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NTC ORLANDO
5090.3a

LETTER REGARDING ABANDONMENT OF WATER SUPPLY WELLS MCCOY ANNEX
BUILDING 7111 NTC ORLANDO FL
6/4/1997
ABB ENVIRONMENTAL



252

June 4, 1997

Document No.: 8545.010

Mr. John Mitchell
Remedial Project Manager
State of Florida
Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

**Subject: Request to Abandon Water Supply Well
McCoy Annex, Building 7111
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317**

Dear Mr. Mitchell:

ABB Environmental Services (ABB-ES) recommended to the Orlando Partnering Team (OPT) the abandonment of the water supply wells located on the McCoy Annex, Naval Training Center (NTC), Orlando, Florida. This recommendation was in accordance with Chapter 40C-3 of the Florida Administration Code (FAC) which states that water wells be abandoned upon placement in an "out-of-service" status.

With approval from the OPT, ABB-ES procured well abandoning services to accomplish the work. On May 1, 1997, Custom Drilling Services, Inc. removed the turbine pump and column piping from the water supply well at Building 7111. The equipment which was removed from the eight-inch diameter well was coated with a petroleum product (lubricating oil).

ABB-ES measured the product thickness in the well using an oil/water interface probe. On May 2, 1997, the product thickness measured 8.79 feet. A sample of the free-product was collected for visual inspection using a disposable bailer. The product appeared to be lubricating oil associated with the lubrication of the turbine pump down hole. A 5-gallon bucket found inside Building 7111, labeled Chevron GST Oil 32, supports this theory. Attachment A contains the Discharge Reporting Form submitted by NTC Orlando Public Works Department to the Orange County Environmental Protection Department and the Florida Department of Environmental Protection (FDEP). Attachment B contains the Initial Remedial Action Notification Form which was submitted to the FDEP for review.

On May 8, 1997, Southern Waste Services, Inc. using enhanced vacuum extraction removed a total of 58 gallons of product/water mixture and transported it to the Howco facility in St. Petersburg, Florida. Attachment C contains the Non-hazardous Waste Manifest and Attachment D contains the Petroleum Contamination Initial Remedial Action Report Form.

On May 9, 1997, a measured product thickness of 0.03 feet remained in the well. Hydrophobic, oil absorbent socks were lowered into the well to soak up the remaining lubricating oil. Periodically, product thickness was measured and new absorbent socks were lowered into the well for lubricating oil removal. Table 1, in Attachment E, provides a record of the water levels and product thickness measured at the site.

ABB Environmental Services Inc.

Sponsor
Special Olympics
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Connecticut 1996



1080 Woodcock Road, Suite 100
St. Paul Building
Orlando, Florida 32803

Telephone (407) 895-8845
Fax (407) 896-6150

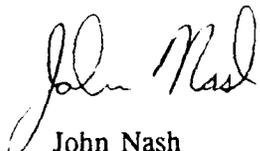
On May 21, 1997, ABB-ES purged 55 gallons of groundwater from the water supply well with the use of a two-inch submersible pump. After purging, a groundwater sample was collected using a teflon bailer. The sample was transported to PC&B Environmental Laboratory Inc. for analysis using Chapter 62-770, FAC's Kerosene Analytical Group (KAG) which includes: U.S. Environmental Protection Agency (USEPA) Methods 601 (volatile organic halocarbons [VOH]), 602 (volatile organic aromatics [VOA] plus methyl tert-butyl ether), 610 (polynuclear aromatic hydrocarbons [PAH]), 504 (ethylene dibromide), 239.2 (total lead), and 418.1 (total recoverable petroleum hydrocarbons [TRPH]). Attachment F contains the laboratory analytical reports and chain-of-custody records for review.

The laboratory analytical results for the May 21, 1997 sampling event show 1.0 mg/l of TRPH and 2.8 $\mu\text{g/l}$ of benzene. The TRPH value falls below the Chapter 62-770, FAC target cleanup level of 5.0 mg/l. The benzene value of 2.8 $\mu\text{g/l}$ is above the Chapter 62-770 FAC target cleanup level, however, "No Further Action and Monitoring Only Guidelines for Petroleum Contaminated Sites" (FDEP 1990), allows for sites with no potable wells within a 1/4 mile radius of the site in a G-II aquifer a guidance concentration of 50 $\mu\text{g/l}$. A potable well survey conducted during the preparation of the Contamination Assessment Report, for the McCoy Annex (1996) reveals that no potable wells are in use in the vicinity of the site. Based on the information provided in this letter report, ABB-ES recommends that the water supply well in Building 7111 be abandoned following the South Florida Water Management District's Guidelines.

Should you have any questions or comments regarding this well abandonment, please contact the undersigned at (407) 895-8845.

Very Truly Yours,
ABB ENVIRONMENTAL SERVICES, INC.


Manuel Alonso, P.G.
Senior Geologist


John Nash
Geologist

MA/JN/lak
Enclosure

cc: Lt. G. Whipple (NTC) w/attachment
Wayne Hansel (SDIV) w/attachment
Nancy Rodriguez (EPA) w/attachment
Mark Zill (NTC) w/attachment

Barbara Nwokike (SDIV) w/attachment
Nick Ugolini (SDIV) w/attachment
John Kaiser (ABB-ES) w/attachment
File w/attachment

ATTACHMENT A

714-08545

5090
NTC 010E
May 2, 1997

CERTIFIED LETTER- RETURN RECEIPT REQUESTED
P-254-039-003

Orange County Environmental Protection Department
Storage Tank Compliance Section
2002 E. Michigan Street
Orlando, FL 32806

Gentlemen:

As required by the Florida Administrative Code, "Underground Storage Tank Systems", Chapter 62-761.820, the Naval Training Center (NTC), Orlando, is submitting a Discharge Reporting Form for a lube oil discharge at facility #7111 located on the Naval Training Center Annex. During removal of the water well pumps as part of proper closure, free product was discovered in the shaft. NTC's remediation contractor has made arrangements to have the oil removed on May 5, 1997. When the oil has been removed, the contractor will do more sampling of the water. Mr. Mark S. Zill is available at (407) 646-4663 to respond to any questions.

Sincerely,

G. B. WHIPPLE
Lieutenant
CEC, U.S. Navy
Public Works Officer
By direction of
the Commander

Enclosure: (1) FDEP Discharge Reporting Form

Copy to:

- (1) Mr. Manuel Alonso, ABB-ES, Orlando
- (2) FDEP, Tallahassee



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DER Form # 17-761.500(1)
Form Title Discharge Reporting Form
Effective Date December 10, 1990
DER Application No. (Filed in by DER)

Discharge Reporting Form

Use this form to notify the Department of Environmental Regulation of:

- 1. Results of tank tightness testing that exceed allowable tolerances within ten days of receipt of test result.
2. Petroleum discharges exceeding 25 gallons on pervious surfaces as described in Section 17-761.460 F.A.C. within one working day of discovery.
3. Hazardous substance (CERCLA regulated), discharges exceeding applicable reportable quantities established in 17-761.460(2) F.A.C., within one working day of the discovery.
4. Within one working day of discovery of suspected releases confirmed by: (a) released regulated substances or pollutants discovered in the surrounding area. (b) unusual and unexplained storage system operating conditions. (c) monitoring results from a leak detection method or from a tank closure assessment that indicate a release may have occurred, or (d) manual tank gauging results for tanks of 550 gallons or less, exceeding ten gallons per weekly test or five gallons averaged over four consecutive weekly tests.

Mail to the local regulatory agency---

PLEASE PRINT OR TYPE
Complete all applicable blanks

Orange County Environmental Protection Dept.
Storage Tank Compliance Section
2002 E. Michigan St.
Orlando, FL 32806

1. DER Facility ID Number: 2. Tank Number: 3. Date:

4. Facility Name: Naval Training Center

Facility Owner or Operator: Commander, Naval Training Center (CODE 010E)

Facility Address: 1350 Grace Hopper Ave., Orlando, FL 32813-8405

Telephone Number: (407) 646-4663 County: Orange

Mailing Address: Same as Above

5. Date of receipt of test results or discovery: May 1, 1997 month/day/yea

6. Method of initial discovery. (circle one only)

- A. Liquid detector (automatic or manual) D. Emptying and Inspection. F. Vapor or visible signs of a discharge in the vicinity
B. Vapor detector (automatic or manual) E. Inventory control. G. Closure: of Water Well (explain
C. Tightness test (underground tanks only). H. Other:

7. Estimated number of gallons discharged: Unknown

8. What part of storage system has leaked? (circle all that apply) A. Dispenser B. Pipe C. Fitting D. Tank E. Unknown

9. Type of regulated substance discharged. (circle one)

- A. leaded gasoline D. vehicular diesel L. used/waste oil V. hazardous substance includes pesticides, ammon
B. unleaded gasoline F. aviation gas M. diesel chlonne and derivatives (write in name or Chemical Abstr
C. gasohol G. jet fuel O. new/lube oil Service CAS number)
Z. other (write in name)

10. Cause of leak. (circle all that apply)

- A. Unknown C. Loose connection E. Puncture G. Spill I. Other (specify)
B. Split D. Corrosion F. Installation failure H. Overfill

11. Type of financial responsibility. (circle one)

- A. Third party insurance provided by the state insurance contractor C. Not applicable
B. Self-insurance pursuant to Chapter 17-769.500 F.A.C. D. None

12. To the best of my knowledge and belief all information submitted on this form is true, accurate, and complete.

G. B. WHIPPLE

Printed Name of Owner, Operator or Authorized Representative

Signature of Owner, Operator or Authorized Representative

ATTACHMENT B



May 5, 1997

Document No.: 8545.001

Mr. John Mitchell
Remedial Project Manager
State of Florida
Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

**Subject: Initial Remedial Action Notification Form
McCoy Annex, Building 7111
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317**

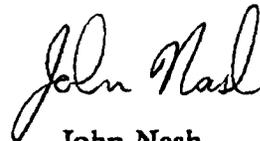
Dear Mr. Mitchell:

Enclosed for your review and approval is the Initial Remedial Action Notification Form for the above referenced facility.

Should you have any questions or comments regarding this IRA Notification Form, please contact the undersigned at (407) 895-8845.

Very Truly Yours,
ABB ENVIRONMENTAL SERVICES, INC.


Manuel Alonso, P.G.
Senior Geologist


John Nash
Geologist

MA/JN/lak
Enclosure

cc: Nick Ugolini, Southern Division w/attachment
Mark Zill, NTC, Orlando w/attachment

g:\users\lkandt\wp51\cto107\ust\fddep\jm050597.wp

ABB Environmental Services Inc.

INITIAL REMEDIAL ACTION NOTIFICATION FORM

This notification provides written confirmation of initial remedial action (IRA) as required by Chapter 17-770.300(5) and (8), Florida Administrative Code. Notification must be within three working days of initiation of an IRA. The notification must be submitted to the appropriate contracted local program and/or:

Florida Department of Environmental Protection
Bureau of Waste Cleanup
Engineering Support Section
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(904) 488-3935

Upon completion of the IRA program task, an Initial Remedial Action Report (or its equivalency) should be submitted for technical review.

I. **FACILITY NAME:** McCoy Annex, Building 7111
Facility Address: Naval Training Center, Orlando, Florida
DER Facility Number (if applicable): 488840202
Date IRA Initiated: 5/7/97 **Date IRA Completed:** 5/21/97

II. FREE PRODUCT RECOVERY

A. **Type(s) of Product Discharged:** Chevron GST Oil 32 (lubricating

B. Quantity

1. **Estimated Gallons Lost:** Unknown

C. **Method of Product Recovery:** Enhanced vacuum extraction by
Southern Waste Services, Inc.

D. **Type of Discharge During Product Recovery:** None

E. **Type of Treatment, i.e., Oil/Water Separator: and Expected
Effluent Quality from Any Discharge:** Offsite
Howco Facility of St. Petersburg, Florida

F. **Quantity and Disposal of Recovered Product:** 22.87 gallons

III. SOIL EXCAVATION

- A. Estimated Volume of Excessively Contaminated Soil Excavated in
Cubic Yards: N/A
- B. Estimated Dimensions of Excavation Including Depth of
Excavation(s): N/A
- C. Type(s) of Product in Soil: N/A
- D. Type of Instrument and Method Used to Determine Excessive
Soil Contamination: N/A
- _____

IV. ADDITIONAL COMMENTS: None

 John Nash
Print Person Completing Form

 John Nash 5/5/97
Signature, Date

 Geologist, ABB Environmental Services,
Title, Affiliation

 1080 Woodcock Rd. Suite 100 Orlando, FL 32803
Company Address

 (407) 895-8845
Phone Number

ATTACHMENT C

John Nash

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address CD/MANAGER, NANKU DRAWING CENTER (CODE 0108) 1350 GENE HOPKIN AVE PENSACOLA FL 32513-8405		1. Generator's US EPA ID No. FLB17.D.0.24.733		TM 7-0119
4. Generator's Phone 407 644-4623		6. US EPA ID Number F10 000997744		
5. Transporter 1 Company Name SOUTHERN WASTE SERVICES		7. Transporter 2 Company Name	8. US EPA ID Number	
9. Designated Facility Name and Site Address HOWCO 843 43RD ST S. ST PETERSBURG FL 33711		10. US EPA ID Number FLD 15.27.C.2767	A. Transporter's Phone 800 981-9369	B. Transporter's Phone
			C. Facility's Phone 813-323-0813	
11. Waste Shipping Name and Description		12. Containers	13. Total Quantity	14. Unit We/Vol
a. VIRGIN OIL FOR LUBRICATING / FOR RECYCLING		No. 1	Type TC	117. G
b.				
c.				
d.				
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above FOR RECYCLING		
15. Special Handling Instructions and Additional Information EMERGENCY PHONE # 800-852-8878 116 Gals. charge for Decon				
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name MARK S. ZUL		Signature Mark S. Zul		Month Day Year 10 50 819
17. Transporter 1 Acknowledgment of Receipt of Materials Printed/Typed Name TROY MCKENNA		Signature Troy McKenna		Month Day Year 10 51 0819
18. Transporter 2 Acknowledgment of Receipt of Materials Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 18.				
Printed/Typed Name LEWIS SPARKS		Signature Lewis Sparks		Month Day Year 10 51 0819

GENERATOR
TRANSPORTER
FACILITY

ATTACHMENT D

PETROLEUM CONTAMINATION INITIAL REMEDIAL ACTION REPORT FORM

An Initial Remedial Action report, detailing the initial remedial action (IRA), should be prepared to satisfy the requirements of Chapters 17-770.630(1)14; 17-773.500(1)(a)4; and 17-773.500(2)(a)4, Florida Administrative Code, (FAC). This form may be used for the IRA report. Additional pages may be necessary in order to properly document the IRA in detail. Failure to provide complete information may result in delays in technical reviews and in reimbursement of task. This report format (or a similar completed report detailing the IRA activities) should be sent to the appropriate contracted local program office and to:

Florida Department of Environmental Protection
Bureau of Waste Cleanup
Engineering Support Section
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(904) 488-3935

I. **FACILITY NAME:** McCoy Annex, Building 7111
Facility Address: Naval Training Center, Orlando, Florida
DER Facility Number (if applicable): 488840202
Date IRA Initiated: 5/8/97 **Date IRA Completed:** 5/20/97

II. FREE PRODUCT RECOVERY

- A. **Type(s) of Product Discharged:** Lubricating Oil
- B. **Quantity**
1. **Estimated Gallons Lost:** 22.87 gallons
 2. **Gallons Recovered:** 58 gallons through 5/20/97 (date)
oil/groundwater
 3. **Attach Exhibit Indicating Amount of Product Recovered, Dates and Cumulative Totals.**
- C. **Attach a Scaled Site Plan, Indicating the Locations and Product Thickness in Wells, Boreholes, Excavations, or Utility Conduits and Wells Utilized for Recovery of Free Product.**
- D. **Method of Product Recovery:** enhanced vacuum extraction
-
-

E. Type of Discharge During Product Recovery: None

F. Type of Treatment, i.e., Oil/Water Separator: Southern
Waste Services transported waste to Howco Facility of
St. Petersburg, Florida.

G. Attach Written Proof of Proper Disposal of Recovered
Product: See Attachment

III. SOIL EXCAVATION

NOTE: Soil shall be defined as excessively contaminated using the procedure stated in Chapter 17-770.200(2), FAC. Representative soil sampling shall be performed as close to the time of excavation as possible, but at no time shall exceed three (3) months prior to the start of excavation. Stockpiled soils greater than thirty (30) days on site waiting for treatment and disposal, must be re-sampled immediately prior to disposal to assure soils are still excessively contaminated. NOTE: See PCR-27 guideline for sites eligible for reimbursement.

If soil sampling data indicates that the amount of soil that is excessively contaminated exceeds 1500 cubic yards, treatment of all excessively contaminated soil at the site shall be addressed in a remedial action plan, and no soil IRA activities shall be performed except for the removal of soils in the immediate vicinity of the tanks.

Only soil above the ambient water table at the time of excavation can be considered as excessively contaminated soil.

Unless the established weight per unit volume of 1.4 tons/cubic yard (as referenced in FAC Rule 17-775) is used for the excavated soil, the weight per unit volume must be determined by a field test (in which an accurately measured volume of soil is weighed) at the time of excavation.

A. Actual Volume of Excessively Contaminated Soil Excavated in
Cubic Yards: NA

Dimensions of Excavation Including Depth of
Excavation(s): NA

NOTE: Attach written proof from the Department in the form of an Alternate Procedure Approval Order authorizing excavating over 1500 cubic yards if applicable. Authorization must be received prior to the excavation of soils.

B. Type(s) of Product in Soil: NA

C. Depth (ft) to Groundwater at the Time of Excavation(s): NA

D. Did Dewatering (i.e., groundwater depression) Occur at Time of Excavation?: NA

E. Type of Instrument and Method Used to Determine Excessive Soil Contamination: NA

F. Attach a table that compares the OVA-FID readings taken with charcoal filter verses readings without filter. Include vertical depths for each sample.

G. Using the OVA procedure for defining excessively contaminated soil as referenced in Rule 17-770.200(2), FAC, include a scaled site plan with the information listed below:

1. Location of excavation, old and new tank farm, dispensers, and product lines, and all soil samples. The corresponding OVA-FID readings for each soil sample (with charcoal filter and without) and its depth must be given.

2. Soil Sampling Procedure is as follows:

Start sampling in a location where it is suspected that excessively contaminated soil exists. Sample from the first soil boring outward in a grid pattern, at five (5) to ten (10) foot intervals, until the perimeter of the excessively contaminated soil plume is defined. Vertical sampling should be performed starting approximately at the initial area of contamination or surface and continued at three (3) foot intervals, or fraction thereof, until a depth approximately one (1) foot above the water table is reached.

H. Copies of Laboratory Analyses for Pre Treatment Soil Samples as Required in Chapter 17-775.410(3), Table II, FAC Must be Attached.

I. Were Tanks Replaced at this Site? If Yes, Indicate the Number, Size, and Location of New Tank Farm:
NA

IV. SOIL TREATMENT AND DISPOSAL

A. Method of Treatment of Excessively Contaminated Soil: NA

B. For Off Site Treatment and Disposal at Permitted STTF, Land Farms, or Landfills Attach Documentation From the Treatment Facility Which Confirms the Weight or Volume of Soil Treated and Date Received. NOTE: See PCR-19 guideline for treatment at out-of-state facilities.

For Other Treatment and Disposal Methods (i.e. On-Site Land Farming, Bioremediation), Attach Post Treatment Laboratory Analyses for Each 250-300 Cubic Yards of Treated Soil in Accordance With Chapter 17-775.400 and the "Guidelines for Assessment and Remediation of Petroleum Contaminated Soils", Most Current Revision.

For Mobile Thermal Treatment Units, Attach Laboratory Analysis per Chapter 17-775(5), FAC.

C. Method of Disposal of Contaminated Soil and Indicate Recipient and Address: NA

V. **ADDITIONAL COMMENTS:** None

John Nash
Print Person Completing Form

John Nash 6/4/97
Signature, Date

Geologist, ABB Environmental Serv.
Title, Affiliation

1080 Woodcock Rd., Suite 100, Orlando, FL
Company Mailing Address

(407) 895-8845
Phone Number

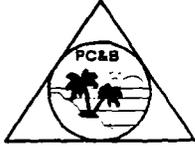
ATTACHMENT E

TABLE 1
WATER SUPPLY WELL ABANDONMENT
 Building 7111, McCoy Annex
 Naval Training Center
 Orlando, Florida

Date	Depth To Product (feet BTOC)	Depth To Water (feet BTOC)	Thickness Of Product (feet)	Comments
5/2/97	46.46	55.25	8.79	extracted product with enhanced vacuum
5/9/97	48.65	48.68	0.03	installed absorbent sock
5/13/97	NA	48.40	0.00	replaced absorbent sock
5/16/97	NA	48.55	0.00	visual inspection, no sheen
5/21/97	NA	48.61	0.00	collected sample for laboratory analysis, no sheen

Note: BTOC = below top of casing.
 NA = not applicable.

ATTACHMENT F



PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

05-30-1997

John Kaiser
ABB Environmental Services
1080 Woodcock Road, Suite 100
Orlando, FL 32803-

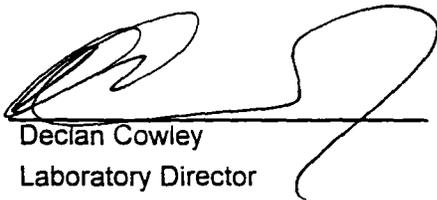
Dear John Kaiser:

Enclosed are the results of the analysis of your samples received 05/22/1997.

Our laboratory is certified by the Florida DHRS (Lab #E83239) and operates under an FDEP approved Comprehensive Quality Assurance Plan (#900134G). Unless otherwise noted, all results are reported as wet weight. All data were determined in accordance with published procedures (EPA-600/4-79-020), Methods for Chemical Analysis of Water and Wastes, Revised March 1983 and/or Standard Methods for the examination of Water and Wastewater, 18th Edition 1989 and/or Test Methods for Evaluating Solid Waste (EPA-SW-846, Revised January 1995), unless stated otherwise in our CompQapp under method modifications.

If you have any questions, please do not hesitate to give me a call.

Sincerely,



Declan Cowley
Laboratory Director



PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

Client : ABB Environmental Services
1080 Woodcock Road, Suite 100
Orlando, FL 32803-

Contact : John Kaiser
Phone : (407) 895-8845

Laboratory Reference Number : 97050154

Project Name : NTC Orlando

Project Number : 8545-58

Chain of Custody : 6214

Sample temperature at time of receipt: 4 degrees C

Laboratory ID	Matrix	Client ID	Status	Date/Time Sampled
97050154-1	Water	073GP101/7111 PW-1	RUN	05/21/1997 11:34
97050154-2	Water	074GP101/7149 PW-1	RUN	05/22/1997 09:32

Number	Parameter	Description
2	Group Test	Kerosene Analytical Group for FAC 17-770
2	EPA 418.1/9073	TRPH by IR

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Halogenated Volatile Organics

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997
ANALYTICAL PROTOCOL: EPA 601/8010

Lab Reference Number	97050154-1	97050154-2
Client Sample ID	073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled	05/21/1997	05/22/1997
Date Extracted	05/23/1997	05/23/1997
Date Analyzed	05/23/1997	05/23/1997
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/l	ug/l
Bromobenzene	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U
2-Chloroethyl vinyl ether	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U
Chloromethane	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U
Dibromomethane	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U
Dichlorodifluoromethane	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U
Methylene chloride	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U
1,2,3-Trichloropropane	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by :



Quality Control Report for Spike/Spike Duplicate Analysis

Halogenated Volatile Organics

Matrix: Water

Lab Sample ID: 9705153-1

QC Batch ID: 9705MS1048

Spike Units: ug/l

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Method: EPA 601

Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Carbon tetrachloride	50.0	0.0	43.0	86	40.0	80	7
Chlorobenzene	50.0	0.0	49.0	98	46.0	92	6
1,4-Dichlorobenzene	50.0	0.0	47.0	94	47.0	94	0
1,1-Dichloroethene	50.0	0.0	58.0	116	53.0	106	9
Trichloroethene	50.0	0.0	53.0	106	48.0	96	10

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Carbon tetrachloride	65	133	11
Chlorobenzene	75	122	12
1,4-Dichlorobenzene	60	137	13
1,1-Dichloroethene	64	139	12
Trichloroethene	69	131	10

Quality Control Report for LCS Analysis

Halogenated Volatile Organics

Matrix: Water

Lab Sample ID: LCS

QC Batch ID: 9705MS1048

LCS Units: ug/l

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Method: EPA 601

Analyst: NM

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Carbon tetrachloride	20.0	18.0	90	70	120
Chlorobenzene	20.0	20.0	100	70	120
1,4-Dichlorobenzene	20.0	24.0	120	70	120
1,1-Dichloroethene	20.0	22.0	110	70	120
Trichloroethene	20.0	20.0	100	70	120

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Aromatic Volatile Organics

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997
ANALYTICAL PROTOCOL: EPA 602/8020

Lab Reference Number	97050154-1	97050154-2
Client Sample ID	073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled	05/21/1997	05/22/1997
Date Extracted	05/23/1997	05/23/1997
Date Analyzed	05/23/1997	05/23/1997
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/l	ug/l
Benzene	2.8	1.0 U
Chlorobenzene	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U
MTBE	5.0 U	5.0 U
Toluene	1.0 U	2.4
m & p-Xylenes	1.0 U	1.0 U
o-Xylene	1.0 U	1.0 U

U = Undetected. The value preceding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by :



Quality Control Report for Spike/Spike Duplicate Analysis

Aromatic Volatile Organics

Matrix: Water

Analysis Date: 05/23/1997

Lab Sample ID: 9705153-1

Preparation Date: 05/23/1997

QC Batch ID: 9705MS1048

Method: EPA 602

Spike Units: ug/l

Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike	MSD Result	MSD	RPD
				Percent Recovery		Percent Recovery	
Benzene	50.0	0.0	53.0	106	49.0	98	8
Ethylbenzene	50.0	0.0	49.0	98	45.0	90	9
MTBE	50.0	0.0	63.0	126	65.0	130	3
Toluene	50.0	0.0	50.0	100	46.0	92	8
m & p-Xylenes	100.0	0.0	91.0	91	93.0	93	2
o-Xylene	50.0	0.0	52.0	104	49.0	98	6

Quality Control Limits

Analyte	Lower	Upper	RPD
	Limit	Limit	
Benzene	67	138	12
Ethylbenzene	67	128	10
MTBE	54	156	16
Toluene	67	129	10
m & p-Xylenes	65	133	12
o-Xylene	67	130	10

Quality Control Report for LCS Analysis

Aromatic Volatile Organics

Matrix: Water

Lab Sample ID: LCS

QC Batch ID: 9705MS1048

LCS Units: ug/l

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Method: EPA 602

Analyst: NM

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Benzene	20.0	22.0	110	51	160
Ethylbenzene	20.0	17.0	85	70	137
MTBE	20.0	23.0	115	40	166
Toluene	20.0	21.0	105	61	140
m & p-Xylenes	40.0	34.0	85	44	150
o-Xylene	20.0	22.0	110	59	140

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Polynuclear Aromatic Hydrocarb

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997
ANALYTICAL PROTOCOL: EPA 610/8100

Lab Reference Number	97050154-1	97050154-2
Client Sample ID	073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled	05/21/1997	05/22/1997
Date Extracted	05/23/1997	05/23/1997
Date Analyzed	05/23/1997	05/23/1997
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	No	No
Dilution Factor	1	1
Result Units	ug/l	ug/l
Acenaphthene	5 U	5 U
Acenaphthylene	5 U	5 U
Anthracene	5 U	5 U
Benzo(a)anthracene	5 U	5 U
Benzo(a)pyrene	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U
Benzo(ghi)perylene	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U
Chrysene	5 U	5 U
Dibenzo(ah)anthracene	5 U	5 U
Fluoranthene	5 U	5 U
Fluorene	5 U	5 U
Indeno(123-cd)pyrene	5 U	5 U
Naphthalene	5 U	5 U
1-Methyl naphthalene	5 U	5 U
2-Methyl naphthalene	5 U	5 U
Phenanthrene	5 U	5 U
Pyrene	5 U	5 U

U = Undetected. The value preceding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by :



Quality Control Report for Spike Analysis

Polynuclear Aromatic Hydrocarbons

Matrix: Water

Lab Sample ID: 9705150-1

QC Batch ID: 9705PAH064

Spike Units: ug/l

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Method: EPA 610

Analyst: KN

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Acenaphthene	50	0	35	70	49	115
Acenaphthylene	50	0	32	64	42	113
Anthracene	50	0	41	82	53	126
Benzo(a)anthracene	50	0	37	74	37	122
Benzo(a)pyrene	50	0	39	78	40	120
Benzo(b)fluoranthene	50	0	41	82	47	123
Benzo(ghi)perylene	50	0	38	76	33	122
Benzo(k)fluoranthene	50	0	41	82	47	123
Chrysene	50	0	37	74	49	120
Dibenzo(ah)anthracene	50	0	40	80	32	124
Fluoranthene	50	0	35	70	46	121
Fluorene	50	0	35	70	41	117
Indeno(123-cd)pyrene	50	0	40	80	31	123
Naphthalene	50	0	30	60	38	107
Phenanthrene	50	0	36	72	43	119
Pyrene	50	0	36	72	49	119

Quality Control Report for LCS Analysis

Polynuclear Aromatic Hydrocarbons

Matrix: Water

Lab Sample ID: LCS

QC Batch ID: 9705PAH064

LCS Units: ug/l

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Method: EPA 610

Analyst: KN

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Acenaphthene	50	38	76	70	120
Acenaphthylene	50	35	70	70	120
Anthracene	50	48	96	70	120
Benzo(a)anthracene	50	39	78	70	120
Benzo(a)pyrene	50	41	82	70	120
Benzo(b)fluoranthene	50	44	88	70	120
Benzo(ghi)perylene	50	39	78	70	120
Benzo(k)fluoranthene	50	43	86	70	120
Chrysene	50	39	78	70	120
Dibenzo(ah)anthracene	50	41	82	70	120
Fluoranthene	50	38	76	70	120
Fluorene	50	37	74	70	120
Indeno(123-cd)pyrene	50	41	82	70	120
Naphthalene	50	37	74	70	120
Phenanthrene	50	35	70	70	120
Pyrene	50	38	76	70	120

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EDB/DBCP

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number	97050154-1	97050154-2
Client Sample ID	073GP101/7111 PW-1	074GP101/7149 PW-1
Date Sampled	05/21/1997	05/22/1997
Date Extracted	05/23/1997	05/23/1997
Date Analyzed	05/23/1997	05/23/1997
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	No	No
Dilution Factor	1	1
Result Units	ug/l	ug/l

Ethylene dibromide (EDB)	0.02 U	0.02 U
1,2-Dibromo-3-chloropropane	0.1 U	0.1 U

U = Undetected. The value preceding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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Quality Control Report for Spike Analysis

EDB/DBCP

Matrix: Water

Lab Sample ID: 9705148-1

QC Batch ID: 9705EDB007

Spike Units: ug/l

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Method: EPA 504

Analyst: ELA

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Ethylene dibromide (EDB)	1.00	0.00	0.99	99	55	133
1,2-Dibromo-3-chloropropane	1.0	0.0	1.0	100	46	133

Quality Control Report for LCS Analysis

EDB/DBCP

Matrix: Water

Lab Sample ID: LCS

QC Batch ID: 9705EDB007

LCS Units: ug/l

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Method: EPA 504

Analyst: ELA

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Ethylene dibromide (EDB)	1.00	1.10	110	75	120
1,2-Dibromo-3-chloropropane	1.0	1.1	107	75	120

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Report of Analysis

CLIENT NAME: ABB Environmental Services
PROJECT NAME: NTC Orlando
PROJECT NUMBER: 8545-58
DATE RECEIVED: 05/22/1997

Lab Reference Number		97050154-1		97050154-2
Client Sample ID		073GP101/7111 PW-1		074GP101/7149 PW-1
Date Sampled		05/21/1997		05/22/1997
Sample Matrix (as Received)		Water		Water

EPA 418.1/9073	TRPH	mg/l	1.0	1.0 U
EPA 6010	Lead, Total	ug/l	3 U	3 U

U = Undetected. The value preceding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by :



Quality Control Report for Spike Analysis

INORGANICS

Matrix: Water

Lab Sample ID: 9705154-2

Analysis Date: 05/28/1997

Preparation Date: 05/28/1997

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
TRPH	10.0 mg/l	0.0	10.8	108	85	111

Quality Control Report for LCS Analysis

INORGANICS

Matrix: Water
Lab Sample ID: LCS

Analysis Date: 05/28/1997
Preparation Date: 05/28/1997

Analyte	LCS Conc		LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
TRPH	10.0 mg/l	0.0	10.0	100	70	120

Quality Control Report for Spike Analysis

INORGANICS

Matrix: Water

Lab Sample ID: 9705153-1

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Lead, Total	100 ug/l	0	102	102	66	124

Quality Control Report for LCS Analysis

INORGANICS

Matrix: Water

Lab Sample ID: LCS

Analysis Date: 05/23/1997

Preparation Date: 05/23/1997

Analyte	LCS Conc		LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Lead, Total	100 ug/l	0	103	103	70	120

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Nº 6214

Chain of Custody

Work Order: 09705154

Date: 5-22-97 Page 1 of 1

COMPANY			ANALYSIS REQUEST										NUMBER OF CONTAINERS		
ADDRESS			EPA 601/602	EPA 504	EPA 610	EPA 239.2 (P)	EPA 418.1								
ABB-EVS															
1080 WOODCOCK ROAD															
ORLANDO, FL 32803															
SAMPLED BY: SIGT DONEWICK & JOHN NASH															
SIGN: <i>Aud. Donewick</i> PHONE NO: 895-8845															
#	SAMPLE ID.	DATE/TIME	MATRIX	EPA 601/602	EPA 504	EPA 610	EPA 239.2 (P)	EPA 418.1							
1	0736P101/7111 PW-1	5-21-97 1134	H ₂ O	2	2	1	1	1							7
2	0746P101/7149 PW-1	5-22-97 0932	H ₂ O	2	2	1	1	1							7
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	PROJECT INFORMATION		SAMPLE RECEIPT	
1: <i>Aud. Donewick</i>	5-22-97	1: <i>B. Bennett</i>	5/22/97	PROJECT NAME:	Total No. of Containers		
2:		2: <i>B. Bennett</i>	5/22/97	PROJECT #:	Chain of Custody Seals		
3:		3:	1315	SITE ADDRESS:	Rec'd Good Condition/Cold		
SPECIAL INSTRUCTIONS/COMMENTS:				PROJECT MANAGER:	PO#:		
				John Kaiser			
				INVOICE TO:	SHIPPED VIA:		
				(IF DIFFERENT FROM ABOVE) ANNI LUENA KANOT			