FINAL

NO FURTHER RESPONSE ACTION PLANNED DECISION DOCUMENT FOR SITE 5 – SOUTHWEST STORM DRAINAGE DITCH

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

DECEMBER 2011

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

DECEMBER 2011

Prepared for

NGB/A7OR
3500 Fetchet Avenue
Andrews AFB, MD 20762
under National Guard Bureau
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ABB	ABB–Environmental Services, Inc.
ANG	Air National Guard
BEHP	bis(2-ethylhexyl)phthalate
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	contaminant of concern
DD	Decision Document
EPA	Environmental Protection Agency
ERP	Environmental Restoration Program
HMTC	Hazardous Materials Technical Center
MCL	Maximum Contaminant Level
MSL	mean sea level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	No Further Action
NFRAP	No Further Response Action Planned
NGB/A7OR	National Guard Bureau, Environmental Restoration Branch
NOAA	National Oceanic and Atmospheric Agency
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
PAHs	polynuclear aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PEER	PEER Consultants, P.C.
PID	photoionization detector
QA/QC	quality assurance/quality control
RI	Remedial Investigation
ROD	Record of Decision
RSCO	Recommended Soil Cleanup Objective
SCDHS	Suffolk County Department of Health Services
SCO	soil cleanup objectives
SDW	small diameter wells
SI	Site Investigation
SVOC	semivolatile organic compound
S&W	Stone & Webster Environmental and Technology Services
TAT	turnaround time
VOC	volatile organic compound

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DECLARATION

Site Name and Location

Environmental Restoration Site
Site 5 – Southwest Storm Drainage Ditch
106th Rescue Wing
Francis S. Gabreski Airport
Westhampton Beach, New York

Statement of Basis and Purpose

This No Further Response Action Planned (NFRAP) Decision Document (DD) presents the selected decision for Site 5 – Southwest Storm Drainage Ditch at the 106th Rescue Wing, Francis S. Gabreski Airport, Westhampton Beach, New York. This decision for Site 5 is based on the results of the remedial action that was conducted in May of 2009 and consisted of excavating, removing and disposing of contaminated soil from the ditch under the Environmental Restoration Program.

Description of the Selected Remedy

Based on the current conditions at Site 5, it has been determined that no significant risk or threat to human health or the environment exists. Therefore, No Further Action is required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Declaration Statement

This Category IV NFRAP DD has been prepared in accordance with the EPA document, "*A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents,*" July 1999, and "*ANG Investigation Guidance,*" September 2009. This NFRAP DD presents the selected action for this site developed in accordance with CERCLA, as amended, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). It has been determined that the selected remedy of no further response action planned is protective of human health and the environment, attains federal and state requirements that are applicable or relevant and appropriate, and is cost effective. The statutory preference for further action is not applicable because the contaminated soils have been removed from the five impacted areas at Site 5, and the site poses no significant threat to human health or the environment. Therefore, no further investigation or remedial action is necessary. In the future, the Air National Guard (ANG) intends to prepare a base-wide Record of Decision (ROD) which will include Site 5.

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Concurrence Record
For the NFRAP Decision at
Site 5 – Southwest Storm Drainage Ditch
106th Rescue Wing
Francis S. Gabreski Airport
Westhampton Beach, New York

Concur and Recommend for Immediate Implementation:

BENJAMIN W. LAWLESS, P.E. Date
Chief, Operations Division
Installations and Mission Support Directorate

New York State Department of Environmental Conservation

[X] Concur [ ] Non-Concur (Please Provide reason)

The New York State Department of Environmental Conservation (NYSDEC) has concurred with the findings of this No Further Response Action Planned Decision Document (NFRAP DD) for Site 5. The NYSDEC concurrence letter for the NFRAP DD is presented in Appendix F.

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INTRODUCTION

1.0 SUMMARY OF SITE CONDITIONS

The 106th Rescue Wing 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 Old Riverhead Road approximately 2 miles north of the Atlantic Ocean shoreline in Westhampton Beach.

Site 5 – Southwest Storm Drainage Ditch is located in the southwestern portion of the base. The location of Site 5 is shown on Figure 1.1. Site 5 and the previous investigations conducted at the site are briefly described in the following subsections.

1.1 SITE BACKGROUND

Site 5 is a storm water drainage ditch that originates as a subsurface outfall on the southwest side of Building 370. Drainage in the ditch is directed to the southwest along the ditch for about 280 ft before it goes below ground surface through a drainage culvert. The culvert resurfaces approximately 50 ft farther south and the ditch continues southwest for nearly 200 ft before drainage is again directed below ground surface through a culvert. The second culvert extends another 450 ft to the south, then resurfaces and then continues east for approximately 550 ft. At this point, flow from the ditch enters the base storm drain system. Flow eventually discharges to a dry ravine about 1500 ft southeast of Site 5. The dry ravine in turn discharges to Aspatuck Creek about 1000 ft further south-southeast.

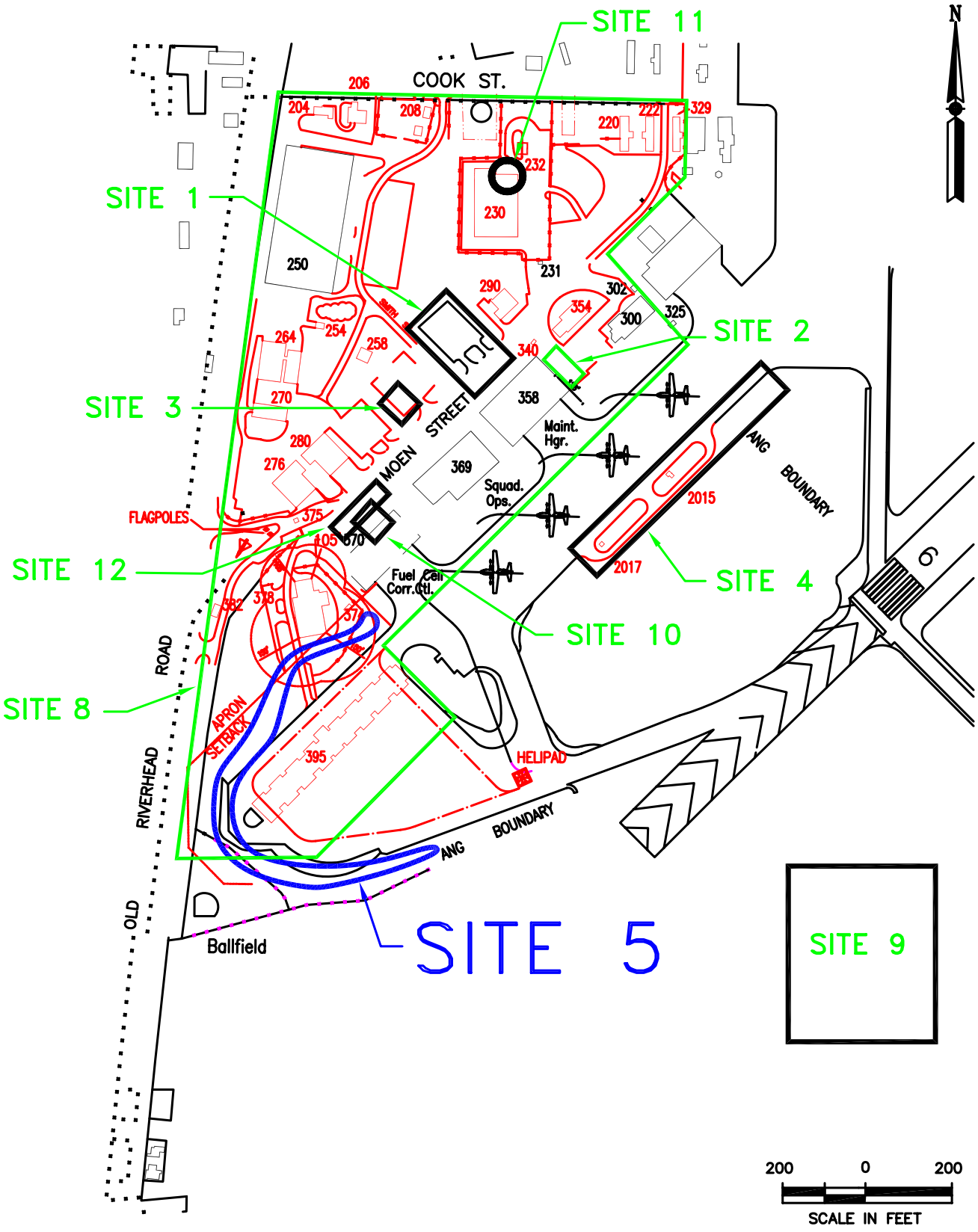
The drainage ditch receives rainwater from roof drains and runoff from paved areas in the southwestern portion of the base. Historically, an oily sheen was observed on the water surfaces in the ditch during periods of heavy rain. Stressed vegetation was observed in localized areas along the ditch during the Site Investigation (SI) in 1994 (ABB-ES 1997).

1.2 PREVIOUS INVESTIGATIONS

Three previous investigations involving sampling have been conducted at Site 5 including a 1994 SI, a 1998 RI and a 2007 Data Gap Investigation. Site 5 was not investigated during the 2000 to 2001 RI, but groundwater samples were collected in the vicinity of the site. Therefore, the results for groundwater sampling during the 2000 to 2001 RI are discussed as they pertain to Site 5. A No Further Response Action Planned (NFRAP) Decision Document (DD) was prepared in 2004 which was followed by the Data Gap Investigation and subsequent remedial action. The results of these investigations, the NFRAP DD and the remedial action are briefly discussed below.

1.2.1 1994 Site Investigation

During the 1994 SI, ABB-Environmental Services (ABB) installed three direct-push probes at Site 5, and collected 11 subsurface soil samples and one groundwater sample from the probes.



GAB/NFRAP DD/FIG1.1
PROJ./3005-036

SITE 5 – SOUTHWEST STORM DRAINAGE DITCH
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE
1.1

In addition, nine sediment grab samples were collected and one surface water sample was collected from surface water pooled at the head of the ditch (ABB 1997). Contaminants detected above action levels in sediments and soil, and surface water and groundwater are summarized in Tables 1.1 and 1.2, respectively. The results are also shown on Figure 1.2.

Overall, the results indicated that sediment and shallow subsurface soil contained concentrations of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals (including arsenic, cadmium, lead, and chromium) that exceeded previous New York State Department of Environmental Conservation (NYSDEC) action levels. Surficial soil within the drainage ditch was primarily impacted at the two most upgradient and exposed sections of the ditch. In addition, one concentration of chromium that was collected from the direct-push groundwater sample, and one concentration of lead from a surface water sample exceeded action levels. The exceedance of chromium in the direct-push groundwater sample was attributed to the sampling methodology which resulted in the presence of entrained sediments in the screening samples (ABB 1997). Additionally, it is likely that the concentration of lead exceeding action levels in the surface water sample was also due to entrained sediments.

1.2.2 1998 Remedial Investigation

In 1998, Stone & Webster (S&W) conducted hand auger soil sampling within the drainage ditch at Site 5. Table 1.3 summarizes the soil exceedances. The results are also shown on Figure 1.3. Two rounds of groundwater samples were collected from monitoring wells at Site 8 (Cell 5) which is adjacent to Site 5. There were no detections of chromium exceeding action levels. This result supports the conclusion of the 1994 SI that the exceedance of chromium in the direct-push groundwater sample was due to entrained sediments (S&W 1999).

The soil samples contained exceedances of several polyaromatic hydrocarbons (PAHs) including benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene, as well as the metals arsenic and lead. The exceedances of benzene, toluene, dibenzofuran, cadmium, and chromium which were detected during the 1994 SI were not confirmed during the 1998 RI. The report for the 1998 RI recommended No Further Action (NFA) at Site 5 due to the results of the baseline risk assessment which indicated that levels of exposure to cancer and noncancer causing constituents were acceptable (S&W 1999).

1.2.3 2000 to 2001 Remedial Investigation

During the base-wide groundwater sampling, monitoring wells located at Site 8-Cell 5 (adjacent to Site 5) were sampled, including PZ-003, PZ-006, SDW-014, SDW-015, and SDW-017. No constituents were detected at concentrations exceeding the action levels in monitoring wells in the vicinity of Site 5 (PEER 2004a). The analytical results are summarized on Table 1.4. Figure 1.4 shows the locations of the monitoring wells sampled during the base-wide sampling, and the contaminants that were detected.

Table 1.1
Site 5 – Sediment and Surface Soil Results – 1994 SI
106th Rescue Wing
Westhampton Beach, New York

Sample ID Depth (ft bgs)	Action Levels(1)		GB-001 0.5-1	GB-001 1.5-2	GB-002 0.5-1	GB-003 0.5-1	GB-004 0.5-1	GB-005 0.5-1	GB-014 0.5-1	GB-015 0.5-1	GB-016 0.5-1	DP-034 10-12
	Saturated	Unsaturated										
Volatile Organics (µg/kg)												
Benzene	0.6	60	**1100**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	15	1500	**14000**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organics (µg/kg)												
Acenaphthene	330	50,000	NA	NA	NA	NA	NA	NA	NA	**58,000**	NA	NA
Anthracene	330	50,000	NA	NA	NA	NA	NA	NA	NA	**76,000**	NA	NA
Benzo(a)anthracene	330	330	**19,000**	NA	NA	1700	NA	**4900**	**1800**	**140,000**	NA	NA
Benzo(a)pyrene	0.33	330	**22,000**	NA	NA	1600	NA	**4300**	**2600**	**120,000**	NA	NA
Benzo(b)fluoranthene	330	1100	**21,000**	**12,000**	NA	1600	NA	**4300**	**3500**	**120,000**	NA	NA
Benzo(g,h,i)perylene	330	50,000	NA	NA	NA	NA	NA	NA	NA	**71,000**	NA	NA
Benzo(k)fluoranthene	330	1100	**20,000**	NA	NA	**1500**	NA	**3800**	**2600**	**91,000**	NA	NA
Chrysene	400	400	**19,000**	NA	NA	**1800**	NA	**500**	**2600**	**140,000**	NA	NA
Dibenz(a,h,)anthracene	340	340	**7700**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	62	6200	NA	NA	NA	NA	NA	NA	NA	**27000**	NA	NA
Fluoranthene	1000	50,000	NA	NA	NA	NA	NA	NA	NA	**340,000**	NA	NA
Indeno(1,2,3-cd)pyrene	320	3200	**18,000**	NA	NA	NA	NA	NA	NA	**68,000**	NA	NA
Phenanthrene	330	50,000	NA	NA	NA	NA	NA	NA	NA	**300,000**	NA	NA
Pyrene	1000	50,000	NA	NA	NA	NA	NA	NA	NA	**270,000**	NA	NA
Metals (mg/kg)	**NYS**	**BKG**										
Arsenic	7.5 or SB	0.10/0.10	0.88	5.2	0.22	0.20	0.36	0.30	4.2	2.4	0.59	NA
Cadmium	1 or SB	0.10/0.10	0.73	**1.3**	0.45	0.88	0.26	0.57	0.21	**2.4**	0.57	NA
Chromium	10 or SB	6.1/0.84	86	**54**	**23**	6.2	NA	NA	**52**	**17**	NA	NA
Lead	SB	4.4/0.65	**864**	**1400**	**45**	**40**	**20**	**27**	**1200**	**360**	**58**	0.21
Selenium	2 or SB	0.10/0.10	NA	NA	NA	NA	NA	NA	0.41	0.27	NA	NA
Silver	SB	0.10/0.10	NA	NA	NA	NA	NA	NA	**0.41**	NA	NA	NA

Notes:
(1) New York State (NYS) Soil Cleanup Objectives were the action levels in effect at the time of the 1994 Site Investigation. Shading and bolding indicate that concentration exceeds action level.

bgs Below ground surface.
DP Direct probe sample.
GB Soil grab sample.
NA Not available.
NYS New York State Recommended Soil Cleanup Objectives.
SB Site background.

Table 1.2
Site 5 – Surface Water and Groundwater Results Exceeding Action Levels – 1994 SI
106th Rescue Wing
Westhampton Beach, New York

Sample	Action Levels(1)		GB-01	GB-035
Depth (ft bgs)	NYS	MCL	0-0.2	30-32
Metals (µg/L)				
Chromium	50	1000	NA	60
Lead	25	15	260	NA

Notes:
(1) New York State (NYS) Class GA Groundwater guidance levels were the action levels in affect at the time of the 1994 Site Investigation.
bgs below ground surface.
MCL Maximum contaminant level.

GB-01 Surface water sample.
GB-035 Direct-push groundwater sample.

1.2.4 2004 No Further Response Action Required Decision Document

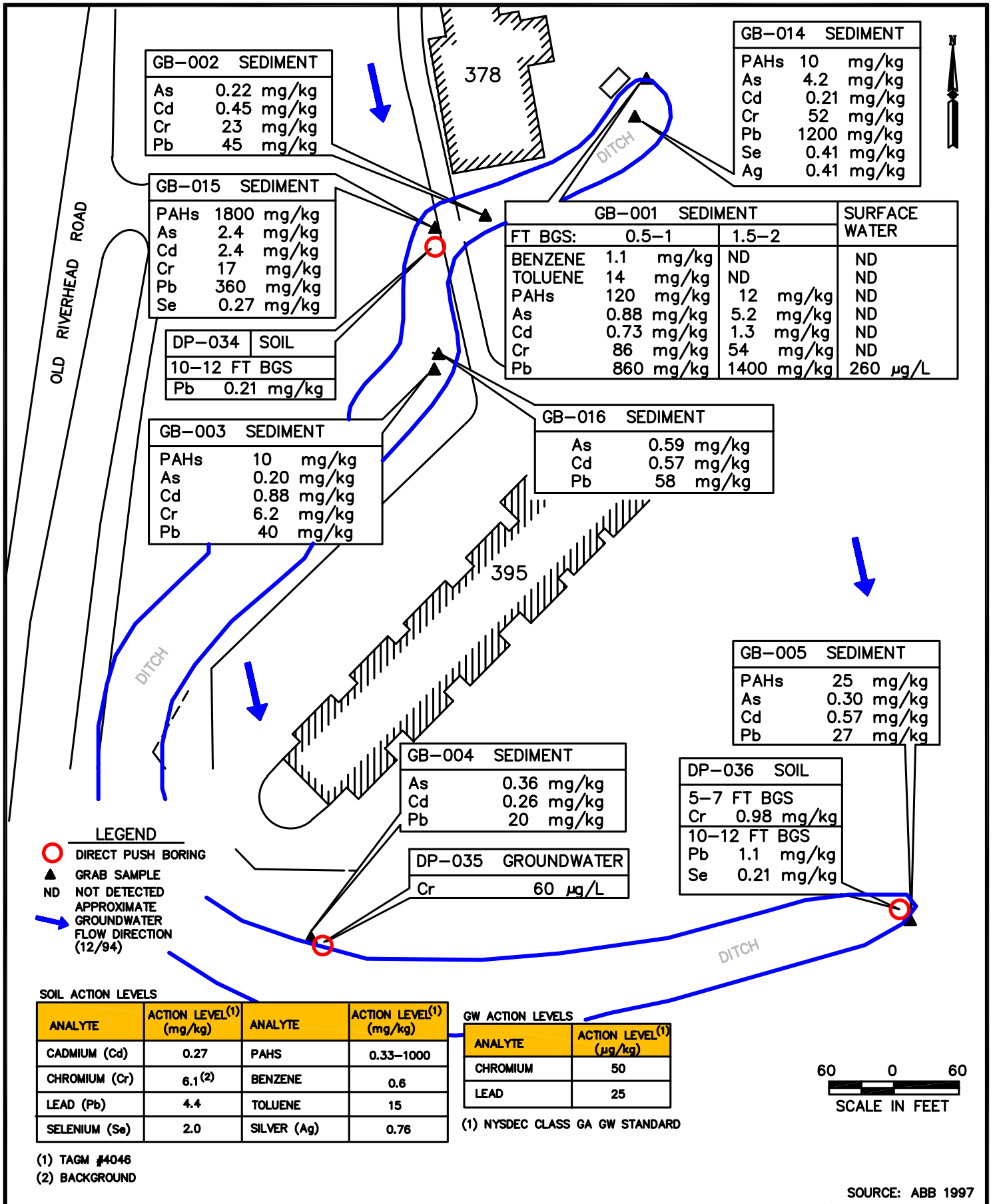
In 2004, an NFRAP DD was prepared for Site 5. The NFRAP recommended NFA for Site 5 on the basis of the previous investigations and the risk assessment which indicated that risks associated with the site were negligible (PEER 2004b).

The NYSDEC did not concur with the NFA recommendation and requested that the extent of VOCs and SVOCs (i.e., PAHs) be further delineated in soil, and that soil containing levels of contaminants that exceed action levels be removed, primarily in the vicinity of GB-15 and GB-001 (NYSDEC 2005).

1.2.5 2007 Data Gap Investigation

Based on the data presented in the 2004 NFRAP DD (PEER 2004b), the NYSDEC requested that SVOC, VOC and metals contamination be further delineated at Site 5 (NYSDEC 2005). In response to the request, the ANG conducted a Data Gap Investigation at Site 5 in 2007 (PEER 2009).

Sixty-six soil samples were collected from 33 hand auger locations (two samples from each location) at Site 5. The soil samples were collected from 0.5 to 1 ft bgs and from 1 to 2 ft bgs. Soil sample results are presented in Table 1.5. The results exceeding action levels are shown on Figure 1.5. The hand auger soil samples were submitted to the laboratory for analysis of PAHs and metals. Samples from hand auger locations HA-01 to HA-11 advanced in the northeastern portion of the ditch were also submitted for analysis of benzene, toluene, ethylbenzene and xylenes (BTEX). Background samples were collected for analysis of metals during the Data Gap Investigation (PEER 2009).



SOIL ACTION LEVELS

ANALYTE	ACTION LEVEL(1) (mg/kg)	ANALYTE	ACTION LEVEL(1) (mg/kg)
CADMIUM (Cd)	0.27	PAHS	0.33-1000
CHROMIUM (Cr)	6.1 (2)	BENZENE	0.6
LEAD (Pb)	4.4	TOLUENE	15
SELENIUM (Se)	2.0	SILVER (Ag)	0.76

(1) TAGM #4046
(2) BACKGROUND

GW ACTION LEVELS

ANALYTE	ACTION LEVEL(1) (µg/kg)
CHROMIUM	50
LEAD	25

(1) NYSDEC CLASS GA GW STANDARD

SOURCE: ABB 1997

GAB/NFRAP DD/FIG1.2
PROJ./003005-036

SITE 5 - 1994 SITE INVESTIGATION RESULTS
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE 1.2

Table 1.3
Site 5 Surface and Shallow Soil Sample Results – 1998 RI
106th Rescue Wing
Westhampton Beach, New York

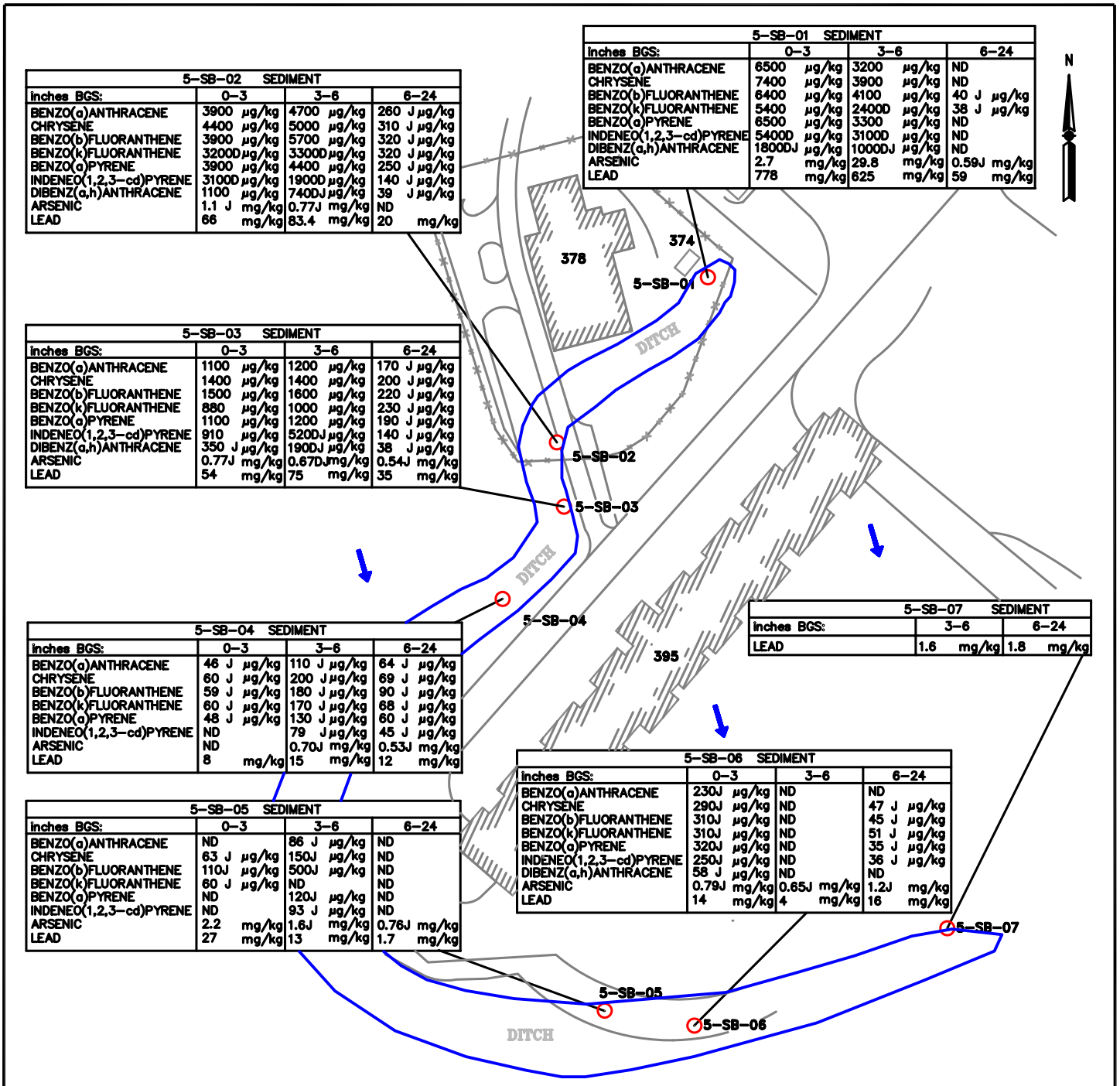
Sample Depth (Inches bgs)	Action Levels		5-SB-01	5-SB-01	5-SB-01	5-SB-02	5-SB-02	5-SB-02	5-SB-03	5-SB-03	5-SB-03	5-SB-04
	Saturated	Unsaturated	0-3	3-6	6-24	0-3	3-6	6-24	0-3	3-6	6-24	0-3
Semivolatile Organics (µg/kg)												
Benzo(a)anthracene	330	330	**6500**	3200	ND	**3900**	**4700**	260 J	**1100**	**1200**	170 J	46 J
Chrysene	400	400	**7400**	3900	ND	**4400**	**5000**	310 J	**1400**	**1400**	200 J	60 J
Benzo(b)fluoranthene	330	1100	**6400**	4100	40 J	**3900**	**5700**	320 J	**1500**	**1600**	220 J	59 J
Benzo(k)fluoranthene	330	1100	**5400**	2400 D	38 J	**3200 D**	**3300 D**	320 J	880	**1000**	230 J	60 J
Benzo(a)pyrene	0.33	330	**6500**	3300	ND	**3900**	**4400**	250 J	**1100**	**1200**	190 J	48 J
Indeneo(1,2,3-cd)pyrene	320	3200	**5400 D**	3100 D	ND	3100 D	1900 D	140 J	910	520 DJ	140 J	ND
Dibenz(a,h,)anthracene	340	340	**1800 DJ**	**1000 DJ**	ND	**1100**	**740 DJ**	39 J	350 J	190 DJ	38 J	ND
Metals (mg/kg)	**NYS**	**BKG**										
Arsenic	7.5 or SB	0.2	2.7	**29.8**	0.59 J	1.1 J	0.77 J	ND	0.77 J	0.67 DJ	0.54 J	ND
Lead	SB	4.4	**778**	**625**	**59**	**66**	**83.4**	**20**	**54**	**75**	**35**	8

Sample Depth (in. bgs)	Action Levels		5-SB-04	5-SB-04	5-SB-05	5-SB-05	5-SB-05	5-SB-06	5-SB-06	5-SB-06	5-SB-07	5-SB-07
	Saturated	Unsaturated	3-6	6-24	0-3	3-6	6-24	0-3	3-6	6-24	3-6	6-24
Semivolatile Organics (µg/kg)												
Benzo(a)anthracene	330	330	110 J	64 J	ND	86 J	ND	230 J	ND	ND	ND	ND
Chrysene	400	400	200 J	69 J	63 J	150 J	ND	290 J	ND	47 J	ND	ND
Benzo(b)fluoranthene	330	1100	180 J	90 J	110 J	500 J	ND	310 J	ND	45 J	ND	ND
Benzo(k)fluoranthene	330	1100	170 J	68 J	60 J	ND	ND	310 J	ND	51 J	ND	ND
Benzo(a)pyrene	0.33	330	130 J	60 J	ND	120 J	ND	320 J	ND	35 J	ND	ND
Indeneo(1,2,3-cd)pyrene	3200	3200	79 J	45 J	ND	93 J	ND	250 J	ND	36 J	ND	ND
Dibenz(a,h,)anthracene	340	340	ND	ND	ND	ND	ND	58 J	ND	ND	ND	ND
Metals (mg/kg)	**NYS**	**BKG**										
Arsenic	7.5 or SB	0.1/0.10	0.70 J	0.53 J	2.2	1.6 J	0.76 J	0.79 J	0.65 J	1.2 J	NR	NR
Lead	SB	4.4/0.65	**15**	**12**	**27**	**13**	1.7	**14**	4	**16**	1.6	1.8

Notes:
1. New York State Soil Cleanup Objectives were the action levels in effect at the time of the 1998 Remedial Investigation.

Shading and bolding indicate action level exceeded.

Bgs Below ground surface.
BKG Upper limit of background concentrations (surface/subsurface).
J Estimated value.
ND Not detected.
NR Not reported.
SB Site background (action level), or soil boring (sample ID).



ACTION LEVELS	
ANALYTE	
BENZO(a)ANTHRACENE	330 µg/kg
CHRYSENE	400 µg/kg
BENZO(b)FLUORANTHENE	330 µg/kg
BENZO(k)FLUORANTHENE	330 µg/kg
BENZO(a)PYRENE	0.33 µg/kg
INDENEO(1,2,3-cd)PYRENE	320 µg/kg
DIBENZ(a,h)ANTHRACENE	340 µg/kg
ARSENIC	7.5 mg/kg
LEAD	4.4 mg/kg

ACTION LEVELS - TAGM #4046

LEGEND

- SEDIMENT AND SHALLOW SOIL SAMPLE LOCATIONS
- D SAMPLE DILUTION
- ND NOT DETECTED
- J ESTIMATED CONCENTRATION
- APPROXIMATE GROUNDWATER FLOW DIRECTION (12/94)

0 50 100
SCALE IN FEET

SOURCE: S&W 1999, VOLUME I

GAB/NFRAP DD/FIG 1.3
PROJ./003005-036

SITE 5 - 1998 REMEDIAL INVESTIGATION RESULTS
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE 1.3

Table 1.4
Site 5 Monitoring Well Sample Results – 2000 to 2001 RI
106th Rescue Wing
Westhampton Beach, New York

Parameter	NYS [b]	MCL [c]	Concentration Location [a] SDW014-02	SDW015-02	SDW017-02	PZ003-02	PZ003-22 (Duplicate)	PZ006-02
Benzene	0.7	5	ND	ND	ND	ND	ND	ND
Carbon Disulfide	50	--	ND	ND	ND	0.2 J	4.0	ND
Chloroform	7	80	ND	ND	2.0	0.7 J	0.3 J	ND
Ethylbenzene	5	700	ND	ND	ND	ND	ND	ND
Toluene	5	1000	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	200	ND	ND	ND	1.0	1.0	ND
Trichloroethene	5	5	ND	ND	ND	2.0	2.0	ND
Vinyl acetate	--	--	ND	ND	ND	ND	ND	ND
Total Xylenes	5	10,000	ND	ND	ND	ND	ND	ND
Semivolatile Organics (µg/L)								
Bis(2-ethylhexyl)phthalate	50	6	ND	4.0	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	--	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50 [d]	--	ND	ND	ND	ND	ND	ND

Parameter	NYS [b]	MCL [c]	Concentration Location/Depth [a] SDW014-02	SDW015-02	SDW017-02	PZ003-02	PZ003-22 (Duplicate)	PZ006-02
Metals (µg/L)								
Aluminum	--	--	2000	600	2600	230	240	330
Arsenic	25	50 [d]	ND	ND	ND	ND	ND	7.1
Barium	--	2000	21	62	19	8.1	8.1	13 E
Cadmium	10	5.0	ND	ND	ND	ND	ND	ND
Calcium	--	--	12,000	11,000	8200	12,000	11,000	27,000
Chromium	50	100	8.9	2.7	12	ND	ND	2.3
Cobalt	--	--	ND	ND	ND	ND	ND	ND
Copper	--	1300 [e]	ND	ND	ND	ND	ND	ND
Iron	--	--	4000	2600	4600	220	260	570 E
Lead	25	15 [e]	ND	ND	ND	ND	ND	ND
Magnesium	--	--	2600	1600	2400	2900	2700	1700
Manganese	--	--	150	120	220	19	18	300
Nickel	--	--	ND	ND	ND	ND	ND	ND
Potassium	--	--	1400	2700	2100	1400	1300	1700
Silver	50	100 [f]	ND	ND	ND	ND	ND	3.0
Sodium	--	--	7700	42,000	12,000	23,000	22,000	3700
Vanadium	--	--	7.0	ND	5.6	ND	ND	ND
Zinc	--	--	54	28	130	ND	ND	28

Notes:
E Estimated value or not reported due to the presence of interferences.
ND Not detected.
-- No applicable action level.

Shading and bolding indicates exceedance of action level.

(a) "SDW" refers to small-diameter well; "SW" refers to Stone & Webster well; "-01" refers to Round 1 sampling, February – March 2001; "02" refers to round 2 sampling, May – June 2001.

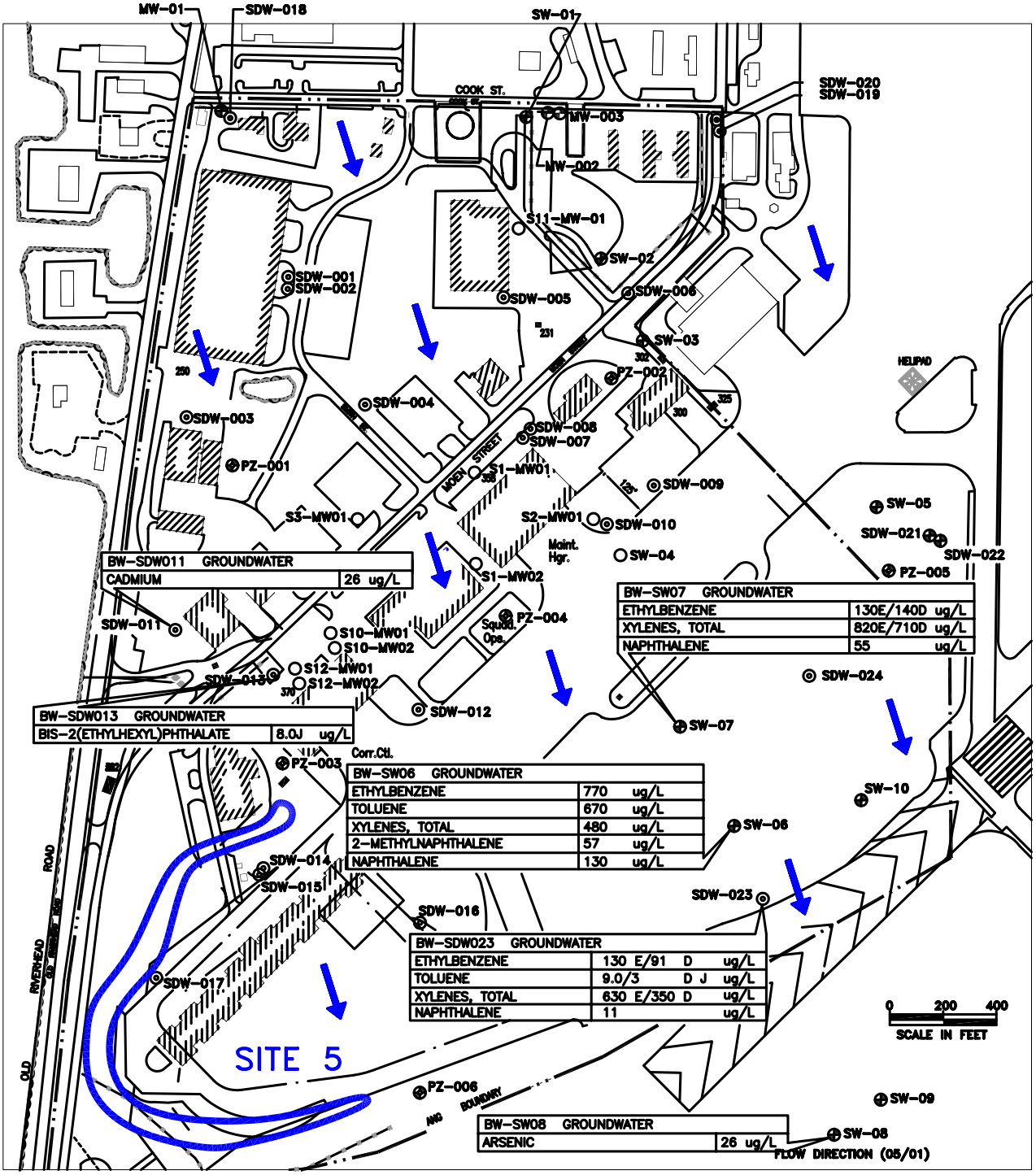
(b) New York State (NYS), Class GA Groundwater; NYSDEC TAGM #4046.

(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.

(f) Secondary Federal MCL.



BW-SDW011 GROUNDWATER	
CADMIUM	26 ug/L

BW-SW07 GROUNDWATER	
ETHYLBENZENE	130E/140D ug/L
XYLENES, TOTAL	820E/710D ug/L
NAPHTHALENE	55 ug/L

BW-SDW013 GROUNDWATER	
BIS-2(ETHYLHEXYL)PHTHALATE	8.0J ug/L

BW-SW06 GROUNDWATER	
ETHYLBENZENE	770 ug/L
TOLUENE	670 ug/L
XYLENES, TOTAL	480 ug/L
2-METHYLNAPHTHALENE	57 ug/L
NAPHTHALENE	130 ug/L

BW-SDW023 GROUNDWATER	
ETHYLBENZENE	130 E/91 D ug/L
TOLUENE	9.0/3 D J ug/L
XYLENES, TOTAL	630 E/350 D ug/L
NAPHTHALENE	11 ug/L

BW-SW08 GROUNDWATER	
ARSENIC	26 ug/L

LEGEND

⊙	PRE-EXISTING SMALL DIAMETER WELL	→	APPROXIMATE GROUNDWATER
⊕	PRE-EXISTING WELL	D	SECONDARY DILUTION FACTOR
⊗	PRE-EXISTING PIEZOMETER	E	ESTIMATED VALUE OR NOT REPORTED DUE TO INTERFERENCES
○	NEW MONITORING WELL (RI, 2000-2001)	J	ESTIMATED CONCENTRATION BELOW DETECTION LIMIT

SOURCE: BASE MAP AND ABB-ES, 1997

GAB/NFRAP DD/FIG1.4
PROJ./003005-036

SITE 5 – 2001 RI BASEWIDE CONTAMINANTS IN GROUNDWATER
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE
1.4

Table 1.5
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration							
		SS5-01-1 (0.5-1 ft)	SS5-01-1D (Duplicate)	SS5-01-2 (1-2 ft)	SS5-02-1 (0.5-1 ft)	SS5-02-2 (1-2 ft)	SS5-03-1 (0.5-1 ft)	SS5-03-2 (1-2 ft)	SS5-04-1 (0.5-1 ft)
Volatile Organics (mg/kg)									
Benzene	0.06	<0.054	<0.053	<0.053	<0.052	<0.053	<0.053	<0.055	<0.053
Ethylbenzene	1	<0.054	<0.053	<0.053	<0.052	<0.053	<0.053	<0.055	<0.053
Toluene	0.7	<0.054	<0.053	<0.053	<0.052	<0.053	<0.053	<0.055	<0.053
Xylenes	0.26	<0.11	<0.11	<0.11	<0.10	<0.11	<0.11	<0.11	<0.11
Polyaromatic Hydrocarbons (mg/kg)									
Acenaphthene	20	<0.018	<0.018	<0.018	<0.017	<0.018	<0.018	<0.018	<0.018
Acenaphthylene	100	<0.018	<0.018	<0.018	<0.017	<0.018	<0.018	<0.018	<0.018
Anthracene	100	<0.018	<0.018	<0.018	<0.017	0.037	<0.018	<0.018	<0.018
Benzo(a)anthracene	1	0.024	<0.018	<0.018	0.05	0.16	0.035	<0.018	0.04
Benzo(a)pyrene	1	0.03	0.025	<0.018	0.078	0.25	0.045	<0.018	0.056
Benzo(b)fluoranthene	1	0.029	0.027	<0.018	0.077	0.41	0.045	<0.018	0.06
Benzo(g,h,i)perylene	100	0.019	<0.018	<0.018	0.032	0.21	0.03	<0.018	0.034
Benzo(k)fluoranthene	0.8	0.029	0.022	<0.018	0.078	0.39	0.041	<0.018	0.048
Chrysene	1	0.029	0.023	<0.018	0.062	0.16	0.04	0.019	0.05
Dibenz(a,h)anthracene	0.33	<0.018	<0.018	<0.018	<0.017	0.1	<0.018	<0.018	<0.018
Fluoranthene	100	0.05	0.037	<0.018	0.099	0.5	0.064	0.037	0.057
Fluorene	30	<0.018	<0.018	<0.018	<0.017	<0.018	<0.018	<0.018	<0.018
Indeno(1,2,3-cd)pyrene	0.5	0.019	<0.018	<0.018	0.036	0.27	0.026	<0.018	0.034
Naphthalene	12	<0.018	<0.018	<0.018	<0.017	<0.018	<0.018	<0.018	<0.018
Phenanthrene	100	<0.018	<0.018	<0.018	0.025	0.1	0.026	<0.018	0.02
Pyrene	100	0.040	0.029	<0.018	0.077	0.32	0.055	0.031	0.048
Metals (mg/kg)									
Arsenic	13	1.1	<1.1	<1.1	<1.0	1.3	<1.1	1.1	<1.1
Beryllium	7.2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.22	<0.21
Cadmium	2.5	<0.27	<0.27	0.36	<0.26	**6.4**	<0.27	<0.27	<0.27
Chromium	30	9.1	4.7	7.2	3.5	**110**	7.9	3.7	2.5
Copper	50	6.6	2.1	1.9	2.6	26	2.7	3.0	1.5
Lead	63	14	10	11	12	**350**	46	55	5.2
Mercury	0.18	**0.45**	**0.35**	0.12	<0.010	**1.3**	0.02	0.023	<0.011
Nickel	30	5	1.4	1.5	1.6	5.4	1.2	1.4	1.1
Silver	2	<0.54	<0.53	<0.53	<0.52	<0.53	<0.53	<0.55	<0.53

Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

Bolding and shading indicate that sample result exceeds the Action Level.

Table 1.5 (Continued)
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration							
		SS5-04-2 (1-2 ft)	SS5-04-2D (Duplicate)	SS5-05-1 (0.5-1 ft)	SS5-05-2 (1-2 ft)	SS5-06-1 (0.5-1 ft)	SS5-06-2 (1-2 ft)	SS5-07-1 (0.5-1 ft)	SS5-07-2 (1-2 ft)
Volatile Organics (mg/kg)									
Benzene	0.06	<0.053	<0.053	<0.053	<0.055	<0.053	<0.052	<0.054	<0.054
Ethylbenzene	1	<0.053	<0.053	<0.053	<0.055	<0.053	<0.052	<0.054	<0.054
Toluene	0.7	<0.053	<0.053	<0.053	<0.055	<0.053	<0.052	<0.054	<0.054
Xylenes	0.26	<0.11	<0.11	<0.11	<0.11	<0.11	<0.10	<0.11	<0.11
Polyaromatic Hydrocarbons (mg/kg)									
Acenaphthene	20	<0.018	<0.018	<0.018	<0.036	<0.088	1.4	0.047	<0.018
Acenaphthylene	100	<0.018	<0.018	<0.018	<0.036	<0.088	<0.87	<0.018	<0.018
Anthracene	100	<0.018	<0.018	<0.018	0.07	<0.088	1.5	0.095	<0.018
Benzo(a)anthracene	1	0.021	0.064	0.053	0.3	0.4	**2.1**	0.17	<0.018
Benzo(a)pyrene	1	0.023	0.043	0.075	0.49	**1.4**	**1.9**	0.19	<0.018
Benzo(b)fluoranthene	1	0.026	0.06	0.073	0.53	**1.4**	**1.5**	0.2	<0.018
Benzo(g,h,i)perylene	100	<0.018	0.022	0.054	0.27	0.81	1.0	0.064	<0.018
Benzo(k)fluoranthene	0.8	0.023	0.048	0.074	0.41	**1.1**	**1.9**	0.17	<0.018
Chrysene	1	0.027	0.087	0.064	0.39	0.710	**2.3**	0.17	<0.018
Dibenz(a,h)anthracene	0.33	<0.018	<0.018	0.021	0.12	**0.35**	<0.87	0.028	<0.018
Fluoranthene	100	0.047	0.13	0.096	0.71	0.38	6.8	0.53	<0.018
Fluorene	30	<0.018	<0.018	<0.018	<0.036	<0.088	2.3	0.046	<0.018
Indeno(1,2,3-cd)pyrene	0.5	<0.018	0.023	0.047	0.27	**0.83**	**0.96**	0.066	<0.018
Naphthalene	12	<0.018	<0.018	<0.018	<0.036	<0.088	3.1	0.05	<0.018
Phenanthrene	100	<0.018	<0.018	0.031	0.39	0.09	10	0.42	<0.018
Pyrene	100	0.046	0.24	0.084	0.55	0.36	5.5	0.37	<0.018
Metals (mg/kg)									
Arsenic	13	<1.1	<1.1	<1.1	<1.1	1.8	<1.1	<1.1	1.2
Beryllium	7.2	<0.21	<0.21	<0.21	<0.22	<0.21	<0.21	<0.21	<0.22
Cadmium	2.5	<0.26	<0.26	<0.270	<0.27	<0.26	<0.26	<0.27	<0.27
Chromium	30	3.0	2.3	4.4	5.6	4.7	3.8	4.3	5.1
Copper	50	1.5	1.5	2.7	3.7	3.9	2.0	2.7	2.8
Lead	63	5.2	4.5	12	29	16	9.1	21	16
Mercury	0.18	0.014	<0.011	<0.011	0.014	<0.01	<0.010	<0.011	0.018
Nickel	30	1.0	0.98	1.8	1.5	2.3	1.4	1.3	1.7
Silver	2	<0.53	<0.53	<0.53	<0.55	<0.53	<0.52	<0.54	<0.54

Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

Bolding and shading indicate that sample result exceeds the Action Level.

Table 1.5 (Continued)
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration							
		SS5-08-1 (0.5-1 ft)	SS5-08-2 (1-2 ft)	SS5-09-1 (0.5-1 ft)	SS5-09-2 (1-2 ft)	SS5-10-1 (0.5-1 ft)	SS5-10-2 (1-2 ft)	SS5-10-2D (Duplicate)	SS5-11-1 (0.5-1 ft)
Volatile Organics (mg/kg)									
Benzene	0.06	<0.054	<0.054	<0.055	<0.053	<0.052	<0.053	<0.053	<0.052
Ethylbenzene	1	<0.054	<0.054	<0.055	<0.053	<0.052	<0.053	<0.053	<0.052
Toluene	0.7	<0.054	<0.054	<0.055	<0.053	<0.052	<0.053	<0.053	<0.052
Xylenes	0.26	<0.11	<0.11	<0.11	<0.11	<0.10	<0.11	<0.11	<0.10
Polyaromatic Hydrocarbons (mg/kg)									
Acenaphthene	20	<0.018	0.037	<0.018	<0.018	<0.017	<0.018	<0.018	<0.017
Acenaphthylene	100	<0.018	<0.036	<0.018	<0.018	<0.017	<0.018	<0.018	<0.017
Anthracene	100	0.035	0.064	<0.018	<0.018	<0.017	<0.018	<0.018	<0.017
Benzo(a)anthracene	1	0.19	0.26	0.067	<0.018	0.084	0.021	<0.018	<0.017
Benzo(a)pyrene	1	0.4	0.36	0.085	<0.018	0.12	0.026	0.02	<0.017
Benzo(b)fluoranthene	1	0.57	0.36	0.083	<0.018	0.13	0.025	0.021	<0.017
Benzo(g,h,i)perylene	100	0.19	0.19	0.028	<0.018	0.053	<0.018	<0.018	<0.017
Benzo(k)fluoranthene	0.8	0.49	0.32	0.088	<0.018	0.12	0.023	0.019	<0.017
Chrysene	1	0.33	0.32	0.072	<0.018	0.10	0.025	0.019	<0.017
Dibenz(a,h)anthracene	0.33	0.089	0.085	<0.018	<0.018	0.025	<0.018	<0.018	<0.017
Fluoranthene	100	0.380	0.7	0.14	<0.018	0.17	0.039	0.03	0.022
Fluorene	30	<0.018	0.041	<0.018	<0.018	<0.017	<0.018	<0.018	<0.017
Indeno(1,2,3-cd)pyrene	0.5	0.19	0.19	0.03	<0.018	0.06	<0.018	<0.018	<0.017
Naphthalene	12	<0.018	<0.036	<0.018	<0.018	<0.017	<0.018	<0.018	<0.017
Phenanthrene	100	0.13	0.38	0.051	<0.018	0.045	<0.018	<0.018	<0.017
Pyrene	100	0.31	0.53	0.11	<0.018	0.13	0.032	0.024	0.02
Metals (mg/kg)									
Arsenic	13	<1.1	<1.1	1.5	<1.1	<1.0	<1.1	<1.1	2.1
Beryllium	7.2	<0.22	<0.22	<0.22	<0.21	<0.21	<0.21	<0.21	<0.21
Cadmium	2.5	0.35	<0.27	<0.27	<0.27	<0.26	<0.26	<0.27	<0.26
Chromium	30	6.1	7.2	4.7	2.8	5.2	1.9	2.5	4.2
Copper	50	3.1	3.0	3.4	1.3	2.1	1.1	1.4	1.6
Lead	63	30	31	30	5.3	12	3.6	3.5	3.2
Mercury	0.18	0.012	0.017	0.022	0.014	<0.010	<0.011	<0.011	<0.010
Nickel	30	1.6	1.7	1.8	0.78	1.3	0.95	1.0	1.3
Silver	2	<0.54	<0.54	<0.55	<0.53	<0.52	<0.53	<0.53	<0.52

Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

Table 1.5 (Continued)
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration							
		SS5-11-2 (1-2 ft)	SS5-12-1 (0.5-1 ft)	SS5-12-2 (1-2 ft)	SS5-12-2D (Duplicate)	SS5-13-1 (0.5-1 ft)	SS5-13-2 (1-2 ft)	SS5-14-1 (0.5-1 ft)	SS5-14-2 (1-2 ft)
Volatile Organics (mg/kg)									
Benzene	0.06	<0.054	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	1	<0.054	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	0.7	<0.054	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Xylenes	0.26	<0.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Polyaromatic Hydrocarbons (mg/kg)									
Acenaphthene	20	<0.06	0.100	0.074	0.095	0.052	<0.018	0.055	<0.018
Acenaphthylene	100	<0.06	0.065	<0.018	<0.036	<0.037	<0.018	<0.037	<0.018
Anthracene	100	0.072	0.27	0.11	0.13	0.093	<0.018	0.12	0.033
Benzo(a)anthracene	1	0.64	0.71	0.27	0.3	0.3	<0.018	0.34	0.088
Benzo(a)pyrene	1	0.72	0.78	0.3	0.32	0.36	<0.018	0.39	0.11
Benzo(b)fluoranthene	1	0.79	0.84	0.33	0.34	0.42	<0.018	0.45	0.13
Benzo(g,h,i)perylene	100	0.47	0.46	0.14	0.16	0.18	<0.018	0.19	0.039
Benzo(k)fluoranthene	0.8	0.70	**0.8**	0.28	0.3	0.35	<0.018	0.4	0.1
Chrysene	1	0.74	0.88	0.31	0.34	0.39	<0.018	0.43	0.092
Dibenz(a,h)anthracene	0.33	0.19	0.18	0.056	0.066	0.068	<0.018	0.072	<0.018
Fluoranthene	100	1.3	1.5	0.74	0.76	0.84	<0.018	0.98	0.22
Fluorene	30	<0.06	0.1	0.041	0.056	<0.037	<0.018	0.041	<0.018
Indeno(1,2,3-cd)pyrene	0.5	0.42	0.41	0.14	0.14	0.16	<0.018	0.170	0.043
Naphthalene	12	<0.06	<0.061	0.018	0.037	<0.037	<0.018	<0.037	<0.018
Phenanthrene	100	0.35	1.0	0.44	0.5	0.37	<0.018	0.49	0.1
Pyrene	100	1.0	1.4	0.54	0.57	0.64	<0.018	0.76	0.17
Metals (mg/kg)									
Arsenic	13	<1.1	1.6	<1.1	<1.1	1.6	1.5	1.8	<1.1
Beryllium	7.2	<0.22	<0.22	<0.21	<0.22	<0.22	<0.22	<0.22	<0.21
Cadmium	2.5	<0.27	1.1	0.32	0.33	<0.28	<0.27	0.42	<0.27
Chromium	30	4.5	14	5.1	5.0	4.9	6.0	6.9	3.2
Copper	50	2.2	**89**	16	15	20	7.2	34	6.5
Lead	63	19	47	29	24	22	16	26	5.1
Mercury	0.18	0.011	0.091	0.022	<0.011	0.020	0.021	0.025	<0.011
Nickel	30	1.3	4.3	1.4	1.6	1.9	2.4	2.6	1.4
Silver	2	<0.54	<0.55	<0.54	<0.54	<0.55	<0.55	<0.56	<0.53

Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

Bolding and shading indicate that sample result exceeds the Action Level.
N/A Not applicable, or not analyzed.

Table 1.5 (Continued)
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration							
		SS5-15-1 (0.5-1 ft)	SS5-15-2 (1-2 ft)	SS5-16-1 (0.5-1 ft)	SS5-16-2 (1-2 ft)	SS5-17-1 (0.5-1 ft)	SS5-17-2 (1-2 ft)	SS5-18-1 (0.5-1 ft)	SS5-18-2 (1-2 ft)
Polyaromatic Hydrocarbons (mg/kg)									
Acenaphthene	20	0.22	0.066	0.026	<0.018	<0.38	<0.018	1.7	0.17
Acenaphthylene	100	<0.06	<0.018	<0.018	<0.018	<0.38	<0.018	<0.36	<0.036
Anthracene	100	0.28	0.079	0.022	<0.018	0.46	0.02	1.9	0.25
Benzo(a)anthracene	1	0.66	0.15	0.1	0.037	**1.6**	0.063	**3.4**	0.63
Benzo(a)pyrene	1	0.67	0.16	0.12	0.054	**1.8**	0.083	**3.7**	0.67
Benzo(b)fluoranthene	1	0.59	0.17	0.12	0.052	**1.9**	0.08	**3.5**	0.65
Benzo(g,h,i)perylene	100	0.42	0.047	0.045	0.019	0.78	0.028	1.4	0.32
Benzo(k)fluoranthene	0.8	0.61	0.14	0.13	0.054	**1.9**	0.084	**3.6**	0.61
Chrysene	1	0.69	0.14	0.12	0.045	**1.8**	0.069	**3.6**	0.69
Dibenz(a,h)anthracene	0.33	0.16	0.023	0.022	<0.018	<0.38	<0.018	**0.66**	0.13
Fluoranthene	100	1.7	0.38	0.3	0.1	4.0	0.16	9.6	1.8
Fluorene	30	0.12	0.037	<0.018	<0.018	<0.38	<0.018	1.2	0.11
Indeno(1,2,3-cd)pyrene	0.5	0.36	0.054	0.049	0.021	**0.74**	0.032	**1.4**	0.3
Naphthalene	12	<0.06	0.038	<0.018	<0.018	<0.38	<0.018	0.67	0.046
Phenanthrene	100	1.2	0.3	0.11	0.083	2.0	0.079	8.7	1.1
Pyrene	100	1.3	0.27	0.22	0.078	3.0	0.12	7.0	1.3
Metals (mg/kg)									
Arsenic	13	1.2	<1.1	<1.1	<1.1	1.7	1.5	<1.1	<1.1
Beryllium	7.2	<0.21	<0.21	<0.21	<0.21	<0.23	<0.22	<0.22	<0.22
Cadmium	2.5	0.3	<0.26	<0.27	<0.26	0.85	<0.27	<0.27	0.34
Chromium	30	7.5	3.9	3.3	0.94	8.5	5.6	4.3	3.0
Copper	50	8.6	5.4	11	1.7	41	7.4	22	21
Lead	63	15	9.1	18	4.5	**81**	10	46	15
Mercury	0.18	0.039	<0.011	0.012	<0.011	0.074	0.023	0.096	0.049
Nickel	30	2.0	1.5	1.6	<0.53	3.3	2.4	1.9	1.7
Silver	2	<0.54	<0.53	<0.54	<0.53	<0.56	<0.55	<0.54	<0.55

Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

Bolding and shading indicate that sample result exceeds the Action Level.

Table 1.5 (Continued)
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration							
		SS5-19-1 (0.5-1 ft)	SS5-19-2 (1-2 ft)	SS5-20-1 (0.5-1 ft)	SS5-20-2 (1-2 ft)	SS5-21-1 (0.5-1 ft)	SS5-21-2 (1-2 ft)	SS5-22-1 (0.5-1 ft)	SS5-22-2 (1-2 ft)
Polyaromatic Hydrocarbons (mg/kg)									
Acenaphthene	20	<0.018	<0.018	<0.018	<0.018	<0.018	<0.036	<0.018	<0.018
Acenaphthylene	100	<0.018	<0.018	<0.018	<0.018	<0.018	0.052	0.026	<0.018
Anthracene	100	<0.018	<0.018	<0.018	0.02	<0.018	0.15	0.081	<0.018
Benzo(a)anthracene	1	0.045	0.033	0.046	0.066	0.08	0.51	0.26	0.052
Benzo(a)pyrene	1	0.061	0.043	0.068	0.091	0.11	0.58	0.29	0.067
Benzo(b)fluoranthene	1	0.065	0.047	0.068	0.097	0.11	0.56	0.28	0.064
Benzo(g,h,i)perylene	100	0.023	0.019	0.025	0.041	0.041	0.26	0.11	0.03
Benzo(k)fluoranthene	0.8	0.063	0.041	0.064	0.083	0.096	0.5	0.3	0.068
Chrysene	1	0.051	0.037	0.052	0.074	0.09	0.54	0.28	0.059
Dibenz(a,h)anthracene	0.33	<0.018	<0.018	<0.018	0.021	0.018	0.11	0.048	<0.018
Fluoranthene	100	0.07	0.053	0.08	0.11	0.13	0.92	0.55	0.099
Fluorene	30	<0.018	<0.018	<0.018	<0.018	<0.018	<0.036	<0.018	<0.018
Indeno(1,2,3-cd)pyrene	0.5	0.023	<0.018	0.026	0.039	0.044	0.23	0.1	0.027
Naphthalene	12	<0.018	<0.018	<0.018	<0.018	<0.018	<0.036	<0.018	<0.018
Phenanthrene	100	<0.018	<0.018	0.02	0.025	0.028	0.21	0.19	0.038
Pyrene	100	0.075	0.059	0.073	0.11	0.11	0.83	0.5	0.091
Metals (mg/kg)									
Arsenic	13	1.2	1.3	1.2	1.1	<1.1	1.3	1.3	1.2
Beryllium	7.2	<0.21	<0.22	<0.21	<0.21	<0.21	<0.22	<0.21	<0.22
Cadmium	2.5	<0.26	<0.27	<0.27	<0.27	<0.26	<0.27	<0.27	<0.27
Chromium	30	3.8	3.8	3.8	4.3	4.7	3.5	3.7	4.0
Copper	50	2.5	2.6	2.6	2.9	4.0	8.4	2.6	2.8
Lead	63	8.0	8.1	7.8	7.0	13	8.7	8.4	8.5
Mercury	0.18	0.022	0.017	0.017	0.016	0.017	0.022	0.023	0.023
Nickel	30	1.5	1.7	1.6	1.5	3.4	2.1	1.5	1.5
Silver	2	<0.53	<0.55	<0.54	<0.54	<0.53	<0.54	<0.53	<0.54

Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

Table 1.5 (Continued)
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration							
		SS5-23-1 (0.5-1 ft)	SS5-23-2 (1-2 ft)	SS5-24-1 (0.5-1 ft)	SS5-24-1D (Duplicate)	SS5-24-2 (1-2 ft)	SS5-25-1 (0.5-1 ft)	SS5-25-2 (1-2 ft)	SS5-26-1 (0.5-1 ft)
Polyaromatic Hydrocarbons (mg/kg)									
Acenaphthene	20	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Acenaphthylene	100	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Anthracene	100	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Benzo(a)anthracene	1	0.021	0.021	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Benzo(a)pyrene	1	0.035	0.026	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Benzo(b)fluoranthene	1	0.046	0.023	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Benzo(g,h,i)perylene	100	0.02	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Benzo(k)fluoranthene	0.8	0.04	0.028	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Chrysene	1	0.037	0.03	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Dibenz(a,h)anthracene	0.33	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Fluoranthene	100	0.066	0.036	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Fluorene	30	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Indeno(1,2,3-cd)pyrene	0.5	0.019	0.019	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Naphthalene	12	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Phenanthrene	100	0.024	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	100	0.054	0.037	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Metals (mg/kg)									
Arsenic	13	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium	7.2	<0.20	<0.20	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
Cadmium	2.5	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
Chromium	30	4.4	4.7	3.6	2.6	1.5	3.9	3.2	3.2
Copper	50	2.6	0.69	1.8	1.7	0.74	1.3	0.76	1.3
Lead	63	10	8.9	4.3	2.2	1.2	1.8	1.0	2.6
Mercury	0.18	<0.010	<0.010	<0.010	<0.01	<0.01	0.014	<0.01	0.023
Nickel	30	1.2	0.65	1.0	0.93	0.67	1.1	0.56	1.2
Silver	2	<0.51	<0.51	<0.51	<0.52	<0.52	<0.52	<0.52	<0.52

Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

Table 1.5 (Continued)
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration							
		SS5-26-2 (1-2 ft)	SS5-26-2D (Duplicate)	SS5-27-1 (0.5-1 ft)	SS5-27-2 (1-2 ft)	SS5-28-1 (0.5-1 ft)	SS5-28-2 (1-2 ft)	SS5-29-1 (0.5-1 ft)	SS5-29-2 (1-2 ft)
Polyaromatic Hydrocarbons (mg/kg)									
Acenaphthene	20	<0.017	<0.017	<0.018	<0.018	<0.017	<0.017	<0.018	<0.017
Acenaphthylene	100	<0.017	<0.017	<0.018	<0.018	<0.017	<0.017	<0.018	<0.017
Anthracene	100	<0.017	<0.017	<0.018	<0.018	<0.017	<0.017	<0.018	<0.017
Benzo(a)anthracene	1	<0.017	<0.017	0.2	<0.018	0.045	<0.017	0.043	<0.017
Benzo(a)pyrene	1	<0.017	<0.017	0.24	<0.018	0.087	<0.017	0.082	<0.017
Benzo(b)fluoranthene	1	<0.017	<0.017	0.27	<0.018	0.081	<0.017	0.083	<0.017
Benzo(g,h,i)perylene	100	<0.017	<0.017	0.1	<0.018	0.045	<0.017	0.049	<0.017
Benzo(k)fluoranthene	0.8	<0.017	<0.017	0.25	<0.018	0.08	<0.017	0.089	<0.017
Chrysene	1	<0.017	<0.017	0.25	<0.018	0.06	<0.017	0.062	<0.017
Dibenz(a,h)anthracene	0.33	<0.017	<0.017	0.046	<0.018	0.02	<0.017	0.024	<0.017
Fluoranthene	100	<0.017	<0.017	0.49	<0.018	0.045	<0.017	0.083	<0.017
Fluorene	30	<0.017	<0.017	<0.018	<0.018	<0.017	<0.017	<0.018	<0.017
Indeno(1,2,3-cd)pyrene	0.5	<0.017	<0.017	0.1	<0.018	0.047	<0.017	0.046	<0.017
Naphthalene	12	<0.017	<0.017	<0.018	<0.018	<0.017	<0.017	<0.018	<0.017
Phenanthrene	100	<0.017	<0.017	0.04	<0.018	<0.017	<0.017	0.025	<0.017
Pyrene	100	<0.017	<0.017	0.38	<0.018	0.038	<0.017	0.066	<0.017
Metals (mg/kg)									
Arsenic	13	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	1.1	<1.0
Beryllium	7.2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.22	<0.21
Cadmium	2.5	<0.26	<0.26	<0.27	<0.26	0.33	<0.26	0.35	<0.26
Chromium	30	3.5	2.9	6.4	2.3	3.3	2.6	17	1.8
Copper	50	1.1	1.1	3.3	0.68	3.1	1.1	6.0	1.0
Lead	63	1.8	2.1	18	1.0	3.7	1.4	41	1.5
Mercury	0.18	<0.01	<0.01	0.016	<0.01	<0.01	<0.01	0.015	<0.01
Nickel	30	1.1	1.1	2.3	0.89	1.7	<0.52	3.7	0.66
Silver	2	<0.52	<0.52	<0.53	<0.52	<0.52	<0.52	<0.54	<0.52

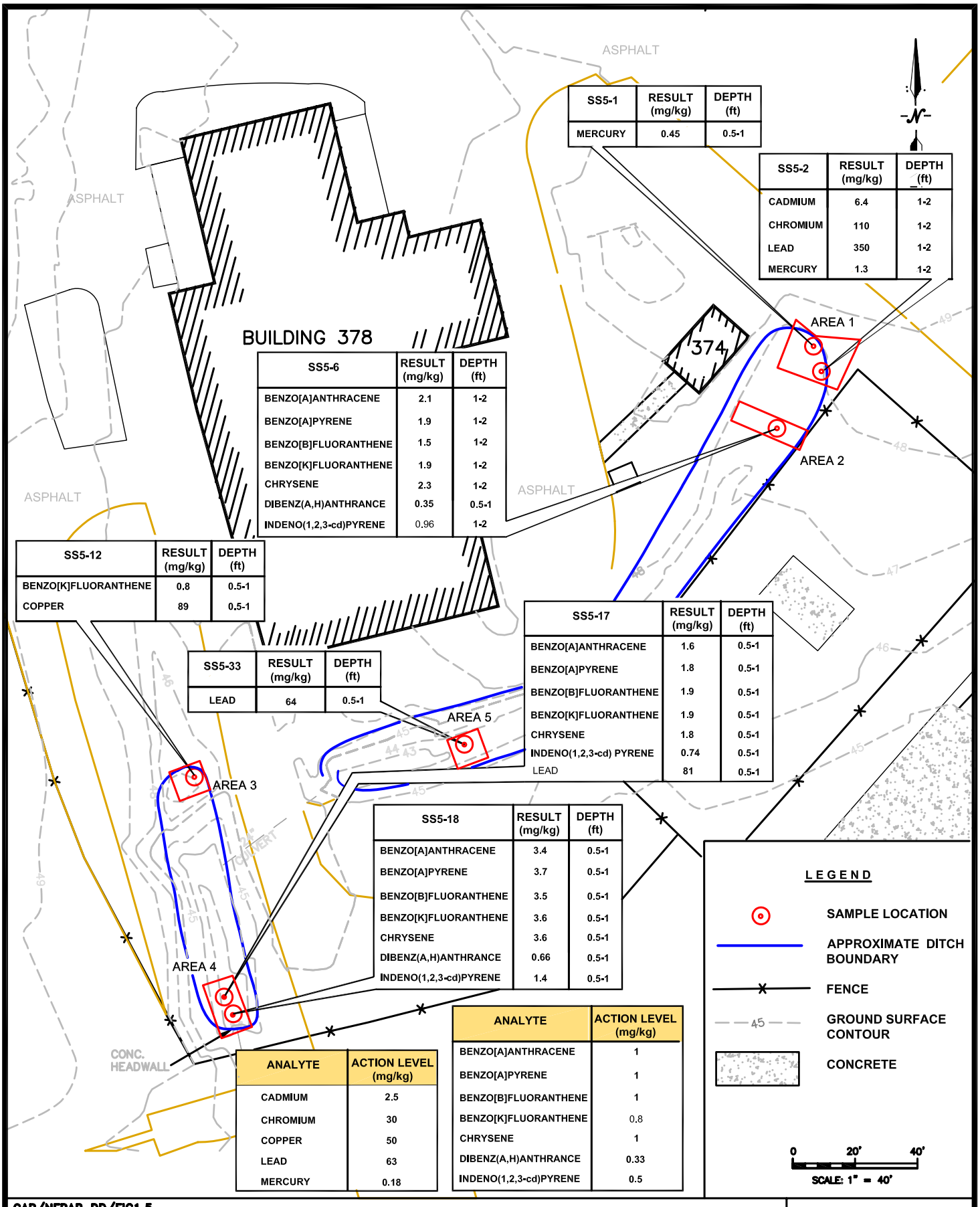
Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

Table 1.5 (Continued)
Site 5 Soil Analytical Results – 2007 Data Gap Investigation
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Concentration								
		SS5-30-1 (0.5-1 ft)	SS5-30-2 (1-2 ft)	SS5-31-1 (0.5-1 ft)	SS5-31-2 (1-2 ft)	SS5-32-1 (0.5-1 ft)	SS5-32-1D (Duplicate)	SS5-32-2 (1-2 ft)	SS5-33-1 (0.5-1 ft)	SS5-33-2 (1-2 ft)
Volatile Organics (mg/kg)										
Benzene	0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.055	<0.053
Ethylbenzene	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.055	<0.053
Toluene	0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.055	<0.053
Xylenes	0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.11	<0.11
Polyaromatic Hydrocarbons (mg/kg)										
Acenaphthene	20	<0.061	<0.017	<0.018	<0.017	<0.017	<0.017	<0.017	0.1	<0.018
Acenaphthylene	100	<0.061	<0.017	<0.018	<0.017	<0.017	<0.017	<0.017	<0.037	<0.018
Anthracene	100	0.066	<0.017	<0.018	<0.017	<0.017	<0.017	<0.017	0.19	<0.018
Benzo(a)anthracene	1	0.029	0.052	0.059	0.036	0.018	0.02	<0.017	0.58	0.021
Benzo(a)pyrene	1	0.41	0.085	0.11	0.057	0.037	0.043	<0.017	0.65	0.026
Benzo(b)fluoranthene	1	0.42	0.078	0.14	0.065	0.042	0.049	<0.017	0.7	0.025
Benzo(g,h,i)perylene	100	0.18	0.045	0.063	0.043	0.023	0.027	<0.017	0.26	<0.018
Benzo(k)fluoranthene	0.8	0.46	0.070	0.13	0.056	0.04	0.049	<0.017	0.64	0.025
Chrysene	1	0.36	0.054	0.1	0.056	0.029	0.032	<0.017	0.64	0.022
Dibenz(a,h)anthracene	0.33	0.078	0.021	0.027	<0.017	<0.017	<0.017	<0.017	0.12	<0.018
Fluoranthene	100	0.69	0.058	0.15	0.073	0.038	0.044	<0.017	1.6	0.046
Fluorene	30	<0.061	<0.017	<0.018	<0.017	<0.017	<0.017	<0.017	0.077	<0.018
Indeno(1,2,3-cd)pyrene	0.5	0.18	0.047	0.061	0.041	0.02	0.024	<0.017	0.25	<0.018
Naphthalene	12	<0.061	<0.017	<0.018	<0.017	<0.017	<0.017	<0.017	<0.037	<0.018
Phenanthrene	100	0.330	<0.017	0.046	<0.017	<0.017	<0.017	<0.017	0.85	0.021
Pyrene	100	0.55	0.054	0.14	0.057	0.035	0.041	<0.017	1.2	0.034
Metals (mg/kg)										
Arsenic	13	1.6	<1.0	1.1	<1.0	<1.0	2.1	<1.0	2.2	<1.1
Beryllium	7.2	<0.22	<0.21	<0.22	<0.21	<0.21	<0.21	<0.21	<0.22	<0.21
Cadmium	2.5	<0.27	<0.26	0.63	<0.26	<0.26	<0.26	<0.26	0.88	<0.26
Chromium	30	6.7	1.0	8.1	2.6	3.5	4.7	1.1	9.5	2.4
Copper	50	4.6	0.8	5.2	0.72	2.5	2.4	0.73	34	2.3
Lead	63	18	1.0	31	1.4	10	10	1.9	**64**	3.7
Mercury	0.18	0.017	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	0.056	<0.011
Nickel	30	2.8	<0.52	3.1	<0.52	1.2	1.6	<0.52	3.5	<0.53
Silver	2	<0.55	<0.52	<0.54	<0.52	<0.52	<0.52	<0.52	<0.55	<0.53

Notes:
(1) Soil sample results compared to Soil Cleanup Objectives (SCOs) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage.
(2) Sample "SS5-XX-X" refers to Site 5 hand auger sample location XX-X at a specified depth below ground surface (bgs). For example, SS5-01-1 is the first hand auger sample at location 01 at 0.5 to 1 ft bgs. SS5-01-2 is the second hand auger sample from location 01 at 1 to 2 ft bgs.

N/A Not applicable, or not analyzed.



GAB/NFRAP DD/FIG1.5
PROJ./003005-036

SITE 5 – 2007 DATA GAP INVESTIGATION SAMPLE RESULTS
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE
1.5

The analytical results for the hand auger soil samples were compared to Soil Cleanup Objectives (SCOs) in 6 New York Codes, Rules and Regulations (NYCRR) Part 375 for unrestricted usage in accordance with NYSDEC requirements. Analyte concentrations that exceeded the SCOs were considered contaminants of concern (COCs). Once an analyte (metal) exceeds an action level the concentration is usually compared to a background level to determine whether or not the metal is retained as a COC. The results for the COC metals were not compared to background concentrations for this effort because the background levels were significantly less than the values for the SCOs (PEER 2009). The soil sample results for VOCs, PAHs, metals and additional analyses are discussed in the following paragraphs.

Contaminated soils (PAHs and metals) were identified in five isolated areas (Areas-1 through -5) in the northern portions of the drainage ditch. No BTEX constituents were detected at locations where the 1994 SI indicated the presence of benzene and toluene. Therefore, the previous detections of benzene and toluene were not confirmed during this Data Gap Investigation (PEER 2009). The sample results exceeding action levels were previously shown on Figure 1.5. The sample results from each of the five areas during the Data Gap Investigation are discussed in the following paragraphs.

Area-1 - Soil at Area-1 contained metals (cadmium, chromium, lead and mercury) at concentrations exceeding SCOs in an estimated 4 ft by 8 ft area. Based on the previous sampling (1994 and 1998) and sampling conducted during the 2007 Data Gap Investigation, soil contamination was estimated to extend to approximately 3 ft bgs at Area-1 (PEER 2009).

Area-2 - Soil at Area-2 contained PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene] exceeding SCOs in an estimated 4 ft by 6 ft area. Based on previous sampling (1998 RI) and sampling conducted during the 2007 Data Gap Investigation, soil contamination was estimated to extend to approximately 2 ft bgs at Area-2 (PEER 2009).

Area-3 - Soil at Area-3 contained benzo(k)fluoranthene and copper at concentrations exceeding SCOs in an estimated 4 ft by 4 ft area. Based on previous sampling (1994 and 1998) and sampling conducted during the 2007 Data Gap Investigation, soil contamination was estimated to extend to approximately 2 ft bgs at Area-3 (PEER 2009).

Area-4 - Soil at Area-4 contained lead and PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene] at concentrations exceeding SCOs in an estimated 4 ft by 8 ft area. Based on previous sampling (1994 and 1998) and sampling conducted during the 2007 Data Gap Investigation, soil contamination was estimated to extend to approximately 2 ft bgs at Area-4 (PEER 2009).

Area-5 - Soil at Area-5 contained lead at concentrations exceeding the SCO in an estimated 4 ft by 4 ft area. Based on previous sampling (1994 and 1998) and sampling conducted during the 2007 Data Gap Investigation, soil contamination was estimated to extend to approximately 2 ft bgs at Area-5 (PEER 2009).

1.3 REMEDIAL ACTION ACTIVIITES

This section describes the remedial action activities performed at Site 5 – Southwest Storm Drainage Ditch to excavate and dispose of the contaminated soil at the five areas identified during the Data Gap Investigation (PEER 2009). The five impacted areas were in the vicinity of the planned location of a major construction project for a new Pararescue Facility. The remedial action activities were conducted from May 19 to June 2, 2009. Copies of daily field log notes are provided in Appendix B.

1.3.1 Soil Excavation

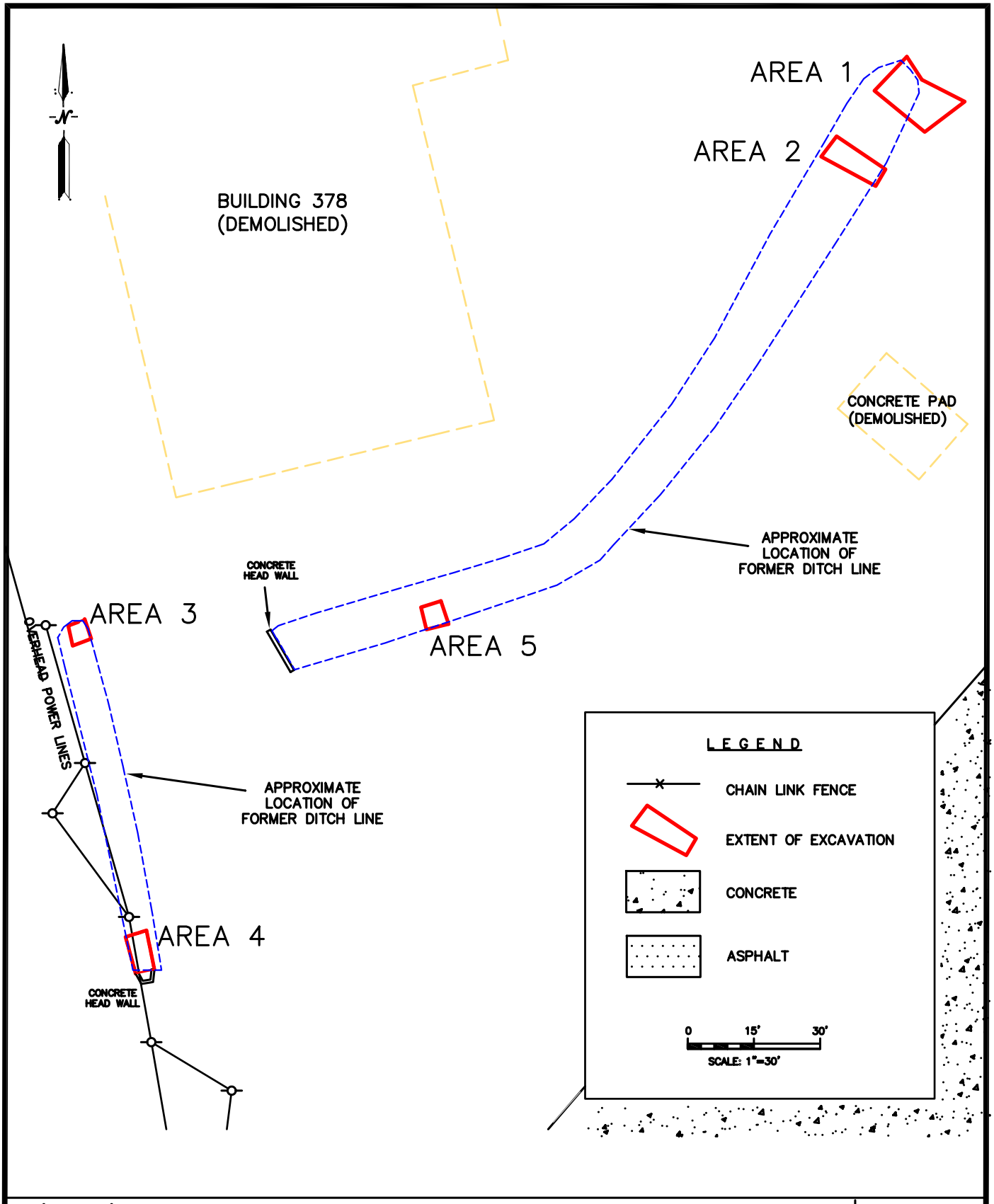
Excavation began at Site 5 on May 20, 2009. Upon arrival at the site, the initial phases of the construction project for the Pararescue Facility were underway and buildings and roadways in the area had been demolished. The areas of the ditch to be excavated were still intact and had only been minimally disturbed by the construction activities. In accordance with the *Work Plan* (PEER 2008), each of the five areas were excavated with a backhoe. The final extents of the excavated areas (Areas-1, -2, -3, -4 and -5) are shown on Figure 1.6.

Upon being excavated to the measurements specified in the *Work Plan,* five confirmation soil samples consisting of four sidewall samples and one bottom sample were collected from each excavation to ensure that all of the contaminated soil had been removed. Depending upon the length of the sidewall, samples were collected and composited from two to three locations from the bottom third of the wall. Additionally, bottom samples were collected and composited from two to four locations in the bottoms of the excavations depending upon the size of the bottom. Soil sample results were compared to SCOs of 6 NYCRR Part 375 for unrestricted usage in accordance with NYSDEC requirements. Confirmation soil sample results are provided in Table 1.6. The Laboratory Data Reports are provided in Appendix C. The activities conducted at each of the five areas are described in the following paragraphs.

Area-1

On May 20, 2009 an approximate 4 ft by 10 ft rectangle (4.4 yd^3 or 8 tons) of soil was removed from the northern portion of the ditch approximately 18 ft east of former Building 374. The excavation extended to depths ranging from 3.0 to 3.5 ft bgs. No staining or odors were observed during the excavation activities and no photoionization detector (PID) readings greater than 0.0 ppmv were recorded. Photographs of Area-1 are provided in Appendix D.

One bottom and four sidewall confirmation soil samples (north, south, east and west walls) were collected and submitted to the laboratory for analysis of metals at expedited turnaround time (TAT). Confirmation soil samples GAB-A1-F1 (bottom sample) and GAB-A1-W1 (west wall sample) and GAB-A1-S1 (south wall sample) contained several metals (cadmium, chromium, copper, lead and mercury) at concentrations exceeding the SCOs (Table 1.6).



GAB/NFRAP DD/FIG1.6
PROJ./3005-036

SITE 5 – AREAS OF REMEDIAL ACTION
106th RESCUE WING
WESTHAMPTON BEACH, NEW YORK

FIGURE
1.6

Table 1.6
Site 5 Confirmation Sample Results – 2009 Remedial Action
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Area 1					Area 1 (Re-Sample)		
		GAB-A1-N1	GAB-A1-E1	GAB-A1-S1	GAB-A1-W1	GAB-A1-F1	GAB-A1-S2	GAB-A1-W2	GAB-A1-F2
Metals (mg/kg)									
Arsenic	13	0.73	0.79	0.92	2.1	2.2	N/A	N/A	N/A
Beryllium	7.2	ND	ND	ND	0.35	0.14	N/A	N/A	N/A
Cadmium	2.5	ND	ND	ND	**11**	ND	ND	ND	ND
Chromium	30	5.6	3.4	4.9	**107**	**149**	ND	ND	2.0
Copper	50	2.8	1.4	5.3	**51**	**119**	ND	1.8	4.2
Lead	63	22	6.3	**76**	**570**	**1050**	ND	9.8	20
Mercury	0.18	ND	ND	**2.3**	ND	**0.62**	ND	0.02	ND
Nickel	30	1.2	1.2	1.8	11	4.5	N/A	N/A	N/A
Silver	2	ND	ND	ND	ND	ND	N/A	N/A	N/A

Analyte	Action Level(1)	Area 1 (Re-Sample)	Area 2						
		GAB-A1-F2D (Duplicate)	GAB-A2-NW1	GAB-A2-NE1	GAB-A2-SE1	GAB-A2-SW1	GAB-A2-F1	GAB-A2-F1D (Duplicate)	
Polyaromatic Hydrocarbons (mg/kg)									
Benzo(k)fluoranthene	0.8	N/A	ND	0.13	0.15	0.1	0.14	0.14	--
All Others	0.33 to 100	N/A	ND	0.11-0.3	0.05-0.22	0.04-0.15	0.12-0.40	0.11-0.22	--
Metals (mg/kg)									
Arsenic	13	N/A	1.7	ND	1.3	0.86	0.85	ND	--
Beryllium	7.2	N/A	0.11	ND	ND	ND	ND	ND	--
Cadmium	2.5	ND	ND	ND	ND	0.48	0.33	ND	--
Chromium	30	2.2	4.9	6.6	6.2	6.3	7.6	2.8	--
Copper	50	4.6	2.5	4.4	4.5	3.8	4.5	1.1	--
Lead	63	24	23.4	54	37	34	35	6	--
Mercury	0.18	ND	ND	ND	ND	ND	ND	ND	--
Nickel	30	N/A	1.8	2.2	1.3	1.7	1.9	1.2	--
Silver	2	N/A	ND	ND	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-A1-S1" refers to Area-1 south sidewall sample number one, and sample "GAB-A1-F2D" refers to Area-1 bottom sample number two (duplicate).

Bolding and shading indicate that sample result exceeds the SCO.

N/A Not applicable.
ND Not detected.

Table 1.6 (Continued)
Site 5 Confirmation Sample Results – 2009 Remedial Action
106th Rescue Wing
Westhampton Beach, New York

Analyte	Action Level(1)	Area 3					
		GAB-A3-N1	GAB-A3-E1	GAB-A3-S1	GAB-A3-W1	GAB-A3-F1	
Polyaromatic Hydrocarbons (mg/kg)							
Benzo(k)fluoranthene	0.8	ND	ND	0.12	0.54	0.14	--
All Others	0.33 to 100	N/A	N/A	N/A	N/A	N/A	--
Metals (mg/kg)							
Copper	50	13	1.2	2.9	4.4	13.7	--
Lead	63	N/A	N/A	N/A	N/A	N/A	--

Analyte	Action Level(1)	Area 4					
		GAB-A4-NE1	GAB-A4-SE1	GAB-A4-SE1D (Duplicate)	GAB-A4-SW1	GAB-A4-NW1	GAB-A4-F1
Polyaromatic Hydrocarbons (mg/kg)							
Benzo(k)fluoranthene	0.8	0.04	0.25	0.21	ND	ND	0.08
All Others	0.33 to 100	0.04-0.09	0.05-0.79	0.08-1.0	0.04	0.04-0.07	0.04-0.24
Metals (mg/kg)							
Lead	63	7.2	16	16	6.9	8.1	3.7

Analyte	Action Level(1)	Area 5					
		GAB-A5-N1	GAB-A5-E1	GAB-A5-S1	GAB-A5-W1	GAB-A5-F1	
Metals (mg/kg)							
Lead	63	2.6	4.9	7.0	3.1	3.5	--

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-A4-NE1" refers to Area-4 northeast sidewall sample number one, and sample "GAB-A4-SE1D" refers to Area-4 southeast sidewall sample number one (duplicate).

N/A Not applicable.
ND Not detected.

Based on the sample results, approximately 2.8 yd^3 of additional soil (5.1 tons) were removed from the bottom, and west and south sidewalls of Area 1 on May 27, 2009. Subsequently, the bottom, west and south sidewalls were re-sampled (GAB-A1-F2, GAB-A1-S2 and GAB-A1-W2) and submitted to the laboratory for analysis of metals at expedited TAT. The results of the additional round of confirmation samples indicated that all of the contaminated soil above SCOs had been removed (Table 1.6). The final excavation was approximately 6 ft by 10 ft in size and extended to approximately 6 ft bgs. In all, approximately, 7.2 yd^3 (or 13.2 tons) of soil were excavated and removed from Area-1.

Area-2

On May 20, 2009 an approximate 5 ft by 14 ft rectangle (5.2 yd^3 or 9.5 tons) of soil was removed approximately 12 ft east of former Building 374 (southwest of Area-1) in the northern portion of the ditch. The excavation extended to approximately 2.0 ft bgs. No staining or odors were observed during the excavation activities and no PID readings greater than 0.0 ppmv were recorded. Photographs of Area-2 are provided in Appendix D.

One bottom and four sidewall confirmation soil samples (northwest, southwest, southeast and southwest walls) were collected for analysis of PAHs and metals at expedited TAT. The results of the confirmation samples indicated that all of the contaminated soil above SCOs had been removed from Area-2.

Area-3

On May 20, 2009 an approximate 5 ft by 5 ft rectangle (1.9 yd^3 or 3.4 tons) of soil was removed from the ditch approximately 36 ft southwest of former Building 378. The excavation extended to approximately 2.0 ft bgs. No staining or odors were observed during the excavation activities and no PID readings greater than 0.0 ppmv were recorded. Photographs of Area-3 are provided in Appendix D.

One bottom and four sidewall confirmation soil samples (north, south, east and west walls) were collected for analysis of benzo(k)fluoranthene and copper at expedited TAT. The results of the confirmation samples indicated that all of the contaminated soil above SCOs had been removed from Area-3.

Area-4

On May 20, 2009 an approximate 4 ft by 8 ft rectangle (2.4 yd^3 or 4.3 tons) of soil was removed from the ditch approximately 100 ft southwest of former Building 378. The excavation extended to approximately 2.0 ft bgs. No staining or odors were observed during the excavation activities and no PID readings greater than 0.0 ppmv were recorded. Photographs of Area-4 are provided in Appendix D.

One bottom and four sidewall confirmation soil samples (northwest, southwest, southeast and southwest walls) were collected for analysis of PAHs and lead at expedited TAT. The results of the confirmation samples indicated that all of the contaminated soil above SCOs had been removed from Area-4.

Area-5

On May 20, 2009 an approximate 4 ft by 5 ft rectangle (1.9 yd^3 or 3.4 tons) of soil was removed from the ditch approximately 38 ft south of former Building 378. The excavation extended to approximately 2.5 ft bgs. No staining or odors were observed during the excavation activities and no PID readings greater than 0.0 ppmv were recorded. Photographs of Area-5 are provided in Appendix D.

One bottom and four sidewall confirmation soil samples (north, south, east and west walls) were collected for analysis of lead at expedited TAT. The results of the confirmation samples indicated that all of the contaminated soil above SCOs had been removed from Area-5.

1.3.2 Soil Disposal

In all, approximately 34 tons of soils were excavated from the five areas at Site 5. The excavated soil was placed in lined roll-offs and covered with tarps. Excavated soil was transported to Pure Soil Technologies, Jackson, New Jersey for recycling by batching into asphalt. Non-Hazardous Waste Manifests and weight tickets are provided in Appendix E. Characterization samples were collected for the recycling facility prior to transporting the soils. The characterization sample results are provided in Appendix C.

1.3.3 Site Restoration

Based on ongoing construction activities, the base determined that no site restoration activities were warranted after removal of the contaminated soil was completed. Therefore, no site restoration activities were conducted as part of the remedial action activities.

1.4 COMMUNITY RELATIONS ACTIVITES

The public was invited to review the draft-final version of this document 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 remedial action and to inform area residents of the NFRAP decision for Site 5, 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 2005), and the *Work Plan* and *Site-Specific Quality Assurance Plan* (PEER 2008). 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. Duplicate soil samples were collected to ensure that the analytical results from the confirmation samples were representative and reproducible. In addition, to the written plans and procedures, and duplicate samples, ANG oversight personnel visited the site for several days 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 in the five areas at Site 5 have been excavated and disposed of in accordance with the *Work Plan* and NYSDEC requirements, and no further monitoring at the site is necessary.

4.0 SUMMARY OF OPERATION AND MAINTENANCE

The remedial action (i.e., soil excavation and disposal) at Site 5 is complete and no ongoing operation and maintenance activities are necessary.

5.0 PROTECTIVENESS

The remedial action activities at Site 5 are completed and all of the contaminated soils above SCOs have been removed from the five impacted areas at the ditch. The formerly contaminated portions of the ditch are in the vicinity of a major construction project at the base, and the majority of the areas will be covered with the new building (Pararescue Facility) and associated parking lots and grounds. The excavation and disposal of contaminated soil above SCOs from the five areas at Site 5 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

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APPENDIX B
FIELD LOGBOOK

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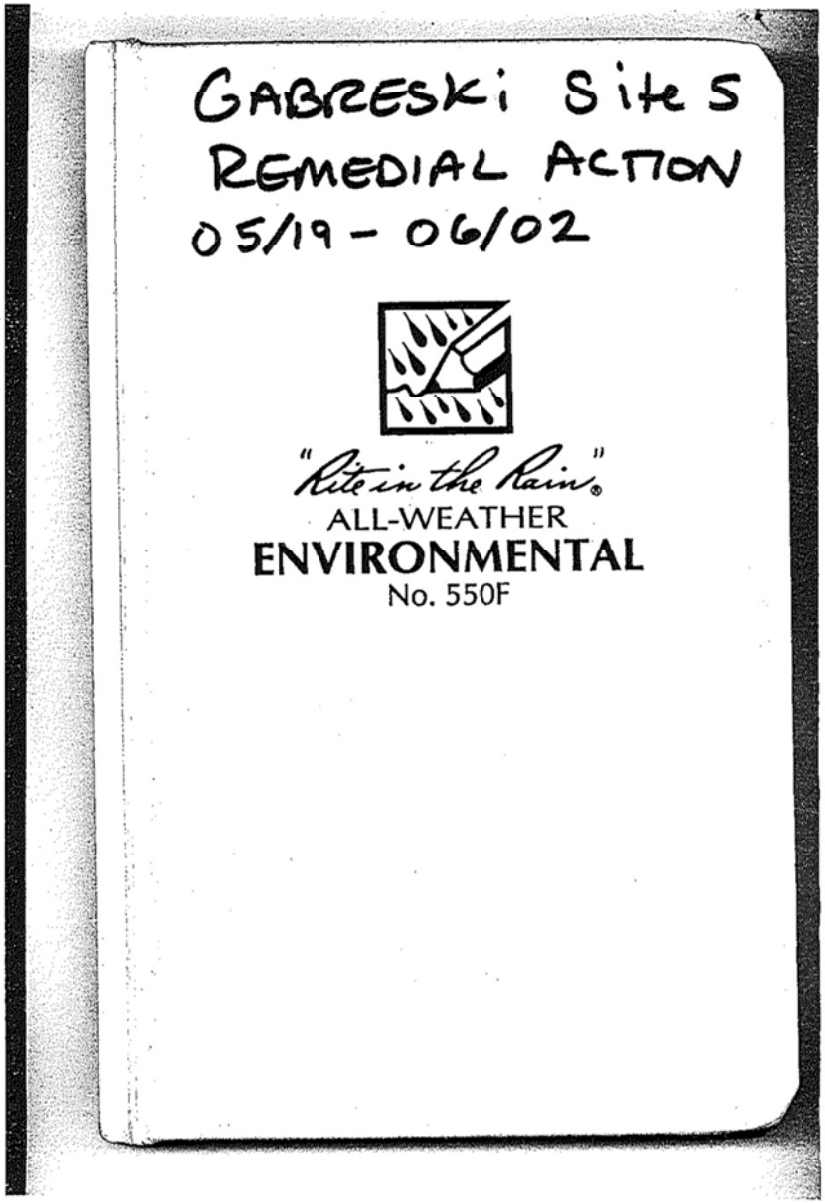
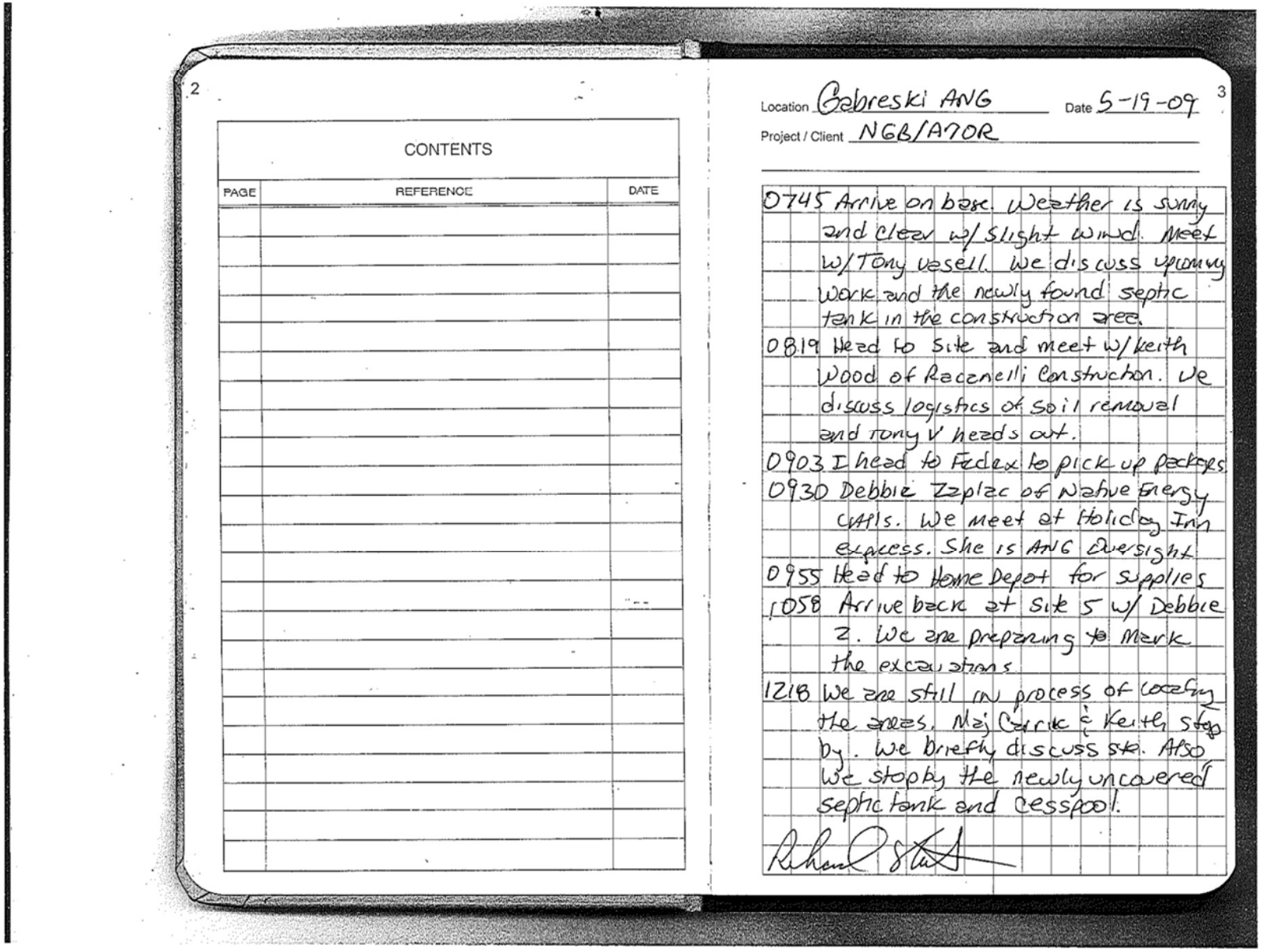

GABRESKI Site 5
REMEDIAL ACTION
05/19 - 06/02
"Rite in the Rain"
ALL-WEATHER
ENVIRONMENTAL
No. 550F



2

CONTENTS

PAGE	REFERENCE	DATE

3

Location Gabreski ANG Date 5-19-09

Project / Client NGB/A7OR

0745 Arrive on base. Weather is sunny and clear w/ slight wind. Meet w/ Tony Vasell. We discuss upcoming work and the newly found septic tank in the construction area.

0819 Head to site and meet w/ Keith Wood of Racanelli Construction. We discuss logistics of soil removal and Tony V heads out.

0903 I head to Fedex to pick up packages

0930 Debbie Zaplac of Native Energy calls. We meet at Holiday Inn express. She is ANG oversight

0955 Head to Home Depot for supplies

1058 Arrive back at site 5 w/ Debbie Z. We are preparing to mark the excavations

1218 We are still in process of locating the areas. Maj Carrick & Keith stop by. We briefly discuss site. Also we stop by the newly uncovered septic tank and cesspool.

Richard Stuart

4

Location Gebreski ANG Date 5-19-09

Project / Client NGB/ANG

1320 We have located the areas for 3 & 4 And the contractor is moving soil from around those locations. They had piled soil on them.

1420 We have measured and marked out the locations for Areas 3, 4 and 5. The hauler arrived with one of the roll-offs (20 cy) earlier. He will bring an additional roll-off tomorrow AM.

1530 Used to get supplies and END day.

RS

Richard Shaw

5

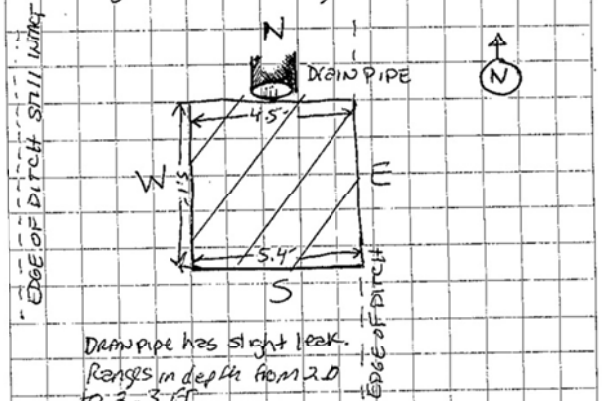
Location Gebreski ANG Date 5-20-09

Project / Client ANG

0630 Arrive on site. Weather is sunny and clear. Calibrated PID at Hotel. Today we will begin excavations, and collect initial samples. Debbie Z. also on site.

0645 Met w/ Keith and Operator about the excavations. We discussed process and procedures. Checked trees for utilities which were previously marked. All areas are clear.

0715 Begin excavating at Area 3.



Drain pipe has slight leak. Ranges in depth from 2.0 to 2.3 ft.

Richard Shaw

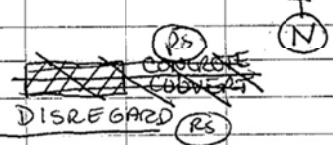
FINAL

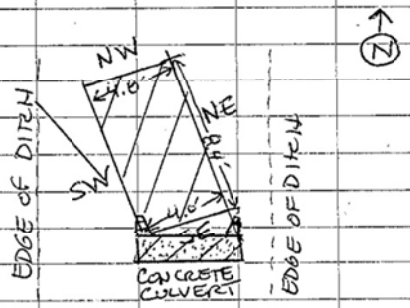
6

Location Gzbreski ANG Date 5-20-09

Project / Client NGB/A7OR

0735 Begin Excavating at Area 4.
No PIDs > 0.0.





NOTE: SE sample collected flush w/ concrete of concrete culvert after digging IN (¼ inch) to side wall. Excavation 2.0 FT Deep

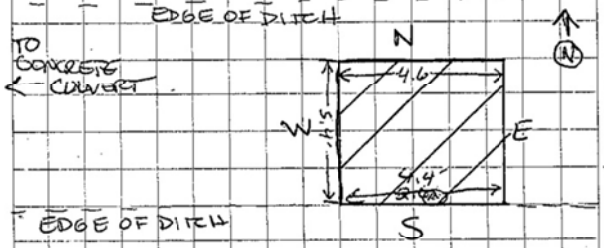
Richard Stark

7

Location Gzbreski ANG Date 5-20-09

Project / Client NGB/A7OR

0755 Begin Area 5.



NOTE: Observed asphalt chunks at northern portion of RS side of ditch. Excavation is 2.6 FT deep. no PIDs > 0.0 ppm.

Richard Stark

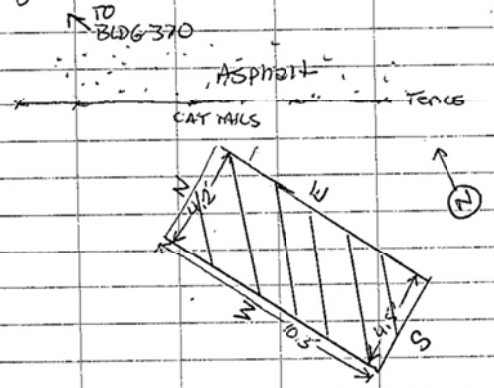
FINAL

8

Location Gabreski ANG Date 5-20-09

Project / Client NGB/ATOR

0818 Begin Area 1.



Depth ranges from 3ft to 3.5ft to the south. No PIDs ≥ 0.0ppm.

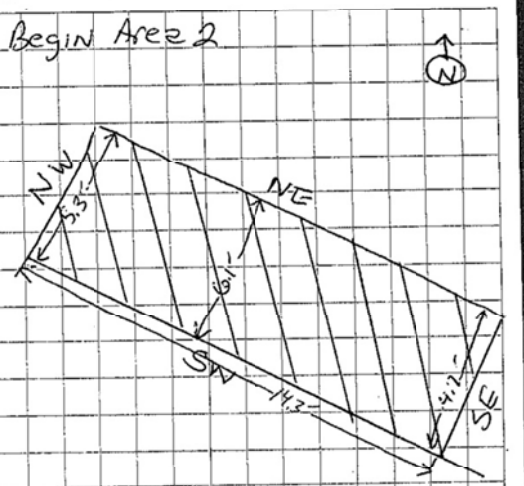
Richard Stark

9

Location Gabreski ANG Date 5-20-09

Project / Client NGB/ATOR

0841 Begin Area 2



No PID readings > 0.0ppm, Depth ranges from 2.0 to 3.0 Ft, with the majority of measurements being around 2.0 Ft.

Richard Stark

FINAL

10

Location Gebreski ANG Date 5-20-09

Project / Client NGB/ATOR

0902 We have completed the initial excavations and get ready to collect confirmation samples.

0920 Collect sample GAB-A1-N1
(1) 40z - metals

0921 Sample # GAB-A1-W1
(1) 40z - metals

0923 Sample # GAB-A1-S1
(1) 40z - Metals

0924 Sample # GAB-A1-E1
(1) 40z - metals

0927 Sample # GAB-A1-F1
(1) 40z - Metals
NOTE: Collected composite samples from 2 locations on the North & South Ends, 3 locations from east, west, and floor.

1010 Collect Floor samples at Area 2:
Sample # GAB-A2-F1
(1) 40z Jar - PAHs, metals
Sample # GAB-A2-F1D (Duplicate)
(1) 4 oz Jar - PAHs, metals

Richard Stark

11

Location Gebreski ANG Date 5-20-09

Project / Client NGB/ATOR

1013 Sample # GAB-A2-NE1
(1) 40z Jar - PAHs, metals
Extra VOA for MS/MSD

1017 Sample # GAB-A2-SW-1
(1) 40z Jar - PAHs, metals

1019 Sample # GAB-A2-SE1
(1) 40z Jar - PAHs, metals

1022 Sample # GAB-A2-NW1
(1) 40z Jar - PAHs, metals
NOTE: Collected composite samples from 2 locations on NW & SE walls & 4 locations from NE & SW walls and floor. Samples collected from bottom third of excavation.

1113 Collect sample from Area 5:
GAB-A5-F1
(1) 40z Jar - Lead

1115 Sample # GAB-A5-N1
(1) 40z Jar - Lead

1117 # GAB-A5-W1
(1) 40z Jar - Lead

Richard Stark

FINAL

12

Location Gabreski ANG Date 5-20-09

Project / Client NGB/A7OR

1119 Collect sample # GAB-A5-S1
(1) 4oz - Lead
1123 Collect sample # GAB-A5-S1 E1
(1) 4oz - Lead
NOTE: collected composite samples from 2 locations on each sidewall (bottom HALF) and from 2 locations on the floor at Area 5.
1155 Collect samples at Area 3, Collect Sample # GAB-A3-F1
(1) 4oz Jar - Benzo(k)fluoranthene, Copper
1158 collect samples # GAB-A3-N1
(1) 4oz Jar - BKF & Copper
1200 Sample # GAB-A3-W1
(1) 4oz Jar - BKF & Copper
1202 Sample # GAB-A3-S1
(1) 4oz Jar - BKF & Copper
1205 collect sample # GAB-A3-E1
(1) 4oz - BKF & Copper
NOTE: Collected composites from two locations on each sidewall and floor. Sidewall samples

Richard Stark

13

Location Gabreski ANG Date 5-20-09

Project / Client NGB/A7OR

collected from bottom half.
1259 collect samples from Area 4.
Sample # GAB-A4-F1
(1) 4oz Jar - PAHs, Lead
1304 collect sample # GAB-A4-SE1
(1) 4oz Jar - PAHs, Lead
GAB-A4SE1D
(1) 4oz Jar - PAHs, Lead
1305 sample # GAB-A4-NE1
(1) 4oz Jar - PAHs, Lead
1306 # GAB-A4-NW1
(1) 4oz Jar - PAHs, Lead
1309 # GAB-A4-SW1
(1) 4oz Jar - PAHs, Lead
1345 collect five point composite sample from Roll off for characterization
GAB-SC-1
(1) 8oz - SVOCs, DRO, PCBs
(1) 4oz - VOCs (not composited)
(1) 4oz - Paint filter, ignitability
(1) 4oz - TAL metals
(1) 4oz - Reactivity

Richard Stark

FINAL

14

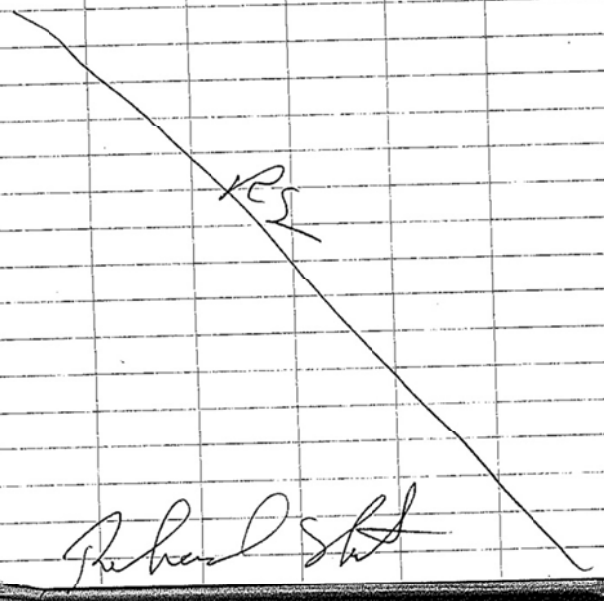
Location GABRESKI ANG Date 5-21-09

Project / Client NOB/ATOR

NOTE: Samples at Area 4 collected by compositing 3 locations from the floor NE & SW side walls and compositing 2 locations from the NW & SE sidewalls.

1410 Deb Z. & I head to pack and ship samples.

1600 Samples shipped and END DAY.



Richard Stark

15

Location Gabreski ANG Date 5-21-09

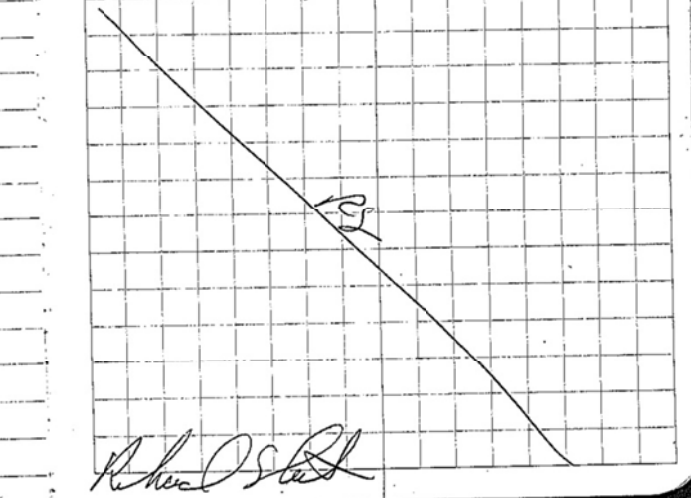
Project / Client NOB/ATOR

0800 Arrive on site. Weather is windy and clear. I place tarp on the rob1 off. Keith Wood of Racanelli Construction is going to secure it w/ bungie cords

0900 I head to Tony Vesell's office to work on cost estimate.

1422 Still working on estimate for Oversight of Abandonment, and sampling of septic system.

1630 END DAY.



Richard Stark

16

Location Gebreski ANG Date 5-27-09

Project / Client NOB/ATOR

0650 Arrive on site. Weather is light rain occasionally and cloudy. We have received data and all excavations are clean except in Area 1. I mark out additional areas to be excavated.

0705 We will put the liner in the box first.

0721 Keith W is putting in the liner. Me & Jimmy begin digging. We will excavate 5FT of additional soil from the floor and 2 additional feet from the south & west walls. PID calibrated earlier at Hotel. We had hits of mercury and lead in the side walls and floor.

0738 Still digging at A-1. We have encountered a concrete slab on the east side of the excavation at about 4.5 FT BGS. Appears to be uneven on top (Not level). NO PID readings above Zero.

Richard Stark

17

Location Gebreski ANG Date 5-27-09

Project / Client NOB/ATOR

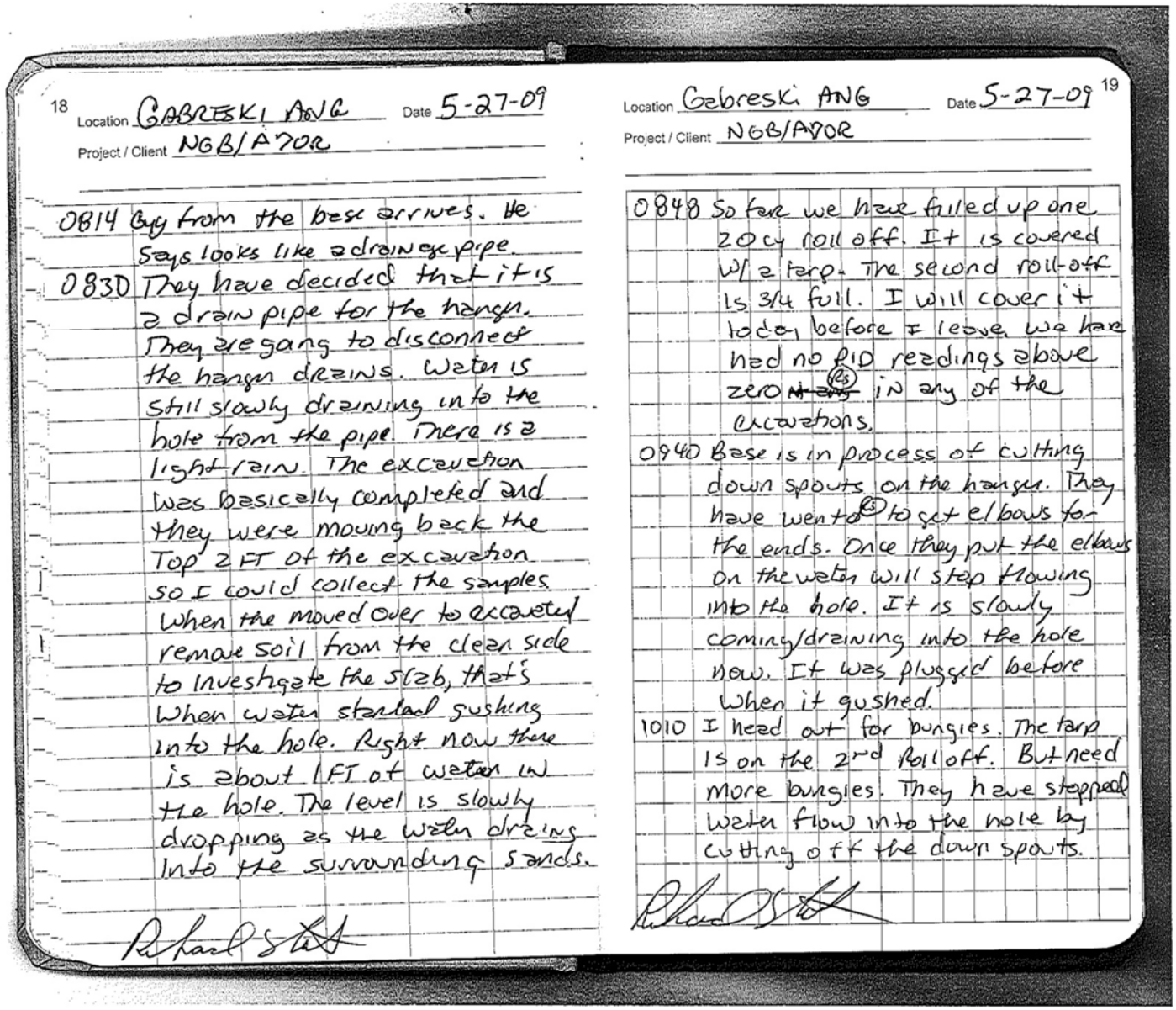
0750 The hole is caving in so they will remove the first two (2) ft from around the excavation. Also, they are going to excavate out the wall on the east side. It was clean based on the results. I will collect samples from the floor and bottom 3rd of the sidewalls when excavation is finished. They are excavating the east wall to help identify the concrete slab. Almost done.

0757 When they dug out the east wall they hit a water line or something. Water is rushing into the hole. They wanted to uncover the concrete slab.

0800 Call Tony Vasell. He will send someone out. He thinks it was a plugged roof drain. The flow of water has slowed to a trickle.

Richard Stark

FINAL



18 Location GABRESKI ANG Date 5-27-09
Project / Client NGB/A7OR

0814 Guy from the base arrives. He says looks like a drainage pipe.
0830 They have decided that it is a drain pipe for the hangar. They are going to disconnect the hangar drains. Water is still slowly draining into the hole from the pipe. There is a light rain. The excavation was basically completed and they were moving back the Top 2 FT of the excavation so I could collect the samples. When the moved over to excavate/remove soil from the clean side to investigate the slab, that's when water started gushing into the hole. Right now there is about 1 FT of water in the hole. The level is slowly dropping as the water drains into the surrounding sands.

Richard Stott

Location Gabreski ANG Date 5-27-09 19
Project / Client NGB/A7OR

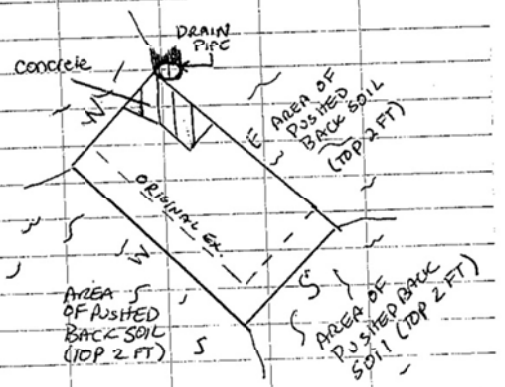
0848 So far we have filled up one 20 cy roll off. It is covered w/ a tarp. The second roll-off is 3/4 full. I will cover it today before I leave. We have had no PID readings above zero ~~N-ans~~ (Rs) in any of the excavations.
0940 Base is in process of cutting down spouts on the hangar. They have went to (Rs) to get elbows for the ends. Once they put the elbows on the water will stop flowing into the hole. It is slowly coming/draining into the hole now. It was plugged before when it gushed.
1010 I need out for bungies. The tarp is on the 2nd Roll off. But need more bungies. They have stopped water flow into the hole by cutting off the down spouts.

Richard Stott

20 Location Gabreski ANG Date 5-27-09

Project / Client NGB/A7OR

AREA I - Additional Excavation



NOTE: Collected Floor samples from 4 locations in the bottom of the excavation. Collected S & W Side wall samples from 3 locations IN each wall from bottom 3rd of excavation. All samples composited.

Richard Stott

Location Gabreski ANG Date 5-27-09 21

Project / Client NGB/A7OR

1220 I arrive at site. Check hole. MOST of the water has seeped out. Only a puddle in the NW portion of the excavation. measured the excavation at > 6 FT wide, >10 FT long & 6 FT deep. We will attempt to clean out the hole from cave IN so I can sample.

1305 hole is cleaned out & Jimmy pushes back more soil to make it safe for me to enter the excavation. He has also made a walkway like a small ramp. I prepare to sample. The South wall, west wall and floor.

1315 collect Sample # GAB-A1-W2 (3) (0010)
(1) 4oz Jar- Metals ~~Hexchrom~~

1319 collect sample # GAB-A2-S2
(1) 4oz Jar- metals

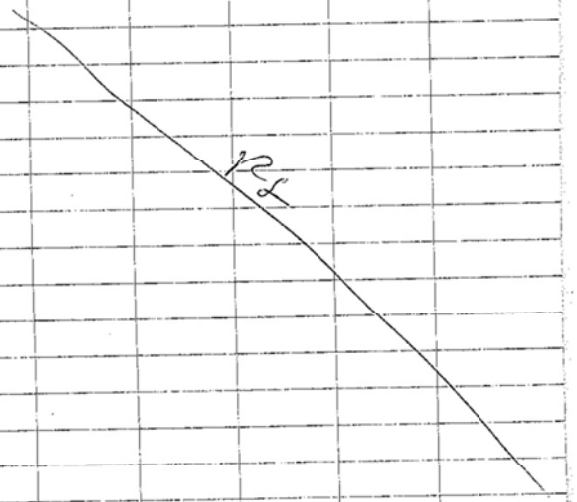
1325 collect # GAB-A1-F2
(1) 4oz Jar - metals
GAB-A1-F2D (Duplicate).
(1) 4oz Jar - metals

Richard Stott

FINAL

22. Location Gabreski ANG Date 5-27-09
Project / Client NOB/ATOR

1500 Head to Long Island Analytical to drop off samples for 24 Hr TAT.
1536 Samples dropped off. Head to Hotel & End day. Samples supposed to be analyzed by tomorrow. Should have results by tomorrow (Thursday) afternoon.



Richard Stott

Location Gabreski ANG Date 5-28-09 23
Project / Client NOB/ATOR

0750 Arrive on site. Going to meet surveyors today. Weather is cold and windy. Excavations 1, 3, 4 and 5 are clean based on results. I will have those excavations surveyed and then turn them over to the construction guys.
0850 Young & Young surveying shows up. John & Brian
1000 Head in base to talk w/ TONY.
1010 Col. Webb w/ TONY. Webb & I inspect site 5
1130 Return Webb to office and head out to check status of data
1830 Received data. Area 1 is now clean so all 5 excavations can be backfilled.
1836 Call K. Wood of Racanelli Construction. He says they will begin putting in footers for the building in some of the areas & I End Day.

Richard Stott

FINAL

24

Location Gabreski ANG Date 5-29-09

Project / Client NGB/ATOR

0815 Arrive on site. Weather is rain
I came to check roll-offs
and prepare them for pick
up. Had emailed Pure Earth,
Inc. to tell them to come &
pick up roll-offs today.
Rich Rukin said he would
try to pick them up but
usually needs 2-days notice.
0850 Met briefly w/ Ray Hassett of
Recanelli Construction. He wanted
to know the status of the septic
tank investigation. I told him
I didn't know anything but
would contact him if I found
out anything.
0915 Tarps and covers are secured
on the roll-offs.
0930 Call Jody Mulota (ANG Program Mgr)
to tell her that the JOB is
finished.
1000 Head out to pack & ship things
back to Knoxville.

Richard Stott

25

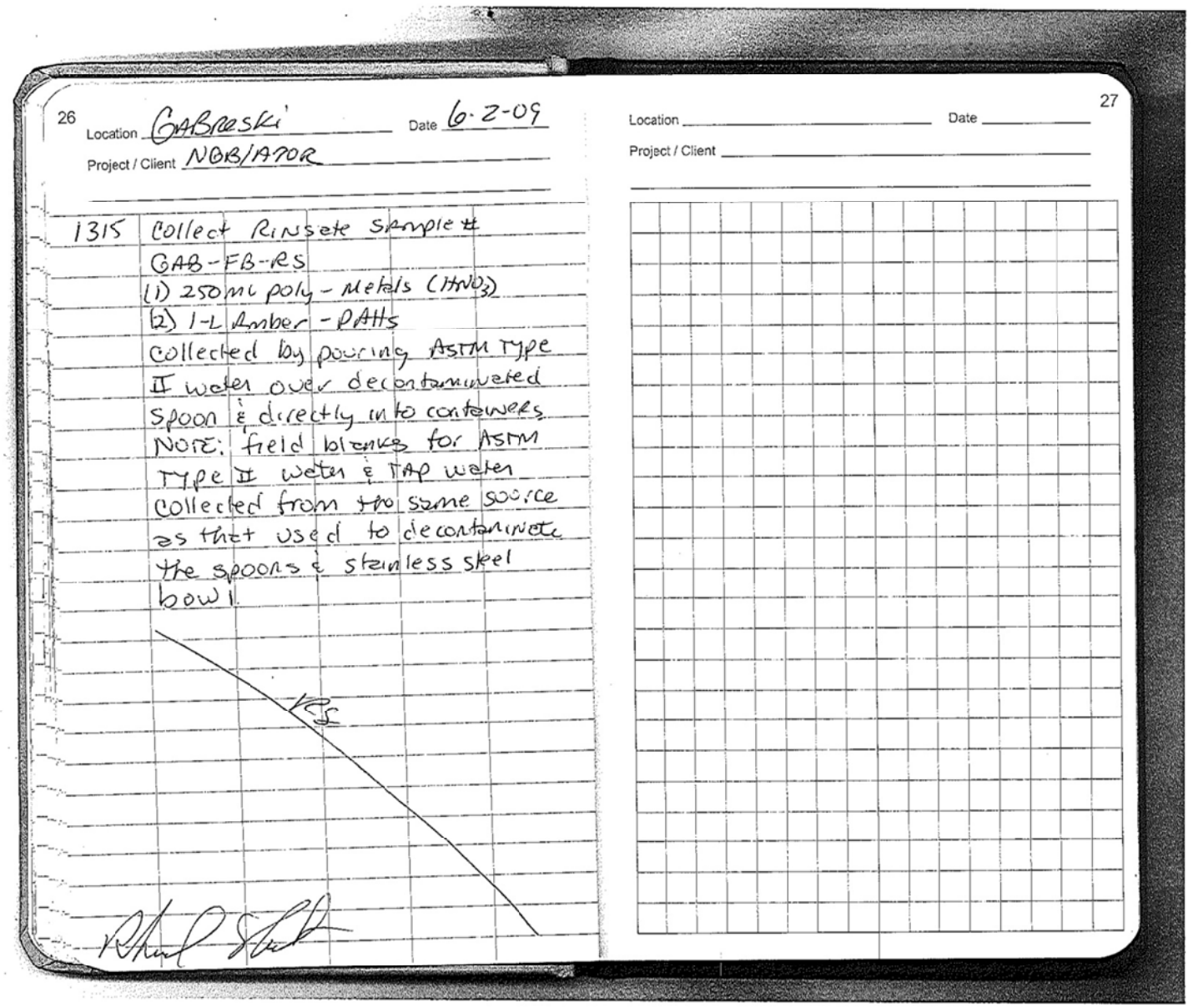
Location Gabreski Date 6-1-09

Project / Client NGB/ATOR

1525 Collect ASTM TYPE II water field
Blank # GAB-FB-ASTM
(1) 4oz 250mL poly - Metals (HNO_3)
(2) 1-L Amber - PAHs
1535 Collect TAP water field blank
GAB-FB-TAP
(1) 4oz 250mL poly - Metals (HNO_3)
(2) 1-L Amber - PAHs

Richard Stott

FINAL



26

Location GABRESKI' Date 6-2-09

Project / Client NOB/IATOR

1315 Collect Rinsate Sample #
GAB-FB-RS
(1) 250ml poly - Metals (HNO_3)
(2) 1-L Amber - PAHs
Collected by pouring ASTM Type II water over decontaminated spoon & directly into containers
NOTE: field blanks for ASTM Type II water & TAP water collected from the same source as that used to decontaminate the spoons & stainless steel bowl.

RS

27

Location Date

Project / Client

FINAL

APPENDIX C
LABORATORY DATA REPORTS

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APPENDIX D
PHOTOGRAPHS

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View of Site Looking Toward the Southwest Prior to Remedial Action

Area-1 Excavation

Area-2 Excavation

Area-3 Excavation

Area-4 Excavation

Area-5 Excavation

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APPENDIX E
WASTE MANIFESTS AND WEIGHT TICKETS

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PEI DISPOSAL GROUP, INC.

Log Number 12524

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name 106th Rescue Wing Shipping Location same

Address 150 Riverhead Rd, Bldg. 250 Address

Westhampton Beach, NY 11978-1201

Approval Number 09050444C

Description of Material: Polyaromatic Hydrocarbons and metals

GROSS

TARE

NET

TONNAGE

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 applicable regulations.

Jerry L. Webb Jerry L. Webb 1 Jun 09

Generator Authorized Agent Name Signature Shipment Date

TRANSPORTER

Transporter Name Allstate ORC Driver Name (Print) Joe Boyle

Address 473 Hamburg Tpk. Vehicle License No./State NJ A65486

West Milford, NJ 07480 Truck Number 113

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

I hereby certify that the above named material was delivered without incident to the destination listed below.

Joe Boyle 6/1/09 Same

Driver Signature Shipment Date Driver Signature Delivery Date

DESTINATION

Site Name Phone No.

Address State Permit #

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent Signature Receipt Date

GENERATOR

PEI DISPOSAL GROUP, INC.

Log Number 12523

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name 106th Rescue Way Shipping Location Sand

Address 150 Riverhead Rd. Bld. 250 Address

West Hampton Beach, NY 11978-1201

Approval Number	Description of Material	
0905044C	polyaromatic hydrocarbons and metals	GROSS TARE NET TONNAGE

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 applicable regulations.

X ANTHONY J. VASELL 2 Jun 2009

Generator Authorized Agent Name Signature Shipment Date

TRANSPORTER

Transporter Name Allstate ORC Driver Name (Print) Bill Santi Fort

Address 473 Hamburg Turnpike Vehicle License No./State A6548G/NJ

West Milford, NJ 07480 Truck Number 113

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

6/2/09

Driver Signature Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature Delivery Date

DESTINATION

Site Name W R Earle Phone No.

Address 665 S. Hope Chapel Rd Jackson NJ 08527 State Permit #

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

6/2/09

Name of Authorized Agent Signature Receipt Date

BROKER

PURE SOIL TECHNOLOGIES
655 S. HOPE CHAPEL RD
JACKSON N.J. 08527
732-657-8551

Date: 06/01/09 Ticket #: 132187
Time: 14:09 Plant: P1
*** Delivery ***

Customer: 0003239
PEI
2545 HEMPSTEAD PIKE
EAST MEADOWS, NY 11554
718-861-7415

Job: 0905044
106TH RESCUE WING
150 RIVERHEAD BLVD
WESTHAMPTON, NY

P.O.#:

Carrier: ALL ST
STATE O.C.R
Truck: Ag548g
License:

Phase: 0

Zone:

Product: JR66
JR66 SOIL
JMF:

DEFAULT ZONE NAME

(Daily) Loads: 1 Amount: 18.08 Tn 16.40 Mg
(To-Date) Loads: 1 Amount: 18.08 Tn 16.40 Mg

Gross:	34.61*Tn	69220*lb	31.40*Mg
Tare:	16.53 Tn	33060 lb	15.00 Mg
Net:	18.08 Tn	36160 lb	16.40 Mg

* - Manual Weight

Received By: _____
Weighmaster: Robert E Gehue

PURE SOIL TECHNOLOGIES
655 S. HOPE CHAPEL RD
JACKSON N.J. 08527
732-657-8551

Date: 06/02/09 Ticket #: 132297
Time: 14:39 Plant: P1
*** Recycled ***

Customer: 0003239
PEI
2545 HEMPSTEAD PIKE
EAST MEADOWS, NY 11554
718-861-7415

Job: 0905044
106TH RESCUE WING
150 RIVERHEAD BLVD
WESTHAMPTON, NY

P.O.#:

Carrier: ALL ST
ALL STATE O.C.R
Truck: Ag548g
License:

Phase: 0

Zone:

DEFAULT ZONE NAME

Product: JR66
JR66 SOIL
JMF:
(Daily) Loads: 1 Amount: 15.66 Tn 14.21 Mg
(To-Date) Loads: 2 Amount: 33.74 Tn 30.61 Mg

Gross:	32.19 Tn	64380 lb	29.20 Mg
Tare:	16.53 Tn	33060 lb	15.00 Mg
Net:	15.66 Tn	31320 lb	14.21 Mg

Received By:_____
Weighmaster: Robert E Schue

APPENDIX F
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, 11th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9625 • **Fax:** (518) 402-9627
Website: www.dec.ny.gov

Joe Martens
Commissioner

May 17, 2011

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

RE: Suffolk County Air National Guard Gabreski Airport
Site 5 Draft Final No Further Response Planned
Decision Document
Dated January 2011

Dear Mr. Murata:

The New York State Department of Environmental Conservation and the New York State Department of Health have reviewed the Site 5 Draft Final No Further Response Action Decision Document at the Suffolk County Air National Guard Base. The Site 5 Area is not listed in the New York State Registry of Inactive Hazardous Waste Disposal Sites. The State concurs with the findings of the Site 5 Decision Document for No Further Action.

If you have any questions please contact Heather Bishop of my staff at (518) 402-9692.

Sincerely,

John Swartwout

John Swartwout, P.E.
Section Chief
Remedial Bureau A

ec:
H. Bishop
Richard Stout, PEER Consultants, P.C (stoutr@peercpc.com)

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