FINAL

PROJECT CLOSEOUT REPORT
FOR
SITE 2 – FORMER HAZARDOUS WASTE STORAGE AREA

106TH RESCUE WING
FRANCIS S. GABRESKI AIRPORT
WESTHAMPTON BEACH, NEW YORK

MARCH 2012

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MARCH 2012

Prepared for

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LIST OF ACRONYMS

ABB	ABB–Environmental Services, Inc.
ANG	Air National Guard
BEHP	bis(2-ethylhexyl)phthalate
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylenes
COC	contaminant of concern
DD	Decision Document
DRO	diesel range organics
EPA	Environmental Protection Agency
GRO	gasoline range organics
MCL	Maximum Contaminant Level
NA	not applicable
ND	not detected
NFA	No Further Action
NFRAP	No Further Response Action Planned
NGB/A7OR	National Guard Bureau, Environmental Restoration Branch
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PCBs	polychlorinated biphenyls
PEER	PEER Consultants, P.C.
PID	photoionization detector
POC	Principle Organic Compound
PRAP	Proposed Remedial Action Plan
QA/QC	quality assurance/quality control
RI	Remedial Investigation
ROD	Record of Decision
RQW	Rescue Wing
RSCO	Recommended Soil Cleanup Objective
SCO	soil cleanup objectives
SI	Site Investigation
SVOC	semivolatile organic compound
S&W	Stone & Webster Environmental and Technology Services
TAT	turnaround time
TAGM	Technical and Administrative Guidance Memorandum
TCB	trichlorobenzene
TPH	total petroleum hydrocarbons
VOC	volatile organic compound

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INTRODUCTION

1.0 SUMMARY OF SITE CONDITIONS

The 106th Rescue Wing (RQW) of the New York Air National Guard (ANG) is located at the Francis S. Gabreski Airport in Suffolk County, New York on the eastern end of Long Island, and approximately 80 miles east of New York City. Francis S. Gabreski Airport, formerly known as Suffolk County Airport, is located on 150 Old Riverhead Road approximately 2 miles north of the Atlantic Ocean shoreline in Westhampton Beach. A base location map is provided in Figure 1.1.

Site 2 – Former Hazardous Waste Storage Area is located in the northeast-central portion of the base. Site 2 is shown on Figure 1.2. Site 2 and the previous investigations conducted at the site are briefly described in the following subsections.

1.1 SITE BACKGROUND

Site 2 - Former Hazardous Waste Storage Area is located adjacent to a loading ramp along the northeast wall of Building 358 (Hanger 2). The site includes grass-covered areas and areas paved with concrete, bricks and asphalt. The site was used from 1970 until 1982 to store shop solvent wastes, including PD-680 (a parts cleaner), and drums containing recovered fuels and oils. The site was formerly an open gravel space with no containment structures and has recently been paved with asphalt on the southeast side of the loading ramp. Previous investigations estimated that less than 500-gallons of liquids from minor spills may have been released at the site during its 12-year operation. No spills were reported at the site; however, stained surface soils were observed during a site visit in 1986 (PEER 2011b).

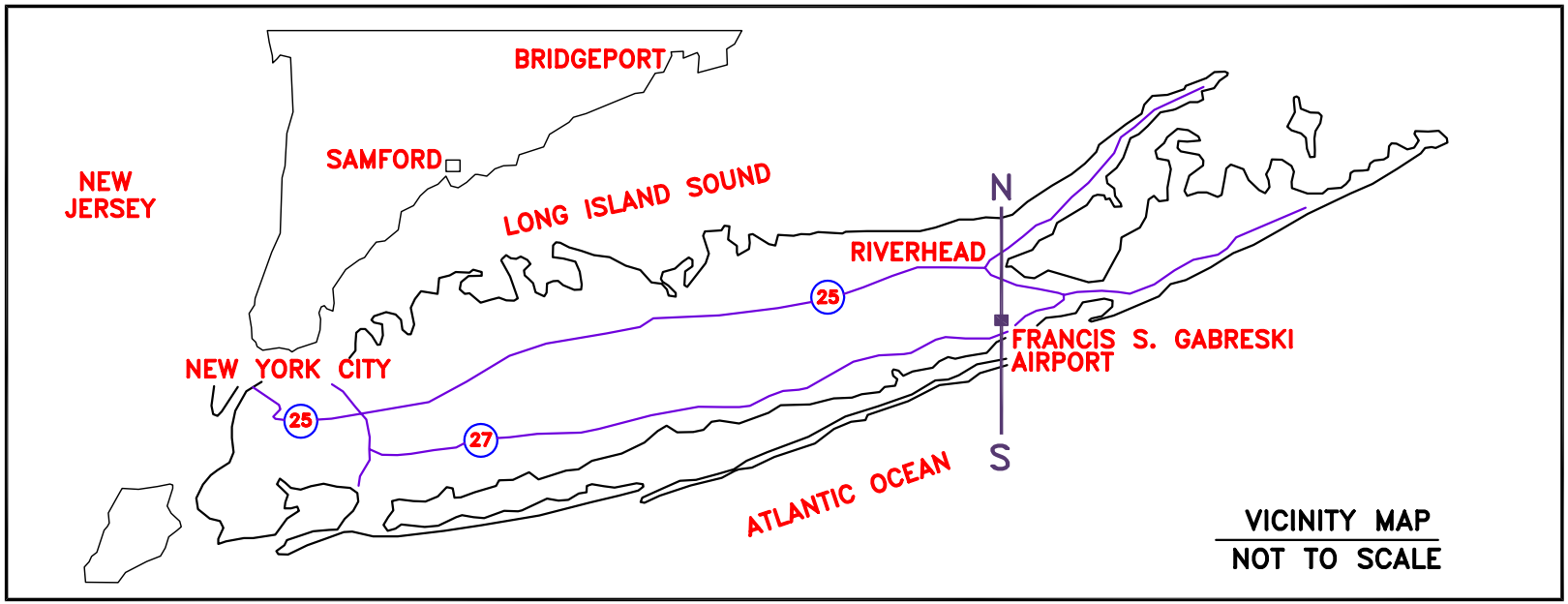
1.2 PREVIOUS INVESTIGATIONS

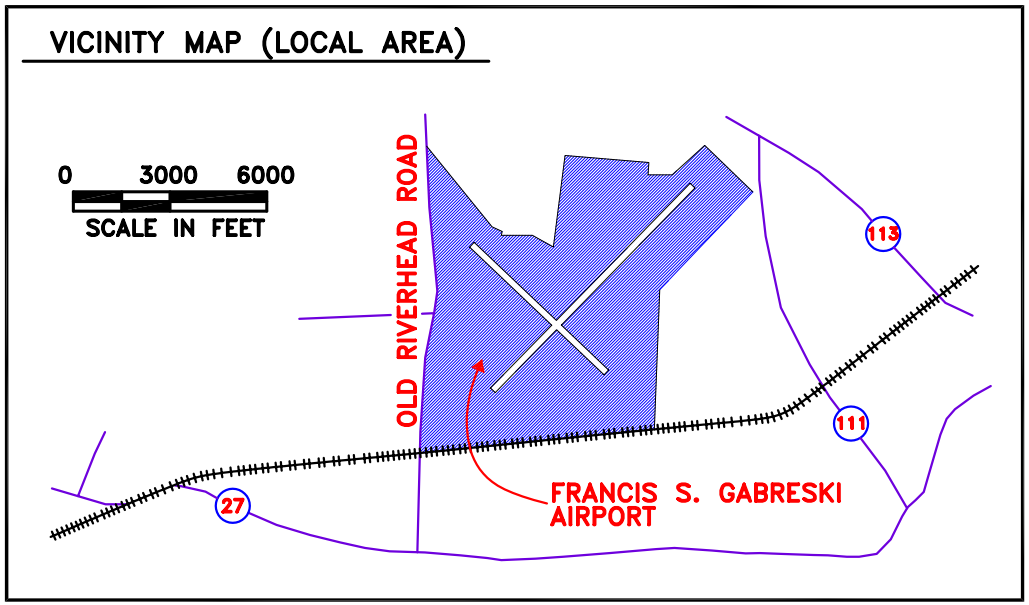
Three previous investigations involving sampling have been conducted at Site 2 including a 1994 Site Investigation (SI), a 2001 Remedial Investigation (RI) and a 2008 Data Gap Investigation. A No Further Response Action Planned (NFRAP) Decision Document (DD) was prepared in 2004 which was followed by a Data Gap Investigation. A Proposed Remedial Action Plan (PRAP) was prepared for Sites 2, 3 and 5 at the base followed by subsequent remedial action at Site 2. The results of these investigations, the NFRAP DD, the PRAP and the remedial action are briefly discussed below.

1.2.1 1994 Site Investigation

During the 1994 SI, direct-push borings were advanced to collect groundwater, and both surface and subsurface soil samples at Site 2.

Arsenic was the only analyte detected above action levels in one surface soil sample. The concentration was slightly above the New York State Department of Environmental Conservation (NYSDEC) soil action level, but was below the average concentration of arsenic in

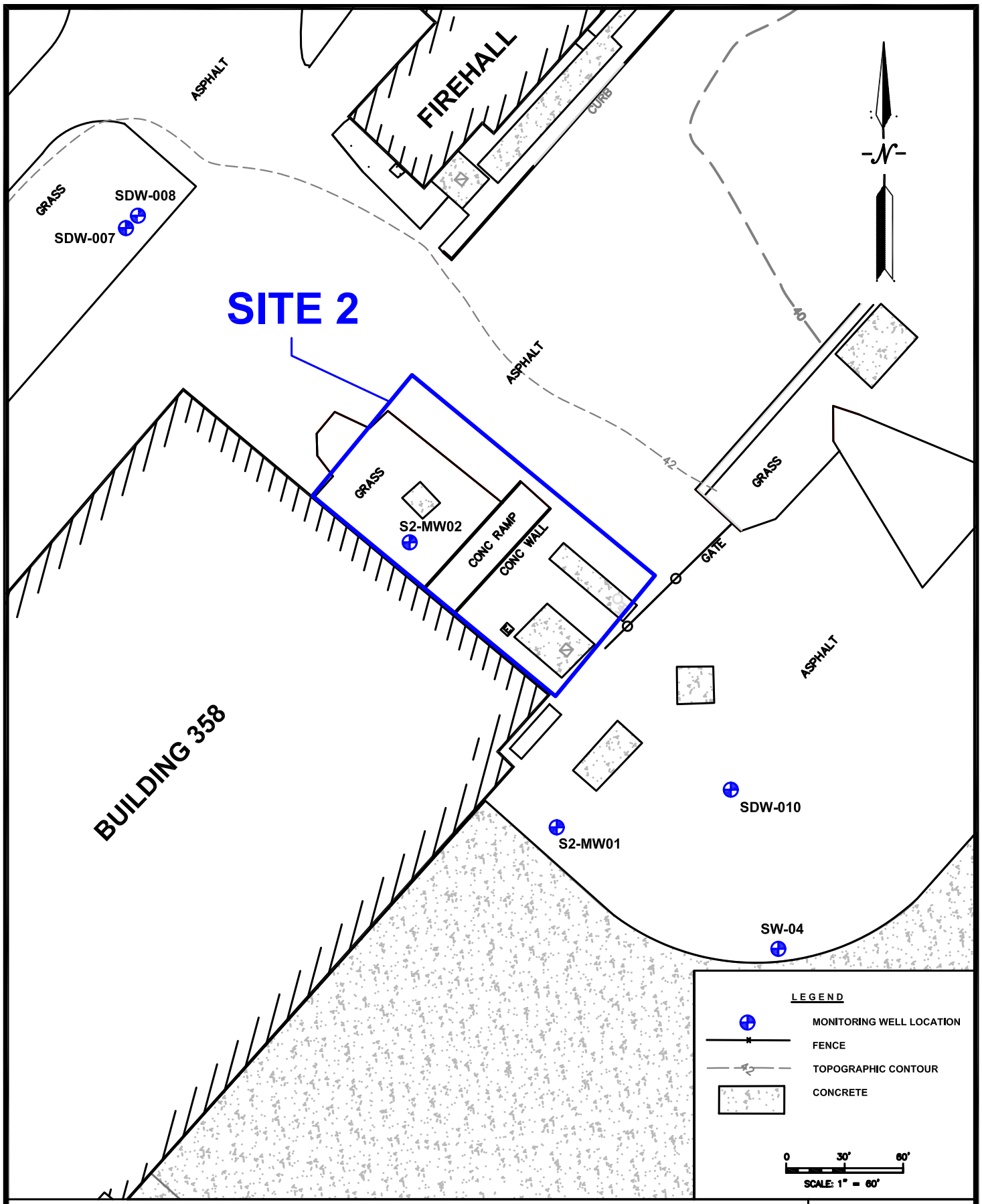




SITE 2 RA RPT
PROJ./3005-041

BASE LOCATION MAP
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE
1.1



SITE 2 RA RPT
PROJ./3005-041

SITE 2 – FORMER HAZARDOUS WASTE STORAGE AREA
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE
1.2

New York State (NYS) background soils. Chromium and lead were detected above reporting limits, but were below their NYSDEC action levels. The SI reported no other evidence to suggest that metal-bearing solutions such as solvents or fuels were released at this site; therefore, the metals were considered to be naturally-occurring constituents of the soils.

Chromium was the only analyte detected above NYSDEC action levels or reporting limits in one of the two groundwater samples collected from 35 to 57 ft below ground surface (bgs). However, since the sample was collected from a direct-push boring, the level of chromium was attributed to the high levels of suspended solids due to the direct-push sampling methodology (ABB-ES 1997). Tables 1.1 and 1.2 summarize the analytes detected above previous action levels at Site 2 (ABB-ES 1977). These results are shown on Figure 1.3.

Table 1.1
Surface Soil Results Exceeding Action Levels at Site 2 – 1994 SI
106th Rescue Wing
Westhampton Beach, New York

Analyte	NYSDEC Action Level (mg/kg)		Depth (ft bgs)	Sample Location	Concentration (mg/kg)
	Previous	Revised			
Arsenic	0.20	7.7	0 – 2	DP-012	0.26

Table 1.2
Groundwater Results Exceeding Action Levels at Site 2 – 1994 SI
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Levels (µg/L)		Depth (ft bgs)	Sample Location	Concentration (µg/kg)
	NYS[(a)]	MCL[(b)]			
Chromium	50	100	32-34	DP-012	250

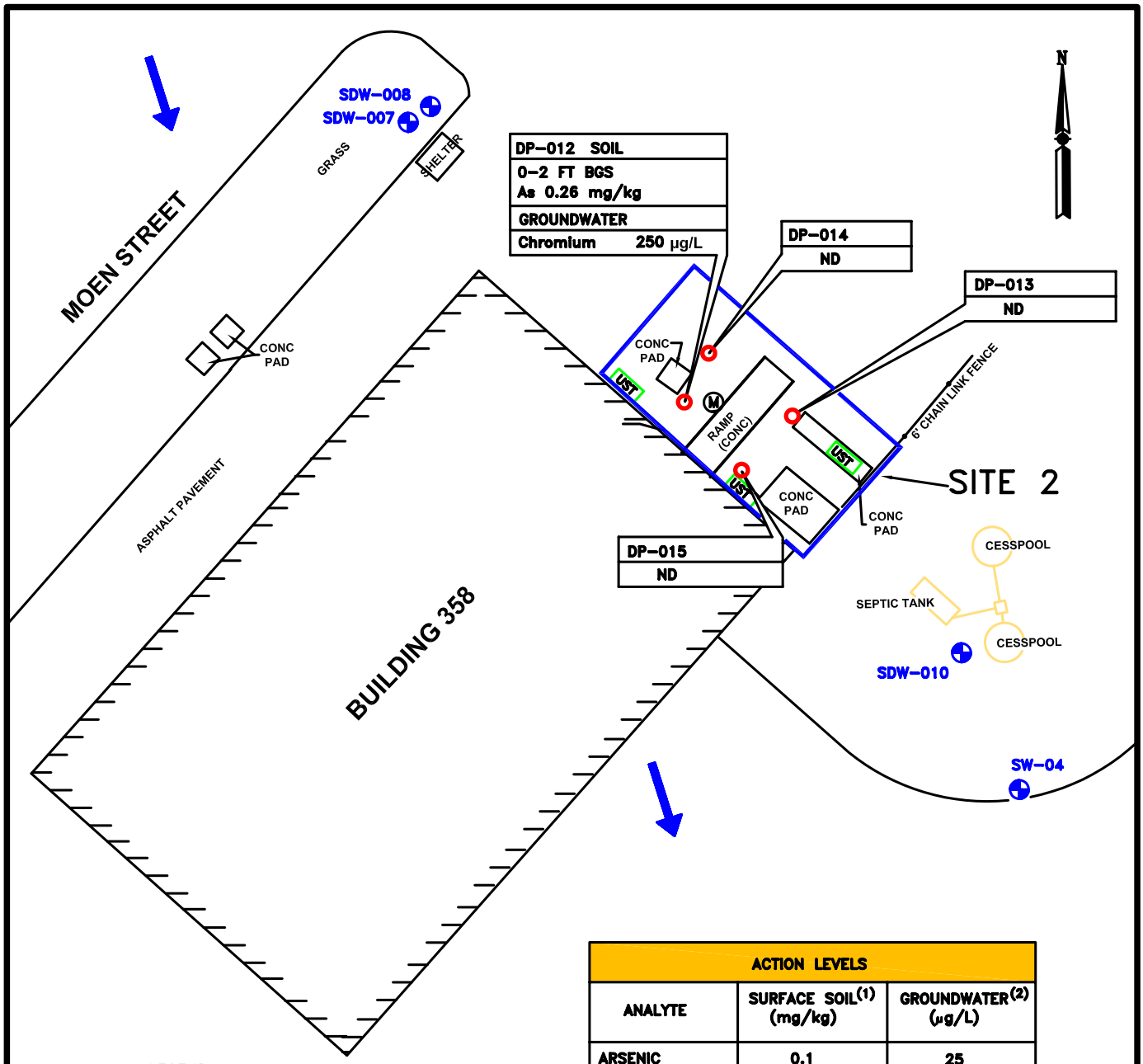
Notes: a) NYS Class GA Groundwater b) EPA Maximum Contaminant Level

The SI Report concluded that no volatile organic compounds (VOCs) or semivolatile organic compounds (SVOCs) that would be indicative of contamination in soil or groundwater were detected at the site. Therefore, the report recommended no further action (NFA) for Site 2.

1.2.2 2001 Remedial Investigation

During the 2001 RI, three direct-push soil borings, S2-DP01, S2-DP02, and S2-DP03, were installed at Site 2 to confirm or deny the presence of arsenic above the action level in surface soils, to evaluate other potential surface and subsurface soil contaminants, and to evaluate suspected groundwater contamination. Additionally, one new monitoring well (S2-MW01) was installed and sampled, and four existing monitoring wells were sampled (SDW007, SDW008, SDW010, and SW-04).

Soil samples from the three direct-push borings were analyzed for expedited screening analysis of VOCs at an off-site laboratory, and confirmatory standard certified laboratory analysis of VOCs, SVOCs and metals. Direct-push boring S2-DP01 was also sampled for polychlorinated



ACTION LEVELS		
ANALYTE	SURFACE SOIL(1) (mg/kg)	GROUNDWATER(2) (µg/L)
ARSENIC	0.1	25
CHROMIUM	6.1	50

1. NYSDEC TAGM #4046.
2. NYSDEC CLASS GA GROUNDWATER STANDARDS.

LEGEND

- DIRECT PUSH PROBE
- MONITORING WELL
- M MANHOLE COVER
- UST FORMER UST
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- BGS BELOW GROUND SURFACE
- ND NON-DETECTED

0 25 50 100

SCALE IN FEET

SOURCE: ABB 1997

SITES 2 RA RPT
PROJ./003005-041

SITE 2 - 1994 SITE INVESTIGATION RESULTS
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE 1.3

biphenyls (PCBs). The results of the VOC and SVOC confirmatory soil analyses and the metals confirmatory soil analyses are summarized on Tables 1.3 and 1.4, respectively. The results for the 2001 RI are shown on Figure 1.4.

No VOCs, SVOCs or PCBs were detected above the NYSDEC action levels in the confirmatory soil samples. Arsenic was not detected at concentrations exceeding the action level in site soils, and the detection of arsenic from the 1994 Site Investigation was not confirmed. Chromium detected in soil at the site was determined to be naturally occurring (PEER 2004a).

Three metals contaminants of concern (COCs) including mercury, cadmium and lead were detected in surface soil. No other COCs were detected in site soils (PEER 2004a). The contaminated surface soils were identified in a single direct-push probe (S2-DP01) adjacent to Building 358 as shown on Figure 1.3.

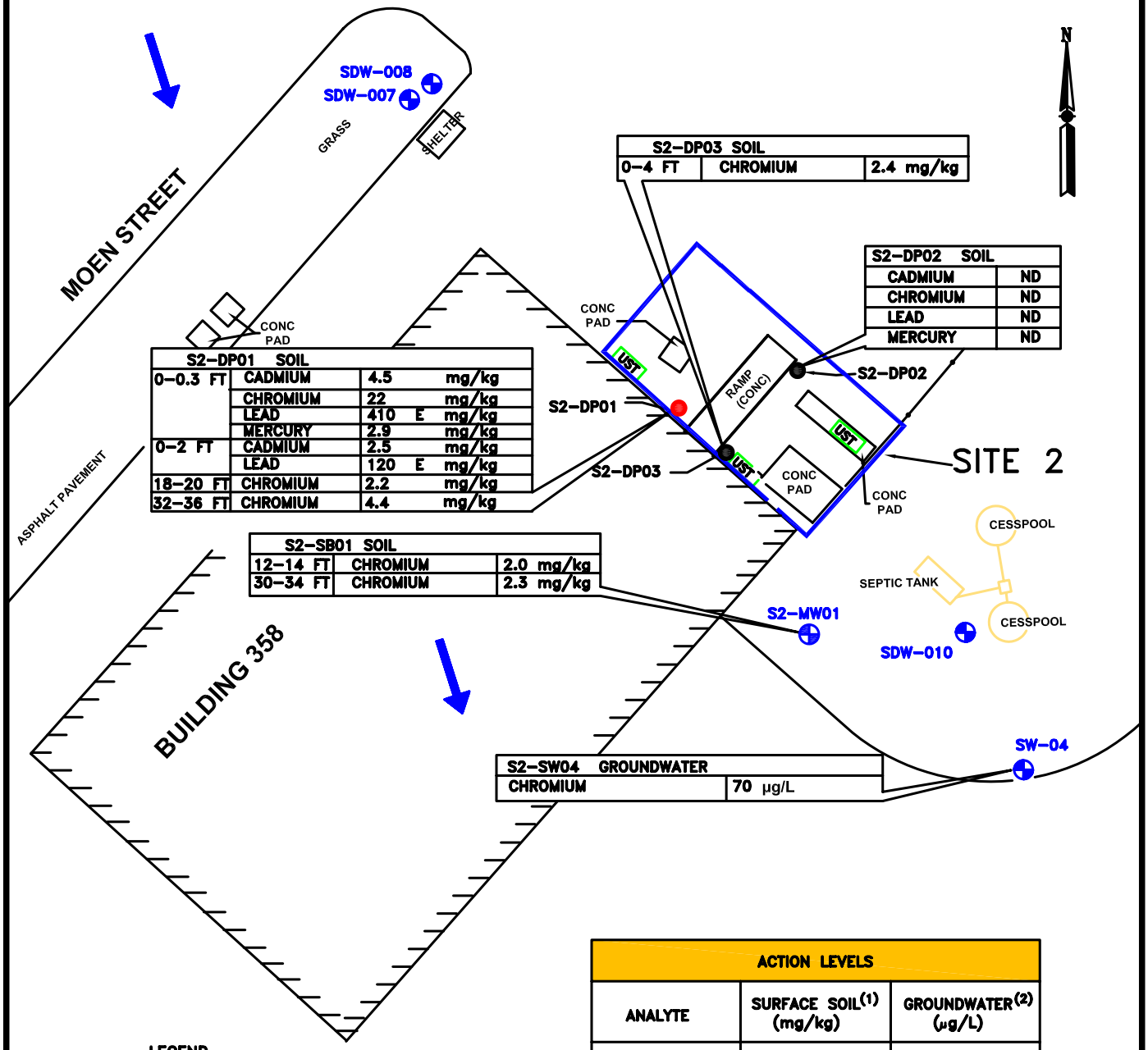
Groundwater screening samples were collected from the three direct-push borings for analysis of VOCs. Confirmatory groundwater samples were also collected from the three borings and analyzed for VOCs and SVOCs. No contaminants were detected in any of the groundwater screening or confirmatory samples from the three direct-push borings. Results of the confirmatory analysis of direct-push groundwater samples are summarized on Table 1.5.

Groundwater monitoring well samples were collected from the four existing wells and the newly installed well at Site 2. Groundwater samples were analyzed for VOCs, SVOCs, total petroleum hydrocarbons-gasoline range organics/diesel range organics (TPH-GRO/DRO), benzene, toluene, ethylbenzene and xylenes (BTEX), and metals. Analytical results for Site 2 monitoring well samples are summarized in Table 1.6 for organics and Table 1.7 for metals. The results for Site 2 are shown on Figure 1.3.

No BTEX, VOCs or SVOCs were detected above the NYSDEC action levels in any of the five monitoring wells. The SVOC bis(2-ethylhexyl)phthalate (BEHP) was detected at an estimated concentration of 6 μg/L, which is at the Maximum Contaminant Level (MCL). BEHP was determined to be a laboratory-introduced contaminant (PEER 2004a). TPH-GRO was not detected. TPH-DRO was detected in monitoring well S2-MW01 during Round 1 at a concentration of 0.6 mg/L, but was not detected in Round 2. NYSDEC action levels had not been established for TPH at the time of the 2001 RI.

Chromium was detected in well SW-04 at a concentration of 70 μg/L, which was above the NYSDEC action level of 50 μg/L, but below the MCL of 100 μg/L. No other metals were detected above the NYSDEC action levels in site groundwater. Chromium was determined to be naturally occurring (PEER 2004a).

The RI Report concluded that three COCs (arsenic, cadmium and lead) were present in a limited area in surface and near surface soil and that no other COCs were identified in subsurface soil or groundwater. The RI risk assessment indicated that exposures to the mercury, cadmium and lead in the limited area of soil at the site were not likely except during excavation activities. Therefore, the report recommended NFA for Site 2 (PEER 2004a).



ACTION LEVELS		
ANALYTE	SURFACE SOIL(1) (mg/kg)	GROUNDWATER(2) (µg/L)
CADMIUM	0.27	10
CHROMIUM	6.1	50
LEAD	4.4	25
MERCURY	0.1	–

1. NYSDEC TAGM #4046.
2. NYSDEC CLASS GA GROUNDWATER STANDARDS.

LEGEND

- DIRECT PUSH PROBE
- DIRECT PUSH PROBE WITH METALS EXCEEDING ACTION LEVELS
- MONITORING WELL
- MANHOLE COVER
- UST — FORMER UST
- APPROXIMATE GROUNDWATER FLOW DIRECTION (05/01)
- E — ESTIMATED VALUE
- ND — NON-DETECTED

0 25 50 100

SCALE IN FEET

SITES 2 RA RPT
PROJ./003005-041

SITE 2 – 2001 REMEDIAL INVESTIGATION RESULTS
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE 1.4

Table 1.3
Soil Sample Results for VOCs and SVOCs at Site 2 – 2001 RI
106th Rescue Wing
Westhampton Beach, New York

Parameter	Action Levels [b]		Sample Location, Depth, Type, and Concentrations[a]										
	Saturated [c]	Unsaturated [d]	SS01-01 (0-0.3 ft) U	DP01-01 (0-2 ft) U	DP01-02 (18-20 ft) U	DP01-03 (32-36 ft) S	DP02-01 (0-2 ft) U	DP02-02 (32-36 ft) S	DP03-01 (0-4 ft) U	DP03-02 (34-36 ft) S	SB01-01 (0-2 ft) U	SB01-02 (12-14 ft) U	SB01-03 (30-34 ft) S
Volatile Organics (µg/kg)													
Benzene	0.6	60	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	3.0	300	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND
Toluene	15	1500	ND	3 J	ND	ND	2 J	ND	ND	ND	2 J	ND	ND
Total Xylenes	12	1200	ND	1 J	ND	ND	2 J	ND	ND	ND	1 J	ND	ND
Semivolatile Organics (µg/kg)													
Di-n-octyl phthalate	1200	80,000	ND	ND	ND	ND	ND	ND	ND	530	ND	ND	ND
PCBs (µg/kg) [e]													
Aroclor 1260	1000 (Surface)	10,000 (Subsurface)	39 J	17 J	ND	ND	NA	NA	NA	NA	NA	NA	NA

Notes:
J Estimated value.
NA Not analyzed.
ND Not detected.

Shading and bolding indicate exceedance of action levels.

(a) Location "DP0X-0X" refers to sample number collected at location DP0X, at depth specified in ft bgs; DP02-03 is the third direct-push sample collected from location DP02 at a depth of 8-12 ft bgs. Type: S = saturated; U = unsaturated.
(b) Recommended Soil Cleanup Objectives, New York State Department of Environmental Conservation (NYSDEC), Technical and Administrative Guidance Memorandum (TAGM) 4046.
(c) Soil in direct contact with groundwater.
(d) Greater than 5 ft above the water table.
(e) Recommended Cleanup Objectives for PCBs in Surface and Subsurface Soils, NYSDEC, TAGM 4046

Table 1.4
Soil Sample Results for Metals at Site 2 – 2001 RI
106th Rescue Wing
Westhampton Beach, New York

Parameter	Action Levels		Sample Concentration Location/Depth [a]										
	NYSDEC RSCO [b]	BKG [c] or ULBC [d]	SS01-01 (0-0.3 ft)	DP01-01 (0-2 ft)	DP01-02 (18-20 ft)	DP01-03 (32-36 ft)	DP02-01 (0-4 ft)	DP02-02 (32-36 ft)	DP03-01 (0-4 ft)	DP03-02 (34-36 ft)	SB01-01 (0-2 ft)	SB01-02 (12-14 ft)	SB01-03 (30-34 ft)
Metals (mg/kg)													
Aluminum	SB	33,000	2300 E	1500 E	360	280	680 E	260 E	850 N*	350 N*	490 E	300 E	320 E
Arsenic	7.5 or SB	7.7/5.5 [d]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	300	15 - 600	28	9.8	1.3	1.4	1.3	0.89	1.6	1.6	1.8	21	1.9
Cadmium	1 or SB	0.39/0.27 [d]	**4.5**	**2.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	SB	130 - 35,000	5200 E	13,000 E	910	ND	120 E	ND E	140 *	ND *	1,300	ND	ND
Chromium	10 or SB	6.1/0.84 [d]	**22**	5.0	**2.2**	**4.4**	ND	ND	**2.4 ***	ND *	ND	**2.0**	**2.3**
Copper	25 or SB	1 - 50	41	18	ND	ND	2.1	ND	ND	ND *	ND	ND	2.5
Iron	2000 or SB	2000 - 550,000	4800 E	3100 E	2100	1000	900 E	520 E	1300 E	560 E	730 E	710 E	810 E
Lead	SB [e]	4.4/0.27 [d] [e]	***410 E***	**120 E**	ND	ND	ND E	ND E	ND *	ND *	ND	ND	ND
Magnesium	SB	100 - 5000	1200 E	6800 E	550	50	69 E	51 E	68 *	150 *	110	49	64
Manganese	SB	50 - 5000	93	48	20	6.4	8.2	8.1	12 N	12 N	12	14	22
Mercury	0.1	0.001 - 0.2	**2.9**	0.099	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	13 or SB	0.5 - 25	6.0	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	SB	6000 - 8000	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	150 or SB	1 - 300	13	3.9	1.9	2.1	2.7	ND	3.2	1.4	1.5	1.7	2.0
Zinc	20 or SB	9 - 50	**830 E**	**94 E**	2.7	1.8	4.6 E	1.5 E	6.2 *	2.3 *	2.7	2.1	2.0

Notes:

* Analysis is not within laboratory quality control limits.
E Estimated value or not reported due to the presence of interferences.
N Spike sample recovery is not within quality control limits.
ND Not detected.
SB Soil background.

Shading and bolding indicate exceedance of action levels.

(a) Location "DP0X-SS0X" refers to surface soil sample at direct-push location 0X, at depth specified in feet below ground surface (bgs): DP01-SS01 is direct-push surface soil sample (first sample) at location DP01 at depth of 0-0.3 ft bgs. Location "DP0X-0X" refers to sample number collected at location DP0X, at depth specified in ft bgs; DP02-03 is the third direct-push sample collected from location DP02 at a depth of 8-12 ft bgs.
(b) RSCO = Recommended Soil Cleanup Objectives, New York State Department of Environmental Conservation (NYSDEC), Technical and Administrative Guidance Memorandum (TAGM) 4046.
(c) BKG = Eastern USA Background, NYSDEC, TAGM 4046 (surface/subsurface).
(d) ULBC = Upper limits of background concentration for surface/subsurface metals in soils; see the *Final RI Report* Section 6.0 (PEER 2004a).
(e) Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm (mg/kg). Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200 to 500 ppm (mg/kg) (TAGM 4046)

Table 1.5
Direct-Push Groundwater Sample Results at Site 2 – 2001 RI
106th Rescue Wing
Westhampton Beach, New York

Parameter	Action Levels		Concentration at Sample Location [a]			
	NYS [b]	MCL [c]	PW01-01 (34-38 ft)	PW02-01 (34-38 ft)	PW02-21 (Dup) (34-38 ft)	PW03-01 (35-39 ft)
Volatile Organic Compounds (µg/L)						
2-Butanone	50	--	ND	ND	ND	6
Carbon Disulfide	50	--	0.4 J	0.3 J	0.4 J	0.2 J
Tetrachloroethene	5	5	ND	0.3 J	ND	0.4 J
Toluene	5	1000	0.3 J	0.6 J	0.5 J	ND
1,1,1-Trichloroethane	5	200	ND	ND	ND	2
TPH-GRO (µg/L)	--	--	NA	NA	NA	NA
TPH-DRO (mg/L)	--	--	NA	NA	NA	NA
Semivolatile Organic Compounds (µg/L)						
All Analytes	--	--	ND	ND	ND	ND

Notes:

B	Analyte is also found in associated blank.
Dup	Duplicate sample.
J	Estimated value.
MCL	Maximum Contaminant Level
NA	Not analyzed.
ND	Not detected.
TPH-DRO	Total petroleum hydrocarbons - diesel range organics.
TPH-GRO	Total petroleum hydrocarbons - gasoline range organics.
--	No applicable action level.

(a) Location "PW0X-0X" refers to sample number collected at location PW0X, at depth specified in ft bgs; PW01-01 is the first direct-push sample collected from location PW01 at a depth of 34-38 ft bgs.

(b) NYS = New York State, Class GA Groundwater; New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) 4046.

Table 1.6
Monitoring Well Sample Results for Organics at Site 2 – 2001 RI
106th Rescue Wing
Westhampton Beach, New York

Parameter	Action Levels		Sample Location and Concentration [a]										
	NYS [b]	MCL [c]	SDW007-01	SDW007-02	SDW008-01	SDW008-R1	SDW008-02	SDW008-R2	SDW010-01	SDW010-02	SW04-02	S2MW01-01	S2MW01-02
BTEX (µg/L)													
m/p-Xylenes	5	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.47	ND
Volatile Organic Compounds (µg/L)													
Carbon Disulfide	50	--	14	ND	2	4	ND	ND	0.4	ND	ND	0.9 J	5.0
Chloroform	7	80	5	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	5	ND	ND	ND	ND	ND	ND	0.8 J	0.5 J	ND	ND	ND
Toluene	5	1000	ND	0.7 J	0.5 J	0.6 BJ	ND	ND	0.2 J	ND	ND	ND	ND
1,1,1-Trichloroethane	5	200	ND	ND	ND	ND	ND	ND	ND	ND	1.0	2	ND
Trichloroethene	5	5	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND
Total Xylenes	5	10,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND
Semivolatile Organic Compounds (µg/L)													
BEHP	50	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	6 J	ND
1,4-Dichlorobenzene	4.7	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 BJ
Diethyl Phthalate	50 [d]	--	2.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	50 [d]	--	ND	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND
1,2,4-TCB	50 [e]	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 BJ
TPH-GRO (µg/L)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
TPH-DRO (mg/L)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.60	ND

Notes:

B Analyte is also detected in method blank.
BTEX Benzene, toluene, ethylbenzene, and xylenes.
J Estimated value.
NA Not analyzed.
ND Not detected.
NYSDEC New York State Department of Environmental Conservation.
TPH-DRO Total petroleum hydrocarbons - diesel range organics.
TAGM Technical and Administrative Guidance Memorandum.
TPH-GRO Total petroleum hydrocarbons - gasoline range organics.
-- No applicable action level.
1,2,4-TCB 1,2,4-Trichlorobenzene
BEHP bis(2-ethylhexyl)phthalate

(a) "SDW" refers to small-diameter well; "SW" refers to Stone & Webster well; "MW" refers to monitoring well; "-01" refers to Round 1 sampling, February - March 2001; "-02" refers to Round 2 sampling, May - June 2001; "R" refers to replicate sample collected at top of well screen.
(b) New York State (NYS), Class GA Groundwater; NYSDEC TAGM 4046.
(c) Maximum Contaminant Level (MCL), United States Environmental Protection Agency.
(d) Guidance value.
(e) Compound is a Principle Organic Compound (POC). Under New York State Drinking Water Standards, a general standard of 5 µg/L applies to all POCs unless a more stringent compound specific standard has been set (ABB-ES 1994).

Table 1.7
Monitoring Well Sample Results for Metals – 2001 RI
106th Rescue Wing
Westhampton Beach, New York

Parameter	Action Levels		Sample Location and Concentration [a]										
	NYS [b]	MCL [c]	SDW007-01	SDW007-02	SDW008-01	SDW008-R1	SDW008-02	SDW008-R2	SDW010-01	SDW010-02	SW04-02	S2MW01-01	S2MW01-02
Metals (µg/L)													
Aluminum	--	--	3600	740	6900	3000	1800	1500	1400	1000	2700	2400	1600
Arsenic	25	50 [d]	ND	ND	ND	ND	ND	ND	ND	ND	7.6	ND	ND
Barium	--	--	170 E	77	34	49	27	27	9.1	7.5	35 E	67	61
Cadmium	10	5.0	ND	ND	ND	ND	ND	ND	1.5	1.0	ND	ND	ND
Calcium	--	--	18,000 E	7200	17,000	21,000	15,000	15,000	17,000	18,000	33,000	19,000	24,000
Chromium	50	100	9.3	2.3	14	6.4	5.0	4.5	3.9	5.1	**70**	7.2	5.0
Cobalt	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	5.7
Copper	--	1300 [e]	8.1	ND	8.6	ND	ND	ND	ND	ND	ND	6.2	ND
Iron	--	--	5000 E	1100	9700 E	4700	3300	2900	1200 E	1400	3300 E	5000	2900
Lead	25	15 [e]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	--	--	3400	1300	5700	6000	3800	3800	2900	3300	5800	4500	5100
Manganese	--	--	730 E	240	260 E	110	83	84	20 E	12	270	110	73
Nickel	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	--	--	16,000	10,000	3100	2800	1800	2000	1900	1300	2900	1600	1800
Sodium	--	--	46,000	67,000	33,000	91,000 N	ND	ND	32,000	31,000	40,000	24,000	33,000
Thallium	--	--	ND	ND	ND	ND	38,000	39,000	ND	ND	ND	5.2	ND
Vanadium	--	--	12	ND	18	9.2	5.5	ND	ND	ND	6.9	9.4	5.2
Zinc	--	--	66	75	64	ND	55	92	55	42	28	48	ND

Notes:
E Estimated value or not reported due to the presence of interferences.
N Spike sample recovery is not within quality control limits.
ND Not detected.
-- No applicable action level.

Shading and bolding indicates exceedance of action level.

(a) "SDW" refers to small-diameter well; "MW" refers to monitoring well; "SW" refers to Stone & Webster well; "R" refers to replicate sample collected at the top of the well screen; "-01" Refers to Round 1 sampling, February - March 2001; "-02" Refers to Round 2 sampling, May - June 2001.
(b) New York State (NYS), Class GA Groundwater; NYSDEC TAGM 4046.
(c) Maximum Contaminant Level (MCL), United States Environmental Protection Agency.
(d) Federal MCL is under review.
(e) Treatment Technique action level. Federal MCL is concentration in water collected from tap.

1.2.3 2004 No Further Response Action Required Decision Document

In 2004, an NFRAP DD was prepared for Site 2. The NFRAP recommended NFA for Site 2 on the basis of the previous investigations and the risk assessment which indicated that risks associated with the site were negligible (PEER 2004b).

The NYSDEC did not concur with the NFA recommendation and requested additional groundwater sampling (especially in the area of DP-012) to demonstrate whether or not chromium existed in site groundwater at levels exceeding the action level or was consistent with background conditions (NYSDEC 2005).

1.2.4 2008 Data Gap Investigation

The 2008 Data Gap Investigation was conducted in response to the NYSDEC's request for additional groundwater sampling at Site 2 as previously discussed in Section 1.2.3. During the Data Gap Investigation, one new monitoring well (S2-MW-02) was installed at Site 2 in the vicinity of former direct-push groundwater sample location DP-012 (Section 1.2.1). Groundwater samples were collected from four existing wells and the one newly installed well. The samples from Site 2 were submitted to the laboratory for analysis of dissolved (filtered) and total metals [Environmental Protection Agency (EPA) Method 6010/7000].

Table 1.8 summarizes the analytical results for the groundwater sampling activities. The results are shown on Figure 1.5. The analytical results for the groundwater samples are discussed in the following paragraph.

Chromium was not detected in the new well (S2-MW02) that was installed at the former location of direct-push boring DP-012. Chromium (unfiltered sample) was detected at a concentration of 222 µg/L in well SW-04 which exceeded the NYSDEC Class GA groundwater standard of 50 µg/L. However, chromium was not detected in the dissolved (filtered) sample from the same well, and no other metals were detected at concentrations exceeding the NYSDEC Class GA groundwater standards.

The positive result for chromium in the unfiltered (total) metals sample at SW-04 was attributed to entrained sediments in the sample, and was supported by the fact that the filtered (dissolved) metals sample did not contain chromium. Therefore, chromium was not retained as a COC in groundwater, and the report for the Data Gap Investigation recommended NFA for Site 2.

1.2.5 2011 Proposed Remedial Action Plan

In 2011, a PRAP was prepared for Sites 2, 3 and 5. The PRAP recommended remedial action for metals-impacted soils at Site 2 due to the planned construction activities at the site. The NYSDEC concurred with the recommendation (PEER 2011a).

Table 1.8
Monitoring Well Sample Results at Site 2 – 2008 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Parameter	Action Level	Concentration (µg/L)					
		SDW-008		SDW-010		SW-04	
		Total	Dissolved	Total	Dissolved	Total	Dissolved
Arsenic	25(1)	<20	<20	<20	<20	<20	<20
Cadmium	5(1)	<5	<5	<5	<5	<5	<5
Chromium	50(1)	<5	<5	18.0	<5	**222**	<5
Lead	15(2)	<10	<10	<10	<10	<10	<10
Mercury	0.7(2)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silver	50(1)	<10	<10	<10	<10	<10	<10
Parameter	**Action Level**	**S2-MW-01**		**S2-MW-02**		**S2-MW-02D (Duplicate)**	
		Total	**Dissolved**	**Total**	**Dissolved**	**Total**	**Dissolved**
Arsenic	25(1)	<20	<20	<20	<20	<20	<20
Cadmium	5(1)	<5	<5	<5	<5	<5	<5
Chromium	50(1)	<5	<5	<5	<5	<5	<5
Lead	15(2)	<10	<10	<10	<10	<10	<10
Mercury	0.7(2)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silver	50(1)	<10	<10	<10	<10	<10	<10

Notes:
1. New York State Department of Environmental Conservation (NYSDEC) Class GA Groundwater Standard.
2. Federal Maximum Contaminant Level (MCL).

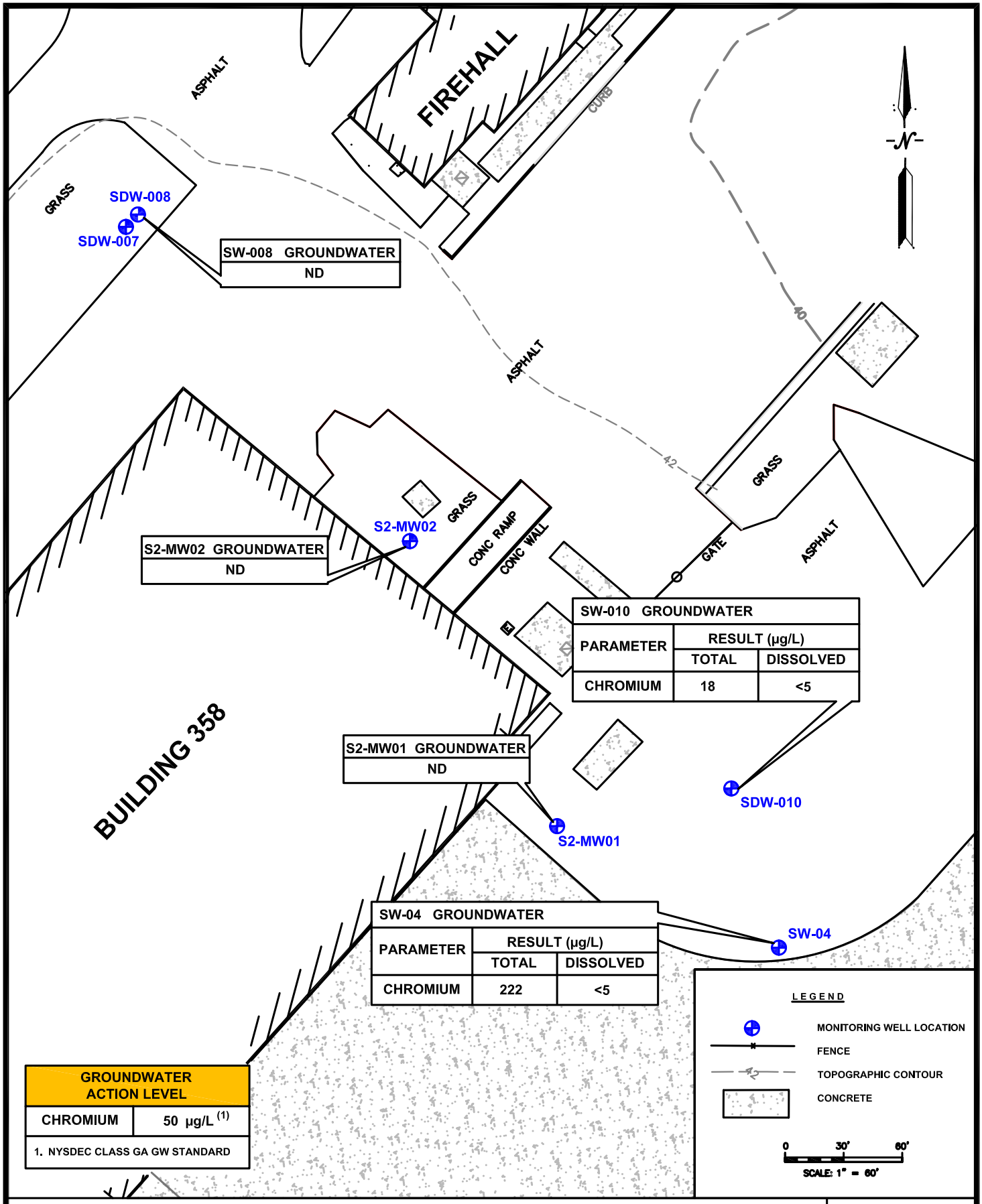
1.3 PROJECT CLOSEOUT ACTIVIITES

In the near future, the 106th RQW plans construction activities at Site 2 on the northeast side of Building 358. A limited area of metals-contaminated surface soil identified during the 2001 RI (Section 1.2.2) was present in the immediate vicinity of the planned construction activities at the site. Additionally, a groundwater monitoring well (S2-MW02) was also located in the area. Therefore, remedial action was conducted to remove the contaminated soils to achieve unrestricted site closeout, and the monitoring well was abandoned.

This section details the remedial action and well abandonment activities performed at Site 2. Copies of daily field log notes are provided in Appendix B.

1.3.1 Well abandonment

One monitoring well (S2-MW-02) was abandoned at Site 2 (Figure 1.4) on November 3, 2011. The well was abandoned in accordance with NYSDEC policy by removing the surface completion (e.g., concrete pad, manhole), and then grouting in-place. In order to grout in-place, the well casing was filled with grout to a level of approximately 5 ft bgs and the casing was cut at the 5 ft depth. The top portion of the casing was removed and the upper 5 ft of the hole was backfilled with native soils to the land surface. The area was later reseeded in conjunction with the restoration of the excavated area. An NYSDEC Well Decommissioning Record form was prepared and is included in Appendix C.



SITES 2 RA RPT
PROJ./3005-041

SITE 2 – 2008 DATA GAP INVESTIGATION RESULTS
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE
1.5

1.3.2 Soil Excavation

Remedial action began at Site 2 on November 4, 2011 and consisted of excavating metals-impacted soil adjacent to the northern end of Building 358. The soil was excavated from an area of 4 ft by 5 ft in size to a depth of approximately 3 ft in accordance with the *Work Plan* (PEER 2011b). The extent of the excavated area is shown on Figure 1.6.

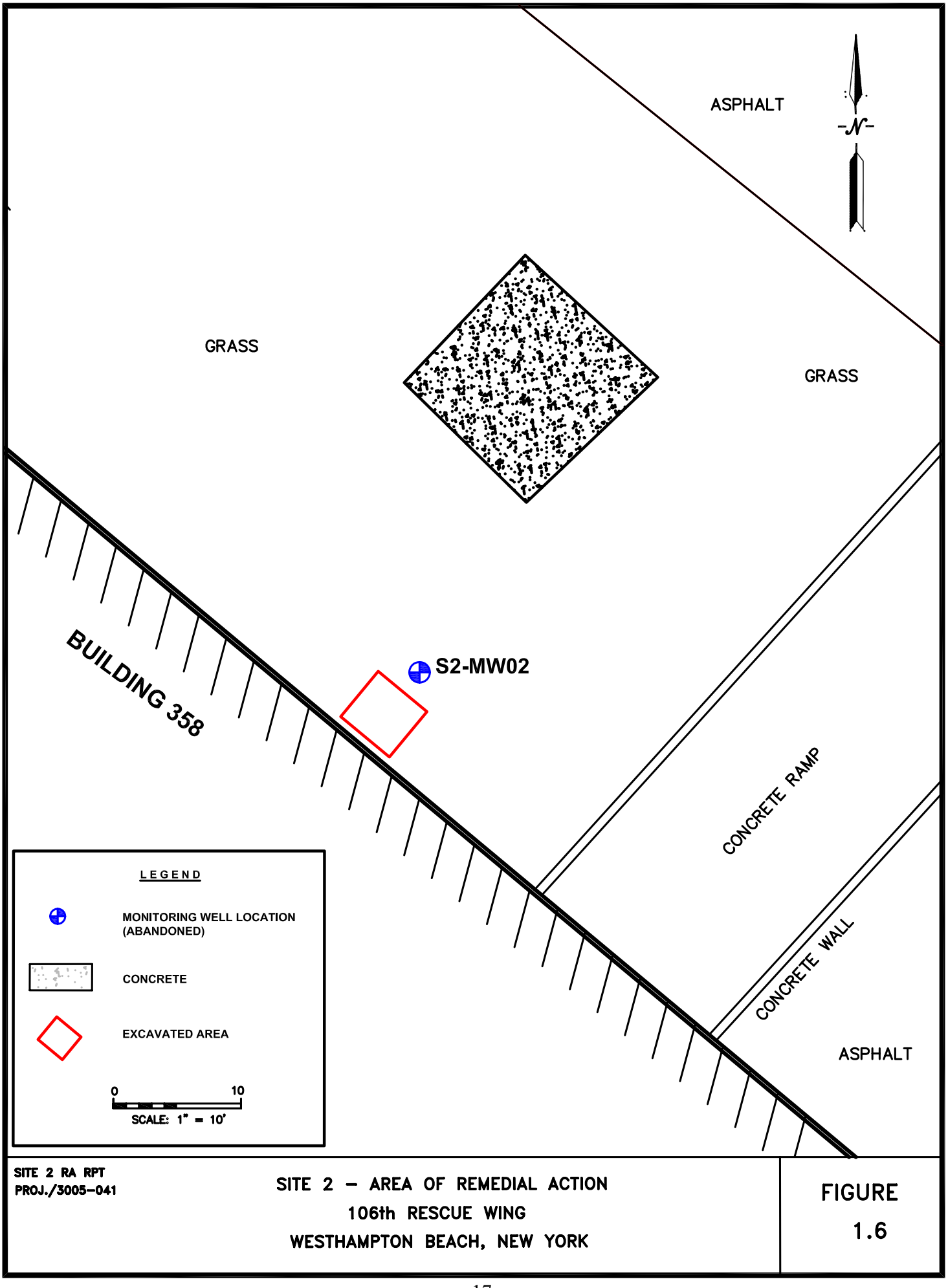
After the initial excavation was completed, five confirmation soil samples consisting of four sidewall samples and one bottom sample were collected from the excavation to ensure that all of the contaminated soil had been removed. Each sidewall sample was a composite obtained from three locations collected from the bottom third of the particular sidewall. Additionally, the bottom sample was collected and composited from three locations in the floor of the excavation. Soil sample results were compared to SCOs of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage in accordance with NYSDEC requirements. Confirmation soil sample results are provided in Table 1.9. The Laboratory Data Reports are provided in Appendix D. The activities conducted are described in the following paragraphs.

The soils were removed using a small backhoe with the overall excavation extending to a depth of 3.2 ft bgs. In all, 2.4 yd^3 (4.3 tons) of metals-impacted soil were excavated and removed from Site 2. No staining or odors were observed in site soils during the excavation activities and no photoionization detector (PID) readings greater than 0.0 ppmv were observed or recorded. Photographs of the area are provided in Appendix E.

Upon completion of the excavation activities, one bottom and four sidewall confirmation soil samples (southwest, southeast, northeast and northwest walls) were collected and submitted to the laboratory for analysis of metals (cadmium, lead and mercury) at expedited turnaround time (TAT). Both the roll off and the excavation were covered and secured while awaiting the results of the confirmation samples. The results of the confirmation samples indicated that all of the contaminated soil above Soil Cleanup Objectives (SCOs) had been removed from the excavation floor and each of the sidewalls except the southwest wall.

The confirmation soil sample from the southwest wall (GAB-SW-1) contained mercury at a concentration of 0.41 mg/kg which exceeded the SCO of 0.18 mg/kg (Table 1.6). The duplicate sample from the southwest wall (GAB-SW-1D) also contained mercury but it was detected at a concentration below the SCO at 0.17 mg/kg.

The southwest wall was initially excavated to the edge of Building 358, and any additional excavation would require digging under the foundation of the building. Therefore, no further soil removal was conducted at the southwest wall to preserve the structural integrity of the building. The NYSDEC had previously agreed that further excavation would not be necessary if it would compromise the structural integrity of the building (NYSDEC 2011).



SITE 2 RA RPT
PROJ./3005-041

SITE 2 – AREA OF REMEDIAL ACTION
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE
1.6

Table 1.9
Excavation Confirmation Sample Results at Site 2 – 2011 Remedial Action
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Confirmation Sample ID/Analytical Results					
		GAB-SW-1	GAB-SW-1D	GAB-SE-1	GAB-NE-1	GAB-NW-1	GAB-FL-1
Metals(mg/kg)							
Cadmium	2.5	ND	ND	ND	ND	ND	ND
Lead	63	ND	ND	3.0	ND	ND	ND
Mercury	0.18	**0.41**	0.17	ND	ND	ND	ND

Notes:

(1) Action levels for the remedial action were the Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "GAB-SW-1" refers to the southwest sidewall sample number one, and sample "GAB-SW-1D" refers to southwest sidewall sample number one (duplicate). "GAB-FL-1" refers to the excavation bottom sample.
(3) Shading and bolding indicate that the result exceeds the action level.

ND Not detected.

1.3.3 Soil Disposal

In all, 4.3 tons of soils were excavated from the excavation at Site 2. The excavated soil was placed in a lined roll-off and covered with a tarp. Excavated soil was transported to Clean Earth, Carteret, New Jersey for recycling on November 16, 2011. Non-Hazardous Waste Manifests and weight tickets are provided in Appendix F. Characterization samples were collected for the recycling facility prior to transporting the soil. The characterization sample results are provided in Appendix D.

1.3.4 Site Restoration

The site was restored by backfilling with approximately 3 yd^3 of clean sandy soil. The soil was compacted with the backhoe and slightly mounded before being reseeded.

1.4 COMMUNITY RELATIONS ACTIVITES

The public was invited to review the draft-final version of the Proposed Remedial Action for Sites 2, 3 and 5 during a 45-day Public Comment Period which began on August 18 and ended on October 1, 2011. Additionally, a Public Meeting was held on September 6, 2011 to discuss the results of the previous investigations and the planned remedial action for Site 2, and to answer any questions. No questions or comments were received from the public during the public meeting or during the Public Comment Period. A Responsiveness Summary is provided in Attachment 1 of the *Final Proposed Remedial Action Plan for Sites 2, 3 and 5* (PEER 2011).

2.0 DEMONSTRATION OF QUALTIY ASSURANCE/QUALITY CONTROL FROM CLEANUP ACTIVITIES

The quality assurance/quality control (QA/QC) program for this remedial action was conducted in accordance with the ANG's *Environmental Restoration Program Investigation Guidance* document (ANG 2009), and the *Work Plan* and *Site-Specific Quality Assurance Plan* (PEER 2011b). These plans provided procedures that were employed during the remedial activities to:

- delineate the areas of contamination;
- confirm that the contaminated soils were successfully excavated and removed; and to
- ensure that the analytical results from the confirmation samples were representative and reproducible.

Implementation of the procedures presented in the plans resulted in meeting project performance goals and the demonstration of achievement of the planned remedial action. A duplicate soil sample was collected, and field blanks (decontamination water blanks and equipment rinsate samples) were collected to ensure that the analytical results from the confirmation samples were representative and reproducible. No contaminants were detected in the field blanks. Laboratory data for the field blank sample results are provided in Appendix D.

In addition, to the written plans and procedures, and duplicate samples, ANG oversight personnel visited the site during field operations to verify that the remedial action activities were conducted in conformance with the *Work Plan* and ANG protocol.

3.0 MONITORING RESULTS

Remedial action monitoring results (Table 1.6) indicate that all of the contaminated soils exceeding SCOs except adjacent to the foundation of Building 358 have been excavated and disposed of in accordance with the *Work Plan* and NYSDEC requirements. Based on a prior agreement with the NYSDEC to protect the structural integrity of Building 358, no further excavation or monitoring at the site is necessary. The NYSDEC and the New York State Department of Health have concurred with the recommendation for no further excavation or monitoring at the site. A concurrence letter is presented in Appendix G.

4.0 SUMMARY OF OPERATION AND MAINTENANCE

The remedial action (i.e., soil excavation and disposal) at Site 2 is complete and no ongoing operation and maintenance activities are necessary.

5.0 PROTECTIVENESS

The remedial action activities at Site 2 are completed and all of the contaminated soils above SCOs have been removed from the impacted area at the site except at the foundation of the northern end of Building 358 (Hanger 2). The area is in the vicinity of a future construction project at the base, and will be covered once the planned extension of the building is complete. The excavation and disposal of contaminated soil above SCOs at the site adequately protects human health and the environment by eliminating any direct contact risks and reduces and/or prevents migration of the contaminants through runoff or sediment erosion.

APPENDIX A
REFERENCES

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APPENDIX A: REFERENCES

ABB-Environmental Services, *Site Investigation Report, 106th Rescue Group*, May 1997.

Air National Guard (ANG), *Environmental Restoration Program Investigation Guidance*, September 2009.

New York State Department of Environmental Conservation (NYSDEC), *Memorandum concerning the exception for no further excavation at Site 2 to protect the structural integrity of Building 358*, June 21, 2011.

NYSDEC, *6 New York Codes, Rules and Regulations Part 375 Environmental Remediation Programs, Subparts 375-1 to 375-4 & 375-6*, December 14, 2006.

NYSDEC, *Memorandum requesting further investigation at Sites 2 and 5*, September 13, 2005.

NYSDEC, *Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (1.1.1)*, 1991.

PEER Consultants, P.C. (PEER), *Final Proposed Remedial Action Plan for Sites 2, 3 and 5 at the 106th Rescue Wing, Francis S. Gabreski Airport, Westhampton Beach, New York*, December 2011a.

PEER, *Final Letter Remedial Action Work Plan for Project Closeout Activities at Site 2 at the106th Rescue Wing, Francis S. Gabreski Airport, Westhampton Beach, New York*, September 2011b.

PEER Consultants, P.C. (PEER), *Final Technical Memorandum for the Data Gap Investigation at Sites 2 and 5, 106th Rescue Wing, Francis S. Gabreski Airport, Westhampton Beach, New York*, January 2009.

PEER, *Final Remedial Investigation Report for Sites 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, and 12, 106th Rescue Wing, New York Air National Guard*, May 2004a.

PEER, *Site 2 No Further Response Action Planned Decision Document, 106th Rescue Wing, Gabreski Airport, Westhampton Beach, New York*, 2004b.

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APPENDIX B
FIELD LOGBOOK

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Gabreski Site 2
Project Closeout

Rite in the Rain®
ALL-WEATHER
ENVIRONMENTAL FIELD BOOK
№ 550F

3005-041

CONTENTS

PAGE	REFERENCE	DATE

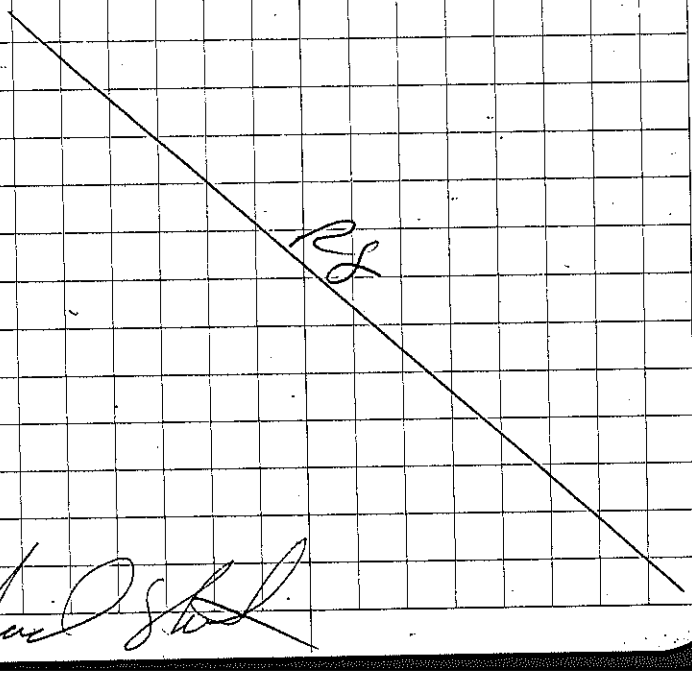
Location Gabreski ANG Date 11-2-2011

Project / Client Site 2 Project closeout

0815 Arrive on base. Meet w/ Tony Vesell and Lt. Denton. Weather is cold and clear. We have received word that roll-off will not be delivered due to storms, we are looking for another subcontractor.

1130 Robert Fontaine (utility Locater) arrives on site to mark utilities.

1240 Utilities at site 2 are marked and we head to lunch. Cheryl Brewer is also here.



Location Gabreski ANG Date 11-3-2011

Project / Client Site 2 Project closeout

0745 Arrive on base. Weather is cold and clear. Talk briefly w/ Tony V and head to site.

0855 Clearwater Drilling arrives on site w/ Bruce V. and Kevin Hough. They will ~~develop~~ RS abandon S2-MW02.

0914 Tom Barzyk from BBEE calls. He is on his way to the site.

0919 Tom arrives soon & we begin Digging up well pad. Mixing 7 gal water, 5 Lbs Bentonite powder and 1 bag of 98.4 Lbs of cement.

0936 Tom B here. Lt. Denton arrives.

1000 In the process of grouting the well. we cut 2 FT ~~of~~ from the casing w/ an inside the casing cutter initially. The right before grouting we cut an additional 3FT off below the ground for a total of approximately 5FT. below grand surface.

1010 Grouting is finished. Richard Stott

Location Gabreski ANG Date 11-3-2011

Project / Client Site 2 Project closeout

1015 We are backfilling the hole from removing the well pad. The well was grouted all the way to the top and grout lies in the bottom of the hole.

1026 Clearwater drilling heads out. Tony still here. Lt Denton has left earlier.

1115 We head w/ Tom to lunch.

1250 Return. They are coming to Drop off the Roll-off. Tony met us at the Gate. We need to stop by the hardware store.

1400 Roll-off is in place and terped. Thadeuss (Roll-off Deliverer) showed us how to operate the terp.

1451 We head out for supplies and end day.

RS

Richard Stott

Location Gabreski ANG Date 11-04-2011

Project / Client Sit 2 project closeout

0845	Arrive on Base w/ C. Brewer. Weather is cold and windy, Mostly cloudy. Tony V. Met us at the gate.
0900	Tailgate health and safety meeting.
0905	Cleary and I mark out the site Area is approximately 4 x 5
0912	Digging begins. Workers are Don and Bruce of EAR. PID is calibrated. checking soils w/ PID for evidence of petroleum hydrocarbons. So far all readings are 0.0 ppmv.
0936	still digging. Excavation is 2FT Deep. No PID reading above 0.0 ppmv. No odors. Soil is Mostly sand w/ fine and course gravel.
0953	Still digging. Excavation is at about 2.8 FT Deep.
1015	Excavation is approximately 3FT Deep. No PID readings above 0.0 ppm. We are cleaning out the excavation. Due to cave in hole is Flush w/ wall of 358.

Richard Stark

Location Gabreski ANG Date 11-04-2011

Project / Client Site 2 Project closeout

1020	Excavation is complete at 3.1 FT in Depth. Size = 4' x 5' x 3.1 FT Deep. See drawing Page 11.
1024	Collect Sample # GAB-SW-1 (1) 6oz Plastic (metals - Cadmium, lead and mercury Sample # GAB-SW-1D (1) 6oz plastic (metals) Sample # GAB-SW-1MS & 1MSD (2) 6oz plastic (metals) Collected from 2 to 2.5 FT BGS from 3 locations on the SW wall of the excavation
1035	Collect sample # GAB-SE-1 (1) 6oz plastic for Metals (cadmium, lead and mercury. Collected from 2 to 2.5 FT BGS from 3 locations on the SE wall. Decanning Bowl before and after each sample as specified in the work plan.

Richard Stark

Location Gabreski ANG Date 11-04-2011

Project / Client Site 2 Project closeout

1042 Collect Sample # GAB-NE-1
(1) 60z plastic container (metals)
Collect from 3 locations from
2.0 to 2.5 FT on the NE wall.

1049 Collect sample # GAB_NW-1
(1) 60z plastic (metals)
Collected from 3 locations from
2.0 to 2.5 FT on the NW wall.

1055 Collect sample # GAB-FL-1
(1) 60z plastic (metals). Collected
from 3 locations in the Approximate
Middle portion of the FLOOR.

1103 collect soil characterization sample (RS)
~~from tote~~ for the disposal company.
(1) 2~~40~~z VOCs (glass) (RS)
(1) 80z glass
(1) 60z plastic
TPH (8015), TOTALS VOCs (8260B)
PAHs (8270), Total metals (6010)
TCLP metals (1311/6010), Ign. ability
(1010A), Corrosivity (pH) (9040C),
Reactivity (Sulfide & Cyanide (SW-846
Chpt 7.3), PCBs (8082).

Rhad Slack

Location Gabreski ANG Date 11-04-2011

Project / Client Site 2 Project closeout

1120 Collect ~~Sample~~ (RS) Blank (ASTM Type II
water) sample ~~by pouring over~~ (RS) (RS)
~~a DC contaminated spoon~~ (RS). Sample
GAB-FB-ASTM
(1) 60z plastic (metals)
Did not collect a tap water blank
since we used ASTM Type II
water for rinsing at each step.

1125 Collect Rinsate Sample #
GAB-RS by pouring over decon-
taminated spoon & directly into
the bottle.
(1) 60z plastic (metals)

1135 The Excavation is covered w/
Ply Board and entrance to the area
is controlled by caution tape.
We are completing pape work
for samples.

1145 Head to Laboratory to Drop off
Samples.

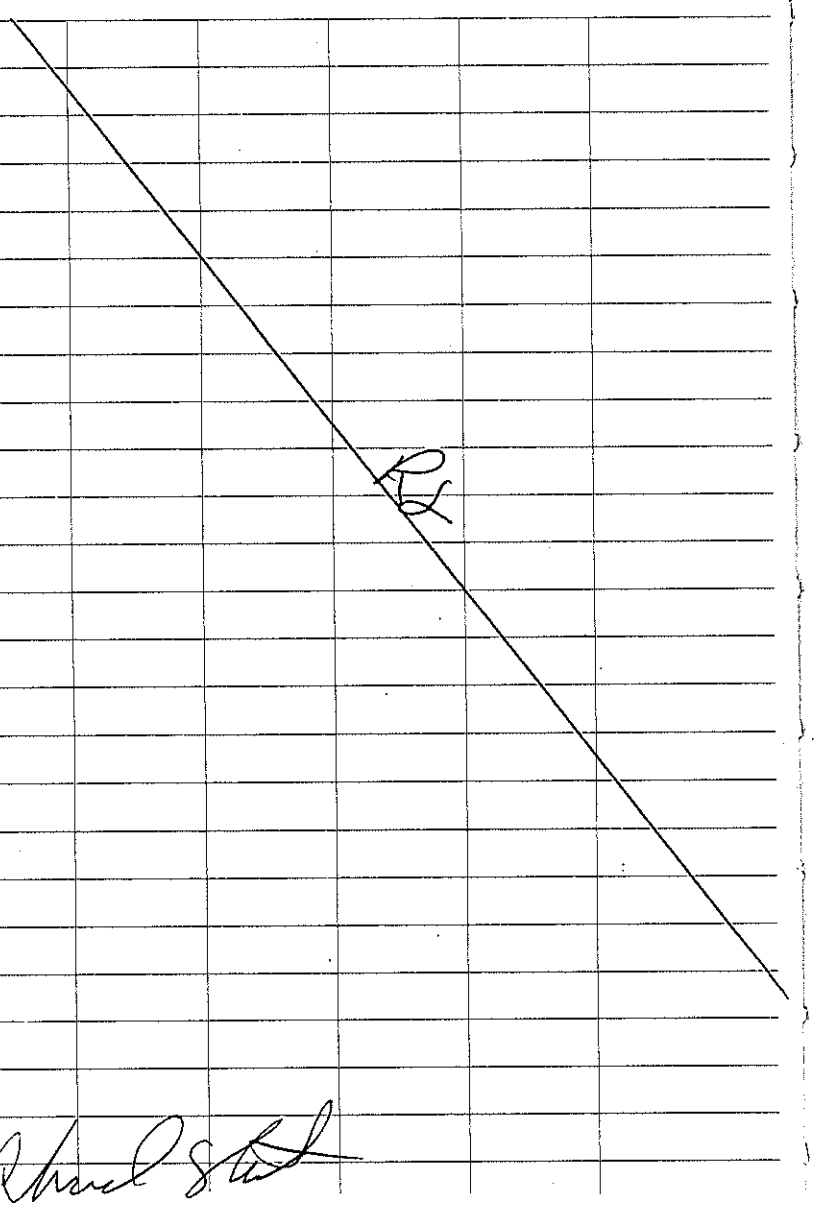
RS

Rhad Slack

10

Location Gabreski ANG Date 11-04-2011

Project / Client Site 2 Project Closeout

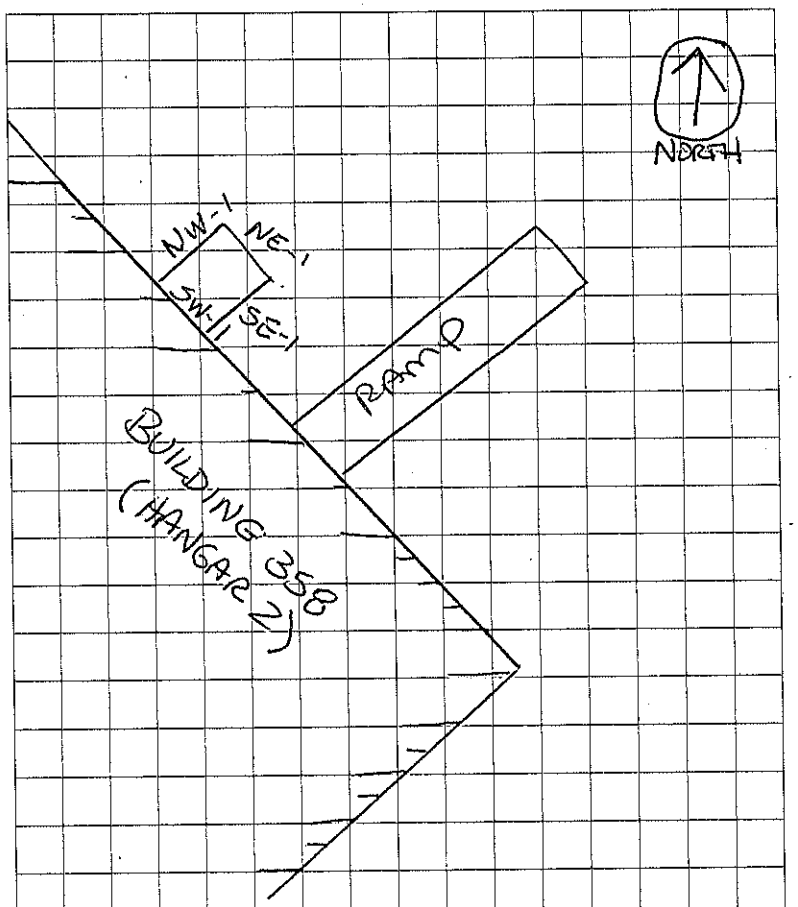


Richard Stuart

11

Location Gabreski ANG Date 11-04-2011

Project / Client Site 2 project Closeout



SAMPLE LOCATIONS (NOT TO SCALE)

Richard Stuart

Location Gabreski ANG Date 11-08-2011

Project / Client Site 2 Project closeout

0730 Arrive on base. We are waiting on Tony V. Weather is cool and clear.

0750 Tony here. Head to site. Received analytical results. All Results below action levels except the original sample for the SW wall which is up against the building. We have already excavated to the ~~east~~ edge of the building so today we will backfill. The result was 0.41 mg/kg for Mercury. The action level is 0.18 mg/kg. The duplicate sample was at 0.17 mg/kg.

0815 Backhoe operator Arrives. Still waiting on the backhoe & Fill. Keith Wood w/ Racanelli arrives. He needs to have us move the Roll-off so they can fix asphalt. I tell him it will be likely moved next week.

0833 Backhoe ~~Oper~~ RS and fill arrive.

Richard Stark

Location Gabreski ANG Date 11-08-2011

Project / Client Site 2 Project closeout

0848 We begin backfilling w/ brown silty sand from All County Block and Supply Corp, Bohemia, NY 11716. Listed as topsoil.

0926 We are still backfilling. We plan to mound the soil a little just in case it settles.

1000 Backfill is complete.

1000 We have re-seeded and are cleaning up around the site.

1105 Site is finished and we head (to ship supplies) to FedEx.

RS

Richard Stark

APPENDIX C
NYSDEC WELL DECOMMISSIONING RECORD FORM

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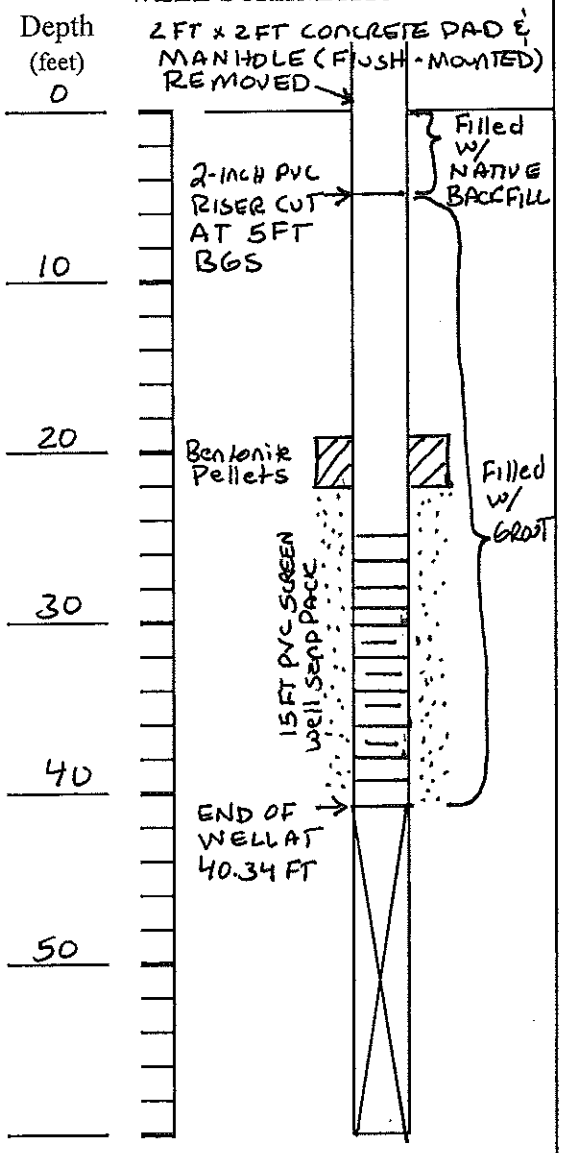
WELL DECOMMISSIONING RECORD

Site Name: Site 2	Well I.D.: S2-MW02
Site Location: Gebreski ANG Base	Driller: Bruce Vigliotta
Drilling Co.: Clearwater Drilling	Inspector: Tom Berzyk
	Date: 11-3-2011

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	N/A
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	N/A
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	N/A
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	5-40.34
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7gal
Quantity of cement used (lbs.)	98.4
Cement type	Portland
Quantity of bentonite used (lbs.)	5
Quantity of calcium chloride used (lbs.)	N/A
Volume of grout prepared (gal.)	<10
Volume of grout used (gal.)	<10

WELL SCHEMATIC*



COMMENTS:

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Bruce Vigliotta
Drilling Contractor

Department Representative

APPENDIX D
LABORATORY DATA REPORT

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3005-0415

LONG ISLAND ANALYTICAL LABORATORIES INC.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"

Laboratory Report

NYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
NJDEP# NY012
PADEP# 68-2943

LIAL# 1110403

November 15, 2011

Peer Consultants, P.C.
Richard Stout, Project Mgr
78 Mitchell Road
Oak Ridge TN, 37830

Re: Gabreski ANG Station Site 2

Dear Richard Stout, Project Mgr,

Enclosed please find the Laboratory Analysis Report(s) for sample(s) received on November 04, 2011. Long Island Analytical Laboratories analyzed the samples on November 14, 2011 for the following:

CLIENT ID	ANALYSIS
GAB-SW-1	Cadmium, Lead, Mercury
GAB-SW-1D	Cadmium, Lead, Mercury
GAB-SW-1MS	Cadmium, Lead, Mercury
GAB-SW-1MSD	Cadmium, Lead, Mercury
GAB-SE-1	Cadmium, Lead, Mercury
GAB-NE-1	Cadmium, Lead, Mercury
GAB-NW-1	Cadmium, Lead, Mercury
GAB-FL-1	Cadmium, Lead, Mercury
GAB-SC-1	EPA 8082, EPA 8260C, EPA 8270 PAH, Flashpoint, pH, RCRA 23, Reactivity, TCLP (8) Metals, TPH 8015
GAB-FB-ASTM	Cadmium, Lead, Mercury
GAB-RS	Cadmium, Lead, Mercury
GAB-TB	EPA 8260C

Samples received at 3.1 ° C

1.C Holding time exceeded, analyze immediate parameter

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.

Michael Veraldi - Laboratory Director

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 10:24	Sample ID: GAB-SW-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-01
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/07/2011	EPA 6010B	1.00	<1.00	mg/kg dry	
Lead	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3050B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 6010B			
Mercury	11/07/2011	EPA 7471A	0.02	0.41	mg/kg dry	4.G
Date Prepared: 11/07/2011			Preparation Method: EPA 7471 B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 7471A			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 10:24	Sample ID: GAB-SW-1D
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-02
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/07/2011	EPA 6010B	1.00	<1.00	mg/kg dry	
Lead	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3050B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 6010B			
Mercury	11/07/2011	EPA 7471A	0.02	0.17	mg/kg dry	4.G
Date Prepared: 11/07/2011			Preparation Method: EPA 7471 B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 7471A			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 10:24	Sample ID: GAB-SW-1MS
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-03
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/07/2011	EPA 6010B	1.00	30.1	mg/kg dry	
Lead	11/07/2011	EPA 6010B	1.65	31.4	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3050B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 6010B			
Mercury	11/07/2011	EPA 7471A	0.02	0.29	mg/kg dry	4.G
Date Prepared: 11/07/2011			Preparation Method: EPA 7471 B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 7471A			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 10:24	Sample ID: GAB-SW-1MSD
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-04
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/07/2011	EPA 6010B	1.00	29.4	mg/kg dry	
Lead	11/07/2011	EPA 6010B	1.65	30.7	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3050B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 6010B			
Mercury	11/07/2011	EPA 7471A	0.02	0.29	mg/kg dry	4.G
Date Prepared: 11/07/2011			Preparation Method: EPA 7471 B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 7471A			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 10:35	Sample ID: GAB-SE-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-05
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/07/2011	EPA 6010B	1.00	<1.00	mg/kg dry	
Lead	11/07/2011	EPA 6010B	1.65	2.98	mg/kg dry	

Date Prepared: 11/07/2011
Preparation Method: EPA 3050B
Date Analyzed: 11/07/2011
Analytical Method: EPA 6010B

Mercury	11/07/2011	EPA 7471A	0.02	<0.02	mg/kg dry	4.G

Date Prepared: 11/07/2011
Preparation Method: EPA 7471 B
Date Analyzed: 11/07/2011
Analytical Method: EPA 7471A

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 10:42	Sample ID: GAB-NE-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-06
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/07/2011	EPA 6010B	1.00	<1.00	mg/kg dry	
Lead	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3050B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 6010B			
Mercury	11/07/2011	EPA 7471A	0.02	<0.02	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 7471 B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 7471A			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 10:49	Sample ID: GAB-NW-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-07
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/07/2011	EPA 6010B	1.00	<1.00	mg/kg dry	
Lead	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3050B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 6010B			
Mercury	11/07/2011	EPA 7471A	0.02	<0.02	mg/kg dry	4.G
Date Prepared: 11/07/2011			Preparation Method: EPA 7471 B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 7471A			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 10:55	Sample ID: GAB-FL-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-08
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/07/2011	EPA 6010B	1.00	<1.00	mg/kg dry	
Lead	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3050B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 6010B			
Mercury	11/07/2011	EPA 7471A	0.02	<0.02	mg/kg dry	4.G
Date Prepared: 11/07/2011			Preparation Method: EPA 7471 B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 7471A			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:03	Sample ID: GAB-SC-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-09
Matrix: Soil	ELAP: #11693

Volatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
Bromomethane	74-83-9	5.14	<5.14	ug/kg dry	4.J
Chlorodifluoromethane	75-45-6	5.14	<5.14	ug/kg dry	
Chloroethane	75-00-3	5.14	<5.14	ug/kg dry	
Chloromethane	74-87-3	5.14	<5.14	ug/kg dry	4.J
Dichlorodifluoromethane	75-71-8	5.14	<5.14	ug/kg dry	4.J
Vinyl chloride	75-01-4	5.14	<5.14	ug/kg dry	
Trichlorofluoromethane	75-69-4	5.14	<5.14	ug/kg dry	4.J
Acetone	67-64-1	51.4	<51.4	ug/kg dry	4.J
1,1-Dichloroethylene	75-35-4	5.14	<5.14	ug/kg dry	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5.14	<5.14	ug/kg dry	4.J
Methylene Chloride	75-09-2	5.14	<5.14	ug/kg dry	4.J
Carbon disulfide	75-15-0	5.14	<5.14	ug/kg dry	
Methyl-tert-Butyl Ether	1634-04-4	5.14	<5.14	ug/kg dry	
trans-1,2-Dichloroethylene	156-60-5	5.14	<5.14	ug/kg dry	
1,1-Dichloroethane	75-34-3	5.14	<5.14	ug/kg dry	
Vinyl acetate	108-05-4	5.14	<5.14	ug/kg dry	4.J
Methyl Ethyl Ketone (2-Butanone)	78-93-3	10.3	<10.3	ug/kg dry	
cis-1,2-Dichloroethylene	156-59-2	5.14	<5.14	ug/kg dry	
2,2-Dichloropropane	590-20-7	5.14	<5.14	ug/kg dry	
Bromochloromethane	74-97-5	5.14	<5.14	ug/kg dry	4.K
Chloroform	67-66-3	5.14	<5.14	ug/kg dry	
1,1,1-Trichloroethane	71-55-6	5.14	<5.14	ug/kg dry	
1,2-Dichloroethane	107-06-2	5.14	<5.14	ug/kg dry	
1,1-Dichloropropylene	563-58-6	5.14	<5.14	ug/kg dry	
Carbon Tetrachloride	56-23-5	5.14	<5.14	ug/kg dry	
Benzene	71-43-2	5.14	<5.14	ug/kg dry	4.K
Trichloroethylene	79-01-6	5.14	<5.14	ug/kg dry	
1,2-Dichloropropane	78-87-5	5.14	<5.14	ug/kg dry	
Dibromomethane	74-95-3	5.14	<5.14	ug/kg dry	
Bromodichloromethane	75-27-4	5.14	<5.14	ug/kg dry	
2-Chloroethyl Vinyl Ether	110-75-8	5.14	<5.14	ug/kg dry	
Methyl Isobutyl Ketone	108-10-1	10.3	<10.3	ug/kg dry	

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:03	Sample ID: GAB-SC-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-09
Matrix: Soil	ELAP: #11693

Volatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
cis-1,3-Dichloropropylene	10061-01-5	5.14	<5.14	ug/kg dry	
Toluene	108-88-3	5.14	<5.14	ug/kg dry	4.K
trans-1,3-Dichloropropylene	10061-02-6	5.14	<5.14	ug/kg dry	
1,1,2-Trichloroethane	79-00-5	5.14	<5.14	ug/kg dry	
Methyl Butyl Ketone (2-Hexanone)	591-78-6	5.14	<5.14	ug/kg dry	
1,3-Dichloropropane	142-28-9	5.14	<5.14	ug/kg dry	
Dibromochloromethane	124-48-1	5.14	<5.14	ug/kg dry	
Tetrachloroethylene	127-18-4	5.14	<5.14	ug/kg dry	
1,2-Dibromoethane	106-93-4	5.14	<5.14	ug/kg dry	
Chlorobenzene	108-90-7	5.14	<5.14	ug/kg dry	
1,1,1,2-Tetrachloroethane	630-20-6	5.14	<5.14	ug/kg dry	
Ethylbenzene	100-41-4	5.14	<5.14	ug/kg dry	
m,p-Xylenes	108-38-3/106-42-3	10.3	<10.3	ug/kg dry	
Styrene	100-42-5	5.14	<5.14	ug/kg dry	
o-Xylene	95-47-6	5.14	<5.14	ug/kg dry	
Bromoform	75-25-2	5.14	<5.14	ug/kg dry	
1,1,2,2-Tetrachloroethane	79-34-5	5.14	<5.14	ug/kg dry	
Isopropylbenzene (Cumene)	98-82-8	5.14	<5.14	ug/kg dry	
1,2,3-Trichloropropane	96-18-4	5.14	<5.14	ug/kg dry	
Bromobenzene	108-86-1	5.14	<5.14	ug/kg dry	
n-Propylbenzene	103-65-1	5.14	<5.14	ug/kg dry	
2-Chlorotoluene	95-49-8	5.14	<5.14	ug/kg dry	
4-Ethyltoluene	622-96-8	5.14	<5.14	ug/kg dry	
4-Chlorotoluene	106-43-4	5.14	<5.14	ug/kg dry	
1,3,5-Trimethylbenzene	108-67-8	5.14	<5.14	ug/kg dry	
tert-Butylbenzene	98-06-6	5.14	<5.14	ug/kg dry	
1,2,4-Trimethylbenzene	95-63-6	5.14	<5.14	ug/kg dry	
sec-Butylbenzene	135-98-8	5.14	<5.14	ug/kg dry	
1,3-Dichlorobenzene	541-73-1	5.14	<5.14	ug/kg dry	
4-Isopropyltoluene	99-87-6	5.14	<5.14	ug/kg dry	
1,4-Dichlorobenzene	106-46-7	5.14	<5.14	ug/kg dry	

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:03	Sample ID: GAB-SC-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-09
Matrix: Soil	ELAP: #11693

Volatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
1,2-Dichlorobenzene	95-50-1	5.14	<5.14	ug/kg dry	
1,4-Diethylbenzene	105-05-5	5.14	<5.14	ug/kg dry	
n-Butylbenzene	104-51-8	5.14	<5.14	ug/kg dry	
1,2-Dibromo-3-chloropropane	96-12-8	5.14	<5.14	ug/kg dry	
1,2,4,5-Tetramethylbenzene	95-93-2	5.14	<5.14	ug/kg dry	
1,2,4-Trichlorobenzene	120-82-1	5.14	<5.14	ug/kg dry	
Naphthalene	91-20-3	5.14	<5.14	ug/kg dry	
Hexachlorobutadiene	87-68-3	5.14	<5.14	ug/kg dry	
1,2,3-Trichlorobenzene	87-61-6	5.14	<5.14	ug/kg dry	
Acrylonitrile	107-13-1	5.14	<5.14	ug/kg dry	

Date Prepared: 11/04/2011
Preparation Method: EPA 5035A
Date Analyzed: 11/04/2011
Analytical Method: EPA 8260C

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:03	Sample ID: GAB-SC-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-09
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
Naphthalene	91-20-3	41.1	<41.1	ug/kg dry	
Acenaphthylene	208-96-8	41.1	<41.1	ug/kg dry	
Acenaphthene	83-32-9	41.1	<41.1	ug/kg dry	
Fluorene	86-73-7	41.1	<41.1	ug/kg dry	
Phenanthrene	85-01-8	41.1	<41.1	ug/kg dry	
Anthracene	120-12-7	41.1	<41.1	ug/kg dry	
Fluoranthene	206-44-0	41.1	<41.1	ug/kg dry	
Pyrene	129-00-0	41.1	<41.1	ug/kg dry	
Benzo(a)anthracene	56-55-3	41.1	<41.1	ug/kg dry	
Chrysene	218-01-9	41.1	<41.1	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	41.1	<41.1	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	41.1	<41.1	ug/kg dry	
Benzo(a)pyrene	50-32-8	41.1	<41.1	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	41.1	<41.1	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	41.1	<41.1	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	41.1	<41.1	ug/kg dry	

Date Prepared: 11/07/2011
Preparation Method: EPA 3545
Date Analyzed: 11/07/2011
Analytical Method: EPA 8270C

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:03	Sample ID: GAB-SC-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-09
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
Aroclor-1016	12674-11-2	10.3	<10.3	ug/kg dry	
Aroclor-1260	11096-82-5	10.3	<10.3	ug/kg dry	
Aroclor-1254	11097-69-1	10.3	<10.3	ug/kg dry	
Aroclor 1242	53469-21-9	10.3	<10.3	ug/kg dry	
Aroclor-1248	12672-29-6	10.3	<10.3	ug/kg dry	
Aroclor 1221	11104-28-2	10.3	<10.3	ug/kg dry	
Aroclor 1232	11141-16-5	10.3	<10.3	ug/kg dry	

Date Prepared: 11/04/2011
Preparation Method: EPA 3545
Date Analyzed: 11/04/2011
Analytical Method: EPA 8082

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:03	Sample ID: GAB-SC-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-09
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Aluminum	11/07/2011	EPA 6010B	13.9	586	mg/kg dry	4.F
Antimony	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Arsenic	11/07/2011	EPA 6010B	0.10	0.34	mg/kg dry	
Barium	11/07/2011	EPA 6010B	0.01	2.14	mg/kg dry	
Beryllium	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Cadmium	11/07/2011	EPA 6010B	1.00	<1.00	mg/kg dry	
Calcium	11/07/2011	EPA 6010B	8.25	61.2	mg/kg dry	
Chromium	11/07/2011	EPA 6010B	1.65	1.81	mg/kg dry	
Cobalt	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Copper	11/07/2011	EPA 6010B	1.65	3.02	mg/kg dry	
Iron	11/07/2011	EPA 6010B	13.9	815	mg/kg dry	4.F
Lead	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Magnesium	11/07/2011	EPA 6010B	1.65	57.2	mg/kg dry	
Manganese	11/07/2011	EPA 6010B	8.25	14.8	mg/kg dry	
Nickel	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Potassium	11/07/2011	EPA 6010B	1.65	31.1	mg/kg dry	
Selenium	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Silver	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Sodium	11/07/2011	EPA 6010B	6.97	<6.97	mg/kg dry	
Thallium	11/07/2011	EPA 6010B	1.65	<1.65	mg/kg dry	
Vanadium	11/07/2011	EPA 6010B	1.65	1.95	mg/kg dry	
Zinc	11/07/2011	EPA 6010B	1.65	7.80	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3050B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 6010B			
Mercury	11/07/2011	EPA 7471A	0.02	0.03	mg/kg dry	4.G
Date Prepared: 11/07/2011			Preparation Method: EPA 7471 B			
Date Analyzed: 11/07/2011			Analytical Method: EPA 7471A			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:03	Sample ID: GAB-SC-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-09
Matrix: Soil	ELAP: #11693

Metals by EPA 1311 TCLP Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Arsenic	11/08/2011	EPA 200.7 Rev. 4.4	0.20	<0.20	mg/L	
Barium	11/08/2011	EPA 200.7 Rev. 4.4	1.00	<1.00	mg/L	
Cadmium	11/08/2011	EPA 200.7 Rev. 4.4	0.05	<0.05	mg/L	
Chromium	11/08/2011	EPA 200.7 Rev. 4.4	0.02	<0.02	mg/L	
Lead	11/08/2011	EPA 200.7 Rev. 4.4	0.02	<0.02	mg/L	
Selenium	11/08/2011	EPA 200.7 Rev. 4.4	0.05	<0.05	mg/L	
Silver	11/08/2011	EPA 200.7 Rev. 4.4	0.05	<0.05	mg/L	

Date Leached: 11/07/2011 Leach Batch: B146030 Leach Method: EPA 1311 Fluid #1
Date Prepared: 11/08/2011 Preparation Method: EPA 200.2
Date Analyzed: 11/08/2011 Analytical Method: EPA 200.7 Rev. 4.4

Mercury	11/08/2011	EPA 245.1	0.02	<0.02	mg/L	

Date Leached: 11/07/2011 Leach Batch: B146030 Leach Method: EPA 1311 Fluid #1
Date Prepared: 11/08/2011 Preparation Method: EPA 245.1
Date Analyzed: 11/08/2011 Analytical Method: EPA 245.1

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:03	Sample ID: GAB-SC-1
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-09
Matrix: Soil	ELAP: #11693

General Chemistry Parameters

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Flashpoint	11/08/2011 09:30	EPA 1010	75.0	>140	°F	
Date Prepared: 11/08/2011			Preparation Method: No Preparation			
Date Analyzed: 11/08/2011			Analytical Method: EPA 1010			
Petroleum Hydrocarbons, Total	11/07/2011 18:02	EPA 8015 B	103	<103	mg/kg dry	
Date Prepared: 11/07/2011			Preparation Method: EPA 3545			
Date Analyzed: 11/07/2011			Analytical Method: EPA 8015 B			
pH	11/04/2011 13:25	SM 18-21 4500-H B (00)	NA	7.45	units	1.C
Temperature @ pH	11/04/2011 13:25	SM 18-21 4500-H B (00)	NA	25.40	°C	1.C
Date Prepared: 11/04/2011			Preparation Method: pH- No Preparation			
Date Analyzed: 11/04/2011			Analytical Method: SM 18-21 4500-H B (00			
Reactive Cyanide	11/04/2011 16:32	SW-846 Ch7 Sec. 7.3	5.14	<5.14	mg/kg dry	
Reactive Sulfide	11/04/2011 16:32	SW-846 Ch7 Sec. 7.3	2.06	<2.06	mg/kg dry	
Date Prepared: 11/04/2011			Preparation Method: Distillation Reactivity			
Date Analyzed: 11/04/2011			Analytical Method: SW-846 Ch7 Sec. 7.3			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:20	Sample ID: GAB-FB-ASTM
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-10
Matrix: Potable Water	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/14/2011	EPA 200.9 Rev. 2.2	0.005	<0.005	mg/L	
Lead	11/10/2011	EPA 200.9 Rev. 2.2	1.00	<1.00	ug/L	
Date Prepared: 11/10/2011			Preparation Method: DW-N/A			
Date Analyzed: 11/10/2011			Analytical Method: EPA 200.9 Rev. 2.2			
Mercury	11/10/2011	EPA 245.1 Rev. 3.0	0.002	<0.002	mg/L	
Date Prepared: 11/09/2011			Preparation Method: EPA 245.1			
Date Analyzed: 11/10/2011			Analytical Method: EPA 245.1 Rev. 3.0			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:25	Sample ID: GAB-RS
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-11
Matrix: Potable Water	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	MRL	Result	Units	Flag
Cadmium	11/14/2011	EPA 200.9 Rev. 2.2	0.005	<0.005	mg/L	
Lead	11/10/2011	EPA 200.9 Rev. 2.2	1.00	<1.00	ug/L	
Date Prepared: 11/10/2011			Preparation Method: DW-N/A			
Date Analyzed: 11/10/2011			Analytical Method: EPA 200.9 Rev. 2.2			
Mercury	11/10/2011	EPA 245.1 Rev. 3.0	0.002	<0.002	mg/L	
Date Prepared: 11/09/2011			Preparation Method: EPA 245.1			
Date Analyzed: 11/10/2011			Analytical Method: EPA 245.1 Rev. 3.0			

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:33	Sample ID: GAB-TB
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-12
Matrix: Non-Potable Water	ELAP: #11693

Volatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
Bromomethane	74-83-9	5.00	<5.00	ug/L	4.G
Chlorodifluoromethane	75-45-6	5.00	<5.00	ug/L	
Chloroethane	75-00-3	5.00	<5.00	ug/L	
Chloromethane	74-87-3	5.00	<5.00	ug/L	
Dichlorodifluoromethane	75-71-8	5.00	<5.00	ug/L	4.G
Vinyl chloride	75-01-4	5.00	<5.00	ug/L	4.G
Trichlorofluoromethane	75-69-4	5.00	<5.00	ug/L	4.G
Acetone	67-64-1	50.0	<50.0	ug/L	4.G
1,1-Dichloroethylene	75-35-4	5.00	<5.00	ug/L	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5.00	<5.00	ug/L	4.G
Methylene Chloride	75-09-2	5.00	23.7	ug/L	
Carbon disulfide	75-15-0	5.00	<5.00	ug/L	4.G
Methyl-tert-Butyl Ether	1634-04-4	5.00	<5.00	ug/L	4.G, 4.J
trans-1,2-Dichloroethylene	156-60-5	5.00	<5.00	ug/L	4.G
1,1-Dichloroethane	75-34-3	5.00	<5.00	ug/L	
Vinyl acetate	108-05-4	5.00	<5.00	ug/L	4.G, 4.J
Methyl Ethyl Ketone (2-Butanone)	78-93-3	10.0	<10.0	ug/L	
cis-1,2-Dichloroethylene	156-59-2	5.00	<5.00	ug/L	
2,2-Dichloropropane	590-20-7	5.00	<5.00	ug/L	4.G
Bromochloromethane	74-97-5	5.00	<5.00	ug/L	
Chloroform	67-66-3	5.00	<5.00	ug/L	
1,1,1-Trichloroethane	71-55-6	5.00	<5.00	ug/L	4.G
1,2-Dichloroethane	107-06-2	5.00	<5.00	ug/L	
1,1-Dichloropropylene	563-58-6	5.00	<5.00	ug/L	4.G
Carbon Tetrachloride	56-23-5	5.00	<5.00	ug/L	4.G
Benzene	71-43-2	0.700	<0.700	ug/L	
Trichloroethylene	79-01-6	5.00	<5.00	ug/L	4.G
1,2-Dichloropropane	78-87-5	5.00	<5.00	ug/L	
Dibromomethane	74-95-3	5.00	<5.00	ug/L	
Bromodichloromethane	75-27-4	5.00	<5.00	ug/L	
2-Chloroethyl Vinyl Ether	110-75-8	5.00	<5.00	ug/L	4.G
Methyl Isobutyl Ketone	108-10-1	10.0	<10.0	ug/L	

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:33	Sample ID: GAB-TB
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-12
Matrix: Non-Potable Water	ELAP: #11693

Volatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
cis-1,3-Dichloropropylene	10061-01-5	5.00	<5.00	ug/L	4.G
Toluene	108-88-3	5.00	<5.00	ug/L	4.G
trans-1,3-Dichloropropylene	10061-02-6	5.00	<5.00	ug/L	4.G
1,1,2-Trichloroethane	79-00-5	5.00	<5.00	ug/L	
1,3-Dichloropropane	142-28-9	5.00	<5.00	ug/L	
Dibromochloromethane	124-48-1	5.00	<5.00	ug/L	4.G
Tetrachloroethylene	127-18-4	5.00	<5.00	ug/L	4.G, 4.J
1,2-Dibromoethane	106-93-4	5.00	<5.00	ug/L	
Chlorobenzene	108-90-7	5.00	<5.00	ug/L	4.G
1,1,1,2-Tetrachloroethane	630-20-6	5.00	<5.00	ug/L	4.G
Ethylbenzene	100-41-4	5.00	<5.00	ug/L	4.G
m,p-Xylenes	108-38-3/106-42-3	10.0	<10.0	ug/L	4.G
Styrene	100-42-5	5.00	<5.00	ug/L	4.G
o-Xylene	95-47-6	5.00	<5.00	ug/L	4.G
Bromoform	75-25-2	5.00	<5.00	ug/L	4.G
1,1,2,2-Tetrachloroethane	79-34-5	5.00	<5.00	ug/L	
Isopropylbenzene (Cumene)	98-82-8	5.00	<5.00	ug/L	4.G
1,2,3-Trichloropropane	96-18-4	5.00	<5.00	ug/L	
Bromobenzene	108-86-1	5.00	<5.00	ug/L	4.G
n-Propylbenzene	103-65-1	5.00	<5.00	ug/L	4.G
2-Chlorotoluene	95-49-8	5.00	<5.00	ug/L	4.G
4-Ethyltoluene	622-96-8	5.00	<5.00	ug/L	4.G
4-Chlorotoluene	106-43-4	5.00	<5.00	ug/L	4.G
1,3,5-Trimethylbenzene	108-67-8	5.00	<5.00	ug/L	4.G
tert-Butylbenzene	98-06-6	5.00	<5.00	ug/L	4.G
1,2,4-Trimethylbenzene	95-63-6	5.00	<5.00	ug/L	4.G
sec-Butylbenzene	135-98-8	5.00	<5.00	ug/L	4.G
1,3-Dichlorobenzene	541-73-1	5.00	<5.00	ug/L	4.G
4-Isopropyltoluene	99-87-6	5.00	<5.00	ug/L	4.G
1,4-Dichlorobenzene	106-46-7	5.00	<5.00	ug/L	4.G
1,2-Dichlorobenzene	95-50-1	5.00	<5.00	ug/L	4.G

Client: Peer Consultants, P.C.	Client ID: Gabreski ANG Station Site 2
Date (Time) Collected: 11/04/2011 11:33	Sample ID: GAB-TB
Date (Time) Received: 11/04/2011 12:42	Laboratory ID: 1110403-12
Matrix: Non-Potable Water	ELAP: #11693

Volatile Analysis

Parameter	CAS No.	MRL	Result	Units	Flag
1,4-Diethylbenzene	105-05-5	5.00	<5.00	ug/L	4.G
n-Butylbenzene	104-51-8	5.00	<5.00	ug/L	4.G
1,2-Dibromo-3-chloropropane	96-12-8	5.00	<5.00	ug/L	4.G
1,2,4,5-Tetramethylbenzene	95-93-2	5.00	<5.00	ug/L	4.G
1,2,4-Trichlorobenzene	120-82-1	5.00	<5.00	ug/L	4.G
Naphthalene	91-20-3	5.00	<5.00	ug/L	
Hexachlorobutadiene	87-68-3	5.00	<5.00	ug/L	4.G
1,2,3-Trichlorobenzene	87-61-6	5.00	<5.00	ug/L	4.G
Acrylonitrile	107-13-1	5.00	<5.00	ug/L	4.G

Date Prepared: 11/11/2011
Preparation Method: EPA 5030B
Date Analyzed: 11/14/2011
Analytical Method: EPA 8260C

Data Qualifiers Key Reference:

1.C	Holding time exceeded, analyze immediate parameter
4.F	Spike recovery does not meet QC criteria due to high target compound concentration
4.G	Spike recovery out of range due to matrix interference
4.J	Continuing Calibration Verification (CCV) quality control levels low
4.K	Continuing Calbration Verification (CCV) quality control levels high
MRL	Minimum Reporting Limit

LONG ISLAND ANALYTICAL LABORATORIES INC.
"TOMORROWS ANALYTICAL SOLUTIONS TODAY"
110 Colin Drive • Holbrook, New York 11741 • Phone (631) 472-3400 • Fax (631) 472-8505 • Email: LIAL@lialinc.com

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

1110403

CLIENT NAME/ADDRESS: Richard Stout, PEER Consultants

CONTACT: Richard Stout
PHONE: 865 805-1168
FAX:

SAMPLER (SIGNATURE) DATE TIME: Cheryl A. Brewer 11/4/11
SAMPLER NAME (PRINT) DATE TIME: Cheryl A. Brewer 11/4/11

SAMPLE(S) SEALED: YES / NO
CORRECT CONTAINER(S): YES / NO

PROJECT LOCATION: Gabreski ANG Station / Site 2

SAMPLES RECEIVED AT: 3.1 °C

TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month. Tendering of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms

	LABORATORY ID # (For Laboratory Use Only)	MATRIX	TYPE	pH	RES. CHLORINE	PRES.	DATE	TIME	SAMPLE # LOCATION	ANALYSIS REQUIRED: Cadmium, Lead, Mercury (6010C)	TPH (8015M)	VOCs (8260B)	PAHs (8270)	Total Metals (6010)	TCLP Metals (1311)	PCBs (8082A)	Corrosivity (9040C)	Reactivity - Sulfide & Cyanide	# OF CONTAINERS
1	1110403-01	S	G			1	11/4/11	1024	GAB-SW-1 24-TAT	X									1
2.	02	S	G			1		1024	GAB-SW-1D 24-TAT	X									1
3.	03	S	G			1		1024	GAB-SW-1MS	X									1
4.	04	S	G			1		1024	GAB-SW-1MSD	X									1
5.	05	S	G			1		1035	GAB-SE-~~3~~1	X									1
6.	06	S	G			1		1042	GAB-NE-~~3~~1	X									1
7.	07	S	G			1		1049	GAB-NW-1	X									1
8.	08	S	G			1		1055	GAB-FL-1	X									1
9.	09	S	G			1		1103	GAB-SC-1 (3 bottles) 48-TAT		X	X	X	X	X	X	X	X	3
10.	10	DW	G	<0.02	<0.01	1,6		1120	GAB-FB-ASTM (Standard)	X									1
11.	11	DW	G	↓	↓	1,6		1125	GAB-RS (Standard)	X									1
12.	12	DW	G	—	—	1,6	↓	1133	GAB-TB (Standard)			X							3
13.																			
14.									stoutr@peercpc.com				EMAIL RESULTS						

FUCK!!

MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WIPE; PC=PAINT CHIPS; BM= BULK MATERIAL, O=OIL, WW=WASTE WATER
TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON
PRES: (1) ICE; (2) HCL; (3) H_2SO_4; (4) NAOH; (5) $NA_2S_3O_3$; (6) HNO_3; (7) OTHER

TURNAROUND REQUIRED: X NORMAL X STAT BY I I

COMMENTS / INSTRUCTIONS: SEE ABOVE

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY (SIGNATURE)	DATE / TIME	PRINTED NAME
Cheryl A Brewer	11/4/11 1231			11.4.11 12:30	Jim Aufiero
RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY SAMPLE CUSTODIAN	DATE 11-4-11 TIME 1230PM	PRINTED NAME Ben Lamberson

WHITE - OFFICE / CANARY - LAB / PINK - SAMPLE CUSTODIAN / GOLDENROD - CLIENT

APPENDIX E
PHOTOGRAPHS

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Site 2 – Former Hazardous Waste Storage Area

Underground Utilities Search

Digging up the Concrete Pad for Well S2-MW02

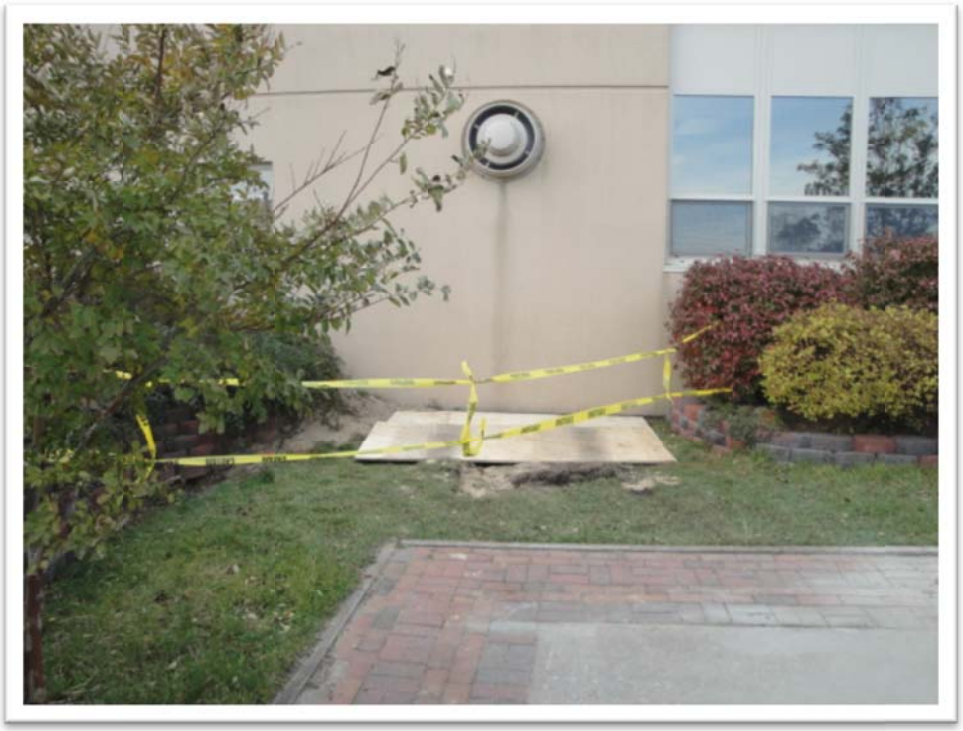
Grouting Well S2-MW02

Beginning the Excavation Activities

Excavation Activities Continue

Preparation for Confirmation Sampling

Open Excavation After Confirmation Sampling



Securing the Excavation

Securing the Rolloff

Backfilling the Excavation

Re-Seeding and Restoring the Site

APPENDIX F
WASTE MANIFESTS AND WEIGHT TICKETS

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CLEANEARTH

Manifest # 544188

GLOBAL JOB NUMBER: _____ **FACILITY APPROVAL NUMBER:** _____

Please Check One:

☑ Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909

☐ Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220

☐ Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633

☐ Other
_____
_____
_____

☐ Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520

☐ Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004

☐ Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: Gabreski ANG STATION WEST Hampton Riverhead Rd West Hampton NY 11977	GROSS WEIGHT: ☑ Tons ☐ Yards	16 TONS
	TARE WEIGHT: ☐ Tons ☐ Yards	
GENERATOR'S PHONE: 516-819-3646 631-723-7112	NET WEIGHT: ☐ Tons ☐ Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

NON HAZ (NON RCRA) regulated Solids
OIL IMPACTED Soil

GENERATOR'S CERTIFICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: ANTHONY JVASELL Title: NYS ENVI TECH

Signature: [signature] Date and Time: 16 NOV 2011 12:20 L

TRANSPORTER

Company: Eastern Environmental Solutions Phone Number: 631-727-2700

Address: 258 Line Rd Manorville NY 11949 Truck # and License Plate: E-8 78149 PA

Driver: MATTHEW CORCORAN SW Haulers Permit #: 1A-698

(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: _____ Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

GENERATOR

Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: (732) 541-8909 Fax: (732) 541-8105

Ticket: 2070002201673

	Date	Time	Scale
In:	11/17/2011	07:35:07	Scale 1
Out:	11/17/2011	07:44:26	P.T.

	Lbs	Tns
Gross:	44480	22.24
Tare:	35860	17.93
Net:	8620	4.31

Manifest: 544188
Vehicle ID: EASTENVE8

Customer: EAST ENV. SOLUTIONS INC.

Facility Approval#: 113071889

Generator: Gabreski ANG Station
Gen Address: Westhampton-Riverhead Road
Westhampton, NY 11967

Job Name: Gabreski ANG Station
Job Address: Westhampton-Riverhead Road
Westhampton-NY, NY 11967

Origin	Materials & Services	Quantity	Unit
Suffolk	Soil Treatment Type II	4.31	Tns

Contaminate Type: 2 Oil
Treatment Type: Bio
Fac Waste Code: NJ DEP ID 27

Comment:

Driver: Matt

Facility: Walter Brunges

APPENDIX G
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION CONCURRENCE LETTER

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New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A, 12th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9625 • **Fax:** (518) 402-9627
Website: www.dec.ny.gov

Joe Martens
Commissioner

February 29, 2012

Ms. Jody Murata
Environmental Remediation Branch
Air National Guard/CEVR
3500 Fetchet Avenue
Andrews AFB, MD 20762-5157

RE: Suffolk County Air National Guard
Francis S. Gabreski Airport
106th Rescue Wing, Westhampton Beach, NY
Site 2 Project Closeout Report
January 2012

Dear Mr. Murata:

The New York State Department of Environmental Conservation and the New York State Department of Health have reviewed the January 2012 Project Closeout Report for Site 2 - Former Hazardous Waste Storage Area at the Suffolk County Air National Guard Base in Westhampton Beach, NY. Site 2 is not listed in the New York State Registry of Inactive Hazardous Waste Disposal Sites.

We understand that all remaining soil is below residential Soil Cleanup Objectives (6NYCRR Part 375) standards after the removal action. The only exception was for excavation that would compromise the structural integrity of Building 358.

The State concurs with the findings of the above referenced January 2012 Project Closeout Report for the Site 2 - Former Hazardous Waste Storage Area. If you have any questions please contact John Swartwout at (518) 402-9620.

Sincerely,

James B. Harrington, P.E.
Bureau Director
Remedial Bureau A

EC:
Richard Stout, PEER Consultants P.C, (stoutr@peercpc.com)
Shawn Denton, Gabreski ANG, (shawn.denton@ang.af.mil)
W. Parish, Region 1
A. Rapiejko, SCDHS, (andrew.rapiejko@suffolkcountyny.gov)
J. Swartwout
H. Bishop