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NTC ORLANDO
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LETTER REGARDING SITE SCREENING RESULTS FOR STUDY AREA 48 FORMER HOBBY COMPLEX AND MCCOY ANNEX WITH ATTACHMENTS NTC ORLANDO FL
2/13/1997
ABB ENVIRONMENTAL

February 13, 1997

8545.306

Commanding Officer
Southern Division
Naval Facilities Engineering Command
ATTN: Wayne Hansel, Code 187300
P.O. Box 190010
Charleston, SC 24919-9010

SUBJECT: Additional Site Screening Results
Study Area 48, Former Hobby Complex
McCoy Annex

Dear Wayne:

Due to OPT decisions at some of the study areas (SAs) which have undergone site screening, ABB-ES has been directed to complete additional site screening activities to resolve certain issues and to fill data gaps. This information will assist the OPT in making technically sound and environmentally responsible decisions regarding the remediation and transfer of various parcels at NTC, Orlando.

This letter presents the additional screening results for SA 48, the former hobby complex at McCoy Annex, and ABB-ES's recommendations to the OPT after evaluating the new findings. If acceptable, the content of this letter will be incorporated into the (final) environmental site screening report for SA 48 and issued for signature.

HISTORY OF SA 48 AND RESULTS OF INITIAL SITE SCREENING. Study Area 48 is located in the northeastern part of McCoy Annex (Figure 1). The ABB-ES document entitled "Technical Memorandum, U.S. Air Force Records Search, NTC, Orlando" (September 1995) identified this location as Area of Concern (AEC)-MC-9 due to former use as a hobby shop complex. Currently, the area consists of asphalt pads, with no structures on them, surrounded by grass. Railroad sidings are embedded in pavement in this area as well. Site screening activities were initiated to evaluate potential contamination of soil or groundwater associated with former site use activities including auto and boat repair, carpentry, and painting. The potential for the presence of underground storage tanks (UST) was also evaluated.

The initial site screening investigation consisted of a geophysical survey (site walkover with a Fisher TW-6 Pipe and Cable Locator) to assess the potential for USTs and buried piping associated with former buildings. In addition, three soil borings were advanced by hand augers to a depth of 8 feet below land surface (bls). The soil borings were completed as temporary monitoring wells.

Geophysical data identified eight anomalous zones within the boundaries of the study area. One of these anomalies (in an asphalt-patched area) may indicate the presence of a UST, based on instrument response.

None of the compounds detected in any of the three subsurface soil samples exceeded their respective screening criteria.

One organic compound was detected at a concentration exceeding screening criteria in the unfiltered groundwater sample and its duplicate from temporary well OLD-48-03 (0.17 and 0.22 $\mu g/\ell$, respectively). Dichlorodiphenyldichloroethene (4,4'-DDE) was detected at a concentration slightly above the FDEP Groundwater Guidance concentration (0.1 $\mu g/\ell$), and the RBC for tap water (in the duplicate sample only; 0.2 $\mu g/\ell$). 4,4'-DDE was also detected in the subsurface soil sample from the corresponding boring location (at a concentration below all soil screening criteria). Because the groundwater sample was unfiltered and collected from a temporary monitoring well, the detected concentration likely represents suspended particulates, rather than dissolved concentrations.

For TAL metals, only aluminum and iron from monitoring well OLD-48-02 were detected at concentrations exceeding background screening values for groundwater. The detected iron concentration from this location (1250 $\mu g/\ell$) is statistically indistinguishable from the background screening value of 1227 $\mu g/\ell$. Concentrations of aluminum (both filtered and unfiltered samples) from this location (7060 $\mu g/\ell$ and 8580 $\mu g/\ell$, respectively) exceed the background screening concentration (4,067 $\mu g/\ell$), but are below the RBC for tap water (37,000 $\mu g/\ell$). These metals both have secondary standards in Florida.

Secondary standards have been established for Class G-I and G-II aquifers by the State of Florida, largely along Federal guidelines, to assure that groundwater meets at least minimum criteria for taste, odor, and color. Secondary standards were not established for human health, cancer risk, or ecological risk considerations. The surficial aquifer in which secondary standards were exceeded are typically used for land irrigation, and not for drinking water supply.

A description of past site activities was included in the ABB-ES document entitled "Technical Memorandum, Site Screening Investigation, Study Area 48, NTC, Orlando," issued in September 1996. Based on records reviews and interviews, there have been no known site activities that may have contributed to the observed exceedances of secondary standards for aluminum and iron. Subsurface soil concentrations of these analytes did not exceed background screening concentrations with one exception: subsurface soil sample 48B00201 had an iron concentration of 945 mg/kg, slightly exceeding the background screening concentration of 829 mg/kg. The three groundwater samples in SA 48 had from 17 to 84 mg/ℓ suspended solids, suggesting that suspended solids probably did not contribute to the observed secondary standards exceedances. There were no other TAL metals exceedances, and groundwater parameters measured during sampling (pH, temperature, conductivity, and turbidity) were within normal limits: pH in the three wells varied from 5.59 to 6.79, the temperature from 23.5° to 26° Centigrade, the conductivity from 268 to 450 μmhos/centimeter, and the turbidity from 1.66 to 4.76 nephelometric turbidity units (NTUs).

ABB-ES concludes that the aluminum and iron are naturally-occurring, are not related to past site activities, and do not pose a risk to human health or the environment.

ADDITIONAL SITE SCREENING ACTIVITIES AND RESULTS. A ground penetrating radar survey was completed along 14 traverses in the vicinity of the metal detector anomalies mapped during initial site screening activities. There were no indications of possible USTs in the recorded data along any of the traverses, although there appeared to be a shallow (less than 2 feet bls) buried east-west utility six to eight feet south of the railroad tracks along the alignment of five of the metal detector anomaly locations.

Monitoring well OLD-48-03 was resampled on 11/7/96 for pesticides only to confirm the previous 4,4'-DDE detection. All analytes were below the instrument detection level and reported as undetected. The results of the resampling are included in Table 1 (Summary of Positive Detections in Groundwater Analytical Results) and Table 2 (Summary of Groundwater Analytical Results). Since the resampling results did not have any pesticide detections, Table 1 will not display data from the new groundwater sample (48G00302 from well OLD-48-03).

CONCLUSIONS AND RECOMMENDATIONS. Based on available information and site screening data, it is concluded that site screening activities have identified no significant soil or groundwater contamination at Study Area 48. Additional geophysical surveys did not reveal the presence of potential USTs in the several anomalous zones identified during initial site screening activities. Although concentrations of 4,4'-DDE exceeded FDEP guidance concentrations during the initial screening activities in April 1996, this compound was not detected during subsequent rescreening in November 1996. Aluminum and iron were exceeded in groundwater from one well location (OLD-48-02) during initial site screening activities, but ABB-ES concludes that these exceedances are naturally-occurring, are not related to past site activities, and do not pose a risk to human health or the environment.

ABB-ES recommends an FOST for SA 48, with no further requirement for evaluation, and a reclassification of the site from 7/Gray to 1/White.

It is our intent to discuss any comments or corrections at the next scheduled meeting of the OPT. Please call me if you have any questions.

Very Truly Yours,

ABB ENVIRONMENTAL SERVICES, INC.

John P. Kaiser
Installation Manager

cc: File
LT Gary Whipple, PWO
Nick Ugolini, SOUTHDIV
John Mitchell, FDEP
Barbara Nwokike, SOUTHDIV
Nancy Rodriguez, USEPA Region IV
Mac McNeil, Bechtel
Steve McCoy, Brown & Root
Richard P. Allen- ABB-ES
Mark Salvetti- ABB-ES
Shannon Gleason- ABB-ES

Figure 1 Study Area Location

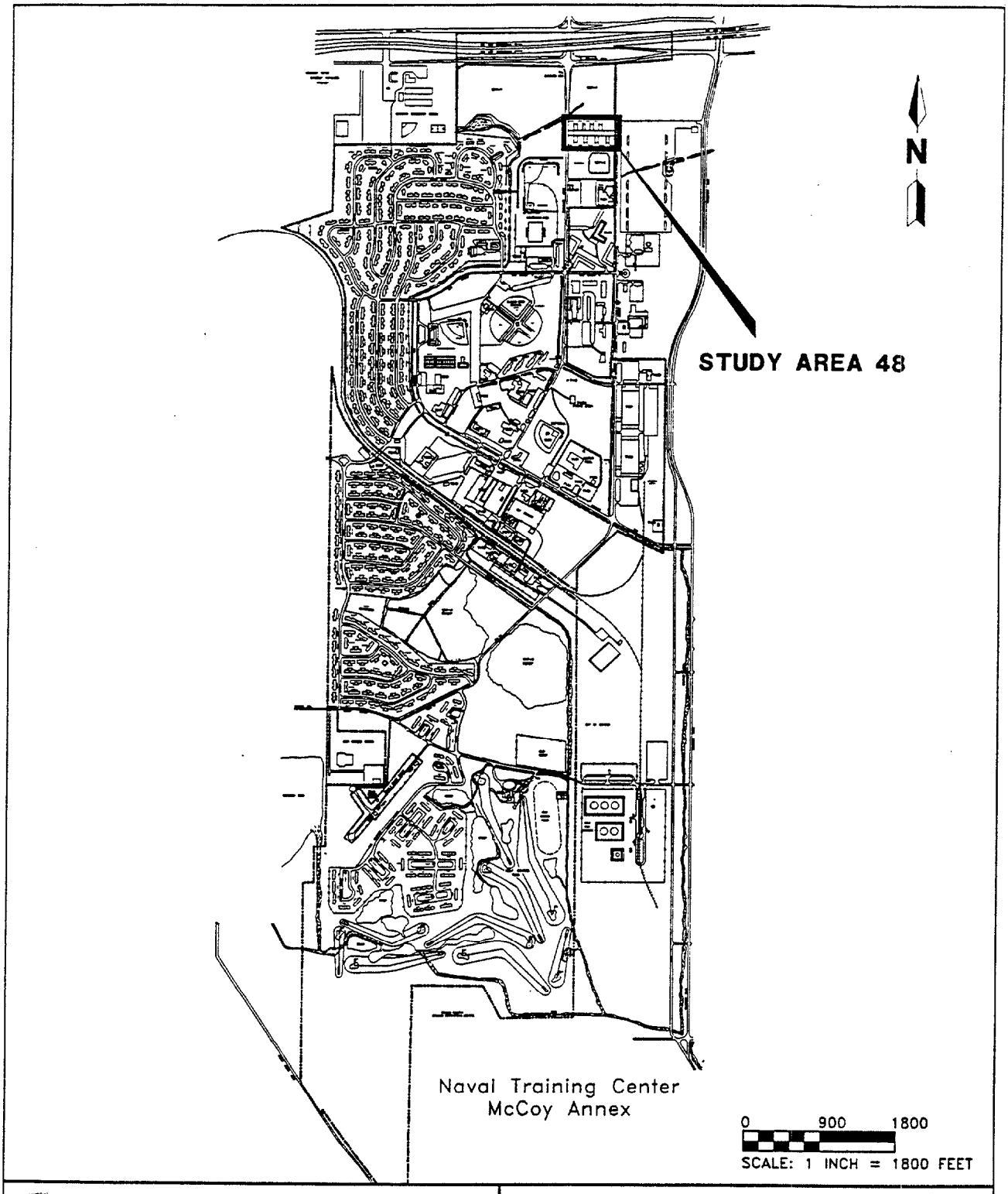

FIGURE 1
STUDY AREA LOCATION

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TECHNICAL MEMORANDUM
SITE SCREENING INVESTIGATION
STUDY AREA 48

NAVAL TRAINING CENTER
ORLANDO, FLORIDA

NTC-SSI.S48
PMW.09.96

Table 1 Summary of Positive Detections in Groundwater Analytical Results, Study Area 48

Table 1
Summary of Positive Detections in Groundwater Analytical Results
Study Area 48

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background [1] Screening	FDEPG	Primary FEDMCL	RBC [2] for Tap Water	48G00101	48H00101	48G00201	48H00201	48G00301	48H00301
Sampling Date					24-Apr-96	24-Apr-96	24-Apr-96	24-Apr-96	24-Apr-96	24-Apr-96
Semivolatile organics, ug/L										
Di-n-butylphthalate		700 [4]	ND	3,700 n	1 J	NA		NA		NA
Pesticides/PCBs, ug/L [13]										
4,4'-DDE		0.1 [7]	ND	0.2 c		NA		NA	0.17	NA
alpha-Chlordane		2 [5]	2	0.052 c		NA		NA	0.15 NJ	NA
gamma-Chlordane		2 [5]	2	0.052 c		NA		NA	0.13	NA
Inorganics, ug/L										
Aluminum	4,067	200 [3]	ND	37,000 n	3130 J	367 J	8580 J	7060 J	1100 J	1270 J
Arsenic	5	50 [5]	50 [8]	0.045 c/ 11n			1.8 J			
Barium	31.4	2,000 [5]	2,000	2,600 n					19.3 J	22.1 J
Beryllium		4 [5]	4	0.016 c			0.19 B	0.23 B		
Calcium	36,830	ND	ND	1,000,000	43700	44000	55400	55100	90100	92700
Chromium	7.8	100 [5]	100 [9]	180 n [10]	3.1 B		9.5 B	9.1 B		2.9 B
Cobalt		ND	ND	2,200 n			2.6 B			
Copper	5.4	1,000 [3]	1300 [11]	1,500 n			5.8 B		4.8 B	
Iron	1,227	300 [3]	ND	11,000 n	443 J		1250 J	894 J	130 J	153 J
Lead	4	15 [5]	15 [12]	15			6.3			
Magnesium	4,560	ND	ND	118,807	2330 B	2410 B	2220 B	2140 B	4770 B	4940 B
Manganese	17	50 [3]	ND	840 n	6.6 B	6.8 B	7.7 B	8.3 B	30.1	27.1
Mercury	0.12	2 [5]	2	11 n				0.08 J		
Potassium	5,400	ND	ND	297,016			1650 B	1610 B	1870 B	2150 B
Selenium	9.7	50 [5]	50	180 n						
Sodium	18,222	160,000 [5]	ND	396,022	1550 J	1810 J	1330 J	1380 J	2590 J	2780 J
Vanadium	20.6	49 [4]	ND	260 n	2.7 B		9.6 B	7.4 B	3.6 B	4.6 B
General Chemistry, mg/L										
Total Suspended Solids	ND	ND	ND	ND	35	NA	84	NA	17	NA

Table 1
Summary of Positive Detections in Groundwater Analytical Results
Study Area 48

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background [1] Screening		FDEPG		Primary FEDMCL		RBC [2] for Tap Water		48G00301D		48H00301D	
Sampling Date									24-Apr-96		24-Apr-96	
Semivolatile organics, ug/L												
Di-n-butylphthalate			700 [4]		ND		3,700 n				NA	
Pesticides/PCBs, ug/L [13]												
4,4'-DDE			0.1 [7]		ND		0.2 c		0.22	J	NA	
alpha-Chlordane			2 [5]		2		0.052 c		0.22	NJ	NA	
gamma-Chlordane			2 [5]		2		0.052 c		0.19		NA	
Inorganics, ug/L												
Aluminum	4,067		200 [3]		ND		37,000 n		1110	J	1230	J
Arsenic	5		50 [5]		50 [8]		0.045 c/ 11n					
Barium	31.4		2,000 [5]		2,000		2,600 n		19	J	21.7	J
Beryllium			4 [5]		4		0.016 c					
Calcium	36,830		ND		ND		1,000,000		89600		91300	
Chromium	7.8		100 [5]		100 [9]		180 n [10]					
Cobalt			ND		ND		2,200 n					
Copper	5.4		1,000 [3]		1300 [11]		1,500 n					
Iron	1,227		300 [3]		ND		11,000 n		134	J	135	J
Lead	4		15 [5]		15 [12]		15					
Magnesium	4,560		ND		ND		118,807		4730	B	4900	B
Manganese	17		50 [3]		ND		840 n		30		26.6	
Mercury	0.12		2 [5]		2		11 n				0.08	J
Potassium	5,400		ND		ND		297,016		2040	B	2070	B
Selenium	9.7		50 [5]		50		180 n				1.7	J
Sodium	18,222		160,000 [5]		ND		396,022		2530	J	2700	J
Vanadium	20.6		49 [4]		ND		260 n		4	B	3.8	B
General Chemistry, mg/L												
Total Suspended Solids	ND		ND		ND		ND				NA	

Table 2 Summary of Groundwater Analytical Results, Study Area 48

Table 2
Summary of Groundwater Analytical Results
Study Area 48

Naval Training Center, Orlando
Orlando, FL

Sample ID	48G00101		48H00101		48G00201		48H00201		48G00301		48H00301		48G00301D		48H00301D		48G00302	
Lab ID	MA810007		MA810008		MA810001		MA810002		MA810003		MA810004		MA810005		MA810006		1681-001	
Sampling Date	24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		7-Nov-96	
Volatile organics, ug/L																		
1,1,1-Trichloroethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,1,2,2-Tetrachloroethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,1,2-Trichloroethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,1-Dichloroethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,1-Dichloroethene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,2-Dibromo-3-chloropropane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,2-Dibromoethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,2-Dichloroethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,2-Dichloropropane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
2-Butanone	5	UR	NA		5	UR	NA		5	UR	NA		5	UR	NA		NA	
2-Hexanone	5	U	NA		5	U	NA		5	U	NA		5	U	NA		NA	
4-Methyl-2-pentanone	5	U	NA		5	U	NA		5	U	NA		5	U	NA		NA	
Acetone	2	R	NA		2	R	NA		3	R	NA		2	R	NA		NA	
Benzene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Bromochloromethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Bromodichloromethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Bromoform	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Bromomethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Carbon disulfide	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Carbon tetrachloride	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Chlorobenzene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Chloroethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Chloroform	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Chloromethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
cis-1,2-Dichloroethene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
cis-1,3-Dichloropropene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Dibromochloromethane	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Ethylbenzene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Methylene chloride	2	U	NA		2	U	NA		2	U	NA		2	U	NA		NA	
Styrene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Tetrachloroethene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Toluene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
trans-1,2-Dichloroethene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	

Table 2
Summary of Groundwater Analytical Results
Study Area 48

Naval Training Center, Orlando
Orlando, FL

Sample ID	48G00101		48H00101		48G00201		48H00201		48G00301		48H00301		48G00301D		48H00301D		48G00302	
Lab ID	MA810007		MA810008		MA810001		MA810002		MA810003		MA810004		MA810005		MA810006		1681-001	
Sampling Date	24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		7-Nov-96	
trans-1,3-Dichloropropene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Trichloroethene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Vinyl chloride	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Xylene (total)	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
Semivolatile organics, ug/L																		
1,2,4-Trichlorobenzene	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
1,2-Dichlorobenzene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,3-Dichlorobenzene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
1,4-Dichlorobenzene	1	U	NA		1	U	NA		1	U	NA		1	U	NA		NA	
2,2'-oxybis(1-Chloropropane)	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2,4,5-Trichlorophenol	25	U	NA		25	U	NA		25	U	NA		25	U	NA		NA	
2,4,6-Trichlorophenol	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2,4-Dichlorophenol	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2,4-Dimethylphenol	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2,4-Dinitrophenol	25	U	NA		25	U	NA		25	U	NA		25	U	NA		NA	
2,4-Dinitrotoluene	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2,6-Dinitrotoluene	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2-Chloronaphthalene	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2-Chlorophenol	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2-Methylnaphthalene	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2-Methylphenol	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
2-Nitroaniline	25	U	NA		25	U	NA		25	U	NA		25	U	NA		NA	
2-Nitrophenol	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
3,3'-Dichlorobenzidine	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
3-Nitroaniline	25	U	NA		25	U	NA		25	U	NA		25	U	NA		NA	
4,6-Dinitro-2-methylphenol	25	U	NA		25	U	NA		25	U	NA		25	U	NA		NA	
4-Bromophenyl-phenylether	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
4-Chloro-3-methylphenol	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
4-Chloroaniline	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
4-Chlorophenyl-phenylether	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
4-Methylphenol	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
4-Nitroaniline	25	U	NA		25	U	NA		25	U	NA		25	U	NA		NA	
4-Nitrophenol	25	U	NA		25	U	NA		25	U	NA		25	U	NA		NA	
Acenaphthene	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	

Table 2
Summary of Groundwater Analytical Results
Study Area 48

Naval Training Center, Orlando
Orlando, FL

Sample ID	48G00101	48H00101	48G00201	48H00201	48G00301	48H00301	48G00301D	48H00301D	48G00302
Lab ID	MA810007	MA810008	MA810001	MA810002	MA810003	MA810004	MA810005	MA810006	1681-001
Sampling Date	24-Apr-96	24-Apr-96	24-Apr-96	24-Apr-96	24-Apr-96	24-Apr-96	24-Apr-96	24-Apr-96	7-Nov-96
Acenaphthylene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Anthracene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Benzo(a)anthracene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Benzo(a)pyrene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Benzo(b)fluoranthene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Benzo(g,h,i)perylene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Benzo(k)fluoranthene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
bis(2-Chloroethoxy)methane	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
bis(2-Chloroethyl)ether	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
bis(2-Ethylhexyl)phthalate	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Butylbenzylphthalate	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Carbazole	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Chrysene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Di-n-butylphthalate	1 J	NA	10 U	NA	10 U	NA	10 U	NA	NA
Di-n-octylphthalate	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Dibenz(a,h)anthracene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Dibenzofuran	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Diethylphthalate	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Dimethylphthalate	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Fluoranthene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Fluorene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Hexachlorobenzene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Hexachlorobutadiene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Hexachlorocyclopentadiene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Hexachloroethane	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Indeno(1,2,3-cd)pyrene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Isophorone	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
N-Nitroso-di-n-propylamine	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
N-Nitrosodiphenylamine (1)	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Naphthalene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Nitrobenzene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Pentachlorophenol	25 U	NA	25 U	NA	25 U	NA	25 U	NA	NA
Phenanthrene	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA
Phenol	10 U	NA	10 U	NA	10 U	NA	10 U	NA	NA

Table 2
Summary of Groundwater Analytical Results
Study Area 48

Naval Training Center, Orlando
Orlando, FL

Sample ID	48G00101		48H00101		48G00201		48H00201		48G00301		48H00301		48G00301D		48H00301D		48G00302	
Lab ID	MA810007		MA810008		MA810001		MA810002		MA810003		MA810004		MA810005		MA810006		1681-001	
Sampling Date	24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		7-Nov-96	
Pyrene	10	U	NA		10	U	NA		10	U	NA		10	U	NA		NA	
Pesticides/PCBs, ug/L																		
4,4'-DDD	0.1	UJ	NA		0.1	U	NA		0.1	U	NA		0.1	U	NA		0.05	U
4,4'-DDE	0.1	UJ	NA		0.1	U	NA		0.17		NA		0.22	J	NA		0.05	U
4,4'-DDT	0.1	UJ	NA		0.1	U	NA		0.1	U	NA		0.1	U	NA		0.1	U
Aldrin	0.05	UJ	NA		0.05	U	NA		0.05	U	NA		0.05	U	NA		0.05	U
alpha-BHC	0.05	UJ	NA		0.05	UJ	NA		0.05	UJ	NA		0.05	UJ	NA		0.05	U
alpha-Chlordane	0.05	UJ	NA		0.05	U	NA		0.15	NJ	NA		0.22	NJ	NA		0.05	U
Aroclor-1016	0.5	UJ	NA		0.5	U	NA		0.5	U	NA		0.5	U	NA		0.05	U
Aroclor-1221	0.5	UJ	NA		0.5	U	NA		0.5	U	NA		0.5	U	NA		0.05	U
Aroclor-1232	0.5	UJ	NA		0.5	U	NA		0.5	U	NA		0.5	U	NA		0.05	U
Aroclor-1242	0.5	UJ	NA		0.5	U	NA		0.5	U	NA		0.5	U	NA		0.05	U
Aroclor-1248	0.5	UJ	NA		0.5	U	NA		0.5	U	NA		0.5	U	NA		0.05	U
Aroclor-1254	0.5	UJ	NA		0.5	U	NA		0.5	U	NA		0.5	U	NA		0.05	U
Aroclor-1260	0.5	UJ	NA		0.5	U	NA		0.5	U	NA		0.5	U	NA		0.05	U
beta-BHC	0.05	UJ	NA		0.05	U	NA		0.05	U	NA		0.05	U	NA		0.05	U
delta-BHC	0.05	UJ	NA		0.05	U	NA		0.05	U	NA		0.05	U	NA		0.05	U
Dieldrin	0.1	UJ	NA		0.1	U	NA		0.1	U	NA		0.1	U	NA		0.05	U
Endosulfan I	0.05	UJ	NA		0.05	U	NA		0.05	U	NA		0.05	U	NA		0.05	U
Endosulfan II	0.1	UJ	NA		0.1	U	NA		0.1	U	NA		0.1	U	NA		0.1	U
Endosulfan sulfate	0.1	UJ	NA		0.1	U	NA		0.1	U	NA		0.1	U	NA		0.1	U
Endrin	0.1	UJ	NA		0.1	U	NA		0.1	U	NA		0.1	U	NA		0.05	U
Endrin aldehyde	0.1	UJ	NA		0.1	U	NA		0.1	U	NA		0.1	U	NA		0.1	U
Endrin ketone	0.1	UJ	NA		0.1	U	NA		0.1	U	NA		0.1	U	NA		0.1	U
gamma-BHC (Lindane)	0.05	UJ	NA		0.05	U	NA		0.05	U	NA		0.05	U	NA		0.05	U
gamma-Chlordane	0.05	UJ	NA		0.05	U	NA		0.13		NA		0.19		NA		0.05	U
Heptachlor	0.05	UJ	NA		0.05	U	NA		0.05	U	NA		0.05	U	NA		0.05	U
Heptachlor epoxide	0.05	UJ	NA		0.05	U	NA		0.1	U	NA		0.15	U	NA		0.05	U
Methoxychlor	0.5	UJ	NA		0.5	UJ	NA		0.5	UJ	NA		0.5	UJ	NA		0.2	U
Toxaphene	5	UJ	NA		5	U	NA		5	U	NA		5	U	NA		1	U
Inorganics, ug/L																		
Aluminum	3130	J	367	J	8580	J	7060	J	1100	J	1270	J	1110	J	1230	J	NA	
Antimony	1.8	R	1.5	R	1.9	R	2.4	R	2.1	R	2.5	R	1.6	R	1.9	R	NA	
Arsenic	1.3	UJ	1.3	UJ	1.8	J	1.3	UJ	1.3	UJ	1.3	UJ	1.3	UJ	1.3	UJ	NA	

Table 2
Summary of Groundwater Analytical Results
Study Area 48

Naval Training Center, Orlando
Orlando, FL

Sample ID	48G00101		48H00101		48G00201		48H00201		48G00301		48H00301		48G00301D		48H00301D		48G00302	
Lab ID	MA810007		MA810008		MA810001		MA810002		MA810003		MA810004		MA810005		MA810006		1681-001	
Sampling Date	24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		24-Apr-96		7-Nov-96	
Barium	7.2	U	6.7	U	11.8	U	10.6	U	19.3	J	22.1	J	19	J	21.7	J	NA	
Beryllium	0.15	U	0.15	U	0.19	B	0.23	B	0.15	U	0.15	U	0.15	U	0.15	U	NA	
Cadmium	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ	1.8	UJ	NA	
Calcium	43700		44000		55400		55100		90100		92700		89600		91300		NA	
Chromium	3.1	B	2.2	U	9.5	B	9.1	B	2.2	U	2.9	B	2.2	U	2.2	U	NA	
Cobalt	1.5	U	1.5	U	2.6	B	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	NA	
Copper	2	U	2	U	5.8	B	2	U	4.8	B	2	U	2	U	2	U	NA	
Iron	443	J	26.8	U	1250	J	894	J	130	J	153	J	134	J	135	J	NA	
Lead	1.2	U	1.2	U	6.3		3.7	U	1.2	U	1.2	U	1.2	U	1.2	U	NA	
Magnesium	2330	B	2410	B	2220	B	2140	B	4770	B	4940	B	4730	B	4900	B	NA	
Manganese	6.6	B	6.8	B	7.7	B	8.3	B	30.1		27.1		30		26.6		NA	
Mercury	0.07	UJ	0.07	UJ	0.07	UJ	0.08	J	0.07	UJ	0.07	UJ	0.07	UJ	0.08	J	NA	
Nickel	7.7	U	7.7	U	7.7	U	7.7	U	7.7	U	7.7	U	7.7	U	7.7	U	NA	
Potassium	767	U	767	U	1650	B	1610	B	1870	B	2150	B	2040	B	2070	B	NA	
Selenium	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.7	J	NA	
Silver	2.2	UR	2.2	UR	2.2	UR	2.2	UR	2.2	UR	2.2	UR	2.2	UR	2.2	UR	NA	
Sodium	1550	J	1810	J	1330	J	1380	J	2590	J	2780	J	2530	J	2700	J	NA	
Thallium	0.86	U	0.86	U	0.86	U	0.86	U	0.86	UJ	0.86	UJ	0.86	UJ	0.86	UJ	NA	
Vanadium	2.7	B	1.6	U	9.6	B	7.4	B	3.6	B	4.6	B	4	B	3.8	B	NA	
Zinc	4.4	U	9.4	U	12.6	U	5.4	U	23.3	U	24.7	U	19.6	U	22.5	U	NA	
General Chemistry, mg/L																		
Total Suspended Solids	35		NA		84		NA		17		NA		NA		NA		NA	