

**APPENDIX A**  
**GROUND-WATER QUALITY ANALYSES**

Received: 02/03/93

02/05/93 16:04:22

REPORT HANDEX OF FLORIDA PREPARED TOXIKON CORPORATION  
TO 30941 SUN EAGLE DRIVE BY 225 WILLOWOOD AVE.  
MOUNT DORA, FL 32726 WOBURN, MA 01801  
(904)735-1800 FAX 5990  
ATTN JOHN WEITZ ATTN PAUL LEZBERG  
PHONE (617) 933-6903 CONTACT JIM  
CERTIFIED BY [Signature]

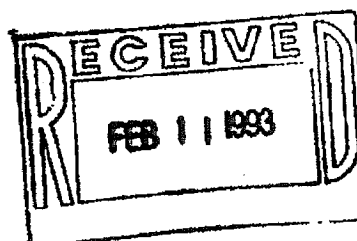
CLIENT HANDEX SAMPLES 6  
COMPANY HANDEX OF FLORIDA  
FACILITY 30941 SUN EAGLE DRIVE  
MOUNT DORA, FL 32726  
WORK ID C.F.1075/9738 US17-92 DEBARY  
TAKEN 2/2/93  
TRANS \_\_\_\_\_  
TYPE WATTE  
P.O. # \_\_\_\_\_  
INVOICE under separate cover

MA CERT # MA064: TRACE METALS, SULFATE, CYANIDE, TURB., RES. FREE  
CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST, NUTRIENTS,  
DEMAND, O&G, PHENOLICS, PCBs (OIL), CT DHS #PH-0563, NY #10778  
FL NRS #E87143, NJ DEP 59538, NC DWR286, SC 88002, MN 204091-C.  
VERIFIED BY: [Signature]  
FLA DHRS - CERT # NRS # E87143

## SAMPLE IDENTIFICATION

01 TRIP BLANK  
02 EQUIPMENT BLANK  
03 A  
04 B  
05 C  
06 D

TEST CODES and NAMES used on this workorder

602M PURGEABLE AROMATICS 602

Page 2  
Received: 02/03/93

TOXIKOM CORP. REPORT  
Results by Sample

Work Order # 93-02-035

SAMPLE ID TRIP BLANK FRACTION 01A TEST CODE 602N NAME PURGEABLE AROMATICS 602  
Date & Time Collected 02/02/93 06:15:00 Category WATER

EPA 602 with MTBE

	RESULT	LIMIT
Benzene	<u>ND</u>	<u>1.0</u>
Toluene	<u>ND</u>	<u>1.0</u>
Ethylbenzene	<u>ND</u>	<u>1.0</u>
Xylenes (Total)	<u>ND</u>	<u>1.0</u>
Methyl-t-Butyl Ether	<u>ND</u>	<u>1.0</u>

Notes and Definitions for this Report:

UNITS: ug/L  
DATE RUN: 02/04/93  
ANALYST: AP  
INSTRUMENT: 2000  
DIL. FACTOR: 1

ND = not detected at detection limit

Page 3  
Received: 02/03/93

TORTON CORP. REPORT  
Results by Sample

Work Order # 93-02-035

SAMPLE ID EQUIPMENT BLANK FRACTION 02A TEST CODE 602M NAME PURGEABLE AROMATICS 602  
Date & Time Collected 02/02/93 10:45:00 Category WATER

**EPA 602 with MTBE**

	RESULT	LIMIT
Benzene	<u>ND</u>	<u>1.0</u>
Toluene	<u>ND</u>	<u>1.0</u>
Ethylbenzene	<u>ND</u>	<u>1.0</u>
Xylenes (Total)	<u>ND</u>	<u>1.0</u>
Methyl-t-Butyl Ether	<u>ND</u>	<u>1.0</u>

Notes and Definitions for this Report:

UNITS: ug/L  
DATE RUN: 02/04/93  
ANALYST: AP  
INSTRUMENT: 2000  
DIL. FACTOR: 1

ND = not detected at detection limit

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Received: 02/03/93

TOXIKON CORP. REPORT  
Results by Sample

Work Order # 93-02-035

SAMPLE ID A FRACTION 03A TEST CODE 602M NAME PURGEABLE NEUMATICS 602  
Date & Time Collected 02/02/93 11:20:00 Category WATER

EPA 602 with MTBE

	RESULT	LIMIT
Benzene	<u>ND</u>	<u>1.0</u>
Toluene	<u>ND</u>	<u>1.0</u>
Ethylbenzene	<u>ND</u>	<u>1.0</u>
Xylenes (Total)	<u>ND</u>	<u>1.0</u>
Methyl-t-Butyl Ether	<u>ND</u>	<u>1.0</u>

Notes and Definitions for this Report:

UNITS: ug/L  
DATE RUN: 02/04/93  
ANALYST: AP  
INSTRUMENT: 2000  
DIL. FACTOR: 1

ND = not detected at detection limit

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Received: 02/03/93

TONKIN CORP. REPORT  
Results by Sample

Work Order # 93-02-035

SAMPLE ID B FRACTION D4A TEST CODE 602M NAME PURGEABLE AROMATICS 602  
Date & Time Collected 02/02/93 11:35:08 Category WATER

**EPA 602 with MTBE**

	RESULT	LIMIT
Benzene	<u>ND</u>	<u>1.0</u>
Toluene	<u>ND</u>	<u>1.0</u>
Ethylbenzene	<u>ND</u>	<u>1.0</u>
Xylenes (Total)	<u>ND</u>	<u>1.0</u>
Methyl-t-Butyl Ether	<u>ND</u>	<u>1.0</u>

Notes and Definitions for this Report:

UNITS: ug/L  
DATE RUN: 02/05/93  
ANALYST: AP  
INSTRUMENT: 2000  
DIL. FACTOR: 1

ND = not detected at detection limit

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Received: 02/03/93

TOXICON CORP. REPORT  
Results by Sample

Work Order # 93-02-035

SAMPLE ID C FRACTION 05A TEST CODE 602M NAME PURGEABLE AROMATICS 602  
Date & Time Collected 02/02/93 11:48:00 Category WATER

**EPA 602 with MTBE**

	RESULT	LIMIT
Benzene	<u>ND</u>	<u>1.0</u>
Toluene	<u>ND</u>	<u>1.0</u>
Ethylbenzene	<u>ND</u>	<u>1.0</u>
Xylenes (Total)	<u>ND</u>	<u>1.0</u>
Methyl-t-Butyl Ether	<u>ND</u>	<u>1.0</u>

Notes and Definitions for this Report:

UNITS: ug/L  
DATE RLV: 02/04/93  
ANALYST: AP  
INSTRUMENT: 2000  
DIL. FACTOR: 1

ND = not detected at detection limit

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Received: 02/03/93

TONKIN CORP. REPORT  
Results by Sample

Work Order # 93-02-035

SAMPLE ID D FRACTION 06A TEST CODE 6021 NAME PURGEABLE AROMATICS 602  
Date & Time Collected 01/28/93 12:00:00 Category WATER

**EPA 602 with MTBE**

	RESULT	LIMIT
Benzene	<u>ND</u>	<u>1.0</u>
Toluene	<u>ND</u>	<u>1.0</u>
Ethylbenzene	<u>ND</u>	<u>1.0</u>
Xylenes (Total)	<u>ND</u>	<u>1.0</u>
Methyl-t-Butyl Ether	<u>ND</u>	<u>1.0</u>

Notes and Definitions for this Report:

UNITS: ug/L  
DATE RUN: 02/04/93  
ANALYST: AP  
INSTRUMENT: 2000  
DIL. FACTOR: 1

ND = not detected at detection limit



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TOXIKON CORP.

REPORT

Work Order # 93-02-035

Received: 02/03/93

Test Methodology

TEST CODE 602H NAME PURGEABLE AROMATICS 602

EPA Method 602: Volatile Aromatic Compounds

Reference: Methods for Organic Chemical Analysis of Municipal and  
Industrial Wastewater. Appendix A. 40CFR Part 136.  
Federal Register Vol. 49, No. 209, 1984.



225 Wildwood Ave., Woburn, MA 01801  
Telephone: (617) 933-6903  
Fax: (617) 933-9198

## CHAIN OF CUSTODY RECORD

WORK ORDER #: 15-03-031

DUE DATE: 7-1-93

COMPANY: Under of Florida  
ADDRESS: 20415 Suncourt Dr.  
Mt. Dora FL 32757  
PHONE #: (888) 735-1800 FAX #: ( )  
P.O. #:                       
CLIENT CONTACT: debra white  
PROJECT ID/LOCATION: ET 10 29 9238 US 17-92  
Debra FL

SAMPLE TYPE  
1. WATER  
2. SOIL  
3. SLUDGE  
4. OIL  
5. TISSUE  
OTHER

CONTAINER TYPE  
P-PLASTIC  
G-GLASS  
V-VOA

ANALYSES

TOXIKON #	SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER		SAMPLING		PRESERVATIVE	ANALYSES												COMMENTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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1	Trip Blank	Water	496	VOA	1	2-2-93	6:15A	HCL	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

SPECIAL INSTRUCTIONS:

☐ RUSH, ..... DAY TURN AROUND  
☒ ROUTINE

RELINQUISHED BY: <u>[Signature]</u>	DATE: 2-2-93	RECEIVED BY: <u>Hydra Coole</u>	DATE: 2-2-93
RELINQUISHED BY:	TIME: 12:55 - P	RECEIVED BY:	TIME: 12:55 - P
RELINQUISHED BY:	DATE:	RECEIVED FOR LAB BY:	DATE:
RELINQUISHED BY:	TIME:		TIME:
METHOD OF SHIPMENT:			

**APPENDIX B**  
**MONITORING WELL GAUGING DATA**

# MONITOR WELL GAUGE REPORT

FOR: Cumberland Farms #1075  
 LOCATION: 9738 U.S. 17-92, Debary, FL  
 JOB NUMBER: 106377

LPH = Liquid Phase Hydrocarbons (gallons)

DATE	WELL #	CASING ELEV. (FEET)	LPH DEPTH (FEET)	WATER DEPTH (FEET)	LPH THICK. (FEET)	LPH ELEV. (FEET)	WATER ELEV. (FEET)
02-02-93	A			3.03	0.00	0.00	0.00
	B			2.27	0.00	0.00	0.00
	C			2.67	0.00	0.00	0.00
	D			3.26	0.00	0.00	0.00

Amount of LPH recovered this visit:

0.00 gallons

Total LPH accumulated to date:

0.00 gallons

# MONITOR WELL GAUGE REPORT

FOR: Cumberland Farms #1075  
LOCATION: 9738 U.S. 17-92, Debary, FL  
JOB NUMBER: 106377

LPH = Liquid Phase Hydrocarbons (gallons)

DATE	WELL #	CASING ELEV. (FEET)	LPH DEPTH (FEET)	WATER DEPTH (FEET)		LPH THICK. (FEET)	LPH ELEV. (FEET)		WATER ELEV. (FEET)
06-20-93	MW-1	10.00		5.25	*	0.00	0.00	*	4.75
	MW-2	9.00		4.46	*	0.00	0.00	*	4.54
	MW-3	10.22		5.36	*	0.00	0.00	*	4.86

Amount of LPH recovered this visit:

0.00 gallons

Total LPH accumulated to date:

0.00 gallons

649803355

**ALTERNATIVE PROCEDURE  
REMEDIAL ACTION REPORT**

**560 South U.S. Highway 17/92 &  
Barwick Road  
DeBary, Volusia County, Florida  
WRS Project No. 200112**

*Submitted to:*  
**State of Florida  
Department of Transportation  
719 South Woodland Boulevard  
DeLand, Florida 32720**

*Submitted by:*  
**WRS Infrastructure & Environment, Inc.  
221 Hobbs Street, Suite 108  
Tampa, Florida 33619  
Telephone: (813) 684-4400  
Facsimile: (813) 684-9177**

November 2000





**WRS**  
*Infrastructure & Environment, Inc.*

Corporate Office:  
221 Hobbs Street, Suite 108  
Tampa, Florida 33619  
(813) 684-4400  
Fax: (813) 684-9177

November 17, 2000

Mr. S. Randy Stafford  
Hazardous Materials Coordinator  
District Environmental Management Office  
Florida Department of Transportation – District 5  
719 South Woodland Boulevard  
DeLand, Florida 32720-6834

**Reference: Construction and Remediation Services**  
**Contract No. :BB-695**  
**FM No. :240793-1-52-02**  
**State Project No. :79040-3544**  
**County :Volusia**

**Subject: Alternative Procedure Remedial Action Report (APRAR)**  
**Construction Support Services**  
**DeBary Tank No. 1**  
**560 South US Highway 17/92**  
**DeBary, Florida**  
**WRS Project No. 200112**

Dear Mr. Stafford:

At the request of the Florida Department of Transportation (FDOT), WRS Infrastructure and Environment, Inc. (WRS) has prepared this Alternative Procedure Remedial Action Report pursuant to the scope of the above referenced contract.

### **Introduction**

The FDOT is in the process of installing a force main near the intersection of South US Highway 17/92 and Barwick Road in DeBary, Florida. A regulated steel underground storage tank (UST) of approximately 600 gallons containing petroleum product was encountered along the FDOT right-of-way during current construction activities. A site map showing the location of the subject area is depicted as **Figure 1**.

The Volusia County Environmental Management Department (VCEMD) requested that cleanup activities take place at the location prior to the continuation of construction activities.

Mr. Ron Freeman, VCEMD Tanks Section, indicated during telephone conversations that conducting an Alternative Procedure Remedial Action by well over pumping or dewatering, as needed, would be allowed based on the current and future land use at the site. UST removal activities took place from May 16 through May 25, 2000. On June 12, 2000, WRS submitted a Limited Tank Closure Report to the FDOT detailing the tank closure activities. Laboratory analytical results indicated that levels of benzene, toluene, total xylenes, naphthalene and benzo (b) fluoranthene were present in the groundwater samples obtained from temporary monitor wells TMW-001 and TMW-002. These constituents exceeded the groundwater cleanup target levels (GCTLs) as set forth in Chapter 62-777, Florida Administrative Code (FAC). The laboratory analytical results from the Limited Tank Closure Report are summarized in **Table 1** and attached as **Appendix A**.

### **Soil Methodology and Results**

WRS performed hand-augered soil borings to delineate potentially-contaminated soils above the groundwater table that were not completely removed during the tank removal procedures. These soil borings were conducted during the installation of four temporary monitor wells. Soils were horizontally and vertically delineated based on results from headspace analysis utilizing an organic vapor analyzer (OVA). The soil samples were collected by filling two 16-ounce mason jars halfway and then covering them with aluminum foil. The organic vapor readings were recorded by using an inline non-filtered and filtered probe. The filtered readings were subtracted from the unfiltered readings for net results of hydrocarbons in parts per million (ppm). WRS delineated soils to below 50 ppm and installed four temporary monitor wells within selected soil borings.

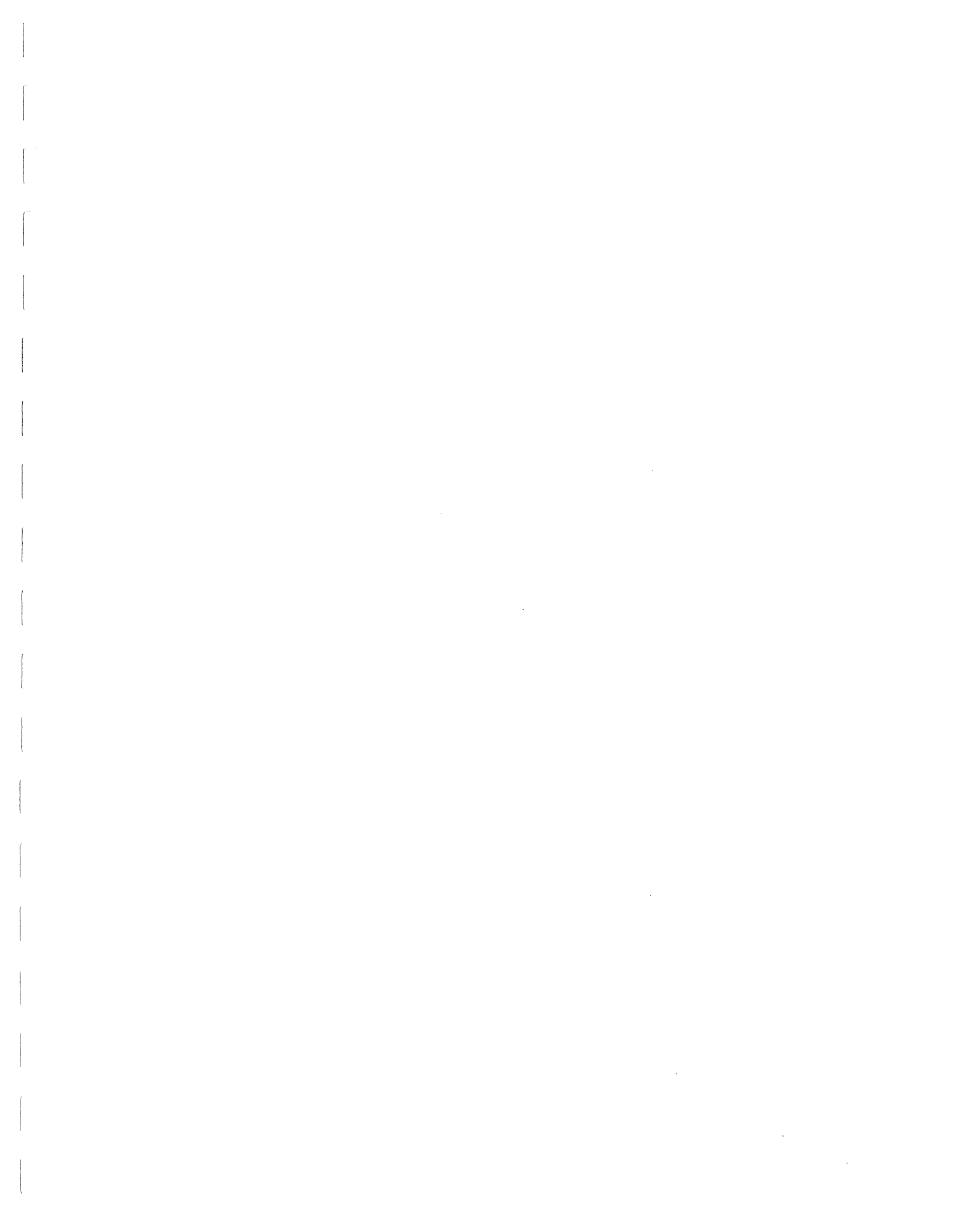
### **Groundwater Remediation**

On July 12, 2000, WRS mobilized to the site to conduct initial site activities. WRS contracted with Mid States Dewatering of Sebring, Florida for the installation of twenty (20) 2-inch diameter PVC well points and associated piping. The dewatering points were set to a depth of 15 feet below land surface (bls) along the eastern perimeter of the treatment area bordering Highway 17/92. The well points along the western perimeter of the treatment area were set to a depth of 7 feet bls, above a confining clay layer, discovered during soil boring installations within this western portion of the site. The well points were placed in a grid pattern with 8-foot centers as illustrated on **Figure 2**.

On July 16, 2000, groundwater treatment activities began as influent groundwater was recovered from the dewatering well point system utilizing a 2-inch centrifugal pump and transferred into a 2,500-gallon holding tank. An air sparge system was designed by WRS for the holding pool to aid in the reduction of petroleum hydrocarbons. Recovered groundwater within the holding tank was discharged through a 9,000-pound and a 6,000-pound granular activated carbon (GAC) cell, coupled in series. The effluent from the carbon cells was discharged into a stormwater catch basin to the west of the treatment system. The groundwater treatment system was set up to allow the fluctuation of the water table to capture petroleum contamination trapped within the soils of the capillary fringe zone.







Mr. Ron Freeman, VCEMD Tanks Section, indicated during telephone conversations that conducting an Alternative Procedure Remedial Action by well over pumping or dewatering, as needed, would be allowed based on the current and future land use at the site. UST removal activities took place from May 16 through May 25, 2000. On June 12, 2000, WRS submitted a Limited Tank Closure Report to the FDOT detailing the tank closure activities. Laboratory analytical results indicated that levels of benzene, toluene, total xylenes, naphthalene and benzo (b) fluoranthene were present in the groundwater samples obtained from temporary monitor wells TMW-001 and TMW-002. These constituents exceeded the groundwater cleanup target levels (GCTLs) as set forth in Chapter 62-777, Florida Administrative Code (FAC). The laboratory analytical results from the Limited Tank Closure Report are summarized in **Table 1** and attached as **Appendix A**.

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### **Groundwater Remediation**

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On July 16, 2000, groundwater treatment activities began as influent groundwater was recovered from the dewatering well point system utilizing a 2-inch centrifugal pump and transferred into a 2,500-gallon holding tank. An air sparge system was designed by WRS for the holding pool to aid in the reduction of petroleum hydrocarbons. Recovered groundwater within the holding tank was discharged through a 9,000-pound and a 6,000-pound granular activated carbon (GAC) cell, coupled in series. The effluent from the carbon cells was discharged into a stormwater catch basin to the west of the treatment system. The groundwater treatment system was set up to allow the fluctuation of the water table to capture petroleum contamination trapped within the soils of the capillary fringe zone.



On July 26, 2000, WRS installed four temporary monitor wells (TMW-004 through TMW-007) to evaluate groundwater quality at the conclusion of remediation operations. The temporary monitor wells were installed with a stainless-steel hand auger to advance soil borings for the completion of temporary monitor wells to the desired depth. The wells ranged in depth from approximately 6 to 7 ft bls. Groundwater depths ranged from 4.5 to 5.85 ft bls. **Table 2** provides well completion and groundwater elevation data.

### Groundwater Analysis

In order to evaluate the efficiency of the groundwater treatment system, influent and effluent samples were collected beginning July 16, 2000. Influent samples were collected from the intake port of the carbon cells and effluent samples were collected from the discharge port of the carbon cells. The groundwater samples were analyzed for volatile organic aromatics (VOA) and volatile organic halocarbons (VOH) by EPA Method 8021, EPA Method 8100 for polynuclear aromatic hydrocarbons (PAHs) and Florida petroleum range organics (FL-PRO) by the FDEP-UST method.

Laboratory analytical results were compiled by Southern Research Laboratories, Inc. (SRL) of Orlando, Florida under FDEP-approved CompQAP Number 940079. Influent samples collected from the treatment system revealed levels of petroleum contamination above GCTLs per Chapter 62-777, F.A.C. Results from two influent sampling events revealed constituents of toluene at 25 micrograms per liter ( $\mu\text{g/l}$ ) on July 17, 2000 and benzo (k) anthracene at 1.2  $\mu\text{g/l}$  on July 20, 2000. The respective GCTLs for toluene and benzo (k) anthracene are 20  $\mu\text{g/l}$  and 0.5  $\mu\text{g/l}$ . Groundwater petroleum constituents from the influent analytical results beyond July 20, 2000 have been below their respective GCTLs.

Temporary monitor wells TMW-4 through TMW-7 were sampled on July 26, 2000. Laboratory analysis of groundwater samples collected from the four monitor wells indicated that petroleum constituents were below detectable limits (BDL), except for TMW-6. Laboratory analytical results from TMW-6 indicated that benzo (k) fluoranthene was detected at 1.2  $\mu\text{g/l}$ , which exceeds its GCTL of 0.5  $\mu\text{g/l}$ . However, levels of benzo (k) fluoranthene detected at TMW-6 were below Natural Attenuation Default Source Concentrations (NADSC). A summary of the groundwater treatment system and monitor well groundwater analytical results are presented in **Table 3** and a copy of the laboratory analytical reports and associated chain-of-custody forms are included in **Appendix A**.

### Conclusions and Recommendations

WRS completed soil and groundwater assessment and remediation activities at the referenced subject site. These remedial activities were based on the findings from the UST removal activities in May 2000. Soil samples were collected at the locations of the installed temporary monitor wells. Soil samples from each boring were collected to the depth of groundwater.

On July 16, 2000, groundwater remediation was initiated to remove petroleum-impacted groundwater from the work area. A total of approximately 90,000 gallons of petroleum



impacted groundwater was treated and discharged. Based on laboratory analytical results, WRS concludes that the groundwater treatment system effectively reduced the levels of petroleum contamination to below GCTLs allowing for FDOT project expansion to continue. WRS recommends no further groundwater remediation at this location.

On July 26, 2000, temporary monitor wells TMW-4 through TMW-7 were sampled to evaluate groundwater quality following remedial activities. Laboratory analytical results from TMW-6 exceeded GCTLs for benzo (k) fluoranthene; however, these levels were below the NADSC for this constituent. Therefore, WRS recommends no further action in the area of TMW-6 and proposes that natural attenuation processes will lower levels of benzo (k) fluoranthene at this location to below GCTLs.

WRS appreciates the opportunity to provide this work for the Department. If you have any questions or require additional information, please contact me at (813) 684-4400.

Sincerely,

WRS INFRASTRUCTURE & ENVIRONMENT, INC.

*Robert A. Fingert, P.E.*

FOR: Gary Winter, CHMM  
Contract Manager

11-17-2000

cc: Ms. Emma Jean Edmondson, Environmental Specialist,  
Volusia County Environmental Management Department

## ATTACHMENTS

### Tables

- 1 Summary of Groundwater Analytical Results
- 2 Temporary Monitor Well Completion and Groundwater Level Data
- 3 Summary of Groundwater Treatment System and Monitor Well Groundwater Analytical Results

### Figures

- 1 Site Vicinity Map
- 2 Site Map

### Appendix

- A Laboratory Analytical Reports and Associated Chain-of-Custody Forms



## **TABLES**

TABLE 1

Summary of Groundwater Analytical Results  
DeBary UST Removal, May 2000

Well No.	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	2-Methyl Naphth.	1-Methyl Naph.	Benzo (b)Fluoranthene
GCIL		1	40	30	20	20	20	20	0.2
NADSC		100	400	300	200	200	200	200	20
TMW001		118	91	27	137	25	16	5.7	ND
TMW002	5/17/00	ND	ND	ND	ND	ND	ND	ND	0.4
TMW003		ND	ND	ND	ND	ND	ND	ND	ND

Notes

GCIL = Groundwater Cleanup Target Level as per Chapter 62-777, F.A.C.

NADSC - Natural Attenuation Default Source Concentration as per Chapter 62-770, F.A.C.

ND = Not Detected

1-Methyl Naph. = 1-Methylnaphthalene

2-Methyl Naph. = 2-Methylnaphthalene

All data recorded in micrograms per liter

**Bolded and shaded values exceed GCTLs**

TABLE 2

## Temporary Monitor Well Completion and Groundwater Level Data

Location ID	Well Diameter	Total Depth (ft bls)	Depth to Groundwater (ft bls)	Screened Interval (ft bls)	Depth to Groundwater (ft btoc)	Water-Level Measurement Date
TMW-004	2-inch	8.5	5.76	3-8	7.76	7/26/00
TMW-005	2-inch	7.3	5.01	1.8-6.8	8.21	7/26/00
TMW-006	2-inch	6.3	4.50	0.8-5.8	8.70	7/26/00
TMW-007	2-inch	8.1	5.85	2.6-7.6	8.25	7/26/00

## Notes:

ft bls = feet below land surface

ft btoc = feet below top of casing

TABLE 3

## Summary of Groundwater Treatment System and Monitor Well Groundwater Analytical Results

Sample No.	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Benzo (k) Fluoranthene
GCIL		1	40	30	20	20	0.5
NADSC		100	400	300	200	200	50
Effluent	7/16/00	ND	ND	ND	ND	ND	ND
Effluent	7/17/00	ND	ND	ND	ND	ND	ND
Effluent	7/19/00	ND	ND	ND	ND	ND	ND
Effluent	7/20/00	ND	ND	ND	ND	ND	ND
Effluent	7/21/00	ND	ND	ND	ND	ND	ND
Effluent	7/22/00	ND	ND	ND	ND	ND	ND
Effluent	7/23/00	ND	ND	ND	ND	ND	ND
Effluent	7/24/00	ND	ND	ND	ND	ND	ND
Effluent	7/25/00	ND	ND	ND	ND	ND	ND
Influent	7/18/00	ND	4	5	25	ND	ND
Influent	7/20/00	ND	1	2	10	ND	1.2
Influent	7/24/00	ND	3	2	15	ND	ND
Effluent Cell #1	7/18/00	ND	ND	ND	ND	ND	ND
Effluent Cell #1	7/24/00	ND	ND	ND	ND	ND	ND
TMW-4DB1	7/26/00	ND	ND	ND	ND	ND	ND
TMW-5DB1	7/26/00	ND	ND	ND	ND	ND	ND
TMW-6DB1	7/26/00	ND	ND	ND	ND	ND	ND
TMW-7DB1	7/26/00	ND	ND	ND	ND	ND	1.2
						ND	ND

## Notes:

GCIL = Groundwater Cleanup Target Level as per Chapter 62-777, F.A.C.

NADSC - Natural Attenuation Default Source Concentration as per Chapter 62-777 F.A.C.

ND = Not Detected

TMW-Temporary Monitor Well

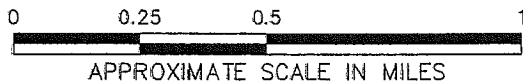
**Bolded and shaded values exceed GCILs**

All values recorded in micrograms per liter

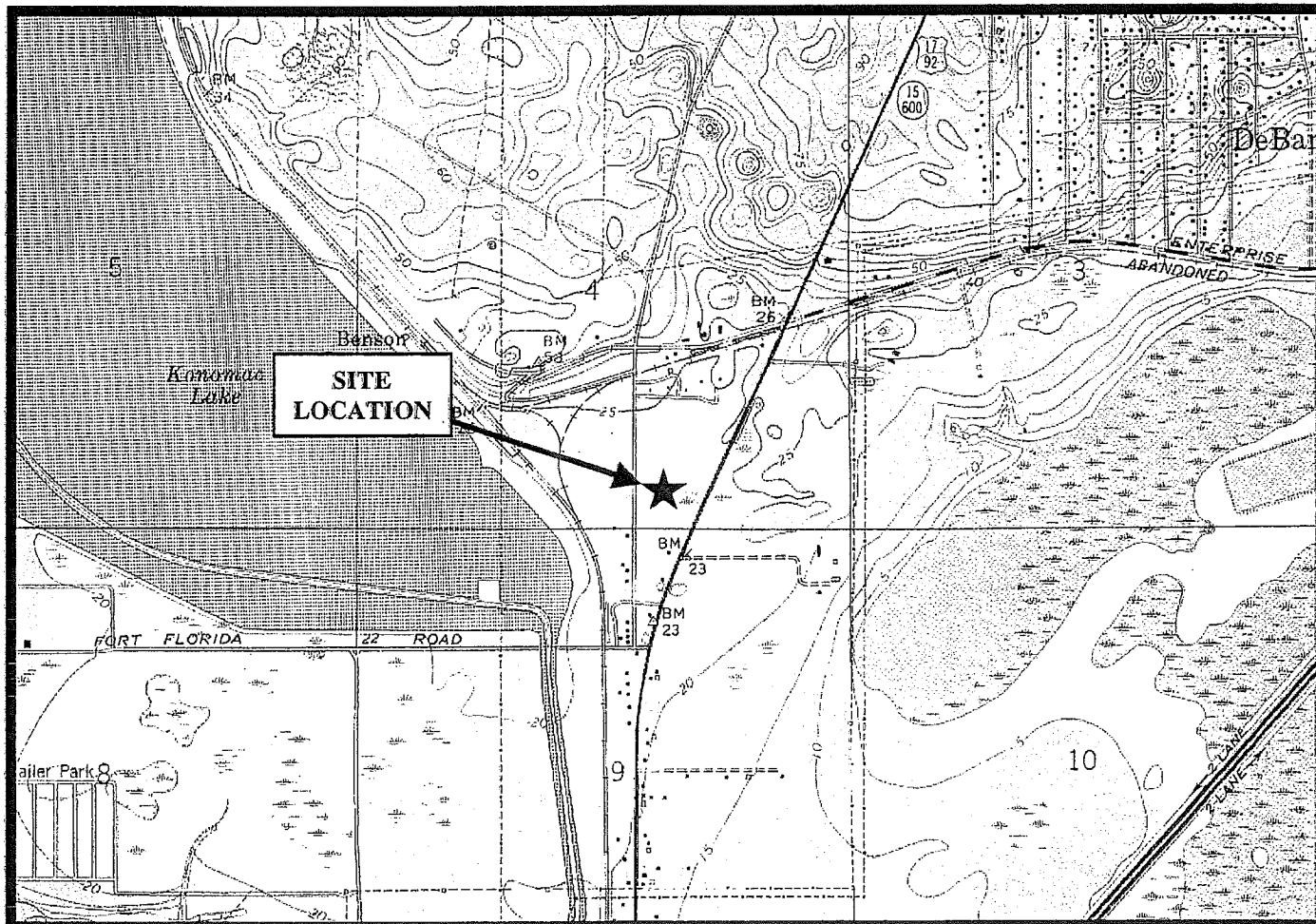
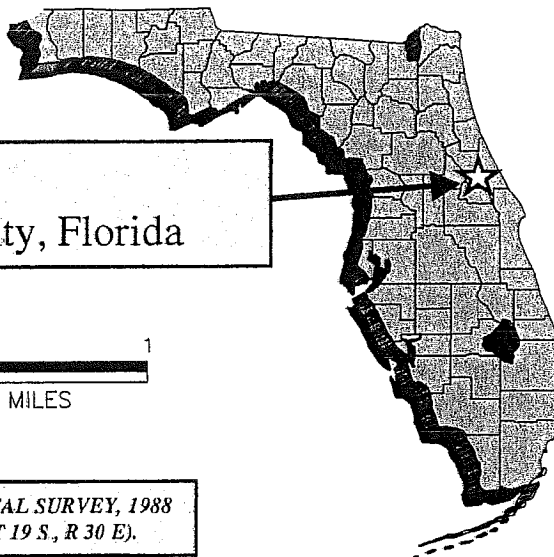
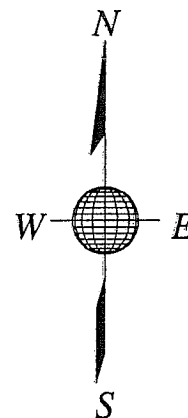


## **FIGURES**

Site Location:  
DeBary, Volusia County, Florida



SOURCE: UNITED STATES GEOLOGICAL SURVEY, 1988  
SANFORD QUADRANGLE ( SEC 4, T 19 S, R 30 E).



DRAWING STATUS: ☐ DRAFT ☒ FINAL

PROJECT NO.: 200112

PROJECT MANAGER: GARY WINTER

SCALE: AS SHOWN

CADD ID: 20011205.PPT

PLOT DATE: 10/18/00

CHK BY: G.W.

CHK DATE: 10/18/00

REVISION NO.:

REV DATE:

DRN BY: J.S.R.

DRN DATE: 5/25/00

APPVD BY: G.W.

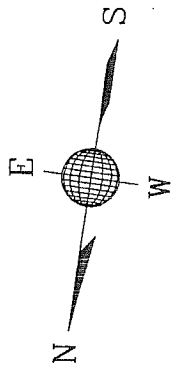
APPVD DATE: 10/18/00



**WRS Infrastructure &  
Environment, Inc.**

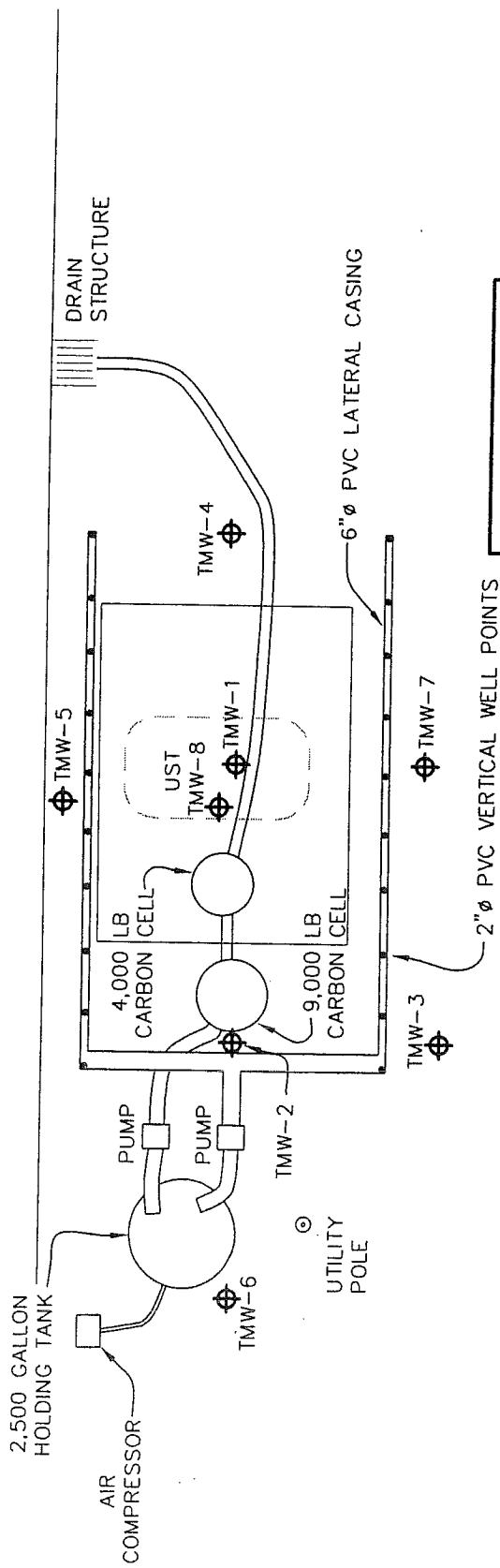
221 HOBBS STREET, SUITE 108, TAMPA, FLORIDA 33619  
PH: (813) 684-4400 FAX: (813) 684-9177

**FIGURE 1  
SITE VICINITY MAP  
DEBARY TANK NUMBER 1 APRAR  
560 US HIGHWAY 17/92  
DEBARY, VOLUSIA COUNTY, FLORIDA**



US HIGHWAY 17/92

NOT TO SCALE



### LEGEND:

DRAINAGE STRUCTURE

2"Ø PVC VERTICAL WELL POINTS WITH  
6"Ø PVC LATERAL CASING

TEMPORARY MONITOR WELL LOCATION (TMW)

DRAWING STATUS	DRAFT	FINAL
PROJECT NO. : 200112		
SCALE: NOT TO SCALE		
REVISION NO.: 0	REV DATE:	
CADD ID: 200112-010	PLOT DATE:	11/16/00
DRN BY: J.S.R.	DRN DATE:	5/25/00
CHK BY: G.W.	CHK DATE:	11/16/00
APPVD BY: G.W.	APPVD DATE:	11/16/00



**WRS Infrastructure &  
Environment, Inc.**

221 HOBBS STREET, SUITE 108, TAMPA, FLORIDA 33619  
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**FIGURE 2  
SITE MAP**

**DEBARY TANK NUMBER 1 APRAR  
560 US HIGHWAY 17/92  
DEBARY, VOLUSIA COUNTY, FLORIDA**

RESIDENCE  
560 HWY 17/92

**APPENDIX A**

**LABORATORY ANALYTICAL REPORTS AND  
ASSOCIATED CHAIN-OF-CUSTODY FORMS**