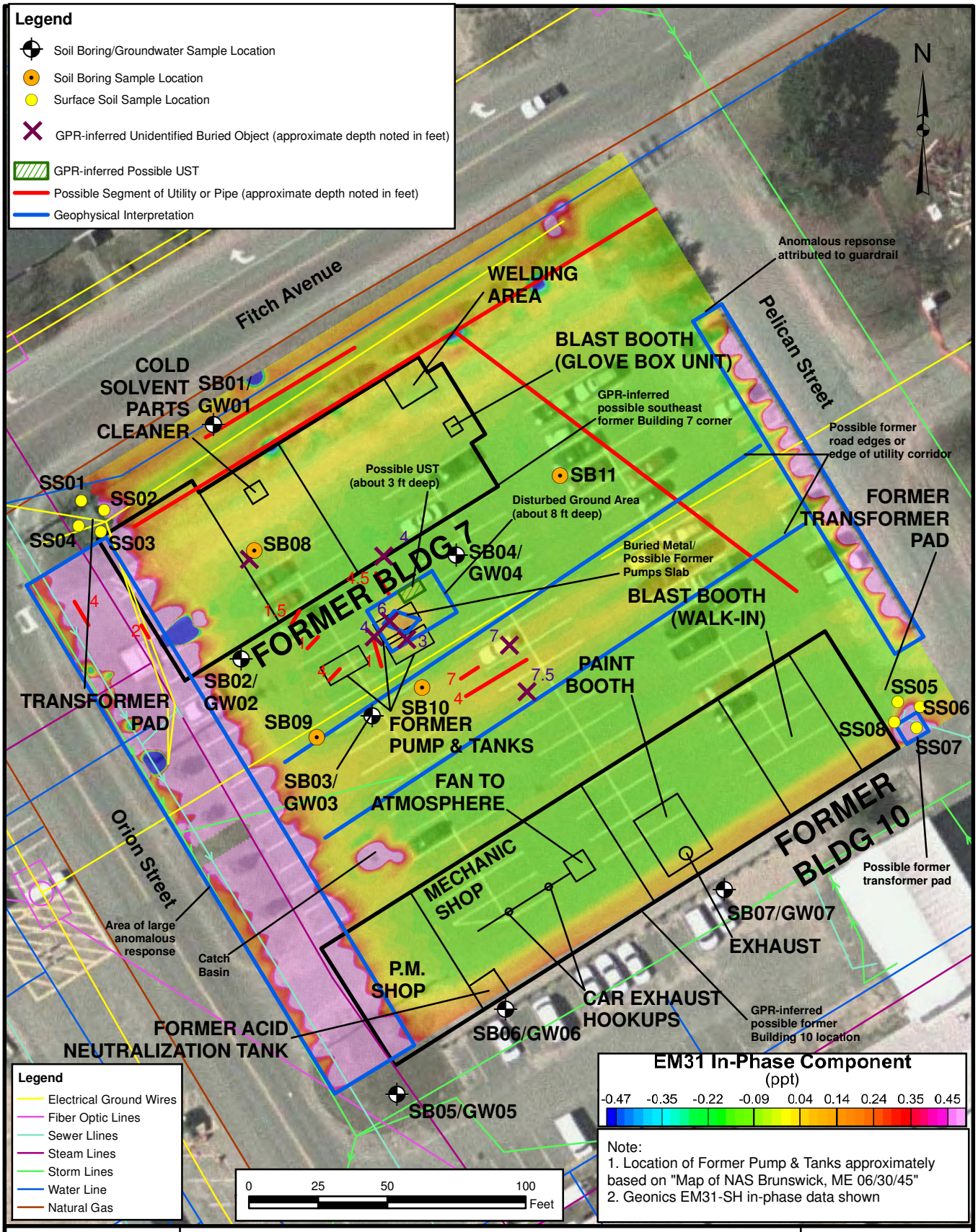
Note:
1. Location of Former Pump & Tanks approximately based on "Map of NAS Brunswick, ME 06/30/45"
2. Geonics EM31-SH quadrature-phase data shown

Tetra Tech NUS, Inc.

EM-31 APPARENT CONDUCTIVITY DATA
AND COMPREHENSIVE INTERPRETATION
BUILDINGS 7 & 10
NAVAL AIR STATION
BRUNSWICK, MAINE

SCALE	
AS NOTED	
FILE	
\..\NASB_BLDG_7&10_QP.MXD	
REV	DATE
0	02/25/11
FIGURE NUMBER	
1	

I:\02330\SI.LR.DR\NASB_BLDG_7&10_IP.MXD DWM 02/25/11



Tetra Tech NUS, Inc.

EM-31 IN-PHASE DATA AND COMPREHENSIVE INTERPRETATION
BUILDINGS 7 & 10
NAVAL AIR STATION
BRUNSWICK, MAINE

SCALE	
AS NOTED	
FILE	
\..\NASB_BLDG_7&10_IP.MXD	
REV	DATE
0	02/25/11
FIGURE NUMBER	
2	

Distance Along Ground Surface (feet)

Approximate Depth (feet)

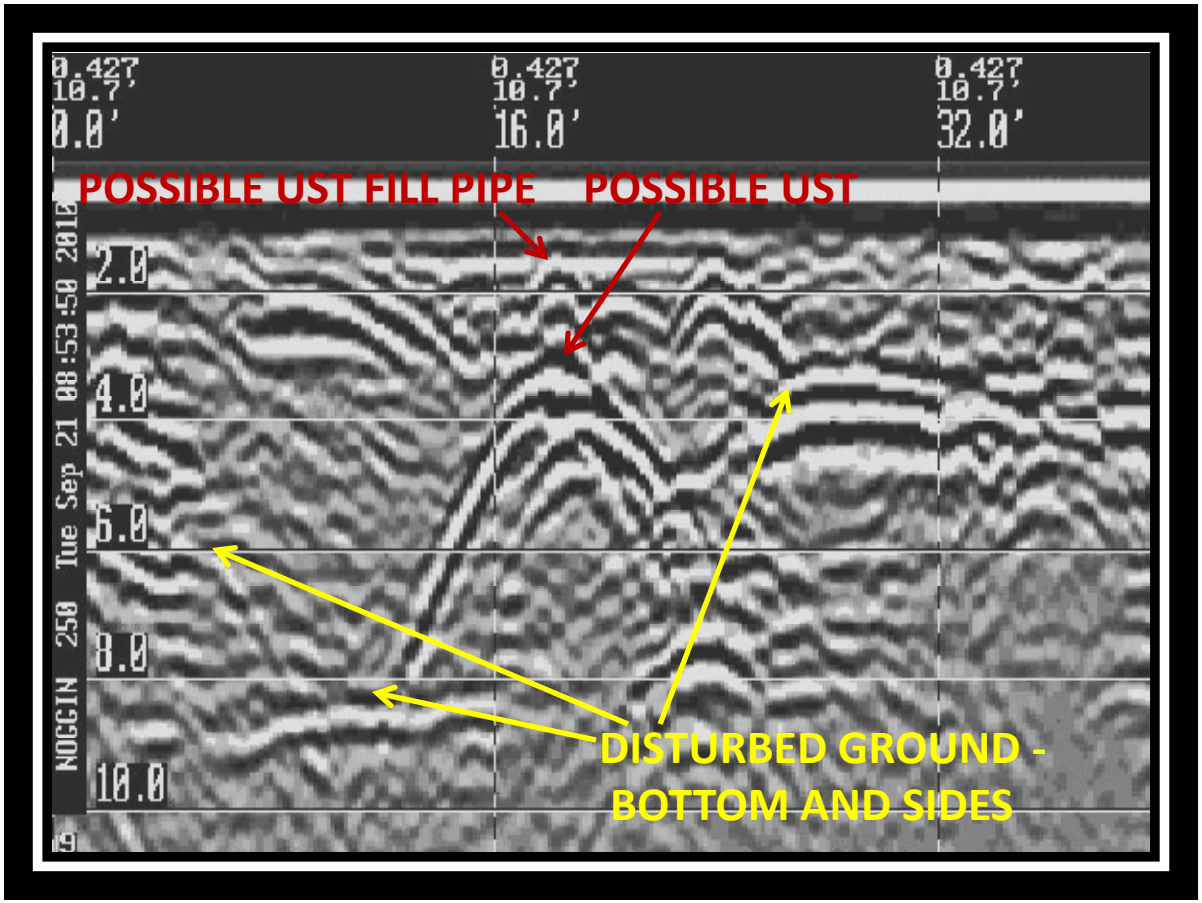


Figure 3: GPR Record Across Long Axis of Possible UST

Distance Along Ground Surface (feet)

Approximate Depth (feet)

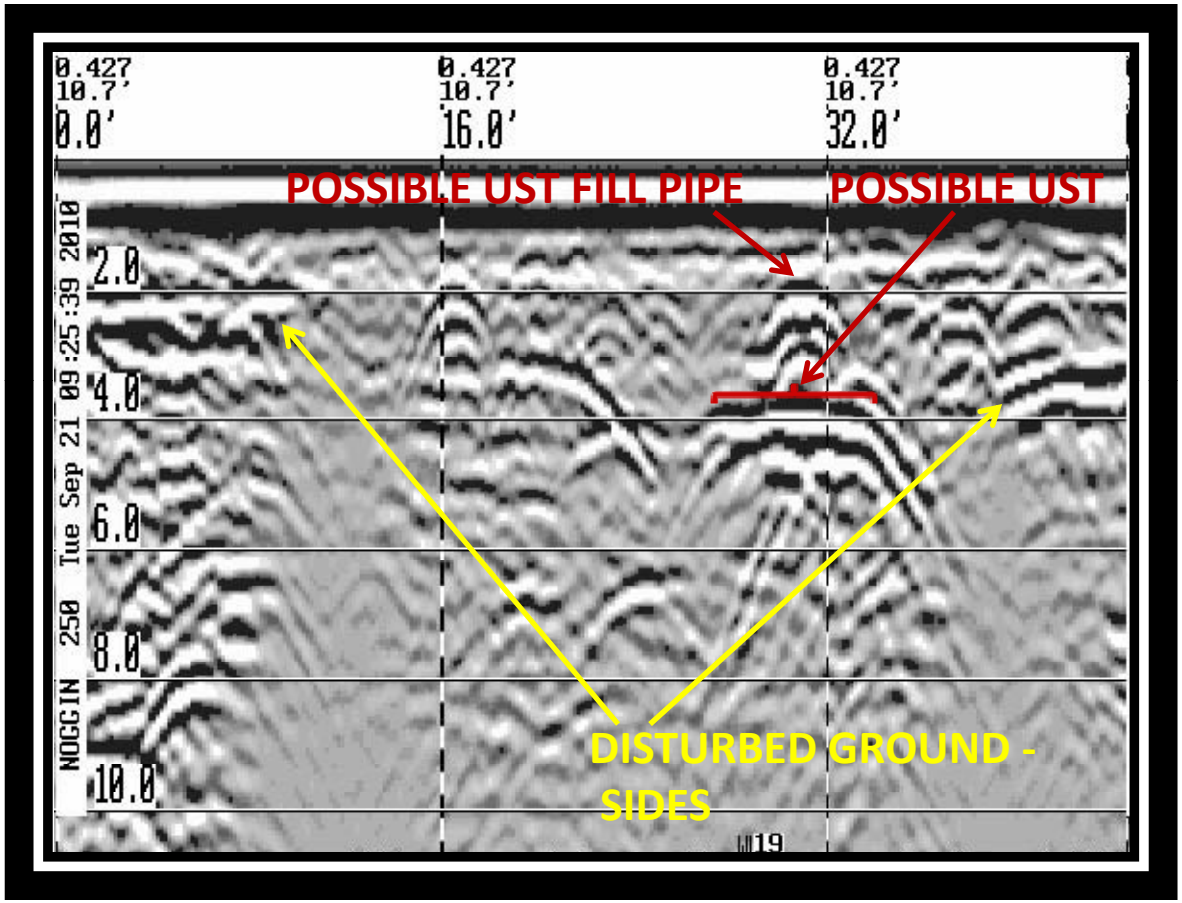


Figure 4: GPR Record Along Long Axis of Possible UST

APPENDIX D

RESPONSES TO EPA AND MEDEP COMMENTS

Responses to Unites States Environmental Protection Agency Comments
Dated October 14, 2011, on the
Site Investigation Report for Four AOPIs
Naval Air Station Brunswick, Maine
Dated April 2011

January 16, 2012

Suspected Mercury Deposal Area

EPA concurs with the Navy's recommendation. No response required.

West Fire Training Area

EPA concurs with the Navy's recommendation. No response required.

Helipad Area

EPA concurs with the Navy's recommendation. No response required.

Former Buildings 7 and 10

EPA states that "The report recommends that because the area around former Buildings 7 & 10 is intended for future industrial use, no further action is recommended for site soils and ground water. Under existing EPA policy, ground waters that are current or potential sources of drinking water that exceed risk-based standards or pose an unacceptable risk generally warrant a remedial action under CERCLA. It is also EPA policy that institutional controls are not a substitute for active remediation for ground waters that are a current or potential drinking water source. For these reasons, EPA cannot concur with the recommendation that no further action is necessary at this study area.

As stated above, the magnitude and size of the Building 7 & 10 contaminated area is not significantly large. EPA believes that in order to quickly and cost effectively meet the intent of the NCP regarding the restoration of potential drinking water sources and the potential complications the contamination may have on the future construction of habitable buildings on this study area, the Navy should consider the implementation of an in-situ chemical oxidation cleanup action at the site. This technology is easily implementable as the contamination is shallow and the geology is amenable to injection of an oxidant by drive-point technology. The costs associated with the implementation of this technology are also very economical. EPA would like to discuss issue further with the Navy and MEDEP to arrive at a mutually agreeable approach for addressing contamination issues at this study area."

Response: *The recommendations section was revised as follows:*

> *"A small-scale groundwater remediation action is under consideration for the Buildings 7 and 10 area to address VOCs in groundwater. An area-wide investigation of low VOC detections in groundwater is planned by the Navy, including the Buildings 7 and 10 area. The results of this investigation will be used by the Navy to determine to path forward for groundwater, in consultation with EPA and MEDEP."*

Buildings 225 and 252

EPA concurs with the Navy's recommendation. No response required.

Responses to Maine Department of Environmental Protection Comments
Dated June 14, 2011 on the
Site Investigation Report for Four AOPIs
Naval Air Station Brunswick, Maine
Dated April 2011

December 20, 2013

General Comments:

1. **Please provide a brief explanation why the project screening levels (PSL) agreed to in the workplan were not used in the report. In some case the criteria is lower than the PSL but in others they are not. In no case should the background 95-percent Upper Prediction Level (UPL) have been used as a criterion. It is a mitigating factor but not a regulatory criterion. In some instances the background is lower than regulatory criteria yet the tables show the results as exceedances, which confuses the issue. Please either add the PSL or provide a rationale in the report for using other criteria. It should also be noted that the Background Study is still in draft form and has not be approved by the agencies.**

   Response: *As stated in the footnotes for Tables 4 and 5 of the AOPI Work Plan, risk-based screening levels were presented "only to evaluate lab methodology," and also that protection of groundwater criteria are only applicable at the site (Helipad Area) for which groundwater samples were not also being collected. (For these sites, comparisons to default/conservative groundwater protection criteria were included for completeness, but groundwater results are considered more indicative of site-specific conditions.) The work plan text states that the report will include "comparisons to relevant screening criteria" and also that "The screening process will begin with a comparison of the chemical data with human health and ecological screening criteria, and for metals and PAHs only, with background concentrations." Instances in which exceedances were highlighted incorrectly in tables (i.e., where a concentration less than the minimum screening level, taking into account background concentrations and ecological and groundwater protection values, was noted as an exceedance) could not be found. In a few cases where background values were less than human health direct contact criteria, the minimum screening criteria were the lower ecological or groundwater protection screening values.*

   The Background Study Report was approved and finalized in March 2013.

Specific Comments:

Mercury Deposal Area

2. **Section 2.2, Field Investigation Activities: It is worthwhile mentioning in the report that MEDEP screened approximately 12 shallow depressions in the area with the Lumex® RA-915 mercury vapor analyzer and only one had a significant response. SB03 was moved to that location.**

   Response: *The requested information was added as follows:*

   "MEDEP also screened approximately 12 shallow depressions in the area with a Lumex® RA-915, and only one of the locations had a significant response. SB03 was moved to this location."

3. **Section 2.3, Results, para 2: "Based on the groundwater contour map prepared based on these groundwater elevations (Figure 2-2) groundwater flow is toward the east at the Mercury Disposal Area."**

   For clarity, please consider: *"Based on the three groundwater elevations taken at the Mercury Disposal Area, groundwater flow appears to be eastward as shown in Figure 2-2."*

Response: *The text was revised as follows:*

"Based on the three water levels and associated groundwater elevations at the Mercury Disposal Area, groundwater flow appears to be eastward, as shown on Figure 2-2".

4. **Section 2.4, Recommendations: MEDEP agrees with the recommendation of no further action for the Mercury Disposal Area.**

   Response: *Noted.*

5. **Table 2-2: See comment 1 above.**

   Response: *See the response to Comment 1.*

6. **Table 2-2: Please add the depth information to the sample result.**

   Response: *The requested information was added.*

7. **Figure 2-2: It would be helpful if the groundwater flow direction arrows were a lighter color; so that they are visible on the aerial photo, or remove the photo for this figure.**

   Response: *The figure was revised as indicated.*

West Fire Training Area:

8. **Section 3.2: Please note in the text the rationale for the addition of the perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) analyses to the Fire Training Area West groundwater sample.**

   Response: *The text was revised to state that analysis for PFOA and PFOS were added because these chemicals can be components of fire-fighting foams.*

9. **Section 3.2, Field Investigation Activities, para 3: "Due to the subsurface geologic conditions encountered (clay with minor silt and few thin sand stringers), only one temporary monitoring well …"**

   While this statement may be clear to those with a geologic background it should be revised so that it can be understood by the general public. MEDEP suggests the following language: "*Clay was encountered close to the surface with narrow lenses of silt or sand, too thin to install a well.*", or something similar.

   Response: *The text was revised as follows:*

   "Due to the subsurface geologic conditions encountered (clay ***encountered close to the surface with narrow lenses of silt and sand too thin to install a well*** *~~with minor silt and a few thin sand stringers~~),…"*

10. **Section 3.4, Recommendations: Based on the lack of any significant sand units at the West FTA, groundwater is not an issue under its current use therefore MEDEP agrees with no further investigation is necessary unless more information becomes available, however the detections of tetrachloroethylene (PCE) in excess of groundwater protection screening level warrant institution controls on the removal of soil.**

    Response: *The recommendation section has been revised to state that no further investigation (as opposed to no further action) is required and that an appropriate path forward will be determined based on future discussions and consensus among the Navy, EPA, and MEDEP.*

As stated in the response to Comment 1, comparisons to groundwater protection criteria were included for this site for completeness only, and based on the November 2013 RSL table, there are no longer any exceedances of PCE groundwater protection SSLs (the previous minimum groundwater protection SSL increased from 0.049 to 2.3 µg/kg).

11. <u>Table 3-2</u>: See comment 1 above.

***<u>Response</u>**: See the response to Comment 1. In Tables 3-2, 3-3, and 3-4, there were no exceedances for any parameters for which background values are available. No changes were made to these tables in response to Comment 1.*

Helipad Area:

12. <u>Section 4.1, Background</u>:

a.) "The helipad is a circular concrete pad approximately 120 feet in diameter, with a slight berm surrounding the pad."

There are actually two low berms encompassing approximately two thirds of the pad. Please revise.

***<u>Response</u>**: Based on this comment and the 2012 excavation activities, the text was revised as follows:*

> *"The helipad is a circular concrete pad approximately 120 feet in diameter, and prior to excavation activities at the site in December 2013, two low berms encompassed approximately two-thirds of the pad."*

b.) It should also be noted that the area was being used to chip and store wood chips during and prior to the sampling event. It should also be noted if the storage of the wood chips on the concrete pad caused any of the proposed sampling locations to be moved or other field changes to the workplan.

***<u>Response</u>**: The requested information was added.*

13. <u>Section 4.3, Results</u>:

a.) This section needs to address the exceedances of the ecological screening levels and the protection of groundwater for metals.

***<u>Response</u>**: The following summary of these exceedances was added to the text after the discussion of arsenic in the second paragraph of Section 4.3:*

> *"Other metals concentrations were less than residential screening criteria, but concentrations of 12 metals (arsenic, barium, cadmium, chromium, cobalt, copper, iron, lead, nickel, thallium, vanadium, and zinc) exceeded MCL- or risk-based SSLs and/or minimum ecological criteria."*

b.) There was no indication from the soil sampled within the Helipad Area was Transition/Mixed soil therefore only upper sand background levels should be applied.

***<u>Response</u>**: The text was revised to remove the reference to Transition/mixed soils. The Table 4-2 background column heading was revised, although no changes to the table values are required based on this change because all values listed in the existing table were for Upper Sand surface soil.*

14. <u>Section 4.4, Recommendations</u>: Factoring in upper sand background UPL, the following is a list of metals that exceeded their Protection of Groundwater criteria and/or ecological

screening level, followed in parenthesis by the number of exceedances out of 15 surface soil samples: Arsenic (9), Barium (3), Cadmium (5), Chromium (3), Cobalt (2), Iron (2), Lead (6), Thallium (2), Vanadium (1) and Zinc (5). Aroclor 1254 also exceeded its Protection of Groundwater criteria in three locations.

The detection of the Polychlorinated Biphenyl (PCB), Aroclor 1254 in multiple samples and numerous inorganics exceeding leaching to groundwater and other criteria warrants a small follow-up action. Removal of the earthen berms and residual soils on the pad would eliminate potential groundwater and other risk concerns with the soils. Additional sampling is needed to confirm that higher concentrations of Aroclor 1254 are not present beneath the berms or in soils below 1 foot near the pad. The previous data collection was well designed to determine the presence of inorganics or PCBs in paint chip residuals, but the source of the PCBs is uncertain and they may not be distributed as residual paint. A limited number of confirmation samples from beneath the outer berm and near the pad after removal are recommended to confirm levels are consistent with or less than those in the original investigation.

Response:

A soil removal action was conducted in December 2012 that included removal of the earthen berms and residual soils on the concrete pad. Post-excavation soil sampling was conducted, and the results are being evaluated. The recommendation section was revised to state the following:

> *"Evaluation of the post-excavation data is ongoing, and an appropriate path forward for the Helipad Area will be determined based on these results and future discussions and consensus among the Navy, EPA, and MEDEP."*

Former Buildings 7 & 10:

15. Section 5.2, Field Investigation Activities, para 3: "Because of holding exceedances, original SVOC results were rejected… These samples were recollected in December 2010 and analyzed for SVOCs as above."

Were any follow-up logs generated from the December 2010 sample collection? Was soil collection based solely on depth? Please provide a brief description of this field effort and whether any field data were collected. At SB-08 (for example), a stained zone was visible in the 11-12 foot sample interval, please note if this was observed in the December soil borings.

Response: *Soil sampling logs for the December 2010 resampling event are included in Appendix A, Field Forms (available in the electronic version of the document). Samples were collected at the same depths as the original samples for consistency (other analytical fractions were not included in the resampling event). Field activities for the resampling event were as described in the existing text, except that samples were collected at the pre-determined depths (this will be noted in the revised text). As noted on the December 2010 SB-08-1112 sample log, a petroleum-like odor and organic material were also observed during the resampling event.*

16. Section 5.3, Results:

a.) Para 1 and Table 5-1: Based on the soil descriptions and the depth of samples the data could be compared to corresponding soil units from the Background Study. To avoid the need for a separate table, in this case comparison to the lowest 95% UPL from the two units is acceptable.

Response: *Noted.*

b.) <u>Para 2</u>: "Based on the groundwater contour map prepared based on these groundwater elevations, groundwater flow…"

It is unclear whether the points were surveyed and the mean sea level (msl) elevations or if groundwater contour map was developed using depth below ground surface (bgs) to groundwater. Please clarify and consider rewording the above sentence to reduce the awkward wording.

<u>Response</u>: *The text was revised to match similar revised text in Section 2.*

c.) <u>Para. 2 and Figure 5-2</u>: Please revise description of the groundwater flow direction to southwest or south-southwest, based on the contours shown on the figure.

<u>Response</u>: *The text was revised as indicated.*

d.) <u>Para 5</u>: *"Maximum concentrations of the PAHs (except fluorine, 2-methylnapthalene, and naphthalene) were detected …"*

Please revise the location description of SB05 to "the southwest corner of the site" or something more accurate than the current text.

<u>Response</u>: *The text was revised to state that SB05 is located near the southwestern corner of the former Building 10 location.*

e.) <u>Para 6</u>: "Concentrations of arsenic exceeded the residential RSL and RAG and groundwater protection criteria, but all concentrations were less than the lesser of the NAS Brunswick Upper Sand and Transition subsurface soil background 95-percent UPL of 5.6 mg/kg."

See comment 16.a above.

<u>Response</u>: *For clarity, the text was revised as follows:*

> *"Concentrations of arsenic exceeded the residential RSL and RAG and groundwater protection criteria, but all concentrations were less than the ~~lesser of~~ NAS Brunswick Upper Sand and Transition subsurface soil background 95-percent UPL**<u>s</u>** of 5.6 **<u>and 15 mg/kg, respectively</u>**."*

17. <u>Section 5.4, Recommendations</u>:

a.) Para 1: "Exceedances of soil-to-groundwater screening criteria were observed more frequently; however, the exceedances were generally minor and/or were within the background range for NAS Brunswick."

This statement overlooks the soil to groundwater exceedances from Volatile Organic Compounds (VOCs) for which there is no background level. The following is a list of the compounds that exceed protection of groundwater criteria and the number of exceedances (in parenthesis) 1,4 dichlorobenzene (1), benzene (4), tetrachloroethene (8), trichloroethene (2). Therefore while MEDEP agrees that no further investigation of the former Buildings 7 & 10 Area is required at this time, based on the data it does appear that solvents were discharged so it will be necessary to place, at a minimum, appropriate institutional controls on groundwater and require notification of any change of use to the area.

<u>Response</u>: *The first portion of the sentence referred to the fact that the VOC exceedances were minor; the second portion of the sentence referred to the fact that PAH and metals exceedances were minor and that concentrations were within background concentrations. For clarity, the referenced text will be revised as follows:*

"Exceedances of soil-to-groundwater screening criteria were observed more frequently; however, the exceedances were generally minor, and for PAHs and metals, concentrations exceeding soil-to-groundwater criteria were less than background values for NAS Brunswick."

The recommendation section was revised to state the following:

"A small-scale groundwater remediation action is under consideration for the Buildings 7 and 10 area to address VOCs in groundwater. An area-wide investigation of low VOC detections in groundwater is planned by the Navy, including the Buildings 7 and 10 area. The results of this investigation will be used by the Navy to determine to path forward for groundwater, in consultation with EPA and MEDEP."

b.) *"For groundwater, a few low-level exceedances of screening levels were detected…"*

Please revise or omit the second half of this sentence. Although levels are low, virtually the entire site has detections of chlorinated VOCs, indicating that there was a widespread or significant source historically. There is adequate data to suggest that at a minimum, institutional control on groundwater and excavation of soils is warranted. In addition, tetrachloroethylene (PCE) exceeds the Region 1 vapor intrusion screening criteria for shallow groundwater at the site, so any future construction at the site needs to address the potential vapor intrusion risks.

Response*: The entire referenced sentence was deleted. As stated in the response to Comment 17a, the recommendations section was revised to indicate that the Navy will discuss with EPA and MEDEP the long-term management strategies required to address residual VOC detections in soil and groundwater in the Buildings 7 and 10 area remaining after the groundwater remedial action.*

c.) MEDEP was present onsite for the recommended excavation to evaluate the potential UST. The anomaly was UST piping likely from the former UST removal. The piping was removed by the contractor. Please add a brief summary of the activity in the final report.

Response*: A brief summary of the activities was added to Section 5.*2, as follows:

"In the draft version of this report, it was recommended that the possible presence of an UST be confirmed through test pit excavation or other direct means and that the UST be removed if found to be present. This work was conducted in May 2011, and based on the results of that investigation and removal of the buried metal concluded to have caused the geophysical anomalies, no additional activities associated with the former UST are required."

18. Table 5-2, Subsurface Soil Detections, Note 3: Minimum of 95-percent upper prediction limits (UPL) for Upper Sand and Transition subsurface soil from …."

A review of the minimum NAS Brunswick Background indicates that just the Upper Sand subsurface soil 95% UPL was used not the Transition subsurface soil. Please correct.

Response*: The footnote and associated table heading were revised. No revisions to the table values are required based on this comment because the Upper Sand values are less than Transition values in all cases.*

Buildings 225 & 252

19. Section 6.3, para 3: "Groundwater elevations at …are consistent with a southerly groundwater flow direction."

Please revise description of the groundwater flow direction to south-southwest, based on the contours shown on the figure.

Response: *The text was revised as indicated.*

20. Section 6.4, Recommendations:

MEDEP agrees that no further investigation of Buildings 225 & 252 Area is required, however based on the data from this investigation and the earlier one it does appear that solvents were discharged or migrated into the area therefore it will be necessary to place appropriate institutional controls on groundwater and soil and require notification of any change of use to the area.

Response: *Based on a weight-of-evidence evaluation of site-specific information and data, the Navy believes that no further action is required for this area. However, the recommendation section has been revised to state that no further investigation is required and that an appropriate path forward will be determined based on future discussions and consensus among the Navy, EPA, and MEDEP.*

21. References: The reference to the Background Study report must include the fact that it is in draft form. Please revise.

Response: *The Background Study was finalized in March 2012. The tables were updated with the background values from the final version of the document.*