Map ID 21: One Stop

June 28, 2022

Ms. Jilian Drenning
Polk County – Florida Department of Health
1806 Hobbs Road
Auburndale, FL 33823
VIA EMAIL ONLY: Jilian.Drenning@flhealth.gov

RE: Year 1 Quarter 2 Post Active Remediation Monitoring Report
One Stop
2998 Hwy 17-92 W
Haines City, Polk County, Florida
FDEP Facility ID No.: 53 8623751
Purchase Order No.: B9DF87
AET Project No.: 25339.19 Task 4
Eligible Discharge Date: 10/15/1996 (PLRIP)
Priority Score: 60

Dear Ms. Drenning:

Advanced Environmental Technologies, LLC (AET) is pleased to provide our services to the Florida Department of Environmental Protection (FDEP) under the Petroleum Restoration Program and the Polk County Florida Department of Health. AET is submitting this Year 1 Quarter 2 Post Active Remediation Monitoring (PARM) Report under Task 4 of the FDEP purchase order (PO) referenced above. All activities were performed in accordance with Chapter 62-780, Florida Administrative Code (FAC). The following data is provided for this report:

Figure 1	Site Map
Figure 1	Groundwater Elevation & Flow Map – April 25, 2022
Figure 3	Groundwater Analytical Summary Map – April 25, 2022
Table 1	Groundwater Elevation Summary
Table 2A	Groundwater Monitoring Well Analytical Summary – VOCs and Metals
Table 2B	Groundwater Monitoring Well Analytical Summary – PAHs and TRPHs
Table 2C	Groundwater Monitoring Well Analytical Summary – Other Contaminants not listed in Chapter 62-770, FAC
Table 2D	Groundwater Monitoring Well Analytical Summary – NAM Parameters
Table 2E	Groundwater Monitoring Well Analytical Summary – UIC Parameters
Appendix A	Field Notes, Groundwater Sampling Logs and Field Equipment Calibration Forms
Appendix B	Groundwater Laboratory Analytical Report and Chain-of-Custody Record

SITE HISTORY

One Stop is located at 2998 Highway 17-92 West in Haines City, Polk County, Florida and currently operates as a gas station/convenience store. In 1977, two 8,000-gallon underground storage tanks (USTs) containing unleaded gasoline were installed on-site. These USTs were removed from the site in 2009 and replaced with one 12,000-gallon compartmented UST containing unleaded gasoline in generally the same location. A site map is presented as **Figure 1**.

On October 15, 1996, a discharge reporting form (DRF) was filed based on soil screening completed during a piping closure. On December 20 ,1996, the discharge was determined eligible for funding under the Petroleum Liability and Restoration Insurance Program (PLRIP). Under PLRIP, the funding cap for the 1996 discharge is $400,000.00. Including the current PO, the amount encumbered towards the cap to date totals $340,921.87.

The below **Table A** summarizes significant events that occurred throughout assessment and remediation of the subject facility and is not provided as a comprehensive list:

Table A

Date	Event
2003-2007	Between 2003 and 2007, site assessment was completed in two Template Site Assessment Reports (TSARs) and three Supplemental Site Assessment Reports (SSARs).
2008	In 2008, AET became the state assigned Agency Term Contractor (ATC) and recommended source removal.
2009	In March 2009, a total of 393.2 tons of petroleum impacted soil was removed from the UST area during tank upgrade activities. Excavation of the south and west walls was limited due to utilities where subsequent soil sampling determined that residual soil contamination was still present, albeit within the smear/saturated zone.
2009-2019	Groundwater monitoring was completed between 2009 and 2019.
January 2020	In January 2020, a Limited Scope Remedial Action Plan (LSRAP) was submitted, recommending injection of approximately 7,000-gallons of PetroFix to resolve the residual groundwater contamination.
September 2020	On September 1, 2020, a RAP Approval Order was issued.
November 2021	Baseline groundwater sampling was completed, prior to the injections.
December 2021	7,012 gallons of PetroFix was injected into 18 direct push technology (DPT) points.

SITE ASSESSMENT SUMMARY

The site contains silty to medium grained sand of varying colors, from approximately 0 to 30-feet (ft) below land surface (bls). Historical depth-to-water (DTW) measurements of the shallow zone have typically ranged from approximately 1 to 5 ft bls, averaging approximately 2.60 ft bls. Historically, groundwater flow measurements of the shallow zone have generally indicated a southern, southwest, to southeast trend. One deep well (DMW-8) was installed on-site (abandoned

in 2009), screened from 25 to 30 ft. There is no discernible confining layer between the shallow wells and deep well.

Based on the historical lithology and groundwater assessment activities, AET provides the following designations:

- Vadose Zone – surface elevation to 1-ft bls
- Smear Zone – 1 to 5-ft bls
- Shallow Aquifer Zone – ≥ 5-ft bls

SITE CONTAMINATION SUMMARY

Based on a source removal completed in 2009, vadose soil contamination concerns remain near the south and west walls of that excavation. The approximate extent of the 2009 excavation is depicted in the attached figures.

Pursuant to historical and current groundwater laboratory analytical data, except for MW-9R and CW-4R, concentrations of all contaminants of concern (COCs) in all historic and current monitor wells have been below Groundwater Cleanup Target Levels (GCTLs) for a minimum of two consecutive sampling events where contamination was historically noted.

TASK 4 FIELD ACTIVITIES

Scope of Work

The scope of work associated with Task 4 of Purchase Order No. B9DF87 included the following:

- Water level gauging and the collection of groundwater samples from eight on-site monitor wells (CW-1RR, CW-2RR, CW-3RR, CW-4R, MW-1R, MW-2R, MW-9R, and MW-11R) for the following analyses:
    - Polycyclic Aromatic Hydrocarbons (PAHs) via EPA Method 8270
    - UIC parameters, analytes include:
        - Aluminum, Arsenic, Chromium, Lead, Sodium, and Nickel via EPA Method 6010 or 6020
        - Ammonia (NH_3) via EPA Method 350.1
        - Sulfate (SO_4) via EPA Method 300.0
        - Nitrate and nitrite (NO_2, NO_3) via EPA Method 353.2
        - Total dissolved solids (TDS) via SM18 2549 C
- Submittal of a Quarterly PARM Report no later than July 29, 2022.

It should be noted that MW-9R was observed to be missing/destroyed during previous field events and was not gauged or sampled in line with the scope of work. No Requests for Change (RFCs) have been submitted for the current purchase order to-date.

Groundwater Elevation and Flow Direction

On April 25, 2022, AET personnel mobilized to the site to collect water level measurements from on-site monitor wells CW-1RR, CW-2RR, CW-3RR, CW-4R, MW-1R, MW-2R, and MW-11R. DTW ranged from 2.00-feet in monitor well CW-4R to 2.73-feet in MW-11R. As observed during the April 25, 2022 water level gauging event, groundwater flow direction appears to be to the south/southwest. This is generally consistent with historical groundwater flow.

Groundwater elevation data and groundwater flow data collected during the April 25, 2022 water level gauging event are summarized in **Table 1** and depicted on **Figure 2**, respectively. Field notes are included in **Appendix A**.

Groundwater Sampling

On April 25, 2022, following the completion of water level gauging activities, AET personnel collected groundwater analytical samples from on-site monitor wells CW-1RR, CW-2RR, CW-3RR, CW-4R, MW-1R, MW-2R, and MW-11R. The purge water was discharged to an impermeable surface for on-site evaporation.

All groundwater samples were analyzed for PAHs via EPA Method 8270, various metals (Aluminum, Arsenic, Chromium, Lead, Sodium, and Nickel) via EPA Method 6010 or 6020, ammonia via EPA Method 350.1, sulfate via EPA Method 300.0, nitrate and nitrite via EPA Method 353.2, and TDS via SM18 2549 C.

All well purging and groundwater sampling activities were performed in accordance with FDEP's SOP and Guidance Memos, and FS 2200. The groundwater samples were placed in laboratory-provided sample containers, labeled, packed on ice in a cooler and transported under chain-of-custody to Environmental Testing Laboratories, Inc. (ETL), a State of Florida NELAC-certified laboratory, in Thomasville, Georgia.

Groundwater laboratory analytical results collected during the April 25, 2022 sampling event indicated concentrations of naphthalene (18 ug/L), 1-methylnaphthalene (41 ug/L), 2-methylnapthalene (65 ug/L), and benzo(b)fluoranthene (0.18 U ug/L) above their respective GCTLs in on-site monitor well CW-4R. In all other monitor wells sampled, however, all petroleum constituents of concern (i.e., PAHs), were below their respective GCTLs.

Additionally, when compared against the baseline UIC data collected in October 2021, the following laboratory method detection limits and/or concentrations of the following UIC constituents exceeded the higher of either the average baseline concentration or their respective GCTLs:

- Aluminum: CW-2RR, CW-4R
- Ammonia: CW-4R, MW-1R
- Fluoride: CW-4R
- TDS: CW-4R

Historic and current laboratory results are summarized on **Tables 2A** through **2E** and current PAH laboratory analytical results are illustrated on **Figure 3**. Field notes, groundwater sampling and field equipment calibration logs are presented in **Appendix A**. A copy of the groundwater laboratory analytical report and chain-of-custody record for this event is provided in **Appendix B**.

QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance and quality control (QA/QC) programs assure the reliability and accuracy of monitoring and measurement data. In preparing this report, AET relied on information provided in the reference documents and assumes that adequate quality control measures were followed with regard to chain-of-custody, laboratory procedures, and data reporting. Validity of the analysis and conclusions drawn for this report are determined by the availability and reliability of referenced information.

Based on review of the DEP field sampling logs, QA/QC measurements appeared consistent with data normally taken with environmental sampling and analysis. Detailed sample collection and preservation procedures, as well as laboratory QA/QC data for analyses, were included in the report for the collected samples. The laboratory analytical results of method blanks, surrogate recovery results, and acceptable limits were included in the reports. Upon review of the laboratory analytical reports, seven of the groundwater samples indicated a reported value between the laboratory method detection limit and the laboratory practical quantitation limit (i.e. results flagged with an "I" value). The data appears valid and within SOP protocol. None of the analyzed contaminant parameters were found in the method blank (i.e. results flagged with a "V" value).

If the method blank indicated detection, AET would utilize the ten times rule as far as validating the data as being usable or not. The ten times rule is based on the EPA guidance document for organic data review. If after applying the rules, the results did not meet the GCTL limits, then the sample would be re-analyzed and or re-sampled (excluding those low level PAHs whose GCTLs cannot be achieved).

All monitoring well purging, groundwater sampling and/or soil sampling activities were performed in accordance with the FDEP's SOP and Guidance Memos, and Chapter 62-160, F.A.C.

CONCLUSIONS

- On April 25, 2022, the DTW ranged from 2.00-feet in monitor well CW-4R to 2.73-feet in MW-11R.
    - Groundwater flow direction appeared to be to the south/southwest. This is generally consistent with historical groundwater flow.
- On April 25, 2022, following the completion of water level gauging activities, AET personnel collected groundwater samples from on-site monitor wells CW-1RR, CW-2RR, CW-3RR, CW-4R, MW-1R, MW-2R, and MW-11R to be analyzed for PAHs and UIC parameters.
    - Groundwater laboratory analytical results indicated concentrations of naphthalene (18 ug/L), 1-methylnaphthalene (41 ug/L), 2-methylnapthalene (65 ug/L), and benzo(b)fluoranthene (0.18 U ug/L) above their respective GCTLs in CW-4R. In all

other monitor wells sampled, however, all petroleum constituents of concern (i.e., PAHs), were below their respective GCTLs.

RECOMMENDATIONS

Submittal of the Task 4 Year 1, Quarter 2 PARM Report concludes Purchase Order# B9DF87. AET recommends continued implementation of the quarterly PARM sampling plan defined in the Limited Scope Remedial Action Plan approved September 1, 2020.

If you should have any questions concerning this proposal, please contact Jessica Batres at (800) 989-8298 ext. 1044, or at jbatres@aetllc.com. Please copy aet-deliverables@aetllc.com on any deliverable review letters. AET looks forward to continuing to work with you on this project.

Sincerely,
Advanced Environmental Technologies, LLC.

Jessica Batres
Project Manager

Ashley Lyttle
Senior Project Manager

FIGURES

LEGEND

APPROXIMATE PROPERTY BOUNDARY
FENCE
UNDERGROUND UTILITIES
OVERHEAD UTILITIES
UTILITY POLE
MONITORING WELL LOCATION
ABANDONED/DESTROYED MONITORING WELL

RESIDENTIAL PROPERTY

PRIVATE WELL

GRASS

ONE STOP

MW-3

CANOPY

MW-4

CURRENT 20K UST

ASPHALT

UST

CW-2

CW-1R

CW-2R

CW-1

CW-1RR

CONCRETE

MW-6

MW-10R

CW-2RR

MW-10

2 FORMER USTS

ASPHALT

MW-5

DISPENSER

CANOPY

3/4

1/2

CW-4

CW-3

2009 EXCAVATION

CW-3R

MW-9

CW-3RR

DMW-8

CW-4R

GRASS

MW-7

MW-1R

MW-1

MW-9R

MW-2R

MW-2

GRASS

GRASS

MW-11

TPOC WELL (MW-11R)

US HIGHWAY 92 WEST

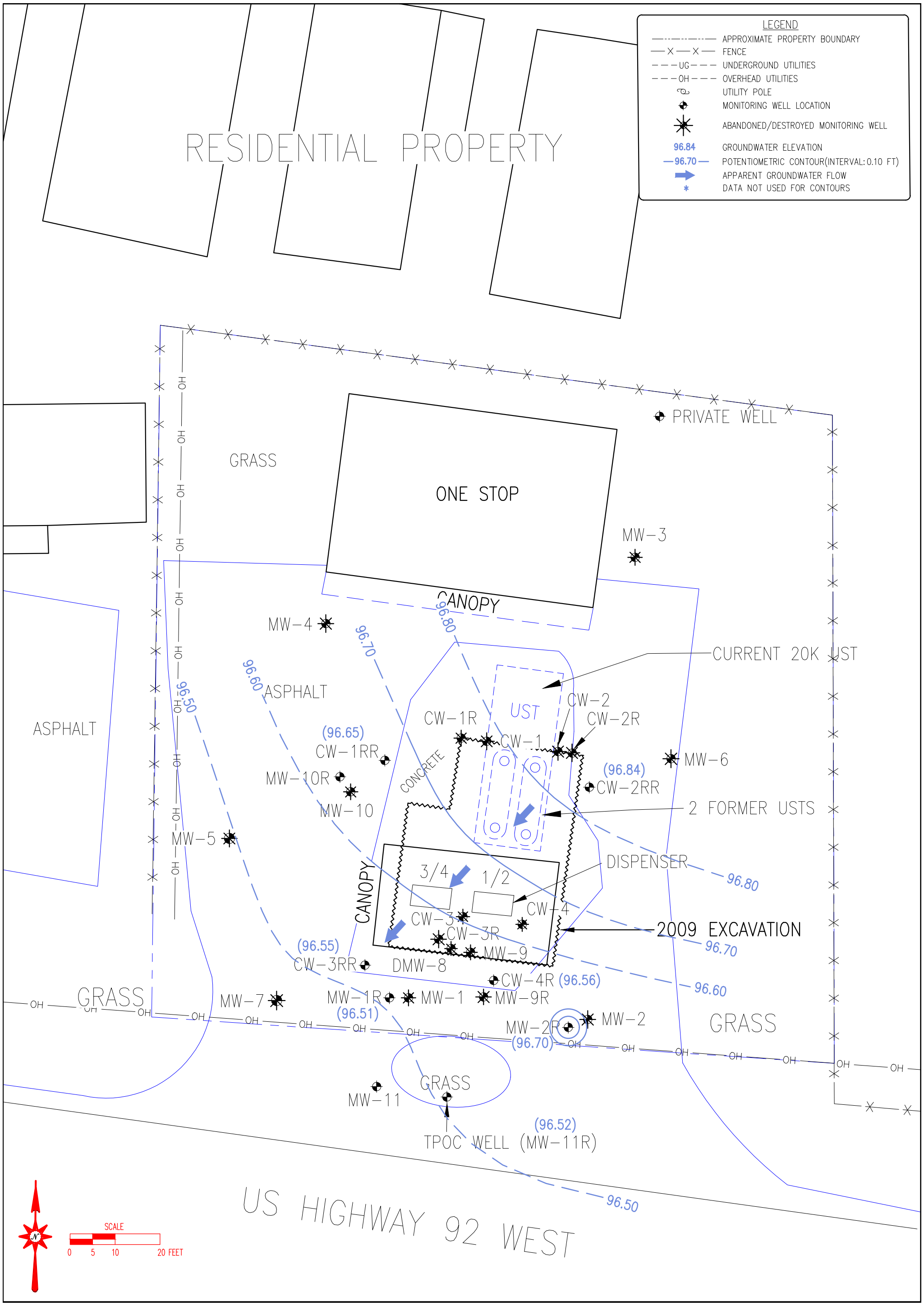
SCALE
0 5 10 20 FEET

Advanced Environmental TECHNOLOGIES, LLC

ONE STOP
2998 US HIGHWAY 92 WEST
HAINES CITY, POLK COUNTY, FLORIDA
FDEP FAC. ID #: 53 8623751

SITE MAP

FIGURE
1
PROJECT NO.
25339.18



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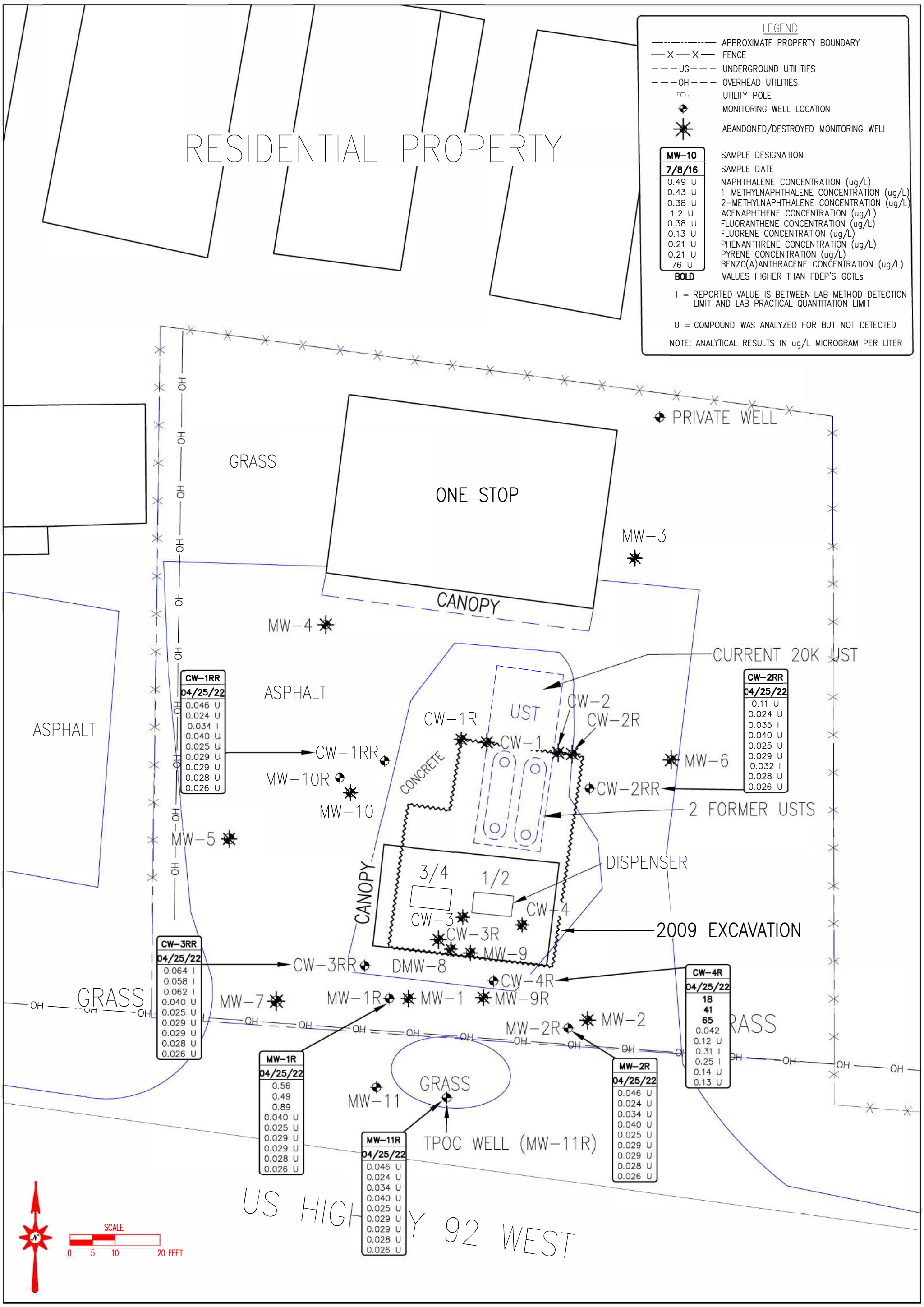
ONE STOP
2998 US HIGHWAY 92 WEST
HAINES CITY, POLK COUNTY, FLORIDA
FDEP FAC. ID #: 53 8623751

GROUNDWATER ELEVATION AND FLOW MAP – APRIL 25, 2022

FIGURE
2
PROJECT NO.
25339.18



Advanced Environmental TECHNOLOGIES, LLC

ONE STOP
2998 US HIGHWAY 92 WEST
HAINES CITY, POLK COUNTY, FLORIDA
FDEP FAC. ID #: 53 8623751

GROUNDWATER ANALYTICAL SUMMARY – APRIL 25, 2022

FIGURE 3

PROJECT NO. 25339.18

TABLES

TABLE 1: GROUNDWATER ELEVATION SUMMARY

Facility ID#: 53/8623751 **Facility Name: One Stop** **See notes at end of table.**

Well No.	CW-1		CW-2		CW-3		CW-4	
Diameter (in)	2		2		2		2	
Well Depth (ft)	7.63		7.61		7.21		7.52	
Screen Interval (ft)	unknown		unknown		unknown		unknown	
TOC Elevation (ft)	98.63		98.91		98.74		98.77	
DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
10/21/2002	96.16	2.47	96.20	2.71	96.13	2.61	96.16	2.61
11/15/2002	96.22	2.41	96.37	2.54	96.35	2.39	96.36	2.41
1/31/2003	96.47	2.16	96.69	2.22	96.59	2.15	96.66	2.11
5/12/2003	96.10	2.53	96.30	2.61	96.24	2.50	96.30	2.47
11/17/2003	96.06	2.57	96.27	2.64	96.21	2.53	96.26	2.51
	Destroyed		Destroyed		Destroyed		Destroyed	

Well No.	CW-1R		CW-2R		CW-3R	
Diameter (in)	2		2		2	
Well Depth (ft)	12.31		12.21		12.09	
Screen Interval (ft)	2 to 12		2 to 12		2 to 12	
TOC Elevation (ft)	98.59		98.86		98.71	
DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW
1/11/2005	96.40	2.19	96.43	2.43	96.36	2.35
8/3/2005	97.46	1.13	97.52	1.34	97.36	1.35
11/9/2005	97.02	1.57	97.06	1.80	96.99	1.72
4/10/2007	95.21	3.38	95.17	3.69	95.14	3.57
5/12/2009	Destroyed		Destroyed		Destroyed	

Well No.	MW-1		MW-2		MW-3		MW-4		MW-5	
Diameter (in)	2		2		2		2		2	
Well Depth (ft)	12		12		12		12		12	
Screen Interval (ft)	2 to 12		2 to 12		2 to 12		2 to 12		2 to 12	
TOC Elevation (ft)	98.45		98.79		98.53		98.94		98.64	
DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
1/31/2003	96.56	1.89	96.67	2.12	96.70	1.83	96.63	2.31	96.54	2.10
5/12/2003	96.26	2.19	96.30	2.49	96.31	2.22	96.26	2.68	96.23	2.41
11/17/2003	96.24	2.21	96.25	2.54	96.31	2.22	96.24	2.70	96.21	2.43
1/11/2005	96.34	2.11	96.39	2.40	96.48	2.05	96.40	2.54	96.35	2.29
8/3/2005	97.31	1.14	97.44	1.35	97.66	0.87	97.45	1.49	97.35	1.29
11/9/2005	97.00	1.45	97.11	1.68	97.11	1.42	97.03	1.91	96.96	1.68
4/10/2007	Not Measured		95.30	3.49	95.15	3.38	Not Measured		95.21	3.43
5/12/2009	Abandoned on 2/13/2009		93.80	4.99	94.06	4.47	94.05	4.89	93.97	4.67
3/15/2012			94.89	3.90	95.43	3.10	Not Measured		95.34	3.30
			Abandoned on 10/17/2013		Abandoned on 10/17/2013		Abandoned on 10/17/2013		Abandoned on 10/17/2013	

TABLE 1: GROUNDWATER ELEVATION SUMMARY

Facility ID#: 53/8623751 **Facility Name: One Stop** **See notes at end of table.**

Well No.	MW-6		MW-7		DMW-8		MW-9		MW-10	
Diameter (in)	2		2		2		2		2	
Well Depth (ft)	12		12		30		12		12	
Screen Interval (ft)	2 to 12		2 to 12		25 to 30		2 to 12		2 to 12	
TOC Elevation (ft)	99.00		98.86		98.80		98.76		98.85	
DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
1/31/2003	96.72	2.28	Not Installed		Not Installed		Not Installed		Not Installed	
5/12/2003	96.30	2.70	96.21	2.65	96.15	2.65				
11/17/2003	96.28	2.72	96.20	2.66	96.21	2.59	96.24	2.52	96.22	2.63
1/11/2005	96.39	2.61	96.34	2.52	96.29	2.51	96.38	2.38	96.42	2.43
8/3/2005	97.63	1.37	97.30	1.56	97.33	1.47	97.36	1.40	97.42	1.43
11/9/2005	97.12	1.88	96.95	1.91	96.98	1.82	97.01	1.75	97.00	1.85
4/10/2007	95.11	3.89	95.12	3.74	Not Measured		95.12	3.64	95.21	3.64
5/12/2009	93.88	5.12	94.37	4.49	Abandoned on 2/13/2009		Abandoned on 2/13/2009		Abandoned on 2/13/2009	
	Abandoned on 10/17/2013		Abandoned on 10/17/2013							

Well No.	CW-4R		MW-1R		MW-9R		MW-10R		MW-11	
Diameter (in)	2		2		2		2		1	
Well Depth (ft)	12.31		12		12		12		12	
Screen Interval (ft)	2 to 12		2 to 12		2 to 12		2 to 12		2 to 12	
TOC Elevation (ft)	98.56		98.64		98.62		98.72		99.45	
DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
1/11/2005	96.35	2.21	Not Installed		Not Installed		Not Installed		Not Installed	
8/3/2005	97.38	1.18								
11/9/2005	97.04	1.52								
4/10/2007	95.02	3.54								
5/12/2009	Not Measured		93.90	4.74	93.89	4.73	94.02	4.70	Not Measured	
11/24/2009			94.99	3.65	95.04	3.58	95.10	3.62		
2/16/2010			96.37	2.27	96.42	2.20	96.44	2.28		
5/4/2010			96.74	1.90	96.83	1.79	96.78	1.94		
8/31/2010			97.20	1.44	97.29	1.33	97.32	1.40		
11/30/2010			95.87	2.77	95.92	2.70	Not Measured		95.86	3.59
3/1/2011			96.07	2.57	96.10	2.52			96.03	3.42
6/8/2011			95.27	3.37	95.33	3.29			95.20	4.25
12/16/2011			95.92	2.72	95.97	2.65			Not Measured	
3/15/2012			95.26	3.38	95.28	3.34				
8/27/2012			97.55	1.09	97.86	0.76				
11/19/2012			96.02	2.62	96.01	2.61				
2/20/2013			95.86	2.78	95.73	2.89				
8/28/2013			96.19	2.45	96.26	2.36				
2/20/2014			96.54	2.10	96.57	2.05				
11/4/2014			96.57	2.07	96.60	2.02	96.55	2.17		
5/7/2015			96.50	2.14	96.46	2.16	96.54	2.18		
3/7/2016			96.38	2.26	96.41	2.21	96.42	2.30		
7/27/2016			96.14	2.50	96.21	2.41	96.17	2.55		
4/11/2017			Not Measured		95.02	3.60	95.11	3.61		

TABLE 1: GROUNDWATER ELEVATION SUMMARY

Facility ID#: 53/8623751 **Facility Name: One Stop** **See notes at end of table.**

Well No.	CW-4R (cont'd)		MW-1R (cont'd)		MW-9R (cont'd)		MW-10R (cont'd)		MW-11 (cont'd)	
11/13/2017	96.30	2.26	Not Measured		96.04	2.58	Not Measured		96.23	3.22
12/11/2017	96.17	2.39			Missing Plug				96.11	3.34
4/19/2018	95.59	2.97			95.58	3.04			Not Measured	
10/3/2018	96.54	2.02	96.51	2.13	96.52	2.10	96.56	2.16		
7/15/2019	96.48	2.08	96.52	2.12	Destroyed		96.64	2.08		
10/6/2021	95.71	2.85	95.69	2.95			Not Measured			
1/24/2022	95.88	2.68	95.87	2.77						
4/25/2022	96.56	2.00	96.51	2.13						

Well No.	MW-11R		CW-1RR		CW-2RR		CW-3RR		MW-2R	
Diameter (in)	1		2		2		2		2	
Well Depth (ft)	12		12		12		12		12	
Screen Interval (ft)	2 to 12		2 to 12		2 to 12		2 to 12		2 to 12	
TOC Elevation (ft)	99.25		98.83		98.93		98.73		98.97	
DATE	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**
12/16/2011	95.90	3.35	Not Installed		Not Installed		Not Installed		Not Installed	
3/15/2012	95.19	4.06								
4/19/2012	94.24	5.01								
8/27/2012	98.59	0.66								
11/19/2012	95.94	3.31								
2/20/2013	95.67	3.58								
8/28/2013	97.14	2.11								
2/20/2014	96.45	2.80								
11/4/2014	96.57	2.68								
5/7/2015	96.43	2.82								
3/7/2016	96.33	2.92								
7/27/2016	96.12	3.13								
4/11/2017	94.95	4.30								
8/22/2017	95.92	3.33	96.23	2.60	96.21	2.72	96.00	2.73	96.01	2.96
11/13/2017	Not Measured		96.37	2.46	96.54	2.39	96.27	2.46	96.40	2.57
12/11/2017			Not Measured		Not Measured		96.49	2.24	96.60	2.37
4/19/2018					95.81	3.12	Not Measured		Not Measured	
10/3/2018					96.79	2.14				
7/15/2019	96.45	2.80	96.63	2.20	96.43	2.50				
10/6/2021	95.70	3.55	95.77	3.06	95.95	2.98	95.70	3.03	95.80	3.17
1/24/2022	95.73	3.52	95.97	2.86	96.12	2.81	95.88	2.85	95.96	3.01
4/25/2022	96.52	2.73	96.65	2.18	96.84	2.09	96.55	2.18	96.70	2.27

Notes:

TOC = Top of casing

DTW = Depth to water

ELEV= Groundwater elevation (TOC elevation - DTW)

All measurements in feet

Recent Data

TABLE 2A: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals

Facility ID#: 53/8623751 Facility Name: One Stop

See notes at end of table.

Sample Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	1,2-Di-chloro-ethane (µg/L)	Total Lead*** (µg/L)
GCTLs		**1****	**40****	**30****	**20****	**20**	**0.02****	**3****	**15****
NADCs		**100**	**400**	**300**	**200**	**200**	**2**	**300**	**150**
CW-1	10/21/2002	**560**	11	**410**	**72**	**82**	NS	NS	NS
	11/17/2003	**270**	18	**386**	**29**	**217**	NS	NS	NS
		Destroyed							
CW-1R	1/11/2005	**320**	10 U	**97**	**30 U**	**94**	NS	NS	NS
	8/3/2005	**100**	3	**49**	9	20	NS	NS	NS
	11/9/2005	**110**	6	**75**	15 U	**69**	NS	NS	NS
	6/21/2006	**81**	2	14	5.6	8	NS	NS	NS
	4/11/2007	**321**	7.9	**52.4**	10.3	17.8	NS	NS	NS
		Destroyed							
CW-1RR	8/22/2017	0.73 I	0.43 U	1.1	1.2 U	0.38 U	NS	NS	NS
	11/13/2017	0.52 U	0.41 U	0.34 U	1.4 U	0.49 U	NS	NS	NS
CW-2	10/21/2002	**630**	16	**290**	**63**	**29**	NS	NS	NS
	11/17/2003	**197**	10	**177**	**30**	1 U	NS	NS	NS
		Destroyed							
CW-2R	1/11/2005	**76**	2.7	20	19.2	19	NS	NS	NS
	8/3/2005	**19.0**	2	1 U	20	12	NS	NS	NS
	11/9/2005	**33**	2	19	7	11	NS	NS	NS
	6/21/2006	**137**	3	16	17	**35**	NS	NS	NS
	4/11/2007	**46.8**	2.88	8.68	19.7	13.7	NS	NS	NS
		Destroyed							
CW-2RR	8/22/2017	0.49 U	0.43 U	0.98 I	1.2 U	0.41 I	NS	NS	NS
	11/13/2017	0.52 U	0.41 U	0.34 U	1.4 U	0.49 U	NS	NS	NS
	10/3/2018	NS	NS	NS	NS	NS	0.0040 U	NS	NS
CW-3	10/21/2002	**530**	10 U	**350**	**210 U**	**77**	NS	NS	NS
	11/17/2003	**782**	5	**520**	**225**	**370**	NS	NS	NS
		Destroyed							
CW-3R	1/11/2005	**920**	36	**330**	**34**	**95**	NS	NS	NS
	8/3/2005	**550**	10 U	**330**	**240**	**130**	NS	NS	NS
	11/9/2005	**1100**	10 U	**280**	**120**	**130**	NS	NS	NS
	6/21/2006	**458**	3 I	**102**	**243**	7 I	NS	NS	NS
	4/11/2007	**345**	2.6	**57.2**	**181**	9.9 I	NS	NS	NS
		Destroyed							
CW-3RR	8/22/2017	0.49 U	0.43 U	0.38 U	1.2 U	0.38 U	NS	NS	NS
	11/13/2017	0.52 U	0.41 U	0.34 U	1.4 U	0.49 U	NS	NS	NS
CW-4	10/21/2002	**600**	10 U	**430**	**130 U**	20 U	NS	NS	NS
	1/31/2003	**330**	10 U	**530**	**270**	20 U	0.02 U	**48**	5 U
	11/17/2003	**120**	3	**177**	**81**	7	NS	NS	NS
		Destroyed							
CW-4R	1/11/2005	**260**	10 U	**130**	**140**	**23**	NS	NS	NS
	8/3/2005	**120**	2 U	**65**	**101**	6	NS	NS	NS
	11/9/2005	**41**	5 U	**33**	**74**	**30 U**	NS	NS	NS
	6/21/2006	**427**	2	86	**83.8**	**31**	NS	NS	NS
	4/11/2007	**397**	2.35 I	**84.3**	**98.6**	**72.6**	NS	NS	NS
CW-4R (cont'd)	11/13/2017	0.52 U	0.41 U	2.9	1.4 U	0.49 U	NS	0.90 U	NS
	12/11/2017	0.52 U	0.41 U	5.2	1.4 U	0.49 U	NS	0.90 U	NS
	10/3/2018	NS	NS	NS	NS	NS	0.0040 U	NS	NS

TABLE 2A: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals

Facility ID#: 53/8623751 Facility Name: One Stop

See notes at end of table.

Sample Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	1,2-Di-chloro-ethane (µg/L)	Total Lead*** (µg/L)
GCTLs		**1****	**40****	**30****	**20****	**20**	**0.02****	**3****	**15****
NADCs		**100**	**400**	**300**	**200**	**200**	**2**	**300**	**150**
MW-1	1/31/2003	**16**	1.1	3.3	5.4	19	NS	NS	NS
	1/11/2005	**81**	1 U	18	**23.2**	13	NS	NS	NS
	8/3/2005	**81**	1	**32**	**21**	**28**	NS	NS	NS
	11/9/2005	**54**	1 U	23	6	**32**	NS	NS	NS
	6/21/2006	**119**	2	**73**	15	14	NS	NS	NS
	4/11/2007	**26.7**	0.840 I	**46.4**	3.2	17.5	NS	NS	NS
		Abandoned							
MW-1R	5/12/2009	**250**	2.7	**98**	**150**	**100**	NS	NS	NS
	11/24/2009	**29**	0.44 U	**34**	6.9	**42**	NS	NS	NS
	2/16/2010	**6.3**	0.26 IV	21	3.9	9.2	NS	NS	NS
	5/4/2010	0.88 U	0.44 U	2.0	1.3 U	2.6	NS	NS	NS
	8/31/2010	**15**	0.44 U	**82**	1.6 I	18	NS	NS	NS
	11/30/2010	0.88 U	0.44 U	1.0	2.6	2.9	NS	NS	NS
	3/1/2011	0.88 U	0.44 U	2.0	1.3 U	3.7	NS	NS	NS
	6/8/2011	**3.9**	0.44 U	7.3	1.6 I	7.5	NS	NS	NS
	12/16/2011	0.34 U	0.35 U	0.52 I	1.4 I	2.6	NS	NS	NS
	3/15/2012	**14**	0.35 U	10.0	1.7 I	5.0	NS	NS	NS
	8/27/2012	0.34 U	0.35 U	2.4	1.1 U	0.62 I	NS	NS	NS
	11/19/2012	0.34 U	0.35 U	26	1.1 U	0.90 I	NS	NS	NS
	2/20/2013	0.58 I	0.35 U	1.8	1.1 U	0.39 I	NS	NS	NS
	8/28/2013	0.34 U	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS
	2/20/2014	0.34 U	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS
MW-2	1/31/2003	1 U	1 U	1 U	3 U	2 U	NS	NS	NS
	4/11/2007	1.0	0.460 I	0.320 I	**46.40**	**77.1**	NS	NS	NS
	5/12/2009	0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	NS	NS	NS
		Abandoned							
MW-2R	8/22/2017	0.49 U	0.43 U	0.38 U	1.2 U	0.38 U	NS	NS	NS
MW-3	1/31/2003	1 U	1 U	1 U	3 U	2 U	NS	NS	NS
	4/10/2007	0.060 U	0.450 I	0.10 U	0.13 U	0.31 U	NS	NS	NS
	5/12/2009	0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	NS	NS	NS
		Abandoned							
MW-4	1/31/2003	1 U	1 U	1 U	3 U	2 U	NS	NS	NS
	5/12/2009	0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	NS	NS	NS
		Abandoned							
MW-5	1/31/2003	1 U	1 U	1 U	3 U	2 U	NS	NS	NS
	4/11/2007	0.270 I	0.410 I	0.10 U	0.140 I	0.510 I	NS	NS	NS
	5/12/2009	0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	NS	NS	NS
		Abandoned							
MW-6	1/31/2003	1 U	1 U	1 U	3 U	4.5	NS	NS	NS
	4/11/2007	0.060 U	0.400 I	0.10 U	0.13 U	0.490 I	NS	NS	NS
	5/12/2009	0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	NS	NS	NS
		Abandoned							
MW-7	5/12/2003	1 U	1 U	1 U	3 U	4.5	NS	NS	NS
	1/11/2005	**1.6**	1 U	1 U	1 U	8.3	NS	NS	NS
	8/3/2005	1 U	1 U	1 U	3 U	2	NS	NS	NS
	11/9/2005	1 U	1 U	1 U	3 U	6 U	NS	NS	NS
	6/22/2006	0.1 U	0.2 I	0.3 U	0.9 U	0.8 I	NS	NS	NS
	4/11/2007	0.250 I	0.320 I	0.10 U	0.130 I	0.910 I	NS	NS	NS
	5/12/2009	0.88 U	0.44 U	0.48 I	1.3 U	0.36 I	NS	NS	NS
		Abandoned							

TABLE 2A: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals

Facility ID#: 53/8623751 Facility Name: One Stop

See notes at end of table.

Sample Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	1,2-Di-chloro-ethane (µg/L)	Total Lead*** (µg/L)
GCTLs		**1****	**40****	**30****	**20****	**20**	**0.02****	**3****	**15****
NADCs		**100**	**400**	**300**	**200**	**200**	**2**	**300**	**150**
DMW-8	5/12/2003	1	1 U	1 U	3 U	2	NS	NS	NS
	1/11/2005	1 U	1 U	1 U	3 U	2 U	NS	NS	NS
	6/21/2006	0.1 U	0.3 I	0.3 U	0.9 U	0.4 U	NS	NS	NS
		Abandoned							
MW-9	11/17/2003	**444**	4	**371**	**41**	**37**	NS	NS	NS
	1/11/2005	**419**	10 U	**210**	**30 U**	**27**	NS	NS	NS
	8/3/2005	**360**	5 U	**190**	15 U	**31**	NS	NS	NS
	11/9/2005	**300**	5 U	**170**	15 U	**30**	NS	NS	NS
	6/21/2006	**278**	3 I	**124**	3 I	**22**	NS	NS	NS
	4/11/2007	**441**	4.30 I	**131**	5.70 I	**48.5 I**	NS	NS	NS
		Abandoned							
MW-9R	5/12/2009	**100**	0.82 I	**71**	9.0	14	NS	NS	NS
	11/24/2009	**6.6**	0.44 U	**60**	1.3 U	**36**	NS	NS	NS
	2/16/2010	**3.6**	0.38 IV	**49**	0.64 U	14	NS	NS	NS
	5/4/2010	**5.3**	0.44 U	18	1.5 I	7.6	NS	NS	NS
	8/31/2010	**9.1**	0.44 U	**35**	1.3 I	15	NS	NS	NS
	11/30/2010	**7.9**	0.44 U	**32**	3.0	8.4	NS	NS	NS
	3/1/2011	**6.6**	0.44 U	**57**	1.3 U	18	NS	NS	NS
	6/8/2011	**1.9**	0.44 U	25	1.8 I	6.8	NS	NS	NS
	12/16/2011	**1.6**	0.36 I	19	2.5 I	5.3	NS	NS	NS
	3/15/2012	1.0	0.35 U	15	1.3 I	4.4	NS	NS	NS
	8/27/2012	0.57 I	0.35 U	2.9	1.9 I	2.3	NS	NS	NS
	11/19/2012	0.34 U	0.35 U	2.2	1.1 U	3.6	NS	NS	NS
	2/20/2013	0.98 I	0.35 U	0.54 I	1.1 U	4.8	NS	NS	NS
	8/28/2013	0.51 I	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS
	2/20/2014	0.39 I	0.35 U	2.7	1.1 U	0.70 I	NS	NS	NS
	10/3/2018	NS	NS	NS	NS	NS	0.0040 U	NS	NS
		Destroyed							
MW-10	11/17/2003	**5**	1	7	3	10	NS	NS	NS
	1/11/2005	**110**	2	4	6	13	NS	NS	NS
	8/3/2005	**7**	1 U	1 U	4	1	NS	NS	NS
	11/9/2005	**31**	1	2	7	6	NS	NS	NS
	6/22/2006	**12**	0.4 I	0.3 U	0.9 U	0.8 I	NS	NS	NS
MW-10 (cont'd)	4/11/2007	**3.83**	0.570 I	0.410 I	0.800 I	1.61 I	NS	NS	NS
		Abandoned							
MW-10R	5/12/2009	0.88 U	0.44 U	0.43 U	1.3 U	0.20 U	NS	NS	NS
	11/24/2009	0.88 U	0.44 U	0.65 I	1.3 U	1.9	NS	NS	NS
	2/16/2010	0.26 U	0.20 IV	0.59 I	0.64 U	0.36 I	NS	NS	NS
	5/4/2010	0.88 U	0.53 I	0.43 U	1.3 U	0.40 I	NS	NS	NS
	8/31/2010	0.88 U	0.44 U	0.43 U	1.3 U	0.46 I	NS	NS	NS
MW-11	6/21/2006	**8**	0.4 I	5	**29**	7	NS	NS	NS
	11/30/2010	0.88 U	0.44 U	0.56 I	4.6	7.2	NS	NS	NS
	3/1/2011	1.3	0.64 I	2.8	1.3 U	19	NS	NS	NS
	6/8/2011	0.88 U	0.44 U	1.1	1.3 U	11	NS	NS	NS
MW-11R	12/16/2011	0.34 U	0.50 I	0.58 I	1.7 I	2.2	NS	NS	NS
	3/15/2012	0.34 U	0.35 U	0.59 I	1.1 U	5.1	NS	NS	NS
	8/27/2012	0.34 U	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS
	11/19/2012	0.34 U	0.35 U	0.34 U	1.1 U	0.82 I	NS	NS	NS
	2/20/2013	0.34 U	0.35 U	0.42 I	1.1 U	1.5	NS	NS	NS
	8/28/2013	0.34 U	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS
	2/20/2014	0.34 U	0.35 U	0.34 U	1.1 U	0.27 U	NS	NS	NS

TABLE 2A: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals

Facility ID#: 53/8623751 **Facility Name: One Stop**

See notes at end of table.

Sample Location / Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	1,2-Di-chloro-ethane (µg/L)	Total Lead*** (µg/L)
GCTLs	**1****	**40****	**30****	**20****	**20**	**0.02****	**3****	**15****
NADCs	**100**	**400**	**300**	**200**	**200**	**2**	**300**	**150**

Notes: Blank = Not Analyzed

BOLD = Exceeds GCTL

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

** = As provided in Chapter 62-550, F.A.C.

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

U = Compound was analyzed for but not detected.

V = Indicates that the analyte was detected in both the sample and the associated method blank.

*** = See Table 2E for metals concentrations after October 2021

TABLE 2B: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#: 53/8623751 **Facility Name: One Stop**

See notes at end of table.

Location	Date	TRPHs (µg/L)	Naph-thalene (µg/L)	1-Methyl-naph-thalene (µg/L)	2-Methyl-naph-thalene (µg/L)	Acen-aph-thene (µg/L)	Acen-aph-thylene (µg/L)	Anthra-cene (µg/L)	Benzo (g,h,i) pery-lene (µg/L)	Fluoran-thene (µg/L)	Fluor-ene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Benzo (a) pyrene (µg/L)	Benzo (a) anthra-cene (µg/L)	Benzo (b) fluoran-thene (µg/L)	Benzo (k) fluoran-thene (µg/L)	Chry-sene (µg/L)	Dibenz (a,h) anthra-cene (µg/L)	Indeno (1,2,3-cd) pyrene (µg/L)
GCTLs		**5,000**	**14**	**28**	**28**	**20**	**210**	**2,100**	**210**	**280**	**280**	**210**	**210**	**0.2****	**0.05[a]**	**0.05[a]**	**0.5**	**4.8**	**0.005[a]**	**0.05[a]**
NADCs		**50,000**	**140**	**280**	**280**	**200**	**2,100**	**21,000**	**2,100**	**2,800**	**2,800**	**2,100**	**2,100**	**20**	**5**	**5**	**50**	**480**	**0.5**	**5**
CW-1	10/21/2002	NS	**140**	**31**	**56**	5.0 U	10	7.7	1.0 U	1.0 U	1.0 U	10 U	1.0 U	**1.0 U**	**1.0 U**	**1.0 U**	**1.0 U**	1.0 U	**1.0 U**	**1.0 U**
	11/17/2003	NS	**200**	**88**	**36**	**43**	2.0 U	1.0 U	0.40 U	1.0 U	3.6	1.0 U	1.0 U	**0.40 U**	**0.40 U**	**0.40 U**	0.40 U	0.40 U	**0.40 U**	**0.40 U**
		Destroyed																		
CW-1R	1/11/2005	NS	**25**	2.6	4.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.50 U**	**0.50 U**	**0.50 U**	0.50 U	0.50 U	**0.50 U**	**0.50 U**
	8/3/2005	NS	13	2	4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	11/9/2005	NS	13	2	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2 U**	0.2 U	0.2 U	0.2 U	0.2 U
	6/21/2006	NS	4.55 B	0.44	0.72	0.04 U	0.04 U	0.04 U	0.07 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.04 U	0.05 U	0.06 U	0.04 U	0.05 U	0.03 U
		Destroyed																		
CW-1RR	7/15/2019	NS	0.66 U	0.56 U	0.56 U	0.99 U	0.93 U	1.3 U	0.82 U	1.3 U	1.2 U	1.4 U	1.3 U	0.15 U	0.17 U	0.084 U	0.18 U	1.1 U	0.13 U	0.15 U
	10/6/2021*	NS	1.0 U	1.0 U	1.0 U	1.2 U	1.0 U	0.93 U	0.96 U	0.78 U	0.99 U	1.0 U	0.84 U	0.11 U	0.17 U	0.068 U	0.084 U	0.58 U	0.081 U	0.10 U
		PetroFix Injections October 20 to 22, 2021																		
	1/24/2022	NS	0.050 I	0.024 U	0.081	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
	4/25/2022	NS	0.046 U	0.024 U	0.034 I	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
CW-2	10/21/2002	NS	**100**	19	**38**	5.0 U	10 U	2.1	1.0 U	1.0 U	1.0 U	10 U	1.0 U	**1.0 U**	**1.0 U**	**1.0 U**	**1.0 U**	1.7	**1.0 U**	**1.0 U**
	11/17/2003	NS	**100**	**33**	12	1.0 U	1.0 U	0.50 U	0.20 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	0.20 U	**0.20 U**	0.20 U	0.20 U	0.20 U	0.20 U
		Destroyed																		
CW-2R	1/11/2005	NS	7.5	0.71	1.2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	8/3/2005	NS	5	0.5	0.9	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	11/9/2005	NS	4	0.5 U	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	6/21/2006	NS	4.37 B	0.31	0.6	0.04 U	0.04 U	0.04 U	0.07 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.04 U	0.05 U	0.06 U	0.04 U	0.05 U	0.03 U
		Destroyed																		
CW-2RR	4/19/2018	NS	0.73 I	0.50 U	0.41 U	0.30 U	0.44 U	0.24 U	0.24 U	0.33 U	0.26 U	0.36 U	0.29 U	0.10 U	0.090 U	0.084 U	0.11 U	0.21 U	0.072 U	0.051 U
	10/3/2018	130 U	0.42 U	0.50 U	0.41 U	0.30 U	0.44 U	0.24 U	0.24 U	0.33 U	0.26 U	0.36 U	0.29 U	0.10 U	0.090 U	0.084 U	0.11 U	0.21 U	0.072 U	0.051 U
	7/15/2019	NS	0.66 U	0.56 U	0.56 U	0.99 U	0.93 U	1.3 U	0.82 U	1.3 U	1.2 U	1.4 U	1.3 U	0.15 U	0.17 U	0.084 U	0.18 U	1.1 U	0.13 U	0.15 U
	10/6/2021*	NS	1.0 U	1.0 U	1.0 U	1.2 U	1.0 U	0.93 U	0.96 U	0.78 U	0.99 U	1.0 U	0.84 U	0.11 U	0.17 U	0.068 U	0.084 U	0.58 U	0.081 U	0.10 U
		PetroFix Injections October 20 to 22, 2021																		
	1/24/2022	NS	0.046 U	0.029 I	0.034 U	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.032 I	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
	4/25/2022	NS	0.11	0.024 U	0.035 I	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.032 I	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
CW-3	10/21/2002	NS	**77**	11	14	1.0 U	3.6	2.6	0.20 U	0.20 U	0.20 U	2.0 U	0.20 U	0.20 U	0.20 U	**0.20 U**	0.20 U	0.20 U	0.20 U	0.20 U
	11/17/2003	NS	**370**	**90**	**31**	5.0 U	5.0 U	2.5 U	1.0 U	2.5 U	2.5 U	2.5 U	2.5 U	**1.0 U**	**1.0 U**	**1.0 U**	**1.0 U**	1.0 U	**1.0 U**	**1.0 U**
		Destroyed																		
CW-3R	1/11/2005	NS	**210**	**34**	**49**	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	**4.0 U**	**4.0 U**	**4.0 U**	**4.0 U**	4.0 U	**4.0 U**	**4.0 U**
	8/3/2005	NS	**190**	24	**43**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	11/9/2005	NS	**180**	24	**37**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**2 U**	**2 U**	**2 U**	**2 U**	2 U	**2 U**	**2 U**
	6/21/2006	NS	**63.5 B**	7.00	13.2	0.36 U	0.36 U	0.37 U	0.73 U	0.32 U	0.27 U	0.30 U	0.32 U	**0.28 U**	0.38 U	**0.53 U**	0.57 U	0.45 U	**0.53 U**	**0.34 U**
	4/11/2007	NS	**38.6**	7.75	11.5	0.0402 I	0.035 U	0.032 U	0.048 U	0.041 U	0.037 U	0.033 U	0.039 U	0.031 U	0.029 U	0.045 U	0.031 U	0.050 U	0.048 U	0.039 U
		Destroyed																		

TABLE 2B: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#: 53/8623751 **Facility Name: One Stop**

See notes at end of table.

Sample Location	Date	TRPHs (µg/L)	Naph-thalene (µg/L)	1-Methyl-naph-thalene (µg/L)	2-Methyl-naph-thalene (µg/L)	Acen-aph-thene (µg/L)	Acen-aph-thylene (µg/L)	Anthra-cene (µg/L)	Benzo (g,h,i) pery-lene (µg/L)	Fluoran-thene (µg/L)	Fluor-ene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Benzo (a) pyrene (µg/L)	Benzo (a) anthra-cene (µg/L)	Benzo (b) fluoran-thene (µg/L)	Benzo (k) fluoran-thene (µg/L)	Chry-sene (µg/L)	Dibenz (a,h) anthra-cene (µg/L)	Indeno (1,2,3-cd) pyrene (µg/L)
GCTLs		**5,000**	**14**	**28**	**28**	**20**	**210**	**2,100**	**210**	**280**	**280**	**210**	**210**	**0.2****	**0.05[a]**	**0.05[a]**	**0.5**	**4.8**	**0.005[a]**	**0.05[a]**
NADCs		**50,000**	**140**	**280**	**280**	**200**	**2,100**	**21,000**	**2,100**	**2,800**	**2,800**	**2,100**	**2,100**	**20**	**5**	**5**	**50**	**480**	**0.5**	**5**
CW-3RR	8/22/2017	NS	2.2	1.4 I	0.76 I	1.2 I	0.19 U	0.19 U	0.34 U	0.17 U	1.3 I	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	11/13/2017	NS	0.13 U	0.21 U	0.21 U	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	7/15/2019	NS	0.76 I	0.56 U	0.56 U	1.2 I	0.93 U	1.3 U	0.82 U	1.3 U	1.2 U	1.4 U	1.3 U	0.15 U	0.17 U	0.084 U	0.18 U	1.1 U	0.13 U	0.15 U
	10/6/2021*	NS	1.0 U	1.0 U	1.0 U	1.2 U	1.0 U	0.93 U	0.96 U	0.78 U	0.99 U	1.0 U	0.84 U	0.11 U	0.17 U	0.068 U	0.084 U	0.58 U	0.081 U	0.10 U
		PetroFix Injections October 20 to 22, 2021																		
	1/24/2022	NS	0.57	0.34	0.46	0.13	0.024 U	0.071 U	0.038 U	0.025 U	0.14	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
	4/25/2022	NS	0.064 I	0.058 I	0.062 I	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
CW-4	10/21/2002	NS	**470**	**76**	**140**	10 U	29	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	**2.0 U**	**2.0 U**	**2.0 U**	**2.0 U**	2.0 U	**2.0 U**	**2.0 U**
	1/31/2003	3,000	**320**	**51**	**96**	5.0 U	17	8.0	1.0 U	1.0 U	1.0 U	10 U	1.0 U	**1.0 U**	**1.0 U**	**1.0 U**	**1.0 U**	1.0 U	**1.0 U**	**1.0 U**
	11/17/2003	NS	**230**	**86**	**44**	5.0 U	48	2.5 U	1.0 U	2.5 U	2.5 U	2.5 U	2.5 U	**1.0 U**	**1.0 U**	**1.0 U**	**1.0 U**	1.0 U	**1.0 U**	**1.0 U**
		Destroyed																		
CW-4R	1/11/2005	NS	**160**	25	**45**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.0 U**	**2.0 U**	**2.0 U**	**2.0 U**	2.0 U	**2.0 U**	**2.0 U**
	8/3/2005	NS	**97**	18	**34**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	11/9/2005	NS	**110**	21	**37**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**2 U**	**2 U**	**2 U**	**2 U**	2 U	**2 U**	**2 U**
	6/21/2006	NS	**74.3 B**	11.8	22.2	0.36 U	0.36 U	0.37 U	0.73 U	0.32 U	0.27 U	0.30 U	0.32 U	**0.28 U**	0.38 U	**0.53 U**	**0.57 U**	0.45 U	**0.53 U**	**0.34 U**
	4/11/2007	NS	**46.2**	5.90	6.42	0.0440 I	0.035 U	0.032 U	0.048 U	0.041 U	0.037 U	0.033 U	0.039 U	0.031 U	0.029 U	0.045 U	0.031 U	0.050 U	0.034 U	0.039 U
	11/13/2017	NS	**19**	16	1.1 I	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	12/11/2017	NS	**33**	25	1.5 I	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	4/19/2018	NS	7.6	5.6	0.47 I	0.30 U	0.44 U	0.24 U	0.24 U	0.33 U	0.26 U	0.36 U	0.29 U	0.10 U	0.090 U	0.084 U	0.11 U	0.21 U	0.072 U	0.051 U
	10/3/2018	350 I	**45**	14	3	0.30 U	0.44 U	0.24 U	0.24 U	0.33 U	0.26 U	0.36 U	0.29 U	0.10 U	0.090 U	0.084 U	0.11 U	0.21 U	0.072 U	0.051 U
	7/15/2019	NS	**26**	4	0.87 I	0.99 U	0.93 U	1.3 U	0.82 U	1.3 U	1.2 U	1.4 U	1.3 U	0.15 U	0.17 U	0.084 U	0.18 U	1.1 U	0.13 U	0.15 U
	10/6/2021*	NS	**21**	10	11	1.2 U	1.0 U	0.93 U	0.96 U	0.78 U	0.99 U	1.0 U	0.84 U	0.11 U	0.17 U	0.068 U	0.084 U	0.58 U	0.081 U	0.10 U
		PetroFix Injections October 20 to 22, 2021																		
	1/24/2022	NS	3.7	3.8	5.1	0.049 I	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.042 I	0.028 U	0.040 U	0.027 I	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
	4/25/2022	NS	**18**	**41**	**65**	0.42	0.12 U	0.36 U	0.19 U	0.12 U	0.31 I	0.25 I	0.14 U	0.20 U	0.13 U	**0.18 U**	0.20 U	0.14 U	0.19 U	0.24 U
MW-1	1/31/2003	NS	5.4	1.0 U	1.0 U	0.50 U	1.0 U	6.0	0.10 U	0.10 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	6/21/2006	NS	**160 B**	9.20	15.6	0.72 U	0.72 U	0.74 U	1.46 U	0.64 U	0.54 U	0.60 U	0.64 U	**0.56 U**	**0.76 U**	**1.06 U**	**1.14 U**	0.90 U	**1.06 U**	**0.68 U**
		Abandoned																		
MW-1R	5/12/2009	1,600	**290**	**30**	**50**	2.8	0.63 U	0.65 U	0.59 U	0.57 U	1.2 I	1.2 I	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	11/24/2009	2,500	**40**	6.1	3.8	6.4	0.63 U	0.65 U	0.59 U	1.7 I	3.5	1.8 I	1.2 I	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	2/16/2010	720	**35**	5.4	6.4	5.5	0.63 U	0.65 U	0.59 U	1.0 I	3.0	3.2	1.0 I	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	5/4/2010	150 I	11	2.2	2.6	5.4	0.63 U	0.65 U	0.59 U	0.91 I	1.8 I	6.0	0.66 I	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	8/31/2010	3,000	**180**	23	28	13	0.63 U	2.0	0.59 U	3.0	7.6	18	1.8 I	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	11/30/2010	300 I	10	3.8	1.1 I	4.5	0.63 U	0.65 U	0.59 U	1.5 I	3.1	4.5	1.1 I	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	3/1/2011	300 I	**15**	2.2	1.6 I	2.6	0.63 U	0.65 U	0.59 U	0.90 I	1.2 I	3.5	0.72 I	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	6/8/2011	550	**43**	5.7	5.8	1.6 I	0.63 U	0.65 U	0.59 U	0.82 I	1.4 I	3.3	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	12/16/2011	120 I	**19**	3.3	2.5	1.4 I	0.56 U	1.4 I	0.51 U	0.51 U	0.73 I	1.4 I	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	3/15/2012	640	**250**	Sample container broken at lab																
	8/27/2012	NS	**17**	2.4	0.89 I	1.6 I	0.38 U	0.51 U	0.51 U	0.77 I	0.44 U	0.47 I	0.66 I	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	11/19/2012	NS	**150**	20	9.6	1.4 I	0.38 U	0.51 U	0.51 U	0.51 U	0.57 I	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	2/20/2013	NS	**48**	**32**	24	3.3	0.38 U	0.51 U	0.51 U	0.51 U	1.3 I	0.48 I	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	8/28/2013	NS	0.60 U	0.62 U	0.60 U	0.56 U	0.38 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U

TABLE 2B: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#: 53/8623751 **Facility Name: One Stop**

See notes at end of table.

Location	Date	TRPHs (µg/L)	Naph-thalene (µg/L)	1-Methyl-naph-thalene (µg/L)	2-Methyl-naph-thalene (µg/L)	Acen-aph-thene (µg/L)	Acen-aph-thylene (µg/L)	Anthra-cene (µg/L)	Benzo (g,h,i) pery-lene (µg/L)	Fluoran-thene (µg/L)	Fluor-ene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Benzo (a) pyrene (µg/L)	Benzo (a) anthra-cene (µg/L)	Benzo (b) fluoran-thene (µg/L)	Benzo (k) fluoran-thene (µg/L)	Chry-sene (µg/L)	Dibenz (a,h) anthra-cene (µg/L)	Indeno (1,2,3-cd) pyrene (µg/L)
GCTLs		**5,000**	**14**	**28**	**28**	**20**	**210**	**2,100**	**210**	**280**	**280**	**210**	**210**	**0.2****	**0.05[a]**	**0.05[a]**	**0.5**	**4.8**	**0.005[a]**	**0.05[a]**
NADCs		**50,000**	**140**	**280**	**280**	**200**	**2,100**	**21,000**	**2,100**	**2,800**	**2,800**	**2,100**	**2,100**	**20**	**5**	**5**	**50**	**480**	**0.5**	**5**
MW-1R (cont'd)	2/20/2014	NS	0.60 U	0.62 U	0.60 U	0.56 U	0.38 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	7/15/2019	NS	**18**	3.9	4.3	0.99 U	0.93 U	1.3 U	0.82 U	1.3 U	1.2 U	1.4 U	1.3 U	0.15 U	0.17 U	0.084 U	0.18 U	1.1 U	0.13 U	0.15 U
	10/6/2021*	NS	**23**	3.1	1.6 I	1.2 U	1.0 U	0.93 U	0.96 U	0.78 U	0.99 U	1.0 U	0.84 U	0.11 U	0.17 U	0.068 U	0.084 U	0.58 U	0.081 U	0.10 U
		PetroFix Injections October 20 to 22, 2021																		
	1/24/2022	NS	0.68	0.41	0.69	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.035 I	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
	4/25/2022	NS	0.56	0.49	0.89	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
MW-2	1/31/2003	NS	0.50 U	1.0 U	1.0 U	0.50 U	1.0 U	4.3	0.10 U	0.10 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	4/11/2007	NS	**17.50**																	
	5/12/2009	100 U	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.57 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
		Abandoned																		
MW-2R	8/22/2017	NS	0.28 I	0.21 U	0.21 U	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.28 I	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	11/13/2017	NS	0.13 U	0.21 U	0.21 U	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	7/15/2019	NS	0.66 U	0.56 U	0.56 U	0.99 U	0.93 U	1.3 U	0.82 U	1.3 U	1.2 U	1.4 U	1.3 U	0.15 U	0.17 U	0.084 U	0.18 U	1.1 U	0.13 U	0.15 U
	10/6/2021*	NS	1.0 U	1.0 U	1.0 U	1.2 U	1.0 U	0.93 U	0.96 U	0.78 U	0.99 U	1.0 U	0.84 U	0.11 U	0.17 U	0.068 U	0.084 U	0.58 U	0.081 U	0.10 U
		PetroFix Injections October 20 to 22, 2021																		
	1/24/2022	NS	0.046 U	0.024 U	0.14	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
	4/25/2022	NS	0.046 U	0.024 U	0.034 U	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
MW-3	1/31/2003	NS	0.50 U	1.0 U	1.0 U	0.50 U	1.0 U	5.3	0.10 U	0.10 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	5/12/2009	100 U	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.57 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
		Abandoned																		
MW-4	1/31/2003	NS	0.50 U	1.0 U	1.0 U	0.50 U	1.0 U	4.8	0.10 U	0.10 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	5/12/2009	100 U	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.57 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
		Abandoned																		
MW-5	1/31/2003	NS	0.50 U	1.0 U	1.0 U	0.50 U	1.0 U	5.7	0.10 U	0.10 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	5/12/2009	100 U	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.57 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
		Abandoned																		
MW-6	1/31/2003	NS	0.50 U	1.0 U	1.0 U	0.50 U	1.0 U	4.3	0.10 U	0.10 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	5/12/2009	100 U	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.57 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
		Abandoned																		
MW-7	5/12/2003	NS	0.5 U	1.0 U	1.0 U	0.5 U	1.0 U	0.1 U	0.1 U	0.1 U	0.1 U	1.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	5/12/2009	100 U	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.57 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
		Abandoned																		
DMW-8	5/12/2003	NS	1.4	1.0 U	1.0 U	0.5 U	1.0 U	0.1 U	0.1 U	0.1 U	0.1 U	1.0 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	6/21/2006	NS	0.09 U	0.04 U	0.05 U	0.04 U	0.04 U	0.04 U	0.07 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.04 U	0.05 U	0.06 U	0.04 U	0.05 U	0.03 U
		Abandoned																		
MW-9	11/17/2003	NS	**260**	**40**	5.0 U	5.0 U	45	2.5 U	1.0 U	2.5 U	2.5 U	2.5 U	2.5 U	**1.0 U**	**1.0 U**	**1.0 U**	**1.0 U**	1.0 U	**1.0 U**	**1.0 U**
	1/11/2005	NS	**350**	**37**	**54**	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	**4.0 U**	**4.0 U**	**4.0 U**	**4.0 U**	4.0 U	**4.0 U**	**4.0 U**
	8/3/2005	NS	**250**	**32**	**49**	0.1	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	11/9/2005	NS	**190**	23	**34**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**2 U**	**2 U**	**2 U**	**2 U**	2 U	**2 U**	**2 U**
	6/21/2006	NS	**263 B**	23.5	**37.0**	1.80 U	1.80 U	1.85 U	3.65 U	1.60 U	1.35 U	1.50 U	1.60 U	**1.40 U**	**1.90 U**	**2.65 U**	**2.85 U**	2.25 U	**2.65 U**	**1.70 U**
	4/11/2007	NS	**66.4**	5.64	8.70	0.0550 I	0.035 U	0.032 U	0.034 U	0.041 U	0.037 U	0.0347 I	0.039 U	0.031 U	0.029 U	0.045 U	0.031 U	0.050 U	0.034 U	0.039 U
		Abandoned																		

TABLE 2B: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#: 53/8623751 **Facility Name: One Stop**

See notes at end of table.

Location	Date	TRPHs (µg/L)	Naph-thalene (µg/L)	1-Methyl-naph-thalene (µg/L)	2-Methyl-naph-thalene (µg/L)	Acen-aph-thene (µg/L)	Acen-aph-thylene (µg/L)	Anthra-cene (µg/L)	Benzo (g,h,i) pery-lene (µg/L)	Fluoran-thene (µg/L)	Fluor-ene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Benzo (a) pyrene (µg/L)	Benzo (a) anthra-cene (µg/L)	Benzo (b) fluoran-thene (µg/L)	Benzo (k) fluoran-thene (µg/L)	Chry-sene (µg/L)	Dibenz (a,h) anthra-cene (µg/L)	Indeno (1,2,3-cd) pyrene (µg/L)
GCTLs		**5,000**	**14**	**28**	**28**	**20**	**210**	**2,100**	**210**	**280**	**280**	**210**	**210**	**0.2****	**0.05[a]**	**0.05[a]**	**0.5**	**4.8**	**0.005[a]**	**0.05[a]**
NADCs		**50,000**	**140**	**280**	**280**	**200**	**2,100**	**21,000**	**2,100**	**2,800**	**2,800**	**2,100**	**2,100**	**20**	**5**	**5**	**50**	**480**	**0.5**	**5**
MW-9R	5/12/2009	**5,700**	**180**	25	**40**	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.57 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	11/24/2009	**5,500**	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	2/16/2010	3,100	**150**	22	**34**	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	5/4/2010	1,300	**49**	7.5	10	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	8/31/2010	4,300	**240**	**34**	**52**	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.090 I	0.082 U	0.48 U	0.090 U	0.10 U
	11/30/2010	2,200	**170**	20	**31**	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.090 I	0.082 U	0.48 U	0.090 U	0.10 U
	3/1/2011	2,700	**120**	17	**29**	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.090 I	0.082 U	0.48 U	0.090 U	0.10 U
	6/8/2011	2,000	**130**	19	**30**	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.090 I	0.082 U	0.48 U	0.090 U	0.10 U
	12/16/2011	1,800	**88**	12	14	0.38 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	3/15/2012	1,900	**140**	**31**	**45**	0.38 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	8/27/2012	NS	**100**	20	18	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	11/19/2012	NS	**95**	**30**	28	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	2/20/2013	NS	**31**	22	8.9	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	8/28/2013	NS	5.7	4.9	2.2	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	2/20/2014	NS	**28**	18	4.8	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.13 I	0.15 U	**0.24**	0.090 I	0.49 U	**0.050 I**	**0.12 I**
	11/4/2014	NS	**22**	4.7	1.2 I	0.65 U	0.66 U	0.53 U	0.97 U	0.91 U	0.83 U	0.85 U	0.87 U	**0.34**	**0.10 I**	**0.61**	0.19 I	0.72 U	0.099 U	**0.43**
	5/7/2015	NS	**20**	10	3.3	0.65 U	0.66 U	0.53 U	0.97 U	0.91 U	0.83 U	0.85 U	0.87 U	0.040 U	0.068 U	0.048 U	0.057 U	0.72 U	0.099 U	0.060 U
	3/7/2016	NS	9.9	4.1	1.6 I	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	7/27/2016	NS	**36**	14	6.6	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	4/11/2017	NS	**43**	23	8.3	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	8/22/2017	NS	12	8.7	0.23 I	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.32 I	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	4/19/2018	NS	**47**	5.7	3.1	0.56 I	0.44 U	0.24 U	0.24 U	0.33 U	0.28 I	0.36 U	0.29 U	0.10 U	0.090 U	0.084 U	0.11 U	0.21 U	0.072 U	0.051 U
	10/3/2018	240 I	**45**	3	2.4	0.66 I	0.44 U	0.24 U	0.24 U	0.33 U	0.26 U	0.36 U	0.29 U	0.10 U	0.090 U	0.084 U	0.11 U	0.21 U	0.072 U	0.051 U
		Destroyed																		
MW-10	11/17/2003	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.20 U	0.50 U	0.50 U	0.50 U	0.50 U	0.20 U	0.20 U	**0.20 U**	0.20 U	0.20 U	0.20 U	0.20 U
		Abandoned																		
MW-10R	5/12/2009	100 U	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.57 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	11/24/2009	480 I	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	**0.21**	0.083 U	**0.22**	0.26	0.48 U	0.090 U	0.10 U
	2/16/2010	180 I	0.56 I	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.10	0.082 U	0.48 U	0.090 U	0.10 U
	5/4/2010	980	0.43 U	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.10	0.082 U	0.48 U	0.090 U	0.10 U
	8/31/2010	100 U	0.46 I	0.75 U	0.45 U	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.10	0.082 U	0.48 U	0.090 U	0.10 U
	7/15/2019	NS	0.66 U	0.56 U	0.56 U	0.99 U	0.93 U	1.3 U	0.82 U	1.3 U	1.2 U	1.4 U	1.3 U	0.15 U	0.17 U	0.084 U	0.18 U	1.1 U	0.13 U	0.15 U
MW-11	6/21/2006	900 U	**77.9 B**	6.50	11.1	0.70 I	0.36 U	0.37 U	0.73 U	0.32 U	0.27 U	0.30 U	0.32 U	**0.28 U**	**0.38 U**	**0.53 U**	**0.57 U**	0.45 U	**0.53 U**	**0.34 U**
	11/30/2010	1300	**61**	5.7	2.9	0.53 I	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	3/1/2011	930	**66**	6.4	5.5	0.47 I	0.69 U	0.72 U	0.65 U	0.63 U	0.64 U	0.60 U	0.69 U	0.072 U	0.091 U	0.091 U	0.090 U	0.53 U	0.099 U	0.11 U
	6/8/2011	500 I	**66**	5.0	5.0	0.38 U	0.63 U	0.65 U	0.59 U	0.57 U	0.58 U	0.55 U	0.63 U	0.065 U	0.083 U	0.083 U	0.082 U	0.48 U	0.090 U	0.10 U
	11/13/2017	NS	0.14 I	0.21 U	0.21 U	2.2	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	12/11/2017	NS	0.20 I	0.21 U	0.21 U	1.8 I	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U

TABLE 2B: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#: 53/8623751 **Facility Name: One Stop**

See notes at end of table.

Sample Location	Date	TRPHs (µg/L)	Naph-thalene (µg/L)	1-Methyl-naph-thalene (µg/L)	2-Methyl-naph-thalene (µg/L)	Acen-aph-thene (µg/L)	Acen-aph-thylene (µg/L)	Anthra-cene (µg/L)	Benzo (g,h,i) pery-lene (µg/L)	Fluoran-thene (µg/L)	Fluor-ene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Benzo (a) pyrene (µg/L)	Benzo (a) anthra-cene (µg/L)	Benzo (b) fluoran-thene (µg/L)	Benzo (k) fluoran-thene (µg/L)	Chry-sene (µg/L)	Dibenz (a,h) anthra-cene (µg/L)	Indeno (1,2,3-cd) pyrene (µg/L)
GCTLs		**5,000**	**14**	**28**	**28**	**20**	**210**	**2,100**	**210**	**280**	**280**	**210**	**210**	**0.2****	**0.05[a]**	**0.05[a]**	**0.5**	**4.8**	**0.005[a]**	**0.05[a]**
NADCs		**50,000**	**140**	**280**	**280**	**200**	**2,100**	**21,000**	**2,100**	**2,800**	**2,800**	**2,100**	**2,100**	**20**	**5**	**5**	**50**	**480**	**0.5**	**5**
MW-11R	12/16/2011	64 U	2.9	0.62 U	0.75 I	0.38 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	3/15/2012	260 I	**21**	0.79 I	0.60 U	0.38 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	4/19/2012	NS	**15**	0.62 U	0.60 U	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	8/27/2012	NS	0.60 U	0.62 U	0.60 U	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	11/19/2012	NS	9.5	0.62 U	0.60 U	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	2/20/2013	NS	**15**	0.62 U	0.60 U	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	8/28/2013	NS	0.60 U	0.62 U	0.60 U	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	2/20/2014	NS	0.64 I	0.62 U	0.60 U	0.56 U	0.56 U	0.51 U	0.51 U	0.51 U	0.44 U	0.45 U	0.51 U	0.076 U	0.15 U	0.036 U	0.066 U	0.49 U	0.041 U	0.046 U
	11/4/2014	NS	0.75 I	0.77 U	0.62 U	0.65 U	0.66 U	0.53 U	0.97 U	0.91 U	0.83 U	0.85 U	0.87 U	0.040 U	0.068 U	0.048 U	0.057 U	0.72 U	0.099 U	0.060 U
	5/7/2015	NS	0.64 U	0.77 U	0.62 U	0.65 U	0.66 U	0.53 U	0.97 U	0.91 U	0.83 U	0.85 U	0.87 U	0.040 U	0.068 U	0.048 U	0.057 U	0.72 U	0.099 U	0.060 U
	3/7/2016	NS	0.17 I	0.21 U	0.21 U	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	7/27/2016	NS	0.13 U	0.21 U	0.21 U	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	4/11/2017	NS	0.38 I	0.38 I	0.21 U	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	8/22/2017	NS	0.79 I	0.27 I	0.21 U	0.26 U	0.19 U	0.19 U	0.34 U	0.17 U	0.16 U	0.26 U	0.18 U	0.090 U	0.10 U	0.088 U	0.083 U	0.21 U	0.057 U	0.047 U
	7/15/2019	NS	0.66 U	0.56 U	0.56 U	0.99 U	0.93 U	1.3 U	0.82 U	1.3 U	1.2 U	1.4 U	1.3 U	0.15 U	0.17 U	0.084 U	0.18 U	1.1 U	0.13 U	0.15 U
	10/6/2021*	NS	1.0 U	1.0 U	1.0 U	1.2 U	1.0 U	0.93 U	0.96 U	0.78 U	0.99 U	1.0 U	0.84 U	0.11 U	0.17 U	0.068 U	0.084 U	0.58 U	0.081 U	0.10 U
		PetroFix Injections October 20 to 22, 2021																		
	1/24/2022	NS	5.8	2.8	1.4	1.2	0.024 U	0.071 U	0.038 U	0.055 I	0.31	0.25	0.033 I	0.040 U	0.037 I	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U
	4/25/2022	NS	0.046 U	0.024 U	0.034 U	0.040 U	0.024 U	0.071 U	0.038 U	0.025 U	0.029 U	0.029 U	0.028 U	0.040 U	0.026 U	0.036 U	0.040 U	0.028 U	0.038 U	0.049 U

Notes:

BOLD = Exceeds GCTL

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

** = As provided in Chapter 62-550, F.A.C.

[a] = See the October 12, 2004 "Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits" to determine how to evaluate data when the CTL is lower than the PQL.

B = Analyte was found in the associated method blank as well as in the sample (CLP B-flag)

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

U = Compound was analyzed for but not detected.

* = Baseline Data

Recent Data

TABLE 2C: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - ^Other Contaminants not listed in Chapter 62-770, F.A.C.

Facility ID#: 53/8623751 Facility Name: One Stop

Sample Location	Sample Date	Trichloro-ethene (TCE) (µg/L)
GCTLs		3
NADCs		300
CW-4	1/31/2003	**50**
		Destroyed

Notes: **BOLD** = Exceeds GCTL

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

^ = These chemicals may be present in petroleum fuels but are not currently included in Table A of Chapter 62-770, F.A.C. (list of Petroleum Products' Contaminants of Concern), and therefore it is not required by rule that samples be analyzed for these chemicals. Summary columns have been provided for the circumstances in which these chemicals and others reported by the laboratory are detected, to comply with subparagraph 62-770.600(8)(a)25., F.A.C.

TABLE 2D: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - NAM PARAMETERS

Facility ID#: 53/8623751 Facility Name: One Stop

Sample Location	Sample Date	Methane (µg/L)	Nitrate (µg/L)	Nitrite (µg/L)	Orthophos-phate (µg/L)	Iron (µg/L)	Sulfate (µg/L)
GCTLs		NA	10,000	1,000	NA	300	250,000
NADCs		NA	100,000	10,000	NA	3,000	2,500,000
MW-9R	3/7/2016	2,600	42 U	32 U	130	**7,700**	3,500 V
		Destroyed					
MW-10R	11/4/2014	2,400	67	25 U	190	**2,700**	12,000
	3/7/2016	2,400	42 U	32 U	190	**13,000**	13,000
MW-11R	11/4/2014	1,400	37 I	25 U	83	**350**	1,100
	3/7/2016	1,400	42 U	32 U	140	**1,100**	620 V

Notes: Blank = Not Analyzed

BOLD = Exceeds GCTL

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

U = Compound was analyzed for but not detected.

V = Indicates that the analyte was detected in both the sample and the associated method blank

TABLE 2E: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - UIC PARAMETERS

Facility ID#: 53/8623751 **Facility Name: One Stop**

See notes at end of table.

Sample Location	Date	Aluminum (µg/L)	Arsenic (µg/L)	Chromium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Sodium (mg/L)	Ammonia (N) (mg/L)	Fluoride (mg/L)	Nitrate (N) (mg/L)	Nitrite (N) (mg/L)	Nitrate-Nitrite (N) (mg/L)	TDS (mg/L)	Sulfate (mg/L)
GCTLs		**200****	**10****	**100****	**15****	**100****	**160****	**2.8**	**2.0****	**10****	**1****	**10****	**500****	**250****
NADCs		2,000	100	1,000	150	1,000	1,600	280	200	100	10	100	5,000	2,500
Baseline Avg.		80	1.3	3.5	1.7	1.4	6	1.7	0.19	0.20	0.018	N/A	231	13
CW-1RR	10/6/2021*	110 I	2.0 U	5.2 U	3.3 U	2.8 U	8.4	**3.1**	0.24	0.049 U	0.036 U	NS	230	12
		PetroFix Injections October 20 to 22, 2021												
	1/24/2022	160 I	1.1 U	4.6 U	2.8 U	2.9 U	8.2	**3.3**	0.20 U	0.050 U,Q	0.049 U,Q	0.050 U	240	2.4 V
	4/25/2022	170 I	1.2 U	4.6 U	2.8 U	2.9 U	5.6	2	0.24	0.072 I	0.049 U	NS	180	2.6
CW-2RR	10/6/2021*	78 I	2.0 U	9.1 I	3.3 U	2.8 U	5.7	**3.4**	0.19 I	0.14 I	0.036 U	NS	250	12
		PetroFix Injections October 20 to 22, 2021												
	1/24/2022	120 I	1.1 U	7.5 I	2.8 U	2.9 U	5.9	**3.3**	0.20 U	0.050 U,Q	0.049 U,Q	0.050 U	260	1.4 V
	4/25/2022	**230 I**	1.2 U	6.8 I	3.4 I	2.9 U	5.3	2.8	0.20 U	0.050 U	0.049 U	NS	220	1.0
CW-3RR	10/6/2021*	58 I	2.0 U	5.2 U	3.3 U	2.8 U	3.7	0.12 I	0.13 U	0.86	0.036 U	NS	220	23
		PetroFix Injections October 20 to 22, 2021												
	1/24/2022	200 I	4.9 I	4.6 U	2.8 U	2.9 U	41	2.0	0.30	9.3 Q	0.049 U,Q	9.3	400	81 V
	4/25/2022	110 U	2.1 I	4.6 U	2.8 U	2.9 U	8.5	0.10 I	0.20 U	2.3	0.049 U	NS	160	16
CW-4R	10/6/2021*	83 I	2.8 I	5.2 U	3.3 U	2.8 U	5.3	1.3	0.16 I	0.049 U	0.036 U	NS	170	10
		PetroFix Injections October 20 to 22, 2021												
	1/24/2022	**720**	**12**	6.8 I	4.5 I	2.9 U	140	**77**	2.0 U	0.059 I,Q	0.049 U,Q	0.059 I	**1,200**	**890 V**
	4/25/2022	**1,100**	4.2 I	12	5.5	2.9 U	64	**25**	**4.0 U**	0.57	0.049 U	NS	**530**	190
MW-1R	10/6/2021*	41 U	2.0 U	5.2 U	3.3 U	2.8 U	6.3	1.8	0.18 I	0.049 U	0.036 U	NS	270	11
		PetroFix Injections October 20 to 22, 2021												
	1/24/2022	**4,600**	**16**	11	11	5.8 I	78	**45**	2.0 U	0.52 Q	0.049 U,Q	0.52	**740**	240 V
	4/25/2022	110 U	5.2	4.6 U	2.8 U	2.9 U	17	**3.8**	0.22	1.5	0.049 U	NS	300	41

TABLE 2E: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - UIC PARAMETERS

Facility ID#: 53/8623751 **Facility Name: One Stop**

See notes at end of table.

Sample		Aluminum	Arsenic	Chromium	Lead	Nickel	Sodium	Ammonia (N)	Fluoride	Nitrate (N)	Nitrite (N)	Nitrate-Nitrite (N)	TDS	Sulfate
Location	**Date**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**
MW-2R	10/6/2021*	160 I	2.0 U	5.2 U	3.3 U	2.8 U	2.0	0.99	0.18 I	0.30	0.036 U	NS	180	16
		PetroFix Injections October 20 to 22, 2021												
	1/24/2022	190 I	1.1 U	4.6 U	2.8 U	2.9 U	2.1	1.1	0.20 U	0.050 U,Q	0.049 U,Q	0.050 U	250	4.1 V
	4/25/2022	110 I	1.2 U	4.6 U	2.8 U	2.9 U	1.7	0.55	0.20 U	0.43	0.049 U	NS	180	8.0
MW-11R	10/6/2021*	52 I	2.0 U	5.2 U	3.3 U	2.8 U	12	1.4	0.28	0.049 U	0.036 U	NS	300	10
		PetroFix Injections October 20 to 22, 2021												
	1/24/2022	**260 I**	3.0 I	4.6 U	3.8 I	2.9 U	**210**	**29**	2.0 U	7.3 Q	0.049 U,Q	7.3	**1,400**	**840 V**
	4/25/2022	110 U	1.2 U	4.6 U	2.8 U	2.9 U	15	0.18 I	0.24	0.050 U	0.049 U	NS	310	27
CW-1, CW-1R, CW-2, CW-2R, CW-3, CW-3R, CW-4, MW-9R		Destroyed												
MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, DMW-8, MW-9, MW-10		Abandoned												
MW-10R, MW-11		Not Sampled												

Notes:

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

µg/L = micrograms per liter

** = As provided in Chapter 62-550, F.A.C.

I = The reported value is between the laboratory minimum detection limit (MDL) and the practical quantitation limit (PQL)

Q = Sample held beyond the accepted holding time (no nitrite was found in any of the samples thus the in hold nitrite+nitrate verifies that the out of hold nitrate value is valid)

U = Indicates that the compound was analyzed for but not detected at the listed MDL

V = Indicates that the analyte was detected in both the sample and the associated method blank

Bold = Exceeds the higher value of either the GCTL or Baseline Aaverage

* = Baseline Data

Recent Data

Map ID 23: Haines City Car Service

UNDERGROUND STORAGE TANK CLOSURE REPORT

Haines City Car Care

1005 17-92 West
Haines City, Fl 33844

(FDEP # 539202865)

Prepared by: Timothy Lentz, PG

Environmental Applications
P.O. Box 2276
Lakeland, Florida 33806

ENVIRONMENTAL APPLICATIONS
P.O. Box 2276 • Lakeland, FL 33806 • (813) 682-8524 (Call for Fax)

December 10, 1993

HRS Polk County
2090 East Clower Street
Bartow, Florida 33880

Attn: Charles Callaham

Re: UST Closure Report
Haines City Car Care
Haines City, Fl
FDEP# none

Dear Mr. Callaham

Enclosed please find the UST Closure Report completed following the excavation and removal of six UST's at the above referenced facility. This site was found to be free of any soil contamination but did contain "excessive" groundwater contamination. The UST's were properly disposed of by Bowen Equipment Service.

If you have any questions or comments please feel free to write or call.

Sincerely,

Timothy Lentz, PG
Geologist

cc: owner
w/encl.

Bowen Equipment Service
w/encl.

1.0 Introduction

On November 12, 1993 Environmental Applications was retained by Bowen Equipment Service to perform a soil gas survey and fulfill underground storage tank (UST) closure requirements at the Haines City Car Care (abandoned service station) facility, at 1005 17-92 West, Haines City, Florida. This facility had utilized 3-2,000 gallon, and 3-1000 gallon, steel, underground petroleum storage tanks. The locations can be seen on the enclosed site plan.

This assessment was accomplished through the use of physical observation, organic vapor analysis, using a flame ionization detector, of soil samples and FDER approved laboratory groundwater analyses.

2.0 Analytical Procedures

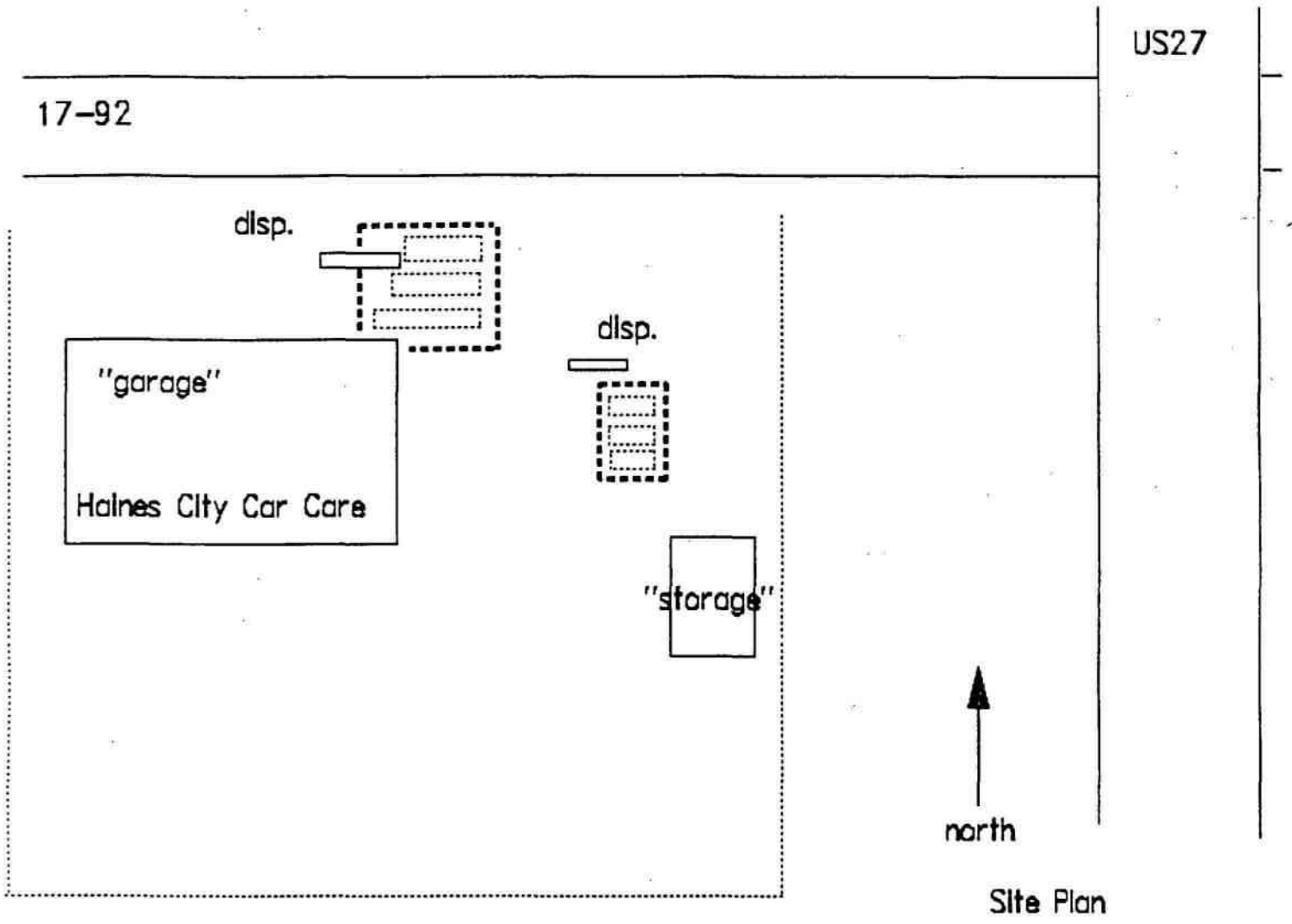
During and after the excavation and removal of the six UST's soil samples were obtained from designated areas and placed in a 16 ounce glass jar, leaving an approximate 2 inch headspace in which soil vapors could accumulate. The jar was then capped and allowed to equilibrate for approximately 2-3 minutes, after which time the inlet probe of the detection unit was inserted into the headspace to facilitate the analysis of soil vapors accumulating.

All glassware was thoroughly washed and rinsed with clean water between individual sampling events. Each soil sample was analyzed for the presence of organic vapors (including methane) in concentrations ranging from 0-1000 parts per million (ppm). Soil samples were analyzed with and without a carbon filter which is used to distinguish between naturally ocurring organics (i.e. methane) and petroleum hydrocarbon vapors. As Rule 17-770.200 of the Florida Administrative Code defines contaminated soils in terms of responses produced on a flame ionization detector (FID).

Petroleum contaminated soil standards are defined in Chapter 17-770.200 of Florida Administrative Code (FAC). As stipulated in this F.A.C. Section, contamination is defined as, "...excessively contaminated soil means soil saturated with petroleum or petroleum products or soil which causes a total hydrocarbon reading of 500 ppm for Gasoline Analytical Group (or 50 ppm for Kerosene Analytical Group of Mixed Product Analytical Group)..."

A Heath Consultants "Detecto Pak II" organic vapor analyzer equipped with a flame-ionization detector was used to analyze soil samples for volatile organic aromatics. This instrument is calibrated daily with a 90 ppm methane calibrant.

Lakeland scrap facility for proper disposal. The tanks were emptied of all contents and properly disposed by Williams Waste Oil. No contaminated soils were encountered during the excavation and removal of the UST's.


US27
17-92
disp.
disp.
"garage"
Haines City Car Care
"storage"
north

Site Plan

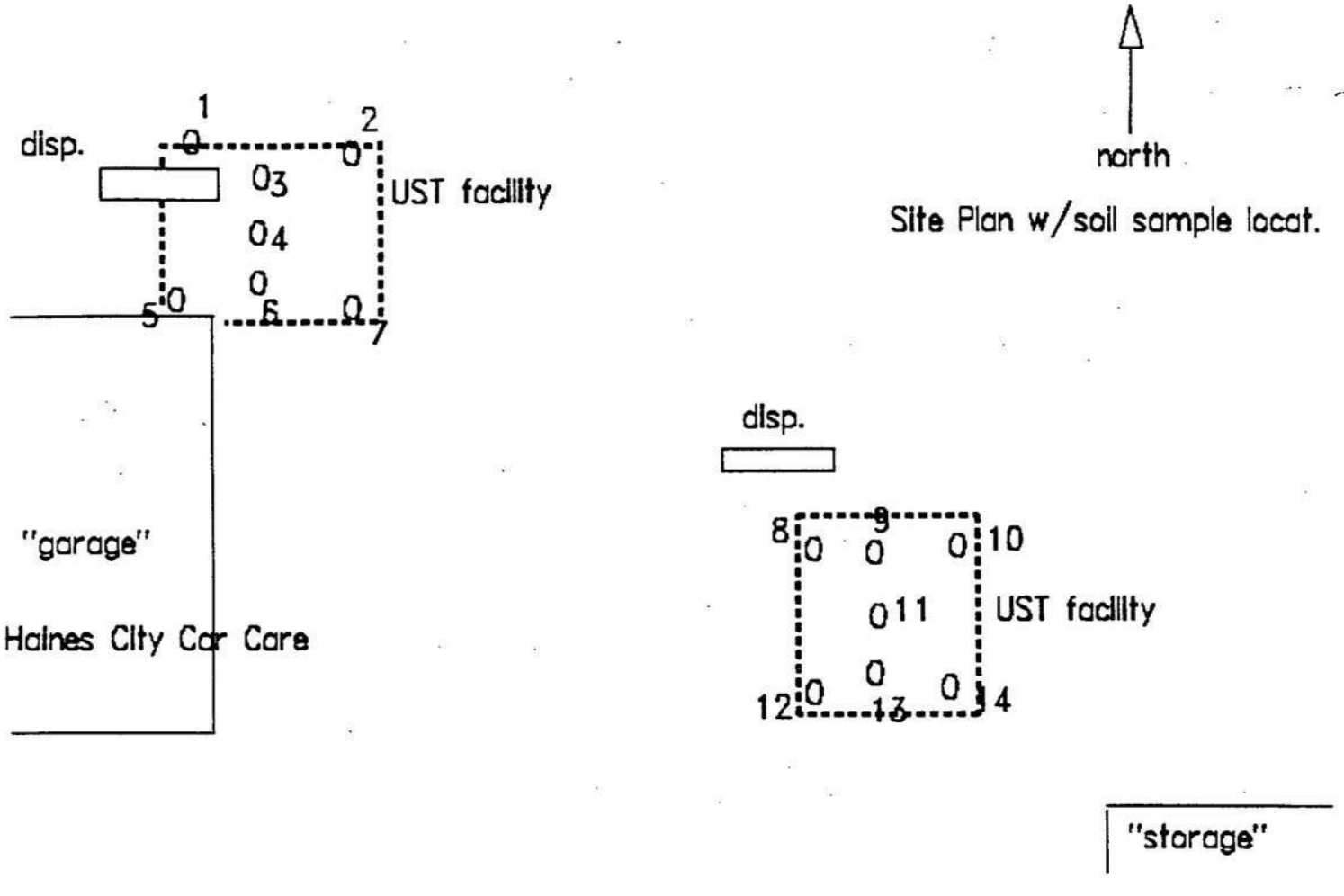
Soils obtained from each sample location were described and the occurrence of petroleum vapors was recorded. The types of soils found at each soil sample site are uniform and described as a brown-tan, fine to medium grained silty sand fill material.

A groundwater sample was obtained from a temporary monitor well installed within each of the two excavations that had contained the underground storage tanks, these samples were analyzed by an FDER approved laboratory for dissolved petroleum compounds using EPA method 602 and 610 (see enclosed laboratory results). Groundwater was encountered at approximately 6-8 feet in depth.

3.0 Conclusion

Based on physical observation, organic vapor analysis of soils and laboratory groundwater analyses there is no soil and some minor groundwater contamination as a result of a petroleum discharge at this site at this time. Using EPA Method 602 the Total VOA was 297.0 ug/l in TMW-1, (eastern UST facility) which exceeded the FDEP groundwater guideline limit of 50 ug/l (ppb). The underground storage tanks were inspected and no corrosion, or holes were observed. The underground storage tanks were cleaned and transported to a

17-92


north
Site Plan w/soil sample locat.
disp.
1
2
3
4
5
6
7
UST facility
"garage"
Haines City Car Care
disp.
8
9
10
11
12
13
14
UST facility
"storage"

Haines City Car Care

SOIL PROFILE SUMMARY
OVA response

soil sample #	OVA response (ppm)/depth				
	2'	4'	6'	8'	
1		0	0		
2		0	0		
3				0	
4				0	TMW-2
5	0	0	0		
6				0	
7	0	0	0		
8	0	0	0		
9				0	
10		0	0		
11				0	TMW-1
12	0	0	0		
13				0	
14		0	0		

No excessively contaminated soils were removed from excavation

PHOSLAB

Phone 813-682-5897 806 W. Beacon Road • Lakeland, Florida 33803 Fax 813-683-3279

Client: Environmental Applications
P. O. Box 2276
Lakeland, Florida 33806

Attn: Mr. Tim Lentz
P.O. #
Project: Haines City Auto Care
Reference: TMW-1/TMW-2

Sampled By: TL
Sample Date: 11-12-93
Date Received: 11-12-93
Analysis Date: 11-14/15/16-93
Analyzed By: GJF/JMC

CERTIFICATE OF ANALYSIS

VOLATILE ORGANICS
EPA METHOD 602

(expressed as ug/L)

	TMW-1	TMW-2	MDL, ug/L
MTBE	<5.0	BDL	0.20
Benzene	<5.0	BDL	0.20
Toluene	<5.0	BDL	0.20
Ethylbenzene	123.0	BDL	0.20
Xylenes	174.0	BDL	0.20
Total VOA	297.0	BDL	0.20

BDL: Below Detectable Limits

QA OFFICER

CHEMIST

FDER QA/QC #870308G

PHOSLAB

Phone 813-682-5897 806 W. Beacon Road • Lakeland, Florida 33803 Fax 813-683-3279

Client: Environmental Applications
P. O. Box 2276
Lakeland, Florida 33806

Attn: Mr. Tim Lentz
P.O. #
Project: Haines City Auto Care
Reference: TMW-1/TMW-2

Sampled By: TL
Sample Date: 11-12-93
Date Received: 11-12-93
Analysis Date: 11-14/15/16-93
Analyzed By: GJF/JMC

CERTIFICATE OF ANALYSIS

POLYNUCLEAR AROMATIC HYDROCARBONS (expressed as ug/L)
EPA METHOD 610

	TMW-1	TMW-2	MDL, ug/L
Naphthalene	BDL	BDL	1.80
2-Methylnaphthalene	BDL	BDL	2.30
1-Methylnaphthalene	BDL	BDL	1.80
Acenaphthylene	BDL	BDL	2.30
Acenaphthene	BDL	BDL	1.80
Fluorene	BDL	BDL	0.21
Phenanthrene	BDL	BDL	0.64
Anthracene	BDL	BDL	0.66
Fluoranthene	BDL	BDL	0.21
Pyrene	BDL	BDL	0.27
Benzo[a]anthracene	BDL	BDL	0.02
Chrysene	BDL	BDL	0.15
Benzo[b]fluoranthene	BDL	BDL	0.02
Benzo[k]fluoranthene	BDL	BDL	0.02
Benzo[a]pyrene	BDL	BDL	0.02
Indeno[1,2,3-cd]pyrene	BDL	BDL	0.04
Dibenzo[ah]anthracene	BDL	BDL	0.03
Benzo[ghi]perylene	BDL	BDL	0.08

BDL: Below Detectable Limits

QA OFFICER

CHEMIST

FDER QA/QC #870308G

Florida Department of Environmental Regulation
Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

DER Application No. _____

Storage Tank Registration Form

Please Print or Type - Review Instructions Before Completing Form

1. DER Facility ID Number: 539202865 2. Facility Type: A
3. New Registration ☐ New Owner Data ☐ Facility Revision ☐ Tank(s) Revision ☒ **
4. County and Code of tank(s) location: ~~POLK (53)~~ /

5. Facility Name: Haines City Car Care
   Tank(s) Address: 1005 17-92 West
   City/State/Zip: Haines City, Fl 33844
   Contact Person: John Rhoden Telephone: (813) 422-6124
6. Financial Responsibility Type: none

7a. Tank(s) Owner: Sherman Rosecrants
   Owner Mailing Address: 434 Hacienda Village
   City/State/Zip: Winter Park, Fl 32708-2542
   Contact Person: Sherman Rosecrants Telephone: (____) _____

7b. New Owner Signature/Change Date: _____ / ___/___/___

8. Location (optional) Latitude: ___°___'___" Longitude: ___°___'___" Section____ Township____ Range____

Complete One Line For Each Tank At This Facility (Use Codes - See Instructions)

Complete 9 - 16 for tanks in use; 9 - 19 for tanks out of use

9	10	11	12	13	14	15	16	17	18	19
1-3	2000	Y		U	B	C	Y	B	O	12/93
4-6	1000	Y		U	B	C	Y	B	O	/

20 Bowen Equipment Service — Certified Contractor*
DPR# PCCO 53724 — Department of Professional Regulation License Number*

*For new tank installation or tank removal

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

Timothy Lentz, Pg geologist — Print name & title of owner or authorized person
Signature
12/9/93 — Date

Northwest District 160 Governmental Center Pensacola, Florida 32501-5794 904-436-8300
Northeast District 7825 Baymeadows Way, Suite B 200 Jacksonville, Florida 32207 904-798-4200
Central District 3319 Maguire Blvd. Suite 232 Orlando, Florida 32803-3767 407-894-7555
Southwest District 4520 Oak Fair Blvd. Tampa, Florida 33610-7347 813-623-5561
South District 2269 Bay St. Fort Myers, Florida 33901-2896 813-332-6975
Southeast District 1800 S. Congress Ave. Suite A West Palm Beach, Florida 33406 407-433-2650

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

Effective Date: December 10, 1990
DER Application No. _____ (Filled in by DER)

Closure Assessment Form

Owners of storage tank systems that are replacing, removing or closing in place storage tanks shall use this form to demonstrate that a storage system closure assesment was performed in accordance with Rule 17-761 or 17-762, Florida Administrative Code. Eligible Early Detection Incentive (EDI) and Reimbursement Program sites do not have to perform a closure assessment.

Please Print or Type
Complete All Applicable Blanks

1. Date: 12/9/93
2. DER Facility ID Number: 539202865 3. County: POLK
4. Facility Name: Haines City Car Care
5. Facility Owner: Sherman Rosecrants
6. Facility Address: 1005 17-92 West, Haines City, Fl 33844
7. Mailing Address: 434 Hacienda Village, Winter Park, Fl 32708-2542
8. Telephone Number: (813) 422-6124 9. Facility Operator: _____
10. Are the Storage Tank(s): **(Circle one or both)** A. Aboveground or B. Underground
11. Type of Product(s) Stored: ~~gas and kero group~~
12. Were the Tank(s): **(Circle one)** A. Replaced B. Removed C. Closed in Place D. Upgraded (aboveground tanks only)
13. Number of Tanks Closed: 6 14. Age of Tanks: _____

Facility Assessment Information

Yes	No	Not Applicable	
☐	☒		1. *Is the facility participating in the Florida Petroleum Liability Insurance and Restoration Program (FPLIRP)?*
☒	☐		2. Was a Discharge Reporting Form submitted to the Department? If yes, When: 12/93 Where: POLK NR1
☒	☐		3. Is the depth to ground water less than 20 feet?
☐	☒	☐	4. Are monitoring wells present around the storage system? If yes, specify type: ☐ Water monitoring ☐ Vapor monitoring
☐	☒	☐	5. Is there free product present in the monitoring wells or within the excavation?
☐	☒	☐	6. *Were the petroleum hydrocarbon vapor levels in the soils greater than 500 parts per million for gasoline?* Specify sample type: ☐ Vapor Monitoring wells ☒ Soil sample(s)
☐	☒	☐	7. Were the petroleum hydrocarbon vapor levels in the soils greater than 50 parts per million for diesel/kerosene? Specify sample type: ☐ Vapor Monitoring wells ☒ Soil sample(s)
☒	☐	☐	8. Were the analytical laboratory results of the ground water sample(s) greater than the allowable state target levels? (See target levels on reverse side of this form and supply laboratory data sheets)
☐	☐	☒	9. If a used oil storage system, did a visual inspection detect any discolored soil indicating a release?
☒	☐		10. Are any potable wells located within ¼ of a mile radius of the facility?
☐	☒		11. Is there a surface water body within ¼ mile radius of the site? If yes, indicate distance: _____

Northwest District 160 Governmental Center
Northeast District 7825 Baymeadows Way, Suite B 200
Central District 3319 Maguire Blvd, Suite 232
Southwest District 4520 Oak Fair Blvd.
South District 2269 Bay St.
Southeast District 1900 S. Congress Ave., Suite A

Form No. Closure Assessment Form
Effective Date December 10, 1990
DER Application No. (Filled in by DER)

12. A detailed drawing or sketch of the facility that includes the storage system location, monitoring wells, buildings, storm drains, sample locations, and dispenser locations must accompany this form.
13. If a facility has a pollutant storage tank system that has both gasoline and kerosene/diesel stored on site, both EPA Method 602 and EPA Method 610 must be performed on the ground water samples obtained.
14. Amount of soils removed and receipt of proper disposal.
15. If yes is answered to any one of questions 5-9, a Discharge Reporting Form 17-761.900(1) indicating a suspected release shall be submitted to the Department within one working day.
16. A copy of this form and any attachments must be submitted to the Department's district office in your area and to the locally administered program office under contract with the Department within 60 days of completion of tank removal or filling a tank with an inert material.

Signature of Owner

Date

Signature of Person Performing Assessment

12/9/93
Date

Timothy Lentz, PG geologist
Title of Person Performing Assessment

State Ground Water Target Levels That Affect A Pollutant Storage Tank System Closure Assessment

State ground water target levels are as follows:

1. For gasoline (EPA Method 602):
   a. Benzene 1 ug/l
   b. Total VOA 50 ug/l
      - Benzene
      - Toluene
      - Total Xylenes
      - Ethylbenzene
   c. Methyl Test-Butyl Ether (MTBE) 50 ug/l

2. For kerosene/diesel (EPA Method 610):
   a. Polynuclear Aromatic Hydrocarbons (PAHS) (Best achievable detection limit, 10 ug/l maximum)

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

Effective Date: December 10, 1990
DER Application No. _____ (Filled in by DER)

Underground Storage Tank Installation and Removal Form For Certified Contractors

Pollutant Storage System Specialty Contractors as defined in Section 489.113, Florida Statutes (Certified contractors as defined in Section 17-761.200, Florida Administrative Code) shall use this form to certify that the installation, replacement or removal of the storage tank system(s) located at the address listed below was performed in accordance with Department Reference Standards.

General Facility Information

1. DER Facility Identification No.: 539202865
2. Facility Name: Haines City Car Care Telephone: (813) 422-6124
3. Street Address (physical location): 1005 17-92 West
   Haines City, Fl 33844
4. Owner Name: Sherman Rosecrants Telephone: (____)____
5. Owner Address: 434 Hacienda Village, Winter Park, Fl 32708-2542
6. Number of Tanks: a. Installed at this time _____ b. Removed at this time 6
7. Tank(s) Manufactured by: _____
8. Date Work Initiated: 11/12/93 9. Date Work Completed: 11/14/93

Underground Pollutant Tank Installation Checklist

Please certify the completion of the following installation requirements by placing an (X) in the appropriate box.

1. The tanks and piping are corrosion resistant and approved for use by State and Federal Laws. ☐
2. Excavation, backfill and compaction completed in accordance with NFPA (National Fire Protection Association) 30(87), API (American Petroleum Institute) 1615, PEI (Petroleum Equipment Institute) RP100-87 and the manufacturers' specifications. ☒
3. Tanks and piping pretested and installed in accordance with NFPA 30(87), API 1615, PEI/RP100(87) and the manufacturers' specifications. ☐
4. Steel tanks and piping are cathodically protected in accordance with NFPA 30(87), API 1632, UL (Underwriters Laboratory) 1746, STI (Steel Tank Institute) R892-89 and the manufacturer's specifications. ☐
5. Tanks and piping tested for tightness after installation in accordance with NFPA 30(87) and PEI/RP100-87. ☐
6. Monitoring well(s) or other leak detection devices installed and tested in accordance with Section 17-761.640, Florida Administrative Code (F.A.C.) ☐
7. Spill and overfill protection devices installed in accordance with Section 17-761.500, F.A.C. ☐
8. Secondary containment installed for tanks and piping as applicable in accordance with Section 17-761.500, F.A.C. ☐

Please Note: The numbers following the abbreviations (e.g. API 1615) are publication or specification numbers issued by these instututions.

Underground Pollutant Tank Removal Checklist

1. Closure assessment performed in accordance with Section 17-761.800, F.A.C. ☒
2. Underground tank removed and disposed of as specified in API 1604 in acordance with Section 17-761.800, F.A.C. ☒

Form Title: Underground Storage Tank Installation & Removal Form for Certified Contractors
Effective Date: December 10, 1990
DER Application No. _____ (Filled in by DER)

Certification

I hereby certify and attest that I am familiar with the facility that is registered with the Florida Department of Environmental Regulation; that to the best of my knowledge and belief, the tank installation, replacement or removal at this facility was conducted in accordance with Chapter 489 and Section 376.303, Florida Statutes and Chapter 17-761, Florida Administrative Code (and its adopted reference sources from publications and standards of the National Fire Protection Association (NFPA), the American Petroleum Institute (API), the National Association of Corrosion Engineers (NACE), American Society for Testing and Materials (ASTM); Petroleum Equipment Institute (PEI); Steel Tank Institute (STI); Underwriters Laboratory (UL); and the tank and integral piping manufacturers' specifications; and that the operations on the checklist were performed accordingly.

Bowen Equipment Service (Type or Print) Certified Pollutant Tank Contractor Name Pollutant Storage System Specialty Contractor License Number (PSSSC)	PCCO 53724 PSSSC Number
M Bowen Certified Tank Contractor Signature	Date
Timothy Lentz, geologist (Type or Print) Field Supervisor Name	Date
Field Supervisor Signature	12/2/93 Date

The owner or operator of the facility must register the tanks with the Department at least 10 days before the installation. The installer must submit this form no more than 30 days after the completion of installation to the Department of Environmental Regulation at the address printed at the top of page one.

Florida Department of Environmental Regulation

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

~~Mail a copy to: EPC, UST Compliance Department~~
~~1900 9th Ave., Tampa, FL 33605~~

DEA Form # 17-761.900(1)
Form Title Discharge Reporting Form
Effective Date December 10, 1990
DER Application No. (if assigned 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 DER District Office in your area listed on the reverse side of this form

PLEASE PRINT OR TYPE
Complete all applicable blanks

1. DER Facility ID Number: 539202865 2. Tank Number: _____ 3. Date: 12/6/93
4. Facility Name: Haines City Car Care
   Facility Owner or Operator: Sherman Rosecrants
   Facility Address: 1005 17-92 West, Haines City, Fl 33844
   Telephone Number: (813) 422-6124 County: POLK
   Mailing Address: 434 Hacienda Village, Winter Park, Fl 32708-2542
5. Date of receipt of test results or discovery: 11/30/93 month/day/year
6. Method of initial discovery. (circle one only)
   A. Liquid detector (automatic or manual)
   B. Vapor detector (automatic or manual)
   C. Tightness test (underground tanks only).
   D. Emptying and Inspection.
   E. Inventory control.
   F. Vapor or visible signs of a discharge in the vicinity.
   G. Closure: EPA 602 (explain)
   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
   B. unleaded gasoline
   C. gasohol
   D. vehicular diesel
   F. aviation gas
   G. jet fuel
   L. used/waste oil
   M. diesel
   O. new/lube oil
   V. hazardous substance includes pesticides, ammonia, chlorine and derivatives (write in name or Chemical Abstract Service CAS number) _____
   Z. other (write in name) _____
10. Cause of leak. (circle all that apply)
    A. Unknown
    B. Split
    C. Loose connection
    D. Corrosion
    E. Puncture
    F. Installation failure
    G. Spill _____
    H. Overfill
    I. Other (specify) _____
11. Type of financial responsibility. (circle one)
    A. Third party insurance provided by the state insurance contractor
    B. Self-insurance pursuant to Chapter 17-769.500 F.A.C.
    C. Not applicable
    D. None
12. To the best of my knowledge and belief all information submitted on this form is true, accurate, and complete.

Timothy Lentz, PG geologist
Printed Name of Owner, Operator or Authorized Representative

Signature of Owner, Operator or Authorized Representative

Northwest District Northeast District Central District Southwest District South District Southeast District

INVOICE
14146

PHOSLAB

806 W. Beacon Road • Lakeland, Florida 33803

Client: Environmental Applications
P. O. Box 2276
Lakeland, Florida 33806

Attn: Mr. Tim Lentz

P.O. #

Project: Haines City Auto Care

Reference: TMW-1/TMW-2

DATE	ANALYTICAL DESCRIPTION	# OF SAMPLES	COST PER UNIT	EXTENSION
11-16-93	Ground Water Sample Analysis by EPA Methods:			
	602	2	85.00	170.00
	610	2	120.00	240.00

PAYMENT DUE DATE: 12-15-93

TERMS: NET/30 DAYS

SUBTOTAL 410.00

PLEASE REMIT THIS AMOUNT 410.00

STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES
DISTRICT SIX
POLK COUNTY PUBLIC HEALTH UNIT
DIRECTOR: KEVIN SHERIN, M.D., M.P.H.

January 11, 1994

Certified Mail

Mr. Sherman Rosecrants
434 Hacienda Village
Winter Springs, FL 32708-2542

RE: CLOSURE REVIEW #D-664-94
FACILITY NAME: Haines City Car Service
FACILITY ADDRESS: Haines City, Florida
FACILITY ID# 539202865
17-770 CONTAMINATION ASSESSMENT REPORT

Dear Mr. Rosecrants:

The analytical results submitted by Environmental Applications, as part of the closure assessment for removal of storage tanks at the referenced facility showed elevated levels of benzene in the groundwater. As such, further assessment to define the extent of contamination at the facility is warranted.

A Contamination Assessment should be initiated within 30 days of receipt of this notice as per Rule 17-770.600, Florida Administrative Code. A Contamination Assessment Report should be submitted by May 30, 1994 (six months after initial discovery of contamination) to the Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619. Attention: Laurel Lucado.

If there are other questions, direct them to Polk County Stationary Pollutant Storage Tank Program at (813) 533-3398, extension 144, or to Laurel Lucado at the DEP Southwest District Tanks Program at (813) 744-6100, extension 427.

Sincerely,

Charles Callaham, R.S.

Charles Callaham, R.S.
Environmental Supervisor

cc: Laurel Lucado, FDEP, Tampa
Environmental Applications

Note: If this facility is eligible for funding assistance and the owner intends to submit a reimbursement application for a completed program task, such as a contamination assessment with a no further action proposal, the closure assessment must follow the guidelines specified in Chapter 17-770.600, Florida Administrative Code for contamination assessments. This review letter should not be considered Departmental approval of the closure report as a contamination assessment or a no further action for reimbursement purposes.

CC:ebe

Doc # 1364-58B

Progress Environmental Laboratories

4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

Client: Growth Environ
Project Mgr: Tim Lentz
Project : Haines City CAR
Project #: FL079401
PO #: 6640

Due Date(TAT): 3/10/95
Fax Reports to:( ) -
Bill to: Gare
Sampler's Initials: MD

9503-17

Station ID	Date	Time	PEL Lab #	# of Bttls	Pres	601/602	EDB	8310	TRPH	PB				Remarks
MW-5	2/28	1445	1	9		3	3	1	1	1				
MW-6	2/28	1350	2	9		3	3	1	1	1				EDB are Approved RJ
MW-7	2/28	1430	3	9		5	3	1	1	1				
Equipment Blank	2/28	1450	4	9		3	3	1	1	1				
MW-8	2/28	1420	5	9		3	3	1	1	1				
Trip Blank	2/28		6			1								

Relinquished By:	Received By:	Date	Time	Project Notes
Mark Deuel	Kim Williams	2/29/95	0944	
Relinquished By:	Received By:	Date	Time	
Relinquished By:	Received By:	Date	Time	
Relinquished By:	Received By:	Date	Time	
		3/6/95	1150	3-8 KD

Doc # 16364-58C

Progress Environmental Laboratories

4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 1

PEL Lab # : 9503-00017-1
Client ID : FL079401;MW-5
Project ID :
Location : Haines City Car Care
Matrix : Water

Collection Information:
Sample Date: 2/28/95
Sample Time: 14:45
Sampled By : MD
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	0.64
Chloromethane	EPA 8010	ND	ug/l	0.57
Vinyl Chloride	EPA 8010	ND	ug/l	0.70
Bromomethane	EPA 8010	ND	ug/l	0.38
Chloroethane	EPA 8010	ND	ug/l	0.53
Trichlorofluoromethane	EPA 8010	ND	ug/l	0.49
1,1-Dichloroethene	EPA 8010	ND	ug/l	0.32
Methylene Chloride	EPA 8010	ND	ug/l	0.30
Trans-1-2-dichloroethene	EPA 8010	ND	ug/l	0.31
1,1-Dichloroethane	EPA 8010	ND	ug/l	0.28
Chloroform	EPA 8010	ND	ug/l	0.35
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	0.28
Carbontetrachloride	EPA 8010	ND	ug/l	0.50
1,2-Dichloroethane	EPA 8010	ND	ug/l	0.29
Trichloroethene	EPA 8010	ND	ug/l	0.55
1,2-Dichloropropane	EPA 8010	ND	ug/l	0.30
Bromodichloromethane	EPA 8010	ND	ug/l	0.27
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	0.33
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.31
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.36
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	0.52
Tetrachloroethene	EPA 8010	ND	ug/l	0.30
Dibromochloromethane	EPA 8010	ND	ug/l	0.70
Bromoform	EPA 8010	ND	ug/l	0.44
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	0.32
Analysis date	EPA 8010	3/5/95		
GC Volatiles	EPA 8020			

- CONTINUED ON NEXT PAGE -

Doc # 16364-58D

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 2

PEL Lab # : 9503-00017-1 (Continued ...)
Client ID : FL079401;MW-5

ND = Less than MDL

Parameter	Method	Results	Units	MDL
MTBE	EPA 8020	ND	ug/l	0.51
Benzene	EPA 8020	ND	ug/l	0.76
Toluene	EPA 8020	ND	ug/l	0.40
Chlorobenzene	EPA 8020	ND	ug/l	0.42
Ethylbenzene	EPA 8020	ND	ug/l	0.39
Total Xylene	EPA 8020	ND	ug/l	
m,p-Xylene	EPA 8020	ND	ug/l	0.55
o-Xylene	EPA 8020	ND	ug/l	0.80
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	0.40
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	0.41
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	0.47
Analysis date	EPA 8020	3/5/95		
EDB	EPA 8011	ND	ug/l	0.02
TRPH	EPA 418.1	ND	mg/l	0.50
Polyaromatic Hydrocarbons	EPA 8310			
Naphthalene	EPA 8310	ND	ug/l	1.39
2-Methyl naphthalene	EPA 8310	ND	ug/l	1.03
1-Methyl naphthalene	EPA 8310	ND	ug/l	0.85
Acenaphthylene	EPA 8310	ND	ug/l	1.13
Acenaphthene	EPA 8310	ND	ug/l	1.01
Fluorene	EPA 8310	ND	ug/l	0.39
Phenanthrene	EPA 8310	ND	ug/l	0.46
Anthracene	EPA 8310	ND	ug/l	1.53
Fluoranthene	EPA 8310	ND	ug/l	0.46
Pyrene	EPA 8310	ND	ug/l	0.57
Benzo (a) Anthracene	EPA 8310	ND	ug/l	0.21
Chrysene	EPA 8310	ND	ug/l	0.36
Benzo (b) Fluoranthene	EPA 8310	ND	ug/l	0.42
Benzo (k) Fluoranthene	EPA 8310	ND	ug/l	0.39
Benzo (a) Pyrene	EPA 8310	ND	ug/l	0.37
Indeno (123) Pyrene	EPA 8310	ND	ug/l	0.42
Dibenzo (a,h) Anthracene	EPA 8310	ND	ug/l	0.29
Benzo (ghi) Perylene	EPA 8310	ND	ug/l	0.85

- CONTINUED ON NEXT PAGE -

Doc # 16364-58E

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 3

PEL Lab # : 9503-00017-1 (Continued ...)
Client ID : FL079401;MW-5

ND = Less than MDL

Parameter	Method	Results	Units	MDL
Analysis Date	EPA 8310	3/6/95		
Lead	EPA 6010	5.16	ug/l	3.73

Respectfully submitted,
Charles R. Ingram, Quality Assurance Officer.

Respectfully submitted,
Vincent M. Giampa, Laboratory Manager.

Dept 1636 4 - 58 F

Progress Environmental Laboratories

4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 1

PEL Lab # : 9503-00017-2
Client ID : FL079401;MW-6
Project ID :
Location : Haines City Car Care
Matrix : Water

Collection Information:
Sample Date: 2/28/95
Sample Time: 13:50
Sampled By : MD
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	0.64
Chloromethane	EPA 8010	ND	ug/l	0.57
Vinyl Chloride	EPA 8010	ND	ug/l	0.70
Bromomethane	EPA 8010	ND	ug/l	0.38
Chloroethane	EPA 8010	ND	ug/l	0.53
Trichlorofluoromethane	EPA 8010	ND	ug/l	0.49
1,1-Dichloroethene	EPA 8010	ND	ug/l	0.32
Methylene Chloride	EPA 8010	ND	ug/l	0.30
Trans-1-2-dichloroethene	EPA 8010	ND	ug/l	0.31
1,1-Dichloroethane	EPA 8010	ND	ug/l	0.28
Chloroform	EPA 8010	ND	ug/l	0.35
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	0.28
Carbontetrachloride	EPA 8010	ND	ug/l	0.50
1,2-Dichloroethane	EPA 8010	ND	ug/l	0.29
Trichloroethene	EPA 8010	ND	ug/l	0.55
1,2-Dichloropropane	EPA 8010	ND	ug/l	0.30
Bromodichloromethane	EPA 8010	ND	ug/l	0.27
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	0.33
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.31
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.36
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	0.52
Tetrachloroethene	EPA 8010	ND	ug/l	0.30
Dibromochloromethane	EPA 8010	ND	ug/l	0.70
Bromoform	EPA 8010	ND	ug/l	0.44
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	0.32
Analysis date	EPA 8010	3/5/95		
GC Volatiles	EPA 8020			

- CONTINUED ON NEXT PAGE -

Doc # 16364-589

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 2

PEL Lab # : 9503-00017-2 (Continued ...)
Client ID : FL079401;MW-6

ND = Less than MDL

Parameter	Method	Results	Units	MDL
MTBE	EPA 8020	ND	ug/l	0.51
Benzene	EPA 8020	ND	ug/l	0.76
Toluene	EPA 8020	ND	ug/l	0.40
Chlorobenzene	EPA 8020	ND	ug/l	0.42
Ethylbenzene	EPA 8020	ND	ug/l	0.39
Total Xylene	EPA 8020	ND	ug/l	
m,p-Xylene	EPA 8020	ND	ug/l	0.55
o-Xylene	EPA 8020	ND	ug/l	0.80
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	0.40
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	0.41
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	0.47
Analysis date	EPA 8020	3/5/95		
EDB	EPA 8011	ND	ug/l	0.02
TRPH	EPA 418.1	ND	mg/l	0.50
Polyaromatic Hydrocarbons	EPA 8310			
Naphthalene	EPA 8310	ND	ug/l	1.39
2-Methyl naphthalene	EPA 8310	ND	ug/l	1.03
1-Methyl naphthalene	EPA 8310	ND	ug/l	0.85
Acenaphthylene	EPA 8310	ND	ug/l	1.13
Acenaphthene	EPA 8310	ND	ug/l	1.01
Fluorene	EPA 8310	ND	ug/l	0.39
Phenanthrene	EPA 8310	ND	ug/l	0.46
Anthracene	EPA 8310	ND	ug/l	1.53
Fluoranthene	EPA 8310	ND	ug/l	0.46
Pyrene	EPA 8310	ND	ug/l	0.57
Benzo (a) Anthracene	EPA 8310	ND	ug/l	0.21
Chrysene	EPA 8310	ND	ug/l	0.36
Benzo (b) Fluoranthene	EPA 8310	ND	ug/l	0.42
Benzo (k) Fluoranthene	EPA 8310	ND	ug/l	0.39
Benzo (a) Pyrene	EPA 8310	ND	ug/l	0.37
Indeno (123) Pyrene	EPA 8310	ND	ug/l	0.42
Dibenzo (a,h) Anthracene	EPA 8310	ND	ug/l	0.29
Benzo (ghi) Perylene	EPA 8310	ND	ug/l	0.85

- CONTINUED ON NEXT PAGE -

Doc # 16364-581H

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 3

PEL Lab # : 9503-00017-2 (Continued ...)
Client ID : FL079401;MW-6

ND = Less than MDL

Parameter	Method	Results	Units	MDL
Analysis Date	EPA 8310	3/6/95		
Lead	EPA 6010	11.20	ug/l	3.73

Respectfully submitted,
Charles R. Ingram, Quality Assurance Officer.

Respectfully submitted,
Vincent M. Giampa, Laboratory Manager.

Doc # 16364-58 I

Progress Environmental Laboratories

4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 1

PEL Lab # : 9503-00017-3
Client ID : FL079401;MW-7
Project ID :
Location : Haines City Car Care
Matrix : Water

Collection Information:
Sample Date: 2/28/95
Sample Time: 14:30
Sampled By : MD
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	0.64
Chloromethane	EPA 8010	ND	ug/l	0.57
Vinyl Chloride	EPA 8010	ND	ug/l	0.70
Bromomethane	EPA 8010	ND	ug/l	0.38
Chloroethane	EPA 8010	ND	ug/l	0.53
Trichlorofluoromethane	EPA 8010	ND	ug/l	0.49
1,1-Dichloroethene	EPA 8010	ND	ug/l	0.32
Methylene Chloride	EPA 8010	ND	ug/l	0.30
Trans-1-2-dichloroethene	EPA 8010	ND	ug/l	0.31
1,1-Dichloroethane	EPA 8010	ND	ug/l	0.28
Chloroform	EPA 8010	ND	ug/l	0.35
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	0.28
Carbontetrachloride	EPA 8010	ND	ug/l	0.50
1,2-Dichloroethane	EPA 8010	ND	ug/l	0.29
Trichloroethene	EPA 8010	ND	ug/l	0.55
1,2-Dichloropropane	EPA 8010	ND	ug/l	0.30
Bromodichloromethane	EPA 8010	ND	ug/l	0.27
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	0.33
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.31
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.36
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	0.52
Tetrachloroethene	EPA 8010	ND	ug/l	0.30
Dibromochloromethane	EPA 8010	ND	ug/l	0.70
Bromoform	EPA 8010	ND	ug/l	0.44
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	0.32
Analysis date	EPA 8010	3/5/95		
GC Volatiles	EPA 8020			

- CONTINUED ON NEXT PAGE -

Doc # 16364-58 J

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 2

PEL Lab # : 9503-00017-3 (Continued ...)
Client ID : FL079401;MW-7

ND = Less than MDL

Parameter	Method	Results	Units	MDL
MTBE	EPA 8020	ND	ug/l	0.51
Benzene	EPA 8020	ND	ug/l	0.76
Toluene	EPA 8020	ND	ug/l	0.40
Chlorobenzene	EPA 8020	ND	ug/l	0.42
Ethylbenzene	EPA 8020	ND	ug/l	0.39
Total Xylene	EPA 8020	ND	ug/l	
m,p-Xylene	EPA 8020	ND	ug/l	0.55
o-Xylene	EPA 8020	ND	ug/l	0.80
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	0.40
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	0.41
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	0.47
Analysis date	EPA 8020	3/5/95		
EDB	EPA 8011	ND	ug/l	0.02
TRPH	EPA 418.1	ND	mg/l	0.50
Polyaromatic Hydrocarbons	EPA 8310			
Naphthalene	EPA 8310	ND	ug/l	1.39
2-Methyl naphthalene	EPA 8310	ND	ug/l	1.03
1-Methyl naphthalene	EPA 8310	ND	ug/l	0.85
Acenaphthylene	EPA 8310	ND	ug/l	1.13
Acenaphthene	EPA 8310	ND	ug/l	1.01
Fluorene	EPA 8310	ND	ug/l	0.39
Phenanthrene	EPA 8310	ND	ug/l	0.46
Anthracene	EPA 8310	ND	ug/l	1.53
Fluoranthene	EPA 8310	ND	ug/l	0.46
Pyrene	EPA 8310	ND	ug/l	0.57
Benzo (a) Anthracene	EPA 8310	ND	ug/l	0.21
Chrysene	EPA 8310	ND	ug/l	0.36
Benzo (b) Fluoranthene	EPA 8310	ND	ug/l	0.42
Benzo (k) Fluoranthene	EPA 8310	ND	ug/l	0.39
Benzo (a) Pyrene	EPA 8310	ND	ug/l	0.37
Indeno (123) Pyrene	EPA 8310	ND	ug/l	0.42
Dibenzo (a,h) Anthracene	EPA 8310	ND	ug/l	0.29
Benzo (ghi) Perylene	EPA 8310	ND	ug/l	0.85

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Doc # 16364-58K

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 3

PEL Lab # : 9503-00017-3 (Continued ...)
Client ID : FL079401;MW-7

ND = Less than MDL

Parameter	Method	Results	Units	MDL
Analysis Date	EPA 8310	3/6/95		
Lead	EPA 6010	ND	ug/l	3.73

Respectfully submitted,
Charles R. Ingram, Quality Assurance Officer.

Respectfully submitted,
Vincent M. Giampa, Laboratory Manager.

Doc # 16364-581

Progress Environmental Laboratories

4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 1

PEL Lab # : 9503-00017-4
Client ID : FL079401;Eq. Blank
Project ID :
Location : Hains City Car Care
Matrix : Water

Collection Information:
Sample Date: 2/28/95
Sample Time: 14:50
Sampled By : MD
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	0.64
Chloromethane	EPA 8010	ND	ug/l	0.57
Vinyl Chloride	EPA 8010	ND	ug/l	0.70
Bromomethane	EPA 8010	ND	ug/l	0.38
Chloroethane	EPA 8010	ND	ug/l	0.53
Trichlorofluoromethane	EPA 8010	ND	ug/l	0.49
1,1-Dichloroethene	EPA 8010	ND	ug/l	0.32
Methylene Chloride	EPA 8010	ND	ug/l	0.30
Trans-1-2-dichloroethene	EPA 8010	ND	ug/l	0.31
1,1-Dichloroethane	EPA 8010	ND	ug/l	0.28
Chloroform	EPA 8010	ND	ug/l	0.35
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	0.28
Carbontetrachloride	EPA 8010	ND	ug/l	0.50
1,2-Dichloroethane	EPA 8010	ND	ug/l	0.29
Trichloroethene	EPA 8010	ND	ug/l	0.55
1,2-Dichloropropane	EPA 8010	ND	ug/l	0.30
Bromodichloromethane	EPA 8010	ND	ug/l	0.27
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	0.33
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.31
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.36
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	0.52
Tetrachloroethene	EPA 8010	ND	ug/l	0.30
Dibromochloromethane	EPA 8010	ND	ug/l	0.70
Bromoform	EPA 8010	ND	ug/l	0.44
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	0.32
Analysis date	EPA 8010	3/6/95		
GC Volatiles	EPA 8020			

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Doc # 16364-58 M

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 2

PEL Lab # : 9503-00017-4 (Continued ...)
Client ID : FL079401;Eq. Blank

ND = Less than MDL

Parameter	Method	Results	Units	MDL
MTBE	EPA 8020	ND	ug/l	0.51
Benzene	EPA 8020	ND	ug/l	0.76
Toluene	EPA 8020	ND	ug/l	0.40
Chlorobenzene	EPA 8020	ND	ug/l	0.42
Ethylbenzene	EPA 8020	ND	ug/l	0.39
Total Xylene	EPA 8020	ND	ug/l	
m,p-Xylene	EPA 8020	ND	ug/l	0.55
o-Xylene	EPA 8020	ND	ug/l	0.80
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	0.40
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	0.41
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	0.47
Analysis date	EPA 8020	3/6/95		
EDB	EPA 8011	ND	ug/l	0.02
TRPH	EPA 418.1	ND	mg/l	0.50
Polyaromatic Hydrocarbons	EPA 8310			
Naphthalene	EPA 8310	ND	ug/l	1.39
2-Methyl naphthalene	EPA 8310	ND	ug/l	1.03
1-Methyl naphthalene	EPA 8310	ND	ug/l	0.85
Acenaphthylene	EPA 8310	ND	ug/l	1.13
Acenaphthene	EPA 8310	ND	ug/l	1.01
Fluorene	EPA 8310	ND	ug/l	0.39
Phenanthrene	EPA 8310	ND	ug/l	0.46
Anthracene	EPA 8310	ND	ug/l	1.53
Fluoranthene	EPA 8310	ND	ug/l	0.46
Pyrene	EPA 8310	ND	ug/l	0.57
Benzo (a) Anthracene	EPA 8310	ND	ug/l	0.21
Chrysene	EPA 8310	ND	ug/l	0.36
Benzo (b) Fluoranthene	EPA 8310	ND	ug/l	0.42
Benzo (k) Fluoranthene	EPA 8310	ND	ug/l	0.39
Benzo (a) Pyrene	EPA 8310	ND	ug/l	0.37
Indeno (123) Pyrene	EPA 8310	ND	ug/l	0.42
Dibenzo (a,h) Anthracene	EPA 8310	ND	ug/l	0.29
Benzo (ghi) Perylene	EPA 8310	ND	ug/l	0.85

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Doc # 16364-58 N

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 3

PEL Lab # : 9503-00017-4 (Continued ...)
Client ID : FL079401;Eq. Blank

ND = Less than MDL

Parameter	Method	Results	Units	MDL
Analysis Date	EPA 8310	3/6/95		
Lead	EPA 6010	ND	ug/l	3.73

Respectfully submitted,
Charles R. Ingram, Quality Assurance Officer.

Respectfully submitted,
Vincent M. Giampa, Laboratory Manager.

Doc # 16364-580

Progress Environmental Laboratories

4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 1

PEL Lab # : 9503-00017-5
Client ID : FL079401;MW-8
Project ID :
Location : Haines City Car Care
Matrix : Water

Collection Information:
Sample Date: 2/28/95
Sample Time: 14:20
Sampled By : MD
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	3.20
Chloromethane	EPA 8010	ND	ug/l	2.85
Vinyl Chloride	EPA 8010	ND	ug/l	3.50
Bromomethane	EPA 8010	ND	ug/l	1.90
Chloroethane	EPA 8010	ND	ug/l	2.65
Trichlorofluoromethane	EPA 8010	ND	ug/l	2.45
1,1-Dichloroethene	EPA 8010	ND	ug/l	1.60
Methylene Chloride	EPA 8010	ND	ug/l	1.50
Trans-1-2-dichloroethene	EPA 8010	ND	ug/l	1.55
1,1-Dichloroethane	EPA 8010	ND	ug/l	1.40
Chloroform	EPA 8010	ND	ug/l	1.75
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	1.40
Carbontetrachloride	EPA 8010	ND	ug/l	2.50
1,2-Dichloroethane	EPA 8010	ND	ug/l	1.45
Trichloroethene	EPA 8010	ND	ug/l	2.75
1,2-Dichloropropane	EPA 8010	ND	ug/l	1.50
Bromodichloromethane	EPA 8010	ND	ug/l	1.35
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	1.65
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	1.55
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	1.80
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	2.60
Tetrachloroethene	EPA 8010	ND	ug/l	1.50
Dibromochloromethane	EPA 8010	ND	ug/l	3.50
Bromoform	EPA 8010	ND	ug/l	2.20
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	1.60
Analysis date	EPA 8010	3/6/95		
GC Volatiles	EPA 8020			

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Doc # 16364-58P

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 2

PEL Lab # : 9503-00017-5 (Continued ...)
Client ID : FL079401;MW-8

ND = Less than MDL

Parameter	Method	Results	Units	MDL
MTBE	EPA 8020	ND	ug/l	0.51
Benzene	EPA 8020	ND	ug/l	0.76
Toluene	EPA 8020	ND	ug/l	0.40
Chlorobenzene	EPA 8020	ND	ug/l	0.42
Ethylbenzene	EPA 8020	ND	ug/l	0.39
Total Xylene	EPA 8020	ND	ug/l	
m,p-Xylene	EPA 8020	ND	ug/l	0.55
o-Xylene	EPA 8020	ND	ug/l	0.80
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	0.40
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	0.41
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	0.47
Analysis date	EPA 8020	3/7/95		
EDB	EPA 8011	ND	ug/l	0.02
TRPH	EPA 418.1	0.63	mg/l	0.50
Polyaromatic Hydrocarbons	EPA 8310			
Naphthalene	EPA 8310	ND	ug/l	1.39
2-Methyl naphthalene	EPA 8310	ND	ug/l	1.03
1-Methyl naphthalene	EPA 8310	ND	ug/l	0.85
Acenaphthylene	EPA 8310	ND	ug/l	1.13
Acenaphthene	EPA 8310	ND	ug/l	1.01
Fluorene	EPA 8310	ND	ug/l	0.39
Phenanthrene	EPA 8310	ND	ug/l	0.46
Anthracene	EPA 8310	ND	ug/l	1.53
Fluoranthene	EPA 8310	ND	ug/l	0.46
Pyrene	EPA 8310	ND	ug/l	0.57
Benzo (a) Anthracene	EPA 8310	ND	ug/l	0.21
Chrysene	EPA 8310	ND	ug/l	0.36
Benzo (b) Fluoranthene	EPA 8310	ND	ug/l	0.42
Benzo (k) Fluoranthene	EPA 8310	ND	ug/l	0.39
Benzo (a) Pyrene	EPA 8310	ND	ug/l	0.37
Indeno (123) Pyrene	EPA 8310	ND	ug/l	0.42
Dibenzo (a,h) Anthracene	EPA 8310	ND	ug/l	0.29
Benzo (ghi) Perylene	EPA 8310	ND	ug/l	0.85

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Doc # 16364-58 P

Progress Environmental Laboratories

4420 Pendola Point Road
Tampa, Florida 33619
(813) 247-2805
FAX: (813) 248-1537

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 1

PEL Lab # : 9503-00017-6
Client ID : FL079401;Trip Blank
Project ID :
Location : Haines City Car Care
Matrix : Water

Collection Information:
Sample Date: 2/28/95
Sample Time: 0:00
Sampled By : PEL
Sample Quality:

ND = Less than MDL

Parameter	Method	Results	Units	MDL
GC Volatiles	EPA 8010			
Dichlorodifluoromethane	EPA 8010	ND	ug/l	0.64
Chloromethane	EPA 8010	ND	ug/l	0.57
Vinyl Chloride	EPA 8010	ND	ug/l	0.70
Bromomethane	EPA 8010	ND	ug/l	0.38
Chloroethane	EPA 8010	ND	ug/l	0.53
Trichlorofluoromethane	EPA 8010	ND	ug/l	0.49
1,1-Dichloroethene	EPA 8010	ND	ug/l	0.32
Methylene Chloride	EPA 8010	ND	ug/l	0.30
Trans-1-2-dichloroethene	EPA 8010	ND	ug/l	0.31
1,1-Dichloroethane	EPA 8010	ND	ug/l	0.28
Chloroform	EPA 8010	ND	ug/l	0.35
1,1,1-Trichloroethane	EPA 8010	ND	ug/l	0.28
Carbontetrachloride	EPA 8010	ND	ug/l	0.50
1,2-Dichloroethane	EPA 8010	ND	ug/l	0.29
Trichloroethene	EPA 8010	ND	ug/l	0.55
1,2-Dichloropropane	EPA 8010	ND	ug/l	0.30
Bromodichloromethane	EPA 8010	ND	ug/l	0.27
2-Chloroethylvinyl ether	EPA 8010	ND	ug/l	0.33
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.31
Trans-1,3-Dichloropropene	EPA 8010	ND	ug/l	0.36
1,1,2-Trichloroethane	EPA 8010	ND	ug/l	0.52
Tetrachloroethene	EPA 8010	ND	ug/l	0.30
Dibromochloromethane	EPA 8010	ND	ug/l	0.70
Bromoform	EPA 8010	ND	ug/l	0.44
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/l	0.32
Analysis date	EPA 8010	3/6/95		
GC Volatiles	EPA 8020			

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Doc # 16364-58 S

- CERTIFICATE OF ANALYSIS -
(HRS #E84207 and FDER CompQap #900306G)

To: Growth Environmental
9942 Currier Davis Dr.
Suite H
Tampa, FL 33619

Attn: Tim Lentz

Report Date: 3/08/95
Page: 2

PEL Lab # : 9503-00017-6 (Continued ...)
Client ID : FL079401;Trip Blank

ND = Less than MDL

Parameter	Method	Results	Units	MDL
MTBE	EPA 8020	ND	ug/l	0.51
Benzene	EPA 8020	ND	ug/l	0.76
Toluene	EPA 8020	ND	ug/l	0.40
Chlorobenzene	EPA 8020	ND	ug/l	0.42
Ethylbenzene	EPA 8020	ND	ug/l	0.39
Total Xylene	EPA 8020	ND	ug/l	
m,p-Xylene	EPA 8020	ND	ug/l	0.55
o-Xylene	EPA 8020	ND	ug/l	0.80
1,3-Dichlorobenzene	EPA 8020	ND	ug/l	0.40
1,4-Dichlorobenzene	EPA 8020	ND	ug/l	0.41
1,2-Dichlorobenzene	EPA 8020	ND	ug/l	0.47
Analysis date	EPA 8020	3/6/95		

Respectfully submitted,
Charles R. Ingram, Quality Assurance Officer.

Respectfully submitted,
Vincent M. Giampa, Laboratory Manager.

Doc # 16364-35B

Page 1 of 1

ENVIRONMENTAL CONSERVATION LABORATORIES

ENCO Laboratories

4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
Ph. (904) 296-3007 · Fax (904) 296-6210

10207 General Drive
Orlando, Florida 32824
Ph. (407) 826-5314 · Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

CLIENT NAME: Growth Environmental
PROJECT MANAGER: Tim Lentz
PROJECT NUMBER: FL 079401 E
PROJECT NAME: Haines City Car Care
SAMPLER'S SIGNATURE: M Deusch

STATION NO.	DATE	TIME	COMPOSITE	GRAB	STATION LOCATION	NO. OF CONTAINERS	601/602	EDB	TRPH	610	PB				REMARKS
MW-1	1/10	1330				7	2	2	1	1	1				Product Smell
MW-2	1/10	1345				7	2	2	1	1	1				
MW-3	1/10	1400				7	2	2	1	1	1				
MW-4	1/10	1415				7	2	2	1	1	1				
Eq Blank	1/10	1430				7	2	2	1	1	1				

RELINQUISHED BY: Kevin Sutherland — DATE/TIME: 4:00pm 1-4-95 — RECEIVED BY: M Deusch

SAMPLE KIT PREPARED BY: ☒ ORLANDO ☐ JACKSONVILLE — DATE/TIME: — RECEIVED BY:

RELINQUISHED BY: — DATE/TIME: — RECEIVED BY:

RELINQUISHED BY: Joyce D. Roberts — DATE/TIME: 0930 1-11-95

RECEIVED FOR LABORATORY BY: — ☐ ORL ☐ JAX — DATE/TIME: 1-11-95 11:30Am

REMARKS: OR 9157 DW

Doc# 16364-35C

Environmental Conservation Laboratories
10207 General Drive
Orlando, Florida 32824
407 / 826-5314
Fax 407 / 850-6945

ENCO
Laboratories
DHRS Certification No. 83318, E83182

CLIENT : Growth Environmental
ADDRESS: 9942 Currie Davis Dr.
Suite H
Tampa, FL 33619

REPORT # : OR9157
DATE SUBMITTED: January 11, 1995
DATE REPORTED : January 17, 1995

ATTENTION: Tim Lentz

SAMPLE IDENTIFICATION

Water samples submitted and identified by client as:

Haines City Car Care
Project #FL079401E
01/10/95

#1 - MW-1 1330

#2 - MW-2 1345

#3 - MW-3 1400

#4 - MW-4 1415

#5 - Eq Blank 1430

PROJECT MANAGER _____
Tracy A. Atkins

Doc# 16364-35D

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	MW-1	MW-2	MW-3	units
Dichlorodifluoromethane	1 U	1 U	1 U	µg/L
Chloromethane	2 U	2 U	2 U	µg/L
Vinyl Chloride	1 U	1 U	1 U	µg/L
Bromomethane	1 U	1 U	1 U	µg/L
Chloroethane	1 U	1 U	1 U	µg/L
Trichlorofluoromethane	1 U	1 U	1 U	µg/L
1,1-Dichloroethene	1 U	1 U	1 U	µg/L
Methylene Chloride	2 U	2 U	2 U	µg/L
t-1,2-Dichloroethene	1 U	1 U	1 U	µg/L
1,1-Dichloroethane	1 U	1 U	1 U	µg/L
Chloroform	1 U	1 U	1 U	µg/L
1,1,1-Trichloroethane	1 U	1 U	1 U	µg/L
Carbon Tetrachloride	1 U	1 U	1 U	µg/L
1,2-Dichloroethane	1 U	1 U	1 U	µg/L
1,2-Dichloropropane	1 U	1 U	1 U	µg/L
Trichloroethene	1 U	1 U	1 U	µg/L
Bromodichloromethane	1 U	1 U	1 U	µg/L
c-1,3-Dichloropropene	1 U	1 U	1 U	µg/L
t-1,3-Dichloropropene	1 U	1 U	1 U	µg/L
1,1,2-Trichloroethane	2 U	2 U	2 U	µg/L
Tetrachloroethene	1 U	1 U	1 U	µg/L
Dibromochloromethane	1 U	1 U	1 U	µg/L
Chlorobenzene	1 U	1 U	1 U	µg/L
Bromoform	1 U	1 U	1 U	µg/L
1,1,2,2-Tetrachloroethane	3 U	3 U	3 U	µg/L
1,3-Dichlorobenzene	1 U	1 U	1 U	µg/L
1,4-Dichlorobenzene	1 U	1 U	1 U	µg/L
1,2-Dichlorobenzene	1 U	1 U	1 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
Bromofluorobenzene	92	87	94	50-146
Date Analyzed	01/16/95	01/16/95	01/16/95	

U = Analyte not detected to indicated level

Doc # 16364-35E

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	MW-1*	MW-2	MW-3	units
Methyl Tert Butyl Ether	2 U	2 U	2 U	µg/L
Benzene	1 U	1 U	1 U	µg/L
Toluene	1 U	1 U	1 U	µg/L
Ethylbenzene	4	1 U	1 U	µg/L
m-Xylene & p-Xylene	2 U	2 U	2 U	µg/L
o-Xylene	1 U	1 U	1 U	µg/L
Chlorobenzene	1 U	1 U	1 U	µg/L
1,2-Dichlorobenzene	1 U	1 U	1 U	µg/L
1,3-Dichlorobenzene	1 U	1 U	1 U	µg/L
1,4-Dichlorobenzene	1 U	1 U	1 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
Bromofluorobenzene	89	75	88	58-146
Date Analyzed	01/16/95	01/16/95	01/16/95	

* = Analyte values confirmed by multiple sample analyses
U = Analyte not detected to indicated level

Doc # 16364-35F

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

RESULTS OF ANALYSIS

EPA METHOD 610 - POLY AROMATIC HYDROCARBONS	MW-1	MW-2	MW-3	units
Acenaphthene	10 U	10 U	10 U	µg/L
Acenaphthylene	10 U	10 U	10 U	µg/L
Anthracene	10 U	10 U	10 U	µg/L
Benzo (a) anthracene	10 U	10 U	10 U	µg/L
Benzo (a) pyrene	10 U	10 U	10 U	µg/L
Benzo (b) fluoranthene	10 U	10 U	10 U	µg/L
Benzo (g,h,i) perylene	10 U	10 U	10 U	µg/L
Benzo (k) fluoranthene	10 U	10 U	10 U	µg/L
Chrysene	10 U	10 U	10 U	µg/L
Dibenzo (ah) anthracene	10 U	10 U	10 U	µg/L
Fluoranthene	10 U	10 U	10 U	µg/L
Fluorene	10 U	10 U	10 U	µg/L
Indeno (123-cd) pyrene	10 U	10 U	10 U	µg/L
1-Methyl naphthalene	10 U	10 U	10 U	µg/L
2-Methyl naphthalene	10 U	10 U	10 U	µg/L
Naphthalene	10 U	5 PQL	10 U	µg/L
Phenanthrene	10 U	10 U	10 U	µg/L
Pyrene	10 U	10 U	10 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
2-Fluorobiphenyl	53	45	60	43-134
Date Analyzed	01/17/95	01/17/95	01/17/95	
Date Extracted	01/16/95	01/16/95	01/16/95	

NOTE: Analyte values determined by EPA Method 610 are confirmed by dual (second) column analysis.

PQL = Analyte detected; value is between method detection level (MDL) and the practical quantitation level (PQL)
U = Analyte not detected to indicated level

Doc # 16364-359

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

RESULTS OF ANALYSIS

EPA METHOD 504 - ETHYLENE DIBROMIDE	MW-1	MW-2	MW-3	units
Ethylene Dibromide	0.02 U	0.02 U	0.02 U	µg/L
Date Analyzed	01/15/95	01/15/95	01/15/95	

EPA METHOD 418.1 - TOTAL PETROLEUM HYDROCARBONS	MW-1	MW-2	MW-3	units
Total Petroleum Hydrocarbons	2 U	2 U	2 U	mg/L
Date Analyzed	01/17/95	01/17/95	01/17/95	

TOTAL METALS ANALYSIS	Method Number	MW-1	MW-2	MW-3	units
Lead, Pb	239.2	**0.035**	**0.008**	**0.026**	mg/L
Date Analyzed		01/13/95	01/13/95	01/13/95	

U = Analyte not detected to indicated level

Doz # 16384-35H

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	MW-4	Eq Blank	Laboratory Blank	units
Dichlorodifluoromethane	1 U	1 U	1 U	µg/L
Chloromethane	2 U	2 U	2 U	µg/L
Vinyl Chloride	1 U	1 U	1 U	µg/L
Bromomethane	1 U	1 U	1 U	µg/L
Chloroethane	1 U	1 U	1 U	µg/L
Trichlorofluoromethane	1 U	1 U	1 U	µg/L
1,1-Dichloroethene	1 U	1 U	1 U	µg/L
Methylene Chloride	2 U	2 U	2 U	µg/L
t-1,2-Dichloroethene	1 U	1 U	1 U	µg/L
1,1-Dichloroethane	1 U	1 U	1 U	µg/L
Chloroform	1 U	1 U	1 U	µg/L
1,1,1-Trichloroethane	1 U	1 U	1 U	µg/L
Carbon Tetrachloride	1 U	1 U	1 U	µg/L
1,2-Dichloroethane	1 U	1 U	1 U	µg/L
1,2-Dichloropropane	1 U	1 U	1 U	µg/L
Trichloroethene	1 U	1 U	1 U	µg/L
Bromodichloromethane	1 U	1 U	1 U	µg/L
c-1,3-Dichloropropene	1 U	1 U	1 U	µg/L
t-1,3-Dichloropropene	1 U	1 U	1 U	µg/L
1,1,2-Trichloroethane	2 U	2 U	2 U	µg/L
Tetrachloroethene	1 U	1 U	1 U	µg/L
Dibromochloromethane	1 U	1 U	1 U	µg/L
Chlorobenzene	1 U	1 U	1 U	µg/L
Bromoform	1 U	1 U	1 U	µg/L
1,1,2,2-Tetrachloroethane	3 U	3 U	3 U	µg/L
1,3-Dichlorobenzene	1 U	1 U	1 U	µg/L
1,4-Dichlorobenzene	1 U	1 U	1 U	µg/L
1,2-Dichlorobenzene	1 U	1 U	1 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
Bromofluorobenzene	96	90	78	50-146
Date Analyzed	01/16/95	01/16/95	01/16/95	

U = Analyte not detected to indicated level

Doc # 16364-35 I

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	MW-4	Eq Blank	Laboratory Blank	units
Methyl Tert Butyl Ether	2 U	2 U	2 U	µg/L
Benzene	1 U	1 U	1 U	µg/L
Toluene	1 U	1 U	1 U	µg/L
Ethylbenzene	1 U	1 U	1 U	µg/L
m-Xylene & p-Xylene	2 U	2 U	2 U	µg/L
o-Xylene	1 U	1 U	1 U	µg/L
Chlorobenzene	1 U	1 U	1 U	µg/L
1,2-Dichlorobenzene	1 U	1 U	1 U	µg/L
1,3-Dichlorobenzene	1 U	1 U	1 U	µg/L
1,4-Dichlorobenzene	1 U	1 U	1 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
Bromofluorobenzene	91	115	86	58-146
Date Analyzed	01/16/95	01/16/95	01/16/95	

U = Analyte not detected to indicated level

Doc # 16364-35 J

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

RESULTS OF ANALYSIS

EPA METHOD 610 - POLY AROMATIC HYDROCARBONS	MW-4	Eq Blank	Laboratory Blank	units
Acenaphthene	10 U	10 U	10 U	µg/L
Acenaphthylene	10 U	10 U	10 U	µg/L
Anthracene	10 U	10 U	10 U	µg/L
Benzo (a) anthracene	10 U	10 U	10 U	µg/L
Benzo (a) pyrene	10 U	10 U	10 U	µg/L
Benzo (b) fluoranthene	10 U	10 U	10 U	µg/L
Benzo (g,h,i) perylene	10 U	10 U	10 U	µg/L
Benzo (k) fluoranthene	10 U	10 U	10 U	µg/L
Chrysene	10 U	10 U	10 U	µg/L
Dibenzo (ah) anthracene	10 U	10 U	10 U	µg/L
Fluoranthene	10 U	10 U	10 U	µg/L
Fluorene	10 U	10 U	10 U	µg/L
Indeno (123-cd) pyrene	10 U	10 U	10 U	µg/L
1-Methyl naphthalene	10 U	10 U	10 U	µg/L
2-Methyl naphthalene	10 U	10 U	10 U	µg/L
Naphthalene	10 U	10 U	10 U	µg/L
Phenanthrene	10 U	10 U	10 U	µg/L
Pyrene	10 U	10 U	10 U	µg/L
Surrogate:	**% Recov**	**% Recov**	**% Recov**	**Limits**
2-Fluorobiphenyl	51	47	73	43-134
Date Analyzed	01/17/95	01/17/95	01/17/95	
Date Extracted	01/16/95	01/16/95	01/16/95	

NOTE: Analyte values determined by EPA Method 610 are confirmed by dual (second) column analysis.

U = Analyte not detected to indicated level

Doc # 16364-35K

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

QUALITY CONTROL DATA

Parameter	% Recovery MS/MSD/LCS	% Recovery Limits	RPD	RPD Limit
EPA 601				
Methylene Chloride	104/103/114	49-154	<1	32
Chloroform	107/ 96/120	62-145	11	28
Carbon Tetrachloride	100/ 99/118	53-151	1	32
Trichloroethene	100/ 81/116	59-139	21	29
Tetrachloroethene	92/ 93/102	62-147	1	27
Chlorobenzene	93/ 86/106	64-137	8	28
EPA 602				
Benzene	88/ 98/ 93	62-140	11	28
Toluene	91/104/ 96	61-135	13	28
Ethylbenzene	100/116/ 94	59-136	15	29
o-Xylene	93/108/ 99	61-133	15	27
EPA 610				
2-Methylnaphthalene	61/ 69/ 62	54-129	12	27
1-Methylnaphthalene	80/ 85/ 77	26-136	6	40
Acenaphthylene	85/ 87/ 84	40-134	2	34
Fluorene	95/ 95/ 95	60-136	<1	22
Pyrene	81/ 80/ 93	40-139	1	43
EPA 504				
Ethylene Dibromide	124/127/121	56-135	2	19

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference
< = Less Than

Doc # 16364-35 L

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City
Car Care

RESULTS OF ANALYSIS

EPA METHOD 504 - ETHYLENE DIBROMIDE	MW-4	Eq Blank	Laboratory Blank	units
Ethylene Dibromide	0.02 U	0.02 U	0.02 U	µg/L
Date Analyzed	01/15/95	01/15/95	01/15/95	

EPA METHOD 418.1 - TOTAL PETROLEUM HYDROCARBONS	MW-4	Eq Blank	Laboratory Blank	units
Total Petroleum Hydrocarbons	2 U	2 U	2 U	mg/L
Date Analyzed	01/17/95	01/17/95	01/17/95	

TOTAL METALS ANALYSIS	Method Number	MW-4	Eq Blank	units
Lead, Pb	239.2	**0.034**	0.005 U	mg/L
Date Analyzed		01/13/95	01/13/95	

U = Analyte not detected to indicated level

Doc # 16364-35-M

ENCO LABORATORIES
REPORT # : OR9157
DATE REPORTED: January 17, 1995
REFERENCE : Haines City Car Care

QUALITY CONTROL DATA CONTINUED

Parameter	% Recovery MS/MSD/LCS	% Recovery Limits	RPD	RPD Limit
EPA 418.1				
Total Petroleum Hydrocarbons	98/ 98/ 93	65-113	<1	12
TOTAL METALS				
Lead, 239.2	106/108/107	80-115	2	10

LABORATORY MANAGER David J. Vesey

Environmental Conservation Laboratories Comprehensive QA Plan #880817G

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference
< = Less Than

Florida Department of

Memorandum **Environmental Protection**

TO: File

THROUGH: William Kutash, Administrator, Waste Management, Southwest District

THROUGH: Laurel Culbreth, Tanks Supervisor, Southwest District

FROM: Alison Meetze, Tanks, Southwest District

DATE: October 21, 2008

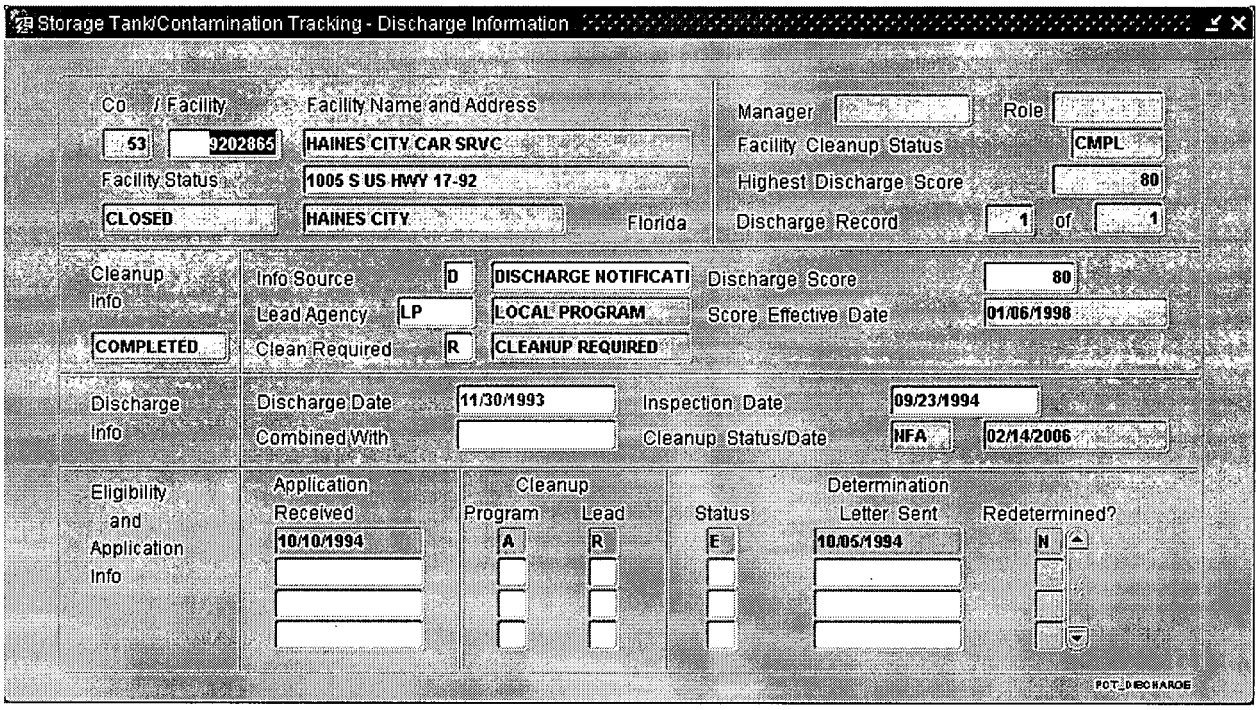
SUBJECT: Enforcement Case Closure
Sherman Rosecrants Property
FDEP ID# 53/9202865

Enforcement actions were begun against this facility following an August 30, 1988 complaint of abandoned underground storage tanks (USTs), and subsequent December 13, 1988 investigation.

Warning Notice #88-0007TK53SWD was issued to the property owner on January 9, 1989. The property owner requested an extension of time to properly close the USTs. On November 12, 1993, Environmental Applications performed the required closure assessment activities at this facility; the assessment resulted in the discovery of groundwater contamination. Cleanup activities of the discharge dated November 30, 1993 were performed under the Abandoned Tank Restoration Program. A Site Rehabilitation Completion Order was issued September 25, 1998.

Based on the UST closure and subsequent completed cleanup, the Southwest District is closing this enforcement case.

AMM


Storage Tank/Contamination Tracking - Discharge Information
Co
Facility
Facility Name and Address
53
9202865
HAINES CITY CAR SRVC
Facility Status
1005 S US HWY 17-92
CLOSED
HAINES CITY
Florida
Manager
Role
Facility Cleanup Status
CMPL
Highest Discharge Score
80
Discharge Record
1
of
1
Cleanup Info
Info Source
D
DISCHARGE NOTIFICATI
Discharge Score
80
Lead Agency
LP
LOCAL PROGRAM
Score Effective Date
01/06/1998
COMPLETED
Clean Required
R
CLEANUP REQUIRED
Discharge Info
Discharge Date
11/30/1993
Inspection Date
09/23/1994
Combined With
Cleanup Status/Date
NFA
02/14/2006
Eligibility and Application Info
Application Received
10/10/1994
Cleanup Program
A
Cleanup Lead
R
Determination Status
E
Determination Letter Sent
10/05/1994
Redetermined?
N
FCT_DISCHARGE

Department of
Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. and Mrs. Sherman Rosecrants
434 Dorado Drive
Winter Springs, Florida 32708-6603

Subject: Site Rehabilitation
Completion Order
Haines City Car Service
1005 South US 17-92
Haines City, Polk County
DEP Facility #539202865

Dear Mr. and Mrs. Rosecrants:

The Bureau of Petroleum Storage Systems has reviewed the Site Assessment Report (SAR) and No Further Action Proposal (NFAP) dated September 18, 1998 (received September 21, 1998), prepared by Universal Solutions, Inc., for the discharge discovered on November 30, 1993 at this site. Documentation submitted with the NFAP confirms that criteria set forth in Rule 62-770.680(1), Florida Administrative Code (F.A.C.), have been met. The NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the site, except as set forth below.

1. In the event concentrations of petroleum products' chemicals of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the site, the Department may require site rehabilitation to reduce concentrations of petroleum products' chemicals of concern to the levels approved in the NFAP or otherwise allowed by Chapter 62-770, F.A.C.

Persons affected by this Order have the following options:

If you choose to accept the above decision by the Department you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

UNDERGROUND STORAGE TANK CLOSURE REPORT

Haines City Car Care

1005 17-92 West
Haines City, Fl 33844

(FDEP # 539202865)

Prepared by: Timothy Lentz, PG

Environmental Applications
P.O. Box 2276
Lakeland, Florida 33806

ENVIRONMENTAL APPLICATIONS
P.O. Box 2276 • Lakeland, FL 33806 • (813) 682-8524 (Call for Fax)

December 10, 1993

HRS Polk County
2090 East Clower Street
Bartow, Florida 33880

Attn: Charles Callaham

Re: UST Closure Report
Haines City Car Care
Haines City, Fl
FDEP# none

Dear Mr. Callaham

Enclosed please find the UST Closure Report completed following the excavation and removal of six UST's at the above referenced facility. This site was found to be free of any soil contamination but did contain "excessive" groundwater contamination. The UST's were properly disposed of by Bowen Equipment Service.

If you have any questions or comments please feel free to write or call.

Sincerely,

Timothy Lentz, PG
Geologist

cc: owner
w/encl.

Bowen Equipment Service
w/encl.

1.0 Introduction

On November 12, 1993 Environmental Applications was retained by Bowen Equipment Service to perform a soil gas survey and fulfill underground storage tank (UST) closure requirements at the Haines City Car Care (abandoned service station) facility, at 1005 17-92 West, Haines City, Florida. This facility had utilized 3-2,000 gallon, and 3-1000 gallon, steel, underground petroleum storage tanks. The locations can be seen on the enclosed site plan.

This assessment was accomplished through the use of physical observation, organic vapor analysis, using a flame ionization detector, of soil samples and FDER approved laboratory groundwater analyses.

2.0 Analytical Procedures

During and after the excavation and removal of the six UST's soil samples were obtained from designated areas and placed in a 16 ounce glass jar, leaving an approximate 2 inch headspace in which soil vapors could accumulate. The jar was then capped and allowed to equilibrate for approximately 2-3 minutes, after which time the inlet probe of the detection unit was inserted into the headspace to facilitate the analysis of soil vapors accumulating.

Tanks **Rel party** **Account** **Loc / comments** **History** Detail **Compliance** **Exit**

-- Facility Detail --

Facility ID: 9202865	Facility Status: CLOSED	Create Date:22-OCT-1992
County: 53 POLK	District: SWD	Name Update:
Name: HAINES CITY CAR SERVICE		Addr Update:
Address: 1005 S US HWY 17-92		
Address2:		Account Status:
City: HAINES CITY	FL -	INVOICE DUE
Onsite Mgr: HAINES CITY CAR SERV	Phone: 407-245-9867	ASTC: 0 USTC: 6

Facility Type:C - Fuel user/Non-retail	DEP Contract Owned?:N
Financial Resp:	
Insurance Comp: Coverage Period:	-
Cleanup Status:ONGO - ONGOING	Effective: 15-APR-1999

Owner Name: ROSECRANTS, SHERMAN		Primary Role:ACCT OWN
Address: 434 HACIENDA VLG		Owner ID#:160
City/St/Zip: WINTER PARK, FL 32708-2542		Begin Date:20-MAY-1994
Last Updated: 01-MAR-1997	Phone: 305-248-2718	Bad Address?:N
Contact: SHERMAN ROSECRANTS		

Facility status.

Count: *1 <List><Replace>

Exit

Storage Tank Registratior

Facility ID: 9202865
Name: HAINES CITY CAR SERVICE

Construction	Piping	Monitoring
C	B	Y

ROSECRANTS, SHERMAN (ID #160)
SHERMAN ROSECRANTS
434 HACIENDA VLG

WINTER PARK , FL 32708-2542

Fee assessment begin date is:08/1999

Added	Tnk ID	T/V/D	A/U	Gallons	Install	Content & Date	Status & Date	Last Updated on	Repl Tank
	1	**TANK**	**U**	**2000**		**B**	**B 11/1993**	**06-MAY-1994**	
	2	TANK	U	2000		B	B 11/1993	06-MAY-1994	
	3	TANK	U	1000		B	B 11/1993	06-MAY-1994	
	4	TANK	U	1000		B	B 11/1993	06-MAY-1994	
	5	TANK	U	1000		B	B 11/1993	06-MAY-1994	

NOTE: ** Install MM/YYYY takes priority; if blank, fee assessment begins today

Count: *0
1(012,031)

<Replace>

Exit

Storage Tank Registration

Facility ID: 9202865
Name: HAINES CITY CAR SERVICE

Construction	Piping	Monitoring

ROSECRANTS, SHERMAN (ID #160)
SHERMAN ROSECRANTS
434 HACIENDA VLG

WINTER PARK , FL 32708-2542

Fee assessment begin date is:08/1999

Added	Tnk ID	T/V/D	A/U	Gallons	Install	Content & Date	Status & Date	Last Updated on	Repl Tank
	3	TANK	U	1000		B	B 11/1993	06-MAY-1994	
	4	TANK	U	1000		B	B 11/1993	06-MAY-1994	
	5	TANK	U	1000		B	B 11/1993	06-MAY-1994	
	6	TANK	U	1000		B	B 11/1993	06-MAY-1994	

NOTE: ** Install MM/YYYY takes priority; if blank, fee assessment begins today

FRM-40352 Last row of query retrieved.
Count: *6 ^ <Replace>
1(019,010)

Facility Discharge **Tasks raYr Codes Media pOll History Reports eXit**

---------- I roleum Contamination Trac ng ----------

Co /Facility:	Facility Name and Address:	Manager: BURMEISTER Role: CSM
53 /9202865	HAINES CITY CAR SERVICE	Facility Cleanup Status: ONGO
	1005 S US HWY 17-92	Highest Discharge Score: 80
	HAINES CITY Florida	Discharge Record: 1 of 1

Cleanup Info: ACTIVE	Info Source: D-DISCHARGE NOTIF	Discharge Score: 80
	Lead Agency: BPSS-BUREAU OF PETRO	Score Effective Date: 06-JAN-1998
	Clean Required: R-CLEANUP REQUIRE	Rank: 500 of 13058 on 03-AUG-1999

Discharge Info:	Discharge Date: 30-NOV-1993	Inspection Date: 23-SEP-1994
	Combined With:	Cleanup Status/Date: SA /15-APR-1999

Eligibility and Application Info:	^	Application Received	Cleanup Program	Cleanup Lead	Determination Status	Determination Letter Sent	Determination Redetermined?
		10-OCT-1994	A	R	E	05-OCT-1994	N
	v						

The line below contains a 'v' to indicate more data. Press the UP or DOWN arrow.

Count: *1 <Replace>

1(005,007)

Exit

Store Tank & Contamination Monitoring

Task Report Information

Co	/Facility	Discharge Date	Task Name	Report Type	Due Date	Received	Status & Comment Date
53	/9202865	30-NOV-1993	SA	LETTER	15-AUG-1997	17-JUL-1997	-
53	/9202865	30-NOV-1993	SA	LETTER	28-MAR-1997	28-APR-1997	-
53	/9202865	30-NOV-1993	SA	LETTER	31-OCT-1997	10-NOV-1997	-
53	/9202865	30-NOV-1993	SA	LETTER	02-FEB-1998	12-FEB-1998	-
53	/9202865	30-NOV-1993	SA	INTERI	01-JUN-1998	02-JUN-1998	-
	/						-
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Tab to "Comment", then press [Ten Keypad /] to enter Comments.

Count: *5 <Replace>
1(007,006)

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 12-7-89

Time 11:00

Subject Haines City Property

Permit No.

County

Mr. Sharman Rosacrantz

Telephone No.

Representing himself

[✓] Phoned Me [ ] Was Called [ ] Scheduled Meeting [ ] Unscheduled Meeting

Other Individuals Involved in Conversation/Meeting —

Summary of Conversation/Meeting

Sharm called in response to Nov. 16, letter. He has had many financial problems.

I told him to send me a letter detailing everything.

(continue on another sheet, if necessary)

Signature

Title FSI

TPA-01
09/78
/jdj

Florida Department of Environmental Regulation

Southwest District ● 4520 Oak Fair Boulevard ● Tampa, Florida 33610-7347 ● 813-623-5561

Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

November 16, 1989

Mr. Sherman Rosecrantz
1000 N. Flagler Avenue
Homestead, Florida 33030

Re: Underground Storage Tanks
1005 Highway 17-92, Haines City

Dear Mr. Rosecrantz:

On January 9, 1989 the District office issued a Warning Notice to you concerning underground storage tanks located at the referenced site. As owner of the tanks and property, you were advised to register and abandon the tanks and conduct an assessment of each tank area. You responded to the notice in a letter which we received on January 26, 1989. In your letter you requested an extension of time to comply. Close to one year has elapsed, and we have not received documentation of tank abandonment.

In light of your history of non-compliance, the District is recommending filing a civil action. Should you wish to resolve this administratively in the interim, I recommend you telephone me at (813) 623-5561, extension 386. A copy of the Warning Notice and registration form have been attached for your review.

Sincerely,

Paul J. Panik
Environmental Specialist I
Tanks Program
Division of Waste Management

PJP/ab
Enclosures

Dear Mr Panik

Re: Sherman Rosecrants
Property 1005 Hwy 17-92 Haines City

In our phone conversion I said I was in bankruptcy & have been trying to sell this property & I will try and contact some fast food chains.

If you would extend a little more time to sell or borrow money I would appreciate it very much

Sincerely
Sherman Rosecrants

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 1-19-89

Time 10:00

Subject His Winter Haven Property

Permit No. —

County Polk

Mr. Sharman Rosecrantz

Telephone No.

Representing himself

[✓] Phoned Me [ ] Was Called [ ] Scheduled Meeting [ ] Unscheduled Meeting

Other Individuals Involved in Conversation/Meeting

Summary of Conversation/Meeting

He is bankrupt — wants to correct problems — is trying to sell property.

I told him to send us a written response to WN

(continue on another sheet, if necessary)

Signature

Title ES)

TPA-01
09/78
/jdj

State of Florida
DEPARTMENT OF VIRONMENTAL REGULATION

Interoffice Memorandum

For Routing To Other Than The Addressee
To: _____ Location: _____
To: _____ Location: _____
To: _____ Location: _____
From: _____ Date: _____

TO: Rick Garrity
Case File

THROUGH: Clabe R. Polk CRP 1-5-89
Mary L. McAuliffe MLM Section Supervisor

FROM: Paul Panik PP Environmental Specialist

DATE: 12-16-88

SUBJECT: Enforcement File Update

PROGRAM: TANKS COUNTY: Polk

FILE NAME: Sharman Rosecrantz Property

- ✓ Warning Notice JAN 9 1989
- _____ Draft NOV (to OGC)
- _____ Revised NOV (to OGC)
- _____ Final NOV (D.M. Sign)
- _____ Draft CO (to OGC)
- _____ Revised CO (to OGC)
- _____ Final CO (Respondent sign)
- _____ Final CO (D.M. Sign)
- _____ Draft Correspondence for D.A.S./Program Manager/ Compliance/Enf. Manager
- _____ Press Release Request to be sent to Tallahassee (see attached form)
- _____ Case Report (to OGC)
- _____ Draft Final Order(to OGC)
- _____ Revised Final Order (to OGC)
- _____ Final Order (D.M. Sign)
- _____ Petition for Enforcement
- _____ Warning Notice Closure
- _____ NOV/CO Closure
- _____ OGC Case Closure Request
- _____ Action Item
- _____ Approval for Penalty >25,000 by Secretary verified by OGC
- _____ Other

Comments: Need to abandon tanks with monitoring

Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor | Dale Twachtmann, Secretary | John Shearer, Assistant Secretary | Richard Garrity, Deputy Assistant Secretary

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JAN 9 1989

Mr. Sherman Rosecrantz
1000 N. Flagler Avenue
Homestead, Florida 33030

WARNING NOTICE #88-0007TK53SWD

Dear Mr. Rosecrantz:

Re: Sherman Rosecrantz Property, 1005 Hwy. 17-92, Haines City

You are hereby notified that you are in violation of Chapter 403 and Chapter 376, Florida Statutes and the regulations promulgated thereunder as follows:

You have failed to comply with 17-61, Florida Administrative Code in that:

You have failed to register and properly abandon the underground storage tanks located on the referenced site.

You are advised to immediately cease all operations contributing to violations of the cited statutes and regulations. You are further advised that you will be held liable for any damages occurring to the resources of the State and for the restoration to original condition of those resources.

You are further advised to properly abandon the storage tanks. Pump the system clean of free liquid and remove the storage systems in a safe manner or fill the tanks with inert material. Also, one soil and one water sample from both tank areas should be analyzed by EPA Methods 601, 602, and 610. A copy of the laboratory results along with the invoice for tank abandonment should be sent to the District office within 30 days of receipt of this Notice. Also, fill out the enclosed Stationary Tank Registration Form and send a copy to the District office within ten (10) days of tank abandonment.

Please reply to this Notice within 14 days of receipt, in writing, indicating your plans to comply with the cited statutes. Please address your response and any questions to Paul J. Panik of the District Tanks Program, Division of Waste Management.

Sincerely,

Richard D. Garrity, Ph.D.
Deputy Assistant Secretary
Southwest District

RDG/pjpb

COMPLAINT FORM

COMPLAINT # _____ DATE 8-30-88

TYPE OF COMPLAINT: AIR D & F GW SW IW DW

PW [TANKS] ODOR NOISE HW(RCRA)

COMPLAINANT: Anonymous TELEPHONE:

ADDRESS:

CITY: ZIP: COUNTY:

*COMPLAINT RECEIVED BY: VIA:

NATURE OF COMPLAINT: Unregistered and improperly abandoned tanks on property

LOCATION OF COMPLAINT & DIRECTIONS TO COMPLAINT AREA:

Address: 1005 W. Hwy 17-92, Haines City

- Near intersection of 17-92 and 27

- Previously called 'Corner Repair Service"; New lessee

INVESTIGATION PROCEDURE & FINDINGS:

property owner: Sherman Rosecrantz

1000 N. Flagler Ave.

Homestead, FL 33030

(305)-245-7020

Site Investigation (12-13-88)

- 3 fill pipes near pump Island

- Bailed diesel out of 1 tank - fluid in all

(Continued other side)

Map ID 24: Ron’s RV Sales

From: SMAR, MIKE [mailto:MIKE.SMAR@aecom.com]
Sent: Monday, January 16, 2017 9:16 AM
To: Pabich, Matthew J <Matthew.Pabich@flhealth.gov>
Subject: Ron"s RV Task 4 Deliverable (FAC ID 538943481)
Attachments: Ron"s RV PARM 1-17.pdf
Task 4 SPI (Revision 2).pdf

Hi Matt Attached is the report and SPI for Task 4 for Ron's RV (PO #AD8295). Please contact me with any questions/comments.

Thanks
Mike

Mike Smar
Project Manager
AECOM Environment
D 407.513.8248 C 407.383.8022
mike.smar@aecom.com

AECOM
150 N. Orange Avenue
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T 407.843.6552 F 407.839.1789
www.aecom.com

Post Active Remediation Monitoring Report

Site:

Ron's RV Sales
1104 Highway 17 &92 West
Haines City, Polk County, Florida
FDEP Facility No. 538943481
Purchase Order No. AD8295
AECOM Project No. 60444594

Prepared for:

Matthew Pabich
Florida Department of Health in Polk County
2090 East Clower Street
Bartow, FL 33830

Copy: KAT Sisters, Inc.

Prepared by:

AECOM
150 North Orange Avenue
Orlando, Florida 32801
(407) 843-6552

January 11, 2017

Post Active Remediation Monitoring Report

The data, findings, recommendations, specifications or professional opinions were prepared solely for the use of the Florida Department of Environmental Protection. AECOM makes no other warranty; either expressed or implied, and is not responsible for the interpretation by others of these data.

Site:
Ron's RV Sales
1104 Highway 17 &92 West
Haines City, Polk County, Florida
FDEP Facility No. 538943481
Purchase Order No. AD8295
AECOM Project No. 60444594

Prepared for:
Matthew Pabich
Florida Department of Health in Polk County
2090 East Clower Street
Bartow, FL 33830

Copy: KAT Sisters, Inc.

Prepared by:
AECOM Technical Services, Inc.
150 North Orange Avenue, Suite 200
Orlando, Florida 32801

AECOM Project No. 60443466

Author: Michael Smar

Title: Project Manager

Signature: 

Reviewer: Jenifer Bass P.E.

Title: Project Engineer

Signature: 

Date: 1/11/2017

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APPENDICES

1.0 INTRODUCTION

AECOM Technical Services (AECOM) is pleased to present the Florida Department of Health in Polk County (FDOHPC) with this Post Active Remediation Monitoring (PARM) Report for the Ron's RV Sales facility. **Figure 1** presents the current site layout.

The Ron's RV Sales site is located at 1104 Highway 17 & 92 West, Haines City, Polk County, Florida and is currently utilized for used car sales under the name of Reyca's Auto Sales, Inc. Located on-site is a one-story brick building with two service bays on the west side of the building.

A Discharge Reporting Form and an Early Detection Incentive Program (EDI) application were submitted to the Florida Department of Environmental Protection (FDEP) on December 28, 1988 and the site was subsequently deemed eligible for the EDI program on December 19, 1989.

Seven underground storage tanks (USTs) and the associated delivery systems were removed from the site in 1989 by MGM Petro Equipment and Enviro Services. The installation dates were not noted in the tank closure documentation. The USTs removed included one UST of unknown contents and location, four USTs reportedly containing diesel fuel located southeast of the building and two USTs reportedly containing kerosene located southwest of the building. Dispensers were located north of the USTs on the southeast side of the building and on the south of the building. A hand pump for kerosene was located on the southwest corner of the building. Replacement USTs were not installed.

A Template Site Assessment Report (TSAR) was submitted by Handex Consulting & Remediation, LLC (HCR) on August 6, 2008. The TSAR indicated eight potable wells were located within ½ mile of the site. Three domestic irrigation wells and one public supply limited use well were located within ¼ mile of the site. None of the wells were reported impacted by contamination from the subject site.

Analytical results reported in the TSAR indicated soil contamination exceeding Soil Cleanup Target Levels (SCTLs), as referenced in Table 2 of Chapter 62-777, Florida Administrative Code (FAC), in the area of the former dispenser islands and the southeastern UST area. Analytical results indicated groundwater concentrations exceeding Groundwater Cleanup Target Levels (GCTLs), as referenced in Table 1 of Chapter 62-777, FAC. The area of groundwater contamination encompassed the pump islands and the UST area on the southeast side of the building. Subsequent groundwater and soil assessment activities were conducted in March and April 2011 to further delineate the extent of soil and groundwater contamination. The results of the additional soil and groundwater sampling indicated impacted soil and groundwater up to and possible beneath the roadways of adjacent Highway 17 and Indiana Street.

HCR submitted a Remedial Action Plan for a source removal excavation which was subsequently approved on November 16, 2011. The Bid Evaluation/Solicitation Package was presented to FDOHPC in March 2012 and was approved in August 2012. Monitor wells MW-A, MW-C, MW-D, MW-E, MW-F and the deep well (DW-G) located in the proposed excavation area were properly abandoned in September 2012. A dewatering system was installed in November 2012. In December 2012, 1,607 tons of impacted soil was removed for proper disposal. Prior to backfilling, approximately 1,650 pounds of Regenesis Oxygen Releasing Compound (ORC-A), were spread in the bottom of the excavation followed by backfilling, compaction and re-paving.

In April 2013, replacement wells (MW-AR, MW-CR, MW-DR, MW-ER and MW-FR) were installed for the wells lost during excavation activities. In addition, monitor well MW-L was installed north of the excavation. The deep well was not replaced. PARM was conducted in May and August 2013 and February 2014. The analytical results from the February 2014 sampling event indicated petroleum contaminant concentrations above Natural Attenuation Default Concentrations (NADCs), as referenced in Table 5 of Chapter 62-777, FAC, in samples from monitor wells MW-ER and MW-FR.

In September 2015, AECOM was assigned the site through the Petroleum Restoration Program under Purchase Order (PO) #AD8295. Four quarters of groundwater sampling were tasked to continue PARM. The scheduled monitor wells for sampling each quarter included DW-G, MW-AR, MW-B, MW-DR, MW-ER, MW-FR, MW-I, MW-J and MW-K; however, the deep well (DW-G) was abandoned and not replaced, as previously mentioned. During the first quarterly sampling event conducted in January 2106, monitor wells MW-AR, MW-DR, MW-ER and MW-FR exhibited petroleum constituents exceeding GCTLs. NADCs for benzene and naphthalene were also exceeded in the groundwater sample from MW-FR.

Following submittal of the first PARM Report, FDOHPC recommended installation of a replacement deep well (DW-GR) and a replacement well for MW-B, as the integrity of the well was compromised. Request for Change #2 was approved for installation of the replacement wells and submittal of a Supplemental Site Assessment Report (SSAR). The replacement wells were installed on July 14 and 15, 2016.

The second groundwater sampling event was conducted on July 20, 2016 and included monitor wells DW-GR, MW-AR, MW-BR, MW-DR, MW-ER, MW-FR and MW-K. The analytical results from monitor well MW-FR (source well) indicated benzene, ethylbenzene and naphthalene exceeding their respective GCTLs. The July 2016 sampling results for monitor wells MW-AR, MW-DR, MW-ER and MW-FR indicated a decrease in contaminant concentrations to below NADCs and a reduced plume footprint as compared to the January 2016 sampling results.

Following submittal of the SSAR for the well installations and second quarterly sampling event, FDOHCP concurred with AECOM's recommendation for continued monitoring of the groundwater plume. This PARM Report summarizes the sampling event conducted in November 2016 under Task 4 and represents the third quarterly sampling event for the PO.

2.0 GROUNDWATER SAMPLING ACTIVITIES

Groundwater sampling was conducted by AECOM personnel on November 9, 2016 in accordance with the PO and Florida Department of Environmental Protection Standard Operating Procedures (DEP-SOP-001/01). Wells scheduled for sampling included DW-GR, MW-AR, MW-BR, MW-DR, MW-ER, MW-FR, MW-I and MW-J. Analyses included Environmental Protection Agency (EPA) Method 8260B for benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl-tert butyl ether (MTBE) and EPA Method 8270D for polynuclear aromatic hydrocarbons (PAHs) as indicated in the table below. Samples were submitted to Environmental Conservation Laboratories, Inc. (ENCO) in Orlando, Florida. No investigative derived waste was generated during the sampling event.

Well IDs	MTBE + BTEX 8260B	PAHs 8270D
DW-GR	X	X
MW-AR	X	X
MW-BR	X	X
MW-DR		X
MW-ER	X	X
MW-FR	X	X
MW-I	X	X
MW-J	X	X

Groundwater level measurements were recorded in the sampled monitor wells prior to sampling. The average depth to water at the site during the November 9, 2016 sampling event was 5.37 feet below land surface (bls). The average depth to water at the site during the last sampling event conducted on July 20, 2016 was 4.64 feet bls. The groundwater flow direction during the sampling event (**Figure 2**) was consistent with the historic easterly flow direction. Relative groundwater elevations from the November 9, 2016 sampling event and previous sampling events are provided in **Table 1**.

The current and historical groundwater sampling results are summarized in **Table 2**. A groundwater contamination map based on the November 9, 2016 groundwater sampling results is provided as **Figure 3.** **Appendix A** contains the laboratory reports provided by ENCO. Sampling data sheets and instrument calibration records are contained in **Appendix B**. The ADaPT Laboratory and Field Electronic Data Deliverables and the Error Log have been uploaded to FDEP's File Transfer Protocol site. **Appendix C** contains copies of the field notes.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are based on the most recent and historic groundwater sampling results:

- The third groundwater sampling event under PO #AD8295 was conducted on November 9, 2016. Groundwater samples were obtained from monitor wells DW-GR, MW-AR, MW-BR, MW-DR, MW-ER, MW-FR, MW-I and MW-J and were analyzed according to the table in **Section 3.0**.

- The analytical results from monitor well MW-FR (source well) for the November 9, 2016 sampling event indicated concentrations of benzene, ethylbenzene, total xylenes, naphthalene, 1-methylnaphthalene and 2-methylnaphthalene exceeded their respective GCTLs; the NADCs for benzene and naphthalene were also exceeded. The previous sampling results from MW-FR in July 2016 indicated benzene, ethylbenzene and naphthalene exceeding their respective GCTLs; however, NADCs were not exceeded. Preceding sampling events to July 2016 indicated benzene, ethylbenzene, total xylenes and naphthalene above their respective NADCs.

- The groundwater sample obtained from monitor well MW-ER exhibited concentrations slightly exceeding GCTLs for total xylenes and naphthalene. Contaminant concentrations were below GCTLs the previous sampling event in July 2016.

- The deep replacement monitor well (DW-GR), screened from 30 feet to 35 feet bls, remained below GCTLs for the analytes tested, indicating the contaminant plume has not migrated downward.

- The groundwater sample from monitor well MW-I exhibited a naphthalene concentration of 15 micrograms per liter (µg/L); just exceeding its NADC of 14 µg/L. This is the first time this well has been above GCTLs and indicates the contaminant plume extends beneath Indiana Street.

- GCTLs were not exceeded in the groundwater samples obtained from the remaining wells sampled (MW-AR, MW-BR, MW-DR, and MW-J).

- The groundwater flow direction during the sampling event was consistent with the historical groundwater flow direction to the east.

- The November 2016 sampling results for monitor wells MW-ER, MW-FR and MW-I indicated an increase in contaminant concentrations and a larger plume footprint as compared to the July 2016 sampling results.

AECOM recommends continued monitoring of the groundwater plume. The recommended wells and associated analyses for the fourth sampling event (Task 5) are shown in the table below. If contaminant concentrations remain above NADCs, additional active remediation will likely be necessary.

Well IDs	MTBE + BTEX 8260B	PAHs 8270D
DW-GR	X	X
MW-AR	X	X
MW-BR	X	X
MW-ER	X	X
MW-FR	X	X
MW-I	X	X
MW-K	X	X

4.0 CLOSURE

AECOM appreciates the opportunity to be of continued service to FDOHPC and FDEP on this project. Following approval of the recommended wells for the Task 5 sampling event, a RFC will be submitted for the additional analyses. Should you have any questions or comments concerning this report, please do not hesitate to contact us.

Tables

TABLE 1: GROUNDWATER ELEVATION TABLE

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W
Haines City, FL

FDEP Facility ID No.: 53/8943481

WELL NO.	SB-37 / PZ-1			MW-A			MW-AR			MW-B			MW-BR		
DIAMETER	2"			2"			2"			2"			2"		
WELL DEPTH	10.00			15.18			15.00			15.06			15.06		
SCREEN INTERVAL	5-10 ft			3-15 ft			3-15 ft			3-15 ft			3-15 ft		
TOC ELEVATION	96.92			98.57			98.32			98.47			98.65		
DATE	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**
8/28/2007				92.47	6.10	--		NI		92.15	6.32	--			
1/28/2008				90.82	7.75	1.65		NI		90.77	7.70	1.38			
2/1/2008	90.20	6.72	--	90.83	7.74	-0.01		NI		90.79	7.68	-0.02			
3/13/2008				91.46	7.11	-0.63		NI		91.62	6.85	-0.83			
6/27/2008								NI							
3/24/2011				91.36	5.56	-1.55		NI							
3/28/2011								NI							
9/4/2012					Abandoned			NI							
5/1/2013							89.64	8.68	--						
8/26/2013							94.02	4.30	-4.38						
2/18/2014							91.95	6.37	2.07						
1/28/2016							92.64	5.68	-0.69	94.37	4.10	-2.75			
7/20/2016							93.35	4.97	-0.71				94.36	4.29	--
11/9/2016							92.61	5.71	0.74				92.59	6.06	6.06

NI = Not Installed **NM = Not Measured** **Blank = No Data**
All Measurements = Feet

On 09/04/2012 - MW-A, MW-C, MW-D, MW-E, MW-F, & DW-G were abandoned

TABLE 1: GROUNDWATER ELEVATION TABLE

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W
Haines City, FL

FDEP Facility ID No.: 53/8943481

WELL NO.	MW-C			MW-CR			MW-D			MW-DR			MW-E		
DIAMETER	2"			2"			2"			2"			2"		
WELL DEPTH	16.00			15.00			16.00			15.00			16.00		
SCREEN INTERVAL	2-16 ft			3-15 ft			2-16 ft			3-15 ft			2-16 ft		
TOC ELEVATION	97.85			97.66			98.63			98.31			98.70		
DATE	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**
8/28/2007		NI			NI			NI			NI			NI	
1/28/2008		NI			NI			NI			NI			NI	
2/1/2008		NI			NI			NI			NI			NI	
3/13/2008	91.50	6.35	--		NI		91.51	7.12	--		NI		91.45	7.25	--
6/27/2008					NI						NI				
3/24/2011					NI		90.74	7.96	0.84		NI		89.90	7.95	0.70
3/28/2011					NI						NI				
9/4/2012		Abandoned			NI			Abandoned			NI			Abandoned	
5/1/2013				89.55	8.11	--				89.65	8.66	--			
8/26/2013				93.89	3.77	-4.34				94.10	4.21	-4.45			
2/18/2014				91.83	5.83	2.06				91.98	6.33	2.12			
1/28/2016										92.69	5.62	-0.71			
7/20/2016										93.46	4.85	-0.77			
11/9/2016										92.67	5.64	0.79			

NI = Not Installed **NM = Not Measured** **Blank = No Data**
All Measurements = Feet

On 09/04/2012 - MW-A, MW-C, MW-D, MW-E, MW-F, & DW-G were abandoned

TABLE 1: GROUNDWATER ELEVATION TABLE 2

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W
Haines City, FL

FDEP Facility ID No.: 53/8943481

WELL NO.	MW-ER			MW-F			MW-FR			DW-G			DW-GR		
DIAMETER	2"			2"			2"			2"			2"		
WELL DEPTH	15.00			13.50			15.00			35.00			35.00		
SCREEN INTERVAL	3-15 ft			2-13.5 ft			3-15 ft			30-35 ft			30-35 ft		
TOC ELEVATION	98.74			98.15			98.40			98.34			98.43		
DATE	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**	**ELEV**	**DTW**	**Diff**
8/28/2007		NI			NI			NI			NI			NI	
1/28/2008		NI			NI			NI			NI			NI	
2/1/2008		NI			NI			NI			NI			NI	
3/13/2008		NI		91.47	6.68	--		NI			NI			NI	
6/27/2008		NI		90.60	7.55	0.87		NI		90.59	7.75	--		NI	
3/24/2011		NI		90.82	7.33	-0.22		NI		90.80	7.60	-0.15		NI	
3/28/2011		NI						NI		90.72	7.68	0.08		NI	
9/4/2012		NI			Abandoned			NI		93.70	4.70	-2.98		NI	
5/1/2013	89.72	9.02	--				89.66	8.74	--		Abandoned			NI	
8/26/2013	94.16	4.58	-4.44				94.03	4.37	-4.37					NI	
2/18/2014	92.07	6.67	2.09				92.01	6.39	2.02					NI	
1/28/2016	92.83	5.91	-0.76				92.77	5.63	-0.76					NI	
7/20/2016	93.43	5.31	-0.60				93.33	5.07	-0.56				93.32	5.11	--
11/9/2016	92.51	6.23	0.92				92.49	5.91	0.84				92.50	5.93	0.82

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All Measurements = Feet

TABLE 1: GROUNDWATER ELEVATION TABLE

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W
Haines City, FL

FDEP Facility ID No.: 53/8943481

WELL NO.	MW-H			MW-I			MW-J			MW-K			MW-L		
DIAMETER	2"			2"			2"			2"			2"		
WELL DEPTH	16.00			16.00			16.00			16.00			15.00		
SCREEN INTERVAL	3-16 ft			3-16 ft			3-16 ft			3-16 ft			3-15 ft		
TOC ELEVATION	96.66			96.36			96.80			96.86			98.63		
DATE	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff
8/28/2007		NI			NI			NI			NI			NI	
1/28/2008		NI			NI			NI			NI			NI	
2/1/2008		NI			NI			NI			NI			NI	
3/13/2008		NI			NI			NI			NI			NI	
6/27/2008	90.51	6.15	--	90.41	5.95	--	90.60	6.20	--	89.81	7.05	--		NI	
3/24/2011	91.14	5.72	-0.43	92.64	5.99	0.04								NI	
3/28/2011														NI	
9/4/2012														NI	
5/1/2013				91.68	6.95	0.96							89.90	8.73	--
8/26/2013													94.43	4.20	-4.53
2/18/2014				94.01	4.62	-2.33	91.75	4.91	-1.29				92.25	6.38	2.18
1/28/2016				94.72	3.91	-0.71	92.53	4.13	-0.78	91.79	5.07	-1.98			
7/20/2016	92.88	3.78	--				93.18	3.62	-0.51	92.39	4.47	-0.60	93.66	4.97	-1.41
11/9/2016	92.36	4.30	0.52	92.22	4.14	0.23	92.38	4.42	0.80	91.59	5.27	0.80	92.61	6.02	6.02

NI = Not Installed **NM = Not Measured** **Blank = No Data**

All Measurements = Feet

Table 2: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W
Haines City, FL

FDEP Facility ID No.: 53/8943481

Well ID	Screen Interval	Sample Date	Depth to Water	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Naphthalene	1-Methyl naphthalene	2-Methyl naphthalene	Benzo(a) anthracene	Benzo(b) fluoranthene	Indeno(1,2,3 -cd)pyrene	EDB	Lead	FL-PRO (mg/L)
GCTL				**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**0.05**	**0.05**	**0.05**	**0.02**	**15**	**5**
NADC				**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**5**	**5**	**5**	**20**	**150**	**50**
PQL												**0.2**	**0.1**	**0.2**			
MW-A	3 - 15	1/28/2008	7.75	**15.0**	1.1	**270**	3.2	0.77U	**100**	***1,100***	**170**				0.0064U	8.3 I	**6.9**
		3/24/2011	5.56	**3.7**	0.69 I	**48.0**	0.50 U	0.50 U	**91.5**	***364***	**47.5**						3.2
MW-AR	3 - 15	5/1/2013	8.68	0.10U	0.50U	0.50U	1.5	0.50U	**47.4**	3.9	3.2						2.0
		8/26/2013	4.30	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U						0.11
		2/18/2014	6.37	**1.1**	0.50U	1.1	4.4	0.50U	**16.7**	1.8 I	2.0						0.19
		1/28/2016	5.68	0.71 U	0.72 U	1.4	1.3 U	0.60 U	**99**	2.8	2.9				NA	NA	NA
		7/20/2016	4.97	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	3.3	0.30	0.16	0.037 U	0.059 U	0.037 U	NA	NA	NA
		11/9/2016	5.71	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	4.8	0.19	0.051 I	0.037 U	0.059 U	0.037 U	NA	NA	NA
MW-B	3 - 15	1/28/2008	7.70	0.16U	0.15U	0.99 I	0.82 I	0.77U	0.038 I	0.33 I	0.048 I				0.0062U	5.0U	0.029U
		1/28/2016	4.10	NA	NA	NA	NA	NA	0.72	0.063 I	0.086 I	0.074	**0.30**	0.17	NA	NA	0.14 U
MW-BR	3 - 15	7/20/2016	4.29	NA	NA	NA	NA	NA	3.3	0.30	0.16	0.037 U	0.059 U	0.037 U	NA	NA	0.10 U
		11/9/2016	6.06	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.035 U	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U	NA	NA	NA
MW-C	2 - 16	3/13/2008	6.35	0.50U	<0.53	0.50U	0.70 I	1.7	<0.015	0.09 I	<0.025						0.028U
MW-CR	3 - 15	5/1/2013	8.11	0.10U	0.50U	0.50U	1.3	0.50U	1.0U	1.0U	1.0U						0.056U
		8/26/2013	3.77	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U						0.057U
		2/18/2014	5.83	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U						0.055U
MW-D	2 - 16	3/13/2008	7.12	0.50U	<0.53	0.50U	<0.67	0.50U	0.29 I	1.9	0.27 I						0.028U
		3/24/2011	7.96	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.056 U	0.19 I	0.085 U						0.15
MW-DR	3 - 15	5/1/2013	8.66	0.10U	0.50U	0.50U	1.6	0.50U	**17.2**	1.0U	1.0U						0.056U
		8/26/2013	4.21	0.10U	0.50U	0.50U	1.4	0.50U	3.4	1.0U	1.0U						0.057U
		2/18/2014	6.33	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U						0.056U
		1/28/2016	5.62	NA	NA	NA	NA	NA	**37**	0.75	0.79				NA	NA	NA
		7/20/2016	4.85	NA	NA	NA	NA	NA	0.080 I	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U	NA	NA	NA
		11/9/2016	5.64	NA	NA	NA	NA	NA	0.91	0.074 I	0.044 U	0.037 U	0.059 U	0.037 U	NA	NA	NA
MW-E	2 - 16	3/13/2008	7.25	0.50U	0.92 I	1.1	6.0	1.7	0.31 I	0.71 I	0.40 I						0.12 V
		3/24/2011	7.95	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 I	0.94 I	0.43 I						0.056 U
MW-ER	3 - 15	5/1/2013	9.02	**51.0**	1.9	**43.9**	***300***	0.50U	11.7	3.7	4.6						0.61
		8/26/2013	4.58	**22.2**	1.4	10.2	***150***	0.50U	**84.0**	1.7 I	1.5 I						0.24
		2/18/2014	6.67	**28.9**	17.2	**72.2**	***457***	0.50U	**40.3**	3.6	4.9						1.5
		1/28/2016	5.91	**4.8**	4.2	**52**	**170**	0.60 U	**59**	9.9	14				NA	NA	NA
		7/20/2016	5.31	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.79	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U	NA	NA	NA
		11/9/2016	6.23	0.71 U	0.72 U	12	**38**	0.60 U	**37**	7.6	9.9	0.037 U	0.059 U	0.037 U	NA	NA	NA

Table 2: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W
Haines City, FL

FDEP Facility ID No.: 53/8943481

Well ID	Screen Interval	Sample Date	Depth to Water	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Naphthalene	1-Methyl naphthalene	2-Methyl naphthalene	Benzo(a) anthracene	Benzo(b) fluoranthene	Indeno(1,2,3 -cd)pyrene	EDB	Lead	FL-PRO (mg/L)
GCTL				**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**0.05**	**0.05**	**0.05**	**0.02**	**15**	**5**
NADC				**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**5**	**5**	**5**	**20**	**150**	**50**
PQL												**0.2**	**0.1**	**0.2**			
MW-F	2 - 13.5	3/13/2008	6.68	***1400***	***2100***	***700***	***3900***	75	***70***	**260**	**39**						**13 V**
		6/27/2008	7.55	***1200***	***1500***	***610***	***2100***	100	***62***	***300***	**37**						**15**
		3/24/2011	7.33	***1240***	**117**	***1050***	***2750***	0.50 U	**53.0**	***359***	24.2						**9.2**
MW-FR	3 - 15	5/1/2013	8.74	***978***	**67.1**	***394***	***2050***	0.50U	***193***	27.8	**52.7**						**5.3**
		8/26/2013	4.37	***197***	**48.7**	**100**	***464***	0.50U	***146***	24.1	**35.0**						3.3
		2/18/2014	6.39	***468***	**70.0**	***363***	***1330***	0.50U	***178***	**28.7**	**50.3**						4.4
		1/28/2016	5.63	***170***	1.8 U	**140**	**120**	1.5 U	***390***	**32**	**38**	0.074 U	1.2 U	0.74 U	NA	NA	2.2
		7/20/2016	5.07	**60**	0.72 U	**55**	19	0.60 U	**62**	7.8	8.5	0.037 U	0.091 I	0.040 U	NA	NA	1.1
		11/9/2016	5.91	***140***	1.4 U	**160**	**68**	0.60 U	***390***	**37**	**49**	0.037 U	0.059 U	0.037 U	NA	NA	NA
DW-G	30 - 35	6/27/2008	7.75	**1.1**	2.5	2.3	20	2.2	2.9	14	1.7						0.32
		3/24/2011	7.6	0.78 I	0.50 U	0.76 I	6.5	0.50 U	*NA	*NA	*NA				*NA	*NA	0.056 U
		3/28/2011	7.68	NA	NA	NA	NA	NA	0.057 U	0.14 I	0.085 U						NA
		9/4/2012	4.70	0.10U	0.50U	0.50U	0.50U	0.50U	0.063 I	0.45 I	0.080 I						NA
DW-GR	30-35	7/20/2016	5.11	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
		11/9/2016	5.93	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.035 U	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U	NA	NA	NA
MW-H	3 - 16	6/27/2008	6.15	0.50U	0.61 I	0.50U	1.4	0.50U	<0.014	0.095 I	0.024U						0.029U
		3/24/2011	5.72	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.057 U	0.076 U	0.085 U						0.056 U
MW-I	3 - 16	6/27/2008	5.95	0.50U	0.53U	0.50U	<0.67	0.50U	0.015U	0.090 I	0.025U						0.029U
		3/24/2011	5.99	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.057 U	0.076 U	0.085 U						0.055 U
		5/1/2013	6.95	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U						0.056U
		2/18/2014	4.62	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U						0.055U
		11/9/2016	4.14	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	**15**	0.57	0.057 I	0.037 U	0.059 U	0.037 U	NA	NA	NA
MW-J	3 - 16	6/27/2008	6.20	0.50U	0.53U	0.50U	0.67U	0.50U	0.015U	<0.024	0.025U						0.029U
		2/18/2014	4.91	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U						0.055U
		11/9/2016	4.42	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.051 I	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U	NA	NA	NA
MW-K	3 - 16	6/27/2008	7.05	0.50U	0.73 I	0.50U	1.6	0.50U	0.015U	<0.024	0.025U						0.029U
		1/28/2016	5.07	NA	NA	NA	NA	NA	0.080 I	0.047 I	0.044 I				NA	NA	0.14 U
		7/20/2016	4.47	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.035 U	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U	NA	NA	0.10 U
MW-L	3 - 15	5/1/2013	8.73	0.10U	0.50U	0.50U	1.6	0.50U	1.0U	1.0U	1.0U						0.056U
		8/26/2013	4.20	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U						0.057U
		2/18/2014	6.38	0.10U	0.50U	0.50U	0.50U	0.50U	1.0U	1.0U	1.0U				NA	NA	0.055U

All concentrations shown in micrograms/liter (ug/l), unless otherwise noted.
NADC = Natural Attenuation Default Concentration in Chapter 62-777, Table V, F.A.C.
Total Xylenes = Sum of ortho, para, and meta-xylene
FL-PRO = Analyzed by Florida Petroleum Range Organics Method for Total Recoverable Petroleum Hydrocarbons
NA = Not analyzed
I = The reported value is between the laboratory method detection limit and method reporting limit
U = indicates that the chemical of concern was undetected
V = Analyte detected in the associated Method Blank

mg/L = results reported in milligrams per liter
GCTL = Groundwater Cleanup Target Levels in Chapter 62-777, Table I, F.A.C.
MTBE = Methyl-tert-butyl ether
PQL = Practical Quantitation Limit
*NA = Not analyzed due to the laboratory breaking the sample.
BOLD indicates sample results exceeded the GCTL
BOLD and ***ITALIC*** indicate sample results exceeded the NADC

Figures

Last saved by: BARRONM(2016-08-16) Last Plotted: 2016-08-16 Project Management Initials: Designer: MEB Checked:_____ Approved:_____ ANSI B 11" x 17"
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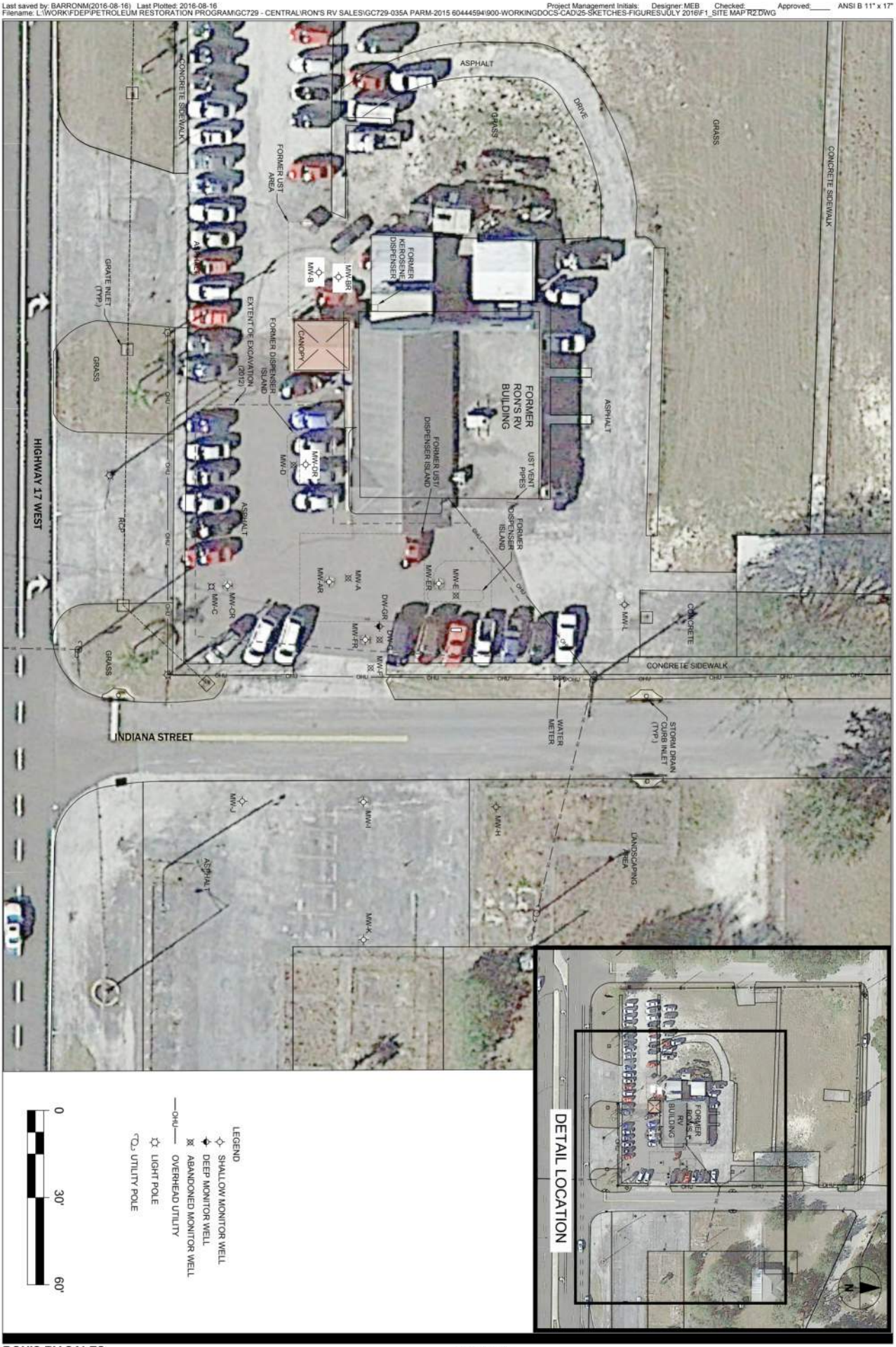
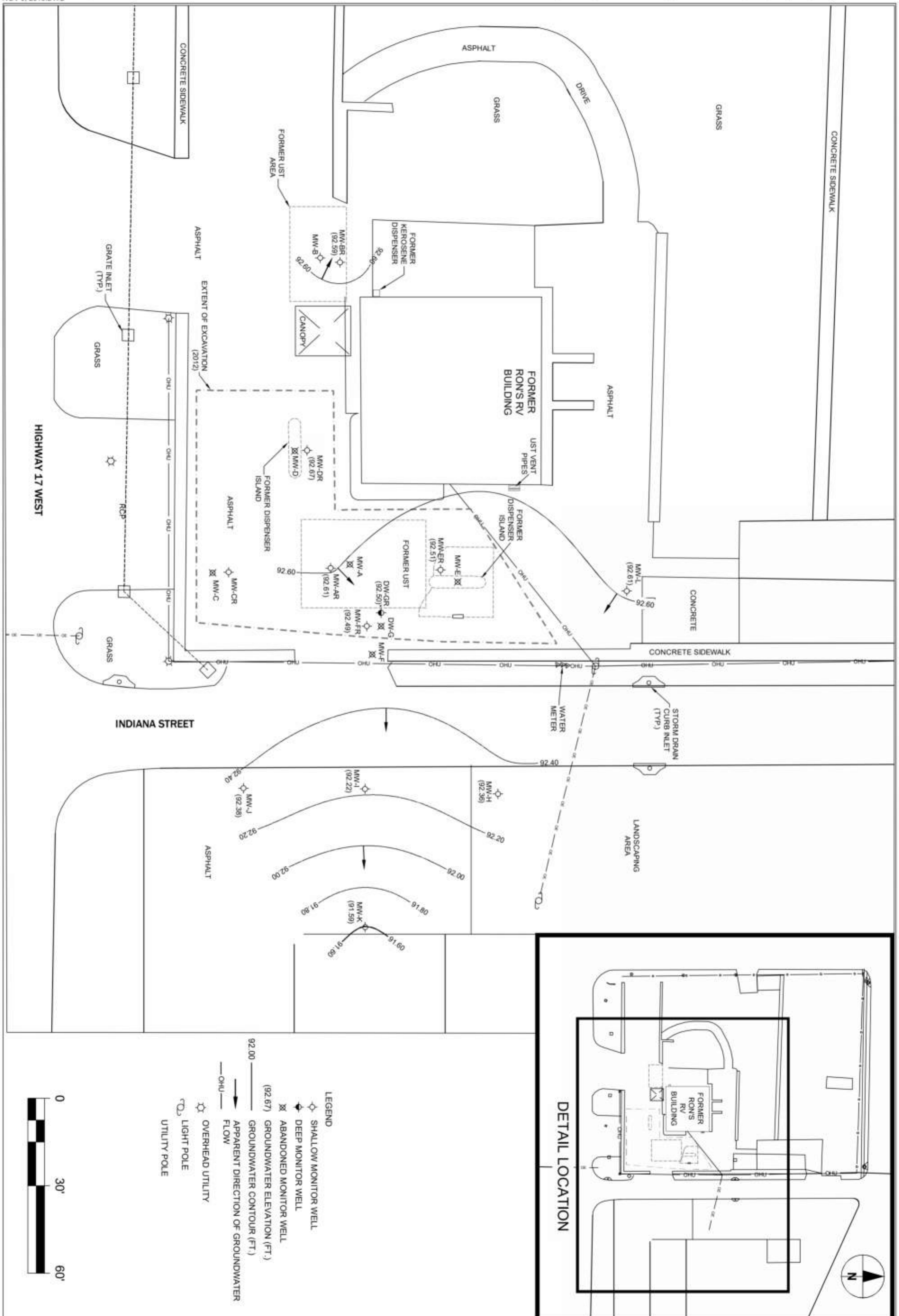


RON'S RV SALES
1104 HIGHWAY 17-92 WEST
HAINES CITY, POLK COUNTY, FLORIDA
FDEP FACILITY ID.: 538943481
Project No.: 60444594 Date: 02/26/2016

SITE MAP

AECOM

Figure: 1



RON'S RV SALES
1104 HIGHWAY 17-92 WEST
HAINES CITY, POLK COUNTY, FLORIDA
FDEP FACILITY ID.: 538943481
Project No.: 60444594 Date: 01/06/2017

GROUNDWATER CONTOUR MAP
NOVEMBER 9, 2016

AECOM

Figure: 2

Last saved by: BARRONM(2017-01-11) Last Plotted: 2017-01-11 Project Management Initials: Designer: MEB Checked: Approved: ANSI B 11" x 17"
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RON'S RV SALES
1104 HIGHWAY 17-92 WEST
HAINES CITY, POLK COUNTY, FLORIDA
FDEP FACILITY ID.: 538943481
Project No.: 60444594 Date: 01/06/2017

GROUNDWATER CONTAMITION MAP
NOVEMBER 9, 2016

AECOM

Figure: 3

Appendix A

Laboratory Analytical Report

ENCO Laboratories

Accurate. Timely. Responsive. Innovative.

10775 Central Port Drive
Orlando FL, 32824
Phone: 407.826.5314 FAX: 407.850.6945

Thursday, November 17, 2016
AECOM Technical Services, Inc. (SE004)
Attn: Mike Smar
150 N. Orange Ave, Suite 200
Orlando, FL 32801

RE: Laboratory Results for
Project Number: 60444594, Project Name/Desc: RON'S RV SALES
ENCO Workorder(s): AZ07449

Dear Mike Smar,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, November 9, 2016.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

David M. Camacho

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: DW-GR **Lab ID: AZ07449-01** **Sampled: 11/09/16 10:32** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	11/23/16		11/11/16	00:00	11/11/16 11:29
EPA 8270D	11/16/16	12/20/16	11/10/16	14:47	11/11/16 18:41

Client ID: MW-AR **Lab ID: AZ07449-02** **Sampled: 11/09/16 12:07** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	11/23/16		11/11/16	00:00	11/11/16 11:56
EPA 8270D	11/16/16	12/20/16	11/10/16	14:47	11/11/16 19:03

Client ID: MW-BR **Lab ID: AZ07449-03** **Sampled: 11/09/16 13:27** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	11/23/16		11/11/16	00:00	11/11/16 12:24
EPA 8270D	11/16/16	12/20/16	11/10/16	14:47	11/11/16 19:25

Client ID: MW-ER **Lab ID: AZ07449-04** **Sampled: 11/09/16 11:32** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	11/23/16		11/11/16	00:00	11/11/16 12:52
EPA 8270D	11/16/16	12/20/16	11/10/16	14:47	11/11/16 19:46

Client ID: MW-ER **Lab ID: AZ07449-04RE1** **Sampled: 11/09/16 11:32** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	11/16/16	12/20/16	11/10/16	14:47	11/14/16 10:58

Client ID: MW-FR **Lab ID: AZ07449-05** **Sampled: 11/09/16 10:11** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	11/23/16		11/11/16	00:00	11/11/16 13:19
EPA 8270D	11/16/16	12/25/16	11/15/16	10:45	11/16/16 12:23

Client ID: MW-FR **Lab ID: AZ07449-05RE1** **Sampled: 11/09/16 10:11** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	11/16/16	12/25/16	11/15/16	10:45	11/17/16 10:54

Client ID: MW-I **Lab ID: AZ07449-06** **Sampled: 11/09/16 09:27** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	11/23/16		11/11/16	00:00	11/11/16 13:47

Client ID: MW-I **Lab ID: AZ07449-06RE1** **Sampled: 11/09/16 09:27** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	11/16/16	12/25/16	11/15/16	10:45	11/17/16 10:10

Client ID: MW-J **Lab ID: AZ07449-07** **Sampled: 11/09/16 08:47** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	11/23/16		11/11/16	00:00	11/11/16 14:15

Client ID: MW-J **Lab ID: AZ07449-07RE1** **Sampled: 11/09/16 08:47** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	11/16/16	12/25/16	11/15/16	10:45	11/17/16 10:32

Client ID: MW-DR **Lab ID: AZ07449-08** **Sampled: 11/09/16 12:49** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	11/16/16	12/25/16	11/15/16	10:45	11/16/16 13:29

Client ID: TRIP BLANK **Lab ID: AZ07449-09** **Sampled: 11/09/16 00:00** **Received: 11/09/16 14:12**

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	11/23/16		11/11/16	00:00	11/11/16 14:42

SAMPLE DETECTION SUMMARY

Client ID: MW-AR **Lab ID: AZ07449-02**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1-Methylnaphthalene	0.19		0.047	0.10	ug/L	EPA 8270D	
2-Methylnaphthalene	0.051	I	0.044	0.10	ug/L	EPA 8270D	
Acenaphthene	0.24		0.037	0.10	ug/L	EPA 8270D	
Fluorene	0.069	I	0.038	0.10	ug/L	EPA 8270D	
Naphthalene	4.8		0.035	0.10	ug/L	EPA 8270D	

Client ID: MW-ER **Lab ID: AZ07449-04**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1-Methylnaphthalene	7.6		0.047	0.10	ug/L	EPA 8270D	
2-Methylnaphthalene	9.9		0.044	0.10	ug/L	EPA 8270D	
Acenaphthene	0.20		0.037	0.10	ug/L	EPA 8270D	
Ethylbenzene	12		0.69	1.0	ug/L	EPA 8260B	
Fluorene	0.15		0.038	0.10	ug/L	EPA 8270D	
m,p-Xylenes	31		1.3	2.0	ug/L	EPA 8260B	
o-Xylene	7.0		0.53	1.0	ug/L	EPA 8260B	
Phenanthrene	0.097	I	0.039	0.10	ug/L	EPA 8270D	
Xylenes (Total)	38		1.3	2.0	ug/L	EPA 8260B	

Client ID: MW-ER **Lab ID: AZ07449-04RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Naphthalene	37		0.18	0.50	ug/L	EPA 8270D	

Client ID: MW-FR **Lab ID: AZ07449-05**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acenaphthene	0.39		0.037	0.10	ug/L	EPA 8270D	
Benzene	140		1.4	2.0	ug/L	EPA 8260B	
Ethylbenzene	160		1.4	2.0	ug/L	EPA 8260B	
Fluorene	0.47		0.038	0.10	ug/L	EPA 8270D	
m,p-Xylenes	68		2.6	4.0	ug/L	EPA 8260B	
Phenanthrene	0.069	I	0.039	0.10	ug/L	EPA 8270D	
Xylenes (Total)	68		2.6	4.0	ug/L	EPA 8260B	

Client ID: MW-FR **Lab ID: AZ07449-05RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1-Methylnaphthalene	37		4.7	10	ug/L	EPA 8270D	
2-Methylnaphthalene	49		4.4	10	ug/L	EPA 8270D	
Naphthalene	390		3.5	10	ug/L	EPA 8270D	

Client ID: MW-I **Lab ID: AZ07449-06RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1-Methylnaphthalene	0.57		0.047	0.10	ug/L	EPA 8270D	
2-Methylnaphthalene	0.057	I	0.044	0.10	ug/L	EPA 8270D	
Naphthalene	15		0.035	0.10	ug/L	EPA 8270D	

Client ID: MW-J **Lab ID: AZ07449-07RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Acenaphthene	0.13		0.037	0.10	ug/L	EPA 8270D	
Naphthalene	0.051	I	0.035	0.10	ug/L	EPA 8270D	

Client ID: MW-DR **Lab ID: AZ07449-08**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1-Methylnaphthalene	0.074	I	0.047	0.10	ug/L	EPA 8270D	
Acenaphthene	0.13		0.037	0.10	ug/L	EPA 8270D	
Naphthalene	0.91		0.035	0.10	ug/L	EPA 8270D	

ANALYTICAL RESULTS

Description: DW-GR
Matrix: Ground Water
Project: RON'S RV SALES

Lab Sample ID: AZ07449-01
Sampled: 11/09/16 10:32
Sampled By: J. Wilson

Received: 11/09/16 14:12
Work Order: AZ07449

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzene [71-43-2]^	0.71	U	ug/L	1	0.71	1.0	6K11025	EPA 8260B	11/11/16 11:29	JAJ	
Ethylbenzene [100-41-4]^	0.69	U	ug/L	1	0.69	1.0	6K11025	EPA 8260B	11/11/16 11:29	JAJ	
m,p-Xylenes [108-38-3/106-42-3]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 11:29	JAJ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.60	U	ug/L	1	0.60	1.0	6K11025	EPA 8260B	11/11/16 11:29	JAJ	
o-Xylene [95-47-6]^	0.53	U	ug/L	1	0.53	1.0	6K11025	EPA 8260B	11/11/16 11:29	JAJ	
Toluene [108-88-3]^	0.72	U	ug/L	1	0.72	1.0	6K11025	EPA 8260B	11/11/16 11:29	JAJ	
Xylenes (Total) [1330-20-7]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 11:29	JAJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*51*	*1*	*50.0*	*102 %*	*41-142*	*6K11025*	*EPA 8260B*	*11/11/16 11:29*	*JAJ*	
Dibromofluoromethane	*48*	*1*	*50.0*	*96 %*	*53-146*	*6K11025*	*EPA 8260B*	*11/11/16 11:29*	*JAJ*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*41-146*	*6K11025*	*EPA 8260B*	*11/11/16 11:29*	*JAJ*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	0.047	U	ug/L	1	0.047	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
2-Methylnaphthalene [91-57-6]^	0.044	U	ug/L	1	0.044	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Acenaphthene [83-32-9]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Fluorene [86-73-7]^	0.038	U	ug/L	1	0.038	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Naphthalene [91-20-3]^	0.035	U	ug/L	1	0.035	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Phenanthrene [85-01-8]^	0.039	U	ug/L	1	0.039	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	6K10022	EPA 8270D	11/11/16 18:41	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*8.4*	*1*	*5.71*	*147 %*	*66-136*	*6K10022*	*EPA 8270D*	*11/11/16 18:41*	*jfi*	*QS-03*

ANALYTICAL RESULTS

Description: MW-AR
Matrix: Ground Water
Project: RON'S RV SALES

Lab Sample ID: AZ07449-02
Sampled: 11/09/16 12:07
Sampled By: J. Wilson

Received: 11/09/16 14:12
Work Order: AZ07449

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzene [71-43-2]^	0.71	U	ug/L	1	0.71	1.0	6K11025	EPA 8260B	11/11/16 11:56	JAJ	
Ethylbenzene [100-41-4]^	0.69	U	ug/L	1	0.69	1.0	6K11025	EPA 8260B	11/11/16 11:56	JAJ	
m,p-Xylenes [108-38-3/106-42-3]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 11:56	JAJ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.60	U	ug/L	1	0.60	1.0	6K11025	EPA 8260B	11/11/16 11:56	JAJ	
o-Xylene [95-47-6]^	0.53	U	ug/L	1	0.53	1.0	6K11025	EPA 8260B	11/11/16 11:56	JAJ	
Toluene [108-88-3]^	0.72	U	ug/L	1	0.72	1.0	6K11025	EPA 8260B	11/11/16 11:56	JAJ	
Xylenes (Total) [1330-20-7]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 11:56	JAJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*52*	*1*	*50.0*	*105 %*	*41-142*	*6K11025*	*EPA 8260B*	*11/11/16 11:56*	*JAJ*	
Dibromofluoromethane	*48*	*1*	*50.0*	*97 %*	*53-146*	*6K11025*	*EPA 8260B*	*11/11/16 11:56*	*JAJ*	
Toluene-d8	*48*	*1*	*50.0*	*97 %*	*41-146*	*6K11025*	*EPA 8260B*	*11/11/16 11:56*	*JAJ*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	**0.19**		ug/L	1	0.047	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
2-Methylnaphthalene [91-57-6]^	**0.051**	I	ug/L	1	0.044	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Acenaphthene [83-32-9]^	**0.24**		ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Fluorene [86-73-7]^	**0.069**	I	ug/L	1	0.038	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Naphthalene [91-20-3]^	**4.8**		ug/L	1	0.035	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Phenanthrene [85-01-8]^	0.039	U	ug/L	1	0.039	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	6K10022	EPA 8270D	11/11/16 19:03	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*4.6*	*1*	*5.71*	*81 %*	*66-136*	*6K10022*	*EPA 8270D*	*11/11/16 19:03*	*jfi*	

ANALYTICAL RESULTS

Description: MW-BR
Matrix: Ground Water
Project: RON'S RV SALES

Lab Sample ID: AZ07449-03
Sampled: 11/09/16 13:27
Sampled By: J. Wilson

Received: 11/09/16 14:12
Work Order: AZ07449

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzene [71-43-2]^	0.71	U	ug/L	1	0.71	1.0	6K11025	EPA 8260B	11/11/16 12:24	JAJ	
Ethylbenzene [100-41-4]^	0.69	U	ug/L	1	0.69	1.0	6K11025	EPA 8260B	11/11/16 12:24	JAJ	
m,p-Xylenes [108-38-3/106-42-3]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 12:24	JAJ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.60	U	ug/L	1	0.60	1.0	6K11025	EPA 8260B	11/11/16 12:24	JAJ	
o-Xylene [95-47-6]^	0.53	U	ug/L	1	0.53	1.0	6K11025	EPA 8260B	11/11/16 12:24	JAJ	
Toluene [108-88-3]^	0.72	U	ug/L	1	0.72	1.0	6K11025	EPA 8260B	11/11/16 12:24	JAJ	
Xylenes (Total) [1330-20-7]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 12:24	JAJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*95 %*	*41-142*	*6K11025*	*EPA 8260B*	*11/11/16 12:24*	*JAJ*	
Dibromofluoromethane	*51*	*1*	*50.0*	*103 %*	*53-146*	*6K11025*	*EPA 8260B*	*11/11/16 12:24*	*JAJ*	
Toluene-d8	*49*	*1*	*50.0*	*97 %*	*41-146*	*6K11025*	*EPA 8260B*	*11/11/16 12:24*	*JAJ*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	0.047	U	ug/L	1	0.047	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
2-Methylnaphthalene [91-57-6]^	0.044	U	ug/L	1	0.044	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Acenaphthene [83-32-9]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Fluorene [86-73-7]^	0.038	U	ug/L	1	0.038	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Naphthalene [91-20-3]^	0.035	U	ug/L	1	0.035	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Phenanthrene [85-01-8]^	0.039	U	ug/L	1	0.039	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	6K10022	EPA 8270D	11/11/16 19:25	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*6.8*	*1*	*5.71*	*119 %*	*66-136*	*6K10022*	*EPA 8270D*	*11/11/16 19:25*	*jfi*	

ANALYTICAL RESULTS

Description: MW-ER
Matrix: Ground Water
Project: RON'S RV SALES

Lab Sample ID: AZ07449-04
Sampled: 11/09/16 11:32
Sampled By: J. Wilson

Received: 11/09/16 14:12
Work Order: AZ07449

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzene [71-43-2]^	0.71	U	ug/L	1	0.71	1.0	6K11025	EPA 8260B	11/11/16 12:52	JAJ	
Ethylbenzene [100-41-4]^	**12**		ug/L	1	0.69	1.0	6K11025	EPA 8260B	11/11/16 12:52	JAJ	
m,p-Xylenes [108-38-3/106-42-3]^	**31**		ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 12:52	JAJ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.60	U	ug/L	1	0.60	1.0	6K11025	EPA 8260B	11/11/16 12:52	JAJ	
o-Xylene [95-47-6]^	**7.0**		ug/L	1	0.53	1.0	6K11025	EPA 8260B	11/11/16 12:52	JAJ	
Toluene [108-88-3]^	0.72	U	ug/L	1	0.72	1.0	6K11025	EPA 8260B	11/11/16 12:52	JAJ	
Xylenes (Total) [1330-20-7]^	**38**		ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 12:52	JAJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*52*	*1*	*50.0*	*103 %*	*41-142*	*6K11025*	*EPA 8260B*	*11/11/16 12:52*	*JAJ*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*53-146*	*6K11025*	*EPA 8260B*	*11/11/16 12:52*	*JAJ*	
Toluene-d8	*49*	*1*	*50.0*	*97 %*	*41-146*	*6K11025*	*EPA 8260B*	*11/11/16 12:52*	*JAJ*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	**7.6**		ug/L	1	0.047	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
2-Methylnaphthalene [91-57-6]^	**9.9**		ug/L	1	0.044	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Acenaphthene [83-32-9]^	**0.20**		ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Fluorene [86-73-7]^	**0.15**		ug/L	1	0.038	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Naphthalene [91-20-3]^	**37**		ug/L	5	0.18	0.50	6K10022	EPA 8270D	11/14/16 10:58	jfi	
Phenanthrene [85-01-8]^	**0.097**	I	ug/L	1	0.039	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	6K10022	EPA 8270D	11/11/16 19:46	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*4.1*	*1*	*5.71*	*72 %*	*66-136*	*6K10022*	*EPA 8270D*	*11/11/16 19:46*	*jfi*	

ANALYTICAL RESULTS

Description: MW-FR
Matrix: Ground Water
Project: RON'S RV SALES

Lab Sample ID: AZ07449-05
Sampled: 11/09/16 10:11
Sampled By: J. Wilson

Received: 11/09/16 14:12
Work Order: AZ07449

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzene [71-43-2]^	**140**		ug/L	2	1.4	2.0	6K11025	EPA 8260B	11/11/16 13:19	JAJ	
Ethylbenzene [100-41-4]^	**160**		ug/L	2	1.4	2.0	6K11025	EPA 8260B	11/11/16 13:19	JAJ	
m,p-Xylenes [108-38-3/106-42-3]^	**68**		ug/L	2	2.6	4.0	6K11025	EPA 8260B	11/11/16 13:19	JAJ	
Methyl-tert-Butyl Ether [1634-04-4]^	1.2	U	ug/L	2	1.2	2.0	6K11025	EPA 8260B	11/11/16 13:19	JAJ	
o-Xylene [95-47-6]^	1.1	U	ug/L	2	1.1	2.0	6K11025	EPA 8260B	11/11/16 13:19	JAJ	
Toluene [108-88-3]^	1.4	U	ug/L	2	1.4	2.0	6K11025	EPA 8260B	11/11/16 13:19	JAJ	
Xylenes (Total) [1330-20-7]^	**68**		ug/L	2	2.6	4.0	6K11025	EPA 8260B	11/11/16 13:19	JAJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*97 %*	*41-142*	*6K11025*	*EPA 8260B*	*11/11/16 13:19*	*JAJ*	
Dibromofluoromethane	*48*	*1*	*50.0*	*95 %*	*53-146*	*6K11025*	*EPA 8260B*	*11/11/16 13:19*	*JAJ*	
Toluene-d8	*49*	*1*	*50.0*	*97 %*	*41-146*	*6K11025*	*EPA 8260B*	*11/11/16 13:19*	*JAJ*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	**37**		ug/L	100	4.7	10	6K15011	EPA 8270D	11/17/16 10:54	jfi	
2-Methylnaphthalene [91-57-6]^	**49**		ug/L	100	4.4	10	6K15011	EPA 8270D	11/17/16 10:54	jfi	
Acenaphthene [83-32-9]^	**0.39**		ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	QL-02
Fluorene [86-73-7]^	**0.47**		ug/L	1	0.038	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Naphthalene [91-20-3]^	**390**		ug/L	100	3.5	10	6K15011	EPA 8270D	11/17/16 10:54	jfi	
Phenanthrene [85-01-8]^	**0.069**	I	ug/L	1	0.039	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	6K15011	EPA 8270D	11/16/16 12:23	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*3.8*	*1*	*5.71*	*66 %*	*66-136*	*6K15011*	*EPA 8270D*	*11/16/16 12:23*	*jfi*	

ANALYTICAL RESULTS

Description: MW-I
Matrix: Ground Water
Project: RON'S RV SALES

Lab Sample ID: AZ07449-06
Sampled: 11/09/16 09:27
Sampled By: J. Wilson

Received: 11/09/16 14:12
Work Order: AZ07449

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzene [71-43-2]^	0.71	U	ug/L	1	0.71	1.0	6K11025	EPA 8260B	11/11/16 13:47	JAJ	
Ethylbenzene [100-41-4]^	0.69	U	ug/L	1	0.69	1.0	6K11025	EPA 8260B	11/11/16 13:47	JAJ	
m,p-Xylenes [108-38-3/106-42-3]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 13:47	JAJ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.60	U	ug/L	1	0.60	1.0	6K11025	EPA 8260B	11/11/16 13:47	JAJ	
o-Xylene [95-47-6]^	0.53	U	ug/L	1	0.53	1.0	6K11025	EPA 8260B	11/11/16 13:47	JAJ	
Toluene [108-88-3]^	0.72	U	ug/L	1	0.72	1.0	6K11025	EPA 8260B	11/11/16 13:47	JAJ	
Xylenes (Total) [1330-20-7]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 13:47	JAJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*51*	*1*	*50.0*	*102 %*	*41-142*	*6K11025*	*EPA 8260B*	*11/11/16 13:47*	*JAJ*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*53-146*	*6K11025*	*EPA 8260B*	*11/11/16 13:47*	*JAJ*	
Toluene-d8	*48*	*1*	*50.0*	*97 %*	*41-146*	*6K11025*	*EPA 8260B*	*11/11/16 13:47*	*JAJ*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	**0.57**		ug/L	1	0.047	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
2-Methylnaphthalene [91-57-6]^	**0.057**	I	ug/L	1	0.044	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Acenaphthene [83-32-9]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	QL-02
Fluorene [86-73-7]^	0.038	U	ug/L	1	0.038	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Naphthalene [91-20-3]^	**15**		ug/L	1	0.035	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Phenanthrene [85-01-8]^	0.039	U	ug/L	1	0.039	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	6K15011	EPA 8270D	11/17/16 10:10	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*4.1*	*1*	*5.71*	*72 %*	*66-136*	*6K15011*	*EPA 8270D*	*11/17/16 10:10*	*jfi*	

ANALYTICAL RESULTS

Description: MW-J
Matrix: Ground Water
Project: RON'S RV SALES
Lab Sample ID: AZ07449-07
Sampled: 11/09/16 08:47
Sampled By: J. Wilson
Received: 11/09/16 14:12
Work Order: AZ07449

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzene [71-43-2]^	0.71	U	ug/L	1	0.71	1.0	6K11025	EPA 8260B	11/11/16 14:15	JAJ	
Ethylbenzene [100-41-4]^	0.69	U	ug/L	1	0.69	1.0	6K11025	EPA 8260B	11/11/16 14:15	JAJ	
m,p-Xylenes [108-38-3/106-42-3]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 14:15	JAJ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.60	U	ug/L	1	0.60	1.0	6K11025	EPA 8260B	11/11/16 14:15	JAJ	
o-Xylene [95-47-6]^	0.53	U	ug/L	1	0.53	1.0	6K11025	EPA 8260B	11/11/16 14:15	JAJ	
Toluene [108-88-3]^	0.72	U	ug/L	1	0.72	1.0	6K11025	EPA 8260B	11/11/16 14:15	JAJ	
Xylenes (Total) [1330-20-7]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 14:15	JAJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*48*	*1*	*50.0*	*95 %*	*41-142*	*6K11025*	*EPA 8260B*	*11/11/16 14:15*	*JAJ*	
Dibromofluoromethane	*49*	*1*	*50.0*	*99 %*	*53-146*	*6K11025*	*EPA 8260B*	*11/11/16 14:15*	*JAJ*	
Toluene-d8	*49*	*1*	*50.0*	*98 %*	*41-146*	*6K11025*	*EPA 8260B*	*11/11/16 14:15*	*JAJ*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	0.047	U	ug/L	1	0.047	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
2-Methylnaphthalene [91-57-6]^	0.044	U	ug/L	1	0.044	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Acenaphthene [83-32-9]^	**0.13**		ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	QL-02
Fluorene [86-73-7]^	0.038	U	ug/L	1	0.038	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Naphthalene [91-20-3]^	**0.051**	I	ug/L	1	0.035	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Phenanthrene [85-01-8]^	0.039	U	ug/L	1	0.039	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	6K15011	EPA 8270D	11/17/16 10:32	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*6.4*	*1*	*5.71*	*112 %*	*66-136*	*6K15011*	*EPA 8270D*	*11/17/16 10:32*	*jfi*	

ANALYTICAL RESULTS

Description: MW-DR | **Lab Sample ID:** AZ07449-08 | **Received:** 11/09/16 14:12
Matrix: Ground Water | **Sampled:** 11/09/16 12:49 | **Work Order:** AZ07449
Project: RON'S RV SALES | **Sampled By:** J. Wilson

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	**0.074**	I	ug/L	1	0.047	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
2-Methylnaphthalene [91-57-6]^	0.044	U	ug/L	1	0.044	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Acenaphthene [83-32-9]^	**0.13**		ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	QL-02
Fluorene [86-73-7]^	0.038	U	ug/L	1	0.038	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Naphthalene [91-20-3]^	**0.91**		ug/L	1	0.035	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Phenanthrene [85-01-8]^	0.039	U	ug/L	1	0.039	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	6K15011	EPA 8270D	11/16/16 13:29	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*6.1*	*1*	*5.71*	*107 %*	*66-136*	*6K15011*	*EPA 8270D*	*11/16/16 13:29*	*jfi*	

Description: TRIP BLANK | **Lab Sample ID:** AZ07449-09 | **Received:** 11/09/16 14:12
Matrix: Water | **Sampled:** 11/09/16 00:00 | **Work Order:** AZ07449
Project: RON'S RV SALES | **Sampled By:** ENCO ORL

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Benzene [71-43-2]^	0.71	U	ug/L	1	0.71	1.0	6K11025	EPA 8260B	11/11/16 14:42	JAJ	
Ethylbenzene [100-41-4]^	0.69	U	ug/L	1	0.69	1.0	6K11025	EPA 8260B	11/11/16 14:42	JAJ	
m,p-Xylenes [108-38-3/106-42-3]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 14:42	JAJ	
Methyl-tert-Butyl Ether [1634-04-4]^	0.60	U	ug/L	1	0.60	1.0	6K11025	EPA 8260B	11/11/16 14:42	JAJ	
o-Xylene [95-47-6]^	0.53	U	ug/L	1	0.53	1.0	6K11025	EPA 8260B	11/11/16 14:42	JAJ	
Toluene [108-88-3]^	0.72	U	ug/L	1	0.72	1.0	6K11025	EPA 8260B	11/11/16 14:42	JAJ	
Xylenes (Total) [1330-20-7]^	1.3	U	ug/L	1	1.3	2.0	6K11025	EPA 8260B	11/11/16 14:42	JAJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*41-142*	*6K11025*	*EPA 8260B*	*11/11/16 14:42*	*JAJ*	
Dibromofluoromethane	*51*	*1*	*50.0*	*101 %*	*53-146*	*6K11025*	*EPA 8260B*	*11/11/16 14:42*	*JAJ*	
Toluene-d8	*49*	*1*	*50.0*	*97 %*	*41-146*	*6K11025*	*EPA 8260B*	*11/11/16 14:42*	*JAJ*	

QUALITY CONTROL DATA

Volatile Organic Compounds by GCMS - Quality Control

Batch 6K11025 - EPA 5030B_MS

Blank (6K11025-BLK1) Prepared: 11/11/2016 00:00 Analyzed: 11/11/2016 11:01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzene	0.71	U	1.0	ug/L							
Ethylbenzene	0.69	U	1.0	ug/L							
m,p-Xylenes	1.3	U	2.0	ug/L							
Methyl-tert-Butyl Ether	0.60	U	1.0	ug/L							
o-Xylene	0.53	U	1.0	ug/L							
Toluene	0.72	U	1.0	ug/L							
Xylenes (Total)	1.3	U	2.0	ug/L							
4-Bromofluorobenzene	*50*			*ug/L*	*50.0*		*101*	*41-142*			
Dibromofluoromethane	*50*			*ug/L*	*50.0*		*99*	*53-146*			
Toluene-d8	*48*			*ug/L*	*50.0*		*97*	*41-146*			

LCS (6K11025-BS1) Prepared: 11/11/2016 00:00 Analyzed: 11/11/2016 10:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzene	16		1.0	ug/L	20.0		81	56-136			
Toluene	16		1.0	ug/L	20.0		81	64-131			
4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*98*	*41-142*			
Dibromofluoromethane	*44*			*ug/L*	*50.0*		*88*	*53-146*			
Toluene-d8	*48*			*ug/L*	*50.0*		*97*	*41-146*			

Matrix Spike (6K11025-MS1) Prepared: 11/11/2016 00:00 Analyzed: 11/11/2016 19:47

Source: AZ07449-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzene	18		1.0	ug/L	20.0	0.71 U	92	56-136			
Toluene	19		1.0	ug/L	20.0	0.72 U	94	64-131			
4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*98*	*41-142*			
Dibromofluoromethane	*52*			*ug/L*	*50.0*		*104*	*53-146*			
Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*41-146*			

Matrix Spike Dup (6K11025-MSD1) Prepared: 11/11/2016 00:00 Analyzed: 11/11/2016 20:15

Source: AZ07449-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzene	19		1.0	ug/L	20.0	0.71 U	94	56-136	2	14	
Toluene	18		1.0	ug/L	20.0	0.72 U	90	64-131	5	16	
4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*97*	*41-142*			
Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*53-146*			
Toluene-d8	*49*			*ug/L*	*50.0*		*99*	*41-146*			

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 6K10022 - EPA 3511_MS

Blank (6K10022-BLK1) Prepared: 11/10/2016 14:47 Analyzed: 11/11/2016 16:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.047	U	0.10	ug/L							
2-Methylnaphthalene	0.044	U	0.10	ug/L							

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 6K10022 - EPA 3511_MS - Continued

Blank (6K10022-BLK1) Continued Prepared: 11/10/2016 14:47 Analyzed: 11/11/2016 16:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	0.037	U	0.10	ug/L							
Acenaphthylene	0.036	U	0.10	ug/L							
Anthracene	0.036	U	0.10	ug/L							
Benzo(a)anthracene	0.037	U	0.10	ug/L							
Benzo(a)pyrene	0.043	U	0.10	ug/L							
Benzo(b)fluoranthene	0.059	U	0.10	ug/L							
Benzo(g,h,i)perylene	0.040	U	0.10	ug/L							
Benzo(k)fluoranthene	0.046	U	0.10	ug/L							
Chrysene	0.051	U	0.10	ug/L							
Dibenzo(a,h)anthracene	0.026	U	0.10	ug/L							
Fluoranthene	0.051	U	0.10	ug/L							
Fluorene	0.038	U	0.10	ug/L							
Indeno(1,2,3-cd)pyrene	0.037	U	0.10	ug/L							
Naphthalene	0.035	U	0.10	ug/L							
Phenanthrene	0.039	U	0.10	ug/L							
Pyrene	0.048	U	0.10	ug/L							
p-Terphenyl	*6.6*			*ug/L*	*5.71*		*115*	*66-136*			

LCS (6K10022-BS1) Prepared: 11/10/2016 14:47 Analyzed: 11/11/2016 17:14

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	6.0		0.10	ug/L	5.71		105	80-120			
Benzo(a)pyrene	6.2		0.10	ug/L	5.71		108	73-149			
Benzo(g,h,i)perylene	5.8		0.10	ug/L	5.71		101	57-124			
Naphthalene	5.1		0.10	ug/L	5.71		89	68-120			
p-Terphenyl	*7.0*			*ug/L*	*5.71*		*122*	*66-136*			

Matrix Spike (6K10022-MS1) Prepared: 11/10/2016 14:47 Analyzed: 11/11/2016 17:36

Source: AZ07721-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	6.5		0.10	ug/L	5.71	0.037 U	113	80-120			
Benzo(a)pyrene	7.5		0.10	ug/L	5.71	0.043 U	131	73-149			
Benzo(g,h,i)perylene	7.3		0.10	ug/L	5.71	0.040 U	128	57-124			QM-07
Naphthalene	5.9		0.10	ug/L	5.71	0.035 U	103	68-120			
p-Terphenyl	*7.4*			*ug/L*	*5.71*		*130*	*66-136*			

Matrix Spike Dup (6K10022-MSD1) Prepared: 11/10/2016 14:47 Analyzed: 11/11/2016 17:57

Source: AZ07721-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	7.3		0.10	ug/L	5.71	0.037 U	128	80-120	13	25	QM-07
Benzo(a)pyrene	8.3		0.10	ug/L	5.71	0.043 U	146	73-149	10	25	
Benzo(g,h,i)perylene	7.7		0.10	ug/L	5.71	0.040 U	134	57-124	4	25	QM-07
Naphthalene	6.1		0.10	ug/L	5.71	0.035 U	107	68-120	4	25	
p-Terphenyl	*8.2*			*ug/L*	*5.71*		*144*	*66-136*			*QS-03*

Batch 6K15011 - EPA 3511_MS

QUALITY CONTROL DATA

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 6K15011 - EPA 3511_MS - Continued

Blank (6K15011-BLK1) Prepared: 11/15/2016 10:45 Analyzed: 11/16/2016 12:01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.047	U	0.10	ug/L							
2-Methylnaphthalene	0.044	U	0.10	ug/L							
Acenaphthene	0.037	U	0.10	ug/L							
Acenaphthylene	0.036	U	0.10	ug/L							
Anthracene	0.036	U	0.10	ug/L							
Benzo(a)anthracene	0.037	U	0.10	ug/L							
Benzo(a)pyrene	0.043	U	0.10	ug/L							
Benzo(b)fluoranthene	0.059	U	0.10	ug/L							
Benzo(g,h,i)perylene	0.040	U	0.10	ug/L							
Benzo(k)fluoranthene	0.046	U	0.10	ug/L							
Chrysene	0.051	U	0.10	ug/L							
Dibenzo(a,h)anthracene	0.026	U	0.10	ug/L							
Fluoranthene	0.051	U	0.10	ug/L							
Fluorene	0.038	U	0.10	ug/L							
Indeno(1,2,3-cd)pyrene	0.037	U	0.10	ug/L							
Naphthalene	0.035	U	0.10	ug/L							
Phenanthrene	0.039	U	0.10	ug/L							
Pyrene	0.048	U	0.10	ug/L							
p-Terphenyl	*6.2*			*ug/L*	*5.71*		*108*	*66-136*			

LCS (6K15011-BS1) Prepared: 11/15/2016 10:45 Analyzed: 11/16/2016 10:34

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	6.6		0.10	ug/L	5.71		116	80-120			
Benzo(a)pyrene	6.8		0.10	ug/L	5.71		118	73-149			
Benzo(g,h,i)perylene	6.4		0.10	ug/L	5.71		112	57-124			
Naphthalene	6.3		0.10	ug/L	5.71		110	68-120			
p-Terphenyl	*7.0*			*ug/L*	*5.71*		*122*	*66-136*			

Matrix Spike (6K15011-MS1) Prepared: 11/15/2016 10:45 Analyzed: 11/16/2016 10:56

Source: AZ07919-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	7.3		0.10	ug/L	5.71	0.037 U	127	80-120			QM-07
Benzo(a)pyrene	7.2		0.10	ug/L	5.71	0.043 U	126	73-149			
Benzo(g,h,i)perylene	6.8		0.10	ug/L	5.71	0.040 U	119	57-124			
Naphthalene	6.6		0.10	ug/L	5.71	0.035 U	116	68-120			
p-Terphenyl	*7.5*			*ug/L*	*5.71*		*131*	*66-136*			

Matrix Spike Dup (6K15011-MSD1) Prepared: 11/15/2016 10:45 Analyzed: 11/16/2016 11:18

Source: AZ07919-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	6.8		0.10	ug/L	5.71	0.037 U	120	80-120	6	25	
Benzo(a)pyrene	6.5		0.10	ug/L	5.71	0.043 U	114	73-149	10	25	
Benzo(g,h,i)perylene	6.0		0.10	ug/L	5.71	0.040 U	105	57-124	12	25	
Naphthalene	6.3		0.10	ug/L	5.71	0.035 U	110	68-120	5	25	
p-Terphenyl	*6.8*			*ug/L*	*5.71*		*119*	*66-136*			

FLAGS/NOTES AND DEFINITIONS

PQL	PQL: Practical Quantitation Limit.
B	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
I	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
J	Estimated value.
K	Off-scale low; Actual value is known to be less than the value given.
L	Off-scale high; Actual value is known to be greater than value given.
M	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
N	Presumptive evidence of presence of material.
O	Sampled, but analysis lost or not performed.
Q	Sample exceeded the accepted holding time.
T	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
Z	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
?	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
*****	Not reported due to interference.
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, there is no impact.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QS-03	Surrogate recovery outside acceptance limits

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

www.encolabs.com

Client Name: AECOM Technical Services, Inc. (SE004)	Project Number: 60444594
Address: 150 N. Orange Ave, Suite 200	Project Name/Desc: RON'S RV SALES
City/ST/Zip: Orlando, FL 32801	PO # / Billing Info:
Tel: (407) 843-6552 Fax: (407) 839-1789	Reporting Contact: Mike Smar
Sampler(s) Name, Affiliation (Print): J. WILSON AECOM	Billing Contact: Accounts Payable
Sampler(s) Signature:	Site Location / Time Zone: Haines City fl. EST

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

___ Expedited

Due ___/___/___

Lab Workorder: AZ07449

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B Arom (Btex + Mtbe) Preservation (See Codes) (Combine as necessary) HI	8270D PAH SIM I	Sample Comments
	DW-GR/110916	11/09/16	1032	G	GW	4	X	X	
	MW-AR/110916		1207		GW	4	X	X	
	MW-BR/110916		1327		GW	4	X	X	
	MW-ER/110916		1132		GW	4	X	X	
	MW-FR/110916		1011		GW	4	X	X	
	MW-I /110916		0927		GW	4	X	X	
	MW-J /110916		0847		GW	4	X	X	
	MW-DR/110916	✓	1249	✓	GW	1		X	
	TRIP BLANK				O	2	X		O = DI WATER

<-- Total # of Containers

Sample Kit Prepared By: ECG	Date/Time: 10/27/16 10:05	Relinquished By:	Date/Time: 10/27/16 10:05	Received By: J WILSON	Date/Time: 11/09/16 0700
Comments/Special Reporting Requirements:		Relinquished By: J WILSON	Date/Time: 11/09/16 1412	Received By:	Date/Time: 11/9/16 1412
		Relinquished By:	Date/Time:	Received By:	Date/Time: 11/9/16 @ 1412
		Cooler #'s & Temps on Receipt: LG-363 1.2°C		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

February 26, 2019

CERTIFIED MAIL #7017 1450 0000 5946 6007
RETURN RECEIPT REQUESTED

Ms. Amy Lasseter
K A T Sisters, Inc.
902 E Heron Cir
Winter Haven, FL 33884

Subject: Remedial Action Plan Approval Order
Ron's RV Sales
1104 HWY 17 & 92 W
Haines City, Polk County
FDEP Facility ID# 538943481
Discharge Date: December 28, 1988 (EDI)
Involves UIC: Yes

Dear Ms. Lasseter:

The Florida Department of Health Polk County (FDOH-Polk), on behalf of the Florida Department of Environmental Protection (Department), has reviewed the Remedial Action Plan (RAP) dated July 27, 2018 (received July 27, 2018), for the petroleum product discharge referenced above. We found all the documents submitted to date to be adequate to meet the RAP requirements of Rule 62-780.700, Florida Administrative Code (F.A.C.). The Department has determined that the actions proposed in this RAP represent a reasonable strategy toward accomplishing the cleanup objectives of Chapter 62-780, F.A.C. Pursuant to Paragraph 62-780.700(7)(a), F.A.C., the Department approves the RAP as described in this RAP Approval Order (Order). However, if it appears during RAP implementation that the remedial strategy is not effective, a request for modification of this Order, pursuant to Subsection 62-780.700(14), F.A.C., may be submitted to the Department, or the Department may require the preparation and submittal of a RAP Modification to enhance the active remediation. Depending on the nature of the system modification, the Department may revoke this Order.

Monitoring wells MW-DR, MW-E, MW-AR, MW-FR, DW-GR, the three new monitoring wells, and MW-I (temporary point of compliance) must be sampled on a quarterly basis during the first year of operation of the remediation system, and the samples must be analyzed for Benzene, Ethylbenzene, Toluene, Xylenes, MTBE, Polycyclic Aromatic Hydrocarbons, and Total Recoverable Petroleum Hydrocarbons. A written request for a modification of the temporary point of compliance monitoring wells to be sampled, sampling frequency, or sampling parameters, may be made after the first year of operation based on the analytical results obtained.

The Department's approval of the RAP should not be construed that we have agreed to the costs and time frames described in the plan for funding by the PRP. Our review of the RAP at this time is to evaluate technical feasibility, effectiveness, compliance with required levels of groundwater treatment and air emissions concerns, and general cost-effectiveness of the proposed remediation strategy.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below.

Persons affected by this Order have the following options:

(A) If you choose to accept the Department's decision regarding the RAP you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order.

(B) If you choose to challenge the decision, you may do the following:

(1) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or

(2) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to Subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from K A T Sisters, Inc., shall mail a copy of the request to K A T Sisters, Inc. at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from K A T Sisters, Inc., shall mail a copy of the petition to K A T

Sisters, Inc. at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

(a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;

(b) A statement of when and how each petitioner received notice of the Department's action or proposed action;

(c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;

(d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;

(e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding the FDOH-Polk's review of the RAP should be directed to Matthew Pabich at 863-578-2038. Questions regarding legal issues should be referred to the Department's Office of General

Counsel at 850-245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 538943481. Please use this identification on all future correspondence with the Department.

Sincerely,

Jan Beuer for NL

Natasha Lampkin
Program Administrator
Petroleum Restoration Program

NL/mp

FILING AND ACKNOWLEDGMENT: FILED,
on this date, pursuant to §120.52 Florida Statutes,
with the designated Department Clerk, receipt
of which is hereby acknowledged.

2-26-19

Clerk
(or Deputy Clerk)

Date

cc: Mr. Larry Harvey, 13025 S US HWY 441, Summerfield, FL, 34491

ec: Matthew Pabich, FDOH-Polk, matthew.pabich@flhealth.gov
Daniel Phillips, P.G., AECOM Technical Services, Daniel.Phillips@aecom.com
Cathy McCarty, Division of Water Resource Management, MS 3530 –
cathleen.mccarty@dep.state.fl.us
File

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

Memorandum

TO: Tim J. Bahr, P.G.
Acting Director, Division of Waste Management

FROM: Natasha Lampkin 2-13-19
Program Administrator, Petroleum Restoration Program

SUBJECT: Delegation of Authority

DATE: February 13, 2019

I, Natasha Lampkin, hereby delegate the authority to carry out the duties and responsibilities appropriate to the Petroleum Restoration Program as detailed below:

Delegate	Delegation Begin	Delegation End
Kenneth Busen	02/26/2019	02/27/2019

This delegation is needed while I am away attending FCCM renewal training.

NL/JB

Ecc Tim Bahr
Kenneth Busen
Susan Fields
Matthew Ingham
Monica Brady

P.E. CERTIFICATION

Remedial Action Plan dated July 27, 2018 (received July 27, 2018), for Ron's RV Sales, located at 1104 HWY 17 92 W, Polk County, FDEP Facility ID# 538943481.

I hereby certify that in my professional judgment, the components of this Remedial Action Plan prepared for the December 28, 1988 petroleum product discharge discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-780, Florida Administrative Code (F.A.C.), and that the engineering design features incorporated in this plan represent a reasonable strategy toward accomplishing the cleanup objectives of Chapter 62-780, F.A.C. However, I have not evaluated and do not certify aspects of this plan that are outside my area of expertise (including, but not limited to, electrical, mechanical, and structural features).

X I personally completed this review.

___ This review was conducted by _____ working under my direct supervision.

Gerald D Robinson, P.E.
Professional Engineer No. 60967
Florida Department of Health in Polk County

11/28/2019
Date

Florida Department of

Memorandum **Environmental Protection**

TO: Cathy McCarty, P.G.
Florida Department of Environmental Protection
Bureau of Water Facilities Regulation
Underground Injection Control Section – MS 3530
2600 Blair Stone Road, Tallahassee, Florida 32399-2400

THROUGH: James Treadwell, P.E.
Petroleum Restoration Program
MS 4540

JT

FROM: Matthew Pabich, ESII
(An employee of a contracted local cleanup program)
Florida Department of Health in Polk County
2090 East Clower St., Bartow, FL 33830

DATE: January 25, 2019

SUBJECT: **In Situ Air Sparging Aquifer Remediation Well(s) at a Petroleum Remedial Action Site**

Pursuant to paragraph 62-528.630(2)(c), F.A.C., inventory information is provided below to notify you of proposed Class V, Group 4, aquifer remediation well(s) to be constructed for groundwater remediation at a petroleum remediation site. The remediation system has been designed to inject atmospheric air only with no additional chemical additives.

Facility name: RON'S RV SALES
Facility address: 1104 HWY 17 & 92 W
City/County: HAINES CITY/POLK COUNTY
Latitude/Longitude: Lat: 28 06 25.06169 / Long: 81 38 46.34605
(of center of air sparging well field)
FDEP Facility Number: 538943481
Facility owner's name: K A T SISTERS INC
Facility owner's address: 902 E HERON CIR
WINTER HAVEN FL 33884

Well contractor's name: AECOM TECHNICAL SERVICES, INC.
(or environmental cleanup contractor responsible for design)
Well contractor's (or environmental cleanup contractor) address:
150 N ORANGE AVENUE, SUITE 200
ORLANDO FL 32801

Facility name: Ron's RV Sales
FDEP facility no.: 538943481

The design of the treatment system consists of the following:

Design total air flow rate: 38 (cfm) at 10 (psi)
Number of air sparging wells: 8
Total estimated aquifer area affected by air sparging: 100,000 cubic feet

The air sparging wells will be installed in the surficial aquifer. The following is a summary description of the affected aquifer:

Name of aquifer: Surficial
Depth to groundwater (feet): 7
Aquifer thickness (feet): Unknown – at least 28' (7'-35' bls)
Areal extent of contamination (square feet): 3,200

A site map showing the air sparging well locations and depicting composite radii of influence is attached. The air sparging wells will be designed as follows:

Number of wells: 8
Diameter of well(s) (i.e., riser pipe & screen) (inches): 2
Total range of depths of screened intervals of all air sparging well(s) (feet):
22 to 25 feet below land surface

Note: As the site rehabilitation proceeds, it may be necessary to cease operation of some air sparging wells, modify air flow rates to other wells, or add additional wells based on changes in the extent and degree of groundwater contamination. Such changes to increase contaminated groundwater cleanup efficiency do not need to be reported to the UIC Section.

The RAP estimates that site rehabilitation will take 1.5 years.

The proposed remediation plan was approved on ____ by an enforceable approval order. A copy is attached. The remediation system installation is expected to commence within 60 days. Please call me at 863-578-2038 if you require additional information.

RON'S RV SALES
1104 Highway 17 & 92 West
Haines City, Polk County, Florida
FDEP Facility ID. No.: 538943481
Project No.: Date: 07/26/2018

EXPECTED RADIUS OF INFLUENCE MAP

AECOM

Figure: 4

Quarterly Natural Attenuation Monitoring Report

Site:
Ron's RV Sales
1104 Highway 17 & 92 West
Haines City, Florida
FDEP Facility ID No. 538943481
FDEP PO No. B9C800

Prepared for:
Ms. Jilian Drenning
Florida Department of Health in Polk County
2090 East Clower Street
Barstow, Florida 33830

Prepared by:
AECOM Technical Services, Inc.
150 North Orange Avenue, Suite 200
Orlando, Florida 32801

December 6, 2021

AECOM Project No. 60667818

Caroline Bekins
Environmental Engineer

Steven C. Cobert, P.E.
Project Manager

Quarterly Natural Attenuation Monitoring Report

For

Ron's RV Sales
1104 Highway 17 & 92 West
Haines City, Florida
FDEP PO No. B9C800
FAC ID 538943481

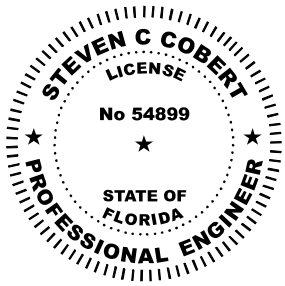
Prepared by:

AECOM

150 North Orange Avenue, Suite 200
Orlando, Florida 32801

In accordance with the provisions of Florida Statutes, Chapter 471, this Natural Attenuation Monitoring Report for the Ron's RV Sales property located in Haines City, Florida, has been prepared under the direct supervision of a Professional Engineer registered in the State of Florida. This work was performed in accordance with generally accepted professional engineering practices pursuant to Chapter 471 of the Florida Statutes. The data, findings, recommendations, specifications or professional opinions were prepared solely for the use of the Florida Department of Environmental Protection. AECOM makes no other warranty; either expressed or implied, and is not responsible for the interpretation by others of these data.

Steven C. Cobert, P.E.
Date
Project Manager
Florida License No. 54899



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1.0 INTRODUCTION

AECOM Technical Services, Inc. (AECOM) is pleased to present the Florida Department of Health in Polk County (FDOHPC) and the Florida Department of Environmental Protection (FDEP) with this Quarterly Natural Attenuation Monitoring (NAM) Report for the Ron's RV Sales site, located at 1104 Highway 17/92 West, Haines City, Florida. A Site Map is provided as **Figure 1**. Work for this site is currently funded under Petroleum Restoration Program (PRP) Purchase Order (PO) No. B9C800.

The site currently operates as a used car sales facility under the name Reyca's Auto Sales. A Discharge Reporting Form and an Early Detection Incentive (EDI) Program application were submitted to the FDEP on December 28, 1988 and the site was subsequently deemed eligible for the EDI program on December 19, 1989.

Seven underground storage tanks (USTs) and the associated delivery systems were removed from the site in 1989 by MGM Petro Equipment and Enviro Services. The installation dates were not noted in the tank closure documentation. The USTs removed included one UST of unknown contents and location, four USTs reportedly containing diesel fuel located southeast of the building and two USTs reportedly containing kerosene located southwest of the building. Dispensers were located north of the USTs on the southeast side of the building and on the south side of the building. A hand pump for kerosene was located on the southwest corner of the building. Replacement USTs were not installed. **Figure 1** illustrates the locations of the USTs and dispensers.

Due to lack of funding eligibility, site assessment activities were not initiated until 2007. A Template Site Assessment Report (TSAR) was submitted by Handex Consulting & Remediation, LLC (HCR) on August 6, 2008. The TSAR indicated eight potable wells were located within ½ mile of the site. Three domestic irrigation wells and one public supply limited use well were located within ¼ mile of the site. None of the wells were reported as impacted by contamination from the subject site.

Analytical results reported in the TSAR indicated soil contamination exceeding Soil Cleanup Target Levels (SCTLs), as referenced in Table 2 of Chapter 62-777, Florida Administrative Code (FAC), in the area of the former dispenser island east of the building and the former dispenser island/UST location. Analytical results indicated groundwater concentrations exceeding Groundwater Cleanup Target Levels (GCTLs), as referenced in Table 1 of Chapter 62-777, FAC. The area of groundwater contamination encompassed the pump islands and the UST area on the southeast side of the building. Subsequent groundwater and soil assessment activities were conducted in March and April 2011 to further delineate the extent of soil and groundwater contamination. The results of the additional soil and groundwater sampling indicated impacted soil and groundwater up to and possibly beneath the roadways of adjacent Highway 17 and Indiana Street.

HCR submitted a Level 3 Limited Scope Remedial Action Plan for a source removal excavation, which was subsequently approved on November 16, 2011. Monitor wells MW-A, MW-C, MW-D, MW-E, MW-F and the deep well (DW-G), located in the proposed excavation area, were properly abandoned in September 2012. A dewatering system was installed in November 2012 and in

December 2012, and 1,607 tons of impacted soil was removed for proper disposal. Prior to backfilling, approximately 1,650 pounds of Regenesis Oxygen Releasing Compound were spread in the bottom of the excavation, followed by backfilling, compaction and re-paving.

In April 2013, replacement wells (MW-AR, MW-CR, MW-DR, MW-ER and MW-FR) were installed for the wells lost during excavation activities. In addition, monitor well MW-L was installed north of the excavation. The deep well was not replaced. Post-active remediation monitoring (PARM) was conducted in May and August 2013 and February 2014. The analytical results from the February 2014 sampling event indicated petroleum contaminant concentrations in samples from monitor wells MW-ER and MW-FR were above the Natural Attenuation Default Concentration (NADC) criteria, as referenced in Table 5 of Chapter 62-777, FAC. In September 2015, AECOM was assigned the site through the FDEP PRP PO AD8295. Four quarters of groundwater sampling were tasked to continue PARM. The scheduled monitor wells for sampling each quarter included DW-G, MW-AR, MW-B, MW-DR, MW-ER, MW-FR, MW-I, MW-J and MW-K; however, the deep well (DW-G) had been abandoned and was not replaced, as previously mentioned. During the first quarterly sampling event conducted in January 2016, monitor wells MW-AR, MW-DR, MW-ER and MW-FR exhibited petroleum constituents exceeding GCTL criteria. NADC criteria for benzene and naphthalene were also exceeded in the groundwater samples collected from MW-FR.

Following submittal of the first PARM Report, FDOHPC recommended installation of a replacement intermediate well (DW-GR) and a replacement well for MW-B, as the integrity of the well was compromised. Request for Change (RFC) #2 was approved for installation of the replacement wells and the submittal of a Supplemental Site Assessment Report. The replacement wells were installed on July 14 and 15, 2016.

The second PARM groundwater sampling event was conducted on July 20, 2016, and included monitor wells DW-GR, MW-AR, MW-BR, MW-DR, MW-ER, MW-FR and MW-K. The analytical results from monitor well MW-FR indicated benzene, ethylbenzene, and naphthalene exceeding their respective GCTL criteria. The July 2016 sampling results for monitor wells MW-AR, MW-DR, MW-ER, and MW-FR indicated a decrease in contaminant concentrations to below NADC criteria, and a reduced plume footprint, as compared to the January 2016 sampling results.

The third PARM groundwater sampling event was conducted on November 9, 2016, and included monitor wells DW-GR, MW-AR, MW-BR, MW-DR, MW-ER, MW-FR, MW-I and MW-J. The analytical results from monitor well MW-FR indicated benzene, ethylbenzene, and total xylenes exceeding their respective GCTL criteria, with benzene and total xylenes exceeding their respective NADC criteria. The detected concentration of naphthalene dropped below the GCTL for this event. The analytical results for monitor well MW-AR indicated only naphthalene exceeded GCTL criteria. The analytical results for monitor well MW-ER indicated only a total xylenes concentration above the GCTL. For subsequent sampling events, AECOM recommended removing MW-DR and MW-J from the sampling plan, and adding MW-K. The FDOHPC approved the changes in the Task 4 approval letter, dated January 23, 2017, and AECOM submitted RFC #6 to adjust the groundwater analytical costs for the subsequent Task 5 Annual PARM sampling event.

On May 3, 2017, AECOM completed the Annual PARM sampling of the site. The analytical results from monitor well MW-FR indicated concentrations of benzene, ethylbenzene, and total xylenes exceeded their respective GCTL criteria; the NADC criteria for benzene and total xylenes were also exceeded. It is noteworthy to indicate that naphthalene dropped from exceeding NADC criteria in November 2016 to non-detect. FDOHPC approved the Annual PARM report on May 24, 2017, and requested for AECOM to collaborate with FDOHPC to address the contamination in monitor well MW-FR. **Table 1** and **Table 2** outline current and historical groundwater elevation and groundwater contamination levels, respectively.

On July 21, 2017, AECOM was issued a PO to prepare a Pilot Test Plan, conduct the pilot test, and prepare a Pilot Test Report and Remedial Action Plan (RAP). Based on the relatively small groundwater plume and significant extent of previous source removal activities conducted in 2012 by HCR, AECOM proposed a combination of AS/SVE technology in the shallow aquifer zone, which extends from approximately 4 to 25 feet below land surface (bls). The Pilot Test Plan submitted by AECOM was approved by FDOHPC on December 11, 2017.

Pilot test wells were installed on January 15, 2018. AECOM provided oversight for Groundwater Protection, LLC to install one 2-inch diameter air sparge well (AS-1) to 25 feet bls, and one 4-inch diameter horizontal soil vapor extraction well (HSVE-1) to 2 feet bls. Based on the results of the pilot test performed on January 24, 2018, AECOM recommended the continuation of the tasked scope of work including a pre-RAP teleconference and preparation of the RAP to utilize AS/SVE technology. AECOM submitted the Level 1 RAP to FDOHPC and FDEP on July 27, 2018, which received subsequent approval on September 10, 2018. AECOM submitted the Remedial Action Construction and Specifications package to FDOHPC on December 14, 2018.

A current site map is provided as **Figure 1**.

2.0 PRE-DRILLING MEETING

On October 4, 2021 AECOM personnel were on-site to conduct a predrilling meeting prior to the scheduled assessment activities. During the site visit, three proposed monitor well locations (MW-M, MW-N, and MW-O) were marked.

On-site participants of the pre-drilling meeting included David Tran from AECOM, Daniel Richards from Preferred Drilling Solutions (PDS), and Robert Campana from FDOHPC. Accessibility to the proposed monitor well locations was evaluated, and per the request of FDOHPC, monitor well locations were adjusted to delineate the current contaminant plume. Field notes are included in **Appendix A**.

3.0 MONITOR WELL INSTALLATION ACTIVITIES

On October 11, 2021, AECOM provided oversight of Preferred Drilling Solutions, Inc. (PDS) during the installation of three on-site shallow monitor wells (MW-M, MW-N, and MW-O) using a

direct push technologies (DPT) drill rig equipped with hollow-stem augers. The location of monitor wells MW-M, MW-N, and MW-O are shown on **Figure 1**.

Monitor wells MW-M, MW-N and MW-O were installed to a terminal depth of 15 feet bls and constructed using ten feet of 2-inch diameter, 0.010-inch, factory-slotted polyvinyl chloride (PVC) well screen, coupled with five feet of solid PVC riser. A 20/30 graded silica sand filter pack was placed from the bottom of the bore hole to approximately one foot above the well screen, followed by 0.5 feet of 30/65 graded fine silica sand seal, and 0.5 feet of neat Portland cement grout to surface completion. The monitor well was finished flush with grade in an 8-inch diameter manhole, installed within a 2-foot by 2-foot concrete pad.

The monitor wells were developed using a peristaltic pump at an average flow rate of approximately 0.5 gallons per minute for a total of 30 minutes. The monitor wells were developed until the groundwater appeared clear and free of silts. Purge groundwater was discharged to an impervious surface and allowed to evaporate. Monitor well construction logs are provided as **Appendix B**.

Four 55-gallon drums of soil investigative-derived waste (IDW) were generated during well installation activities. A soil sample from the IDW was collected and submitted to Southern Research Laboratories, Inc. (SRL) for laboratory analysis by United States Environmental Protection Agency (EPA) Method 8260B for volatile organic compounds. Laboratory analysis of the soil samples did not detect any analyzed parameters at concentrations exceeding Chapter 62-777, FAC, SCTL criteria. The IDW drum was labeled and staged at the site pending pickup. The IDW was removed from the site by Erwin Remediation, Inc. on November 3, 2021. A copy of the non-hazardous waste manifest and photo of the IDW drum staged at the site is provided in **Appendix C**.

4.0 GROUNDWATER SAMPLING ACTIVITIES

On October 15, 2021, AECOM personnel were on-site to collect groundwater samples from tasked monitor wells MW-AR, MW-DR, MW-ER, MW-FR, MW-I, MW-J, MW-K, DW-GR, MW-M, MW-N, and MW-O. AECOM notes that monitor wells MW-J and MW-K could not be located at the time of sampling, and approval was received from FDOHPC to instead sample monitor wells MW-CR and MW-H. However, monitor well MW-H did not have a cap, and was filled with dirt. As such, monitor well MW-H could not be sampled. Prior to monitor well purging and sampling, water level measurements were collected. The average depth to water for the October 15, 2021 sampling event was 6.06 feet bls. During well purging and prior to collecting a groundwater sample, the effluent water stream was monitored for the following stabilization parameters: oxidation-reduction potential, dissolved oxygen, conductivity, temperature, pH, and turbidity.

All samples were collected in accordance with the FDEP Standard Operating Procedures for Field Activities (DEP-SOP-001/01) effective March 1, 2014. Copies of the groundwater sampling logs and field equipment calibration records for the recent sampling event are provided in **Appendix D**. Field notes are provided in **Appendix A**. Samples were placed on wet ice upon collection and

transported to SRL for analysis by EPA Method 8260B for benzene, toluene, ethylbenzene, and total xylenes, including methyl tert-butyl ether; EPA Method 8270 for polynuclear aromatic hydrocarbons; and laboratory method Florida Petroleum Residual Organic for total petroleum hydrocarbons.

A comprehensive historical summary of groundwater levels and elevation data for this site is provided in **Table 1**. A groundwater elevation contour map, based on the DTW data collected on October 15, 2021, is provided as **Figure 2**. Groundwater flow direction is to the east-southeast, which is consistent with historical data.

5.0 GROUNDWATER ANALYTICAL RESULTS

Laboratory analysis of the groundwater samples collected on October 15, 2021 indicate naphthalene concentrations exceeded GCTL criteria in monitor wells MW-ER and MW-M. The benzene concentration also exceeded GCTL criteria in monitor well MW-M. All other contaminant concentrations remain below GCTL criteria in all sampled wells.

A comprehensive summary of groundwater analytical results for this site is presented in **Table 2**. Groundwater analytical results are depicted on **Figure 3**. A copy of the laboratory analytical report, including chain-of-custody documentation, is provided in **Appendix E**.

6.0 CONCLUSIONS / RECOMMENDATIONS

Based on the results of the NAM groundwater sampling described herein, AECOM concludes the following:

- Laboratory analysis of the groundwater samples collected from monitor wells MW-ER and MW-M on October 15, 2021, reported naphthalene concentrations exceeding Chapter 62-777, FAC, GCTL criteria. Additionally, the benzene concentration exceeded GCTL criteria in monitor well MW-M.

- The groundwater flow direction during the October 15, 2021 sampling event was to the east-southeast, which is generally consistent with historical groundwater flow.

AECOM recommends continued quarterly NAM sampling at monitor wells MW-FR, MW-M, MW-N, and MW-O until all sampled contaminants remain below GCTL criteria for at least two consecutive sampling events.

7.0 CLOSURE

This report represents the final Task 2 deliverable for the current FDEP PO No. B9C800, and AECOM will provide an invoice for Task 2 upon approval of this deliverable, in accordance with FDEP PRP procedures.

AECOM appreciates the opportunity to be of continued service to the FDOHPC and the FDEP on this project. Should you have any questions, or require additional information, please do not hesitate to contact Steve Cobert at 407-992-5797, or via email at steve.cobert@aecom.com.

TABLES

TABLE 1: GROUNDWATER ELEVATION TABLE

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W, Haines City, FL

FDEP Facility ID No.: 53/8943481

WELL NO.	SB-37 / PZ-1			MW-A			MW-AR			MW-B			MW-BR		
DIAMETER (inch)	2			2			2			2			2		
WELL DEPTH (FT.)	10.00			15.18			15.00			15.06			15.06		
SCREEN INTERVAL (FT.)	5-10			3-15			3-15			3-15			3-15		
TOC ELEVATION	96.92			98.57			98.32			98.47			98.65		
DATE	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff
8/28/2007				92.47	6.10	--				92.15	6.32	--			
1/28/2008				90.82	7.75	1.65				90.77	7.70	1.38			
2/1/2008	90.20	6.72	–	90.83	7.74	-0.01				90.79	7.68	-0.02			
3/13/2008				91.46	7.11	-0.63				91.62	6.85	-0.83			
6/27/2008															
3/24/2011				93.01	5.56	-1.55									
3/28/2011															
9/4/2012					Abandoned										
5/1/2013							89.64	8.68	–						
8/26/2013							94.02	4.30	-4.38						
2/18/2014							91.95	6.37	2.07						
1/28/2016							92.64	5.68	-0.69	94.37	4.10	-2.75			
7/20/2016							93.35	4.97	-0.71				94.36	4.29	--
11/9/2016							92.61	5.71	0.74				92.59	6.06	1.77
5/3/2017							90.16	8.16	2.45				90.32	8.33	2.27
2/23/2018							91.84	6.48	-1.68						
10/15/2021							92.15	6.17	-0.31						

Blank = No Data
All Measurements = Feet

TABLE 1: GROUNDWATER ELEVATION TABLE

Site Name: Ron's RV Sales **FDEP Facility ID No.:** 53/8943481
Site Address: 1104 US Highway 17-92 W, Haines City, FL

WELL NO.	MW-C			MW-CR			MW-D			MW-DR			MW-E		
DIAMETER (inch)	2			2			2			2			2		
WELL DEPTH (FT.)	16.00			15.00			16.00			15.00			16.00		
SCREEN INTERVAL (FT.)	2-16			3-15			2-16			3-15			2-16		
TOC ELEVATION	97.85			97.66			98.63			98.31			98.70		
DATE	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff
3/13/2008	91.50	6.35	–				91.51	7.12	–				91.45	7.25	--
6/27/2008															
3/24/2011							90.67	7.96	0.84				90.75	7.95	0.70
3/28/2011															
9/4/2012		Abandoned						Abandoned						Abandoned	
5/1/2013				89.55	8.11	--				89.65	8.66	--			
8/26/2013				93.89	3.77	-4.34				94.10	4.21	-4.45			
2/18/2014				91.83	5.83	2.06				91.98	6.33	2.12			
1/28/2016										92.69	5.62	-0.71			
7/20/2016										93.46	4.85	-0.77			
11/9/2016										92.67	5.64	0.79			
2/23/2018															
10/15/2021				91.91	5.75	-				92.30	6.01	-			

Blank = No Data
All Measurements = Feet

TABLE 1: GROUNDWATER ELEVATION TABLE

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W, Haines City, FL

FDEP Facility ID No.: 53/8943481

WELL NO.	MW-ER			MW-F			MW-FR			DW-G			DW-GR		
DIAMETER (IN.)	2			2			2			2			2		
WELL DEPTH (FT.)	15.00			13.50			15.00			35.00			35.00		
SCREEN INTERVAL (FT.)	3-15			2-13.5			3-15			30-35			30-35		
TOC ELEVATION	98.74			98.15			98.40			98.34			98.43		
DATE	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff
3/13/2008				91.47	6.68	--									
6/27/2008				90.60	7.55	0.87				90.59	7.75	--			
3/24/2011				90.82	7.33	-0.22				90.74	7.60	-0.15			
3/28/2011										90.66	7.68	0.08			
9/4/2012					Abandoned					93.64	4.70	-2.98			
5/1/2013	89.72	9.02	–				89.66	8.74	–		Abandoned				
8/26/2013	94.16	4.58	-4.44				94.03	4.37	-4.37						
2/18/2014	92.07	6.67	2.09				92.01	6.39	2.02						
1/28/2016	92.83	5.91	-0.76				92.77	5.63	-0.76						
7/20/2016	93.43	5.31	-0.60				93.33	5.07	-0.56				93.32	5.11	--
11/9/2016	92.51	6.23	0.92				92.49	5.91	0.84				92.50	5.93	0.82
5/3/2017	90.37	8.37	2.14				90.27	8.13	2.22				90.29	8.14	2.21
2/23/2018	91.89	6.85	-1.52				91.82	6.58	-1.55						
10/15/2021	92.16	6.58	-0.27				92.09	6.31	-0.27				92.05	6.38	-

Blank = No Data
All Measurements = Feet

TABLE 1: GROUNDWATER ELEVATION TABLE

Site Name: Ron's RV Sales **FDEP Facility ID No.:** 53/8943481
Site Address: 1104 US Highway 17-92 W, Haines City, FL

WELL NO.	MW-H			MW-I			MW-J			MW-K			MW-L		
DIAMETER (IN.)	2			2			2			2			2		
WELL DEPTH (FT.)	16.00			16.00			16.00			16.00			15.00		
SCREEN INTERVAL (FT.)	3-16			3-16			3-16			3-16			3-15		
TOC ELEVATION	96.66			96.36			96.80			96.86			98.63		
DATE	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff
6/27/2008	90.51	6.15	–	90.41	5.95	--	90.60	6.20	–	89.81	7.05	--			
3/24/2011	90.94	5.72	-0.43	90.37	5.99	0.04									
3/28/2011															
9/4/2012															
5/1/2013				89.41	6.95	0.96							89.90	8.73	--
8/26/2013													94.43	4.20	-4.53
2/18/2014				91.74	4.62	-2.33	91.89	4.91	-1.29				92.25	6.38	2.18
1/28/2016				92.45	3.91	-0.71	92.67	4.13	-0.78	91.79	5.07	-1.98			
7/20/2016	92.88	3.78	–				93.18	3.62	-0.51	92.39	4.47	-0.60	93.66	4.97	-1.41
11/9/2016	92.36	4.30	0.52	92.22	4.14	0.23	92.38	4.42	0.80	91.59	5.27	0.80	92.61	6.02	1.05
5/3/2017				90.01	6.35	6.35				89.37	7.49	2.22			
10/15/2021				91.82	4.54	-1.81									

Blank = No Data
All Measurements = Feet

TABLE 1: GROUNDWATER ELEVATION TABLE

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W, Haines City, FL

FDEP Facility ID No.: 53/8943481

WELL NO.	MW-M			MW-N			MW-O								
DIAMETER (IN.)	2			2			2								
WELL DEPTH (FT.)	5-15			15.00			15.00								
SCREEN INTERVAL (FT.)	5-15 ft			5-15			5-15								
TOC ELEVATION	98.21			98.55			98.19								
DATE	ELEV	DTW	Diff	ELEV	DTW	Diff	ELEV	DTW	Diff						
10/15/2021	91.99	6.22		92.05	6.50		92.06	6.13							

Blank = No Data

All Measurements = Feet

Table 2: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W
Haines City, FL

FDEP Facility ID No.: 53/8943481

Well ID	Screen Interval	Sample Date	Depth to Water	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Naphthalene	1-Methyl naphthalene	2-Methyl naphthalene	Benzo(a) anthracene	Benzo(b) fluoranthene	Indeno(1,2,3 -cd)pyrene	EDB	Lead	FL-PRO (mg/L)
GCTL				**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**0.05**	**0.05**	**0.05**	**0.02**	**15**	**5**
NADC				**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**5**	**5**	**5**	**20**	**150**	**50**
PQL												**0.2**	**0.1**	**0.2**			
MW-A	3 - 15	1/28/2008	7.75	**15.0**	1.1	**270**	3.2	0.77 U	**100**	**1,100**	**170**				0.0064U	8.3 I	**6.9**
		3/24/2011	5.56	**3.7**	0.69 I	**48.0**	0.50 U	0.50 U	**91.5**	**364**	**47.5**						3.2
MW-AR	3 - 15	5/1/2013	8.68	0.10 U	0.50 U	0.50 U	1.5	0.50 U	**47.4**	3.9	3.2						2.0
		8/26/2013	4.30	0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0U	1.0U	1.0U						0.11
		2/18/2014	6.37	**1.1**	0.50 U	1.1	4.4	0.50 U	**16.7**	1.8 I	2.0						0.19
		1/28/2016	5.68	0.71 U	0.72 U	1.4	1.3 U	0.60 U	**99**	2.8	2.9						
		7/20/2016	4.97	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	3.3	0.30	0.16	0.037 U	0.059 U	0.037 U			
		11/9/2016	5.71	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	4.8	0.19	0.051 I	0.037 U	0.059 U	0.037 U			
		5/3/2017	8.16	0.5 U	0.5 U	0.5 U	2 U	5 U	**53**	1.57	1.23	0.05 U	0.025 U	0.05 U			
		2/23/2018	6.48	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			
		10/15/2021	6.17	0.5 U	0.5 U	0.5 U	2 U	5 U	2.7 I	0.46 I	0.2 U	0.05 U	0.025 U	0.05 U			0.25 U
MW-B	3 - 15	1/28/2008	7.70	0.16U	0.15U	0.99 I	0.82 I	0.77U	0.038 I	0.33 I	0.048 I				0.0062 U	5.0U	0.029 U
		1/28/2016	4.10	NA	NA	NA	NA	NA	0.72	0.063 I	0.086 I	0.074	**0.30**	0.17			0.14 U
MW-BR	3 - 15	7/20/2016	4.29	NA	NA	NA	NA	NA	3.3	0.30	0.16	0.037 U	0.059 U	0.037 U			0.10 U
		11/9/2016	6.06	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.035 U	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U			
		5/3/2017	8.33	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			
MW-C	2 - 16	3/13/2008	6.35	0.50U	<0.53	0.50U	0.70 I	1.7	<0.015	0.09 I	<0.025						0.028 U
MW-CR	3 - 15	5/1/2013	8.11	0.10 U	0.50 U	0.50 U	1.3	0.50 U	1.0 U	1.0 U	1.0 U						0.056 U
		8/26/2013	3.77	0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U						0.057 U
		2/18/2014	5.83	0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U						0.055 U
		10/15/2021	5.75	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			0.25 U
MW-D	2 - 16	3/13/2008	7.12	0.50 U	<0.53	0.50 U	<0.67	0.50 U	0.29 I	1.9	0.27 I						0.028 U
		3/24/2011	7.96	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.056 U	0.19 I	0.085 U						0.15
MW-DR	3 - 15	5/1/2013	8.66	0.10 U	0.50 U	0.50 U	1.6	0.50 U	**17.2**	1.0 U	1.0 U						0.056 U
		8/26/2013	4.21	0.10 U	0.50 U	0.50 U	1.4	0.50 U	3.4	1.0 U	1.0 U						0.057 U
		2/18/2014	6.33	0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U						0.056 U
		1/28/2016	5.62						**37**	0.75	0.79						
		7/20/2016	4.85						0.080 I	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U			
		11/9/2016	5.64						0.91	0.074 I	0.044 U	0.037 U	0.059 U	0.037 U			
		10/15/2021	6.01	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			0.25 U
MW-E	2 - 16	3/13/2008	7.25	0.50 U	0.92 I	1.1	6.0	1.7	0.31 I	0.71 I	0.40 I						0.12 V
		3/24/2011	7.95	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.47 I	0.94 I	0.43 I						0.056 U
MW-ER	3 - 15	5/1/2013	9.02	**51.0**	1.9	**43.9**	**300**	0.50 U	11.7	3.7	4.6						0.61
		8/26/2013	4.58	**22.2**	1.4	10.2	**150**	0.50 U	**84.0**	1.7 I	1.5 I						0.24
		2/18/2014	6.67	**28.9**	17.2	**72.2**	**457**	0.50 U	**40.3**	3.6	4.9						1.5
		1/28/2016	5.91	**4.8**	4.2	**52**	**170**	0.60 U	**59**	9.9	14						
		7/20/2016	5.31	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.79	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U			
		11/9/2016	6.23	0.71 U	0.72 U	12	**38**	0.60 U	**37**	7.6	9.9	0.037 U	0.059 U	0.037 U			
		5/3/2017	8.37	0.74 I	0.65 I	12	**59**	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			
		2/23/2018	6.85	0.5 U	0.5 U	3.4	2 U	5 U	**26**	4.1	7.8	0.05 U	0.025 U	0.05 U			
		10/15/2021	6.58	0.5 U	0.5 U	0.5 U	2 U	5 U	**14.8**	4.2	6.1	0.05 U	0.025 U	0.05 U			0.31 I

Table 2: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Site Name: Ron's RV Sales
Site Address: 1104 US Highway 17-92 W
Haines City, FL

FDEP Facility ID No.: 53/8943481

Well ID	Screen Interval	Sample Date	Depth to Water	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Naphthalene	1-Methyl naphthalene	2-Methyl naphthalene	Benzo(a) anthracene	Benzo(b) fluoranthene	Indeno(1,2,3 -cd)pyrene	EDB	Lead	FL-PRO (mg/L)
GCTL				**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**0.05**	**0.05**	**0.05**	**0.02**	**15**	**5**
NADC				**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**5**	**5**	**5**	**20**	**150**	**50**
PQL												**0.2**	**0.1**	**0.2**			
MW-F	2 - 13.5	3/13/2008	6.68	**1400**	**2100**	**700**	**3900**	75	***70***	**260**	**39**						**13 V**
		6/27/2008	7.55	**1200**	**1500**	**610**	**2100**	100	***62***	**300**	**37**						**15**
		3/24/2011	7.33	**1240**	**117**	**1050**	**2750**	0.50 U	**53.0**	**359**	24.2						**9.2**
MW-FR	3 - 15	5/1/2013	8.74	**978**	**67.1**	**394**	**2050**	0.50 U	**193**	27.8	**52.7**						**5.3**
		8/26/2013	4.37	**197**	**48.7**	**100**	**464**	0.50 U	**146**	24.1	**35.0**						3.3
		2/18/2014	6.39	**468**	**70.0**	**363**	**1330**	0.50 U	**178**	**28.7**	**50.3**						4.4
		1/28/2016	5.63	**170**	1.8 U	**140**	**120**	1.5 U	**390**	**32**	**38**	0.074 U	1.2 U	0.74 U			2.2
		7/20/2016	5.07	**60**	0.72 U	**55**	19	0.60 U	**62**	7.8	8.5	0.037 U	0.091 I	0.040 U			1.1
		11/9/2016	5.91	**140**	1.4 U	**160**	**68**	0.60 U	**390**	**37**	**49**	0.037 U	0.059 U	0.037 U			
		5/3/2017	8.13	**180**	8.1	**200**	**240**	5 U	2 U	10.35	0.2 U	0.05 U	0.025 U	0.05 U			
		2/23/2018	6.58	**18**	2.8	**68**	**28.9**	5 U	**190**	**36**	**47**	0.05 U	0.025 U	0.05 U			
		10/15/2021	6.31	0.5 U	0.5 U	0.5 U	2 U	5 U	2.52 I	0.42 I	0.2 U	0.05 U	0.025 U	0.05 U			0.25 U
DW-G	30 - 35	6/27/2008	7.75	**1.1**	2.5	2.3	20	2.2	2.9	14	1.7						0.32
		3/24/2011	7.6	0.78 I	0.50 U	0.76 I	6.5	0.50 U	*NA	*NA	*NA				*NA	*NA	0.056 U
		3/28/2011	7.68						0.057 U	0.14 I	0.085 U						
		9/4/2012	4.70	0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.063 I	0.45 I	0.080 I						
DW-GR	30-35	7/20/2016	5.11	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U									
		11/9/2016	5.93	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.035 U	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U			
		5/3/2017	8.14	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			
		10/15/2021	6.38	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			0.25 U
MW-H	3 - 16	6/27/2008	6.15	0.50 U	0.61 I	0.50 U	1.4	0.50 U	<0.014	0.095 I	0.024U						0.029 U
		3/24/2011	5.72	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.057 U	0.076 U	0.085 U						0.056 U
MW-I	3 - 16	6/27/2008	5.95	0.50 U	0.53 U	0.50 U	<0.67	0.50 U	0.015 U	0.090 I	0.025U						0.029U
		3/24/2011	5.99	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.057 U	0.076 U	0.085 U						0.055 U
		5/1/2013	6.95	0.10 U	0.50 U	0.50U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U						0.056 U
		2/18/2014	4.62	0.10 U	0.50 U	0.50U	0.50U	0.50 U	1.0 U	1.0 U	1.0 U						0.055 U
		11/9/2016	4.14	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	**15**	0.57	0.057 I	0.037 U	0.059 U	0.037 U			
		5/3/2017	6.35	0.5 U	0.5 U	0.5 U	2 U	5 U	3.28 I	0.84	0.2 U	0.05 U	0.025 U	0.05 U			
		10/15/2021	4.54	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			0.25 U
MW-J	3 - 16	6/27/2008	6.20	0.50 U	0.53 U	0.50 U	0.67 U	0.50 U	0.015 U	<0.024	0.025U						0.029 U
		2/18/2014	4.91	0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U						0.055 U
		11/9/2016	4.42	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.051 I	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U			
MW-K	3 - 16	6/27/2008	7.05	0.50 U	0.73 I	0.50 U	1.6	0.50 U	0.015 U	<0.024	0.025 U						0.029 U
		1/28/2016	5.07						0.080 I	0.047 I	0.044 I						0.14 U
		7/20/2016	4.47	0.71 U	0.72 U	0.69 U	1.3 U	0.60 U	0.035 U	0.047 U	0.044 U	0.037 U	0.059 U	0.037 U			0.10 U
		5/3/2017	7.49	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			
MW-L	3 - 15	5/1/2013	8.73	0.10 U	0.50 U	0.50 U	1.6	0.50 U	1.0 U	1.0 U	1.0 U						0.056 U
		8/26/2013	4.20	0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U						0.057 U
		2/18/2014	6.38	0.10 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U						0.055 U
MW-M	5-15	10/15/2021	6.22	**7.1**	0.5 U	13	4.6 I	5 U	**56**	12.3	17.5	0.05 U	0.025 U	0.05 U			1.2
MW-N	5-15	10/15/2021	6.50	0.5 U	0.5 U	0.5 U	2 U	5 U	3.3 I	1.6	2.1	0.05 U	0.025 U	0.05 U			0.26 I
MW-O	5-15	10/15/2021	6.13	0.5 U	0.5 U	0.5 U	2 U	5 U	2 U	0.2 U	0.2 U	0.05 U	0.025 U	0.05 U			0.25 U

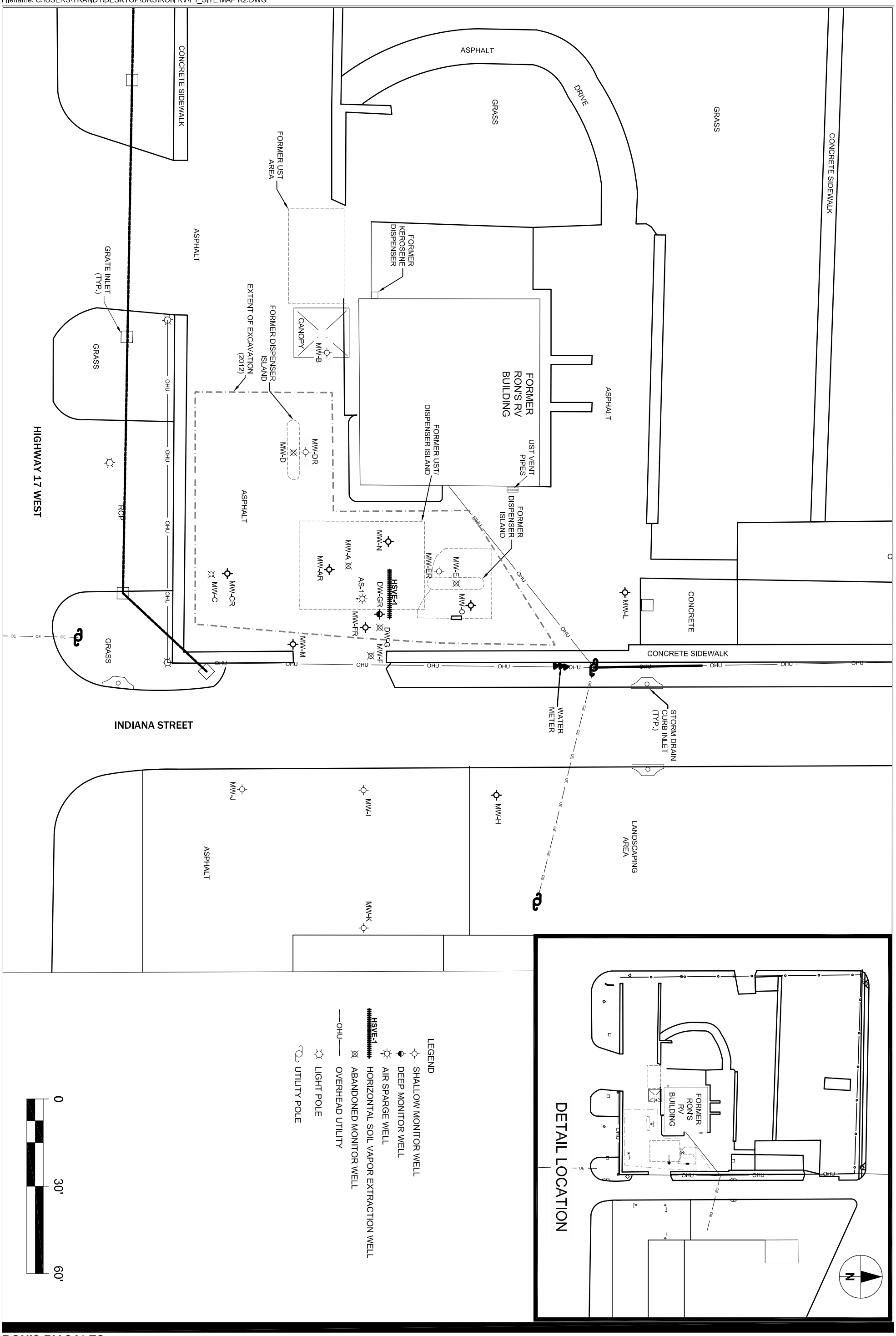
All concentrations shown in micrograms/liter (ug/l), unless otherwise noted.
NADC = Natural Attenuation Default Concentration in Chapter 62-777, Table V, F.A.C.
Total Xylenes = Sum of ortho, para, and meta-xylene
FL-PRO = Analyzed by Florida Petroleum Range Organics Method for Total Recoverable Petroleum Hydrocarbons
*NA = Not analyzed due to the laboratory breaking the sample.
I = The reported value is between the laboratory method detection limit and method reporting limit
U = indicates that the chemical of concern was undetected
V = Analyte detected in the associated Method Blank

mg/L = results reported in milligrams per liter
GCTL = Groundwater Cleanup Target Levels in Chapter 62-777, Table I, F.A.C.
MTBE = Methyl-tert-butyl ether
PQL = Practical Quantitation Limit
140 **BOLD** indicates sample result exceeded the GCTL
210 **Black shading** indicates sample result exceeded the NADC

FIGURES

Last saved by: TRAND1(2021-10-13) Last Plotted: 2021-10-13
Filename: C:\USERS\TRAND1\DESKTOP\URS\RON RV\F1_SITE MAP R2.DWG

Project Management Initials: Designer: MEB Checked:____ Approved:____ ANSI B 11" x 17"



RON'S RV SALES
1104 Highway 17 & 92 West
Haines City, Polk County, Florida
FDEP Facility ID. No.: 538943481
Project No.: Date: 10/13/2021

SITE MAP

AECOM

Figure: 1

CONCRETE SIDEWALK
GRASS
CONCRETE
CONCRETE SIDEWALK
STORM DRAIN CURB INLET (TYP.)
LANDSCAPING AREA
MW-L (NM)
ASPHALT
DRIVE
ASPHALT
GRASS
UST VENT PIPES
FORMER DISPENSER ISLAND
FORMER RON'S RV BUILDING
WATER METER
MW-H (NM)
MW-O (92.06)
MW-ER (92.16)
MW-E
FORMER KEROSENE DISPENSER
FORMER UST
MW-N (92.05)
DW-GR (92.05)
DW-G
MW-F
MW-FR (92.09)
MW-A
MW-I (91.82)
MW-K
MW-BR (NM)
MW-B (NM)
FORMER UST AREA
CANOPY
MW-AR (92.15)
MW-DR (92.30)
MW-D
FORMER DISPENSER ISLAND
MW-M (91.99)
MW-J
MW-CR (91.91)
MW-C
ASPHALT
EXTENT OF EXCAVATION (2012)
ASPHALT
CONCRETE SIDEWALK
GRATE INLET (TYP.)
RCP
GRASS
GRASS
INDIANA STREET
ASPHALT
HIGHWAY 17 WEST
89.40

92.18 92.22 92.26 92.14 92.10 92.06 92.02 91.98 91.94 91.90 91.86

DETAIL LOCATION

LEGEND
- SHALLOW MONITOR WELL
- DEEP MONITOR WELL
- ABANDONED MONITOR WELL
- (92.30) GROUNDWATER ELEVATION (FT.)
- 91.86 GROUNDWATER CONTOUR (FT.)
- APPARENT DIRECTION OF GROUNDWATER FLOW
- OHU OVERHEAD UTILITY
- LIGHT POLE
- UTILITY POLE

NOTE:
* - DW-GR NOT USED FOR CONTOUR MAP GENERATION

0 30' 60'

AECOM

Figure: 2

GROUNDWATER CONTOUR MAP
OCTOBER 15, 2021

RON'S RV SALES
1104 Highway 17 & 92 West
Haines City, Polk County, Florida
FDEP Facility ID. No.: 538943481
Project No.: 60667818 Date: 11/3/2021

CONCRETE SIDEWALK
GRASS
CONCRETE
CONCRETE SIDEWALK
STORM DRAIN CURB INLET (TYP.)
LANDSCAPING AREA
MW-L
ASPHALT
DRIVE
GRASS
ASPHALT
FORMER RON'S RV BUILDING
UST VENT PIPES
FORMER DISPENSER ISLAND
WATER METER
MW-H
MW-O
MW-E
FORMER KEROSENE DISPENSER
MW-N
FORMER UST
MW-A
MW-F
DW-G
MW-I
MW-K
MW-BR
MW-B
CANOPY
MW-D
FORMER UST AREA
FORMER DISPENSER ISLAND
EXTENT OF EXCAVATION (2012)
MW-FR
MW-M
MW-J
MW-AR
MW-CR
MW-C
ASPHALT
ASPHALT
CONCRETE SIDEWALK
INDIA STREET
GRATE INLET (TYP.)
GRASS
RCP
GRASS
HIGHWAY 17 WEST

10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	2 U
1-M	0.2 U
2-M	0.2 U
TRPH	250 U

MW-ER 10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	**14.8**
1-M	4.2
2-M	6.1
TRPH	310 I

DW-GR 10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	2 U
1-M	0.2 U
2-M	0.2 U
TRPH	250 U

MW-I 10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	2 U
1-M	0.2 U
2-M	0.2 U
TRPH	250 U

MW-N 10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	3.3 I
1-M	1.6
2-M	2.1
TRPH	260 I

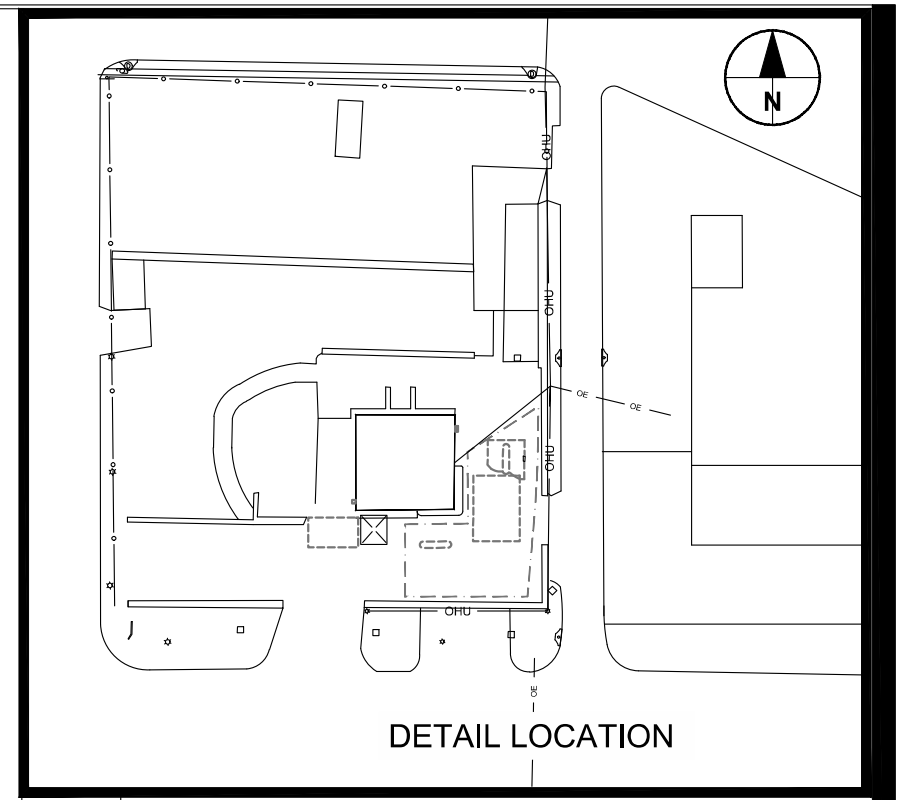
MW-FR 10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	2.52 I
1-M	0.42 I
2-M	0.2 U
TRPH	250 U

MW-M 10/15/21	
B	**7.1**
T	0.5 U
E	13
X	4.6 I
M	5 U
N	**56**
1-M	12.3
2-M	17.5
TRPH	1200

MW-DR 10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	2 U
1-M	0.2 U
2-M	0.2 U
TRPH	250 U

MW-AR 10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	2.7 I
1-M	0.46 I
2-M	0.2 U
TRPH	250 U

MW-CR 10/15/21	
B	0.5 U
T	0.5 U
E	0.5 U
X	2 U
M	5 U
N	2 U
1-M	0.2 U
2-M	0.2 U
TRPH	250 U



LEGEND

- SHALLOW MONITOR WELL
- DEEP MONITOR WELL
- ABANDONED MONITOR WELL
- APPROXIMATE EXTENT OF GROUNDWATER CONTAMITION EXCEEDING GCTLs (DASHED WHERE INFERRED)
- OHU — OVERHEAD UTILITY
- LIGHT POLE
- UTILITY POLE

10/15/21	
B	1
T	40
E	30
X	20
M	20
N	14
1-M	28
2-M	28
TRPH	5000

10/15/21 DATE
B BENZENE (µg/L)
T TOLUENE (µg/L)
E ETHYLBENZENE (µg/L)
X TOTAL XYLENE (µg/L)
M MTBE (µg/L)
N NAPHTHALENE (µg/L)
1-M 1-METHYLNAPHTHALENE (µg/L)
2-M 2-METHYLNAPHTHALENE (µg/L)
TRPH TRPH (µg/L)

NOTES:

- U = INDICATES THAT THE CHEMICAL OF CONCERN WAS UNDETECTED
- I = INDICATES THE CHEMICAL WAS DETECTED BUT BELOW THE REPORTING LIMIT; THEREFORE, AN ESTIMATED VALUE
- D = DATA REPORTED FROM A DILUTION
- NA = NOT ANALYZED
- GCTL = GROUNDWATER CLEANUP TARGET LEVELS AS PROVIDED IN 62-777, F.A.C.
- NADC = NATURAL ATTENUATION DEFAULT CONCENTRATIONS AS PROVIDED IN 62-777, F.A.C.
- **BOLD** INDICATES CONCENTRATION GREATER THAN GCTLs
- ***BOLD ITALIC*** INDICATES CONCENTRATION GREATER THAN NADCs

0 30' 60'

AECOM

Figure: 3

GROUNDWATER CONTAMITION MAP
OCTOBER 15, 2021

RON'S RV SALES
1104 Highway 17 & 92 West
Haines City, Polk County, Florida
FDEP Facility ID. No.: 538943481
Project No.: 60667818 Date: 11/3/2021

Map ID 28: Haines City Quality Cleaners Inc.

#539500205
Red folder

SITE SUMMARY REPORT
Haines City Quality Cleaners, Inc.

511 Haines City Mall
Haines City, Polk County, Florida 33844

FDEP Facility Identification Number:
539500205

September 1998
Rust Project Number: 203234

Prepared for
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Prepared by
Rust Environment & Infrastructure
370 South North Lake Boulevard
Suite 1028
Altamonte Springs, Florida 32701

SITE SUMMARY REPORT
Haines City Quality Cleaners, Inc.

511 Haines City Mall
Haines City, Polk County, Florida 33844

FDEP Facility Identification Number:
539500205

Prepared by: _____

William Fetner, P.G.
Florida Reg. No. 01386
Hydrogeologist

Reviewed by: _____

Blanche M. Wallace, P.G.
Assistant Program Manager

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LIST OF APPENDICES

SITE SUMMARY REPORT

1.0 SITE LOCATION AND BACKGROUND

1.1 Physical Setting

From the USGS Winter Haven, Florida Topographic Quadrangle Map, 1959 (photo revised 1980), Haines City Quality Cleaners is located in Section 29, Township 27 South, Range 27 East, Polk County, in the southwest quadrant of the intersection of U.S. Highway 17 and "C" Street. The site address is 511 Haines City Mall, Haines City, Florida (**Figure 1**), in the Haines City Mall shopping center.

1.2 Geology/Hydrogeology

According to the lithologic log of a nearby well (W-3799) as archived in the Well Log Data System (GeoSys, Inc.), the geology in the vicinity of the site may be expected to consist of approximately 80 feet of undifferentiated sand and clay followed by approximately 30 feet of limestone and clay of the Hawthorn Group. The Hawthorn Group overlays limestone of the Crystal River Formation (approximately 150 feet thick) and the Ocala Limestone (approximately 80 feet thick). Limestone, sand and dolostone of the Avon Park Formation was encountered below the Ocala Limestone to a depth of 600 feet (the total depth of the well). No significant clay layers were observed in the upper 90 feet of well W-3799.

Based on the elevations shown on the USGS Topographic Map it appears that groundwater would be encountered at the site approximately 5 to 10 feet below ground surface. This is based on the difference in elevation between the site [estimated 130 to 135 feet National Geodetic Vertical Datum (NGVD)] and nearby Lake Tracy (elevation of 124 feet NGVD).

2.0 FACILITY EVALUATION

2.1 History and Operations

Rust Environment & Infrastructure (Rust) personnel visited the subject facility on July 30, 1998. During this visit, the former owner of the facility, Mr. Jerry Tribble, was interviewed regarding the dry cleaning operations performed at the site. According to Mr. Tribble, the site began operations as Smith's Cleaners sometime in 1984 under the ownership of Mr. Ray Smith. Please note that Mr. Smith operated a dry cleaner prior to 1984 at a different location within the same shopping center. It is believed that the location of that cleaner was somewhere within the area occupied by the present-day Publix. In 1984, the subject site was constructed as an addition to the shopping center and Mr. Smith moved his dry cleaning operations from the present-day Publix area to this location. Mr. Tribble bought the cleaner and all its equipment from Mr. Smith in August 1985 and operated the facility until 1997. In July 1997, Mr. Tribble moved his dry

cleaning operations from the Haines City Mall to the east side of "C" Street (see **Figure 2**). The site has been vacant since July 1997. A copy of the Drycleaning Site Visit Checklist is provided in **Appendix A**. Photographs taken during the site visit are also provided in **Appendix A**.

Figure 3 is a site layout map showing the former location of relevant dry cleaning equipment. A transfer dry cleaning machine was used for approximately 5 years (1984 to 1989) before it was replaced by a dry-to-dry machine. Both machines used tetrachloroethylene (PERC) as the solvent. PERC for the transfer and dry-to-dry machines was stored in a 55-gallon drum located immediately east of the machines. Solvent recovery for the transfer and dry-to-dry machines was conducted with cartridge filters and powder filters, respectively. A distillation unit was also used to recover solvent. The still was located west of the transfer and dry-to-dry machines. A spotting board, steam presses and conventional laundry machines were used at the site. Small quantities of spotting agents were kept next to the spotting board. A boiler room, located south of the cleaner, contained a natural gas-powered boiler, a fuel oil-powered boiler, a vacuum, and an air compressor. Fuel oil for the boiler was stored approximately 8 feet south of the boiler room in a 200-gallon capacity above-ground storage tank (AST). Spent filters (cartridge and powder), still bottoms, cooked powder residues, lint, and spotting board residues were all stored in small waste drums (typically 15-gallon drums) immediately southeast of the transfer and dry-to-dry machines. The waste drums were initially disposed of by Safety Kleen (through 1990) and later by MCF. New PERC was pumped to the storage drum via hose through the back entrance. Empty spotting agent containers were disposed of in the dumpster.

Secondary containments for the dry-to-dry machine, the waste drums, and the solvent storage drum were installed in November 1996. No impermeable floor (concrete) sealant was ever applied at the site. Except for one floor drain located in the boiler room, no drains are present in the main building of the cleaner. No obvious cracks were observed in the concrete floor.

Mr. Tribble stated that minimal solvent "drips" occurred over the years from the pump seal, door seal and pipe fittings of one or both dry cleaning machines. He said repairs were made immediately upon the discovery of any leak. Dates, volume amounts, or number of leaks that occurred were not documented. Mr. Tribble also stated that the still unit would occassionally "boilover" during the years that the transfer machine was in use (1984 to 1989). Separator water was disposed of through the back entrance door and/or the sewer system via the existing restroom. The facility has always been connected to the city's sanitary sewer system. According to Mr. Tribble, the roof of the cleaner was in disrepair and leaked significantly during rain events. These leaks produced standing water in different areas of the cleaner that would subsequently be swept by employees through the back entrance door. It is conceivable that during the removal of the standing water small amounts of solvents might have been picked up and disposed of with the rest of the rain water through the back door. Mr. Tribble does not recall any other spills or releases of solvents/spotting agents than those described above, nor is he aware of any releases that may have occurred at the cleaner during the ownership of Mr. Smith.

2.2 Potential Contaminant Source Areas

Potential contaminant source areas (see **Figure 3**) include the area beneath the former transfer and dry-to-dry machines, distillation unit, spotting board, the waste drums, the solvent storage drum, the area near the former dumpster, and area immediately south of the cleaner close to the back entrance door.

2.3 Previous Site Investigations

A Site Screening Report Form dated September 29, 1997, was submitted for this site by HSA Environmental (HSA). According to this report, a soil sample was collected by HSA personnel on July 31, 1997, approximately 7 feet southeast of the back entrance door. The sample (identified as HQC-001) was collected 0.5 feet below land surface and was analyzed by Progress Environmental Labs using EPA Test Method 8010. The results of analyses indicated that the sample contained PCE at 91,000 micrograms per kilogram (the residential soil cleanup target level for PCE is 10,000 micrograms per kilogram). According to Mr. Tribble, HSA collected the soil sample when the cleaner was just vacated and it happened to coincide with the floor of the site being washed off with a hose with discharge directed through the back entrance door. No other investigations are known to have been conducted for this site.

2.4 Adjacent Properties and Uses

The general area around the site is shown on **Figure 2**. **Appendix B** contains plat maps and an aerial photograph (taken in November 1996) of the site and surroundings. Former Haines City Quality Cleaners is located at the east end of a shopping center, known as Haines City Mall (**Figure 3**). The store immediately west of the cleaners is presently vacant but used to be occupied by Hungry Howie's Pizza. East and south are grass and asphalt areas followed by "C" Street to the east and Live Oak Avenue to the south. To the northeast, across an asphalt driveway and parking area, is a Citgo Quick Lube shop. North of the site is a large paved parking area followed by U.S. Highway 17. Stormwater ditches are present south and east of the site approximately 130 and 100 feet from the cleaner, respectively.

An environmental database search by Environmental Data Resources, Inc. (**Appendix C**) found five sites of concern within a one-quarter mile radius of the site. One site had a registered AST (the new Haines City Quality Cleaners) and four sites had registered underground storage tanks (USTs). Two of the UST sites were also reported on the leaking UST database (LUST). The LUST sites, Shell-Hoppy's (approximately 300 feet northeast of the site) and Sasser Grove Service (approximately 1,000 feet southwest of the site) have reported discharge discovery dates of January 7, 1987, and December 27, 1988, respectively.

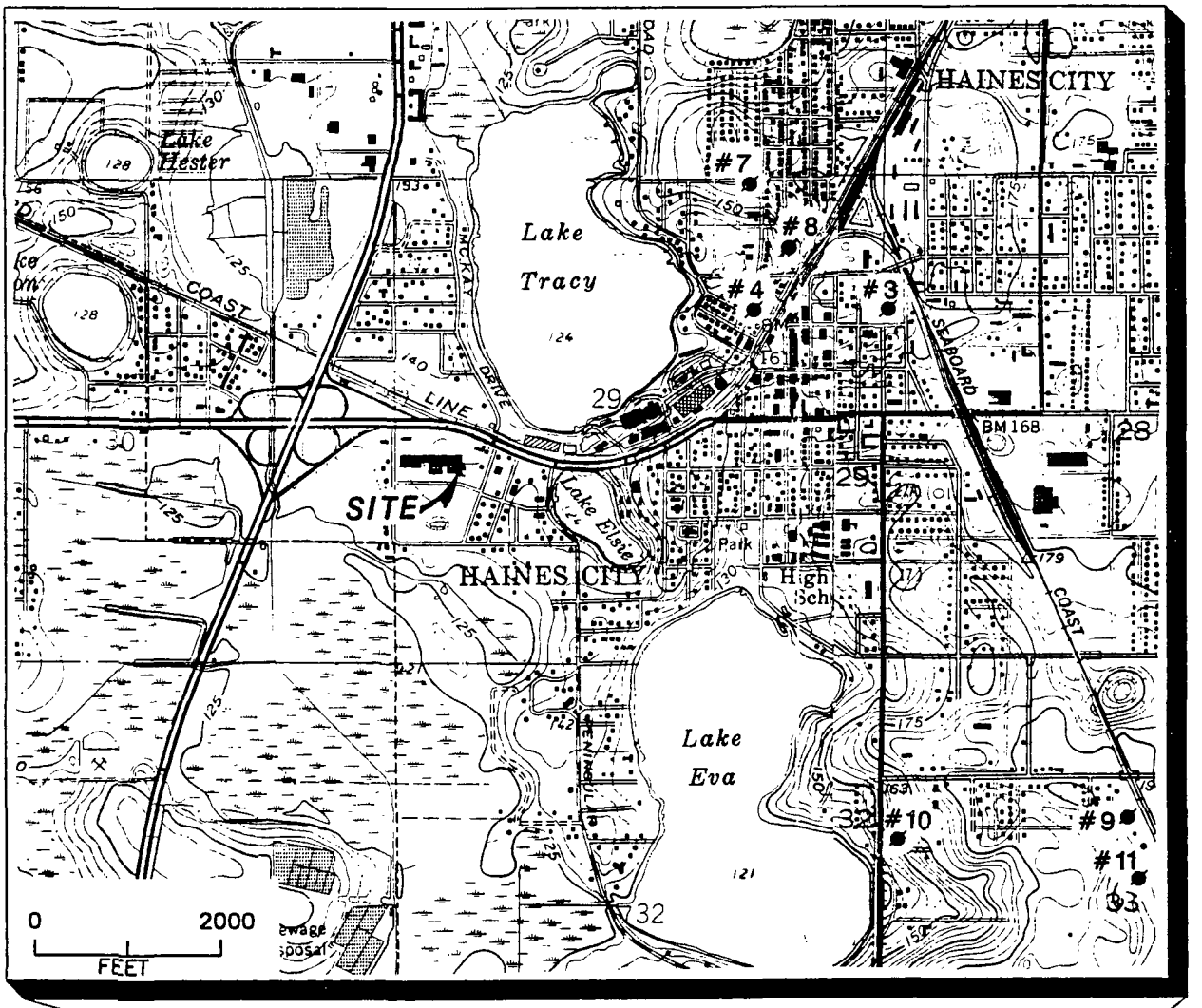
2.5 Potable Well Verification

The presence of the potable municipal well listed in Item 5a of the Site Screening Report could not be verified. Numerous telephone conversations and correspondence with three regulatory agencies - Southwest Florida Water Management District (SWFWMD), City of Haines City, and Polk County Health Department (PCHD) - indicate that no municipal or domestic potable wells exist within 1/2-mile of the cleaner. **Figure 1** shows the location of the closest municipal wells to the site based on information provided by the City of Haines City. A representative from PCHD performed an inspection of the municipal wells on August 12, 1998, and confirmed the absence of potable wells within 1/2-mile of the cleaner. **Appendix D** contains a table provided by Haines City showing construction details and average yield of the municipal wells shown on **Figure 1**. **Appendix D** also includes a Well Construction Permits Issued Report provided by the SWFWMD. This report contains all reported water supply wells within Sections 29 through 32 (Township 27 South, Range 27 East).

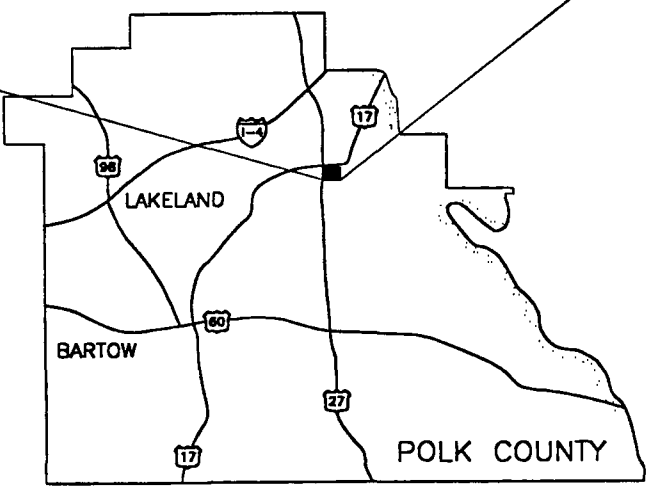
3.0 CLOSURE

After reporting the findings of the municipal well search to FDEP, it was agreed that this Site Summary Report would be submitted with all documents gathered by Rust during this preliminary investigation.

It is Rust's understanding that the site will not be further assessed at this time since the qualifying well could not be located.



QUADRANGLE LOCATION



SOURCE:
USGS TOPOGRAPHIC QUADRANGLE MAPS:
MAP–WINTER HAVEN, POLK CO., FLORIDA, 1959
(PHOTO REVISED 1980)
MAP–DUNDEE, POLK CO., FLORIDA, 1953
(PHOTO REVISED 1980)

TOWNSHIP 27 SOUTH
RANGE 27 EAST
SECTION 29

LEGEND:

#4 MUNICIPAL WELL WITH IDENTIFICATION NUMBER

08-19-98

P:\203234\CAD\FIGURE1.DWG

Rust Environment & Infrastructure Inc.

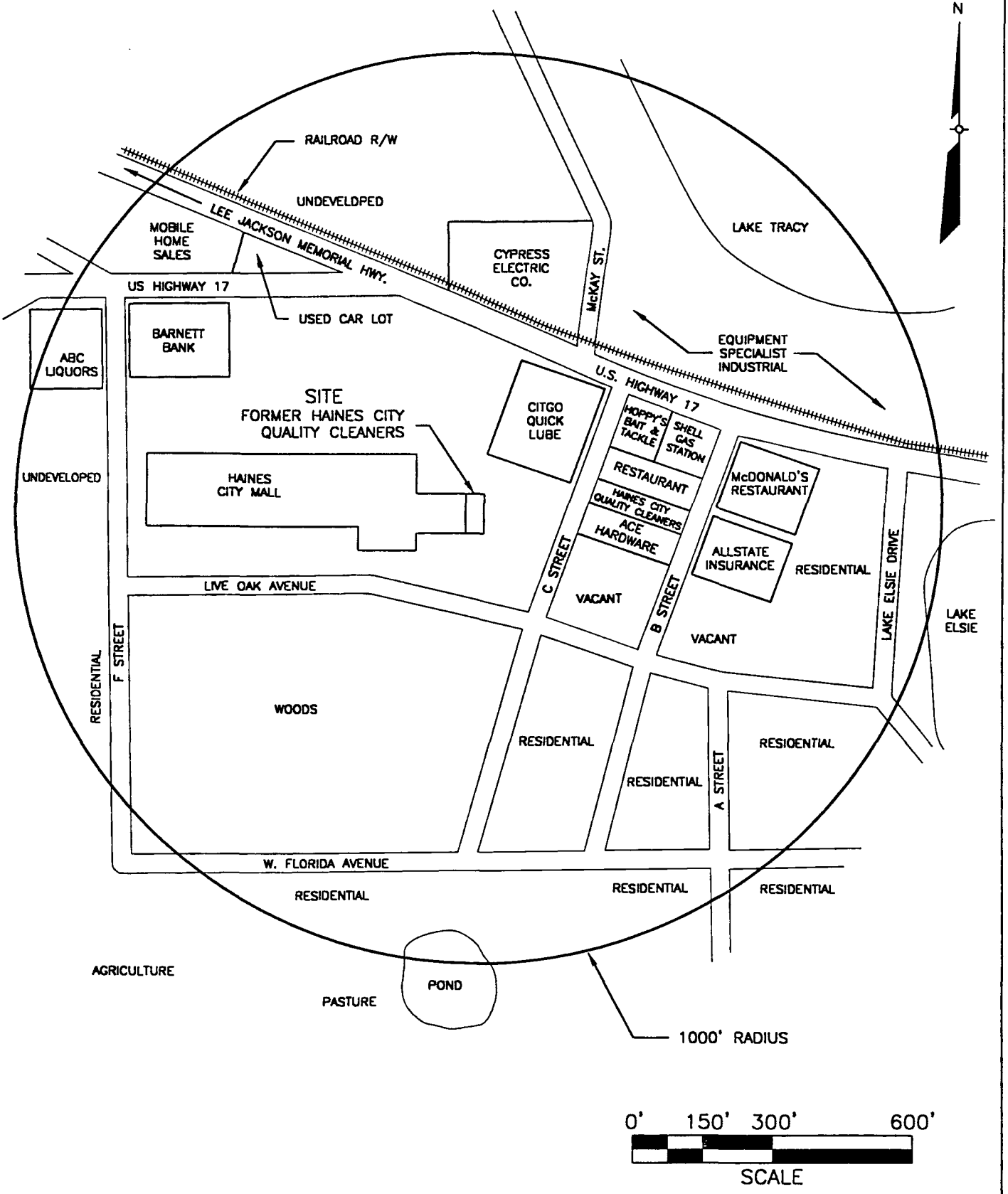
FIGURE 1

SITE LOCATION/TOPOGRAPHIC MAP

HAINES CITY QUALITY CLEANERS, INC.
HAINES CITY, FLORIDA
FDEP FACILITY NO.: 539500205

08-19-98 203234

DRAWN BY: M.E.B. | CHECKED BY:



Rust Environment & Infrastructure Inc.

FIGURE 2

SITE VICINITY MAP

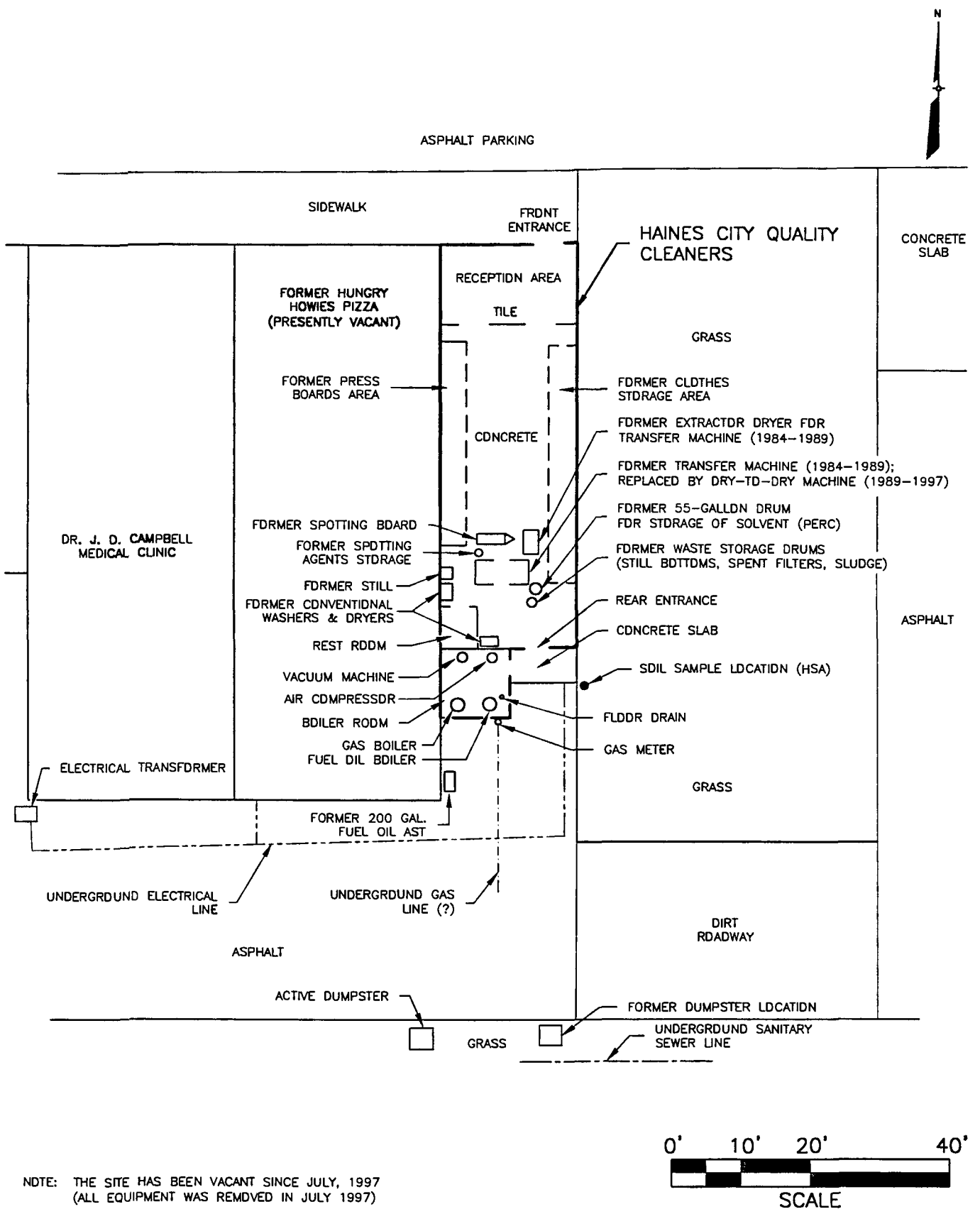
HAINES CITY QUALITY CLEANERS, INC.
HAINES CITY, FLORIDA
FDEP FACILITY NO.: 539500205

DATE: 08-19-98 203234

DRAWN BY: M.E.B. | CHECKED BY:

PLOT DATE: 08-19-98

FILE NAME: P:\203234\CAD\VICINITY.DWG



NOTE: THE SITE HAS BEEN VACANT SINCE JULY, 1997 (ALL EQUIPMENT WAS REMOVED IN JULY 1997)

Rust Environment & Infrastructure Inc.

FIGURE 3

SITE LAYOUT MAP

HAINES CITY QUALITY CLEANERS
HAINES CITY, FLORIDA
FDEP FACILITY NO.: 539500205

DATE: 08-19-98 203234

DRAWN BY: M.E.B. CHECKED BY:

PLOT DATE: 08-19-98

FILE NAME: P:\203234\CAD\SITE.DWG

DRYCLEANING SITE VISIT CHECKLIST

This checklist is intended to aid contractors in obtaining information during their site visit. It should be used to supplement information obtained from the *Drycleaning Solvent Cleanup Program Application* - DEP Form 62-781.900(1), and the *Site Screening Report Form* - DEP Form 62-781.900(3). Information should be obtained from interviews with the drycleaner owner/operator, staff, real property owner, etc., as appropriate.

Date: 7/30/98
Facility: HAINES CITY QUALITY CLEANERS, INC.
Address: 511 HAINES CITY BLVD, HAINES CITY, POLK COUNTY, FL 33844
Contact: JERRY TRIBBLE
Facility ID No.: 539500205

Site History & Operations

Date drycleaning operations began at site: SOMETIME IN 1984 UNDER THE OWNERSHIP OF RAY SMITH (SMITH'S CLEANERS). JERRY TRIBBLE BOUGHT THE OPERATION FROM MR. SMITH IN AUGUST 1985.
Facility still in operation? (yes / (no)) No - date closed JULY 23, 1997

Have any other businesses occupied the site? List names and types of businesses: SMITH'S CLEANERS, DRYCLEANER, 1984 TO AUGUST 1985 (THE SITE WAS BUILT IN 1984 FOR SMITH'S CLEANERS)

Solvents used/dates used : PCE 1984-JUL. 1997 petroleum solvent (type) NO
valclene NO other (type) NONE

Drycleaning equipment used: (e.g. dry-to-dry, transfer machine, still, spotting board, presses, etc.)
Denote equipment locations on facility layout diagram.

- TRANSFER MACHINE, 1984 TO 1989 (MACHINE REMOVED IN 1989, REPLACED BY DRY-TO-DR
- DRY-TO-DRY, 1989 TO JULY 1997
- STILL, 1984 TO JUL. 1997 (DISTILLATION UNIT)
- SPOTTING BOARD, 1989 TO JUL. 1997
- STEAM PRESSES, 1989 TO JUL. 1997

Conventional laundering performed? ((yes) / no). 1984 TO 1997
If yes, is pre-cleaning/spotting performed prior to laundering ((yes) / no)?
Denote equipment locations on facility layout diagram.

Are or were USTs ever present at the site? (yes / (no)). HOWEVER, AST WAS PRESENT AT THE SITE.
Denote the content and the status of the tanks. 200-GALLON AST, FUEL OIL FOR BOILER, OPERATED 1984 TO JUL. 1997

Site Visit Checklist
Site: HAINES CITY QUALITY CLEANERS, INC.
Date: 7/30/98

Is or was the facility on a septic system? (yes / (no)).
Is the system active? (yes / no). N/A
Denote location of the tank and drainfield on the facility layout diagram. N/A

Does the facility have floor drains? (yes / (no)) EXCEPT IN THE BOILER ROOM
Denote locations on facility layout diagram, including drainage pipe routing.

Is there an onsite water supply well? (yes / (no)) If yes, determine:
completed interval N/A
producing aquifer N/A
use (i.e. potable, etc.) N/A

Types of utilities servicing the facility? (e.g. natural gas, electric, etc.) CENTRAL FL GAS, FL POWER, CITY OF HAINES CITY SEWER & WATER, GTE TELEPHONE, HAINES CITY FOR TRASH, TIME WARNER CABLE, SAFETY KLEEN AND THEN RCF FOR HAZ WASTE REMOVAL (RCF USED FROM ≈1990 TO 1997
Denote locations on the facility layout diagram.

Facility Waste Management Practices

How are/were the following wastes disposed?

- still bottoms STORED IN 15-GAL DRUMS, REMOVED BY SAFETY KLEEN / RCF
- cooked powder residues SAME AS ABOVE
- spent filters (describe type) SAME AS ABOVE. USED CLEANRITE CARTRIDGES FOR TRANSFER MACHINE; POL FILTERS FOR DRY-TO-DRY MACHINE.
- separator water DISPOSED OF THROUGH BACK DOOR OF SITE AND/OR SEWER SYSTEM (BATHROOM
- lint STORED IN 15-GAL DRUMS, REMOVED BY SAFETY KLEEN / RCF
- spotting & pre-cleaning residues SAME AS ABOVE
- solvent/spotting agent containers EMPTY CONTAINERS DISPOSED IN DUMPSTER

Document any known spills, leaks, or discharges of solvents or solvent contaminated wastes including dates and amounts, if known.
PUMP SEAL, DOOR SEAL AND PIPE FITTING DRIPS IN THE TRANSFER MACHINE AND/OR DRY-TO-DRY MACHINE (MINIMAL LEAKS AND REPAIRS MADE IMMEDIATELY). NO DATES OR AMOUNTS AVAILABLE. ACCORDING TO OWNER, THE CLEANER'S ROOF LEAKED DURING RAIN EVENTS AND WATER ACCUMULATED ON THE FLOOR WAS SWEPT THROUGH THE BACK DOOR, THUS POSSIBLY PICKING SMALL AMOUNTS OF SOLVENTS (DROPS FROM THE MACHINES) PRESENT ON THE CLEANER'S FLOOR.

Potential Contaminant Source Areas (describe general condition of units or area based on observations, historical operations, discussions with facility personnel, etc.): SITE VACANT SINCE JULY 1997

- drycleaning machines RUST STAINS IN FORMER LOCATION (SAME WITH EXTRACTOR MACHINE LOCATION
- distillation units UNIT FOR THE TRANSFER MACHINE "BOILOVER" OCCASSIONALLY, RUST STAINS IN FORMER LOCATION

Site Visit Checklist
Site: HAINES CITY QUALITY CLEANERS, INC.
Date 7 / 30 / 98

- •solvent storage areas RUST STAINS IN FORMER LOCATION OF STORAGE TANK (55-GAL. DRUM).
- waste storage areas (drum storage, dumpsters etc.) RUST STAINS IN FORMER LOCATION OF 15-GAL. WASTE DRUMS; SOIL STAINS NOTED AT FORMER LOCATION OF DUMPSTER
- back door / outside areas NO OBVIOUS STAINS OBSERVED
- septic tank / drainfield N/A
- sanitary sewer lines CONDITIONS UNKNOWN.
- storm sewers / drains / soakage pits NONE OBSERVED IMMEDIATELY ADJACENT TO SITE
- floor drains / floor cracks NO DRAINS OR FLOOR CRACKS WERE NOTED. THERE IS ONE FLOOR DRAIN AT THE BOILER ROOM BELIEVED TO BE CONNECTED TO SEWER SYSTEM.
- spotting board area SOME RUST STAINS
- USTs N/A
- other AST: SOIL STAINS OBSERVED AT THE FORMER LOCATION OF THE 200-GAL. AST (FUEL OIL). AST WAS PLACED ON TOP OF EXPOSED SOIL.

Secondary Containment:

Has secondary containment been installed around or beneath:

- each machine in which one quart or more of solvents are used? (yes / no) DRY-TO-DRY MACHINE, INSTALLED IN NOV. 1996.
- solvent storage areas? (yes / no) WASTE STORAGE DRUMS & SOLVENT STORAGE DRUM, INSTALLED IN NOV. 1996.
- floor beneath spotting board sealed or rendered impervious ? (yes / no)
- identify other floor surfaces that have been sealed/rendered impervious where solvents may spill or leak. NONE

Drainage

Describe stormwater drainage from the site (e.g. - stormwater sewer, soakage pits/French drains, stormwater catchment basin, ditches, etc.? (Designate locations and include designation of paved and unpaved areas on site drawing)

- - STORMWATER DITCHES PRESENT SOUTH AND EAST OF THE CLEANER, APPROX. 130 AND
- 100' FROM THE SITE, RESPECTIVELY.
- - NO STORMWATER DRAINS NOTED IN THE PROXIMITY OF THE SITE. SANITARY SEWER LINES
- RUNS SOUTH AND EAST OF THE CLEANER

Verification of Drinking Water Supply Well:

For the drinking water well that was used to score the site, Verify the following:

- location CLOSEST ACTIVE PUBLIC WELL APPEARS TO BE APPROX. 3600FT. NORTHEAST OF THE SITE. THE WELL IDENTIFIED AS WELL #4. WELL PWS#6532232 IN SITE SCREENING REPORT COULD NOT BE LOCATED AS INDICATED IN THE REPORT (THE SWFWMD AND CITY OF HAINES CITY COULD NOT CONFIRM THE EXISTENCE OF THIS WELL)
- operator HAINES CITY (WELL #4)
- completion interval CASED TO 171', TOTAL DEPTH 810'
- producing aquifer FLORIDAN AQUIFER

Site Visit Checklist
Site: HAINES CITY QUALITY CLEANERS, INC.
Date 7 / 30 / 98

- Confirm whether or not the well is contaminated. (yes / no)

Identify Facilities Surrounding the Drycleaning Site - and post information on a figure.

- -WEST: VACANT STORE, FORMER HUNGRY HOWIES PIZZA RESTAURANT
- -SOUTH: OPEN SPACE (ASPHALT & GRASS); THEN LIVE OAK AVENUE AND WOODED AREA
- -EAST: OPEN SPACE (GRASS & PAVED); THEN "C" STREET, FOLLOWED BY SMALL BUSINESS INCLUDING
- NEW LOCATION OF HAINES CITY QUALITY CLEANERS
- -NORTH: PARKING LOT FOLLOWED BY CITGO QUICK LUBE, THEN U.S. HIGHWAY 17 & 92.
-

Other Concerns/Comments:

7/88
PF203234

Cut on concrete pad, next to
back door of boiler room

7/98
P#203234

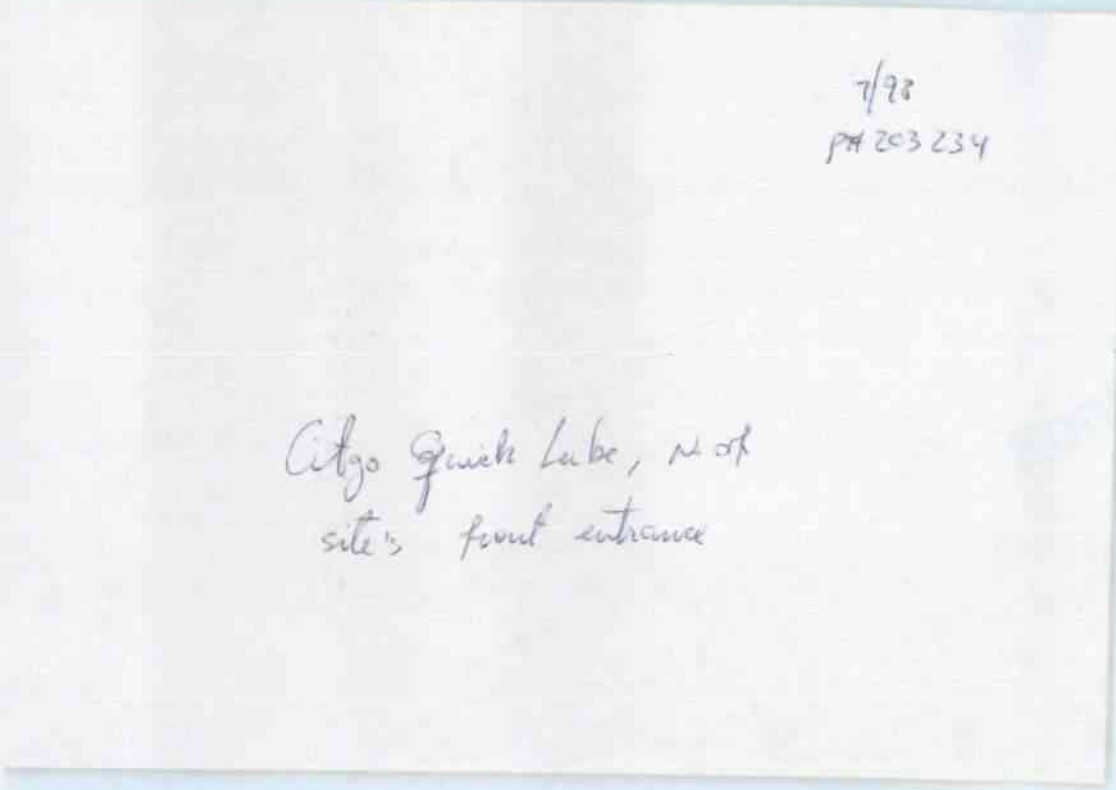
Border room

7/98
p# 203234

Back door


RYDER

7/98
PA 203234



Citgo Quick Lube, N of
site's front entrance

7/98

p # 203 234

Looking NW of 2216's front entrance


LAUNDRY

7/78

P#203234

Looking west of strip mall

7/98
P# 203234

looking SW of back entrance

7/98

P# 203234

Looking S of back entrance

7/78

P# 203234

Looking SE of back entrance

7/98

p # 203234

Back side of site and adjacent shops

7/98

p# 203234

Bides room + back entrance

7/98

P# 203234

East side + front of site

7/98

P# 203234

Fireside Cleaners

Looking to fill Front Lobby

7/98

P# 203234

Riverside site, looking south to back entrance

7/98

P#203234

Site is front entrance

7/98

P# 203734

N. wall of birch room

7/98
P# 203234

Near S. wall of bldg. room.
Note drain.

7/98

P# 203234

South wall of boiler room

7/18

P# 203234

Lobby of site, looking S from front entrance


ACE

1/98

P# 203234

Looking E from back entrance

7/98

p# 203234

Looking NE of site

7/98

P.# 203234

Ceiling in boiler room

7/98
PH 203234

Truck cleaner, looking south to back
entrance & bathroom

7/98

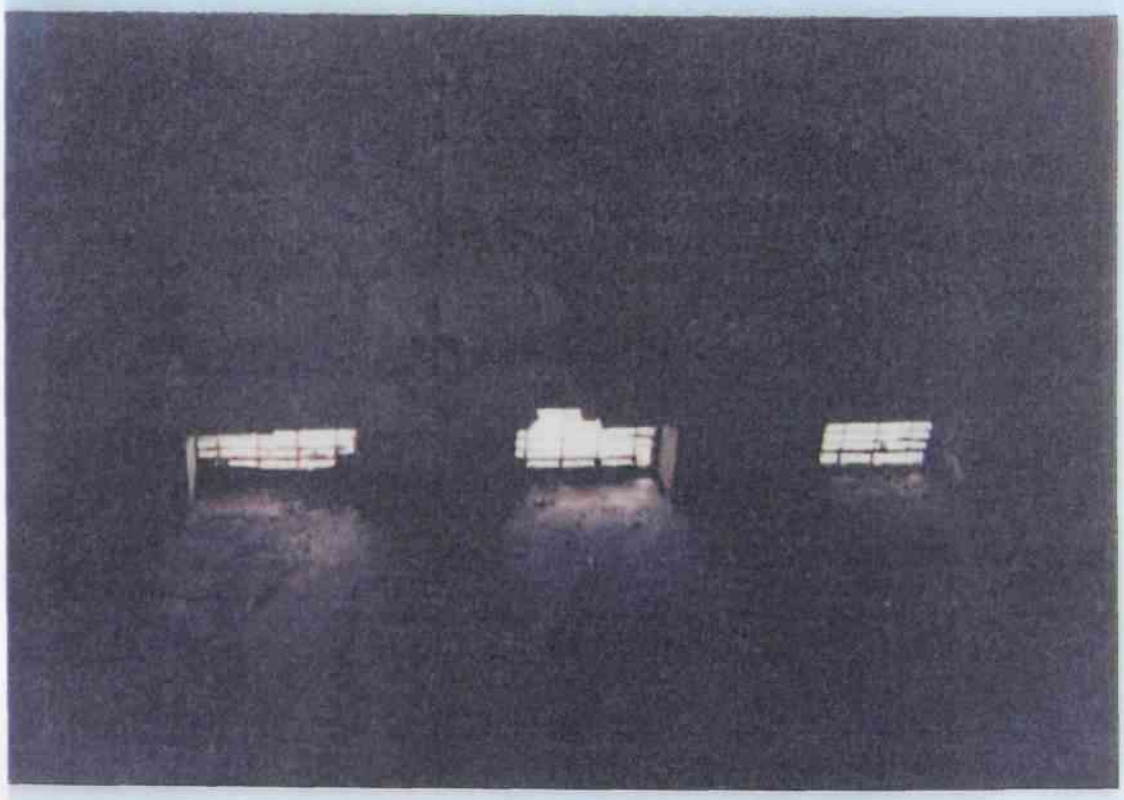
P# 203234

Inside cleaner, looking N to lobby area.

2/98

P# 203234

W. wall of boiler room



1/98

P# 203234

South wall of boiler room

INTERIM SOURCE REMOVAL PLAN

(Former) Haines City Quality Cleaners, Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205, ERIC_5357
FDEP TA HW551 DC030B

Prepared for:
Ms. Brandie Stringer
Florida Dept. of Environmental Protection
2600 Blair Stone Road, Mail Station 4520
Tallahassee, Florida 32399-2400

Prepared by:

AECOM
150 North Orange Avenue, Suite 200
Orlando, Florida 32801

May 10, 2019

AECOM Project No. 60600730

INTERIM SOURCE REMOVAL PLAN

Professional Certification

In accordance with the provisions of Florida Statutes, Chapter 471, this Interim Source Removal Plan for the (Former) Haines City Quality Cleaners, Inc. facility located in Haines City, Polk County, Florida, has been prepared under the direct supervision of a Professional Engineer registered in the State of Florida. This work was performed in accordance with generally accepted professional engineering practices pursuant to Chapter 471 of the Florida Statutes. The data, findings, recommendations, specifications or professional opinions were prepared solely for the use of the Florida Department of Environmental Protection. AECOM makes no other warranty; either expressed or implied and is not responsible for the interpretation by others of these data.

Site:
(Former) Haines City Quality Cleaners, Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205, ERIC_5357
FDEP TA HW551 DC030B

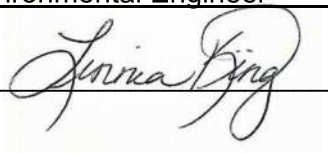
Prepared for:
Ms. Brandie Stringer
Florida Dept. of Environmental Protection
2600 Blair Stone Road, Mail Station 4520
Tallahassee, Florida 32399-2400

Prepared by:

AECOM
150 North Orange Avenue, Suite 200
Orlando, Florida 32801
(407) 843-6552

May 10, 2019

AECOM Project No. 60600730

Author: Linnea King
Title: Environmental Engineer
Signature: 

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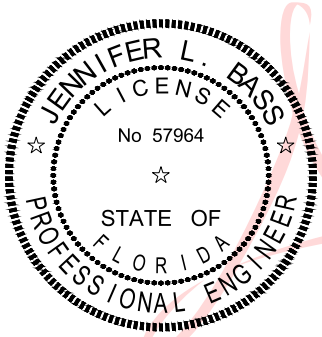

Digitally signed by Jennifer Bass
Date: 2019.05.10 10:16:32 -04'00'

Printed copies of this document are not considered signed and sealed. The signature must be verified on the electronic document.

AECOM Technical Services, Inc.
150 N. Orange Ave, Suite 200
Orlando, FL 32801
Certificate of Authorization No. 8115
Jennifer L. Bass, P.E. No. 57964

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ACRONYMS AND ABBREVIATIONS

µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µg/m3	micrograms per cubic meter
AECOM	AECOM Technical Services, Inc.
bls	Below land surface
cfm	Cubic Feet per Minute
CSM	Conceptual Site Model
DPT	Direct Push Technology
DSCP	Drycleaning Solvent Cleanup Program
DNAPL	Dissolved Non-aqueous Phase Liquid
EDR	Environmental Data Resources, Inc.
EPA	Environmental Protection Agency
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
FID/PID	photoionization detector / flame ionization detector
$Feet^2$	Square feet
$Feet^3$	Cubic feet
ft	feet
ft/day	feet per day
ft/ft	feet per feet
GAC	Granular Active Carbon
gpd	Gallons Per Day
GCTL	Groundwater Cleanup Target Level
HAPs	Hazardous Air Pollutants
I	Data qualifier; indicates a detection between the MDL and RL
IDW	Investigation Derived Waste
ISRP	Interim Source Removal Plan
lbs	Pounds
MAGS™	Modified Active Gas Sampling
Mg/kg	milligrams per kilogram
MW	Monitor Well
NAM	Natural Attenuation Monitoring
NFA	No Further Action
PCE	Tetrachloroethene
P&ID	Process and Instrumentation Diagram
PVC	polyvinyl chloride
PWS	potable well supply
ROI	Radius of Influence
SAR	Site Assessment Report
scfm	standard cubic feet per minute
SCTL	Soil Cleanup Target Level
SRCR	Source Removal Completion Report
SSR	Site Summary Report
SSRF	Site Screening Report Form
SVE	Soil Vapor Extraction
TCE	Trichloroethylene

USGS	United States Geological Survey
VEW	Vapor extraction well
VOC	Volatile organic compound
VOH	Volatile organic halocarbons

1.0 INTRODUCTION

AECOM Technical Services, Inc. (AECOM) was retained by the Florida Department of Environmental Protection (FDEP) Drycleaning Solvent Cleanup Program (DSCP) to prepare an Interim Source Removal Plan (ISRP) for the (Former) Haines City Quality Cleaners, Inc. facility (Site), under contract number HW551-DC030C. This ISRP was prepared in response to findings reported in the Site Assessment Report (SAR) dated November 5, 2018.

1.1 Site and Vicinity Description

The Site is located in Section 29, Township 27 South, Range 27 East (**Figure 1**), Polk County, Florida, in the southwest quadrant of the intersection of US Highway 17 and C Street. The site address was 511 Haines City Mall, which is currently Suite 1F of the Haines City Mall shopping center and occupied by Enterprise Car Rentals. Suite 1F is the end unit and easternmost suite, located close to C Street. The FDEP facility identification number is ERIC_5357.

The shopping center property, formerly containing the subject drycleaner, is located in a mixed commercial/ residential area (**Figure 2**) which is bordered to the north by US Highway 17/US Highway 92, Live Oaks Avenue and a residential community to the south, vacant property to the west along South F street, and additional retail/commercial properties to the east bordering C Street.

As discussed in the Work Plan generated for this site, the environmental database report (EDR) identified numerous sites (13) within their respective ASTM and/or EDR search distances from the subject property. Based on AECOM's review of these database listings, most of these sites are not expected to impact the subject property based on their distance from the subject property, regulatory status (i.e. closed, cleanup not required or achieved, no violations found), listing on a non-contamination related database, and/or topographical position from the subject property (i.e. down-gradient or cross-gradient). Due to the proximity to the subject property and/or type of facility (i.e. drycleaners and petroleum storage facilities), six sites are discussed in detail in the November 2018 Site Assessment Report: Bills Radiator Service, one un-named Business/Property approximately 400 feet south of the subject property, Shell - Hoppy's, Sasser Grove Service, Publix Supermarket, and Ridge Shopper.

The nearest surface water identified near the facility are two lakes; Lake Elsie is located approximately 1,000 feet east-southeast; and Lake Tracy, a much larger lake, is located approximately 1,000 feet northeast, at its nearest point (**Figure 1**).

1.2 Site Operational History

According to the former owner of the Haines City Quality Cleaners, the site operated as a drycleaner from sometime in 1984, when an extension of the already existing shopping center was first constructed, and Smith Cleaners moved in. Smith Cleaners was previously located at another location in the shopping center, reportedly west of the current site and believed to be

within the footprint of the current Publix supermarket. Smith Cleaners changed to Haines City Quality Cleaners in August 1985 and operated at the subject location until July 1997, when it moved across the street to its current location at 7 C Street. Currently, Suite 1F of the Haines City Mall is occupied by an Enterprise Car Rental facility and has remained since September 1998. Other businesses occupying this unit between July 1997 and September 1998 are unknown.

No existing monitor wells (MWs) or on-site water supply well were observed on the shopping center property and discussion with the owner identified that the landscaping irrigation system is hooked up to the city water supply system. The shopping plaza has been connected to the municipal water supply system since it was constructed.

According to 2005, 2010, and 2016 potable well surveys from the Florida Department of Health (FDOH) Bureau of Water Programs, no large public wells with production rates of >150,000 gallons per day (gpd) are located within a ½-mile radius of the site. The closest active potable water supply (PWS) well that was identified in the Site Screening Form (SSF) is the City of Haines City well (permit #6532232), reportedly located within ¼-mile south of the site. The EDR radius search identified the same PWS well in the same location; however, it was not located during the site reconnaissance visit. The EDR report states that "PWS system location is not always the same as well location". Documentation for 13 City of Haines City wells was identified in the EDR report and two of the wells were confirmed by visual observation in the field. All 13 wells are located between a ½-mile and 1 mile east-northeast and northeast of the site. These wells are listed as >100,000 gpd and the closest well (AAC5841 – FLSA80000009815 – permit #6532232) is 12 inches in diameter. The depth and screened interval are not listed for this well; however in general, the City of Haines City wells are listed as 570, 600, or 810 feet deep, with 170 or 200 feet of casing. The reported specifics for these wells are summarized in the following table for easy reference:

Well ID	FL Well ID	Well Diameter/Casing/Depth	Permit #
14804	FLSW70000014804	12" / 171' / 810'	WUP8522
14813	FLSW70000014813	12" / 171' / 810'	WUP8522
AAC5841 (Well #4)	**FLSA80000009815**	**12" / NA / NA**	**6532232**
14805	FLSW70000014805	16" / 200' / 600'	WUP8522
14814	FLSW70000014814	16" / 200' / 600'	WUP8522
AAC5843 (Well #7)	**FLSA80000009817**	**16" / 200' / 600'**	**6532232**
AAC5842	**FLSA80000009816**	**16" / 200' / 600'**	**6532232**
14806	FLSW70000014806	16" / 200' / 600'	WUP8522
14815	FLSW70000014815	16" / 200' / 600'	WUP8522
530051406	**FLSA80000056388**	**NA / NA / 600'**	**NR**
AAC5840	**FLSA80000009814**	**12" / NA / NA**	**6532232**
14810	FLSW70000014810	12" / 170' / 570'	WUP8522
14813	FLSW70000014813	12" / 170' / 570'	WUP8522

According to 2005, 2010, and 2016 potable well surveys from FDOH Bureau of Water Programs, no small potable wells are located within a ¼-mile radius of the site. Two wells were identified approximately ½-mile south-southeast and southwest from the site.

1.3 Previous Investigations

FDEP records indicate that a SSF was completed and submitted in July 1997 and a Site Summary Report (SSR) was prepared by AECOM (then known as Rust Environment & Infrastructure) and dated September 1998. The SSR indicates that tetrachloroethene (PCE) was detected in soil from an exterior boring southeast of the facility's back door at 0.5-feet below land surface (bls) at a concentration of 91 milligrams per kilogram (mg/kg), exceeding the Soil Cleanup Target Levels (SCTLs) listed in Table 2 of Chapter 62-777, Florida Administrative Code (FAC) for that compound. FDEP admitted Haines City Quality Cleaners into the DSCP with a site priority score of 142. In October 1998, the site was re-scored to 101. A site map is illustrated in **Figure 3**.

In 2016, FDEP tasked AECOM to perform additional site assessment activities to identify the potential sources of dry-cleaning solvents that may impact the soil and groundwater quality, delineate the horizontal an vertical extents of impacts, characterize site lithology, and determine site specific aquifer characteristics to assist with transport modeling and possible remedial design. AECOM submitted a Site Assessment Work Plan on April 29, 2016 and performed the additional site assessment activities from February 2017 through July 2018. These activities are included:

- November 16, 2016 – camera survey of sanitary sewer lines to determine the presence/absence of damage that may represent potential discharge point. Observations indicated that the lines were in good condition with no evidence of damage or loose joints;
- February 6, 2017 and July 24, 2018 - Soil was classified through from two Lithologic Borings (LB001 and LB002) advanced to 60 and 85 feet bls, respectively, utilizing direct push technology (DPT). Lithologic boring locations are illustrated in **Figure 3**;
- February 6 through 9, 2017 – Collection of soil samples from 13 locations (SB001 through SB013) for analysis using EPA Method 8260 (volatile organic halocarbons - VOH) for the characterization of potential source areas in order to identify/delineate potentially affected soil areas utilizing a FDEP-approved on-site mobile laboratory (**Figure 4**). Sample depths included 2, 5, and 8 feet bls. Following receipt of the mobile laboratory analytical results, select samples were sent to a fixed base laboratory for verification and Synthetic Precipitate Leaching Procedure (SPLP) analysis, if necessary. No contaminants of concern were detected above SCTLs by the mobile or fixed base laboratories in soil samples collected during this assessment. The mobile laboratory indicated that low levels of chlorinated compounds were detected in samples collected at 2 feet bls at SB010 and SB011 locations. Since none of the

detected compounds exceeded the FDEP direct exposure or leachability SCTLs; the SPLP analysis was not conducted for any sample;

- February 6 through February 10, 2017 - 16 discrete depth interval groundwater samples (**Figure 3**) were collected using DPT at depths ranging from 15 to 75 feet bls. Samples were analyzed according to EPA Method 8260B (VOHs) utilizing an FDEP-approved on-site mobile laboratory. Chlorinated analytes were detected above FDEP Groundwater Cleanup Target Levels (GCTLs) per Chapter 62-777, FAC in DP001 at 35, 45, and 55 feet bls, in DP002 at 35 and 55 feet bls, in DP003 at 45 feet bls, in DP004 at 35 feet bls, in DP009 at 45 feet bls, in DP010 at 45, 55, and 75 feet bls, and in DP015 at 65 feet Bls, and verified with a fixed laboratory. Note that PCE was also detected at a concentration above GCTLs in the fixed laboratory duplicate sample from DP014 at 55 feet bls, when no PCE was detected in the original sample from that interval when analyzed by the mobile laboratory. All other analytes were either not detected or detected below GCTLs (**Figure 5A**);
- February 8, 2017 – Two temporary monitor wells were installed in the location of soil borings SB010 and SB011 (inside the facility) to a depth of 10 feet bls with a 5 ft screen and sampled for analysis according to EPA Method 8260 (VOH). Mobile laboratory results indicated PCE concentrations were detected below GCTLs in both locations. Two permanent vapor extraction wells (VEWs), VW001 and VW002, were installed in their place for the planned Modified Active Gas Sampling (MAGS) activities (**Figure 3**);
- February 9, 2017 – Two additional VEWs (VW003 and VW004) were installed (**Figure 3**);
- February 9 and 10, 2017 - Based on laboratory results from the DPT sampling, four permanent groundwater monitor wells were installed (MW001 through MW004). Wells were sampled February 14, 2017 and analyzed according to EPA Method 8260 (VOH). PCE and trichloroethylene (TCE) concentrations exceeded GCTLs in MW001 screened 30 to 35 feet bls (**Figure 5B**);
- July 13, 2017 – Monitor wells were resampled. No VOH concentrations were detected above GCTLs;
- July 23 through 27, 2018 - Based on previous groundwater sampling and DPT data, and following FDEP approval of placement, seven additional monitor wells were installed (MW005 through MW011) to depths of 15, 35, and 45 feet bls. One well (MW009) was installed to 75 feet bls. Wells were sampled on August 21, 2018 for analysis by EPA Method 8260 (VOHs). PCE concentrations exceeded GCTLs in MW005 screened 30 to 35 feet bls while concentrations remained below GCTLs in MW001; and

- July 11, 2018 - Conducting MAGS™ tests from the four VEWs. Soil vapor extraction (SVE) analytical results are illustrated in **Figure 7** and summarized in **Table 4**. Although the results of the MAGS™ test indicated relatively low levels of PCE, there was evidence of some residual source in the vadose zone. Extraction flows and radial extents of vacuum observed during the test indicate this site is suitable for soil vapor extraction technology.

Note that no catch basins were located in the vicinity of the subject property; therefore, sediment sampling was not performed. Based on the current groundwater concentrations and field observations, the presence of PCE as dissolved non-aqueous phase liquid (DNAPL) is not considered likely. The groundwater concentrations for PCE did not exceed 1% of the solubility limit of PCE in water (USEPA 1992) and no field observations of DNAPL were noted during the investigation. Soil and groundwater analytical data is summarized in **Table 1**, **Table 2A** and **Table 2B**, respectively.

1.4 Site-Specific Geology and Hydrogeology

Site geology has been determined from soil boring lithologic information from previous assessment activities in 2017 and 2018. Lithologic descriptions from a boring location to the south of the site indicates the surficial geology at this site consists of predominantly fine-grained sand from land surface to 60 feet bls. Lithologic descriptions from a boring east of the site indicates the surficial geology at this site consists of predominantly fine-grained sand from land surface to 20 feet bls, clayey sand and clay from 20 feet bls to approximately 40 feet bls, fine-grained sand from 40 to 60 feet bls, and clayey silty sand from 60 to 85 feet bls.

The depth to groundwater (**Table 3**) in the shallow zone wells in February and July 2017 ranged from 8 to 9 feet bls. Based upon the water table elevation data from February and July 2017, the apparent shallow groundwater flow direction was determined to be toward the northwest beneath the drycleaner. During monitor well sampling on August 21, 2018, groundwater was encountered slightly higher at approximately 7 feet bls with an apparent groundwater flow direction to the northeast towards Lake Tracy, which was not consistent with the previous two determinations. The apparent intermediate (30-35 feet bls) groundwater flow direction was generally to the east, and the apparent secondary intermediate (40-45 feet bls) groundwater flow direction was generally to the northeast, similar to historical shallow groundwater flow direction. Shallow and intermediate groundwater contour maps for August 2018 are provided as **Figures 6A**, **6B**, and **6C**, respectively. Although groundwater sampling activities reached a depth of 75 feet bls during this investigation, only one well was installed to that depth, which is insufficient to render a flow direction determination. Water table elevation data are summarized in **Table 3**.

An estimated hydraulic conductivity value of 0.3 to 55 cubic feet ($feet^3$)/day/square feet ($feet^2$) (median of 27 $feet^3$/day/$feet^2$ will be used for calculations) was derived from the US Geological

Survey and US Department of the Interior Water Scientific Investigations Report 2006-5320, Hydrology of Polk County.

Hydraulic gradients and velocities were calculated using data from the August 2018 groundwater sampling event. Calculations resulted in a horizontal hydraulic gradient (i_x) of 0.015 foot per foot (ft/ft), a vertical hydraulic gradient (i_z) of 0.31 ft/ft (a positive number indicates a downward flow direction), a horizontal groundwater velocity (v_x) of 1.35 feet per day (ft/day), and a vertical groundwater velocity (v_z) of 2.79 ft/day. Due to the lack of cluster wells installed, vertical hydraulic gradient (i_z) and the vertical groundwater velocity (v_z) were calculated using monitor wells MW004 and MW005.

2.0 INTERIM REMEDIAL EVALUATION

2.1 Conceptual Model

Based upon the observations and data collected during the described site assessment activities, AECOM has developed a Conceptual Site Model (CSM) for the Site. It is assumed that during active drycleaning operations at the facility, drycleaning solvents (PCE and TCE) were released to the environment. The source of contamination is unknown, but appears to be in the immediate vicinity of the former facility.

The released drycleaning solvent likely percolated through the vadose soils, or migrated down vertically to the underlying groundwater via advective transport as an aqueous liquid. The low or non-detected concentrations of PCE-degradation by-products (TCE, cis-dichloroethylene, trans-dichloroethylene or vinyl chloride) indicate little natural attenuation has occurred.

Groundwater impacts are limited in aerial extent to approximately 930 square feet, where the bulk of machinery was staged and to the east of the drycleaning facility. While the direct source of contamination is unknown, impacts have migrated vertically, with PCE concentrations observed at the screened interval of 30 to 35 feet bls in monitor well MW005. Using concentrations detected in MW005, total contaminant mass is estimated to be less than one pound (**Appendix B**).

Potential human and ecological receptors along the distributed impacts associated with the contamination at the site are limited. Soil impacts above the applicable direct-exposure SCTLs were not detected during recent soil investigation activities. Groundwater impacts remain outside the influence of any reported water supply wells. Residences and business in this area are connected to the municipal water supply, and no small potable wells are in the immediate vicinity of the Site. There are no large public wells within 1/2-mile radius of the site. The closest active potable water supply is located ¼-mile south of the Site.

2.2 Remedial Alternative Evaluation

As indicated above, the MAGS™ test indicated there was some residual source in the vadose zone, which warranted preparation of this ISRP. Soil Vapor Extraction (SVE) was selected as the most appropriate remedy to reduce the soil contaminant source based upon the MAGS™ operational data and the site constraints. All applicable design data was collected during the MAGS™ sampling event. Groundwater concentrations exceed applicable GCTLs for PCE and reflect a slow rate of natural attenuation.

3.0 REMEDIAL SYSTEM DESIGN

As described in **Section 1.3**, the area of the former drycleaning facility was identified as being impacted predominantly by PCE through soil gas analyses. SVE has been selected as the preferred remedial strategy for soil impacts at this site as documented in FDEP's SVE Presumptive Remedy Approval dated March 4, 2019. Based on the MAGS™ event, the existing four vapor extraction wells located within the PCE-impacted area can be utilized (**Figure 3**). SVE will be implemented during monthly episodic treatment events. The following sections detail the design for the recommended remediation approach.

3.1 Soil Vapor Extraction Wells

The network of treatment wells will consist of the four existing vapor extraction wells VW001, VW002, VW003, and VW004. VEW wells are 4-inch diameter polyvinyl chloride (PVC) wells screened from approximately 1 to 8 feet bls, with 0.010-slotted PVC screen. VEW well construction details are illustrated in **Figure 8**. Location of the VEWs is illustrated in **Figure 3**.

3.2 Soil Vapor Extraction Modeling

Design of the proposed SVE system is based on performance data gathered during the MAGS™ event on July 11, 2018. During the MAGS™ assessment event, wellhead vacuum readings ranged between 3.3 (VW002) and 5.4 (VW004) inches of water column (in. H_2O) and extraction flow rates ranged between approximately 24.4 (VW002) and 28.5 (VW001) standard cubic feet per minute (scfm). The corresponding calculated radius of influence (ROI), based upon a minimum vacuum influence of 0.1 in. H_2O, ranged from 18 feet (distance from VW002 and VW004) to a maximum of 40 feet (distance from VW001) during the MAGS™ events. The average calculated ROI of 28 ft met or exceeded the proposed ROI of 20 feet; however, due to the variance between 18 feet and 40 feet during testing, the more conservative proposed ROI of 20 ft will be applied for design.

Using the MAGS™ data (**Appendix A**) summarized in the January 2019 SAR, the effective ROI at 0.1 in. H_2O observed at the wellheads was achieved with vacuums ranging from 25 to 30 in. H_2O and flow rates observed from 25.5 to 30 cubic feet per minute (cfm). Using an average applied flow of 28 cfm and 28 in. H_2O as design parameters to operate the four VEWs simultaneously, inclusive of friction losses and 25% safety factors, a maximum extraction vacuum of 42 in. H_2O and total flow of 112 cfm is estimated. Design calculations from the MAGS™ sampling event and extrapolation of these data for this design using the farthest extraction well (VW002) from the portable treatment system is provided in **Appendix B**.

3.3 Soil Vapor Extraction Equipment

AECOM recommends that the VEWs be directly connected to the manifold on the portable treatment unit using 3 inch diameter flex hose; therefore, no trenching or piping will be necessary.

The recommended specifications of the treatment equipment are provided below and associated information for major components is provided in **Appendix C**.

- Vapor Extraction Blower: One 3-phase, Ametek Rotron Regenerative blower model EN6 (or equivalent) with a 5.0 hp motor capable of a maximum flow rate of 210 scfm and a maximum vacuum of 85 in H_2O.
- Moisture Separator: One Rotron Model MS350BS moisture separator (or equivalent) with a 40-gallon capacity and maximum air flow of 350 cfm and vacuum of 22 inches of mercury, equipped with a high moisture level alarm to shut down the extraction blower.
- Control Panel: A weather-tight control panel with run time meters, blower controls, and associated interlocks to prevent blower damage or adverse conditions in the event of an operational fault.

A portable, tow-behind diesel-powered, 3-phase generator will be required to power the SVE blower and components. Episodic system layout is illustrated in **Figure 9**. A process and instrumentation diagram (P&ID) for the proposed SVE system equipment is provided as **Figure 10**.

3.4 Emissions Treatment

Soil vapor analytical results during the MAGS™ test indicated PCE concentrations ranging from 0.94 (VW004) to 3 (VW001) mg/m^3 with corresponding photoionization detector (PID) readings of 387 and 634 ppm. Based on the design flows, and low levels of contaminated emissions, one 55-gallon vapor-phase carbon drum (or equivalent) with 180 pound of granular activated carbon (GAC) capacity and nominal flow rate of 270 cfm will be used for emissions treatment. Vapor mass emission rate estimates indicate this will be sufficient to recover 1 pound of vapor emissions in 30 days, at emission rates of less than 0.5 pounds per day (lb/day). Emissions and carbon capacity calculations are provided in **Appendix B**.

4.0 IMPLEMENTATION

As the VEWs will be directly connected to the manifold on the portable treatment trailer, trenching or piping will not be necessary. Therefore, no preconstruction or construction activities are necessary.

4.1 System Operation, Maintenance, and Monitoring

Initially, a mobile treatment trailer housing the portable SVE system will be mobilized to the site on a weekly basis for one, 8-hour vapor extraction event, for a term of four consecutive weeks. VEWs will be connected directly to the manifold via above-ground 3-inch diameter suction hoses. Hose connections at the 4-inch wellhead will be equipped with a tapered PVC reducer tee and camlock fitting or similar for a secure connection to transfer hose. Vacuum and flow can be adjusted to optimize flow and influence during operation of the four vapor extraction wells. Should screening data indicate favorable reductions in emissions, two SVE wells will be operated instead of all four.

Operational monitoring parameters will be recorded hourly and will include the following:

- System total flow rate
- Individual extraction line flow rate
- Individual extraction line vacuum
- Vapor screening from individual VEW lines
- Wellhead vacuum from monitor well MW004

An effluent air sample will be collected on the first and eighth hour during each event for analysis by EPA Method TO15 (volatile organic compounds; VOCs) to verify contaminant mass removal. A groundwater sample from the moisture separator will be collected, if needed, for analysis of VOHs via EPA 8260 for disposal characterization. After 4 weeks of treatment, if analytical results indicate no detections, SVE treatment will be discontinued. If detections remain, SVE will continued for an additional 4 week term. Episodic treatment will continue for no more than a total of 6 months.

4.2 Remediation Cost

FDEP has approved an estimated $90,000 for SVE system installation and $50,000 for operation and maintenance. An estimated breakdown of costs for the implementation of episodic treatment and monitoring are displayed below:

- Equipment Procurement and Construction: $70,000 (if suitable FDEP or AECOM-owned equipment is unavailable)
- Observation Well Installation: $2,500
- Episodic Operation and Maintenance: $25,000 (up to 6 months of episodic treatment)
- Sampling: $30,000 (air and groundwater)
- Reporting: $8,500 (up to 3 quarterly ISR status reports and one annual status report)

4.3 Groundwater Monitoring

A groundwater monitoring program will be initiated in accordance with the schedule provided in **Table 5**. As reported in the SSAR, groundwater samples were last reported at concentrations exceeding the applicable GCTL for PCE in monitor well MW005 (30 to 35 ft bls) in August 2018. As stated in FDEP's March 19, 2019 SVE Presumptive Remedy Approval, to evaluate criteria for Natural Attenuation Monitoring (NAM) or further remediation, an annual groundwater sampling event will be performed. AECOM proposes to perform this sampling event by August 2019. As wells with previous detections must have two consecutive clean sampling events before being removed from NAM sampling requirements, samples will be collected accordingly from monitor wells MW001, MW005, MW008 and MW009 for select VOHs.

Water levels will be measured prior to sampling for developing groundwater contour drawings to be included in a groundwater monitoring report. Groundwater investigation derived waste (IDW) will be contained in a 55-gallon drum for proper transport and disposal. To reach no further action (NFA) status for final site closure and receive a Site Rehabilitation Completion Order (SRCO), the requirements of Chapter 62-780.680 FAC shall be met.

5.0 REPORTING

5.1 Reporting Requirements

Within 60 days of completing episodic events, an Interim Source Removal Report summarizing treatment activities will be submitted. Within 60 days of the proposed August 2019 groundwater sampling event, a groundwater monitoring report will be submitted that summarizes the proposed August 2019 groundwater sampling activities and evaluates the data for a recommendation to either continue monitoring or perform additional remedial action.

5.2 Termination of Remedial Action

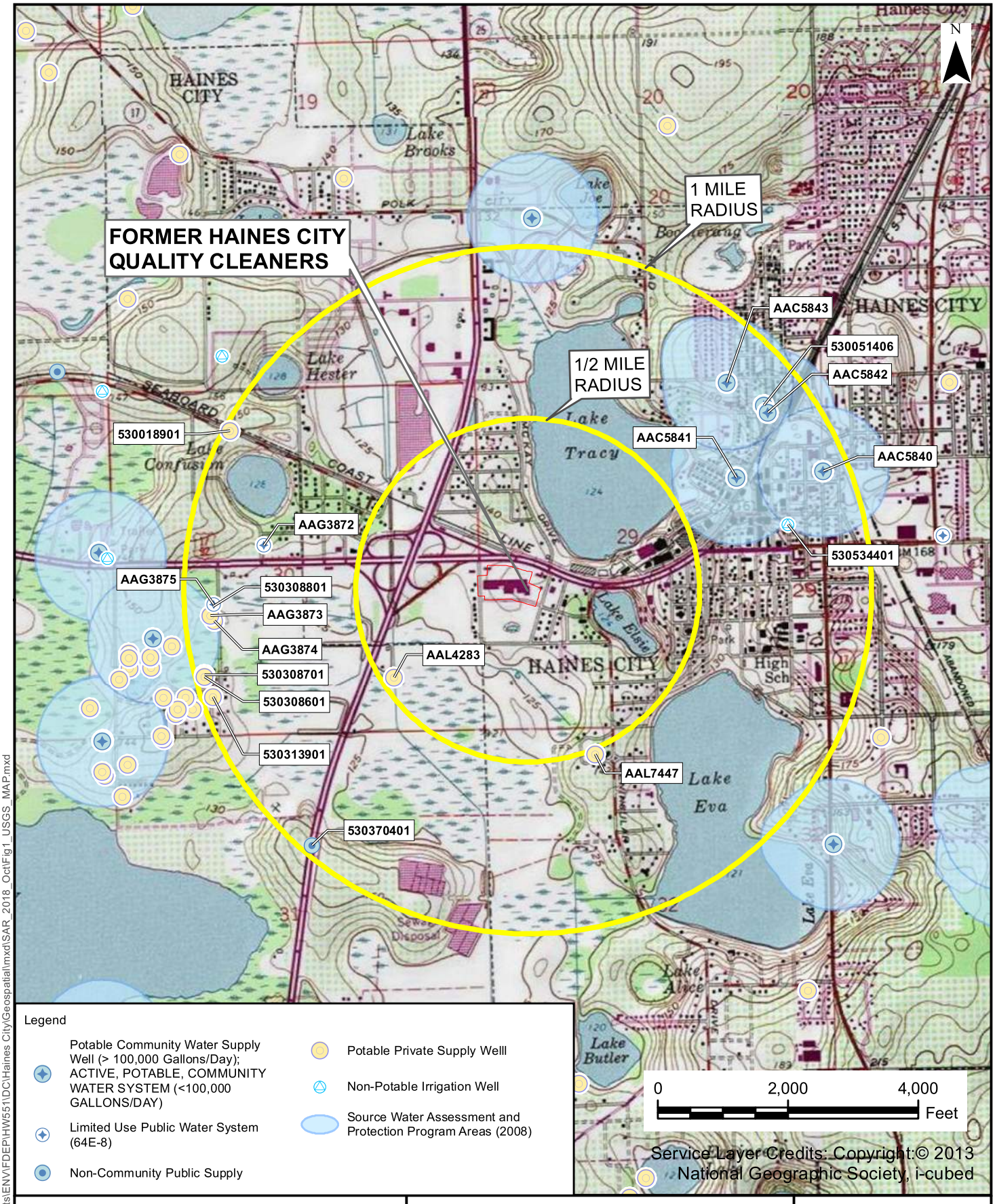
Depending on vapor concentration trends over time, episodic treatment may be discontinued or preparation of an addendum to this original ISRP may be warranted. When the NFA criteria have been achieved, a Source Removal Completion Report (SRCR) will be submitted to the FDEP for consideration of a SRCO. At that time, onsite wells will be abandoned to return the site to conditions similar to those existing prior to remediation.

Based on the degree and extent of impacts at this facility, AECOM anticipates that soil concentrations of chlorinated solvent compounds will be reduced to levels below the SCTLs within 20 to 40 days of operation of the proposed SVE system. Cleanup time was estimated based on prior experience as well as the number of pore volume exchanges (**Appendix B**).

5.3 Off-site Contamination

DPT assessment performed in 2018 indicates that horizontal and vertical delineation of groundwater contaminants appears to be defined and contained on the subject property. The GCTL exceedance of PCE in DP015 at 16 micrograms per liter (µg/L) at 65 feet bls is acknowledged by FDEP as not off-site and downgradient as DP015 is located approximately 380 feet east of the subject property building and on the other side of the current location of the Haines City Quality Cleaners at 7 C Street (**Figure 3**). AECOM recommended in the November 2018 SAR that any further investigation regarding the DP015 location should be conducted in conjunction with the assessment of the current location of the Haines City Quality Cleaners, located at 7 C Street, in between the subject property and the DP015 location. A reconnaissance of that facility conducted in 2016 indicated some assessment work had been done and discussion with the operator indicated that he may be able to produce documentation of that investigation. FDEP's January 22, 2019 SAR review letter recommended installation of a monitor well cluster with two wells (one screened from 40 to 45 feet bls and another screened from 60 to 65 feet bls) at the DP015 location to confirm whether PCE exceeds GCTLs in a properly constructed monitor well. Documentation has not been obtained. The two additional monitor wells will be installed as recommended and sampled during the first quarterly sampling event.

FIGURES



SOURCE:
USGS TOPOGRAPHIC QUADRANGLE
BARTOW, FLORIDA
TOWNSHIP 27 SOUTH
RANGE 27 EAST
SECTION 029

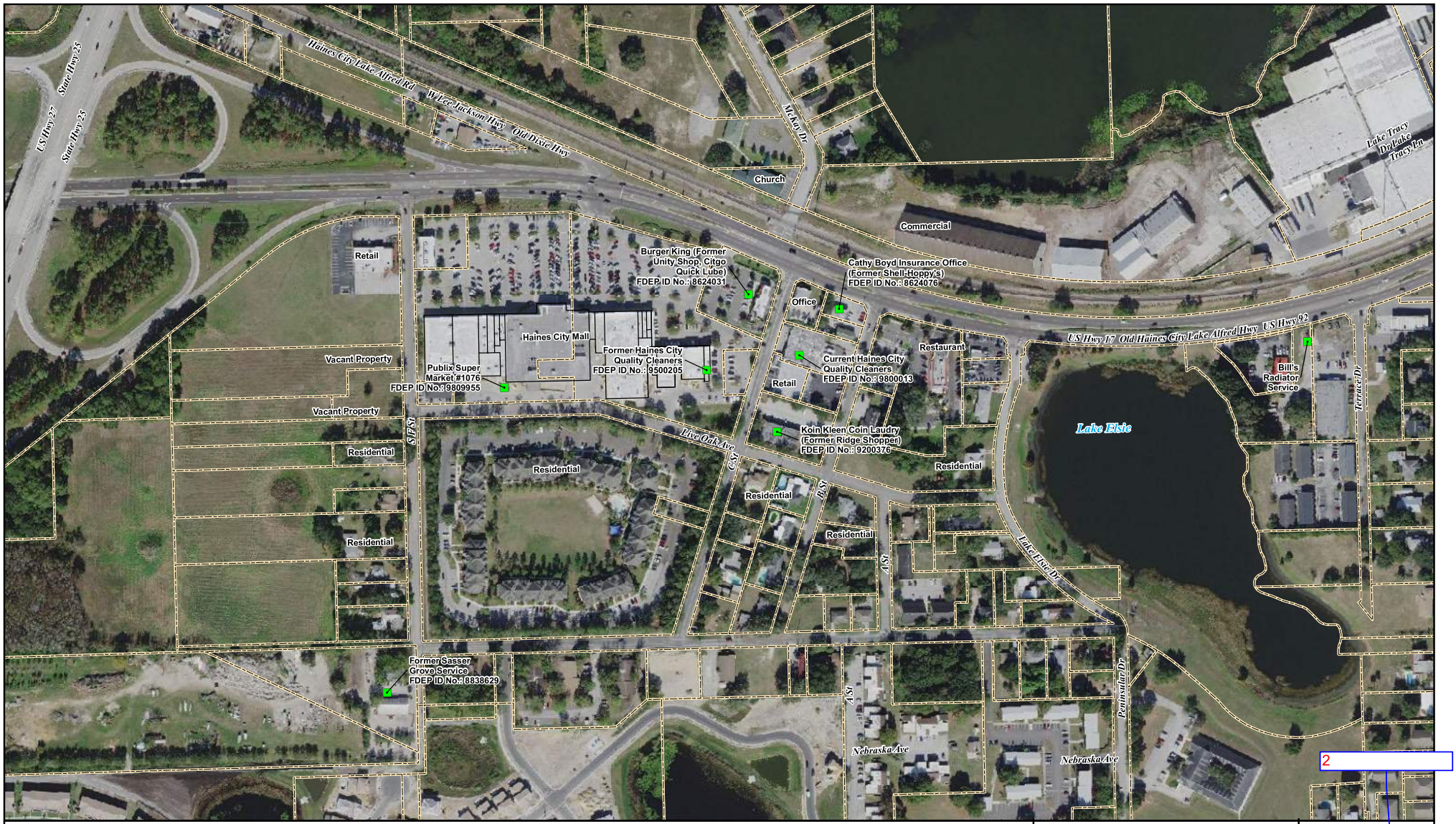
USGS SITE LOCATION MAP

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 1

Document Path: P:\DCS\Projects\ENV\FDEP\HW551\DC\Haines City\Geospatial\mxd\SAR_2018_Oct\Fig1_USGS_MAP.mxd



Legend

- Current or Former FDEP Facility
- Parcel Boundary

N

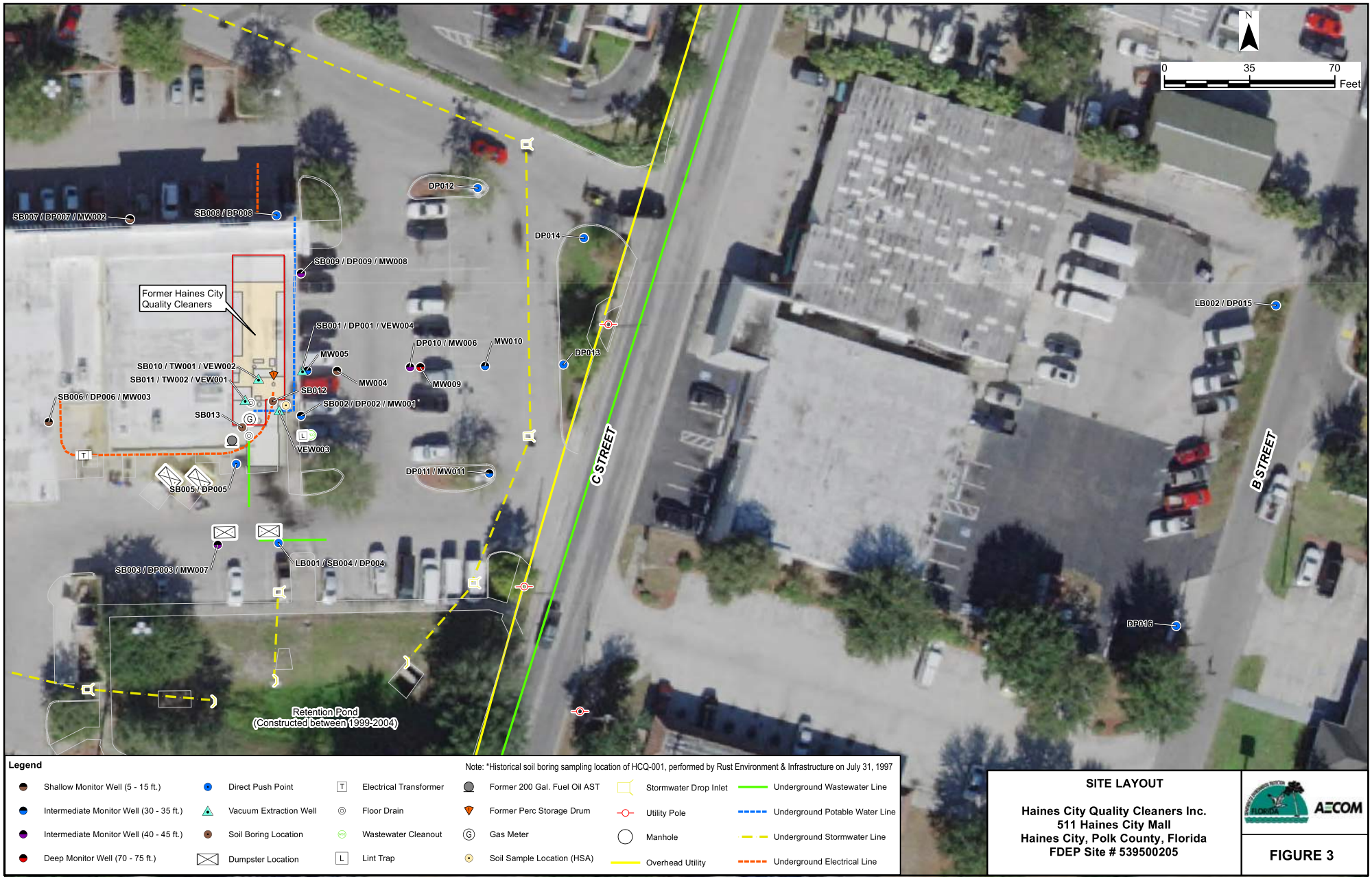
0 250 500 Feet

SITE VICINITY MAP

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 2A



Legend

- Shallow Monitor Well (5 - 15 ft.)
- Intermediate Monitor Well (30 - 35 ft.)
- Intermediate Monitor Well (40 - 45 ft.)
- Deep Monitor Well (70 - 75 ft.)
- Direct Push Point
- Vacuum Extraction Well
- Soil Boring Location
- Dumpster Location
- Electrical Transformer
- Floor Drain
- Wastewater Cleanout
- Lint Trap
- Former 200 Gal. Fuel Oil AST
- Former Perc Storage Drum
- Gas Meter
- Soil Sample Location (HSA)
- Stormwater Drop Inlet
- Utility Pole
- Manhole
- Overhead Utility
- Underground Wastewater Line
- Underground Potable Water Line
- Underground Stormwater Line
- Underground Electrical Line

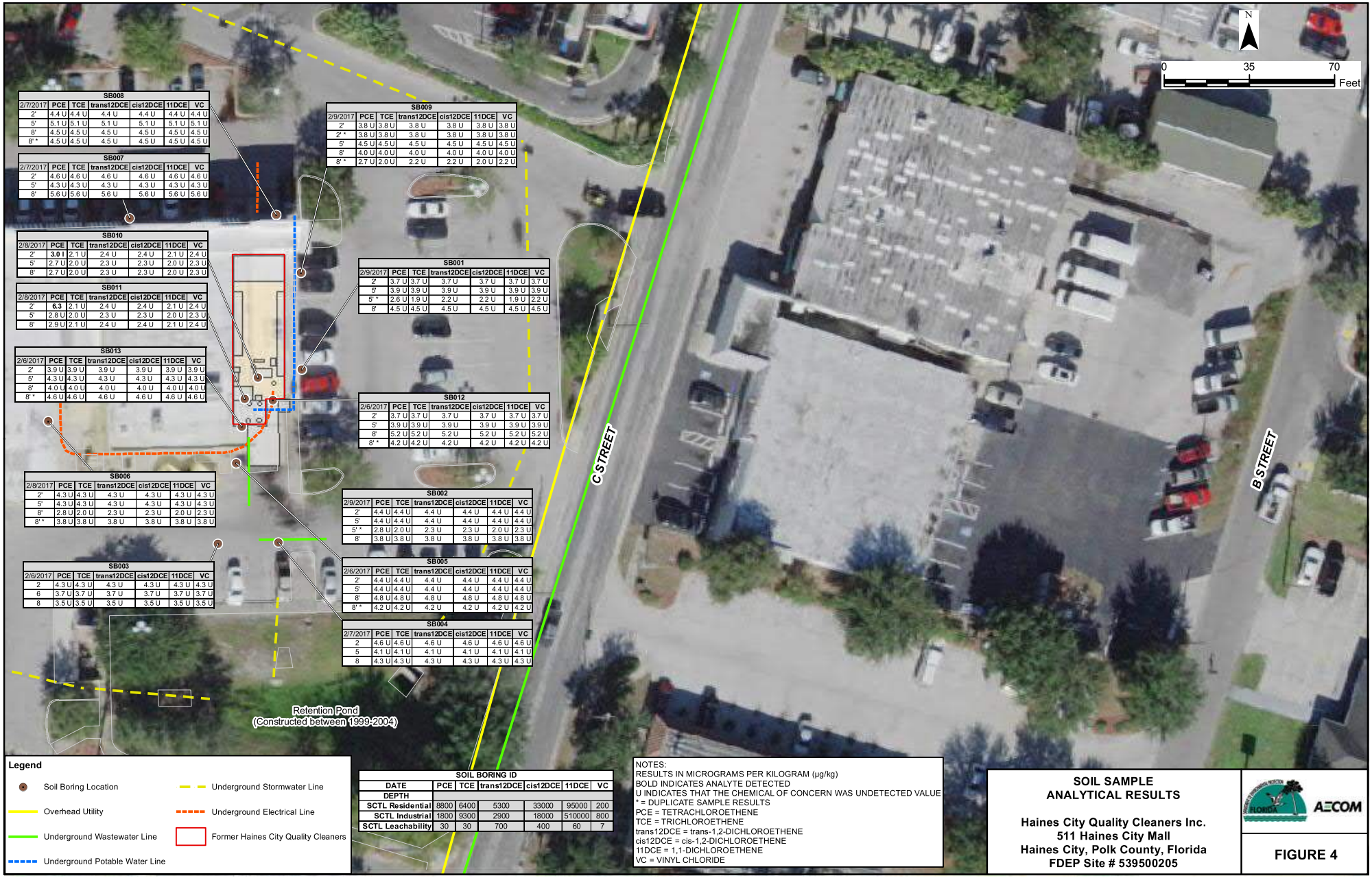
Note: *Historical soil boring sampling location of HCQ-001, performed by Rust Environment & Infrastructure on July 31, 1997

SITE LAYOUT

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 3



SB008

2/7/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
5'	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
8'	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
8' *	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U

SB007

2/7/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
5'	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
8'	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U

SB009

2/9/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2' *	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
5'	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
8'	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
8' *	2.7 U	2.0 U	2.2 U	2.2 U	2.0 U	2.2 U

SB010

2/8/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	**3.0 I**	2.1 U	2.4 U	2.4 U	2.1 U	2.4 U
5'	2.7 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
8'	2.7 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U

SB001

2/9/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
5'	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
5' *	2.6 U	1.9 U	2.2 U	2.2 U	1.9 U	2.2 U
8'	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U

SB011

2/8/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	**6.3**	2.1 U	2.4 U	2.4 U	2.1 U	2.4 U
5'	2.8 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
8'	2.9 U	2.1 U	2.4 U	2.4 U	2.1 U	2.4 U

SB013

2/6/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
5'	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
8'	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
8' *	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U

SB012

2/6/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
5'	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
8'	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
8' *	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U

SB006

2/8/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
5'	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
8'	2.8 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
8' *	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U

SB002

2/9/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
5'	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
5' *	2.8 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
8'	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U

SB003

2/6/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
6	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
8	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U

SB005

2/6/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2'	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
5'	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
8'	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
8' *	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U

SB004

2/7/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
2	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
5	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
8	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U

Legend

- Soil Boring Location
- Overhead Utility
- Underground Wastewater Line
- Underground Potable Water Line
- Underground Stormwater Line
- Underground Electrical Line
- Former Haines City Quality Cleaners

SOIL BORING ID

DATE	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
DEPTH						
SCTL Residential	8800	6400	5300	33000	95000	200
SCTL Industrial	1800	9300	2900	18000	510000	800
SCTL Leachability	30	30	700	400	60	7

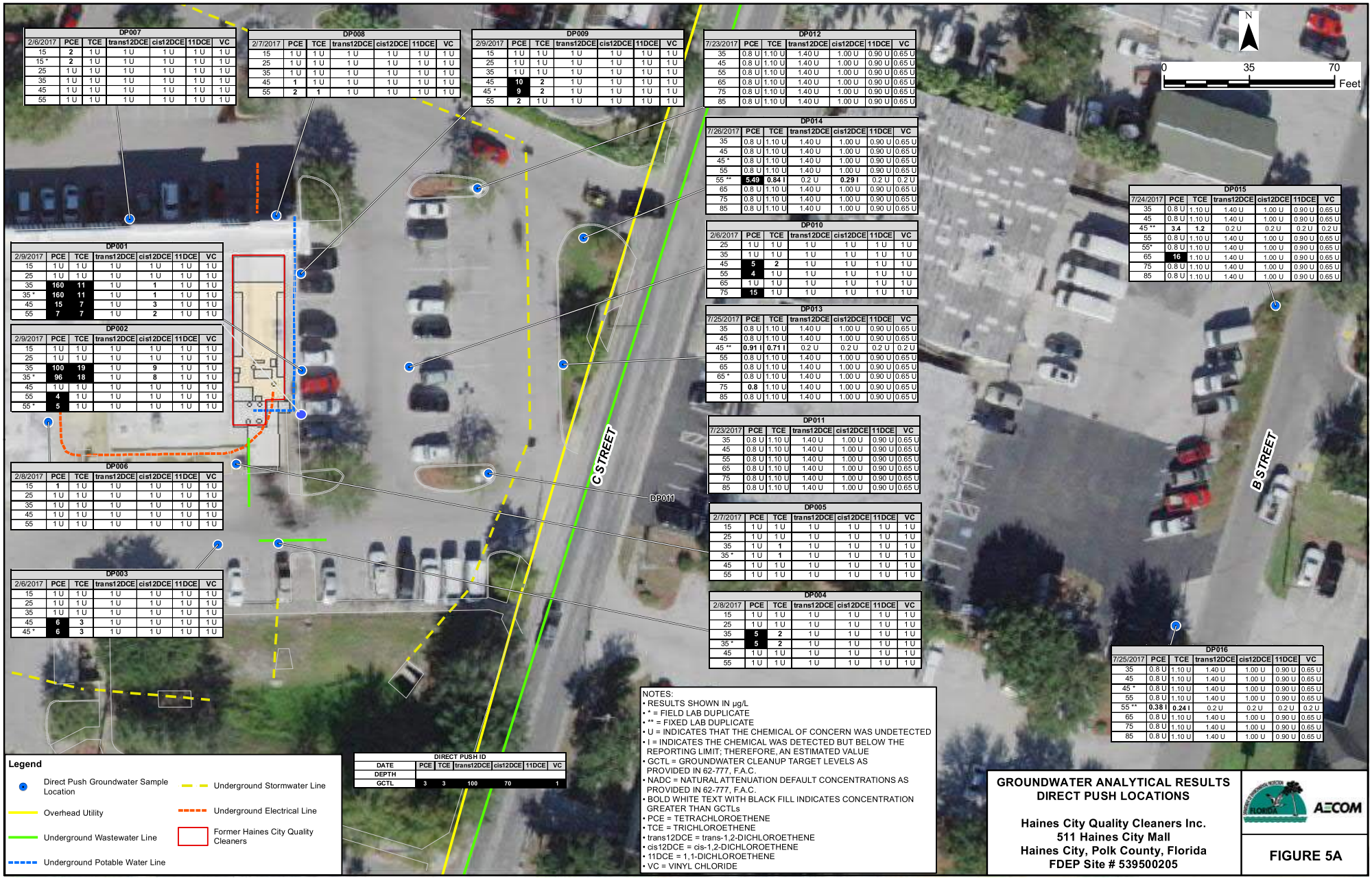
NOTES:
RESULTS IN MICROGRAMS PER KILOGRAM (µg/kg)
BOLD INDICATES ANALYTE DETECTED
U INDICATES THAT THE CHEMICAL OF CONCERN WAS UNDETECTED VALUE
* = DUPLICATE SAMPLE RESULTS
PCE = TETRACHLOROETHENE
TCE = TRICHLOROETHENE
trans12DCE = trans-1,2-DICHLOROETHENE
cis12DCE = cis-1,2-DICHLOROETHENE
11DCE = 1,1-DICHLOROETHENE
VC = VINYL CHLORIDE

SOIL SAMPLE ANALYTICAL RESULTS

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 4



DP007

2/6/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	2	1 U	1 U	1 U	1 U	1 U
15 *	2	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	1 U	1 U	1 U	1 U	1 U	1 U
45	1 U	1 U	1 U	1 U	1 U	1 U
55	1 U	1 U	1 U	1 U	1 U	1 U

DP008

2/7/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	1 U	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	1 U	1 U	1 U	1 U	1 U	1 U
45	1	1 U	1 U	1 U	1 U	1 U
55	2	1	1 U	1 U	1 U	1 U

DP009

2/9/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	1 U	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	1 U	1 U	1 U	1 U	1 U	1 U
45	10	2	1 U	1 U	1 U	1 U
45 *	9	2	1 U	1 U	1 U	1 U
55	2	1 U	1 U	1 U	1 U	1 U

DP012

7/23/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
35	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
55	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
65	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
75	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
85	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U

DP014

7/26/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
35	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45 *	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
55	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
55 **	5.49	0.84 I	0.2 U	0.29 I	0.2 U	0.2 U
65	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
75	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
85	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U

DP015

7/24/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
35	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45 **	3.4	1.2	0.2 U	0.2 U	0.2 U	0.2 U
55	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
55*	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
65	16	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
75	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
85	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U

DP001

2/9/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	1 U	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	160	11	1 U	1	1 U	1 U
35 *	160	11	1 U	1	1 U	1 U
45	15	7	1 U	3	1 U	1 U
55	7	7	1 U	2	1 U	1 U

DP010

2/6/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
25	1 U	1 U	1 U	1 U	1 U	1 U
35	1 U	1 U	1 U	1 U	1 U	1 U
45	5	2	1 U	1 U	1 U	1 U
55	4	1 U	1 U	1 U	1 U	1 U
65	1 U	1 U	1 U	1 U	1 U	1 U
75	15	1 U	1 U	1 U	1 U	1 U

DP002

2/9/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	1 U	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	100	19	1 U	9	1 U	1 U
35 *	96	18	1 U	8	1 U	1 U
45	1 U	1 U	1 U	1 U	1 U	1 U
55	4	1 U	1 U	1 U	1 U	1 U
55 *	5	1 U	1 U	1 U	1 U	1 U

DP013

7/25/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
35	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45 **	0.91 I	0.71 I	0.2 U	0.2 U	0.2 U	0.2 U
55	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
65	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
65 *	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
75	0.8	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
85	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U

DP006

2/8/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	1	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	1 U	1 U	1 U	1 U	1 U	1 U
45	1 U	1 U	1 U	1 U	1 U	1 U
55	1 U	1 U	1 U	1 U	1 U	1 U

DP011

7/23/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
35	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
55	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
65	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
75	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
85	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U

DP003

2/6/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	1 U	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	1 U	1 U	1 U	1 U	1 U	1 U
45	6	3	1 U	1 U	1 U	1 U
45 *	6	3	1 U	1 U	1 U	1 U

DP005

2/7/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	1 U	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	1 U	1	1 U	1 U	1 U	1 U
35 *	1 U	1	1 U	1 U	1 U	1 U
45	1 U	1 U	1 U	1 U	1 U	1 U
55	1 U	1 U	1 U	1 U	1 U	1 U

DP004

2/8/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
15	1 U	1 U	1 U	1 U	1 U	1 U
25	1 U	1 U	1 U	1 U	1 U	1 U
35	5	2	1 U	1 U	1 U	1 U
35 *	5	2	1 U	1 U	1 U	1 U
45	1 U	1 U	1 U	1 U	1 U	1 U
55	1 U	1 U	1 U	1 U	1 U	1 U

DP016

7/25/2017	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
35	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
45 *	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
55	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
55 **	0.38 I	0.24 I	0.2 U	0.2 U	0.2 U	0.2 U
65	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
75	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
85	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U

DIRECT PUSH ID

DATE	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
DEPTH						
GCTL	3	3	100	70		1

Legend

- Direct Push Groundwater Sample Location
- Overhead Utility
- Underground Wastewater Line
- Underground Potable Water Line
- Underground Stormwater Line
- Underground Electrical Line
- Former Haines City Quality Cleaners

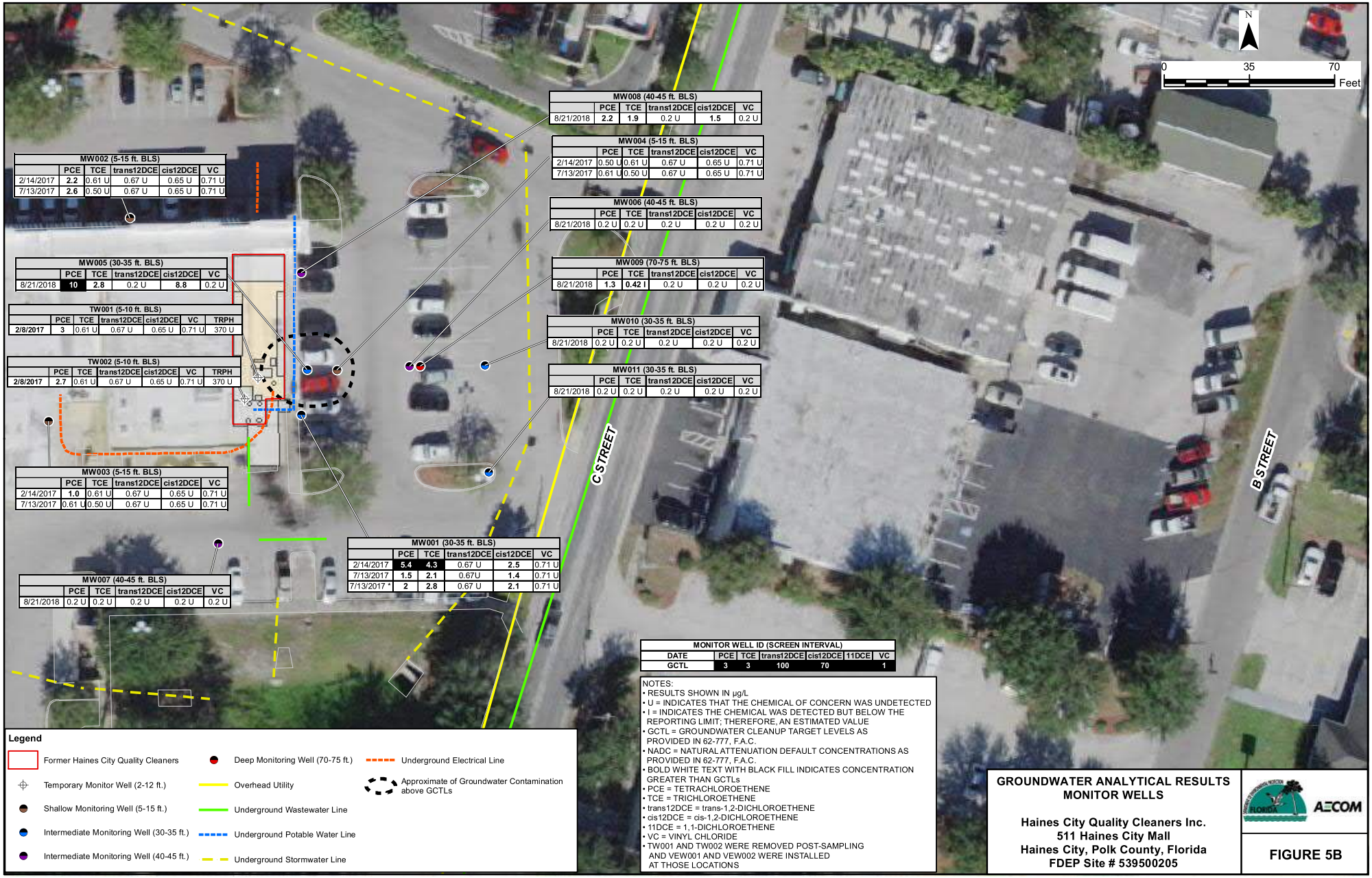
NOTES:
- RESULTS SHOWN IN µg/L
- * = FIELD LAB DUPLICATE
- ** = FIXED LAB DUPLICATE
- U = INDICATES THAT THE CHEMICAL OF CONCERN WAS UNDETECTED
- I = INDICATES THE CHEMICAL WAS DETECTED BUT BELOW THE REPORTING LIMIT; THEREFORE, AN ESTIMATED VALUE
- GCTL = GROUNDWATER CLEANUP TARGET LEVELS AS PROVIDED IN 62-777, F.A.C.
- NADC = NATURAL ATTENUATION DEFAULT CONCENTRATIONS AS PROVIDED IN 62-777, F.A.C.
- BOLD WHITE TEXT WITH BLACK FILL INDICATES CONCENTRATION GREATER THAN GCTLs
- PCE = TETRACHLOROETHENE
- TCE = TRICHLOROETHENE
- trans12DCE = trans-1,2-DICHLOROETHENE
- cis12DCE = cis-1,2-DICHLOROETHENE
- 11DCE = 1,1-DICHLOROETHENE
- VC = VINYL CHLORIDE

GROUNDWATER ANALYTICAL RESULTS DIRECT PUSH LOCATIONS

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 5A



MW002 (5-15 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
2/14/2017	2.2	0.61 U	0.67 U	0.65 U	0.71 U
7/13/2017	2.6	0.50 U	0.67 U	0.65 U	0.71 U

MW005 (30-35 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
8/21/2018	10	2.8	0.2 U	8.8	0.2 U

TW001 (5-10 ft. BLS)						
	PCE	TCE	trans12DCE	cis12DCE	VC	TRPH
2/8/2017	3	0.61 U	0.67 U	0.65 U	0.71 U	370 U

TW002 (5-10 ft. BLS)						
	PCE	TCE	trans12DCE	cis12DCE	VC	TRPH
2/8/2017	2.7	0.61 U	0.67 U	0.65 U	0.71 U	370 U

MW003 (5-15 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
2/14/2017	1.0	0.61 U	0.67 U	0.65 U	0.71 U
7/13/2017	0.61 U	0.50 U	0.67 U	0.65 U	0.71 U

MW007 (40-45 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
8/21/2018	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

MW001 (30-35 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
2/14/2017	5.4	4.3	0.67 U	2.5	0.71 U
7/13/2017	1.5	2.1	0.67U	1.4	0.71 U
7/13/2017 *	2	2.8	0.67 U	2.1	0.71 U

MW008 (40-45 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
8/21/2018	2.2	1.9	0.2 U	1.5	0.2 U

MW004 (5-15 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
2/14/2017	0.50 U	0.61 U	0.67 U	0.65 U	0.71 U
7/13/2017	0.61 U	0.50 U	0.67 U	0.65 U	0.71 U

MW006 (40-45 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
8/21/2018	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

MW009 (70-75 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
8/21/2018	1.3	0.42 I	0.2 U	0.2 U	0.2 U

MW010 (30-35 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
8/21/2018	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

MW011 (30-35 ft. BLS)					
	PCE	TCE	trans12DCE	cis12DCE	VC
8/21/2018	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

MONITOR WELL ID (SCREEN INTERVAL)						
DATE	PCE	TCE	trans12DCE	cis12DCE	11DCE	VC
GCTL	3	3	100	70		1

Legend

- Former Haines City Quality Cleaners
- Temporary Monitor Well (2-12 ft.)
- Shallow Monitoring Well (5-15 ft.)
- Intermediate Monitoring Well (30-35 ft.)
- Intermediate Monitoring Well (40-45 ft.)
- Deep Monitoring Well (70-75 ft.)
- Overhead Utility
- Underground Wastewater Line
- Underground Potable Water Line
- Underground Stormwater Line
- Underground Electrical Line
- Approximate of Groundwater Contamination above GCTLs

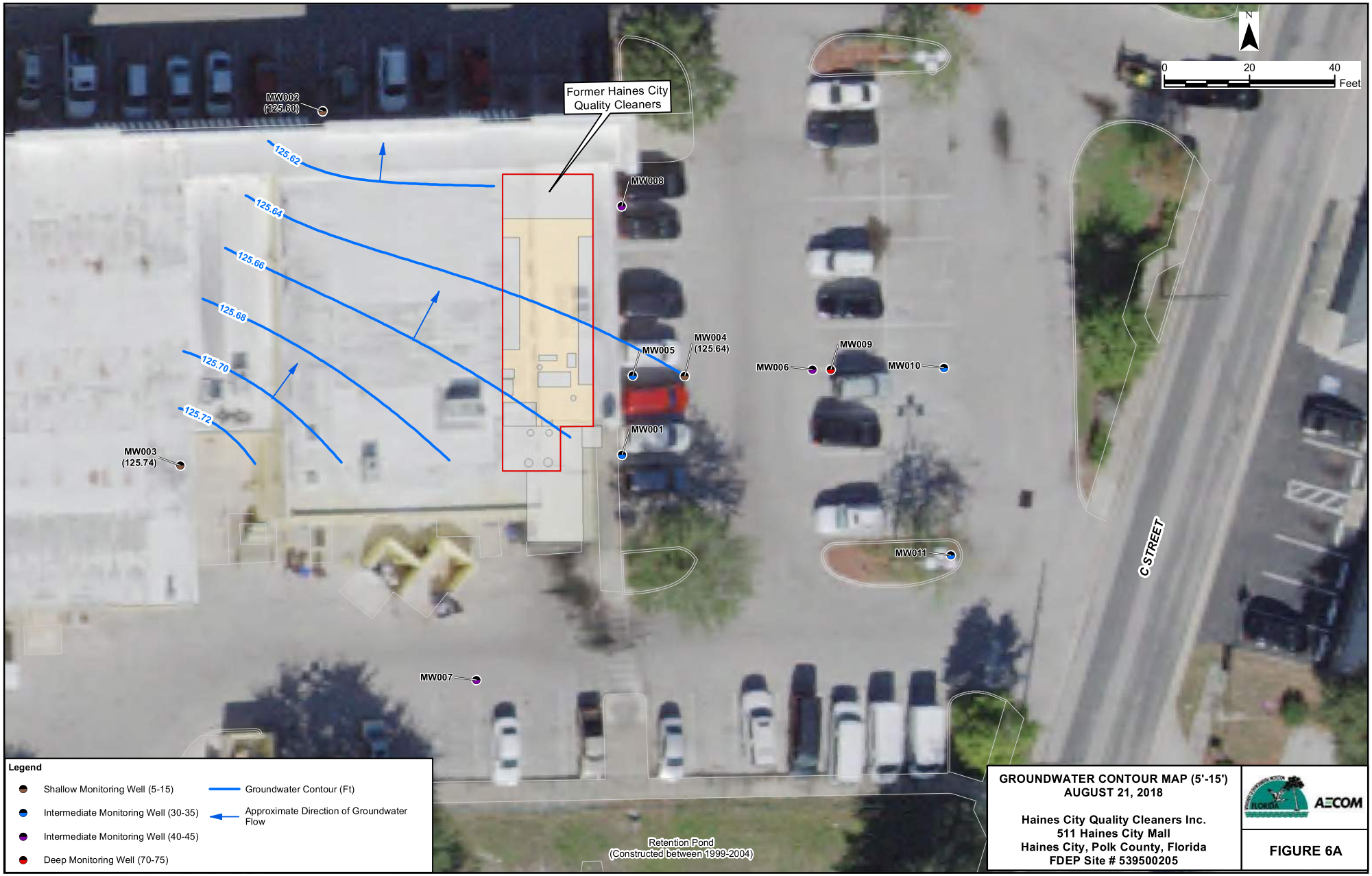
NOTES:
- RESULTS SHOWN IN µg/L
- U = INDICATES THAT THE CHEMICAL OF CONCERN WAS UNDETECTED
- I = INDICATES THE CHEMICAL WAS DETECTED BUT BELOW THE REPORTING LIMIT; THEREFORE, AN ESTIMATED VALUE
- GCTL = GROUNDWATER CLEANUP TARGET LEVELS AS PROVIDED IN 62-777, F.A.C.
- NADC = NATURAL ATTENUATION DEFAULT CONCENTRATIONS AS PROVIDED IN 62-777, F.A.C.
- BOLD WHITE TEXT WITH BLACK FILL INDICATES CONCENTRATION GREATER THAN GCTLs
- PCE = TETRACHLOROETHENE
- TCE = TRICHLOROETHENE
- trans12DCE = trans-1,2-DICHLOROETHENE
- cis12DCE = cis-1,2-DICHLOROETHENE
- 11DCE = 1,1-DICHLOROETHENE
- VC = VINYL CHLORIDE
- TW001 AND TW002 WERE REMOVED POST-SAMPLING AND VEW001 AND VEW002 WERE INSTALLED AT THOSE LOCATIONS

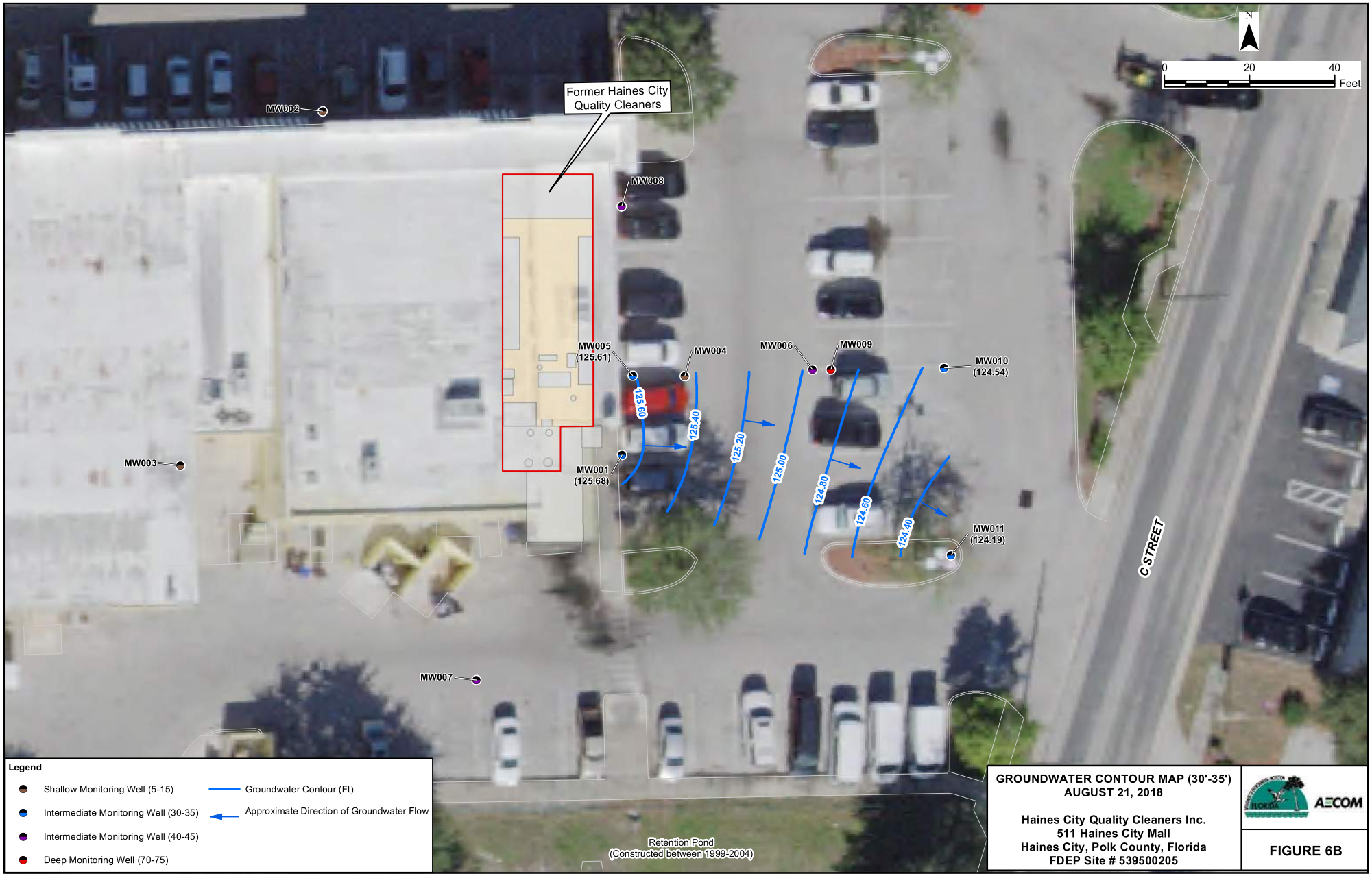
GROUNDWATER ANALYTICAL RESULTS
MONITOR WELLS

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 5B


N
0
20
40
Feet
Former Haines City Quality Cleaners
MW002 (125.60)
MW008
MW004 (125.64)
MW005
MW009
MW006
MW010
MW001
MW003 (125.74)
MW011
MW007
C STREET
125.62
125.64
125.66
125.68
125.70
125.72
Retention Pond (Constructed between 1999-2004)
Legend
Shallow Monitoring Well (5-15)
Intermediate Monitoring Well (30-35)
Intermediate Monitoring Well (40-45)
Deep Monitoring Well (70-75)
Groundwater Contour (Ft)
Approximate Direction of Groundwater Flow
GROUNDWATER CONTOUR MAP (5'-15')
AUGUST 21, 2018
Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205
AECOM
FIGURE 6A

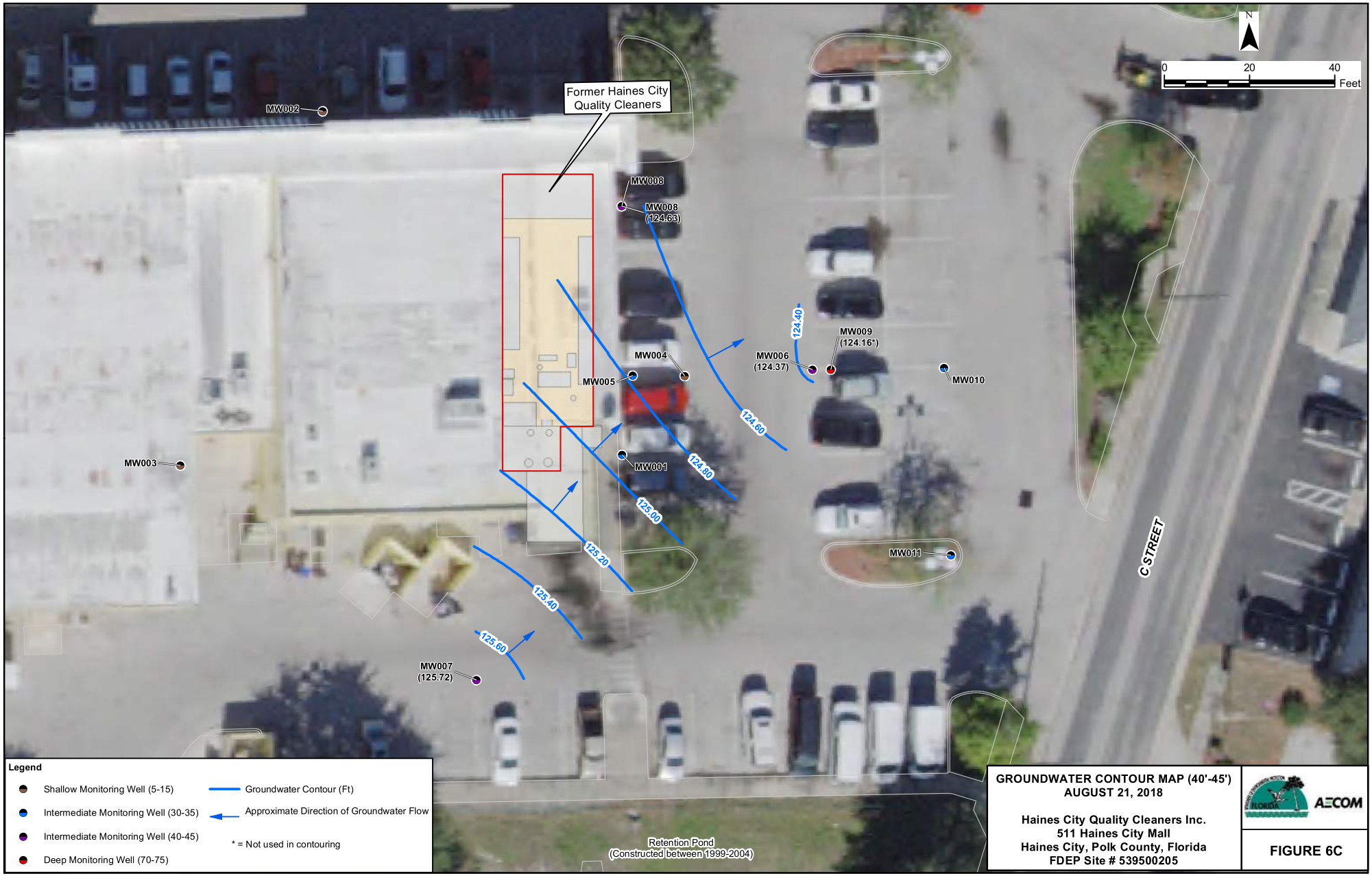


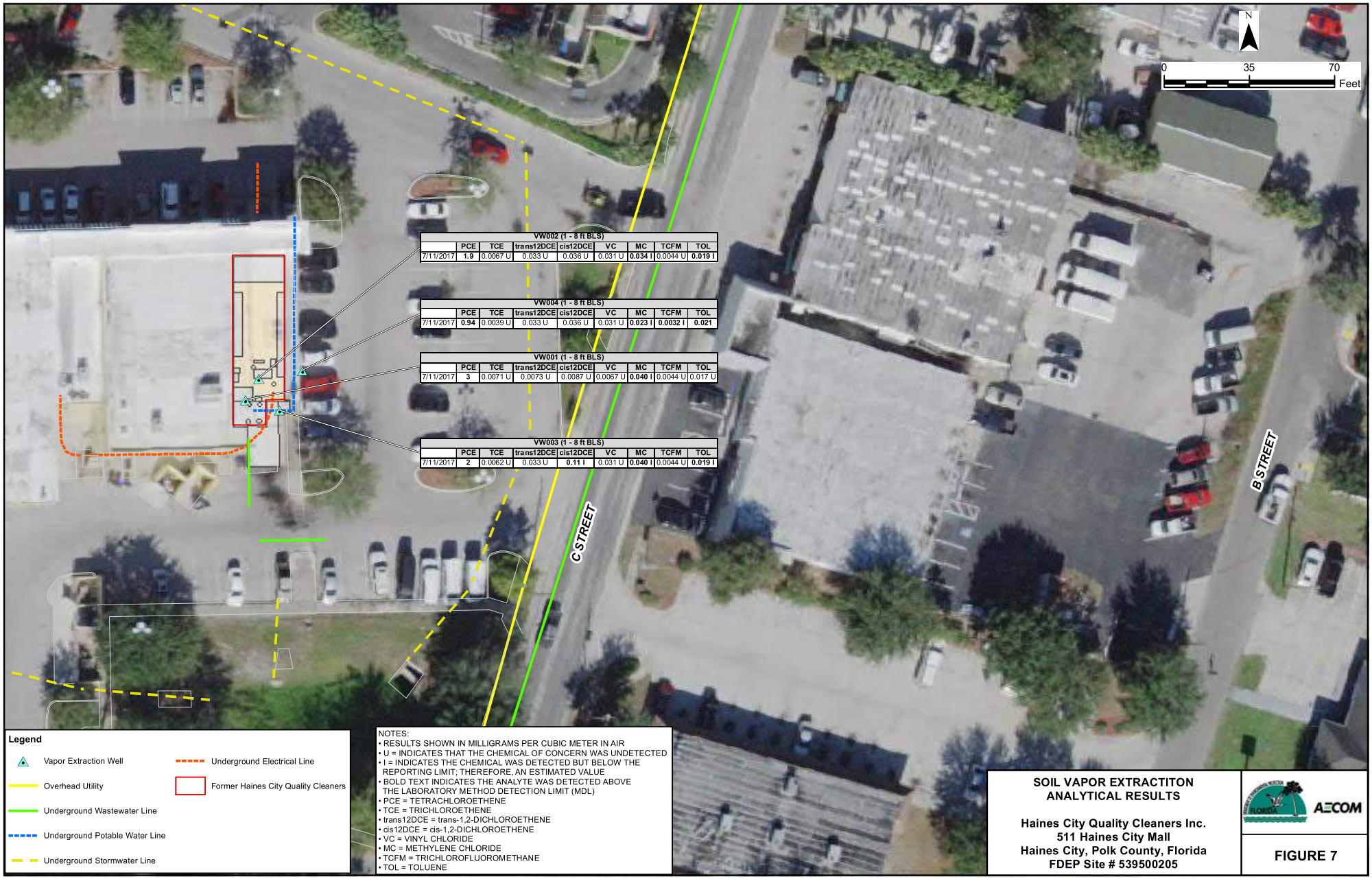
GROUNDWATER CONTOUR MAP (30'-35')
AUGUST 21, 2018

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 6B


N
0
20
40
Feet
Former Haines City Quality Cleaners
MW002
MW008
MW008 (124.63)
MW009 (124.16*)
MW006 (124.37)
MW004
MW005
MW010
MW003
MW001
MW011
MW007 (125.72)
124.40
124.60
124.80
125.00
125.20
125.40
125.60
C STREET
Retention Pond (Constructed between 1999-2004)
Legend
Shallow Monitoring Well (5-15)
Intermediate Monitoring Well (30-35)
Intermediate Monitoring Well (40-45)
Deep Monitoring Well (70-75)
Groundwater Contour (Ft)
Approximate Direction of Groundwater Flow
* = Not used in contouring
GROUNDWATER CONTOUR MAP (40'-45')
AUGUST 21, 2018
Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205
AECOM
FIGURE 6C



VW002 (1 - 8 ft BLS)

	PCE	TCE	trans12DCE	cis12DCE	VC	MC	TCFM	TOL
7/11/2017	**1.9**	0.0067 U	0.033 U	0.036 U	0.031 U	**0.034 I**	0.0044 U	**0.019 I**

VW004 (1 - 8 ft BLS)

	PCE	TCE	trans12DCE	cis12DCE	VC	MC	TCFM	TOL
7/11/2017	**0.94**	0.0039 U	0.033 U	0.036 U	0.031 U	**0.023 I**	**0.0032 I**	**0.021**

VW001 (1 - 8 ft BLS)

	PCE	TCE	trans12DCE	cis12DCE	VC	MC	TCFM	TOL
7/11/2017	**3**	0.0071 U	0.0073 U	0.0087 U	0.0067 U	**0.040 I**	0.0044 U	0.017 U

VW003 (1 - 8 ft BLS)

	PCE	TCE	trans12DCE	cis12DCE	VC	MC	TCFM	TOL
7/11/2017	**2**	0.0062 U	0.033 U	**0.11 I**	0.031 U	**0.040 I**	0.0044 U	**0.019 I**

Legend

- Vapor Extraction Well
- Overhead Utility
- Underground Wastewater Line
- Underground Potable Water Line
- Underground Stormwater Line
- Underground Electrical Line
- Former Haines City Quality Cleaners

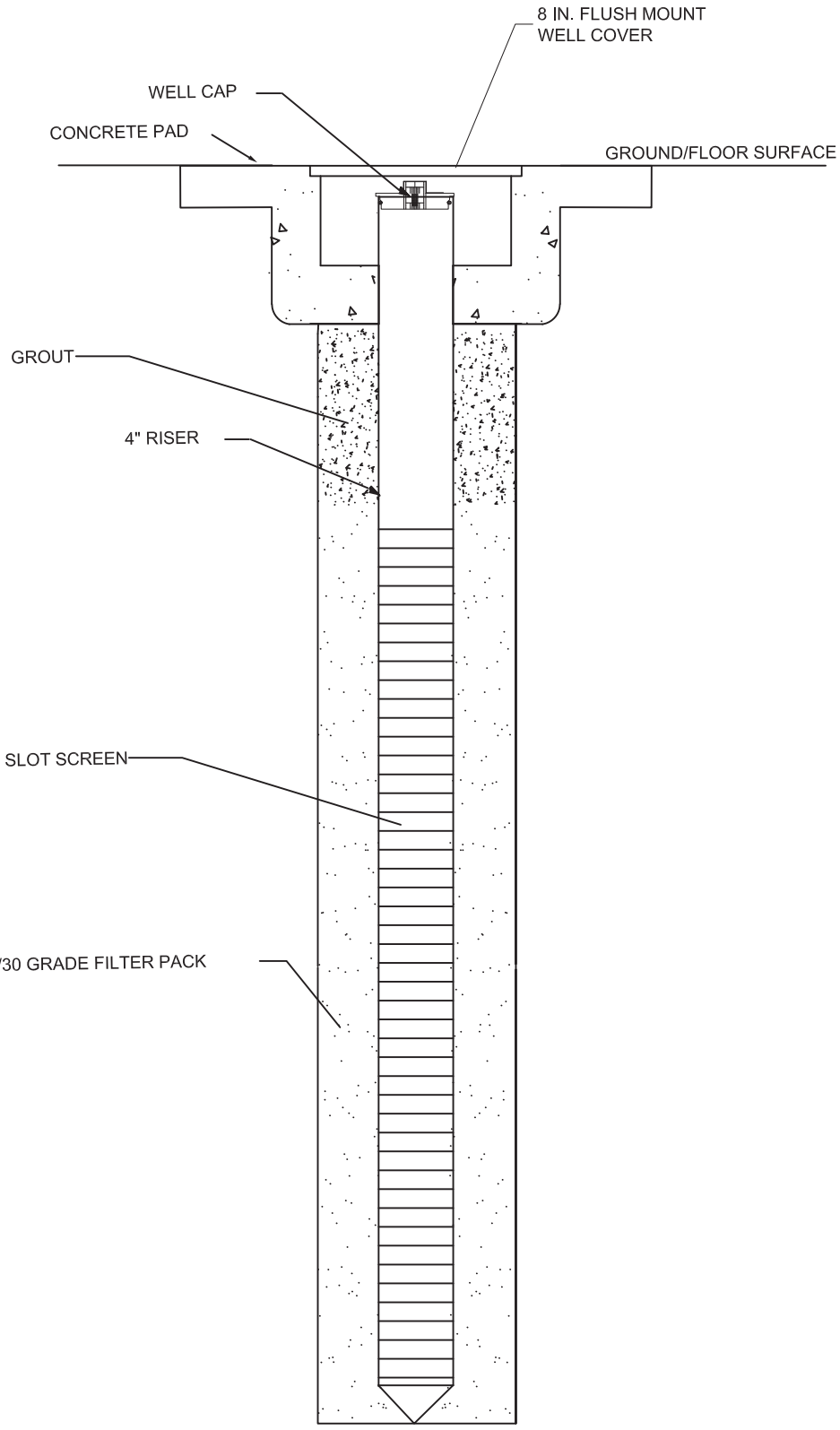
NOTES:
- RESULTS SHOWN IN MILLIGRAMS PER CUBIC METER IN AIR
- U = INDICATES THAT THE CHEMICAL OF CONCERN WAS UNDETECTED
- I = INDICATES THE CHEMICAL WAS DETECTED BUT BELOW THE REPORTING LIMIT; THEREFORE, AN ESTIMATED VALUE
- BOLD TEXT INDICATES THE ANALYTE WAS DETECTED ABOVE THE LABORATORY METHOD DETECTION LIMIT (MDL)
- PCE = TETRACHLOROETHENE
- TCE = TRICHLOROETHENE
- trans12DCE = trans-1,2-DICHLOROETHENE
- cis12DCE = cis-1,2-DICHLOROETHENE
- VC = VINYL CHLORIDE
- MC = METHYLENE CHLORIDE
- TCFM = TRICHLOROFLUOROMETHANE
- TOL = TOLUENE

SOIL VAPOR EXTRACTITON ANALYTICAL RESULTS

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 7



VAPOR EXTRACTION WELL DETAIL
NOT TO SCALE

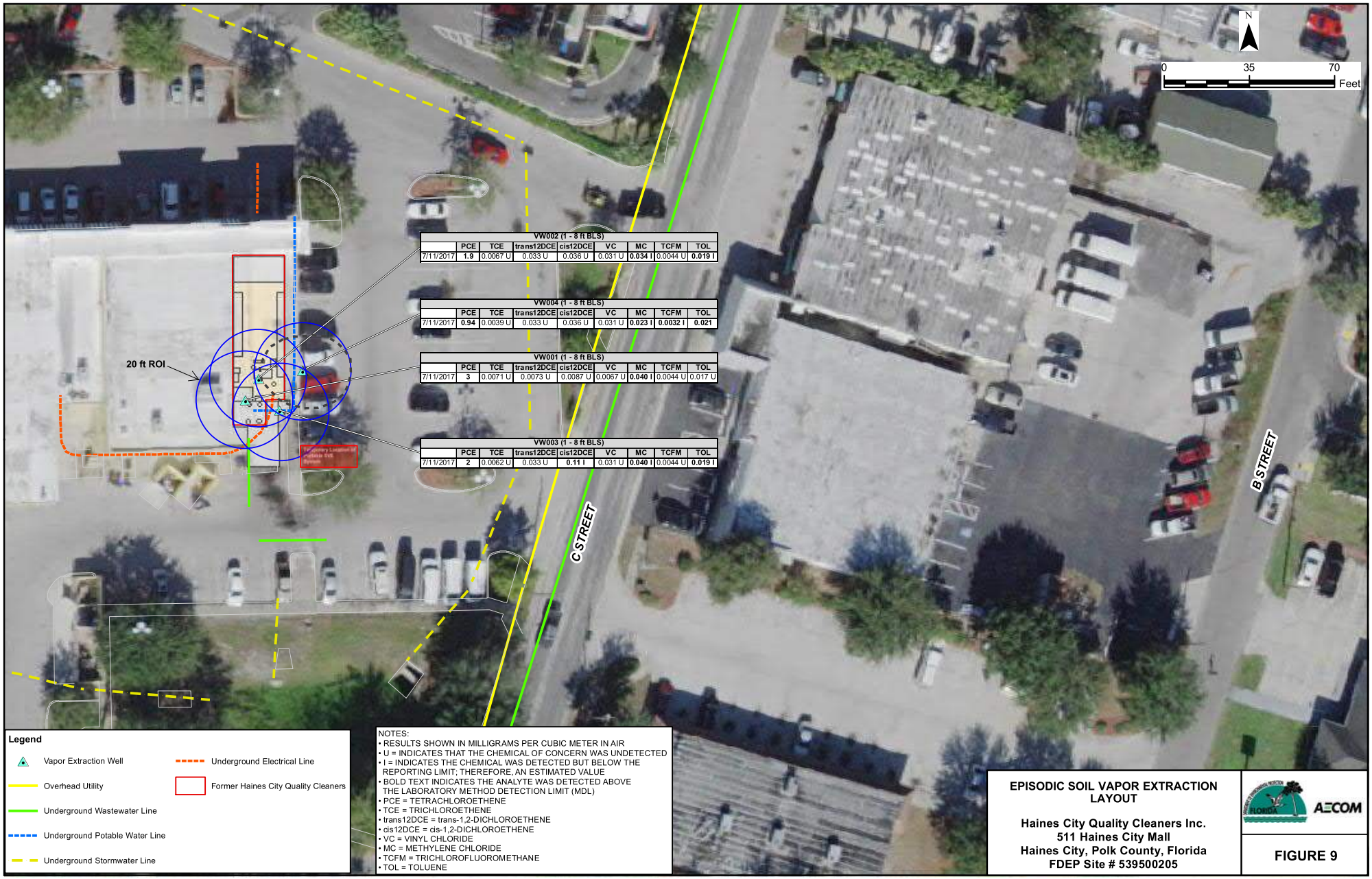
FIGURE 8

VAPOR EXTRACTION WELL DETAIL

FORMER HAINES CITY QUALITY CLEANERS, INC.
511 Haines City Mall, Haines City, Polk County, Florida
FDEP FACILITY ID NO.: 539500205

5/8/2019

REVISED BY:
DRAWN BY:
p:\dcs\projects\env\fdep\hw551\dc\haines city\dc030c isrp 60600730\900-cad, gis\910-cad\20-sheets\f8_vw detail.dwg



NOTES:
- RESULTS SHOWN IN MILLIGRAMS PER CUBIC METER IN AIR
- U = INDICATES THAT THE CHEMICAL OF CONCERN WAS UNDETECTED
- I = INDICATES THE CHEMICAL WAS DETECTED BUT BELOW THE REPORTING LIMIT; THEREFORE, AN ESTIMATED VALUE
- BOLD TEXT INDICATES THE ANALYTE WAS DETECTED ABOVE THE LABORATORY METHOD DETECTION LIMIT (MDL)
- PCE = TETRACHLOROETHENE
- TCE = TRICHLOROETHENE
- trans12DCE = trans-1,2-DICHLOROETHENE
- cis12DCE = cis-1,2-DICHLOROETHENE
- VC = VINYL CHLORIDE
- MC = METHYLENE CHLORIDE
- TCFM = TRICHLOROFLUOROMETHANE
- TOL = TOLUENE

EPISODIC SOIL VAPOR EXTRACTION LAYOUT

Haines City Quality Cleaners Inc.
511 Haines City Mall
Haines City, Polk County, Florida
FDEP Site # 539500205

AECOM

FIGURE 9

LEGEND:

- WATER LINE
- AIR LINE
- ELECTRIC LINE
- (L3) LEVEL SWITCH HIGH–HIGH
- (L2) LEVEL SWITCH HIGH
- (L1) LEVEL SWITCH LOW
- CONTACT
- (VR) VACUUM RELIEF
- (P) PRESSURE GAUGE (0–60 PSI)
- (SP) SAMPLE PORT
- (T) TEMPERATURE (0–250 DEGREE F)
- (GV) GLOBE VALVE
- (TO) GROUNDWATER TOTALIZING FLOW METER
- (CV) CHECK VALVE
- (V) VACUUM GAUGE (0–60 "H2O)
- (F3) 3–INCH DIRECT READ FLOW METER, ERDCO (15–150 SCFM)
- (VT) VACUUM TRANSMITTER
- (BV) BALL VALVE
- (WYE) Y–TYPE STRAINER
- (DF) DILUTION FILTER

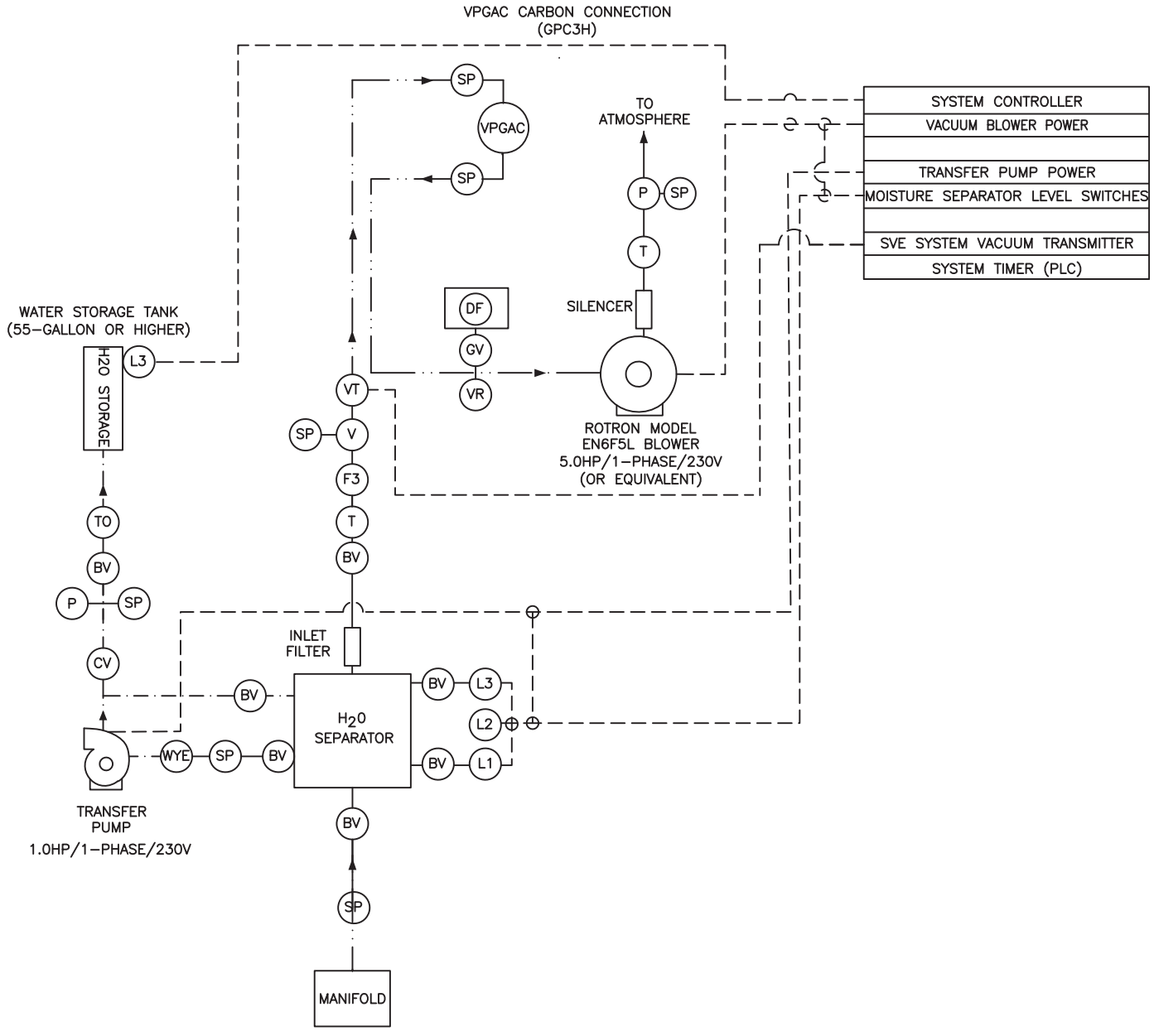


FIGURE 8

VAPOR EXTRACTION WELL DETAIL

FORMER HAINES CITY QUALITY CLEANERS, INC.
511 Haines City Mall, Haines City, Polk County, Florida
FDEP FACILITY ID NO.: 539500205

5/8/2019

REVISED BY:
DRAWN BY:
c:\users\kingl1\desktop\haines city isr\f10_pid.dwg

TABLES

TABLE 1
SOIL ANALYTICAL DATA

Facility Name: Haines City Quality Cleaners
Facility ID#: 539500205

Sample ID	Depth (bls)	Sample Date		PCE	TCE	trans-1,2-DCE	cis-1,2-DCE	1,1-DCE	Vinyl chloride
				µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
			SCTL Residential	8800	6400	5300	33000	95000	200
			SCTL Industrial	1800	9300	2900	18000	510000	800
			SCTL Leachability	30	30	700	400	60	7
SB001	2	2/9/2017		3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
SB001	5	2/9/2017		3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB001 duplicate*	5	2/9/2017		2.6 U	1.9 U	2.2 U	2.2 U	1.9 U	2.2 U
SB001	8	2/9/2017		4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
SB002	2	2/9/2017		4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
SB002	5	2/9/2017		4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
SB002 duplicate*	5	2/9/2017		2.8 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
SB002	8	2/9/2017		3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
SB003	2	2/6/2017		4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
SB003	6	2/6/2017		3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
SB003	8	2/6/2017		3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
SB004	2	2/7/2017		4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
SB004	5	2/7/2017		4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
SB004	8	2/7/2017		4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
SB005	2	2/6/2017		4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
SB005	5	2/6/2017		4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
SB005	8	2/6/2017		4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
SB005 duplicate	8	2/6/2017		4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
SB006	2	2/8/2017		4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
SB006	5	2/8/2017		4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
SB006 duplicate*	5	2/8/2017		2.8 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
SB006	8	2/8/2017		3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U

TABLE 1
SOIL ANALYTICAL DATA

Facility Name: Haines City Quality Cleaners
Facility ID#: 539500205

Sample ID	Depth (bls)	Sample Date		PCE	TCE	trans-1,2-DCE	cis-1,2-DCE	1,1-DCE	Vinyl chloride
				µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
			SCTL Residential	8800	6400	5300	33000	95000	200
			SCTL Industrial	1800	9300	2900	18000	510000	800
			SCTL Leachability	30	30	700	400	60	7
SB007	2	2/7/2017		4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
SB007	5	2/7/2017		4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
SB007	8	2/7/2017		5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SB008	2	2/7/2017		4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
SB008	5	2/7/2017		5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
SB008	8	2/7/2017		4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
SB008	8	2/7/2017		4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
SB009	2	2/9/2017		3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
SB009 duplicate	2	2/9/2017		3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
SB009	5	2/9/2017		4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
SB009	8	2/9/2017		4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
SB009 duplicate*	8	2/9/2017		2.7 U	2.0 U	2.2 U	2.2 U	2.0 U	2.2 U
SB010	2	2/8/2017		**3.0 I**	2.1 U	2.4 U	2.4 U	2.1 U	2.4 U
SB010	5	2/8/2017		2.7 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
SB010	8	2/8/2017		2.7 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
SB011	2	2/8/2017		**6.3**	2.1 U	2.4 U	2.4 U	2.1 U	2.4 U
SB011	5	2/8/2017		2.8 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U
SB011	8	2/8/2017		2.9 U	2.1 U	2.4 U	2.4 U	2.1 U	2.4 U
SB012	2	2/6/2017		3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
SB012	5	2/6/2017		3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB012	8	2/6/2017		5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
SB012 duplicate	8	2/6/2017		4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
SB013	2	2/6/2017		3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB013	5	2/6/2017		4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
SB013	8	2/6/2017		4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
SB013 duplicate	8	2/6/2017		4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U

Notes:

bls = below land surface
ug/kg = micrograms kilogram
U = the analyte was not detected
I = the analyte was detected between the Method Detection Limit and Reporting Limit and is considered an estimate
SCTL = soil cleanup target level as provided in Table 2 of Chapter 62-777 FAC
PCE = tetrachloroethelene
TCE = trichloroethelene
trans-1,2-DCE = trans-1,2-Dichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
1,1-DCE = 1,1-Dichloroethene
* = analysis by a fixed base laboratory

TABLE 2A
GROUNDWATER ANALYTICAL SUMMARY - DIRECT PUSH SAMPLES

Facility Name: Haines City Quality Cleaners
Facility ID#: 539500205

DP Boring ID	Depth (ft bls)	Sample Date	PCE	TCE	trans-1,2-DCE	cis-1,2-DCE	1,1-DCE	Vinyl chloride
			ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
GCTL			**3**	**3**	**100**	**70**		**1**
DP001	15	2/9/2017	1 U	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		**160**	**11**	1 U	**1**	1 U	1 U
	35 Dup		**160**	**11**	1 U	**1**	1 U	1 U
	45		**15**	**7**	1 U	**3**	1 U	1 U
	55		**7**	**7**	1 U	**2**	1 U	1 U
DP002	15	2/9/2017	1 U	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		**100**	**19**	1 U	**9**	1 U	1 U
	35 Dup		**96**	**18**	1 U	**8**	1 U	1 U
	45		1 U	1 U	1 U	1 U	1 U	1 U
	55		**4**	1 U	1 U	1 U	1 U	1 U
	55 Dup		**5**	1 U	1 U	1 U	1 U	1 U
DP003	15	2/6/2017	1 U	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		1 U	1 U	1 U	1 U	1 U	1 U
	45		**6**	**3**	1 U	1 U	1 U	1 U
	45 Dup		**6**	**3**	1 U	1 U	1 U	1 U
DP004	15	2/8/2017	1 U	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		**5**	**2**	1 U	1 U	1 U	1 U
	35 Dup		**5**	**2**	1 U	1 U	1 U	1 U
	45		1 U	1 U	1 U	1 U	1 U	1 U
	55		1 U	1 U	1 U	1 U	1 U	1 U
DP005	15	2/7/2017	1 U	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		1 U	**1**	1 U	1 U	1 U	1 U
	35 Dup		1 U	**1**	1 U	1 U	1 U	1 U
	45		1 U	1 U	1 U	1 U	1 U	1 U
	55		1 U	1 U	1 U	1 U	1 U	1 U
DP006	15	2/8/2017	**1**	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		1 U	1 U	1 U	1 U	1 U	1 U
	45		1 U	1 U	1 U	1 U	1 U	1 U
	55		1 U	1 U	1 U	1 U	1 U	1 U
DP007	15	2/6/2017	**2**	1 U	1 U	1 U	1 U	1 U
	15 Dup		**2**	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		1 U	1 U	1 U	1 U	1 U	1 U
	45		1 U	1 U	1 U	1 U	1 U	1 U
	55		1 U	1 U	1 U	1 U	1 U	1 U
DP008	15	2/7/2017	1 U	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		1 U	1 U	1 U	1 U	1 U	1 U
	45		**1**	1 U	1 U	1 U	1 U	1 U
	55		**2**	**1**	1 U	1 U	1 U	1 U
DP009	15	2/9/2017	1 U	1 U	1 U	1 U	1 U	1 U
	25		1 U	1 U	1 U	1 U	1 U	1 U
	35		1 U	1 U	1 U	1 U	1 U	1 U
	45		**10**	**2**	1 U	1 U	1 U	1 U
	45 Dup		**9**	**2**	1 U	1 U	1 U	1 U
	55		**2**	1 U	1 U	1 U	1 U	1 U
DP010	25	2/6/2017	1 U	1 U	1 U	1 U	1 U	1 U
	35		1 U	1 U	1 U	1 U	1 U	1 U
	45		**5**	**2**	1 U	1 U	1 U	1 U
	55		**4**	1 U	1 U	1 U	1 U	1 U
	65		1 U	1 U	1 U	1 U	1 U	1 U
	75		**15**	1 U	1 U	1 U	1 U	1 U
DP011	35	7/23/2018	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	55		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	65		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	75		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	85		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
DP012	35	7/23/2018	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	55		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	65		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	75		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	85		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U

TABLE 2A
GROUNDWATER ANALYTICAL SUMMARY - DIRECT PUSH SAMPLES

DP013	35	7/25/2018	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45 fixed lab dup		**0.91 I**	**0.71 I**	0.2 U	0.2 U	0.2 U	0.2 U
	55		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	65		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	65 Dup 3		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	75		**0.8**	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	85		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
DP014	35	7/26/2018	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45 Dup 4		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	55		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	55 fixed lab dup		**5.49**	**0.84 I**	0.2 U	**0.29 I**	0.2 U	0.2 U
	65		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	75		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	85		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
DP015	35	7/24/2018	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45 fixed lab dup		**3.4**	**1.2**	0.2 U	0.2 U	0.2 U	0.2 U
	55		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	55 Dup 1		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	65		**16**	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	75		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	85		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
DP016	35	7/25/2018	0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	45 Dup 2		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	55		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	55 fixed lab dup		**0.38 I**	**0.24 I**	0.2 U	0.2 U	0.2 U	0.2 U
	65		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	75		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U
	85		0.8 U	1.10 U	1.40 U	1.00 U	0.90 U	0.65 U

NOTES:

Contaminant concentration exceeds the GCTL

Bold text: Contaminant detected at specified concentration

U: Undetected - concentration below the specified laboratory practical quantitation limit (PQL)

I: Concentration between laboratory MDL and PQL

ug/l: micrograms per liter

ft bls: feet below land surface

VOH		GCTL
PCE	ug/l	**3**
TCE	ug/l	**3**
Cis-1,2-DCE	ug/l	**70**
Trans-1,2-DCE	ug/l	**100**
VC	ug/l	**1**

TABLE 2B
GROUNDWATER ANALYTICAL SUMMARY - MONITOR WELLS

Facility Name: Haines City Quality Cleaners
Facility ID#: 539500205

Well ID	Screen Interval	Sample Event	Sample Date	PCE	TCE	trans-1,2-DCE	cis-1,2-DCE	Vinyl chloride	VOCs	TRPH	Temperature	pH	Dissolved oxygen	Turbidity	Conductivity	ORP
				ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	^{0}C		mg/l	NTU	uS/cm	mV
TW001	5 to 10 ft bls	Assessment	2/8/2017	**3**	0.61 U	0.67 U	0.65 U	0.71 U	ND	370 U	NA	NA	NA	NA	NA	NA
TW002	5 to 10 ft bls	Assessment	2/8/2017	**2.7**	0.61 U	0.67 U	0.65 U	0.71 U	ND	370 U	NA	NA	NA	NA	NA	NA
MW001	30 to 35 ft bls	Assessment	2/14/2017	**5.4**	**4.3**	0.67 U	**2.5**	0.71 U			26.4	6.00	0.10	256	140	-188
		Assessment	7/13/2017	**1.5**	**2.1**	0.67U	**1.4**	0.71 U			25.6	6.92	0.65	15.6	200	-180
		Assessment	7/13/2017 dup	**2**	**2.8**	0.67 U	**2.1**	0.71 U								
MW002	5 to 15 ft bls	Assessment	2/14/2017	**2.2**	0.61 U	0.67 U	0.65 U	0.71 U			24	6.73	0.14	5.04	170	-75
		Assessment	7/13/2017	**2.6**	0.50 U	0.67 U	0.65 U	0.71 U			22.7	6.55	1.38	13.2	316	12
MW003	5 to 15 ft bls	Assessment	2/14/2017	**1.0**	0.61 U	0.67 U	0.65 U	0.71 U			26.3	6.81	1.10	14	160	-152
		Assessment	7/13/2017	0.61 U	0.50 U	0.67 U	0.65 U	0.71 U			24.6	6.61	1.61	13	288	25
MW004	5 to 15 ft bls	Assessment	2/14/2017	0.50 U	0.61 U	0.67 U	0.65 U	0.71 U			26.1	6.80	0.20	10	140	-191
		Assessment	7/13/2017	0.61 U	0.50 U	0.67 U	0.65 U	0.71 U			28.2	6.91	0.94	5.41	335	-76
MW005	30 to 35 ft bls	Assessment	8/21/2018	**10**	**2.8**	0.2 U	**8.8**	0.2 U			29.9	5.79	0.11	950	98.4	-131
MW006	40 to 45 ft bls	Assessment	8/21/2018	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			29.7	5.93	0.15	15.6	149	-114
MW007	40 to 45 ft bls	Assessment	8/21/2018	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			28.6	6.68	0.09	280	166	-179
MW008	40 to 45 ft bls	Assessment	8/21/2018	**2.2**	**1.9**	0.2 U	**1.5**	0.2 U			28	5.03	0.16	5.33	94	12
MW009	70 to 75 ft bls	Assessment	8/21/2018	**1.3**	**0.42 I**	0.2 U	0.2 U	0.2 U			29.8	6.96	0.20	16.1	302	-171
MW010	30 to 35 ft bls	Assessment	8/21/2018	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			30.1	6.73	0.12	4.78	251	-240
MW011	30 to 35 ft bls	Assessment	8/21/2018	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U			28.8	6.38	0.18	4.36	261	-194

NOTES:

Contaminant concentration exceeds the GCTL

Bold text: Contaminant detected at specified concentration

U: Undetected - concentration below the specified laboratory practical quantitation limit (PQL)

I: Concentration between laboratory MDL and PQL

ug/l: micrograms per liter

ft bls: feet below land surface

VOH		GCTL
PCE	ug/l	**3**
TCE	ug/l	**3**
Cis-1,2-DCE	ug/l	**70**
Trans-1,2-DCE	ug/l	**100**
VC	ug/l	**1**

TABLE 3
GROUNDWATER ELEVATION DATA

Facility Name: Haines City Quality Cleaners
Facility ID#: 539500205

WELL NO.	MW001	MW002	MW003	MW004	MW005
DIAMETER, inches	1"	1"	1"	1"	1"
WELL DEPTH	35.00	15.00	15.00	15.00	35.00
SCREEN INTERVAL	30 to 35	5 to 15	5 to 15	5 to 15	30 to 35
TOC ELEVATION	132.61	133.32	133.52	132.78	132.74

DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
2/14/2017	123.79	8.82	123.92	9.4	123.95	9.57	123.97	8.81		
7/13/2017	124.33	8.28	124.02	9.3	124.20	9.32	124.24	8.54		
8/21/2018	125.68	6.93	125.60	7.72	125.74	7.78	125.64	7.14	125.61	7.13

WELL NO.	MW006	MW007	MW008	MW009	MW010
DIAMETER, inches	1"	1"	1"	1"	1"
WELL DEPTH	45.00	45.00	45.00	75.00	35.00
SCREEN INTERVAL	40 to 45	40 to 45	40 to 45	70 to 75	30 to 35
TOC ELEVATION	132.53	132.45	132.78	132.37	132.32

DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
8/21/2018	124.37	8.16	125.72	6.73	124.63	8.15	124.16	8.21	124.54	7.78

WELL NO.	MW011	VEW001	VEW002	VEW003	VEW004
DIAMETER, inches	1"	4"	4"	4"	4"
WELL DEPTH	35.00	8.00	8.00	8.00	8.00
SCREEN INTERVAL	30 to 35	1 to 8	1 to 8	1 to 8	1 to 8
TOC ELEVATION	132.60	132.57	133.23	132.28	132.51

DATE	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW
8/21/2018	124.19	8.41								

NOTES: TOC Elevation data from professional survey (N.A.V.D. 1988)
All measurements in feet

TABLE 4

SOIL VAPOR SAMPLE ANALYTICAL DATA

Haines City Quality Cleaners

Sample ID	Screen (feet bls)	Sample Date	PCE	TCE	trans-1,2-DCE	cis-1,2-DCE	Vinyl chloride	Methylene Chloride	Trichlorofluoromethane	Toluene
			mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3
VW001	1 to 8	7/11/2017	**3**	0.0071 U	0.0073 U	0.0087 U	0.0067 U	**0.040 I**	0.0044 U	0.017 U
VW002	1 to 8	7/11/2017	**1.9**	0.0067 U	0.033 U	0.036 U	0.031 U	**0.034 I**	0.0044 U	**0.019 I**
VW003	1 to 8	7/11/2017	**2**	0.0062 U	0.033 U	**0.11 I**	0.031 U	**0.040 I**	0.0044 U	**0.019 I**
VW004	1 to 8	7/11/2017	**0.94**	0.0039 U	0.033 U	0.036 U	0.031 U	**0.023 I**	**0.0032 I**	**0.021**

Notes:
bold text = the analyte was detected above the laboratory method detection limit (MDL)
U = the analyte was not detected
I = estimated value between the MDL and PQL
mg/m3 = miligrams per cubic meter in air

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January 6, 2022

Ben Grubbs
State of Florida
Department of Environmental Protection
Bureau of Waste Cleanup, MS 4520
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: **Response to Comments: Memorandum: SVE Startup Report**
Haines City Quality Cleaners
511 Haines City Mall
Haines City, Polk County, Florida
Facility ID 539500205 ERIC_5357
Task Assignment No. HW551-DC030D

Dear Mr. Grubbs:

This is a Response to Comments of the Memorandum dated November 16, 2021, for the SVE Startup Report dated October 28, 2021, submitted for this site. The comments that were received via email from the Department of Environmental Protection (FDEP), Waste Site Cleanup Section are numbered below, followed by AECOM's response in italics.

1. The PCE concentrations included in Table 1D are incorrect for the samples collected on September 17, 2021.

The PCE concentrations included in Table 1D for the samples collected on September 17, 2021 have been revised.

2. Table 1D should be cross-referenced with laboratory analytical data sheets. Specifically, there are many analytes that appear to have been detected on Table 1D that were below detection limits (BDL) according to the laboratory analytical data sheets. According to Table 1D, these analytes should have the "BDL" notation. Putting numerical values in Table 1D for analytes that were BDL make the 'Total VOC' column of Table 1D incorrect.

The analytes that were detected below the laboratory Method Detection Limit are now presented with a "U" identifier in Table 1D. The 'Total VOC' column has been revised to only sum the detected compounds. Section 5.0 of the text has been revised to include the new contaminant mass calculated amount.

3. The use of a minus sign (-) should be used consistently when referring to vacuum readings. For instance, Figure 2 has the wellhead vacuum for MW004 as -0.9 inches of water (IW) but all other wellhead vacuum readings omit the (-) sign which gives the implication that they are under positive

pressure.

Table 1C and Figure 2 have been revised to include a minus sign (-) on all of the vacuum readings that are under negative pressure.

4. The print for Drawing 2 is extremely light. Please submit a revised Drawing 2 that is more legible.

A revised darker version of Drawing 2 is attached.

5. Section 3.2 states that the activated carbon unit will remain connected to the treatment system until laboratory results for the influent samples confirm that the allowable air emissions rate of 13.7 pounds per day (lbs/day) is not exceeded. Per an October 21, 2008, FDEP memo (attached), the maximum air emissions from a cleanup site may not exceed 2.7 lbs/day for any single Hazardous Air Pollutant or 6.8 lbs/day of Total Hazardous Air Pollutants.

Section 3.2 has been revised to state the correct pounds per day emission limit.

6. The FDEP approved Interim Source Removal Plan (ISRP) has individual soil vapor extraction (SVE) wells being sampled by Method TO-15 only after start-up. However, according to the SVE Startup Report it appears that individual SVE wells were sampled by Method TO-15 after Week 1 also.

The additional week 1 sampling was proposed by AECOM and agreed to in the January 21, 2021 Task Assignment.

7. Please explain the reason why a 3-hp regenerative blower was installed in lieu of the proposed 5-hp regenerative blower that was approved in the ISRP.

The SVE system at Haines City came from a Tetra Tech site in Wildwood based on availability of treatment systems and the need to remove the system from the Wildwood site.

Sincerely,

AECOM Technical Services, Inc.

Julie Cassetta
Project Manager

Jennifer Joyal, P.E.

PE License No. 57964
Eng. Bus. Authorization No. 8115

SVE Startup Report

Site:
Haines City Quality Cleaners
511 Haines City Mall
Haines City, Polk County, Florida
Facility ID 539500205 ERIC_5357
Task Assignment No. HW551-DC030D

Prepared for:
Ben Grubbs
State of Florida
Department of Environmental Protection
Bureau of Waste Cleanup, MS 4520
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Prepared by:
AECOM Technical Services, Inc.

150 North Orange Avenue
Suite 200
Orlando, Florida 32801

October 28, 2021, *revised January 6, 2021*

SVE Startup Report

In accordance with the provisions of Florida Statutes, Chapter 471, this SVE Startup Report for the Haines City Quality Cleaners site, located in Haines City, Florida, has been prepared under the direct supervision of a Professional Engineer registered in the State of Florida. This work was performed in accordance with generally accepted professional engineering practices pursuant to Chapter 471 of the Florida Statutes. The data, findings, recommendations, specifications or professional opinions were prepared solely for use by the Florida Department of Environmental Protection. AECOM Technical Services, Inc. makes no other warranty; either expressed or implied and is not responsible for the interpretation by others of these data.

Site:
Haines City Quality Cleaners
511 Haines City Mall
Haines City, Polk County, Florida
Facility ID 539500205 ERIC_5357
Task Assignment No. HW551-DC030D

Prepared for:
Ben Grubbs
State of Florida
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Bureau of Waste Cleanup, MS 4520
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October 28, 2021, *revised January 6, 2022*

Author:
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Project Manager

Jennifer Joyal, State of Florida, Professional Engineer, License No.57964

Jennifer Joyal, P.E. 57964 State of Florida

Digitally signed by Jennifer Joyal, P.E. 57964 State of Florida
Date: 2022.01.07 09:42:39 -10'00'

This item has been electronically signed and sealed by Jennifer Joyal on the date indicated using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

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DRAWINGS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION

AECOM Technical Services, Inc. (AECOM) is pleased to present the Florida Department of Environmental Protection (FDEP) with this Soil Vapor Extraction (SVE) Startup Report that summarizes Remedial Action Construction (RAC) activities, and SVE Startup performed at the Haines City Quality Cleaners facility located in Haines City, Florida. Work was performed according to the HW551 contract under Task Assignment (TA) DC030E.

The following tables mentioned throughout the report are attached:

- **Table 1A** provides a Remedial System Summary;
- **Table 1B** provides a System Performance Summary;
- **Table 1C** provides Vapor Extraction (VE) and Key Monitor Well Data;
- **Table 1D** provides the SVE System Analytical Summary;

2.0 SITE HISTORY

According to the former owner of the Haines City Quality Cleaners, the site operated as a drycleaner from sometime in 1984, when an extension of the already existing shopping center was first constructed, and Smith Cleaners moved in. Smith Cleaners was previously located at another location in the shopping center, reportedly west of the current site and believed to be within the footprint of the current Publix supermarket. Smith Cleaners changed to Haines City Quality Cleaners in August 1985 and operated at the subject location until July 1997, when it moved across the street to its current location at 7 C Street. Currently, Suite 1F of the Haines City Mall is occupied by an Enterprise Car Rental facility and has been since September 1998. Other businesses occupying this unit between July 1997 and September 1998 are unknown.

FDEP records indicate that a Site Screening Report Form (SSRF) was completed and submitted in July 1997 and a Site Summary Report (SSR) was prepared in September 1998 by AECOM (then known as Rust Environment & Infrastructure). The SSR indicated that tetrachloroethene (PCE) was detected at 0.5-feet below land surface (bls) in an exterior soil boring located southeast of the facility's back door at a concentration of 91 milligrams per kilogram (mg/kg), exceeding its Soil Cleanup Target Level (SCTL) as given in Table 2, Chapter 62-777, Florida Administrative Code (FAC). The FDEP admitted Haines City Quality Cleaners into the DSCP with a site priority score of 142. In October 1998, the site was re-scored to 101.

In 2016, the FDEP tasked AECOM to perform additional site assessment activities to identify the potential sources of dry-cleaning solvents that may impact the soil and groundwater quality, delineate the horizontal and vertical extents of impacts, characterize site lithology, and determine site specific aquifer characteristics to assist with transport modeling and possible remedial design.

AECOM performed the additional site assessment activities between February 2017 and July 2018.

The site assessment indicated that dry-cleaning chlorinated contaminants of concern were not detected above SCTLs in any soil samples collected. Discrete depth interval groundwater samples, collected using direct push technology (DPT) at depths ranging between 15 and 75 feet bls, indicated chlorinated compounds above Groundwater Cleanup Target Levels (GCTLs) as given in Table 1, Chapter 62-777, FAC, in DP001 at 35, 45, and 55 feet bls; in DP002 at 35 and 55 feet bls; in DP003 at 45 feet bls; in DP004 at 35 feet bls; in DP009 at 45 feet bls; in DP010 at 45, 55, and 75 feet bls; and in DP015 at 65 feet bls. In 2017, four permanent groundwater monitor wells (MW001 through MW004), sampled and analyzed by EPA Method 8260 volatile organic halocarbons (VOHs), indicated PCE and trichloroethylene (TCE) exceeded GCTLs in MW001 (screened 30 to 35 feet bls). In 2018, seven additional monitor wells (MW005 through MW011) were installed to depths of 15, 35, and 45 feet bls and one deep monitor well (MW009) was installed to 75 feet bls. Groundwater analysis of samples collected from those wells by EPA Method 8260 (VOHs) indicted PCE concentrations exceeded GCTLs in MW005 (screened 30 to 35 feet bls) while concentrations were below GCTLs in all other sampled wells. The results of Modified Active Gas Sampling (MAGS^{TM}) of the vadose zone in the area of the cleaners indicated relatively low levels of PCE in the soil. Vapor extraction flow and radial extents of vacuum influence observed during the test indicated that this site is suitable for soil vapor extraction technology.

An Interim Source Removal Plan (ISRP) was prepared and submitted by AECOM in May 2019, to address the VOHs in the soil vadose zone. A revised ISRP was submitted in July 2019 and subsequently approved. Updated groundwater data was needed prior to ISRP implementation; therefore, AECOM conducted groundwater monitoring in September 2019. Results from sampling indicated that two monitor wells (MW005 and MW008) contained contaminant concentrations exceeding GCTLs.

This SVE Startup Report summarizes remediation action construction and startup activities. A Site Map is included as **Figure 1**.

3.0 REMEDIAL ACTION CONSTRUCTION ACTIVITIES

From June 17 to July 9, 2021, construction activities were conducted at the subject site to install the proposed SVE system as outlined in the July 2019 approved ISRP. Construction was performed by Ridge Environmental Solutions, Inc. (Ridge) of Bradenton, Florida with oversight from AECOM. Equipment utilized included heavy-duty work trucks, work trailers, a concrete cutting saw, and a skid steer. A FDEP-owned SVE system was secured at the rear of the plaza

and the remediation wells which were previously installed in 2017 as part of MAGS™ were trenched and plumbed into the SVE system. In total, four vapor extraction wells (VEW) wells (VW001, VW002, VW003, and VW004) were trenched and piped back to the SVE system trailer as proposed in the ISRP. Wellhead construction and vault installation were completed on each remediation well as outlined in the approved ISRP.

One 200-pound vapor phase granular activated carbon (VPGAC) vessel was provided by Evoqua Water Technologies, LLC of Chicago, Illinois and placed at the front of the SVE system and plumbed into the SVE air stream for emission control. A privacy fence was constructed by Ridge around the SVE system. ABP Electric, Inc. of Lakeland, Florida installed a service meter outside the privacy fence to provide electric service. ABP Electric connected the service meter with below ground conduit to the SVE system service disconnect panel. Duke Energy connected electric service to a transformer located in the rear of the shopping plaza.

Drawing 1 provides the as-built layout of the trenches and power service. **Drawing 2** provides the as-built vapor extraction pipe support details. **Drawing 3** provides the as-built of the remedial compound fence and trailer anchor details. **Drawing 4** outlines the as-built process instrumentation diagram (PID). Field notes for all construction activities are included in **Appendix A**. A photographic log of construction events is provided as **Appendix B**. The construction - electrical permit is included in **Appendix C**.

3.1 Installed SVE System

The SVE system consists of a 3.0 horsepower (HP), 208-230V/460V-volt, 3-phase Ametek Rotron Regenerative Blower (EN656M72XL) which is capable of approximately 212 cubic feet per minute (CFM). The treatment system is equipped with a Sensaphone Sentinel 4G Telemetry unit which monitors the equipment to allow for quick response to system shutdowns and other issues. Emails are sent from the system when alarm conditions are triggered. Treatment system fail-safes include: shut down of the SVE system in the event of blower motor overcurrent, low vacuum on the blower motor influent, low pressure on the blower motor effluent, and high water detection in the moisture separator tank via a single-point float-switch assembly.

3.2 Vapor and Liquid Post-Treatment

The SVE system is equipped with one 200-pound VPGAC vessel, to treat captured vapors from the SVE subsystem. Sample ports are present before (influent) the carbon vessel and after (effluent) to monitor the need for carbon replacement. This VPGAC will remain connected to the treatment system until laboratory results for the influent samples confirm that the allowable air

emissions rate of 2.7 pounds per day (lbs/day) is not exceeded. At a minimum, the vessel will remain operational for 30 days following startup.

4.0 SVE SYSTEM STARTUP ACTIVITIES

4.1 Startup – September 10, 2021

On September 10, 2021, AECOM personnel mobilized to the site to complete startup activities of the SVE system. The SVE system was checked and started at approximately 9:00 with the dilution valve 100% open. The dilution valve was slowly closed and the SVE system was adjusted and balanced. Design parameters as stated in the ISRP to operate the four VEWs simultaneously, were estimated as a maximum wellhead vacuum and flow of a 25 inches of water ("H^2O) and 25 CFM, respectively, and a maximum extraction vacuum of 42 "H^2O and total flow of 112 cfm. AECOM attempted to bring VW001, VW002, VW003, and VW004 up to the wellhead design vacuum and flow; however, were unable to achieve these values at the wellheads. Personnel adjusted the dilution valve, checked the filter, and checked for leaks in an attempt to achieve the design vacuum and flow rates. Note that the design vacuum and flow rates were based on using a blower with a 5.0 HP motor capable of a maximum flow rate of 210 cfm and a maximum vacuum of 85 "H^2O as stated in the ISRP; however, the blower received in the FDEP-owned trailer is significantly less at 3.0 HP, which is likely contributing to the lower than expected values. Manifold vacuums ranged from 3.6 "H^2O up to 26 "H^2O while wellhead vacuums ranged from 3.0 "H^2O to 4.9 "H^2O.

At the conclusion of day one, the SVE wells were operating at approximately 16% of the average target wellhead pressure and 50% of the targeted flow. AECOM personnel recorded depth-to-water, and stress readings at monitor wells MW-1, MW-4, MW-5. AECOM defines influence as a stress of 0.2 "H^2O or greater. Based on this, influence was noted in one monitor well (MW004).

Influent, effluent, and VEW (VW001, VW002, VW003, and VW004) air samples were collected on startup from the SVE air stream for screening with a field organic vapor analyzer (OVA) and for laboratory analysis. Samples were submitted to Southern Research Laboratory, Inc. (SRL) of Orlando, Florida for EPA Method Modified TO-15 analysis. The field OVA data on day one indicated 9 parts per million (ppm) on the influent air stream and 0 ppm on the effluent air stream. Based on laboratory analytical data for the effluent air sample from day one of operation and the collected OVA data, the daily threshold limit for vapor emissions of 2.7 lbs/day was not exceeded. Laboratory analytical results indicated that PCE was detected in VW001 through VW004 at concentrations ranging from 1.1 to 2.2 milligrams per meter cubed (mg/m^3) with the highest concentration observed in VW002.

4.2 Week One Activities – September 17, 2021

Personnel returned to the site for week one of startup activities on September 17, 2021. Prior to arrival, AECOM received two emails from the Sensaphone indicating the Sensaphone was offline; however, the SVE system and Sensaphone were on upon arrival. SVE wellhead vacuums remained similar to the first day of operation; however, manifold flow rates increased slightly.

AECOM personnel recorded depth-to-water and stress readings at monitor wells MW001, MW004, and MW005 and influence was noted only in MW004. Influent and effluent OVA field screening data indicated 9 ppm and 0 ppm, respectively during startup, and 4.6 ppm and 5.8 ppm, respectively during week one. Influent, effluent, and VEW (VW001, VW002, VW003, and VW004) air samples were also collected and shipped to SRL for EPA Method Modified TO-15 analysis laboratory analysis. Laboratory data and OVA data were again analyzed to ensure that vapor emissions remained below 2.7 lbs/day. Additionally, air samples were collected from each of the vapor extraction wells to gauge system effectiveness. Laboratory analytical results indicated that PCE was detected in VW001 through VW004 at concentrations ranging from 1 mg/m^3 to 2.2 mg/m^3 during startup and 0.10 mg/m^3 to 0.42 mg/m^3 during week one with the highest concentration observed in VW002 during startup and VW001 during week one.

Field notes outlining the startup activities performed can be found in **Appendix A**. All laboratory analytical reports for air and effluent groundwater samples collected during the September 10, 2021 startup event can be found in **Appendix D**. The associated O&M logs from the three-day startup event can be found in **Appendix E**. Summary Report Tables are included with this Startup Report. **Table 1A** through **Table 1C** provide an overview of site information and provides performance summaries for the SVE system and monitor well influence. **Table 1D** summarizes the SVE system analytical results and provides a contaminant recovery estimate.

5.0 CONCLUSIONS / RECOMMENDATIONS

Based on the data outlined above, AECOM presents the following conclusions and recommendations for continued remediation at the subject site:

- Influence was observed in MW004 during startup and week one indicating that an ROI of at least 15 feet is being achieved.

- Contaminant mass calculations indicate that a minimal amount of contaminant mass was recovered during the startup and week one outlined above. Based on the lab results and OVA readings collected during the startup event, AECOM estimates that approximately

0.08 pounds of contaminant has been removed from the subsurface. The details for this estimate are provided in **Table 1D**.

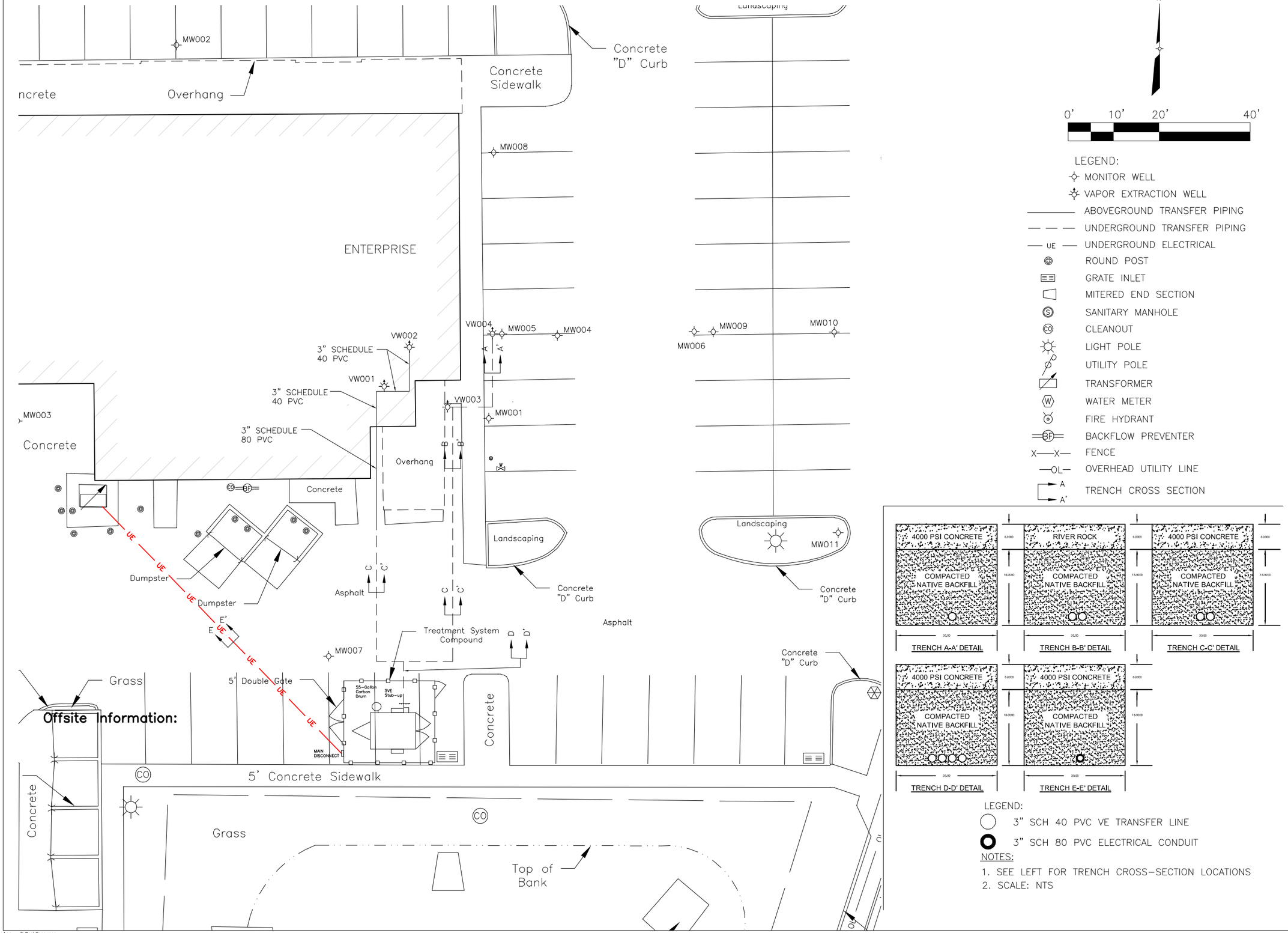
- Based on the details outlined above, AECOM concludes that the SVE system is remediating the subject site; however, based on the lower than anticipated vacuum and flow measurements, remediation may take longer than anticipated. Because of this, the FDEP may want to consider upgrading the blower to a 5.0 HP as proposed in the ISRP. This was the last task in the current Task Assignment; however, a Task Assignment Change Order is being prepared to add one task in which the Haines City Quality Cleaners site will be transferred from AECOM to another Contractor.

6.0 CLOSURE

AECOM appreciates the opportunity to be of continued service to the FDEP on this project. Should you have any questions or comments concerning this report, please do not hesitate to contact us.

DRAWINGS

Drawing 1	Trench Layout Details – As-Built
Drawing 2	Vapor Extraction Pipe Support Details – As-Built
Drawing 3	Wood Fence and Trailer Anchor – As-Built
Drawing 4	Process Instrumentation Diagram (PID) – As-Built



AECOM

PROJECT

FORMER HAINES CITY QUALITY CLEANERS, INC. 199
511 HAINES CITY MALL
HAINES CITY, POLK COUNTY
PROPOSED TASK ASSIGNMENT DC030E
FDEP SITE NO. ERIC_5357

CLIENT

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE CLEANUP-DIVISION OF WASTE MANAGEMENT
DRY CLEANING SOLVENT PROGRAM, MS 4520
2600 BLAIR STONE ROAD
TALLAHASSEE, FL 32399-2400

CONSULTANT

AECOM
150 North Orange Avenue
Suite 200
Orlando, FL
www.aecom.com

CONSULTANTS

REGISTRATION

ISSUE/REVISION

I	2021-09-30	INITIAL
I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

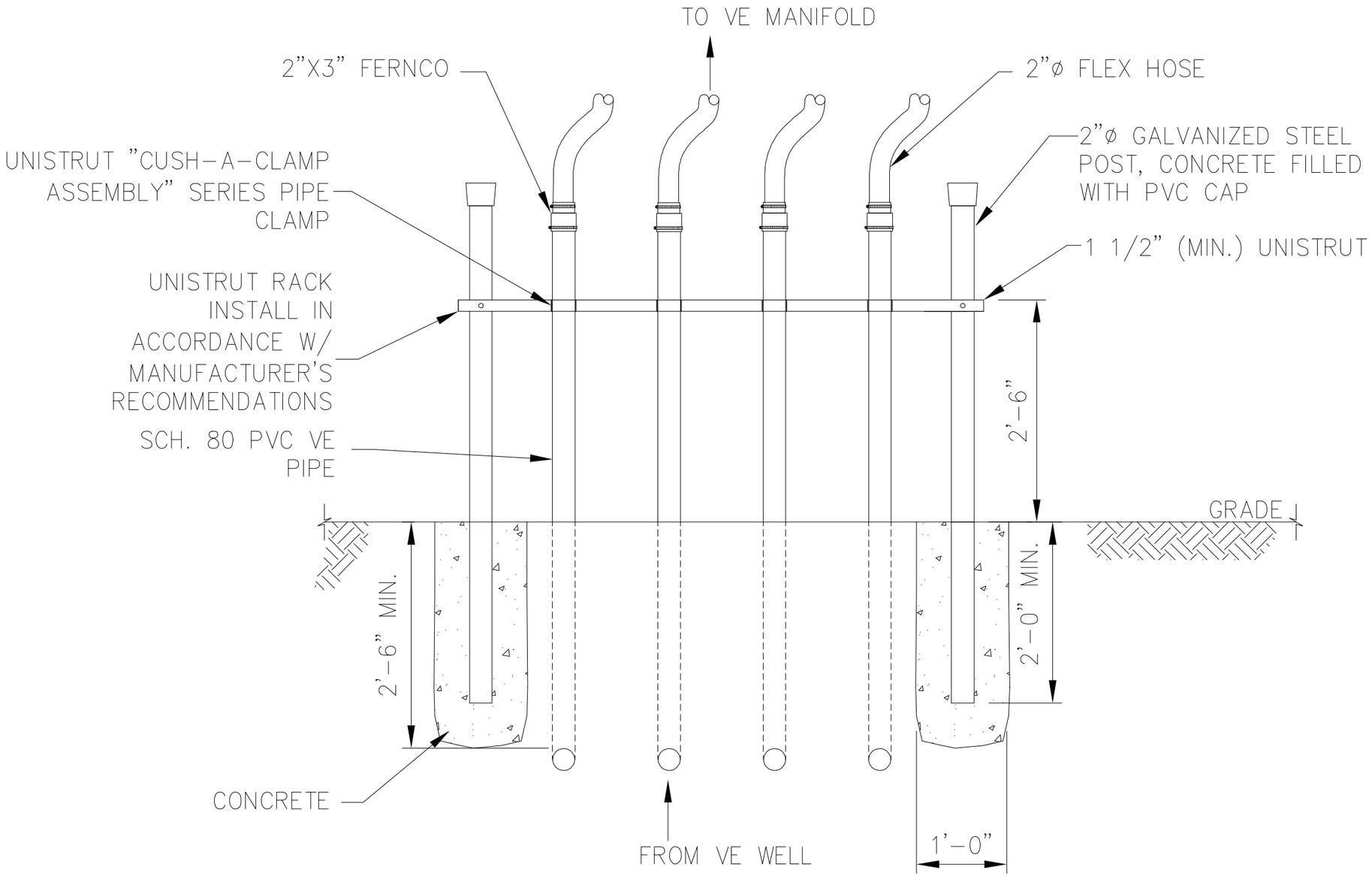
60651233

SHEET TITLE

D1_TRENCH DETAILS (AS-BUILT)

SHEET NUMBER

1



VE PIPE SUPPORT ON RACK DETAIL

NOT TO SCALE

Project Management Initials: Designer:____ Checked:____ Approved:____ 11" x 17"

Last saved by: BARRONM (2021-10-20) Last Plotted: 2021-09-30
Filename: L:\DCS\PROJECTS\ENV\FDEP\HW\551\DC\HAINES CITY\DC030E SVE INSTALL 2021 60651233\900-CAD- GIS\910-CAD\20-SHEETS\D2_VE PIPE SUPPORT DETAILS-ASBUILT.DWG

AECOM

PROJECT

FORMER HAINES CITY QUALITY CLEANERS, INC. 199
511 HAINES CITY MALL
HAINES CITY, POLK COUNTY
PROPOSED TASK ASSIGNMENT DC030E
FDEP SITE NO. ERIC_5357

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CONSULTANTS

REGISTRATION

ISSUE/REVISION

I	2021-09-30	INITIAL
I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

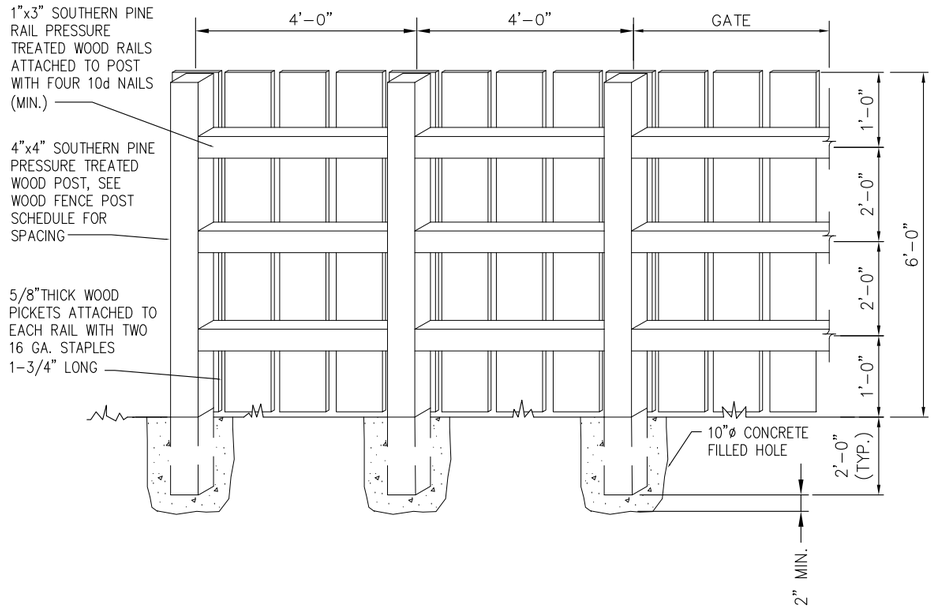
60663392

SHEET TITLE

D3_VE PIPE SUPPORT ON RACK DETAILS (AS-BUILT)

SHEET NUMBER

2

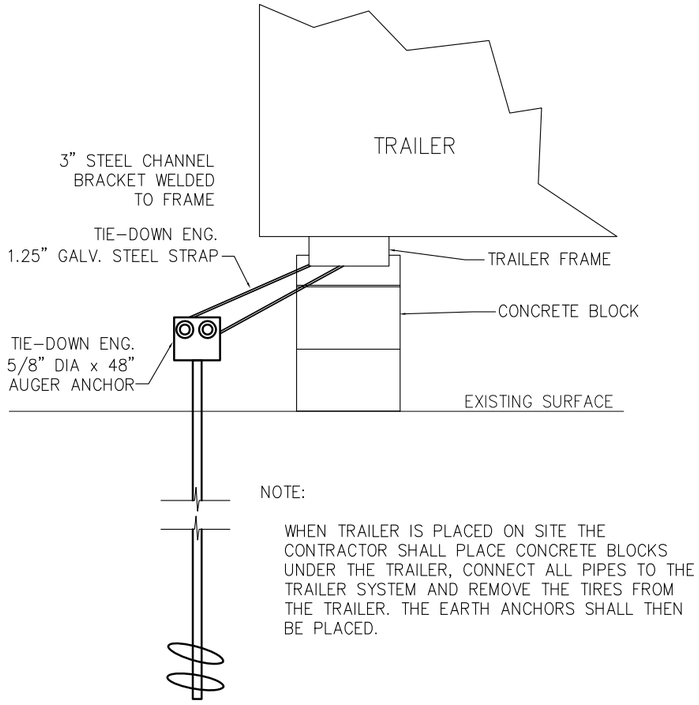


WOOD FENCE NOTES:

1. ALL LUMBER TO BE #2 SOUTHERN PINE OR BETTER (PRESSURE TREATED).
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND LOCAL (POLK COUNTY) CODES.
   NAILS, BOLTS AND OTHER METAL CONNECTORS WHICH ARE USED IN LOCATIONS EXPOSED TO WEATHER SHALL BE GALVANIZED OR OTHERWISE CORROSION RESISTANT.
3. WIND DESIGN CRITERIA PER FBC 1606:
   a. BASIC WIND SPEED = 145 MPH
   b. WIND IMPORTANCE FACTOR = 0.77
   c. EXPOSURE CATEGORY B
   d. INTERNAL PRESSURE COEFFICIENT = NOT APPLICABLE
   e. COMPONENTS AND CLADDING DESIGN WIND PRESSURE = +40.0 PSF – 39.4 PSF EFFECTIVE WIND AREA = 100 ft
4. SPACING BETWEEN WOOD POSTS ARE TO BE IN ACCORDANCE WITH SCHEDULE – NO EXCEPTIONS UNLESS OTHERWISE DIRECTED BY ENGINEER OF RECORD.

WOOD FENCE SECTION

NOT TO SCALE



NOTE:

WHEN TRAILER IS PLACED ON SITE THE CONTRACTOR SHALL PLACE CONCRETE BLOCKS UNDER THE TRAILER, CONNECT ALL PIPES TO THE TRAILER SYSTEM AND REMOVE THE TIRES FROM THE TRAILER. THE EARTH ANCHORS SHALL THEN BE PLACED.

TRAILER ANCHOR DETAIL

NOT TO SCALE

AECOM

PROJECT

FORMER HAINES CITY QUALITY CLEANERS, INC. 199
511 HAINES CITY MALL
HAINES CITY, POLK COUNTY
PROPOSED TASK ASSIGNMENT DC030E
FDEP SITE NO. ERIC_5357

CLIENT

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REGISTRATION

ISSUE/REVISION

I	2021-09-30	INITIAL
I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

60663392

SHEET TITLE

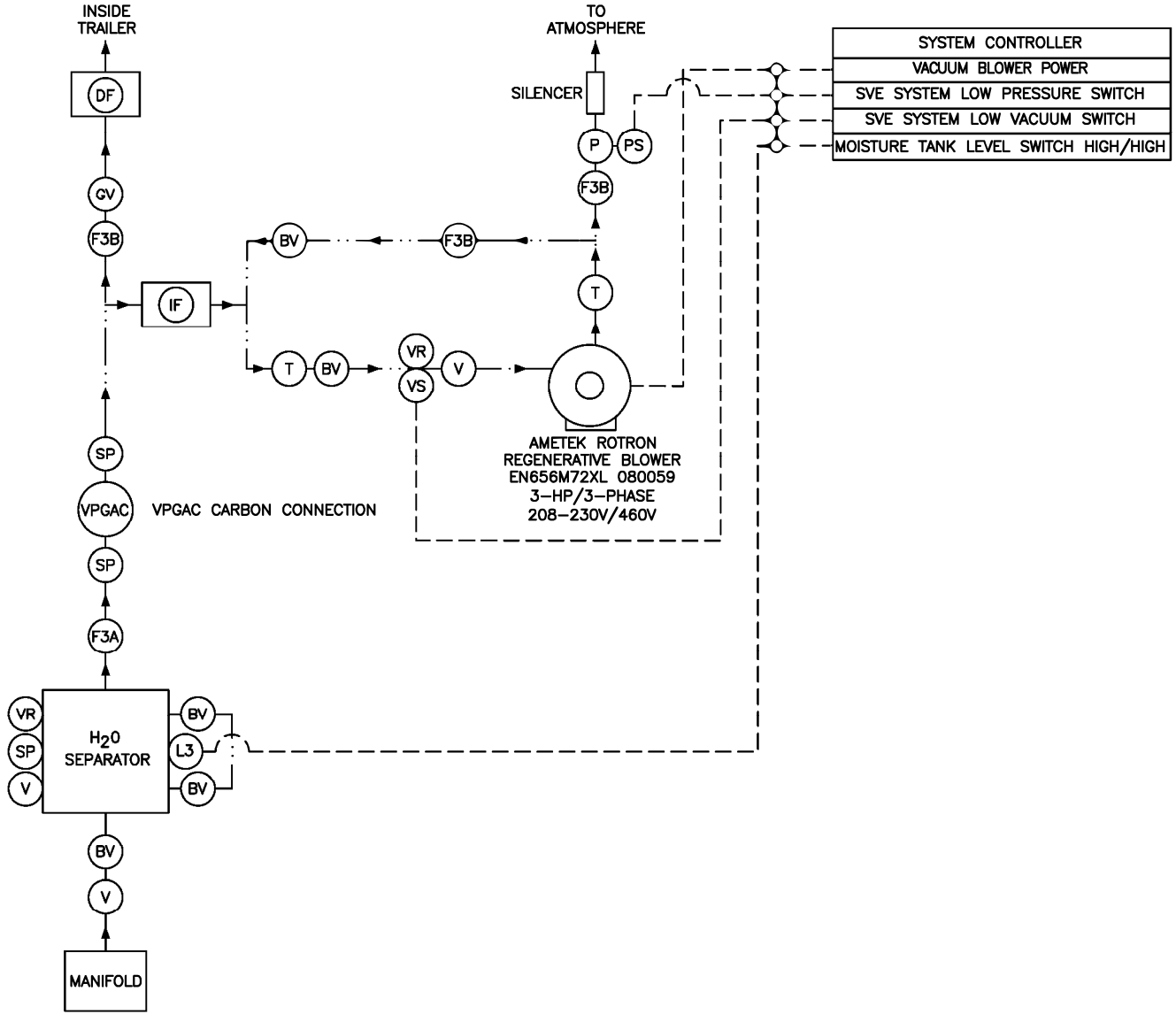
D3_WOOD FENCE SECTION AND TRAILER ANCHOR DETAILS (AS-BUILT)

SHEET NUMBER

1

LEGEND:

WATER LINE	VR	VACUUM RELIEF	SP	SAMPLE PORT
AIR LINE	P	PRESSURE GAUGE (0–60 PSI)	F3A	3–INCH DIRECT READ FLOW METER, ERDCO (0–30 SCFM)
ELECTRIC LINE	V	VACUUM GAUGE (0–60 "H2O)	F3B	3–INCH DIRECT READ FLOW METER, ERDCO (15–150 SCFM)
CONTACT	T	TEMPERATURE (0–250 DEGREE F)	VS	VACUUM SWITCH
IF	GV	GLOBE VALVE	PS	PRESSURE SWITCH
DF	BV	BALL VALVE	L3	LEVEL SWITCH HIGH–HIGH



AECOM

DRAWING 4
PROCESS INSTRUMENTATION DIAGRAM
AS-BUILT

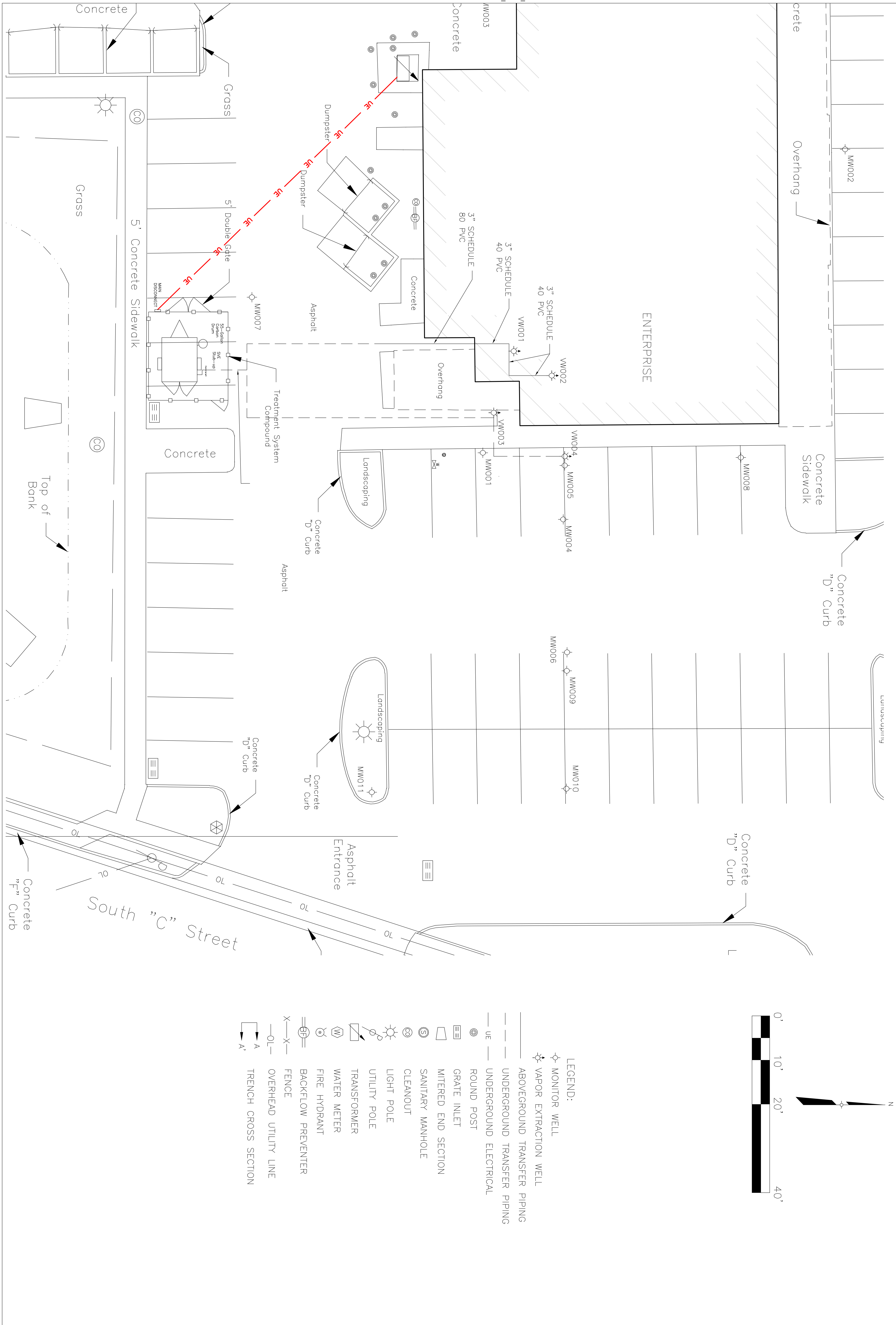
FORMER HAINES CITY QUALITY CLEANERS, INC.
511 Haines City Mall, Haines City, Polk County, Florida
FDEP FACILITY ID NO.: 539500205

10/6/2021

60651233

REVISED BY:
DRAWN BY: JJB
\\na.aecomnet.com\ifs\amer\orlando-user13\dcs\projects\env\fdep\hw551\dc\haines city\dc030e sve install 2021 60651233\900-cad- gis\910-cad\20-sheets\d5_pid.dwg

FIGURES



FORMER HAINES CITY QUALITY CLEANERS, INC. 199
511 HAINES CITY MALL
HAINES CITY, POLK COUNTY, FLORIDA
FDEP Facility ID. No.: 60651233
FDEP SITE NO. ERIC_5333 Date: 2021-10-18

SITE MAP

AECOM

Figure: 1

AECOM

Figure: 2

STRESS INFLUENCE MAP

FORMER HAINES CITY QUALITY CLEANERS, INC. 199
511 HAINES CITY MALL
HAINES CITY, POLK COUNTY, FLORIDA
FDEP Facility ID. No.: 606512331
FDEP SITE NO. ERIC_533 Date: 2021-12-20

N

0' 10' 20' 40'

LEGEND:
- MONITOR WELL
- VAPOR EXTRACTION WELL
- ABOVEGROUND TRANSFER PIPING
- UNDERGROUND TRANSFER PIPING
- UE UNDERGROUND ELECTRICAL
- ROUND POST
- GRATE INLET
- MITERED END SECTION
- SANITARY MANHOLE
- CLEANOUT
- LIGHT POLE
- UTILITY POLE
- TRANSFORMER
- WATER METER
- FIRE HYDRANT
- BACKFLOW PREVENTER
- X—X— FENCE
- —OL— OVERHEAD UTILITY LINE
- RADIUS OF INFLUENCE (15 FEET)

VW004		
Date	Wellhead Vacuum (in of H20)	Groundwater Elevation
9/10/2021	-4.90	NA
9/17/2021	-4.50	NA

VW002		
Date	Wellhead Vacuum (in of H20)	Groundwater Elevation
9/10/2021	-3.90	NA
9/17/2021	-4.60	NA

VW001		
Date	Wellhead Vacuum (in of H20)	Groundwater Elevation
9/10/2021	-3.00	NA
9/17/2021	-3.20	NA

VW003		
Date	Wellhead Vacuum (in of H20)	Groundwater Elevation
9/10/2021	-3.50	NA
9/17/2021	-3.30	NA

MW005		
Date	Wellhead Vacuum (in of H20)	Groundwater Elevation
9/10/2021	+0.2	126.32
9/17/2021	0.00	126.22

MW004		
Date	Wellhead Vacuum (in of H20)	Groundwater Elevation
9/10/2021	-0.90	126.32
9/17/2021	-0.90	126.23

MW001		
Date	Wellhead Vacuum (in of H20)	Groundwater Elevation
9/10/2021	0.00	126.34
9/17/2021	0.00	126.25

MW002 MW003 MW004 MW005 MW006 MW007 MW008 MW009 MW010 MW011
VW001 VW002 VW003 VW004
ENTERPRISE
Concrete "D" Curb
Concrete Sidewalk
Overhang
Concrete
Landscaping
Landscapir
Asphalt
Asphalt Entrance
Dumpster
Dumpster
3" SCHEDULE 40 PVC
3" SCHEDULE 40 PVC
3" SCHEDULE 80 PVC
UE
Treatment System Compound
55-Gallon Carbon Drum
SVE Stub-up
MAIN DISCONNECT
5' Double Gate
Grass
5' Concrete Sidewalk
Top of Bank
Concrete "F" Curb
OL
South "C" Street
CO

TABLES

TABLE 1A: REMEDIAL SYSTEM SUMMARY

Facility Name: Haines City Quality Cleaners
Facility Address: 511 Haines City Mall, Haines City, Polk County
Facility ID#:539500205 ERIC_5357 Startup Date: 9/7/2021
Facility Operational Status: Inactive/Closed

Groundwater Recovery	NA	
Recovery Well ID#		
Screen Interval		
Drawdown		
Design Flow Rate (GPM)		
Design Inflluent Concentration		
Effluent Polishing Type		
Gallery Design Size		
Other (e.g. FP Recovery, Pretreat)		
Permits		
(e.g. NPDES, consumptive use)		
Soil Treatment		
VES Well ID#	VW001, VW002, VW003, VW004	
Screen Interval	Vertical 4-inch diameter SVE, installed appx. 8 ft. below grade with 8 feet screen	
Design Flow Rate	112 cfm	
Off Gas Treatment	Activated carbon gas treatment	
Other		
Air Sparging	NA	
Sparging Well ID#		
Screen Interval		
Design Flow Rate		
Equipment & Specifications	Ametek Rotron Blower (EN656M72XL) (3-phase, 3 HP, XP: 460v)	**Availability**
(i.e. tower, blower, flowmeter,	Flowmeter - Dwyer 5" 3-25 scfm	
pumps) Specify usage, type, mfg,	Air Water Separator- Rotron Model MS350B	
and design specifications.	Rotron flowmeters 6-30, 25-125, 45-225	
	Vapor Carbon - Evoqua - 50 lbs	
	Trailer-Trailer mounted SVE System VIN#5GLBE10183C000297	
Control Panel	ABP Electrical -Enviroline Enclosures w/lockable cover	
(Brand & List components)		
Surge Protection (Mfg & Type)		
Other		
Telemetry (Mfg)	Sentinel w/4G LTE	Phone #: NA

SYSTEM REPAIR HISTORY

Date	Part Replaced or Modification
9/10/2021	System Startup
9/17/2021	Week 1

TABLE 1B: SYSTEM PERFORMANCE SUMMARY

Facility Name: Haines City Quality Cleaners
Facility ID#: ERIC_5357

Code	Arrive	Depart
1	on	on
2	off	on
3	off	off
4	on	off

Total Treatment Days = Hour meter / 24 hours

Site Visit Date	Days Between Site Visits	Days Since Startup	Hour Meter (hrs)	Hours between visits (hrs)	Run-Time Between Visits (days)	Percent Run-Time per Period (%)	Cumulative Percent. Run-Time (%)	Vacuum AWS ("H_2O)	Vacuum Before Blower ("H2O)	Total Flow Before Blower (SCFM)	Temp. After Blower (^0F)	Total Treatment Days	Treatment System Status VES
9/10/2021	0	0	63195	0	0	0	0	17.1	14	60.6	129	0.0	2
9/17/2021	7	7	63363	168	7	100.0%	100.0%	15.1	14	17.2	110	7	1

Notes:
Total flow estimated from sum of manifold vacuums

TABLE 1C: SVE AND MONITOR WELL INFLUENCE DATA

Facility Name: Haines City Quality Cleaners
Facility ID#:
ERIC_5357

fpm = feet per minute
ppm = parts per million

All Measurements = Feet
No Data = Blank
OVA Readings = ppm
Not Measured= NM
Vacuum = in of H_2O

WELL NO.	VW001				VW002				VW003				VW004			
DIAMETER	4 inch				4 inch				4 inch				4 inch			
WELL DEPTH	8 feet bls				8 feet bls				8 feet bls				8 feet bls			
SCREEN INTERVAL	1 - 8 feet bls				1 - 8 feet bls				1 - 8 feet bls				1 - 8 feet bls			
Date	Manifold Vacuum	Well Vacuum	Manifold Flow (fpm)	PID (ppm)	Manifold Vacuum	Well Vacuum	Manifold Flow	PID	Manifold Vacuum	Well Vacuum	Manifold Flow	PID	Manifold Vacuum	Well Vacuum	Manifold Flow	PID
9/10/2021	-3.60	-3.00	12.10	7.0	-16.00	-3.90	12.00	9.0	-15.00	-3.50	14.00	16.0	-26.00	-4.90	12.00	15.0
9/17/2021	-3.20	-3.20	17.00	7.0	-4.80	-4.60	19.50	6.4	-3.80	-3.30	19.30	16.8	-5.30	-4.50	17.00	3.5

WELL NO.	MW001		MW004		MW005											
DIAMETER (in.)	1"		1"		1"											
WELL DEPTH (ft.)	35.00		15.00		35.00											
SCREEN INTERVAL (ft)	30 to 35		5 to 15		30 to 35											
TOC ELEVATION	132.61		132.78		132.74											
DATE	Stress	DTW	Stress	DTW	Stress	DTW										
9/10/2021	0.00	7.37	-0.90	7.61	+0.2	7.63										
9/17/2021	0.00	7.48	-0.90	7.70	0.00	7.73										

TABLE 1D: SVE SYSTEM ANALYTICAL AND PERFORMANCE SUMMARY

Facility Name: Haines City Quality Cleaners
Facility ID#: ERIC_5357

Below Detection Limits = BDL
Not Sampled = NS
Analytical Results = mg/m^3

Sample		Hour Meter	Run-Time per O&M Period	Wellhead Vacuum	Trailer Vacuum	System PID	Flow Rate	PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	Vinyl Chloride	Other VOC	Total VOC	Recovery Rate	Emission Rate
Location	Date	(hrs)	(days)	(in of H20)	(in of H20)	(ppm)	(cfm)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(lbs/day)	(lbs/day)
VW001	9/10/2021	63195	0	3	3.6	7	12	1	0.0075 U	0.006 U	0.0051 U	0.0057 U	0.309	1.31	-	-
VW002	9/10/2021	63195	0	3.9	16	9	12	2.2	0.019 U	0.015 U	0.013 U	0.014 U	1.388	3.59	-	-
VW003	9/10/2021	63195	0	3.5	15	16	14	1.7	0.013 U	0.01 U	0.0085 U	0.0095 U	0.846	2.55	-	-
VW004	9/10/2021	63195	0	4.9	26	15	12	1.2	0.019 U	0.015 U	0.013 U	0.014 U	1.345	2.55	-	-
Combined Inf.	9/10/2021	63195	0	-	62.4	9	72	1.3	0.019 U	0.015 U	0.013 U	0.014 U	1.065	2.37	0.01534	-
Combined Eff.	9/10/2021	63195	0	-	4	0	135	0.034	0.019 U	0.015 U	0.013 U	0.014 U	0.991	1.025	-	0.01247

Start of Current Period 10-Sep-21
End of Current Period
Operational Days in Current Period 1

Sample		Hour Meter	Run-Time per O&M Period	Wellhead Vacuum	Trailer Vacuum	System PID	Flow Rate	PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	Vinyl Chloride	Other VOC	Total VOC	Recovery Rate	Emission Rate
Location	Date	(hrs)	(days)	(in of H20)	(in of H20)	(ppm)	(cfm)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(mg/m^3)	(lbs/day)	(lbs/day)
VW001	9/17/2021	63363	7	3.2	3.3	7	17	0.42	0.0075 U	0.006 U	0.0051 U	0.0057 U	0.3698		-	-
VW002	9/17/2021	63363	7	4.6	4.8	6.4	19.5	0.21	0.019 U	0.015 U	0.013 U	0.014 U	2.29	-	-	-
VW003	9/17/2021	63363	7	3.3	3.8	16.8	19.3	0.1	0.0075 U	0.006 U	0.0051 U	0.0057 U	0.2783	-	-	-
VW004	9/17/2021	63363	7	4.5	5.3	3.5	17	0.11	0.019 U	0.015 U	0.013 U	0.014 U	1.62	-	-	-
Combined Inf.	9/17/2021	63363	7	-	58.9	4.6	72.8	0.150	0.019 U	0.015 U	0.013 U	0.014 U	1.5749	1.7333	0.01137	-
Combined Eff.	9/17/2021	63363	7	-	3.3	5.8	110	0.021 U	0.019 U	0.015 U	0.013 U	0.014 U	0.346	0.3460	-	0.00343

Start of Current Period 17-Sep-21
End of Current Period
Operational Days in Current Period 7
VOH Mass (lbs) Recovered in Current Period 0.08

Notes:

Estimated combined influent vacuum calculated by summing manifold vacuums
Estimated combined influent flow calculated by summing manifold flow
mg/m^3 = miligrams per meter cubed
cmf = cubic feet per minute
in of H2O = inches of water
lbs = pounds

Total Mass recovered to date (lbs) 0.08

PSI Project Number: 05523414
July 25, 2022

Professional Service Industries, Inc.
5801 Benjamin Center Drive, Suite 112, Tampa, FL 33634
Phone: (813) 886-1075

Florida Department of Environmental Protection
Waste Site Cleanup Section
2600 Blair Stone Road, MS 4520
Tallahassee, FL 32399-2400

Attention: Ms. Walsta Jean-Baptiste, PG
Contract Manager
Telephone: (850) 245-8705
Email: Walsta.jeanbaptiste@FloridaDEP.gov

Re: Remedial Action System Status Report
January to June 2022
Haines City Quality Cleaners
ERIC_5357
Task Assignment DC 038 A
Contract No. HW 552

Dear Ms. Jean-Baptiste:

Professional Service Industries, Inc. (PSI), an Intertek company, is pleased to submit the Remedial Action System Status Report for the Haines City Quality Cleaners in Haines City, Polk County, Florida. One copy is being submitted electronically.

Thank you for choosing PSI as your consultant for this important project. If you have any questions, please don't hesitate to contact us at (813) 886-1075.

Respectfully submitted,
PROFESSIONAL SERVICE INDUSTRIES, INC.

Scott Jordan, PE
Project Engineer

Nana G. Westmark, PG, CHMM
Senior Geologist / Contract Manager

CC: Mr. Robert Huckaby, PE, WSCP FDEP

\\Tampa-fs1\projects\552-Env\FDEP BWC\05522477 Haines City Quality Cleaners\Reports\2020-0828 RASS Semi-Annual 1\Remedial Action System Status Report - ERIC_5357.docx

Remedial Action System Status Report
January to June 2022
Haines City Quality Cleaners
ERIC_5357
Task Assignment DC038A
Contract No. HW 552

Prepared for

Florida Department of Environmental Protection
Waste Site Cleanup Section
2600 Blair Stone Road
MS 4520
Tallahassee, Florida 32399-2400
Telephone (850) 245-8705

Prepared by

Professional Service Industries, Inc.
5801 Benjamin Center Drive, Suite 112
Tampa, Florida 33634
Telephone (813) 886-1075

PSI Project No. 05523414

July 25, 2022

TABLE OF CONTENTS

CERTIFICATION

FLORIDA REGISTERED PROFESSIONAL ENGINEER

In accordance with the provisions of Florida Statutes, Chapter 471, this Remedial Action System Status Report, January 2022 to June 2022, for Haines City Quality Cleaners has been prepared under my responsible charge and direct supervision. This work was performed in accordance with generally accepted professional engineering practices pursuant to Chapter 471 of the Florida Statutes and is general in conformance with Chapter 62-780, Florida Administrative Code. The data, findings, recommendations, specifications or professional opinions were prepared solely for the use of the Florida Department of Environmental Protection. PSI makes no other warranty, either expressed or implied, and is not responsible for the interpretation by others of these data.

ANDREW SCOTT JORDAN LICENSE No. 89970 STATE OF FLORIDA PROFESSIONAL ENGINEER

Andrew Scott Jordan, PE Date

Florida Registration No. 89970
Professional Service Industries, Inc.
5801 Benjamin Center Drive, Suite 112
Tampa, Florida 33634
Eng. Bus. Authorization No. 3684

1 INTRODUCTION

This report presents a summary of activities performed by Professional Service Industries, Inc. (PSI), an Intertek company, at the Haines City Quality Cleaners (ERIC_5357) facility during the period of operation from January 2022 to June 2022. This Remedial Action System Status (RASS) Report describes the performance of a soil vapor extraction (SVE) system. The purpose of the SVE system is to remediate soil, impacted by dry cleaning solvents, to the Cleanup Target Levels established in Chapter 62-777, Florida Administrative Code (F.A.C.). The intent of this report is to summarize remedial system operation, maintenance and cleanup performance, and to make recommendations as needed to enhance system performance such that site cleanup and closure can be achieved. The activities described herein for the Haines City Quality Cleaners is being conducted under the State of Florida Drycleaning Solvent Cleanup Program.

1.1 AUTHORIZATION

Authorization to conduct Operation and Maintenance (O&M) of the SVE system was by Task Assignment DC038A, dated December 7, 2021, under the terms and conditions of the Florida Department of Environmental Protection, Bureau of Waste Cleanup Consolidated Services Contract No. HW 552.

1.2 SITE DESCRIPTION

The former Haines City Quality Cleaners was a drycleaning facility located at 511 Haines City Mall, in Haines City, Polk County. The property is situated approximately 800 feet southwest of Lake Tracy. A USGS topographic map depicting the site location is illustrated on **Figure 1**.

The former Haines City Quality Cleaners occupied a tenant space on the east portion of a multi-tenant commercial shopping center. The tenant space is currently occupied by a rental car agency (Enterprise Rent-A-Car). No drycleaning equipment remains at the former facility. The surrounding land use is primarily commercial, but also includes an apartment complex and single-family homes to the south.

1.3 PROJECT BACKGROUND

The Haines City Quality Cleaners operated at the tenant space inside the Haines City Mall starting in 1984. The name of the cleaners at that time was Smith Cleaners who has since moved to a separate location in the mall and reportedly within the footprint of the current Publix supermarket.

The name of the drycleaners was changed to Haines City Quality Cleaners in August 1985, which operated until July 1997 when the drycleaning business moved across the street. The tenant space that is designated as Haines City Quality Cleaners in the Drycleaning Solvent Cleanup Program is Suite 1F of the Haines City Mall which is currently is occupied by an Enterprise Car Rental facility and has remained since September 1998.

The FDEP tasked AECOM in 2016 to perform site assessment activities to identify the potential sources of drycleaning solvents that may impact the soil and groundwater quality, delineate the horizontal and vertical extents of impacts, characterize site lithology, and determine site specific aquifer characteristics

to assist with transport modeling and possible remedial design. The assessment was performed between February 2017 and July 2018. The soil assessment indicated that no dry-cleaning chlorinated contaminants of concern were detected above SCTLs in any soil samples collected.

Groundwater assessment indicated chlorinated compounds above Groundwater Cleanup Target Levels (GCTLs) in several depth intervals as measured with direct push technology and a mobile lab. Eleven monitor wells were installed to delineate the groundwater impact from the former drycleaner which were installed to depths of 15, 35, and 45 feet bls and one deep monitor well (MW009) was installed to 75 feet bls.

A Modified Active Gas Sampling Study (MAGS) was also conducted as a part of the site assessment which revealed relatively low levels of PCE in the soil. Based on the MAGS tests, the site was suitable for soil vapor extraction technology to address the on-site contaminants. An Interim Source Removal Plan (ISRP) was prepared and submitted by AECOM in May 2019 to address the VOHs in the vadose zone.

The SVE system was constructed from June to July 2021 and started up on September 10, 2021. Due to contractor change, PSI has taken over the Operations and Maintenance (O&M) of the SVE system at the subject site. AECOM has provided tables, CAD and GIS drawings to PSI.

1.4 REMEDIAL SYSTEM

The SVE system is located within an enclosed treatment system trailer in the parking lot behind the building. The system consists of four vapor extraction wells (VW001 through VW004) screened 1 to 8 feet bls. The remedial equipment, summarized in **Table 1**, includes a 3 horsepower (HP) Ametek Rotron regenerative blower for vapor recovery, 40-gallon moisture separator, 200-pound vapor phase granular activated carbon (GAC) vessel, and Sensaphone Sentinel 4G telemetry system. The SVE manifold allows each SVE line to be independently operated and monitored. Valve controls at the manifold allow each line to be utilized for either vacuum extraction or air injection. A 6-foot high wooden fence with a man gate and a double drive gate was installed around the SVE system compound. A detailed site map is included as **Figure 2**.

Some minor modifications were made in April 2022 to the SVE piping to accommodate the car wash business. The SVE lines were re-piped underground to the SVE system behind the building, the details of which were described and presented in a deliverable dated July 5, 2022, under TA DC 010 A and subsequently approved by the Department July 7, 2022.

2 REMEDIATION SYSTEM OPERATION AND DATA EVALUATION

The general strategy for operating and maintaining the remediation equipment at the site is to optimize contaminant mass recovery by adjusting system operating parameters as needed to maximize flow rates and vacuum influence while minimizing water entrainment, short circuiting and channeling.

2.1 SYSTEM MAINTENANCE AND SITE VISIT DATA

Routine tasks performed during each site visit include the following:

- Record system operating parameters (*e.g.,* hour meter readings, flow rates, vacuum levels) on a site-specific O&M checklist (**Appendix A**).
- Inspect filters and clean or replace them as needed.
- Measure depth to water and vacuum influence at select monitoring wells and vapor monitoring points (VMPs).
- Measure organic vapor concentrations in the total system influent and individual SVE lines by utilizing an organic vapor analyzer (OVA) equipped with a photoionization detector (PID).
- Collect system influent samples in accordance with the approved sampling schedule for laboratory analysis.

Site visits were conducted monthly during the January to June 2022 reporting period. No operational variances were noted for this reporting period. Maintenance repairs and system modifications are summarized in **Table 1**.

2.2 TREATMENT SYSTEM OPERATION AND PERFORMANCE

The system operated at an average run time of 100% during the January to June 2022 reporting period, as summarized in **Table 2**. The system operated at an average flow rate and vacuum of 83 scfm at 61 IW from January to June 2022, as summarized in **Table 3**, which is a lower flow rate and higher vacuum than design (112 scfm at 42 IW). Depth to water at the site averages 7 to 9 ft bls based upon previous groundwater sampling events. The applied vacuum, flow rates and OVA screening results measured at individual SVE wells are summarized in **Table 4**.

Vacuum influence measurements, summarized in **Table 5**, indicate that a minimum subsurface vacuum greater than 0.1 IW was maintained throughout the source area during the reporting period.

The depth to water (DTW) in shallow monitoring well MW004 ranged from 9.33 to 10.03 feet bls during the reporting period, as summarized in **Table 5**. The DTW during the reporting period was approximately 1.3 to 2 feet from the bottom of the screened interval of the SVE wells, and water movement has been audible in the SVE002 conveyance piping. The applied vacuum therefore remained below the design vacuum in order to maintain an adequate pore volume exchange rate and radius of influence by minimizing water entrainment.

2.3 SOIL VAPOR SAMPLE ANALYSIS AND MASS CALCULATIONS

Soil vapor influent and effluent samples were collected in January 2022 and March 2022 for analysis in Summa canisters. Additional samples were collected from vapor extraction wells VW001 and VW003 in March 2022. SVE well samples are scheduled to be collected during the next O&M visit, the results of which will be presented in the next email summary. The air samples were analyzed by EPA Method TO-15 for volatile organic compounds (VOCs) by a National Environmental Laboratory Accreditation Conference (NELAC) certified laboratory. The analytical results, summarized in **Table 3**, indicated that contaminant concentrations were highest in VW001. These results are consistent with the 2017 MAGS investigation and startup results. Influent concentrations have declined since startup, which is typical when contaminant mass transport is limited by diffusion. The laboratory analytical report is provided in **Appendix B**.

An estimated 0.17 pounds of VOHs were recovered by the SVE system during the reporting period. These values are consistent with the mass estimated in the ISRP (2 pounds). The estimated emission rate for total Hazardous Air Pollutants (HAPs) during the reporting was 0.0012 pounds per day (lb/day), which is below the regulatory emissions limit of 13.7 lb/day for total HAPs. Mass recovery calculations are summarized in **Table 3**.

2.4 QUALITY ASSURANCE / QUALITY CONTROL MEASURES

Air sampling activities were performed in general accordance with the sample collection procedures outlined in Section 8.0 of the FDEP Bureau of Laboratories VO-013-1.9, Ambient Air Sampling into Passivated Canisters for Volatile Organic Compound Analysis. Samples were delivered under chain of custody to Pace Analytical National, a NELAC-certified laboratory (Florida Certification Number E87487), in accordance with Florida DEP-SOP 001/01.

The analytical laboratory results were evaluated for the following QA/QC criteria:

1. Samples were received and processed by the laboratory within applicable holding times.
2. No contaminants of concern were detected above the method detection limit (MDL) in the method blank (MB) associated with each sample batch.
3. Laboratory Control Sample (LCS) and LCS Duplicate results for contaminants of concern were within QC limits.
4. Surrogate recoveries and control sample duplicate recoveries were within control ranges.

Based on this summary, the laboratory results are considered suitable for the intended use of evaluating the performance of the SVE system.

3 CONCLUSIONS AND RECOMMENDATIONS

PSI performed six months of O&M activities along with groundwater monitoring at the Haines City Quality Cleaners on behalf of the FDEP Waste Site Cleanup Section, under the Drycleaning Solvent Cleanup Program.

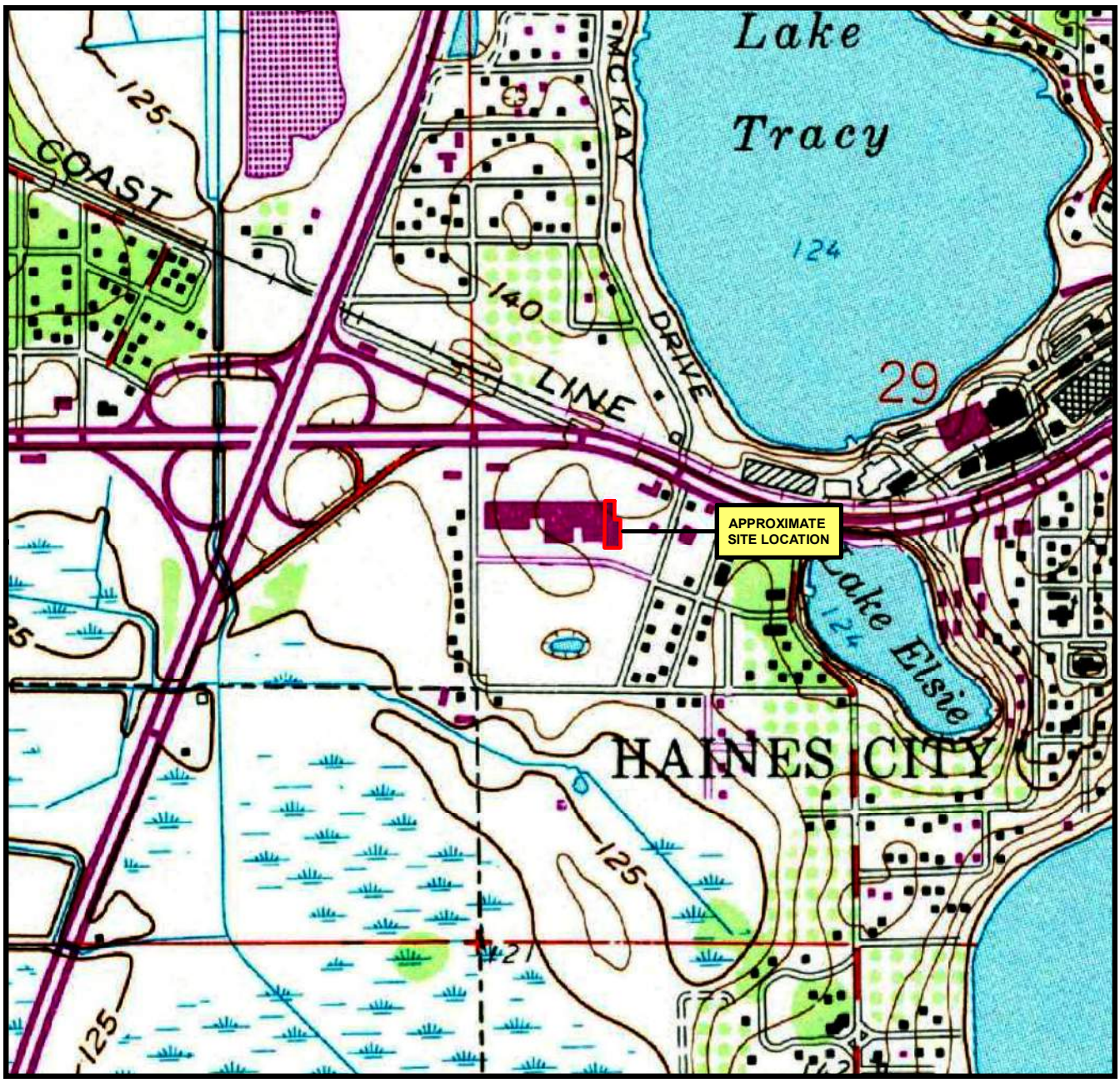
3.1 CONCLUSIONS

- The SVE system was 100% operational during the January to June 2022 reporting period.
- The system operated at an average flow rate and vacuum of 83 scfm at 61 IW during the reporting period, which is a lower flow rate and higher vacuum than design (112 scfm at 42 IW).
- A minimum subsurface vacuum greater than 0.1 IW was maintained throughout the source area within the footprint of the building.
- Soil vapor influent samples collected during startup indicated that contaminant concentrations were highest in VW001. These results are consistent with the 2017 MAGS investigation and startup results.
- SVE influent concentrations have declined significantly since startup, which suggests the rate of contaminant mass recovery may be limited by matrix diffusion.
- An estimated 0.176 pounds of VOHs were recovered by the SVE system during the reporting period. An estimated 0.206 pounds of VOHs have been recovered by the SVE system since startup, which is considerably lower than the mass estimated in the ISRP (1.1 pounds in the first 30 days).
- The estimated emission rate for total HAPs during the reporting period was 0.0012 lb/day, which is significantly below the regulatory emission rate of 13.7 lb/day for total HAPs.

3.2 RECOMMENDATIONS

- Continue SVE system operation with monthly O&M visits.
- Initiate selective operation of individual SVE wells. Varying airflow pathways can promote improved mass recovery by mitigating the formation of preferential pathways. SVE wells with higher contaminant concentrations will be operated more frequently than wells with lower concentrations, but all wells will be operated at least periodically.
- Continue treating air emissions using the onsite vapor GAC.
- Continue monitoring groundwater conditions on an annual basis.

FIGURES



SCALE 1 : 10,000

0.35 0.175 0 0.35 Mile

900 450 0 900 1,800 Feet

0.3 0.15 0 0.3 Kilometers

CONTOUR INTERVAL 5 FEET

SOURCE: USGS QUADRANGLE "WINTER HAVEN, FLA"
NATIONAL GEODETIC VERTICAL DATUM 1929
DATE: 1959 DATE REVISED: 1980

SECTION 29, TOWNSHIP 27 SOUTH, RANGE 27 EAST

PROJECT NO. 05523414
DRAWN BY BTW
DATE CREATED 7/15/2022

intertek psi
5801 Benjamin Center Drive, Suite 112
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(813) 249-4916 fax

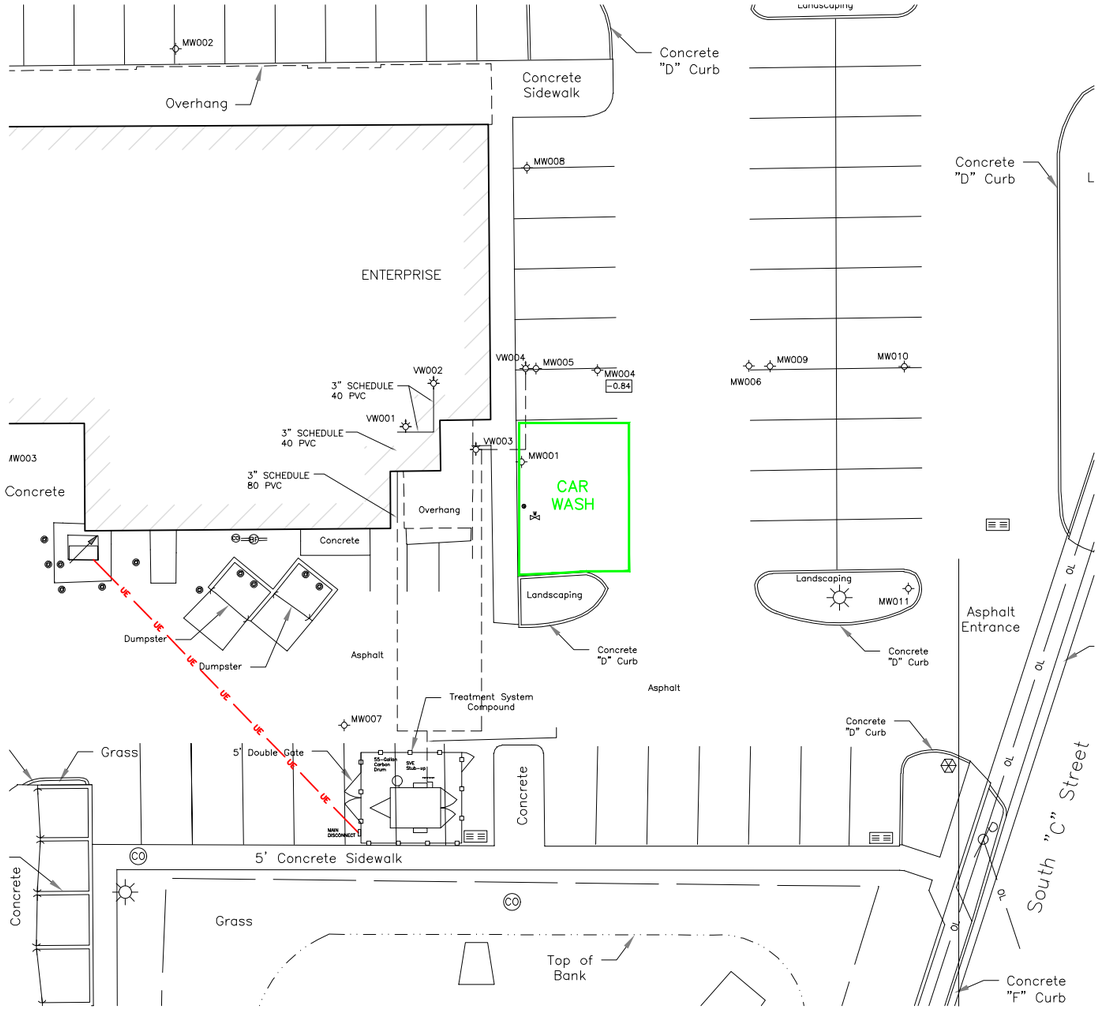
USGS TOPOGRAPHIC MAP

HAINES CITY QUALITY CLEANERS
511 HAINES CITY MALL
HAINES CITY, POLK COUNTY, FLORIDA

FIGURE 1

P:\552-Env\FDEP BWC\05523414 Haines City\CAD GIS\2022-07\fig 1 - USGS Topographic Map.mxd

NORTH



BUILDING

LEGEND:

- MONITOR WELL
- VAPOR EXTRACTION WELL
- ABOVEGROUND TRANSFER PIPING
- UNDERGROUND TRANSFER PIPING
- UE — UNDERGROUND ELECTRICAL
- ROUND POST
- GRATE INLET
- MITERED END SECTION
- SANITARY MANHOLE
- CLEANOUT
- LIGHT POLE
- UTILITY POLE
- TRANSFORMER
- WATER METER
- FIRE HYDRANT
- BACKFLOW PREVENTER
- FENCE
- OVERHEAD UTILITY LINE
- TRENCH CROSS SECTION
- -0.84 VACUUM INFLUENCE MEASUREMENT (IW)

NOTE: 2021 DRAWING PROVIDED BY AECOM

P:\552-Env\FDEP BWC\05523414 Haines City\CAD GIS\2022-07

PROJ. NO. 05523414 DRAWN BY BTW DATE CREATED 07/18/22 SCALE: 1" = 30'	intertek psi 5801 Benjamin Center Drive, Suite 112 Tampa, Florida 33634 (813) 886-1075 (813) 249-4916 fax	0 30 60 APPROXIMATE SCALE IN FEET	SITE LAYOUT AND VACUUM INFLUENCE (JUNE 2022) HAINES CITY QUALITY CLEANERS 511 HAINES CITY MALL HAINES CITY, POLK COUNTY, FLORIDA FAC ID # ERIC_5357	FIGURE 2

TABLES

TABLE 1: Remedial System Summary

Facility Name: Haines City Quality Cleaners
Facility ID #: ERIC_5357

Drycleaner Status	*Currently no drycleaning operations take place at this facility*
Current Business Operations	*Enterprise Rent-A-Car*
Groundwater Recovery	N/A
Permits	N/A
Soil Treatment	Soil Vapor Extraction (SVE)
VES Well ID#	VW001, VW002, VW003, VW004
Screen Depth	1 to 8 feet bls
Screen Length	7 feet (4-inch diameter)
Design Flow Rate	Total = 112 cfm @ 42 IW
	SVE wells = 28 cfm @ 28 IW
Off Gas Treatment	Evoqua, 50 lb of GAC
FDEP Equipment Property No.	117312
Equipment & Specifications	Blower: Ametek Rotron EN656M72XL, 3 HP, 3-ph
	Vapor Liquid Separator: Rotron Model MS350B
Control Panel	Enviroline
Telemetry	Sensaphone Sentinel with 4G LTE
	S/N: SCD-1200-4GATCD 00:07:F9:00:DB:31

SYSTEM REPAIR HISTORY

Date	Part Replaced or Modification
9/10/2021	System startup
10/4/2021	System shutdown pending contractor reassignment
1/14/2022	System startup
4/26/2022	Repair broken fence gate
5/13/2022	Buried 12' of aboveground piping for VW001 and VW002

TABLE 2: Soil Vapor Extraction Performance Summary

Facility Name: Haines City Quality Cleaners
Facility ID #: ERIC_5357

Process Status Codes		
Code	Arrive	Depart
1	on	on
2	off	on
3	off	off
4	on	off

Site Visit Date	Days Between Site Visits	Days Since Startup	Hour Meter Reading	Daily Designed Run Time (hours)	Hours of Operation (period)	Total Hours of Operation (cumulative)	Approved Down Time (hours)	Percent Run Time (period)	Percent Run Time (cumulative)	Process Status
9/10/2021	0	0	63,195	24	0	0		N/A - Startup		2
9/17/2021	7	7	63,363	24	168	168		100%	100%	1
10/4/2021	17	24	63,768	24	405	573		99%	99%	4
1/14/2022	102	126	63,768	0	0	573		N/A - Temp Shutdown		2
2/14/2022	31	157	64,512	24	744	1,317		100%	100%	1
3/30/2022	44	201	65,567	24	1,055	2,372		100%	100%	1
4/26/2022	27	228	66,217	24	650	3,022		100%	100%	1
5/13/2022	17	245	66,620	24	404	3,425		99%	100%	1
6/3/2022	21	266	67,124	24	504	3,929		100%	100%	1

Average Run Time for Reporting Period	
January to June 2022	100%

TABLE 3: SVE System Analytical and Performance Summary

Facility Name: Haines City Quality Cleaners
Facility ID #: ERIC_5357

Sample Location	Date	Hour Meter	Vacuum/ Pressure (IW)	Flow (scfm)	OVA (ppm)	Laboratory Analytical Results (mg/m^3)					Total VOH (mg/m^3)	Recovery Rate (lb/day)	Emission Rate (lb/day)	Cumulative Recovered Mass (lb)
						PCE	TCE	cis-1,2 DCE	trans-1,2 DCE	Vinyl Chloride				
Influent	9/10/2021	63195	-62.4	60.6	9	**1.3**	0.019 U	0.015 U	0.013 U	0.014 U	1.3	0.007		**0.007**
Effluent			4.0	135	0	**0.034 I**	0.019 U	0.015 U	0.013 U	0.014 U	0.034		0.0004	
VW001			See Table 4			**1.0**	0.0075 U	0.0060 U	0.0051 U	0.0057 U	1.0			
VW002			See Table 4			**2.2**	0.019 U	0.015 U	0.013 U	0.014 U	2.2			
VW003			See Table 4			**1.7**	0.013 U	0.010 U	0.0085 U	0.0095 U	1.7			
VW004			See Table 4			**1.2**	0.019 U	0.015 U	0.013 U	0.014 U	1.2			
Influent	9/17/2021	63363	-62.3	60.8	4.6	**0.15 I**	0.019 U	0.015 U	0.013 U	0.014 U	0.15	0.0008		**0.035**
Effluent			3.3	101.2	5.8	0.021 U	0.019 U	0.015 U	0.013 U	0.014 U	0.00		0.0000	
VW001			See Table 4			**0.42**	0.0075 U	0.0060 U	0.0051 U	0.0057 U	0.42			
VW002			See Table 4			**0.21**	0.019 U	0.015 U	0.013 U	0.014 U	0.21			
VW003			See Table 4			**0.10**	0.0075 U	0.0060 U	0.0051 U	0.0057 U	0.10			
VW004			See Table 4			**0.11 I**	0.019 U	0.015 U	0.013 U	0.014 U	0.11			
Influent	1/14/2022	63768	-68.0	86.9	0.2	**0.402**	0.000364 U	0.000311 U	0.000267 U	0.000243 U	0.402	0.0031		**0.068**
Effluent			1.8	71.0	0.2	**0.00306**	0.000364 U	0.000311 U	0.000267 U	0.000243 U	0.003		0.0000	
Influent	2/14/2022	64512	-58.8	85.5	0.0									
Effluent			2.2	72.9	0.0									
Influent	3/30/2022	65567	-68.0	79.8	0.0	**0.0392**	0.000364 U	0.000311 U	0.000267 U	0.000243 U	0.041	0.0003		**0.197**
Effluent			2.2	66.3	0.0	0.000553 U	0.000364 U	0.000311 U	0.000267 U	0.000243 U	0.000		0.0000	
VW001			See Table 4			**0.0435**	0.000364 U	0.000311 U	0.000267 U	0.000243 U	0.044			
VW003			See Table 4			0.000553 U	**0.00437**	0.000311 U	0.000267 U	0.000243 U	0.004			
Influent	4/26/2022	66217	-56.2	80.9	0.0									
Effluent	4/26/2022		2.3	65.2	0.0									
Influent	5/13/2022	66620	-	-	-									
Effluent	5/13/2022		2.3	67.7	-									
Influent	6/3/2022	67124	-54.6	82.8	0.0	Not collected					0.00	0.0000		**0.206**
Effluent	6/3/2022		2.4	65.9	0.0	Not collected					0.00		0.0000	
VW001			See Table 4			Not collected					0.00			
VW002			See Table 4			Not collected					0.00			
VW003			See Table 4			Not collected					0.00			
VW004			See Table 4			Not collected					0.00			

TABLE 3: SVE System Analytical and Performance Summary

Facility Name: Haines City Quality Cleaners
Facility ID #: ERIC_5357

Summary for Reporting Period: January to June 2022	
Average Vacuum (IW):	**-61**
Average Flow (scfm):	**83**
Mass Recovered this Period (lb):	**0.17**
Cumulative Mass Recovered (lb):	**0.21**

Notes:

mg/m^3 = milligrams per cubic meter
lb/day = pounds per day
scfm = standard cubic feet per minute (ft^3/min)
IW = inches of water
ppm = parts per million
VOH = volatile organic halocarbons
U = Analyte detected below laboratory method detection limit.
I = Analyte detected between the laboratory method detection limit and practical quantitation limit.

Emission rate and total mass recovered based on the following equations:

Formula for Mass Recovery/Emission Rate

$$M = \frac{Q \cdot c}{11{,}124}$$

where:
M = Mass flow rate (lb/day)
Q = Air flow rate (scfm)
c = VOH concentration (mg/m^3)
11,124 = unit conversion factor: (ft^3/min)·(mg/m^3) to (lb/day)

Formula for Mass Recovered Between Dates

$$R = \left(\frac{M_1 + M_2}{2}\right) \times \left(\frac{T_2 - T_1}{24}\right)$$

where:
R = mass recovered between previous and current date (lb)
M_1 = mass flow rate of previous date (lb/day)
M_2 = mass flow rate of current date (lb/day)
T_1 = hour meter reading on previous date
T_2 = hour meter reading on current date

TABLE 4: SVE Well Data

Facility Name: Haines City Quality Cleaners
Facility ID #: ERIC_5357

Well ID	VW001				VW002				VW003				VW004			
Diameter (inches)	4				4				4				4			
Well Depth (feet bls)	8				8				8				8			
Screen Interval (feet bls)	1 - 8				1 - 8				1 - 8				1 - 8			
	Vacuum (IW)		Flow	OVA	Vacuum (IW)		Flow	OVA	Vacuum (IW)		Flow	OVA	Vacuum (IW)		Flow	OVA
Date	Manifold	Wellhead	(scfm)	(ppm)	Manifold	Wellhead	(scfm)	(ppm)	Manifold	Wellhead	(scfm)	(ppm)	Manifold	Wellhead	(scfm)	(ppm)
9/10/2021	-3.6	-3.0	12	7.0	-16	-3.9	12	9.0	-15	-3.5	14	16.0	-26	-4.9	12	15.0
9/17/2021	-3.2	-3.2	17	7.0	-4.8	-4.6	20	6.4	-3.8	-3.3	19	16.8	-5.3	-4.9	17	3.5
1/14/2022	-10.2	NM	47	0.3	-2.0	NM	0.8	0.3	-3.8	NM	15	0.2	-4.2	NM	16	0.2
2/14/2022	-15.3	-12.29	73	0.2	-1.5	-1.42	0	0.0	-15.8	-1.28	24	0.0	-1.9	-0.31	0.3	0.0
3/30/2022	-14.7	NM	79	0.0	-1.3	NM	1	0.0	-15.8	NM	2	0.0	-1.9	NM	0.5	0.0
4/26/2022	-15.2	NM	79	0.0	-1.5	-1.8	1	0.0	-15.8	-0.9	6	0.0	0.0	-0.4	0	0.0
5/13/2022	-13.2	-13.0	73	0.0	-1.5	-1.8	1	0.0	-14.7	-0.8	2	0.0	-13.4	-2.0	6	0.0
6/3/2022	-9.6	-8.8	45	0.0	-4.5	-4.3	18	0.0	-8.8	-1.1	1	0.0	-3.9	-4.0	16	0.0

Notes:
IW = inches of water
scfm = standard cubic feet per minute (ft^3/min)
OVA = organic vapor analyzer
ppm = parts per million
NM = not measured

TABLE 5: Vacuum Influence and Depth to Water Data

Facility Name: Haines City Quality Cleaners
Facility ID #: ERIC_5357

Well ID	MW004	
Diameter (inches)	1	
Well Depth (feet bls)	15.00	
Screen Interval (feet bls)	5 - 15	
Date	Vacuum Influence (IW)	DTW (feet bls)
9/10/2021	-0.90	7.61
9/17/2021	-0.90	7.70
1/14/2022	-0.92	9.94
2/14/2022	-0.21	10.03
3/30/2022	-0.16	9.97
4/29/2022	-0.17	9.33
5/13/2022	-0.39	9.74
6/3/2022	-0.84	9.79

Notes:
bls = below land surface
IW= inches of water
DTW = depth to water
NM = not measured

Map ID 32: Shell Hoppy’s

Discharge Report Form

PLEASE PRINT OR TYPE

DEP Form # 62-761 900(1)
Form Title Discharge Report Form
Effective Date July 13, 1998

MAR 15 2002

Instructions are on the reverse side. Please complete all **applicable** blanks

1. Facility ID Number (if registered) 53/8624076 **2. Date of form completion.** 3/14/02

3. General information
Facility name or responsible party (if applicable): Shell-Hoppy's
Facility Owner or Operator, or Discharger: Don Ingram
Contact Person: Don Ingram Telephone Number: (863)326-9833 County: Polk
Facility or Discharger Mailing Address: P.O. Box 93; Haines City, FL 33845
Location of Discharge (street address) 407 U.S. Highway 17-92; Haines City, FL 33844
Latitude and Longitude of Discharge (if known)

4. Date of receipt of test results or discovery of confirmed discharge: 12/28/01 month/day/year

5. Estimated number of gallons discharged: Unknown

6. Discharge affected: [ ] Air [X] Soil [ ] Groundwater [ ] Drinking water well(s) [ ] Shoreline [ ] Surface water (water body name)

7. Method of discovery (check all that apply)

[ ] Liquid detector (automatic or manual)	[ ] Internal inspection	[X] Closure/Closure Assessment
[ ] Vapor detector (automatic or manual)	[ ] Inventory control	[ ] Groundwater analytical samples
[ ] Tightness test	[ ] Monitoring wells	[X] Soil analytical tests or samples
[ ] Pressure test	[ ] Automatic tank gauging	[ ] Visual observation
[ ] Statistical Inventory Reconciliation	[ ] Manual tank gauging	[ ] Other

8. Type of regulated substance discharged: (check one)

[ ] Unknown	[X] Used/waste oil	[ ] Jet fuel	[ ] Heating oil	[ ] New/lube oil
[ ] Gasoline	[ ] Aviation gas	[ ] Diesel	[ ] Kerosene	[ ] Mineral acid

[ ] Hazardous substance - includes CERCLA substances from USTs above reportable quantities, pesticides, ammonia, chlorine, and derivatives (write in name or Chemical Abstract Service (CAS) number)
[ ] Other

9. Source of Discharge: (check all that apply)

[ ] Dispensing system	[ ] Pipe	[ ] Barge	[ ] Pipeline	[ ] Vehicle
[X] Tank	[ ] Fitting	[ ] Tanker ship	[ ] Railroad tankcar	[ ] Airplane
[ ] Unknown	[ ] Valve failure	[ ] Other Vessel	[ ] Tank truck	[ ] Drum

[ ] Other

10. Cause of the discharge: (check all that apply)

[ ] Loose connection	[ ] Puncture	[ ] Spill	[ ] Collision	[ ] Corrosion
[ ] Fire/explosion	[ ] Overfill	[ ] Human error	[ ] Vehicle Accident	[ ] Installation failure

] Other Unknown

. Actions taken in response to the discharge: Removal of visually stained soil.

. Comments: Soil was transported to an FDEP approved facility.
Soil samples collected after source removal were below regulatory levels.

. Agencies notified (as applicable):

] State Warning Point *1-800 320-0519*	[ ] National Response Center *1-800-424-8802*	[ ] Florida Marine Patrol *(800) 342-5367*	[ ] Fire Department.	[X] DEP (district/person) [X] County Tanks Program

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

Kevin E. Ottman as Consultant for Owner
ıted Name of Owner, Operator or Authorized Representative, or Discharger

Signature of Owner, Operator or Authorized Representative, or Discharger

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

APR 29 2002

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Don Ingram
Ingram Family Limited Partnership
P.O. Box 93
Haines City, Florida 33845

Subject: Site Rehabilitation Completion Order
Shell - Hoppys
U.S. Highway 17-92 West @ "B" Street
Haines City, Polk County
FDEP Facility ID# 538624076
Discharge Date: December 3, 2001 (Non-program)

Dear Mr. Ingram:

The Polk County Health Department Petroleum Cleanup Program has reviewed the Tank Closure Assessment and Site Rehabilitation Completion Report (SRCR) dated March 4, 2002 (received April 12, 2002) with supplemental information provided through April 11, 2002, prepared and submitted by Ottman & Associates, Inc. for this site. Documentation submitted with the SRCR confirms that criteria set forth in Rule 62-770.680(1), Florida Administrative Code (F.A.C.), have been met. The SRCR is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the site for petroleum product contamination associated with the discharge listed above, except as set forth below.

(1) In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the site, the Department of Environmental Protection (Department) may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the SRCR or otherwise allowed by Chapter 62-770, F.A.C.

(2) Additionally, you are required to properly abandon all monitoring wells, except compliance wells required by Chapter 62-761, F.A.C., for release detection, within 60 days of receipt of this Order. The monitoring wells must be plugged and abandoned in accordance with the requirements of Rule 62-532.500(4), F.A.C.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative proceeding (hearing) is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for a hearing are set forth below.

Persons affected by this Order have the following options:

If you choose to accept the above decision by the Department about the SRCR you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

If you disagree with the decision, you may do one of the following:

(1) File a petition for administrative hearing with the Department's Office of General Counsel within 21 days of receipt of this Order; or

(2) File a request for an extension of time to file a petition for hearing with the Department's Office of General Counsel within 21 days of receipt of this Order. Such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for hearing.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for Hearing

For good cause shown, pursuant to Rule 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for hearing. Such a request must be filed (received) in the Department's Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Mr. Don Ingram of Ingram Family Limited Partnership, shall mail a copy of the request to Mr. Don Ingram of Ingram Family Limited Partnership at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for administrative hearing must be made.

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Mr. Don Ingram of Ingram

Family Limited Partnership, shall mail a copy of the request to Mr. Don Ingram of Ingram Family Limited Partnership at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Section 120.54(5)(b)4.a., F.S., and Rule 28-106.201, F.A.C., a petition for administrative hearing shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the name, address, and telephone number of the petitioner's representative, if any, the site owner's name and address, if different from the petitioner, the FDEP facility number, and the name and address of the facility;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by the petitioner, or a statement that there are no disputed facts;
(e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and
(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an order responding to supplemental information provided pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the clerk of the Department (see below).

The FDEP Facility Number for this site is 538624076. Please use this identification on all future correspondence with the Department or the Polk County Health Department Petroleum Cleanup Program.

Questions

Any questions regarding the Polk County Health Department Petroleum Cleanup Program's review of your SRCR should be directed to Kimberly Murray at (863) 701-1303, extension 104. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 488-9314. Contact with any of the above does not constitute a petition for administrative hearing or request for an extension of time to file a petition for administrative hearing.

Sincerely,

For Michael E. Ashey, Chief
Bureau of Petroleum Storage Systems

MEA/kjm

cc: Grace Rivera, FDEP - BPSS
Kimberly Murray, Polk County Health Department Petroleum Cleanup Program
Kevin Ottman, Ottman & Associates, Inc., 41 Lake Morton Drive, Lakeland, FL 33801
File

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to
§120.52 Florida Statutes, with the
designated Department Clerk, receipt
of which is hereby acknowledged.

Nancy C Dan — Clerk (or Deputy Clerk)

4-24-2012 — Date

P.E. CERTIFICATION

The Tank Closure Assessment and Site Rehabilitation Completion Report (SRCR) dated March 4, 2002 with supplemental information provided through April 11, 2002 for Shell-Hoppys, requested no further action without conditions for the petroleum discharge discovered on December 3, 2001. This facility is located at U.S. Highway 17-92 West at B Street, Haines City, Polk County, Florida, and the facility number for this site is 538624076.

I hereby certify that in my professional judgment, the components of this Site Rehabilitation Completion Report satisfy the requirements set forth in Chapter 62-770, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the objectives stated in Chapter 62-770, F.A.C., have been met.

___ I personally completed this review.

_X_ This review was conducted by __Kimberly Murray___ working under my direct supervision.

Donald R. Ehlenbeck, P.E.
Professional Engineer No. 24533
Polk County Health Department

Signature

April 18, 2002

Date

TEMPLATE SITE ASSESSMENT REPORT

[Signature Page]

DATE: March 30, 2018

PO#/TA#/WO#: B0786D

Site FDEP Facility ID #	53/8624076 Score: 30
Site Name:	Hoppy's Shell
Address:	U.S. Highway 17/92 and B Street
City:	Haines City
County:	Polk County
Consultant Company:	Geo Resources & Engineering, Inc.
Address:	1356 Willow Branch Avenue
City, State, Zip	Jacksonville, Florida 32205
Consultant Rep.:	Sarah Johnson, PG
Phone #:	814-758-1088
Responsible Party Name:	H.D. Ingram
Address:	PO Box 93
City, State, Zip:	Haines City, FL 33844
Responsible Party Rep.:	H.D. Ingram
Phone #:	863-422-6162

CERTIFICATION:

Qualified Registered Professional Engineer or Registered Professional Geologist Certification.

I hereby certify that I have supervised the field work (as summarized in the "Recent Site Assessment Activities" section) and preparation of this report, in accordance with Florida Rules and Regulations. As a registered professional geologist and/or professional engineer, as authorized by Chapters 492 or 471, Florida Statutes, I certify that I am a qualified groundwater professional, with knowledge and experience in groundwater contamination assessment and cleanup. To the best of my knowledge, the information and laboratory data summarized in the "Recent Site Assessment Activities" section (including the applicable attachments) are true, accurate, complete, and in accordance with applicable State Rules and Regulations. ***Include a hard (paper) copy of this cover page, signed and sealed, when submitting the report electronically.***

Consultant Name: Sarah M. Johnson

PE or PG License #: 2896

Signature: 

Date: 03/30/18 FLORIDA Stamp or Seal

Site Name:	Hoppy's Shell
Facility ID #:	53/8624076
Date:	March 30, 2018

TABLE OF CONTENTS

SECTIONS INCLUDED IN REPORT:

Site Name: Hoppy's Shell
Facility ID #: 53/8624076
Date: March 30, 2018

LIST of ATTACHMENTS

(Formats for Tables and Figures are provided in FDEP Petroleum Cleanup Preapproval Program Standard Operating Procedures (SOP) Manual, 5th Edition, April 2005 and subsequent updates, SOP PCS-004, SOP PCS-005, SOP PCS-006 and the October 1998 Assessment Report Preparation guidance). Updated Table formats can be found at the Petroleum Cleanup website.

TABLES

ATTACHED		*TABLE #*	*APPENDIX*
Assessment Tables			
X	SOIL SCREENING RESULTS	1	A
X	SOIL ANALYTICAL RESULTS	2	A
X	GROUNDWATER ANALYTICAL RESULTS *(monitoring wells)*	4	A
	GROUNDWATER ANALYTICAL RESULTS *(direct push)*		A
X	GROUNDWATER ELEVATION DATA	3	A
	MONITORING WELL CONSTRUCTION DATA		A
	SUPPLY WELL CONSTRUCTION DATA *(includes well owner name and address information)*		A
	SITE ASSESSMENT SUMMARY FORM		A
	OTHER:		

TEMPLATE SITE ASSESSMENT REPORT

Site Name: Hoppy's Shell
Facility ID #: 53/8624076
Date: March 30, 2018

FIGURES

ATTACHED		*FIGURE #*	*APPENDIX*
Assessment Figures			
X	SITE PLAN - *including current and/or former tank locations, piping/utilities, and extent of soil excavations (if applicable)*	2	B
	SITE VICINITY AREA USE MAP - *including all potential off-site sources of contamination and water wells located within 500 feet*		B
	POTABLE WELL LOCATION MAP - *A USGS quadrangle map illustrating all municipal/public and private supply wells located within 1/2 and 1/4 mile, respectively (respective radii illustrated)*		B
X	SOIL SAMPLING LOCATIONS - *including data collected during monitoring well installation*	3	B
X	SOIL SCREENING DATA PLOTTED - *including data collected from monitoring well installations.* ***This map can include recommended soil boring locations***	4	B
X	GROUNDWATER SAMPLING LOCATIONS - *including all monitoring well and direct push sampling locations*	3	B
X	GROUNDWATER CONTAMINANT CONCENTRATIONS - *Benzene, BTEX, MTBE & Naphthalene concentrations plotted at each sampling point.* ***This map can include recommended well locations***	7A & 7C	B
X	GROUNDWATER ELEVATION CONTOUR MAP(S) - *with flow interpretation for each impacted zone.* ***Note, previous flow interpretations should be submitted when they are not consistent with the current flow interpretation(s)***	6A thru 6B	B
	GROUNDWATER PLUME INTERPRETATION(S) - *with contaminant isoconcentration contours plotted for each significant contaminant of concern (or total BTEX)*	thru	B
	ESTIMATED FREE PRODUCT PLUME AREA - *including thickness measured*		B
	GEOLOGIC/HYDROLOGIC CROSS-SECTION – *including lithologic, well screen and depth to water fluctuation information*		B
	PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS *(if not illustrated in another figure)*		B
X	OTHER: SITE LOCATION MAP	1	
X	SOIL CONTAMINANT CONCENTRATIONS	5	

FIGURES (continued)

ATTACHED		*FIGURE #*	*APPENDIX*
Remediation Figures			
____	REMEDIAL SYSTEM SITE LAYOUT - *showing remedial system layout and locations of major system components (e.g., monitoring and recovery wells, system housing, effluent discharge, etc.)*	____	____
____	REMEDIATION SYSTEM SCHEMATIC - *showing treatment influent/effluent discharge, etc.*	____	____
____	OTHER: ____	____	____

MISC. ATTACHMENTS

ATTACHED		*APPENDIX*
X	LABORATORY ANALYTICAL REPORTS - *including COCs required for all sampling*	C
X	GROUNDWATER SAMPLING LOGS – *form FD 9000-24 is required for all groundwater sampling*	D
X	FIELD INSTRUMENT CALIBRATION RECORDS- *form FD 9000-8 is required for all groundwater sampling*	D
X	WELL CONSTRUCTION & DEVELOPMENT LOGS *recommend using Petroleum Cleanup Program forms*	E
X	BORING LOGS *recommend using Petroleum Cleanup Program forms*	F
____	CONTAMINATED SOIL AND/OR GW VOLUME AND CONTAMINANT MASS CALCULATIONS	____
____	COPIES OF OFF-SITE ACCESS AGREEMENTS	____
X	COPY OF APPLICABLE WORK ORDER, PURCHASE ORDER, OR TASK ASSIGNMENT	G
X	COPY OF APPLICABLE CHANGE ORDERS	G
X	COPY OF DISPOSAL MANIFESTS - *to document IDW soil and/or groundwater disposal*	H
____	AQUIFER TEST CALCULATIONS	____
____	CHRONOLOGY OF FIELD WORK PERFORMED *- a list of what was performed and when performed*	____

Site Name: Hoppy's Shell
Facility ID #: 53/8624076
Date: March 30, 2018

_____	COPY OF PREVIOUS REMEDIAL ACTION PLAN APPROVAL ORDER	_____
_____	COPY OF PREVIOUS SITE (OR CONTAMINATION) ASSESSMENT REPORT APPROVAL LETTER	_____
X	OTHER: SITE ASSESSMENT SUMMARY WORKSHEET	I
_____	OTHER: _____	_____
_____	ORIGINAL SIGNED AND SEALED PROFESSIONAL LAND SURVEY	_____
_____	ELECTRONIC COPY OF PROFESSIONAL LAND SURVEY	
X	ELECTRONIC COPY OF TEMPLATE SITE ASSESSMENT REPORT	

Site Name: Hoppy's Shell
Facility ID #: 53/8624076
Date: March 30, 2018

SECTION I - Facility & Discharge Information/Initial Abatement
Site Name

☐ *Cluster Site*

Part _____ Facility FDEP# _____ Site Name: _____

I-A) Site Description

Please provide a brief description of the site and a summary of site history and operations. What type of business or businesses (if any), non-petroleum as well as petroleum, operated at the former/present site? If petroleum, describe where all former and current fuel tanks, lines and dispensers were/are located (indicating how this information was obtained). Describe any access constraints (utility conduits, canopies, land cover, etc.) which also might influence the placement of monitoring wells and/or the installation of soil borings. Indicate whether there are any owner issues or traffic concerns which might effect when the work can be performed? ***Please indicate when the requested information is best illustrated on the site map.***

Hoppy's Shell is located at U.S. Highway 17/92 and B Street in Haines City, Polk County, Florida. The facility currently operates as an insurance agency in a single, one-story building. The site formerly operated as a retail gasoline station as far back as June 1959, the installation date of the original USTs.

Site map (Figures 1 & 2) illustrating all current & former tanks, lines and dispensers (including utilities, canopies, etc.) is included in Appendix A

Site Name: Hoppy's Shell
Facility ID #: 53/8624076
Date: March 30, 2018

I-B) Petroleum System/Tank History

List current and former UST's and/or AST's operated at site. Systems (PAST AND PRESENT) must be illustrated on Site Plan. This information should be a summary of the Department's STCM database, all tank closure reports (if applicable) and site owner & operator information.

ID#	AST or UST	Size (gallons)	Installation Date	Contents (unleaded gasoline/ diesel/etc.)	Status (active, removed or abandoned [in place])	Date Removed or Abandoned (if applicable)
1	UST	4,000	6/01/1959	Leaded Gasoline	Removed	
2	UST	4,000	6/01/1959	Leaded Gasoline	Removed	
3	UST	4,000	6/01/1959	Unleaded Gasoline	Removed	
4	UST	2,000	6/01/1959	Unleaded Gasoline	Removed	
5	UST	2,000	6/01/1959	Unleaded Gasoline	Removed	
6	UST	4,000	6/01/1959	Vehicular Diesel	Removed	
7	UST	5,000	8/01/1990	Unleaded Gasoline	Removed	
8	UST	6,000	8/01/1990	Unleaded Gasoline	Removed	
9	UST	6,000	8/01/1990	Unleaded Gasoline	Removed	
10	UST	550		Kerosene	Removed	
11	UST	550		Waste Oil	Removed	

-If above information is different than the Department's STCM database, please indicate source of updated information:

	YES	NO
Active Site? If yes, please indicate method, date and extent of latest tank and line tightness test (include copy of tightness test results). If tank tightness test results are not available, please explain why they are not necessary or indicate when next tightness test will be performed.		X

The facility is now in operation as an insurance agency.

Copy of tightness test results included in Appendix _____

I-B) Petroleum System/Tank History (continued)

	YES	NO
Petroleum System Closure? *If yes, briefly describe type of petroleum system (AST, UST, distribution lines, etc.) and closure activities conducted.* ***Description not needed if copy of system tank closure report included.***	X	

Note: Section I-C should be used to document soil, groundwater or product removal performed during closures.

The original USTs (five gasoline tanks and one diesel tank) and the dispensing system were reportedly removed in 1990. An Initial Remedial Action (IRA) was conducted in December 1990, during which approximately 49 tons of petroleum-impacted soils were removed. A second discharge was reported August 15, 1990, and was combined with the 1987 EDI-eligible discharge. During the December 3, 2001 removal of three unleaded gasoline USTs, one kerosene UST, and one waste oil UST, stained soil was observed in the area of the waste oil UST. A Limited Closure Summary Report (December 2001) summarizing the removal of three unleaded gasoline USTs was completed, as well as a Closure Assessment Report (March 4, 2002) concerning the removal of the kerosene and waste oil USTs, which documented the removal of four drums of soil from the area of the waste oil tank and subsequent confirmation sampling. No remaining impact to the surrounding soil and groundwater was reported, and no additional activities were recommended. Site Rehabilitation Completion status was received for the waste oil release on April 29, 2002.

☐ Description of system closure activities included in attached tank closure report.

Copy of tank or system closure report (if applicable) included in Appendix _____

I-C) Release Information

	Discovery Date(s)	Program Type(s): *ATRP, EDI, PCPP, PLRIP or Non-program* *(please indicate if a non-program discharge has been combined with an eligible discharge)*
1st	January 7, 1987	Early Detection Incentive (EDI)
2nd	August 15, 1990	EDI – In combination with the 1987 EDI discharge
3rd	December 3, 2001	Non-program
4th		
5th		
6th		

-Source description and release history that includes date(s) of release(s), cause(s) of release(s), where they occurred, type(s) of product released and volume(s) of release(s) [please explain how estimates were derived].

- Suspected type(s) of product released:

X	Leaded Gasoline	☐	Diesel/Kerosene	X	Unleaded Gasoline
X	Used Oil	☐	Unknown	☐	Other: _____

Site Name: Hoppy's Shell
Facility ID #: 53/8624076
Date: March 30, 2018

I-D) Initial Abatement/Source Removal

(Soil/Groundwater/Free Product removal during tank closures):

	YES	NO	N/A
Was soil contamination detected during petroleum system closure? If yes, please briefly describe extent of petroleum impacts and method(s) used to identify soil contamination.	X		

January 1987: An unknown amount of petroleum product was released and identified through soil field screening and confirmed with an analytical sample indicating 1609.5 ug/kg for total volatile organic aromatics (VOAs). A reported 35 cubic yards of contaminated soil was removed during the 1990 IRA.

December 2001: During the removal of the waste oil UST, stained soil was observed. During the IRA, four 55-gallon drums of impacted soil was removed, and soil samples were collected for field vapor screening, and one sample was collected for laboratory analysis, indicating that no SCTLs were exceeded. A groundwater sample collected and analyzed was reported with elevated total lead and total cadmium levels. A permanent monitoring well was installed in the center of the excavation, and a subsequent groundwater sample collected indicated no elevated constituent levels.

Site map (Figure 3) illustrating soil sampling locations is included in Appendix A
Tabular summary of soil sampling results (Tables 2) is included in Appendix B

	YES	NO	N/A
Was contaminated soil removed? If yes, please describe the horizontal and vertical extents of the soil removal and indicate where contaminated soil might still exist.	X		

January 1987 release: A reported 35 cubic yards of contaminated soil was removed from an excavation area measuring 10 ft by 12 ft.

December 2001 release: Four 55-gallon drums of impacted soil was removed.

Approximate depth to water at time of excavation (if known) 12 *feet bls*

Approximate amount removed *35yds^3/ 220gal* *tons* [ ] *yds^3* [X] *Date:* *August 1990/ March 2002*

Disposal method: *Thermal Treatment / Disposal (unknown treatment)*

SECTION III - Recent Site Assessment Activities

III-A) Soil Investigation

[soil sampling]

	YES	NO
Was soil (vadose zone and smear zone) investigated? If yes, please provide a brief discussion of soil sampling methodology, including the method(s) used to collect the laboratory samples. If no, please explain.	X	

Seven soil borings were installed in the vicinity of the former UST system and dispenser areas on July 10, 2017, using direct-push technology. The borings were advanced to approximately 10 ft bgs, and soil samples were collected for field screening at depth intervals of 1, 2, 4, 6, 8, and 10 ft bgs. Elevated net vapor levels (greater than 10 parts per million [ppm]) were observed in SB-1 at 7-8 ft bgs (17.2 ppm). Net vapor level readings less than 10 ppm were observed at the SB-2 (8.3ppm) and SB-4 (4.1ppm) locations, collected from depths of 5-6 ft bgs and 1-2 ft bgs, respectively. Three soil samples were collected for laboratory analysis using Environmental Protection Agency (EPA) Methods 8260B, 8270C, and the FL-Pro Method. The soil analytical data reported the sampled constituent levels below their respective SCTLs.

Date of last soil screening event (OVA data) with or without laboratory sampling: *July 10, 2017*

Site map (Figure 3) illustrating sampling locations is included in Appendix A

Tabular summary of soil screening results (Table 1) is included in Appendix B

Tabular summary of laboratory soil sampling results (Table 2) is included in Appendix B

Soil sampling logs (for laboratory samples) are included in Appendix _____

Soil samples (previous sampling events included) have been collected and analyzed for:

Required for all suspected GAG & KAG contaminated sites.

X	BTEX/MTBE (*low//high)*	X	PAHs	X	TRPHs

Required for all sites where Used Oil contamination is suspected.

X	Priority Pollutant Volatile Organics & Extractable Organics	X	As, Cd, Cr, Pb	X	TRPHs

III-A) Soil Investigation (continued)

	YES	NO	N/A
Was soil Investigative Derived Waste (IDW) generated?	X		

If yes, please describe method used for identifying soil needing disposal:

Three 55-gallon drums of IDW were generated during the July 10, 2017 assessment event. A soil preburn sample was collected for purposes of waste characterization. One 55-gallon drum of IDW was generated during the March 14, 2018 assessment event.

Volume of contaminated soil disposed of: 4 [X] *drums* [ ] *cu. yds.*

Disposal method: Incineration

[soil results]

	YES	NO	N/A
Was soil contamination above applicable Cleanup Target Levels identified above the water table?		X	

If yes, identify where concentrations above CTLs were detected, depths encountered and corresponding OVA readings. If no, please indicate whether laboratory results agree with OVA readings (if they do not agree, please discuss significance of OVA screening data and/or reliability of laboratory results). If "N/A", please explain.

Approximate volume of vadose zone soil contamination: _____ *cu. yds.*

Site map (Figure _____) illustrating extent of soil contamination is included in Appendix _____

Soil concentration summary (Table _____) is included in Appendix _____

Soil sampling logs (for laboratory samples) are included in Appendix _____

III-A) Soil Investigation (continued)

	YES	NO	N/A
Was vadose zone soil contamination delineated? If no, please describe where additional borings should be located (indicating proposed depths of investigations). If "N/A", please explain.			X

Site map (Figure _____) illustrating proposed sampling locations is included in Appendix _____

	YES	NO	N/A
Has a smear zone been identified? Definition: The "smear zone" is the soil contamination located within the zone of water table fluctuation (it has been described as a "secondary source" of contamination). *If yes, please discuss the horizontal and vertical contaminant mass distribution in the smear zone. If no, please describe what additional information is needed (soil borings, well data, etc.). If "N/A", please explain.*			X

Groundwater elevation measurements collected at the site on July 13, 2017, ranged from approximately 8.5 to 8.8 ft bgs. Three soil samples were collected from the 1-2-, 5-6-, and 7-8-ft bgs intervals and were reported with no contaminants exceeding the respective SCTLs. In addition, the three groundwater samples collected were also reported with no contaminants exceeding the respective GCTLs.

Subsequent groundwater elevation measurements were collected during a sampling event on October 11, 2017, and ranged from 5.68 to 6.00 ft bgs. The groundwater samples collected were reported with no contaminants exceeding the respective GCTLs.

Site map (Figure _____) illustrating proposed sampling locations is included in Appendix _____

III-B) Groundwater Investigation

[monitoring wells/direct push]

	YES	NO
Were monitoring wells installed (or abandoned)? *If yes, briefly identify which wells were installed/abandoned and describe their construction.* ***The well locations and construction details can be omitted if the information is included in current site maps and tabular summaries.***	X	

Three permanent monitoring wells were installed as part of the July 2017 interim site assessment activities. Permanent monitoring wells MW-17-01, MW-17-02, and MW-17-03, were installed to an approximate depth of 15 ft bgs. The wells were constructed with 10 ft of 2-inch diameter 0.01-inch slotted screen flush threaded to 5 ft of solid schedule 40 PVC riser. The annular space surrounding the wells was filled with a 20/30 fine sand filter pack followed by a 30/65 sand seal, and completed flush to grade with a neat cement grout. The wells were set with a 2-ft by 2-ft concrete pad and an 8-inch diameter steel manhole cover.

A temporary monitoring well, TMW-1, was installed in the vicinity of the former used oil tank excavation area on March 14, 2018. The well was installed to an approximate depth of 15 ft bgs with 10 ft of 2-inch diameter 0.01-inch slotted screen flush threaded to 5 ft of solid schedule 40 PVC riser. The well was properly abandoned using the tremie-pipe method immediately following sample collection.

Site map (Figure 3) illustrating the well locations is included in Appendix A
Tabular summary of well construction details (Table 3) is included in Appendix B
Monitoring well completion reports are included in Appendix E

	YES	NO
Was direct push (geoprobe) groundwater grab-sampling performed? *If yes, briefly identify the locations and depths where the samples were collected.* ***A description of the sample locations and results can be omitted if the information is included in current site maps and tabular summaries***		X

Site map (Figure _____) illustrating the groundwater sampling results is included in Appendix _____
Tabular summary of groundwater sampling results (Table _____) is included in Appendix _____

III-B) Groundwater Investigation (continued)

[groundwater sampling]

	YES	NO
Was groundwater sampling performed? *If yes, please provide a brief discussion of groundwater purging and sampling methodology and identify the wells that were sampled. If no, please explain.* ***A description of the sampling results can be omitted if the information is illustrated in current contaminant plume maps and tabular summaries***	X	

On July 13, 2017, groundwater samples were collected from monitoring wells MW-17-01 through MW-17-03. Each sampled monitoring well was purged and sampled in accordance with current FDEP quality protocol. Samples were placed on wet ice and transported to Advanced Environmental Laboratories, Inc. (AEL) for analysis. Monitoring wells MW-17-02 and MW-17-03 were sampled for benzene, toluene, ethylbenzene, total xylenes, and methyl tert-butyl ether (BTEX+MTBE) using EPA Method 8260B, for polycyclic aromatic hydrocarbons (PAHs) using EPA Method 8270C, for total petroleum hydrocarbons (TRPH) using the FL-PRO Method, and for total lead by EPA Method 6010. Monitoring wells MW-17-01 was sampled for the gasoline/kerosene analytical group of parameters, including the previously listed parameters in addition to ethylene dibromide (EDB) and 1,2-dichloroetance (EDC).

On October 11, 2017, additional groundwater samples were collected from monitoring wells MW-17-01 through MW-17-03 for analyses including BTEX+MTBE using EPA Method 8260B, for PAHs using EPA Method 8270C, for TRPH using the FL-PRO Method, and for total lead by EPA Method 6010.

On March 14, 2018 a groundwater sample was collected from temporary monitoring well TMW-1. The sample was analyzed for lead using EPA Method 6010.

If groundwater sampling not performed, indicate date of last sampling event (if applicable): _____

Indicate wells sampled on that date (if applicable): _____

Site map (Figures 7A, 7B, 7C) illustrating the groundwater sampling results is included in Appendix A

Tabular summary of groundwater sampling results (Table 4) is included in Appendix B

Groundwater field sampling logs are included in Appendix D

Groundwater samples (previous sampling events included) have been collected and analyzed for:

Required for all suspected GAG/KAG sites.

[X] BTEX/MTBE	[X] PAHs	[X] TRPHs

Required for all contaminated GAG/KAG sites.

[X] EDB	[X] Lead (Pb)	[X] VOHs

Required for all suspected used oil (or unknown fuel type) contaminated sites.

[ ] Priority Pollutant Volatile Organics & Extractable Organics	[ ] As, Cd, Cr, Pb	[ ] TRPHs

III-B) Groundwater Investigation (continued)

	YES	NO	N/A
Was groundwater IDW generated? *If yes, please explain why disposal on-site was not possible.*		X	

Volume of contaminated groundwater disposed of: _____ [ ] *drums* [ ] *gallo*

[groundwater results]

	YES	NO	N/A
Was groundwater contamination identified above the applicable Cleanup Target Levels? *If yes, indicate locations where highest concentrations detected with depths encountered. If "N/A", please explain.*		X	

Approximate volume of contaminated groundwater: _____ *gallons*

Plume maps [Figure(s) _____] illustrating extent of groundwater contamination is/are included in Appendix _____

III-B) Groundwater Investigation (continued)

	YES	NO	N/A
Has horizontal delineation been completed in the surficial aquifer? If no, please describe where additional sampling is required (indicating wells and needed analyses) and/or additional monitoring wells should be installed (indicating proposed screened intervals for each). If "N/A", please explain.	X		

No exceedance of GCTLs were reported for the July 13, 2017, October 11, 2017 or March 14, 2018 sampling events.

Site map (Figure _____) illustrating proposed monitoring well locations is included in Appendix _____

	YES	NO	N/A
Has vertical delineation been completed in the plume area? If no, please describe where additional sampling is required (indicating needed analyses) and/or identify locations where vertical extent well(s) should be installed (indicating proposed screened intervals, single or double cased and length of surface casings). If "N/A", please explain.	X		

No exceedances of GCTLs were reported within the shallower aquifer zone. Therefore, an investigation of the deeper aquifer zone was not requested.

Site map (Figure _____) illustrating proposed vertical extent well locations is included in Appendix _____

SECTION IV - Impacted Media

IV-A) Lithologic Summary

The impacted aquifer(s) can be best characterized by the following description (predominantly):
Select One

X	Sands [SW, SP, SM]		Sandy Clay, Clayey Sand or Silty Clays [SC, ML, CL]		Clays [CH]
	Intermingled Sands and Clays		Intermingled Sands, Clays and Limestone		Limestone [LS]

Please describe a typical soil column and all defined aquifers (perched/upper/lower). This should include a brief description of the site lithology (using the Unified Soil Classification System), and all other geologic and/or hydrogeologic characteristics of the area which might influence migration or transport of the contamination.

The underlying lithology observed at the site was characterized primarily by fine sands and silty sands within the upper 15 ft, with clayey sands encountered at approximately 10 to 15 ft bgs at the SB-1/MW-17-01 location. Groundwater was encountered at the site at approximately 9 ft bgs during soil assessment activities. Groundwater elevation measurements collected on July 13, 2017, ranged from 8.48 to 8.82 ft bgs, and on October 11, 2017, ranged from 5.68 to 6.00 ft bgs.

Lithologic cross-section (Figure _____) is included in Appendix _____

Is the lithologic information obtained to date sufficient to characterize the impacted media? *If no, please explain [indicating area(s) where additional lithologic data are needed].* ***A map illustrating where the additional borings/wells need to be located can be omitted if those locations have been identified in the soil and/or groundwater sections.***	YES	NO
	X	

Site map illustrating proposed lithologic boring locations (Figure _____) is included in Appendix _____

Site Name: Hoppy's Shell
Facility ID #: 53/8624076
Date: March 30, 2018

IV-B) Hydrologic Summary

Have all the monitoring well tops-of-casings been surveyed? *If no, please describe why this information has not been obtained. [Note, the TOC survey does not have to be performed by a Professional Land Surveyor. However, if the monitoring wells are installed prior to the survey, then the TOCs should be included in the Professional Land Survey.]*

YES [X] NO [ ]

Was a professional land survey performed? *If yes, please indicate date of survey, whether it was saved on disk (indicating type of program), and who performed it. Also indicate which monitoring wells (if any) were included in the survey. [Note: the site map must be based on the professional land survey.]*

YES [ ] NO [X]

Is original signed and sealed professional land survey included? yes [ ] no [ ]

Is copy of electronic version of land survey (labeled with ID #, site name & report date) included? yes [ ] no [ ]

Have depth to groundwater and groundwater flow direction in the upper zone aquifer been determined? *If yes, please indicate average depth to water and fluctuation range (low/high stand) in all impacted areas of the site. If no, please explain.*

YES [X] NO [ ]

Groundwater elevation measurements collected on July 13, 2017, ranging from 8.48 to 8.82 ft bgs, and on October 11, 2017, ranging from 5.68 to 6.00 ft bgs, indicated a northerly groundwater flow.

Site map(s) [Figure(s) 6A & 6B] illustrating upper zone water table elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix A

Tabular summary of all groundwater elevation data (Table 3) is included in Appendix B

IV-B) Hydrologic Summary (continued)

	YES	NO
Have depth to groundwater and groundwater flow direction(s) in lower and/or intermediate aquifer(s) been determined?		X

If yes, please indicate average depth to water and fluctuation range in vertical extent wells (low/high stand). If no, please explain.

Groundwater impacts in the shallower aquifer were not encountered. Therefore, the deeper aquifer zone was not investigated.

Site map [Figure(s)_____] illustrating lower/intermediate zone water table elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix _____

	YES	NO
Are perched aquifer conditions suspected? *If yes, please indicate estimated depth and thickness of perched zone and whether perched zone extends across entire site.*		X

Site map (Figure _____) illustrating estimated lateral extent of perched zone (when it does not extend across entire site), water level elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix _____

	YES	NO	Unknown
Is the site tidally influenced? *If yes, please indicate tidal fluctuation range and whether groundwater flow direction might change during tidal cycle. If unknown, please indicate whether this issue is important at this site (outlining data collection plan if needed).*		X	

Site map(s) [Figure(s)_____] illustrating changes in flow direction is/are included in Appendix _____

SECTION V - Post Assessment Summary & Recommendations

Filled out AFTER site assessment has been completed

V-A) Site Assessment Summary

The Site Assessment Summary table shall be completed and submitted as an attachment to this TSAR. The summary is a separate Excel worksheet.

Site Assessment Summary completed and included as Appendix I.

	YES	NO
Are all the documents submitted to date adequate to meet the site assessment requirements of Rule 62-780.600, Florida Administrative Code (F.A.C.)?	X	

V-B) Recommendations

	YES	NO
Is No Further Action (NFA) without conditions recommended? If yes, please provide reasons NFA is appropriate.	X	

Neither soil nor groundwater samples collected during the July 2017 assessment activities and the October 2017 and March 2018 groundwater sampling events were reported with contaminant levels in exceedance of the applicable CTLs.

	YES	NO
Is No Further Action (NFA) with conditions recommended? *If yes, please provide reasons conditional NFA is appropriate and describe the conditions* [the needed institutional or engineering controls] *pursuant to Rule 62-770.680(2), F.A.C.*		X

Site Name:	Hoppy's Shell
Facility ID #:	53/8624076
Date:	March 30, 2018

SECTION VI - Program Issues
(for state funded cleanup sites)

List of all consultant company personnel (not subcontractor employees) that participated in the field work or helped to prepare the report:

Name	Duties	Dates On-Site (if applicable)		
Jeffry Wahl	Field Activities	7/10/2017	thru	7/10/2017
Mark Carrie	Field Activities	7/13/2017	thru	10/11/2017
Tom Brumbaugh	Field Activities	3/14/2018	thru	3/14/2018
McCullough Wells	Report Preparation		thru	
Sarah Johnson, PG	Report Preparation		thru	
Michael Garbee, PG	Report Preparation		thru	
			thru	
			thru	

VI-A) Work Plan and Cost Summary

Briefly summarize initial work plan.

The original work plan consisted of three tasks:
Task 1: Prepare and submit and Updated Health and Safety Plan
Task 2: Complete DPT soil boring and monitoring well installation per Soil Boring & Well Installation table. Subsequently collect groundwater samples from the newly installed monitoring wells per the Water Sampling Table. Complete and submit Interim Assessment Report with required documentation. Submit request for change if additional assessment is needed. Dispose of drums produced by drilling operations.
Task 3: After 90 days, collect groundwater samples per water sampling table and figure. Complete and submit General Site Assessment Report in TSAR format and Site Assessment Screening Workbook with Site Screening Information Tab completed. Contingent funding only to offset the cost associated with Field Request for Change for any open task.

Copy of original work order or task assignment is included in appendix G

Was any extra work authorized? *If yes, please summarize extra work planned for site.*	YES	NO
	X	

Task 4 was added to include the removal of IDW generated (drum disposal and mobilization) during the well installation event and for the abandonment of the three newly installed monitoring wells (2" diameter each). An additional mobilization is included to account for mobilization to the site to meet with the disposal contractors to sign for and receive the waste manifests. The scheduling of the disposal is based upon the disposal contractor's schedule and will not be completed concurrent with the well abandonment activities. Submit a Well Abandonment/Site Restoration Report.
Task 5 was added to include the installation of temporary monitoring well TMW-1. The additional scope consisted of the installation, groundwater sample collection, proper abandonment, and transportation and disposal of IDW generated during the temporary monitoring well installation event.

Copies of all authorization forms are included in Appendix G

VI-A) Work Plan and Cost Summary (continued)

	YES	NO
Was any planned work <u>not</u> performed? If yes, please describe work not performed with reasons why not performed.		X

	YES	NO
Are there any changes in cost from original work order, purchase order, or task assignment? If yes, please describe the changes and cost adjustments that will be required for invoicing.	X	

A change order was authorized for the addition of Task 4 to the Purchase Order. This resulted in an increase of $2,101.95 to the original contract. Task 4 will be completed upon approval of this TSAR (Task 3). These changes in costs will not affect the current task, Task 3.
Change orders were authorized for the costs associated with the installation, groundwater sample collection, proper abandonment, and transportation and disposal of IDW generated during the temporary monitoring well installation event. Additional personnel time was authorized to incorporate the results of the additional assessment into the TSAR.

Copies of all needed subcontractor and/or materials invoices and draft change order cost template included in Appendix G

APPENDIX A

TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility ID: 53/8624076 **Facility Name: Hoppy's Shell**

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SS-1	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
SS-2	8/30/1990	12.0	3	220.0	0.0	220.0	
			7	610.0	0.0	610.0	
SS-3	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
SS-4	8/30/1990	12.0	3	580.0	0.0	580.0	
			7	1,000.0	0.0	1,000.0	
SS-5	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
SS-6	8/30/1990	12.0	3	860.0	0.0	860.0	
			7	1,000.0	0.0	1,000.0	
SS-7	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	220.0	0.0	220.0	
SS-8	8/30/1990	12.0	3	850.0	0.0	850.0	
			7	1,000.0	0.0	1,000.0	
SS-9	8/30/1990	12.0	3	80.0	0.0	80.0	
			7	360.0	0.0	360.0	
SS-10	8/30/1990	12.0	3	840.0	0.0	840.0	
			7	1,000.0	0.0	1,000.0	
SS-11	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
SS-12	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
SS-13	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
SS-14	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
SS-15	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
SS-16	8/30/1990	12.0	3	0.0	0.0	0.0	
			7	0.0	0.0	0.0	
North-1	12/4/2001		5	<1	<1	<1	Kerosene Tank Excavation
South-1	12/4/2001		5	<1	<1	<1	Kerosene Tank Excavation
East-1	12/4/2001		5	<1	<1	<1	Kerosene Tank Excavation
West-1	12/4/2001		5	<1	<1	<1	Kerosene Tank Excavation
Bottom	12/4/2001		8	<1	<1	<1	Kerosene Tank Excavation
SB-1/MW-17-01	7/10/2017	9.0	1	0.0	0.0	0.0	
			2	0.0	0.0	0.0	
			3	0.0	0.0	0.0	
			4	0.0	0.0	0.0	
			6	10.0	0.0	10.0	
			8	17.2	0.0	17.2	Lab Sample
			10	17.4	0.0	17.4	

TABLE 1: SOIL SCREENING SUMMARY

Facility ID: 53/8624076 **Facility Name: Hoppy's Shell**

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-2	7/10/2017	9.0	1	6.2	0.0	6.2	
			2	7.8	0.0	7.8	
			3	7.2	0.0	7.2	
			4	6.5	0.0	6.5	
			6	8.3	0.0	8.3	Lab Sample
			8	7.1	0.0	7.1	
			10	6.8	0.0	6.8	
SB-3	7/10/2017	9.0	1	8.3	0.0	8.3	
			2	8.9	0.0	8.9	
			3	7.9	0.0	7.9	
			4	8.2	0.0	8.2	
			6	8.7	0.0	8.7	
			8	8.5	0.0	8.5	
			10	7.8	0.0	7.8	
SB-4/MW-17-02	7/10/2017	9.0	1	2.0	0.0	2.0	
			2	4.1	0.0	4.1	Lab Sample
			3	2.7	0.0	2.7	
			4	2.9	0.0	2.9	
			6	3.4	0.0	3.4	
			8	3.7	0.0	3.7	
			10	3.8	0.0	3.8	
SB-5/MW-17-03	7/10/2017	9.0	1	5.0	0.0	5.0	
			2	6.0	0.0	6.0	
			3	5.1	0.0	5.1	
			4	2.1	0.0	2.1	
			6	4.2	0.0	4.2	
			8	4.3	0.0	4.3	
			10	5.1	0.0	5.1	
SB-6	7/10/2017	9.0	1	2.3	0.0	2.3	
			2	1.0	0.0	1.0	
			3	1.0	0.0	1.0	
			4	0.7	0.0	0.7	
			6	2.5	0.0	2.5	
			8	2.2	0.0	2.2	
			10	1.4	0.0	1.4	
SB-7	7/10/2017	9.0	1	1.7	0.0	1.7	
			2	0.9	0.0	0.9	
			3	0.5	0.0	0.5	
			4	0.6	0.0	0.6	
			6	1.9	0.0	1.9	
			8	3.4	0.0	3.4	
			10	2.6	0.0	2.6	

ppm = parts per million

TABLE 2A: SOIL ANALYTICAL SUMMARY - VOAs, TRPHs and Metals

Facility ID#: 53/8624076 **Facility Name: Hoppy's Shell** **See notes at end of table.**

Sample				OVA	Laboratory Analyses										
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (mg/kg)	Ethyl-benzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)	Arsenic (mg/kg)	Cad-mium (mg/kg)	Chro-mium (mg/kg)	Lead (mg/kg)	Comments
Leachability Based on Groundwater Criteria (mg/kg)					0.007	0.6	0.5	0.2	0.09	340		7.5	38		
Direct Exposure Residential (mg/kg)					1.2	1500	7500	130	4400	460	2.1	82	210	400	
PREBURN	08/16/90		NA												
8-24-90	08/30/90		NA		0.0026	0.002 U	0.002 U	0.002 U	0.002 U	1.0 U	NS	NS	NS	NS	"Dirt Burner Samples"
8-27-90	08/30/90		NA		0.00385	0.002 U	0.002 U	0.002 U	0.002 U	1.0 U	NS	NS	NS	NS	"Dirt Burner Samples"
8-28-90	08/30/90		NA		0.0026	0.002 U	0.002 U	0.002 U	0.002 U	1.0 U	NS	NS	NS	NS	"Dirt Burner Samples"
8-29-90	08/30/90		NA		0.0039	0.002 U	0.002 U	0.002 U	0.002 U	3	NS	NS	NS	NS	"Dirt Burner Samples"
East Bank	12/04/01		NA		0.001 U	0.001 U	0.001 U	0.003 U	0.005 U	4.0 U	NS	NS	NS	NS	Kerosene UST Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	0.2	1.39	1.28	**2,729**	Waste Oil UST Pre-Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	2.86	Waste Oil UST Post-Removal
Bottom	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	0.85	Waste Oil UST Post-Removal
Center	02/01/02		NA		NS	NS	NS	NS	NS	49	NS	NS	NS	NS	Waste Oil UST Post-Removal
PREBURN	07/10/17				NS	NS	NS	NS	NS	NS	0.23 U	0.032 U	0.32	0.32	
SB-1@7-8	07/10/17		7-8		0.00097 U	0.00087 U	0.0011 U	0.003 U	0.0009 U	17 I	NS	NS	NS	NS	
SB-2@5-6	07/10/17		5-6		0.00096 U	0.00086 U	0.0011 U	0.003 U	0.00089 U	19	NS	NS	NS	NS	
SB-4@1-2	07/10/17		1-2		0.0011 U	0.00095 U	0.0012 U	0.0033 U	0.00098 U	130	NS	NS	NS	NS	

Notes: NA = Not Available.

NS = Not Sampled.

* = Leachability value may be determined using TCLP.

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 2B: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility ID#: 53/8624076 **Facility Name: Hoppy's Shell** **See notes at end of table.**

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
Leachability Based on Groundwater Criteria (mg/kg)					1.2	3.1	8.5	2.1	27	2500	32000	1200	160	250	880	
Direct Exposure Residential (mg/kg)					55	200	210	2400	1800	21000	2500	3200	2600	2200	2400	
East Bank	12/04/01		NA		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	Kerosene UST Removal
East Bank	12/04/01		NA		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	Waste Oil UST Pre-Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
Bottom	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
Center	02/01/02		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
SB-1@7-8	07/10/17		7-8		0.0027 U	0.0025 U	0.0035 U	0.0033 U	0.0044 U	0.0045 U	0.0061 U	0.0057 U	0.0038 U	0.0035 U	0.0031 U	
SB-2@5-6	07/10/17		5-6		0.0028 U	0.0026 U	0.0036 U	0.0034 U	0.0045 U	0.0047 U	0.0078 I	0.013	0.0039 U	0.0036 U	0.012	
SB-4@1-2	07/10/17		1-2		0.014 U	0.013 U	0.018 U	0.017 U	0.023 U	0.023 U	0.031 U	0.15	0.019 U	0.064	0.15	

Notes: NA = Not Available.
NS = Not Sampled.

If analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 2C: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility ID#: 53/8624076 **Facility Name: Hoppy's shell** **See notes at end of table.**

Sample				OVA	Laboratory Analyses								
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chry-sene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
Leachability Based on Groundwater Criteria (mg/kg)					8	0.8	2.4	24	77	0.7	6.6		
Direct Exposure Residential (mg/kg)					0.1							0.1	
East Bank	12/04/01		NA		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NS	Waste Oil UST Pre-Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Pre-Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
Bottom	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
Center	02/01/02		NA		NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
SB-1@7-8	07/10/17		7-8		0.0075 U	0.0036 U	0.0054 U	0.0055 U	0.0045 U	0.0041 U	0.0045 U	0.00650475	
SB-2@5-6	07/10/17		5-6		0.0085 I	0.0057 I	0.013	0.0057 U	0.0098	0.0042 U	0.0077 I	0.0132783	
SB-4@1-2	07/10/17		1-2		0.039 U	0.035 I	0.039 I	0.029 U	0.057	0.021 U	0.023 U	0.038752	

Notes: NA = Not Available.

NS = Not Sampled.

** = Leachability value not applicable.

= Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent.

If analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 3: GROUNDWATER ELEVATION TABLE

All Measurements = Feet

Facility Name: Hoppy's Shell **Facility ID#: 53/8624076**

No Data = Blank

WELL NO.	MW-17-01	MW-17-02	MW-3	
DIAMETER	2"	2"	2"	
WELL DEPTH	15'	15'	15'	
SCREEN INTERVAL	5-15'	5-15'	5-15'	
TOC ELEVATION	100.00	100.19	100.48	

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP			
07/13/17	91.52	8.48		91.59	8.60		91.66	8.82				
10/11/17	94.32	5.68		94.42	5.77		94.48	6.00				

NI = Not Installed

NR = Not Recorded

TABLE 4A: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals

Facility ID#: 53/8624076 **Facility Name: Hoppy's Shell** **See notes at end of table.**

Sample Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total VOAs (µg/L)	MTBE (µg/L)	EDB (µg/L)	1,2-Di-chloro-ethane (µg/L)	Total Arsenic (µg/L)	Total Cad-mium (µg/L)	Total Chro-mium (µg/L)	Total Lead (µg/L)
Chapter 62-780, F.A.C. GCTLs		1	40	30	20	NA	20	0.02	**	**	**	**	15.00
Chapter 62-780, F.A.C. NADCs		100	400	300	200	NA	200	2.00	**	**	**	**	150.00
Center of Kerosene UST Excavation	12/4/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Center of Used Oil UST Excavation	12/4/2001	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	NS	NS	3.0 U	16.8	5.6	11.8	**467.4**
Center	2/4/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.4 U	NS	4.0 U
MW-17-01	7/13/2017	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	0.013 U	0.49 U	NS	NS	NS	1.1 U
MW-17-02	7/13/2017	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
MW-17-03	7/13/2017	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
MW-17-01	10/11/17	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
MW-17-02	10/11/17	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
MW-17-03	10/11/17	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
TMW-1	3/14/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.5

Notes: NA = Not Available.
NS = Not Sampled.
GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.
NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.
** = As provided in Chapter 62-520, F.A.C.

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].
Freshwater Surface Water (FSW), Marine Surface Water (MSW) and Groundwater of Low Yield/Poor Quality (LY/PQ) CTLs should be added to the base of the table as applicable.

TABLE 4B: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#: 53/8624076 **Facility Name: Hoppy's Shell** **See notes at end of table.**

Sample Location	Sample Date	TRPHs (µg/L)	Naph-thalene (µg/L)	1-Methyl-naph-thalene (µg/L)	2-Methyl-naph-thalene (µg/L)	Acen-aph-thene (µg/L)	Acen-aph-thylene (µg/L)	Anthra-cene (µg/L)	Benzo (g,h,i) pery-lene (µg/L)	Fluoran-thene (µg/L)	Fluor-ene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Benzo (a) pyrene (µg/L)	Benzo (a) anthra-cene (µg/L)	Benzo (b) fluoran-thene (µg/L)	Benzo (k) fluoran-thene (µg/L)	Chry-sene (µg/L)	Dibenz (a,h) anthra-cene (µg/L)	Indeno (1,2,3-cd) pyrene (µg/L)
Chapter 62-780, F.A.C. GCTLs		5,000	14	28	28	20	210	2,100	210	280	280	210	210	0.2**	0.05[a]	0.05[a]	0.5	4.8	0.005[a]	0.05[a]
Chapter 62-780, F.A.C. NADCs		50,000	140	280	280	200	2,100	21,000	2,100	2,800	2,800	2,100	2,100	20	5	5	50	480	0.5	5
Center of Kerosene UST Excavation	12/4/2001	NS	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.2 U	0.2 U	0.2 U	0.5 U	5.0 U	0.2 U	0.2 U
Center of Used Oil UST Excavation	12/4/2001	400 U	2.0 U	NS	NS	2.0 U	4.0 U	2.0 U	5.0 U	3.0 U	2.0 U	6.0 U	2.0 U	0.2 U	0.2 U	0.2 U	0.5 U	3.0 U	0.2 U	0.2 U
Center	2/4/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17-01	7/13/2017	670 I	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-02	7/13/2017	610 I	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-03	7/13/2017	690	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-01	10/11/17	750	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-02	10/11/17	600 U	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-03	10/11/17	710	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
TMW-1	3/14/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes: NA = Not Available.
NS = Not Sampled.
GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.
NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.
** = As provided in Chapter 62-550, F.A.C.
[a] = See the October 12, 2004 "Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits" to determine how to evaluatie data when the CTL is lower than the PQL.

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].
Freshwater Surface Water (FSW), Marine Surface Water (MSW) and Groundwater of Low Yield/Poor Quality (LY/PQ) CTLs should be added to the base of the table as applicable.

Benzo(a)pyrene Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Facility/Site Name: Hoppy's Shell
Location: U.S. Highway 17/92 abd B Street, Haines City, FL
Facility/Site ID No.: 53/8624076

Soil Sample No. SB-1 @ 7-8'
Sample Date 7/10/2017
Location: SB-1
Depth (ft): 7-8'

INSTRUCTIONS: Calculate Total Benzo(a)pyrene Equivalents if at least one of the carcinogenic PAHs is detected in the sample at a concentration equal to or higher than the Method Detection Limit (MDL), whether quantified with certainty (the concentration reported has no qualifier) or estimated (the concentration reported has a "J", "T" or "I" qualifier). Enter the contaminant concentrations (in mg/kg) for all seven carcinogenic PAHs in the yellow boxes using the following criteria (and see table below):

1. If quantified with certainty, or estimated and has the "J" qualifier, enter the reported value;
2. If not detected at the MDL (the concentration reported is the MDL followed by the "U" qualifier) enter 1/2 of the reported value;
3. If detected at a concentration lower than the MDL and the concentration is estimated (has the "T" qualifier) enter the estimated value;
4. If detected at a concentration equal to or higher than the MDL but lower than the Practical Quantitation Limit (PQL) and the concentration is estimated (has the "I" qualifier) enter the estimated value;
5. If detected at a concentration equal to or higher than the MDL but lower than the PQL and it is not estimated (the concentration reported is the PQL followed by the "M" qualifier) enter 1/2 of the reported value.

Contaminant	Concentration (mg/kg)	Toxic Equivalency Factor	Benzo(a)pyrene Equivalents
Benzo(a)pyrene	0.00375	1.0	0.0038
Benzo(a)anthracene	0.0018	0.1	0.0002
Benzo(b)fluoranthene	0.0027	0.1	0.0003
Benzo(k)fluoranthene	0.00275	0.01	0.0000
Chrysene	0.00225	0.001	0.0000
Dibenz(a,h)anthracene	0.00205	1.0	0.0021
Indeno(1,2,3-cd)pyrene	0.00225	0.1	0.0002

DE Residential = 0.1 mg/kg; DE Industrial = 0.7 mg/kg

Total Benzo(a)pyrene Equivalents = 0.00650475

The concentration shown does not exceed the Residential Direct Exposure SCTL of 0.1 mg/kg.

The concentration shown does not exceed the Industrial Direct Exposure SCTL of 0.7 mg/kg.

Summary Criteria for Table Entries			
Detection	**Concentration Reported**	**Data Qualifier**	**Enter**
Various	Quantified with certainty	None	reported value
Various	Estimated	J	reported (estimated) value
ND at MDL	MDL	U	1/2 reported value
< MDL	Estimated	T	reported (estimated) value
≥ MDL but < PQL	Estimated	I	reported (estimated) value
≥ MDL but < PQL	PQL	M	1/2 reported value

Benzo(a)pyrene Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Facility/Site Name: Hoppy's Shell
Location: U.S. Highway 17/92 abd B Street, Haines City, FL
Facility/Site ID No.: 53/8624076

Soil Sample No. SB-2 @ 5-6'
Sample Date 7/10/2017
Location: SB-2
Depth (ft): 5-6'

INSTRUCTIONS: Calculate Total Benzo(a)pyrene Equivalents if at least one of the carcinogenic PAHs is detected in the sample at a concentration equal to or higher than the Method Detection Limit (MDL), whether quantified with certainty (the concentration reported has no qualifier) or estimated (the concentration reported has a "J", "T" or "I" qualifier). Enter the contaminant concentrations (in mg/kg) for all seven carcinogenic PAHs in the yellow boxes using the following criteria (and see table below):

1. If quantified with certainty, or estimated and has the "J" qualifier, enter the reported value;
2. If not detected at the MDL (the concentration reported is the MDL followed by the "U" qualifier) enter 1/2 of the reported value;
3. If detected at a concentration lower than the MDL and the concentration is estimated (has the "T" qualifier) enter the estimated value;
4. If detected at a concentration equal to or higher than the MDL but lower than the Practical Quantitation Limit (PQL) and the concentration is estimated (has the "I" qualifier) enter the estimated value;
5. If detected at a concentration equal to or higher than the MDL but lower than the PQL and it is not estimated (the concentration reported is the PQL followed by the "M" qualifier) enter 1/2 of the reported value.

Contaminant	Concentration (mg/kg)	Toxic Equivalency Factor	Benzo(a)pyrene Equivalents
Benzo(a)pyrene	0.0085	1.0	0.0085
Benzo(a)anthracene	0.0057	0.1	0.0006
Benzo(b)fluoranthene	0.0130	0.1	0.0013
Benzo(k)fluoranthene	0.00285	0.01	0.0000
Chrysene	0.00980	0.001	0.0000
Dibenz(a,h)anthracene	0.0021	1.0	0.0021
Indeno(1,2,3-cd)pyrene	0.0077	0.1	0.0008

DE Residential = 0.1 mg/kg; DE Industrial = 0.7 mg/kg

Total Benzo(a)pyrene Equivalents = 0.0132783

The concentration shown does not exceed the Residential Direct Exposure SCTL of 0.1 mg/kg.

The concentration shown does not exceed the Industrial Direct Exposure SCTL of 0.7 mg/kg.

Summary Criteria for Table Entries			
Detection	**Concentration Reported**	**Data Qualifier**	**Enter**
Various	Quantified with certainty	None	reported value
Various	Estimated	J	reported (estimated) value
ND at MDL	MDL	U	1/2 reported value
< MDL	Estimated	T	reported (estimated) value
≥ MDL but < PQL	Estimated	I	reported (estimated) value
≥ MDL but < PQL	PQL	M	1/2 reported value

Benzo(a)pyrene Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Facility/Site Name: Hoppy's Shell
Location: U.S. Highway 17/92 abd B Street, Haines City, FL
Facility/Site ID No.: 53/8624076

Soil Sample No. SB-4 @ 1-2'
Sample Date 7/10/2017
Location: SB-4
Depth (ft): 1-2'

INSTRUCTIONS: Calculate Total Benzo(a)pyrene Equivalents if at least one of the carcinogenic PAHs is detected in the sample at a concentration equal to or higher than the Method Detection Limit (MDL), whether quantified with certainty (the concentration reported has no qualifier) or estimated (the concentration reported has a "J", "T" or "I" qualifier). Enter the contaminant concentrations (in mg/kg) for all seven carcinogenic PAHs in the yellow boxes using the following criteria (and see table below):

1. If quantified with certainty, or estimated and has the "J" qualifier, enter the reported value;
2. If not detected at the MDL (the concentration reported is the MDL followed by the "U" qualifier) enter 1/2 of the reported value;
3. If detected at a concentration lower than the MDL and the concentration is estimated (has the "T" qualifier) enter the estimated value;
4. If detected at a concentration equal to or higher than the MDL but lower than the Practical Quantitation Limit (PQL) and the concentration is estimated (has the "I" qualifier) enter the estimated value;
5. If detected at a concentration equal to or higher than the MDL but lower than the PQL and it is not estimated (the concentration reported is the PQL followed by the "M" qualifier) enter 1/2 of the reported value.

Contaminant	Concentration (mg/kg)	Toxic Equivalency Factor	Benzo(a)pyrene Equivalents
Benzo(a)pyrene	0.0195	1.0	0.0195
Benzo(a)anthracene	0.0350	0.1	0.0035
Benzo(b)fluoranthene	0.0390	0.1	0.0039
Benzo(k)fluoranthene	0.0145	0.01	0.0001
Chrysene	0.0570	0.001	0.0001
Dibenz(a,h)anthracene	0.0105	1.0	0.0105
Indeno(1,2,3-cd)pyrene	0.0115	0.1	0.0012

DE Residential = 0.1 mg/kg; DE Industrial = 0.7 mg/kg

Total Benzo(a)pyrene Equivalents = 0.038752

The concentration shown does not exceed the Residential Direct Exposure SCTL of 0.1 mg/kg.

The concentration shown does not exceed the Industrial Direct Exposure SCTL of 0.7 mg/kg.

Summary Criteria for Table Entries			
Detection	**Concentration Reported**	**Data Qualifier**	**Enter**
Various	Quantified with certainty	None	reported value
Various	Estimated	J	reported (estimated) value
ND at MDL	MDL	U	1/2 reported value
< MDL	Estimated	T	reported (estimated) value
≥ MDL but < PQL	Estimated	I	reported (estimated) value
≥ MDL but < PQL	PQL	M	1/2 reported value

APPENDIX B

FIGURES

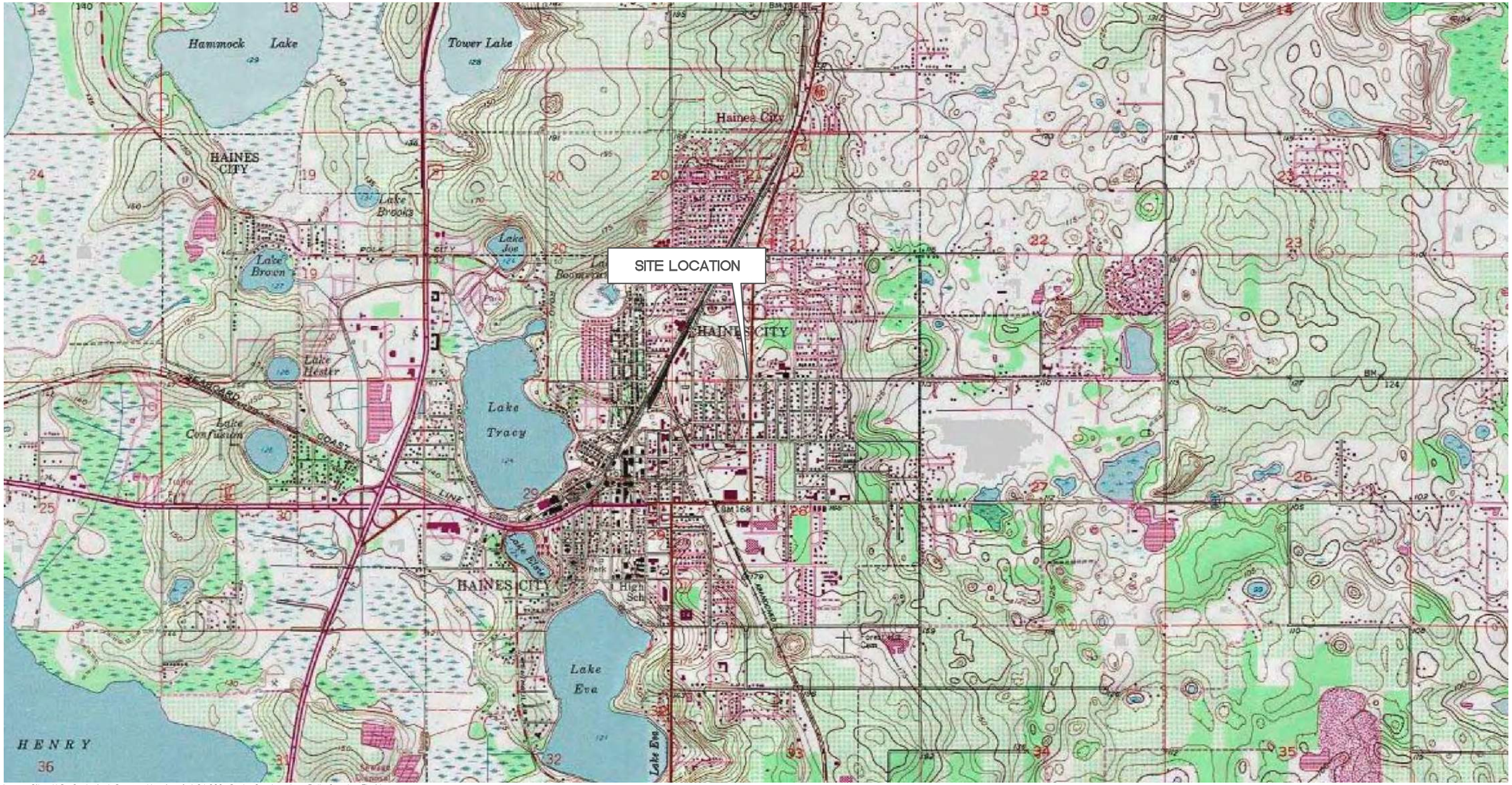


Image Cite: U.S. Geological Survey, Mosaic of 1:24,000–Scale Quadrangles, Polk County, Florida

QUADRANGLE LOCATION

N

0 2000'

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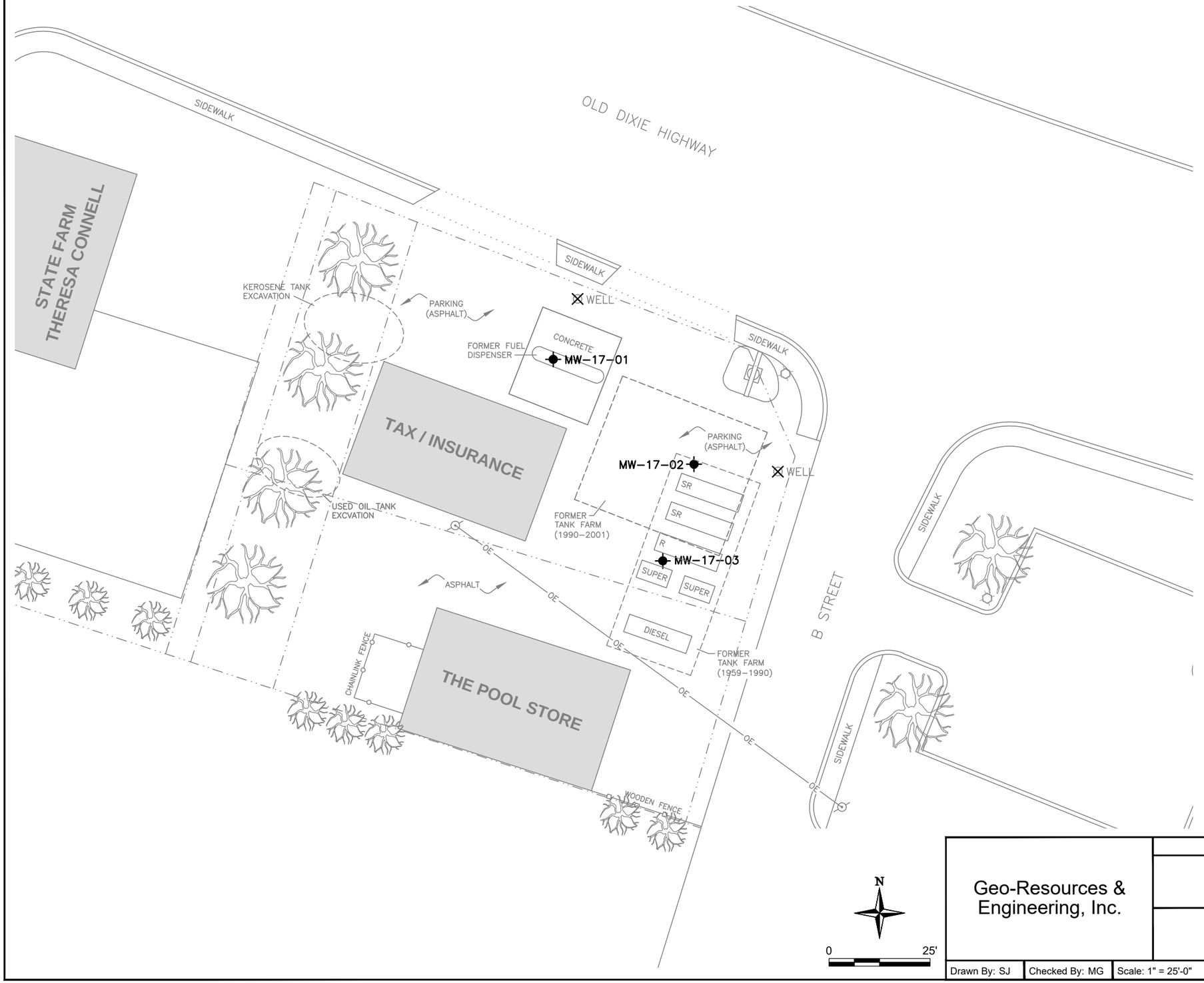
FIGURE 1

SITE LOCATION MAP

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: MW	Checked By: MG	Scale: 1" = 2000'-0"	Date: 12/5/17	File: FIGURE 1 SITE LOCATION MAP



EXPLANATION

MW-1	MONITORING WELL LOCATION AND DESIGNATION
	ABANDONED WELL LOCATION
	PROPERTY LINE
OE	OVERHEAD ELECTRIC LINE
	UTILITY POLE
	SIGN
	METAL LUMINAIRE POLE

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FIGURE 2

SITE PLAN

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: SJ	Checked By: MG	Scale: 1" = 25'-0"	Date: 12/19/17	File: FIGURE 2 SITE PLAN

EXPLANATION

SB-1	MONITORING WELL LOCATION AND DESIGNATION
SB-1/MW-1	SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION
SS-1	SOIL SAMPLE LOCATION AND DESIGNATION (DEC. 1999 APPROXIMATE LOCATION)
CW	COMPLIANCE WELL LOCATION AND DESIGNATION (DEC. 1999 APPROXIMATE LOCATION)
	ABANDONED WELL LOCATION
	PROPERTY LINE
OE	OVERHEAD ELECTRIC LINE
	UTILITY POLE
	SIGN
	METAL LUMINAIRE POLE

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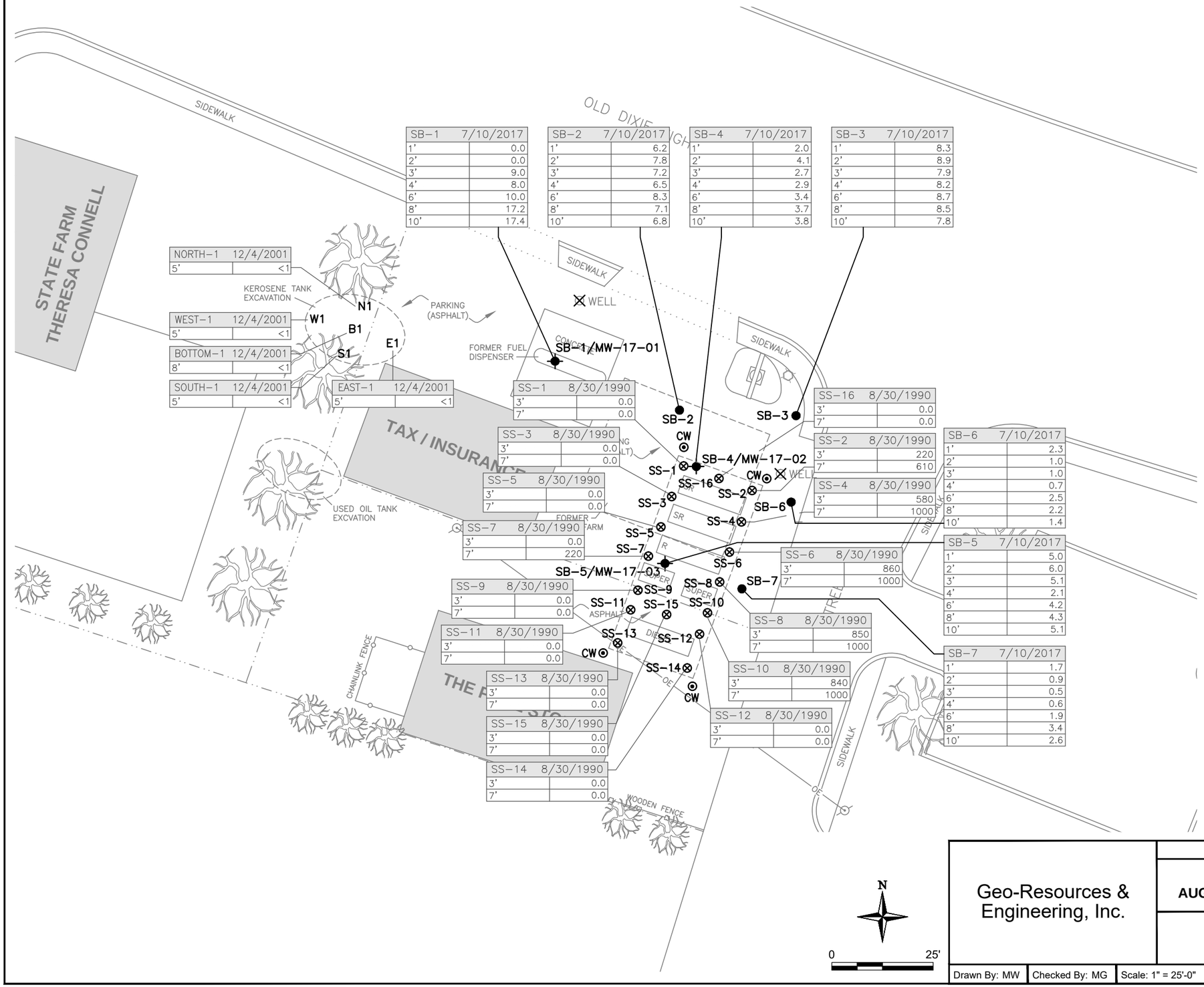
FIGURE 3

SOIL BORING & MONITORING WELL LOCATIONS (FORMER & CURRENT)

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: SJ	Checked By: MG	Scale: 1" = 25'-0"	Date: 3/27/18	File: FIGURE 3 SOIL BORING & MONITORING WELL LOCATIONS



OVA TABLE EXPLANATION

SB-1	7/10/2017
1'	0.0
2'	0.0
3'	9.0
4'	8.0
6'	10.0
8'	17.2
10'	17.4

- SOIL BORING DESIGNATION
- SAMPLE DATE
- SAMPLE DEPTH (FT BGS)
- ORGANIC VAPOR ANALYZER NET READINGS IN (PPM)

EXPLANATION

- SB-1 — MONITORING WELL LOCATION AND DESIGNATION
- SB-1/MW-1 — SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION
- SS-1 — SOIL SAMPLE LOCATION AND DESIGNATION (DEC. 1999 APPROXIMATE LOCATION)
- CW — COMPLIANCE WELL LOCATION AND DESIGNATION (DEC. 1999 APPROXIMATE LOCATION)
- ABANDONED WELL LOCATION
- PROPERTY LINE
- OE — OVERHEAD ELECTRIC LINE
- UTILITY POLE
- SIGN
- METAL LUMINAIRE POLE

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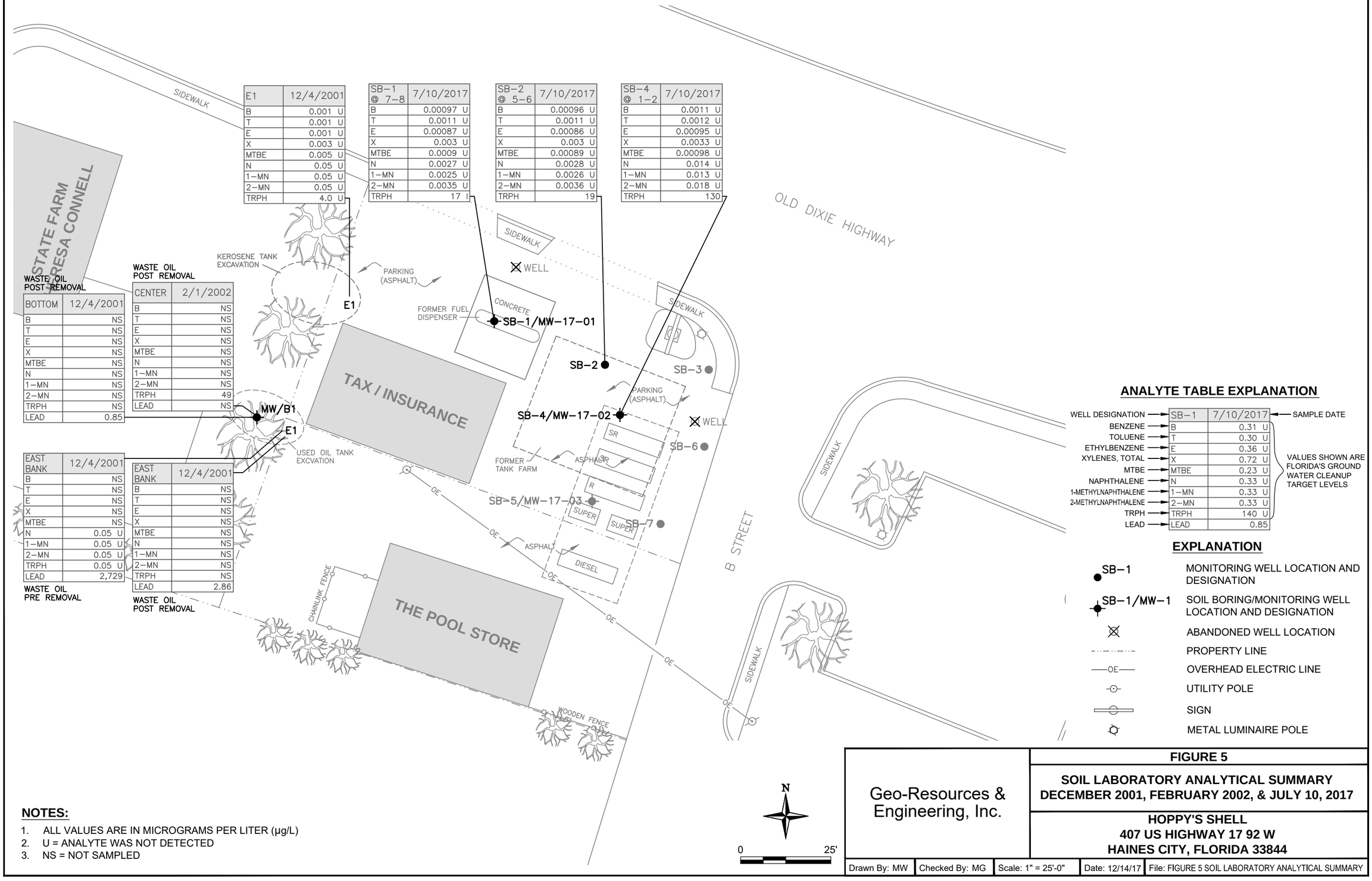
FIGURE 4

SOIL VAPOR SURVEY SUMMARY
AUGUST 1990, DECEMBER 2001, & JULY 10, 2017

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: MW	Checked By: MG	Scale: 1" = 25'-0"	Date: 12/14/17	File: FIGURE 4 SOIL VAPOR SURVEY SUMMARY



E1	12/4/2001
B	0.001 U
T	0.001 U
E	0.001 U
X	0.003 U
MTBE	0.005 U
N	0.05 U
1-MN	0.05 U
2-MN	0.05 U
TRPH	4.0 U

SB-1 @ 7-8	7/10/2017
B	0.00097 U
T	0.0011 U
E	0.00087 U
X	0.003 U
MTBE	0.0009 U
N	0.0027 U
1-MN	0.0025 U
2-MN	0.0035 U
TRPH	17 I

SB-2 @ 5-6	7/10/2017
B	0.00096 U
T	0.0011 U
E	0.00086 U
X	0.003 U
MTBE	0.00089 U
N	0.0028 U
1-MN	0.0026 U
2-MN	0.0036 U
TRPH	19

SB-4 @ 1-2	7/10/2017
B	0.0011 U
T	0.0012 U
E	0.00095 U
X	0.0033 U
MTBE	0.00098 U
N	0.014 U
1-MN	0.013 U
2-MN	0.018 U
TRPH	130

WASTE OIL POST REMOVAL

BOTTOM	12/4/2001
B	NS
T	NS
E	NS
X	NS
MTBE	NS
N	NS
1-MN	NS
2-MN	NS
TRPH	NS
LEAD	0.85

WASTE OIL POST REMOVAL

CENTER	2/1/2002
B	NS
T	NS
E	NS
X	NS
MTBE	NS
N	NS
1-MN	NS
2-MN	NS
TRPH	49
LEAD	NS

EAST BANK	12/4/2001
B	NS
T	NS
E	NS
X	NS
MTBE	NS
N	0.05 U
1-MN	0.05 U
2-MN	0.05 U
TRPH	0.05 U
LEAD	2,729

WASTE OIL PRE REMOVAL

EAST BANK	12/4/2001
B	NS
T	NS
E	NS
X	NS
MTBE	NS
N	NS
1-MN	NS
2-MN	NS
TRPH	NS
LEAD	2.86

WASTE OIL POST REMOVAL

ANALYTE TABLE EXPLANATION

WELL DESIGNATION	SB-1	7/10/2017 ← SAMPLE DATE
BENZENE	B	0.31 U
TOLUENE	T	0.30 U
ETHYLBENZENE	E	0.36 U
XYLENES, TOTAL	X	0.72 U
MTBE	MTBE	0.23 U
NAPHTHALENE	N	0.33 U
1-METHYLNAPHTHALENE	1-MN	0.33 U
2-METHYLNAPHTHALENE	2-MN	0.33 U
TRPH	TRPH	140 U
LEAD	LEAD	0.85

VALUES SHOWN ARE FLORIDA'S GROUND WATER CLEANUP TARGET LEVELS

EXPLANATION

- SB-1 — MONITORING WELL LOCATION AND DESIGNATION
- SB-1/MW-1 — SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION
- ABANDONED WELL LOCATION
- PROPERTY LINE
- OE — OVERHEAD ELECTRIC LINE
- UTILITY POLE
- SIGN
- METAL LUMINAIRE POLE

NOTES:

1. ALL VALUES ARE IN MICROGRAMS PER LITER (µg/L)
2. U = ANALYTE WAS NOT DETECTED
3. NS = NOT SAMPLED

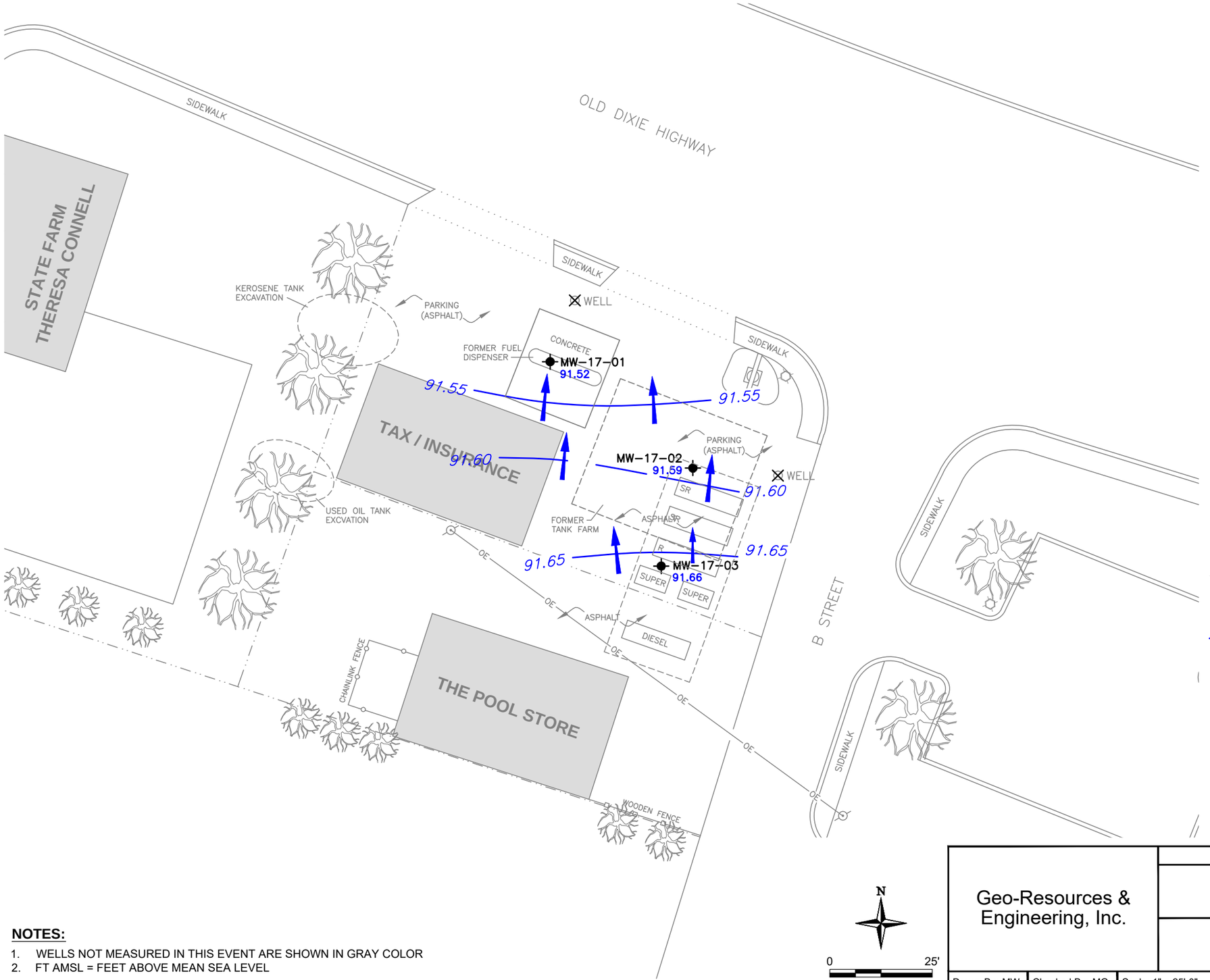
Geo-Resources & Engineering, Inc.

FIGURE 5

SOIL LABORATORY ANALYTICAL SUMMARY
DECEMBER 2001, FEBRUARY 2002, & JULY 10, 2017

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: MW	Checked By: MG	Scale: 1" = 25'-0"	Date: 12/14/17	File: FIGURE 5 SOIL LABORATORY ANALYTICAL SUMMARY



EXPLANATION

- MW-1 / 0.0 — SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION SHOWING GROUNDWATER ELEVATION (FT AMSL)
- 91.50 — LINE OF EQUAL ELEVATION OF POTENTIOMETRIC SURFACE (FT AMSL, CONTOUR INTERVAL .5 FT., DASHED WHERE INFERRED)
- GENERALIZED GROUNDWATER FLOW DIRECTION
- ABANDONED WELL LOCATION
- PROPERTY LINE
- OE — OVERHEAD ELECTRIC LINE
- UTILITY POLE
- SIGN
- METAL LUMINAIRE POLE

NOTES:

1. WELLS NOT MEASURED IN THIS EVENT ARE SHOWN IN GRAY COLOR
2. FT AMSL = FEET ABOVE MEAN SEA LEVEL

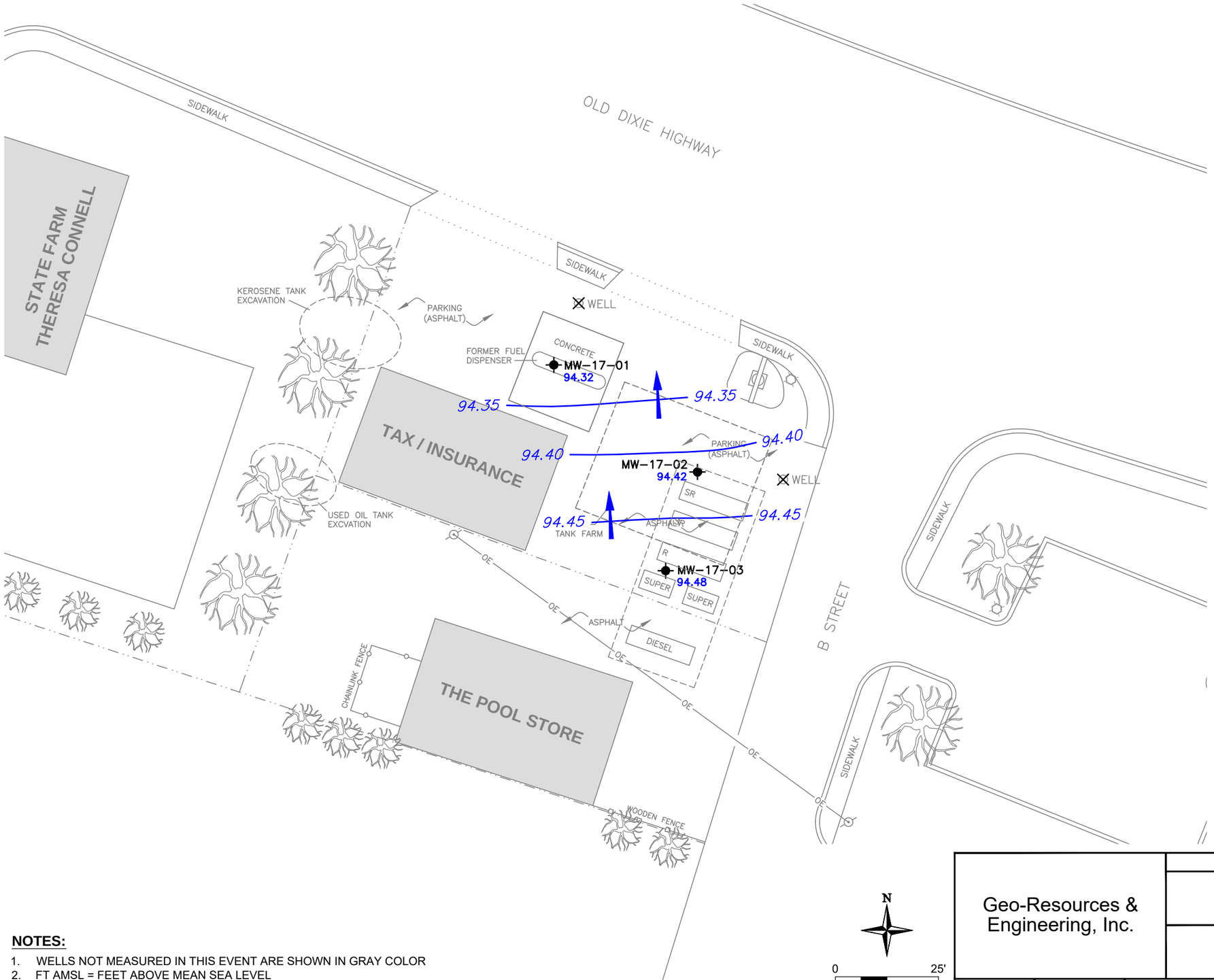
Geo-Resources & Engineering, Inc.

FIGURE 6A

POTENTIOMETRIC SURFACE MAP
JULY 13, 2017

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: MW	Checked By: MG	Scale: 1" = 25'-0"	Date: 12/14/17	File: FIGURE 6A POTENTIOMETRIC SURFACE MAP



EXPLANATION

- MW-1 0.0 — SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION SHOWING GROUNDWATER ELEVATION (FT AMSL)
- 91.50 — LINE OF EQUAL ELEVATION OF POTENTIOMETRIC SURFACE (FT AMSL, CONTOUR INTERVAL .5 FT., DASHED WHERE INFERRED)
- GENERALIZED GROUNDWATER FLOW DIRECTION
- ABANDONED WELL LOCATION
- PROPERTY LINE
- OE — OVERHEAD ELECTRIC LINE
- UTILITY POLE
- SIGN
- METAL LUMINAIRE POLE

NOTES:

1. WELLS NOT MEASURED IN THIS EVENT ARE SHOWN IN GRAY COLOR
2. FT AMSL = FEET ABOVE MEAN SEA LEVEL

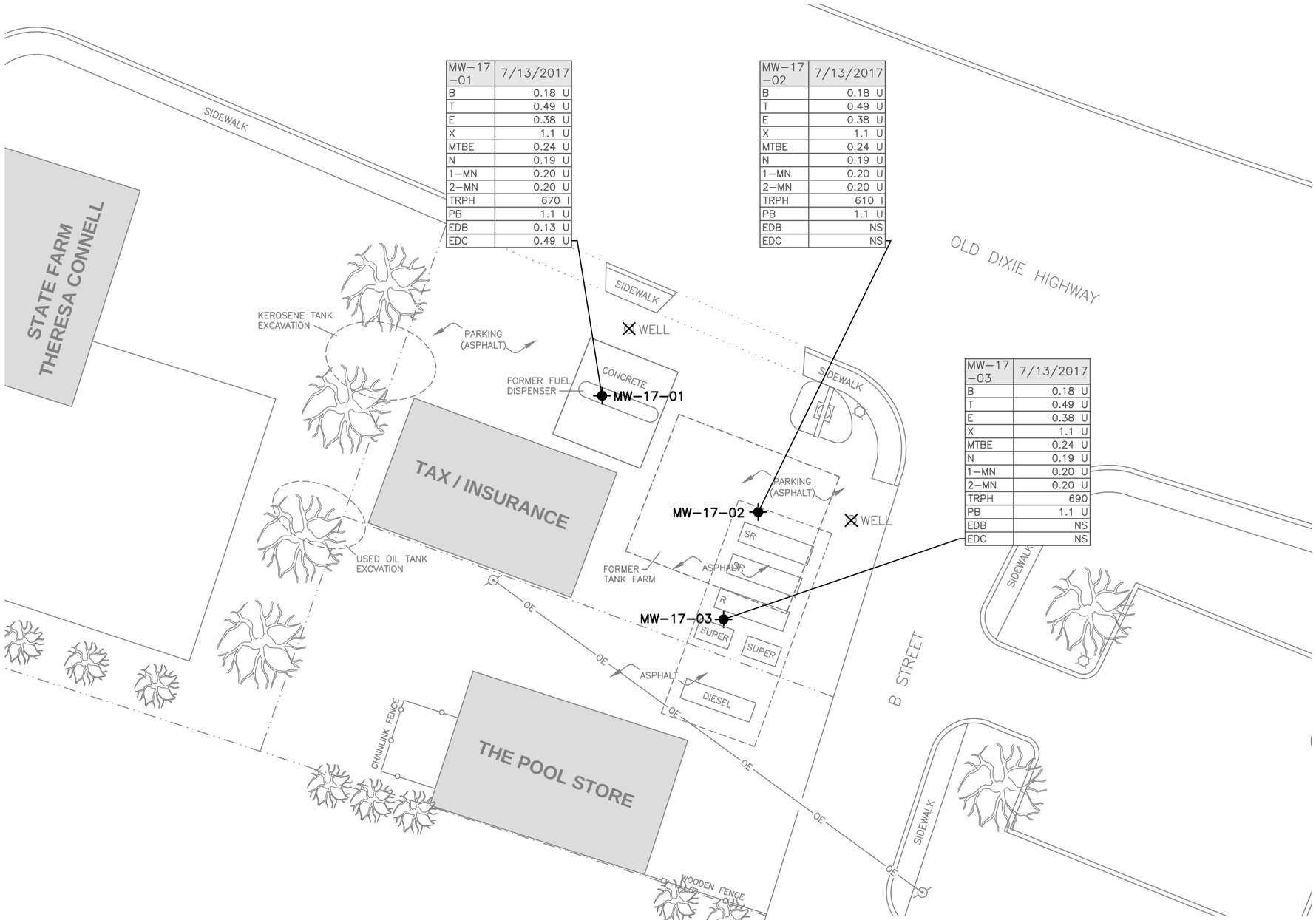
Geo-Resources & Engineering, Inc.

FIGURE 6B

POTENTIOMETRIC SURFACE MAP
OCTOBER 11, 2017

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: MW	Checked By: MG	Scale: 1" = 25'-0"	Date: 12/14/17	File: FIGURE 6B POTENTIOMETRIC SURFACE MAP



MW-17-01	7/13/2017
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
N	0.19 U
1-MN	0.20 U
2-MN	0.20 U
TRPH	670 I
PB	1.1 U
EDB	0.13 U
EDC	0.49 U

MW-17-02	7/13/2017
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
N	0.19 U
1-MN	0.20 U
2-MN	0.20 U
TRPH	610 I
PB	1.1 U
EDB	NS
EDC	NS

MW-17-03	7/13/2017
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
N	0.19 U
1-MN	0.20 U
2-MN	0.20 U
TRPH	690
PB	1.1 U
EDB	NS
EDC	NS

ANALYTE TABLE EXPLANATION

	MW-17-01	7/13/2017
WELL DESIGNATION →		← SAMPLE DATE
BENZENE →	B	1
TOLUENE →	T	40
ETHYLBENZENE →	E	30
XYLENES, TOTAL →	X	20
MTBE →	MTBE	20
NAPHTHALENE →	N	14
1-METHYLNAPHTHALENE →	1-MN	28
2-METHYLNAPHTHALENE →	2-MN	28
TRPH →	TRPH	5000
LEAD →	PB	15
ETHYLENE DIBROMIDE →	EDB	0.02
ETHYLENE DICHLORIDE →	EDC	**

VALUES SHOWN ARE FLORIDA'S GROUND WATER CLEANUP TARGET LEVELS

EXPLANATION

- MW-1 — SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION
- ABANDONED WELL LOCATION
- PROPERTY LINE
- OE — OVERHEAD ELECTRIC LINE
- UTILITY POLE
- SIGN
- METAL LUMINAIRE POLE

NOTES:

1. ALL VALUES ARE IN MICROGRAMS PER LITER (µg/L)
2. U = ANALYTE WAS NOT DETECTED
3. NS = NOT SAMPLED
4. ** = AS PROVIDED IN CHAPTER 62-520, F.A.C.

N

0 25'

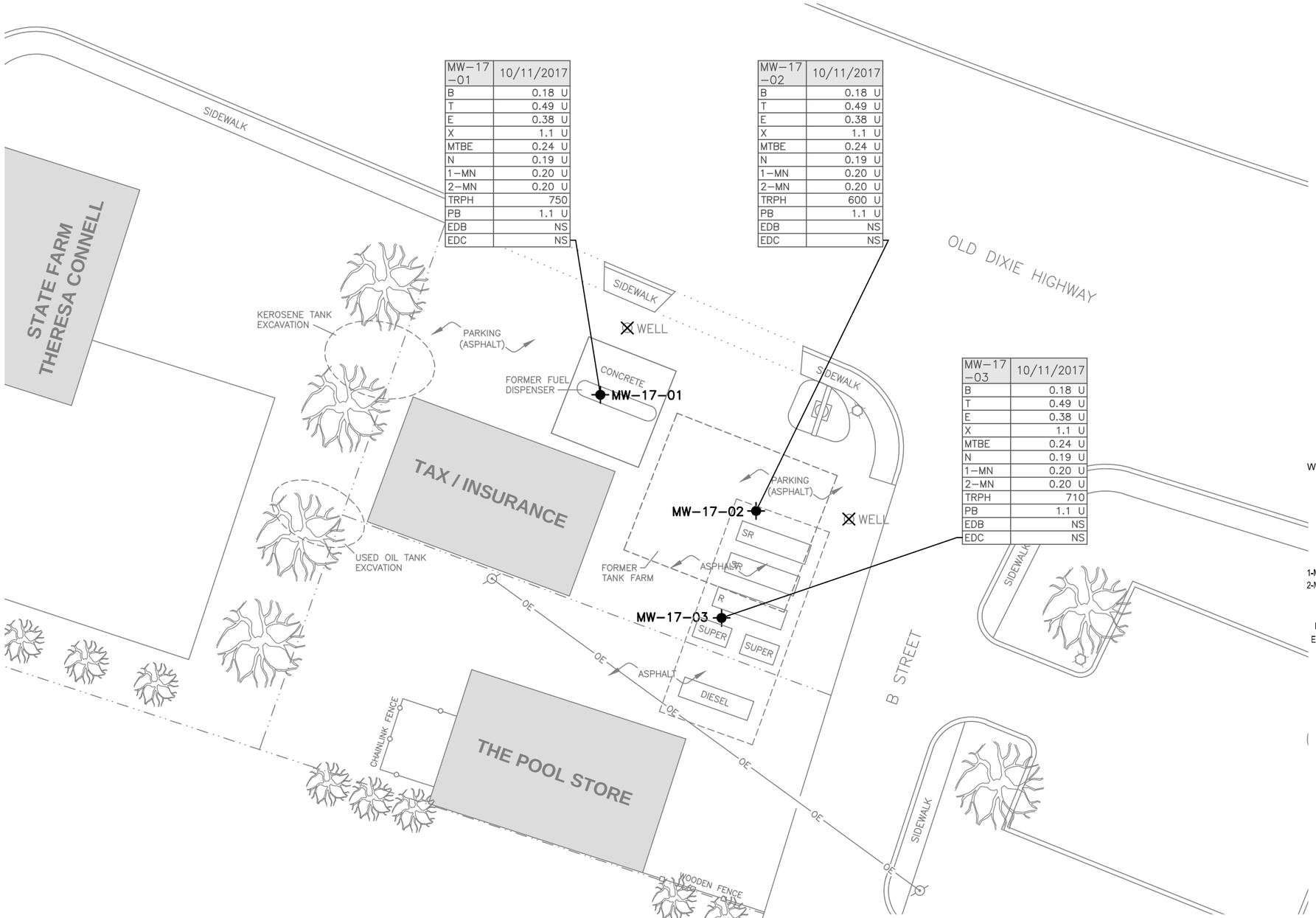
Geo-Resources & Engineering, Inc.

FIGURE 7A

GROUNDWATER ANALYTICAL SUMMARY
JULY 13, 2017

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: SJ	Checked By: MG	Scale: 1" = 25'-0"	Date: 12/15/17	File: FIGURE 7A GROUNDWATER ANALYTICAL SUMMARY



MW-17-01	10/11/2017
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
N	0.19 U
1-MN	0.20 U
2-MN	0.20 U
TRPH	750
PB	1.1 U
EDB	NS
EDC	NS

MW-17-02	10/11/2017
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
N	0.19 U
1-MN	0.20 U
2-MN	0.20 U
TRPH	600 U
PB	1.1 U
EDB	NS
EDC	NS

MW-17-03	10/11/2017
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
N	0.19 U
1-MN	0.20 U
2-MN	0.20 U
TRPH	710
PB	1.1 U
EDB	NS
EDC	NS

ANALYTE TABLE EXPLANATION

	MW-17-01	10/11/2017
WELL DESIGNATION →		← SAMPLE DATE
BENZENE →	B	1
TOLUENE →	T	40
ETHYLBENZENE →	E	30
XYLENES, TOTAL →	X	20
MTBE →	MTBE	20
NAPHTHALENE →	N	14
1-METHYLNAPHTHALENE →	1-MN	28
2-METHYLNAPHTHALENE →	2-MN	28
TRPH →	TRPH	5000
LEAD →	PB	15
ETHYLENE DIBROMIDE →	EDB	0.02
ETHYLENE DICHLORIDE →	EDC	**

VALUES SHOWN ARE FLORIDA'S GROUND WATER CLEANUP TARGET LEVELS

EXPLANATION

- MW-1 — SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION
- ABANDONED WELL LOCATION
- PROPERTY LINE
- OE — OVERHEAD ELECTRIC LINE
- UTILITY POLE
- SIGN
- METAL LUMINAIRE POLE

NOTES:

1. ALL VALUES ARE IN MICROGRAMS PER LITER (µg/L)
2. U = ANALYTE WAS NOT DETECTED
3. NS = NOT SAMPLED
4. ** = AS PROVIDED IN CHAPTER 62-520, F.A.C.

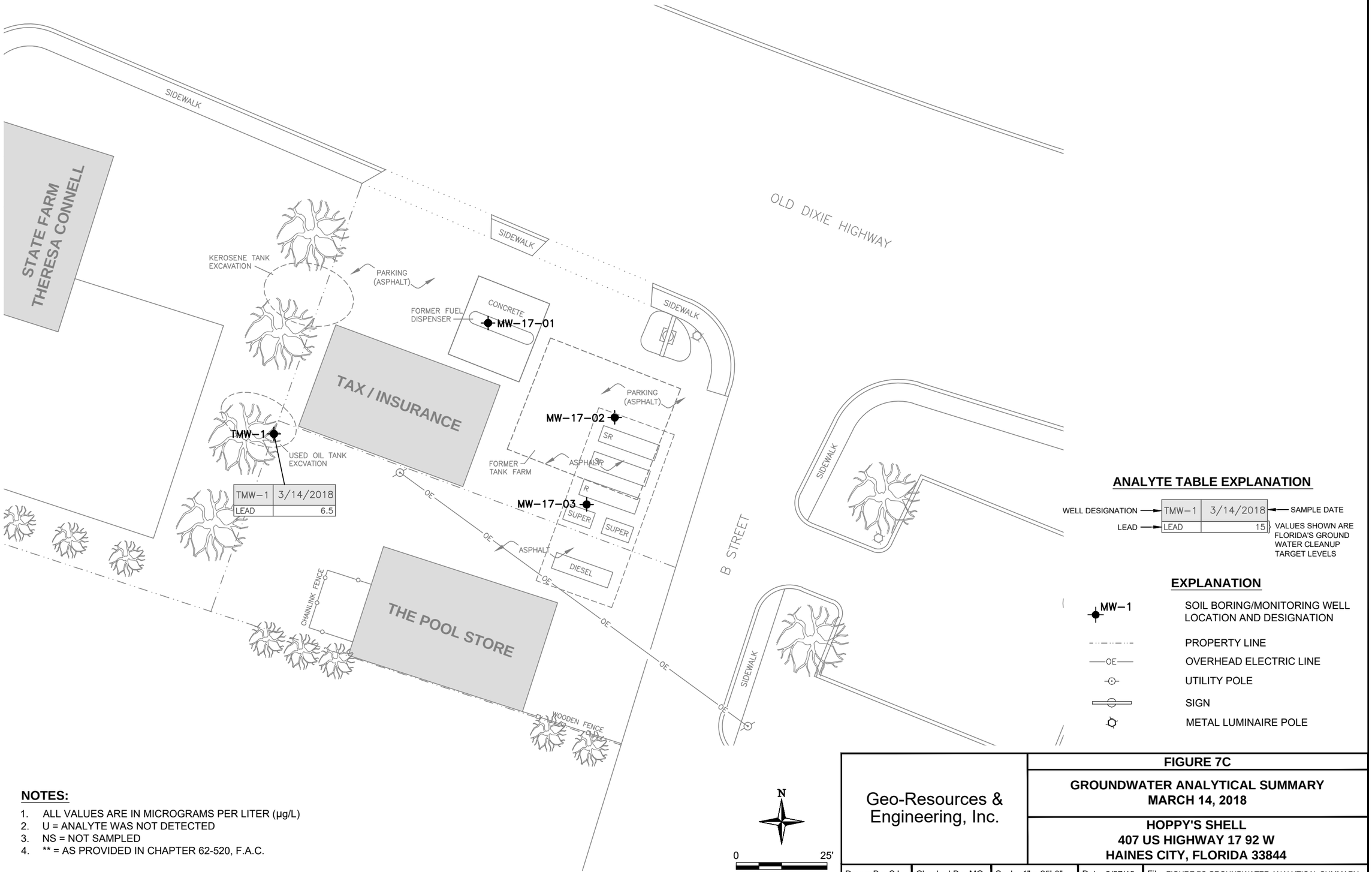
Geo-Resources & Engineering, Inc.

FIGURE 7B

GROUNDWATER ANALYTICAL SUMMARY
OCTOBER 11, 2017

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: MW	Checked By: MG	Scale: 1" = 25'-0"	Date: 12/15/17	File: FIGURE 7B GROUNDWATER ANALYTICAL SUMMARY



NOTES:

1. ALL VALUES ARE IN MICROGRAMS PER LITER (µg/L)
2. U = ANALYTE WAS NOT DETECTED
3. NS = NOT SAMPLED
4. ** = AS PROVIDED IN CHAPTER 62-520, F.A.C.

Geo-Resources & Engineering, Inc.

FIGURE 7C

GROUNDWATER ANALYTICAL SUMMARY
MARCH 14, 2018

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: SJ	Checked By: MG	Scale: 1" = 25'-0"	Date: 3/27/18	File: FIGURE 7C GROUNDWATER ANALYTICAL SUMMARY

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

May 30, 2019

CERTIFIED MAIL #7018 2290 0001 3474 6488
RETURN RECEIPT REQUESTED

Ms. Teresa F. Connell
3226 Lake Breeze Dr.
Haines City, FL 33844-9333

Subject: Site Rehabilitation Completion Order
Shell-Hoppys
407 US Hwy 17/92 W
Haines City, Polk County
FDEP Facility ID# 538624076
Discharge Dates: January 7, 1987 (EDI) & August 15, 1990

Dear Ms. Connell:

The Florida Department of Health in Polk County (FDOH-Polk), on behalf of the Florida Department of Environmental Protection (Department) has reviewed the Site Assessment Report (SAR) and No Further Action Proposal (NFAP) dated March 30, 2018 (received March 30, 2018), and the Monitoring Well Abandonment Report dated June 25, 2018 (received June 25, 2018), for the petroleum product discharges referenced above. All the documents submitted to date are adequate to meet the site assessment requirements of Rule 62-780.600, Florida Administrative Code (F.A.C.). In addition, documentation submitted with the SAR/NFAP confirms that criteria set forth in Subsection 62-780.680(1), F.A.C., have been met. Please refer to the attached maps of the source property and analytical summary tables, Exhibits A and B respectively and hereby incorporated by reference. The SAR/NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the facility for petroleum product contamination associated with the discharges referenced above, except as set forth below.

In the event concentrations of contaminants of concern are detected above the levels approved in this Order, the department will reevaluate the contamination and reinitiate State-funded site or discharge rehabilitation to reduce concentrations of contaminants of concern to the levels approved in the Order or otherwise allowed by Chapter 62-780, F.A.C., in accordance with the State-funded eligibility provisions that are applicable for the site or discharge. This includes any confirmed impacts found to be migrating beyond the site's property boundary. If groundwater is being used for potable uses in the area affected by the contamination, the Department will take all necessary steps to protect public health, safety and welfare under Chapter 376, F.S., as necessary. If a new or subsequent discharge occurs at the facility that

is not eligible for state funding, the contamination must be evaluated and addressed as provided in Chapter 62-780, F.A.C.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until a subsequent order of the Department. Because the administrative hearing process is designed to formulate final agency action, the subsequent order may modify or take a different position than this action.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the addressee at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the addressee must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the addressee must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first.

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver may not apply to persons who have not received a clear point of entry.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Questions

Any questions regarding the FDOH-Polk's review of the SAR/NFAP should be directed to Sara Richie at 863-578-2020. Questions regarding legal issues should be referred to the Department's Office of General Counsel at 850-245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 538624076. Please use this identification on all future correspondence with the Department.

EXECUTION AND CLERKING

Executed in Tallahassee, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Natasha Lampkin
Program Administrator
Petroleum Restoration Program

Attachment(s):

1. Maps of the Source Property;
2. Analytical Summary Tables

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

cc: Ms. Teresa F. Connell, 3226 Lake Breeze Dr., Haines City, FL 33844-9333

ec: Yanisa Angulo, FDEP Southwest District Office – yanisa.angulo@dep.state.fl.us
Sara Richie, FDOH-Polk – sara.richie@flhealth.gov
Jilian Drenning, FDOH-Polk – jilian.drenning@flhealth.gov
Sarah Johnson, P.G., Geo Resources & Engineering, Inc. – sarahjohnson0815@gmail.com
Darrin W. Herbst, P.G., Southwest Florida Water Management District – darrin.herbst@watermatters.org
David Arnold, Southwest Florida Water Management District – davidn.arnold@watermatters.org
File

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Jeanine Sandlin — **Clerk**

5-31-19 — **Date**

P.G. CERTIFICATION

Site Assessment Report (SAR) and No Further Action Proposal (NFAP) dated March 30, 2018 (received March 30, 2018), for Shell-Hoppys, located at 407 US Hwy 17/92 W, Haines City, FDEP Facility ID# 538624076.

I hereby certify that in my professional judgment, the components of this Site Assessment Report/No Further Action Proposal prepared for the January 7, 1987 and August 15, 1990 petroleum product discharges discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-780, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the site rehabilitation objectives stated in Chapter 62-780, F.A.C., have been met.

✓ I personally completed this review.

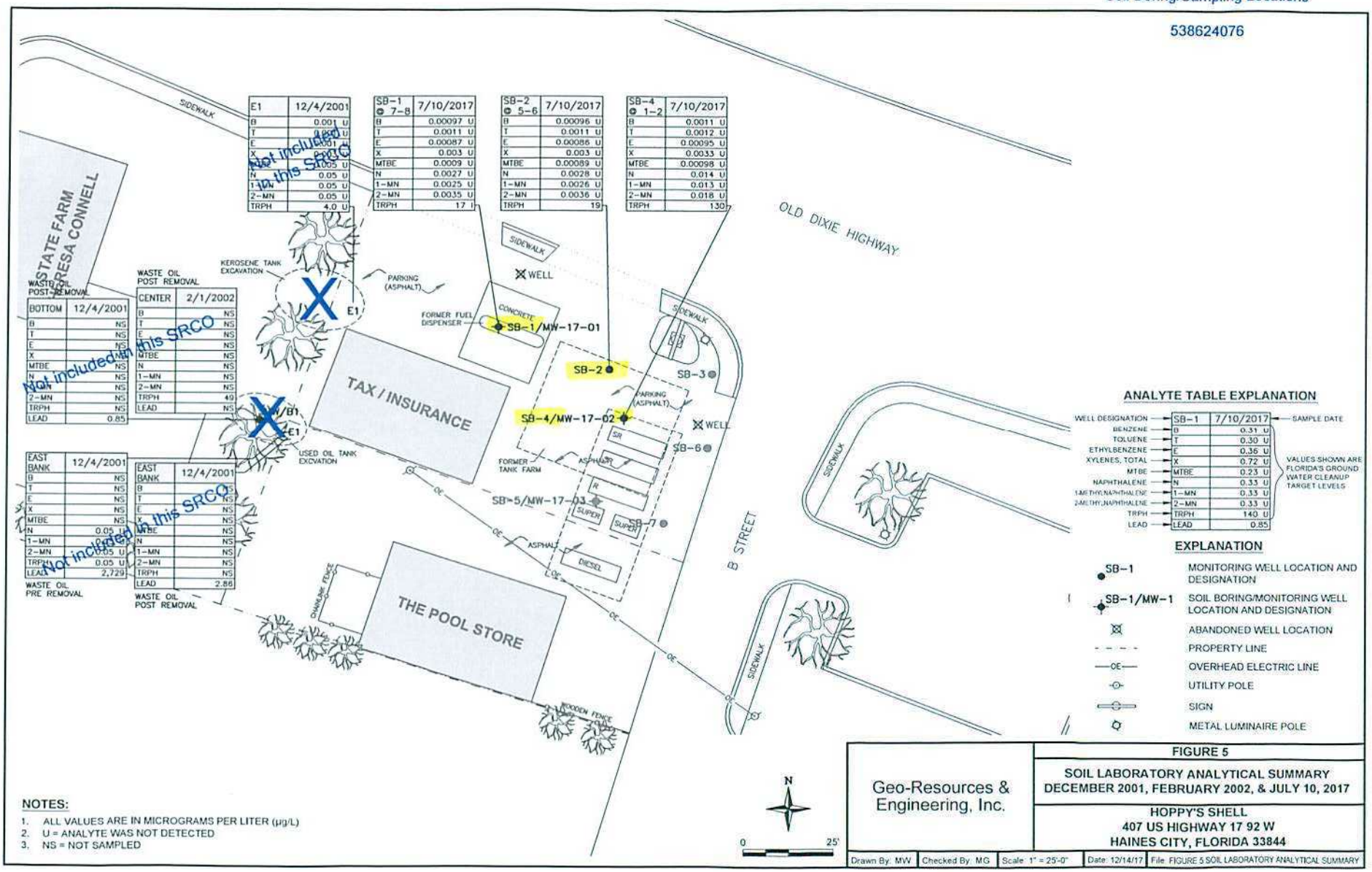
___ This review was conducted by _____ working under my direct supervision.

K. V. Duke Clem, P.G.
Professional Geologist #1579
Florida Department of Health in Polk County
Petroleum Cleanup Program

05/03/2019
Date

Exhibit A-1
Soil Boring/Sampling Locations

538624076



E1	12/4/2001
B	0.001 U
T	0.001 U
E	0.001 U
X	0.003 U
MTBE	0.005 U
N	0.05 U
1-MN	0.05 U
2-MN	0.05 U
TRPH	4.0 U

SB-1 @ 7-8	7/10/2017
B	0.00097 U
T	0.0011 U
E	0.00087 U
X	0.003 U
MTBE	0.0009 U
N	0.0027 U
1-MN	0.0025 U
2-MN	0.0035 U
TRPH	17 I

SB-2 @ 5-6	7/10/2017
B	0.00096 U
T	0.0011 U
E	0.00086 U
X	0.003 U
MTBE	0.00089 U
N	0.0028 U
1-MN	0.0026 U
2-MN	0.0036 U
TRPH	19

SB-4 @ 1-2	7/10/2017
B	0.0011 U
T	0.0012 U
E	0.00095 U
X	0.0033 U
MTBE	0.00098 U
N	0.014 U
1-MN	0.013 U
2-MN	0.018 U
TRPH	130

WASTE OIL POST-REMOVAL

BOTTOM	12/4/2001
B	NS
T	NS
E	NS
X	NS
MTBE	NS
N	NS
1-MN	NS
2-MN	NS
TRPH	NS
LEAD	0.85

WASTE OIL POST REMOVAL

CENTER	2/1/2002
B	NS
T	NS
E	NS
X	NS
MTBE	NS
N	NS
1-MN	NS
2-MN	NS
TRPH	49
LEAD	NS

EAST BANK	12/4/2001
B	NS
T	NS
E	NS
X	NS
MTBE	NS
N	0.05 U
1-MN	0.05 U
2-MN	0.05 U
TRPH	0.05 U
LEAD	2,729

WASTE OIL PRE REMOVAL

EAST BANK	12/4/2001
B	NS
T	NS
E	NS
X	NS
MTBE	NS
N	NS
1-MN	NS
2-MN	NS
TRPH	NS
LEAD	2.86

WASTE OIL POST REMOVAL

ANALYTE TABLE EXPLANATION

WELL DESIGNATION	SB-1	7/10/2017 ← SAMPLE DATE
BENZENE	B	0.31 U
TOLUENE	T	0.30 U
ETHYLBENZENE	E	0.36 U
XYLENES, TOTAL	X	0.72 U
MTBE	MTBE	0.23 U
NAPHTHALENE	N	0.33 U
1-METHYLNAPHTHALENE	1-MN	0.33 U
2-METHYLNAPHTHALENE	2-MN	0.33 U
TRPH	TRPH	140 U
LEAD	LEAD	0.85

VALUES SHOWN ARE FLORIDA'S GROUND WATER CLEANUP TARGET LEVELS

EXPLANATION

- SB-1 — MONITORING WELL LOCATION AND DESIGNATION
- SB-1/MW-1 — SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION
- ABANDONED WELL LOCATION
- PROPERTY LINE
- OE — OVERHEAD ELECTRIC LINE
- UTILITY POLE
- SIGN
- METAL LUMINAIRE POLE

NOTES:
1. ALL VALUES ARE IN MICROGRAMS PER LITER (µg/L)
2. U = ANALYTE WAS NOT DETECTED
3. NS = NOT SAMPLED

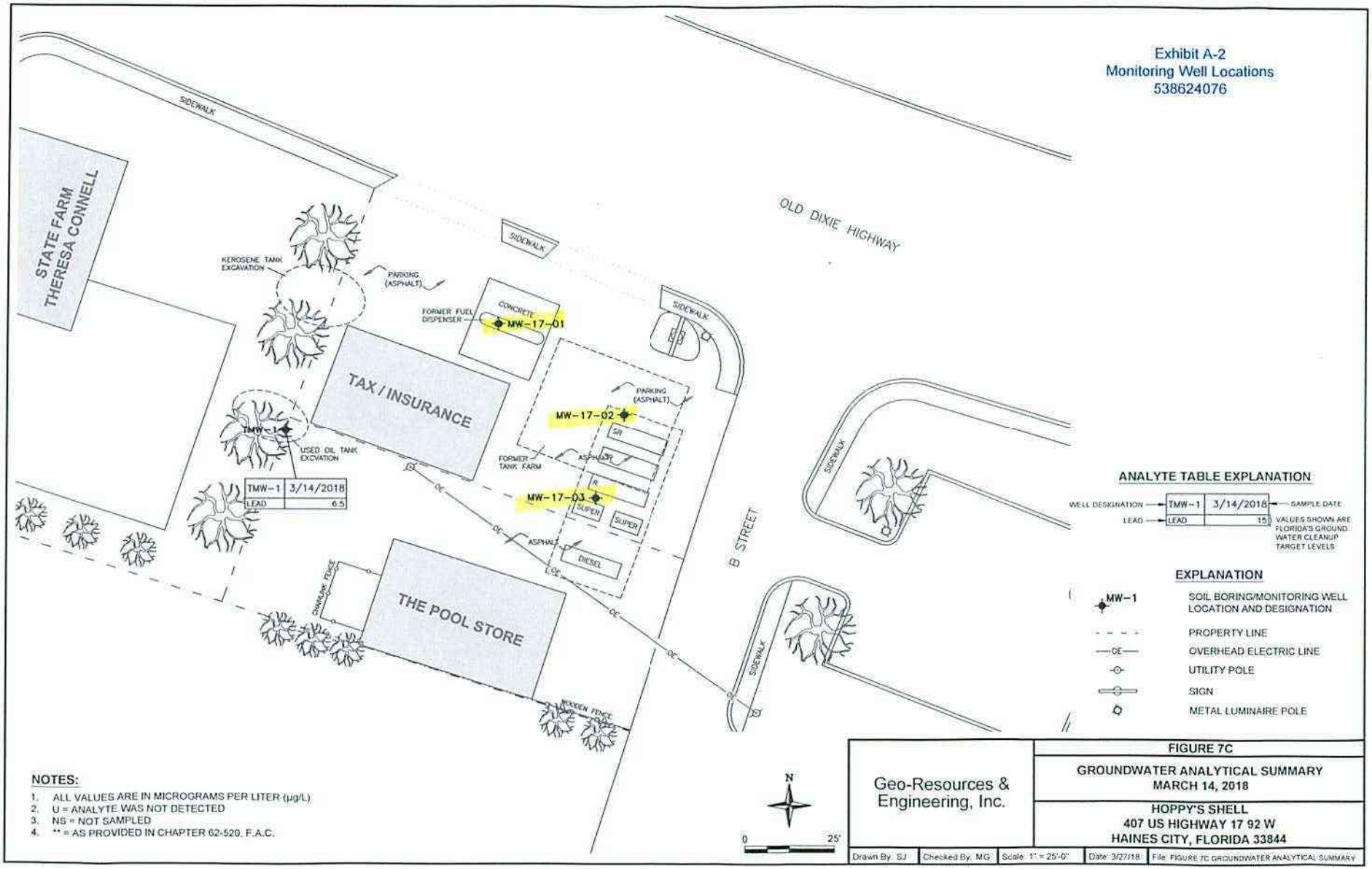
Geo-Resources & Engineering, Inc.

FIGURE 5
SOIL LABORATORY ANALYTICAL SUMMARY
DECEMBER 2001, FEBRUARY 2002, & JULY 10, 2017
HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: MW | Checked By: MG | Scale: 1" = 25'-0" | Date: 12/14/17 | File: FIGURE 5 SOIL LABORATORY ANALYTICAL SUMMARY

*Locations denoted by "X" are not included in the discharges associated with this SRCO – Associated with the 12/3/01 non-program closed discharge

Exhibit A-2
Monitoring Well Locations
538624076



ANALYTE TABLE EXPLANATION

WELL DESIGNATION →	TMW-1	3/14/2018	← SAMPLE DATE
LEAD →	LEAD	15	VALUES SHOWN ARE FLORIDA'S GROUND WATER CLEANUP TARGET LEVELS

EXPLANATION

MW-1	SOIL BORING/MONITORING WELL LOCATION AND DESIGNATION
- - - -	PROPERTY LINE
—OE—	OVERHEAD ELECTRIC LINE
	UTILITY POLE
	SIGN
	METAL LUMINAIRE POLE

NOTES:

1. ALL VALUES ARE IN MICROGRAMS PER LITER (µg/L)
2. U = ANALYTE WAS NOT DETECTED
3. NS = NOT SAMPLED
4. ** = AS PROVIDED IN CHAPTER 62-520, F.A.C.

Geo-Resources & Engineering, Inc.

FIGURE 7C

GROUNDWATER ANALYTICAL SUMMARY
MARCH 14, 2018

HOPPY'S SHELL
407 US HIGHWAY 17 92 W
HAINES CITY, FLORIDA 33844

Drawn By: SJ	Checked By: MG	Scale: 1" = 25'-0"	Date: 3/27/18	File: FIGURE 7C GROUNDWATER ANALYTICAL SUMMARY

Exhibit B-1
Soil Analytical Summary
538624076
Page 1 of 3

TABLE 2A: SOIL ANALYTICAL SUMMARY - VOAs, TRPHs and Metals

Facility ID#: 53/8624076 **Facility Name: Hoppy's Shell**

See notes at end of table.

Sample				OVA	Laboratory Analyses										
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (mg/kg)	Ethyl-benzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)	Arsenic (mg/kg)	Cad-mium (mg/kg)	Chro-mium (mg/kg)	Lead (mg/kg)	Comments
Leachability Based on Groundwater Criteria (mg/kg)					0.007	0.6	0.5	0.2	0.09	340		7.5	38		
Direct Exposure Residential (mg/kg)					1.2	1500	7500	130	4400	460	2.1	82	210	400	
PREBURN	08/16/90		NA												
8-24-90	08/30/90		NA		0.0026	0.002 U	0.002 U	0.002 U	0.002 U	1.0 U	NS	NS	NS	NS	"Dirt Burner Samples"
8-27-90	08/30/90		NA		0.00385	0.002 U	0.002 U	0.002 U	0.002 U	1.0 U	NS	NS	NS	NS	"Dirt Burner Samples"
8-28-90	08/30/90		NA		0.0026	0.002 U	0.002 U	0.002 U	0.002 U	1.0 U	NS	NS	NS	NS	"Dirt Burner Samples"
8-29-90	08/30/90		NA		0.0039	0.002 U	0.002 U	0.002 U	0.002 U	3	NS	NS	NS	NS	"Dirt Burner Samples"
East Bank	12/04/01		NA		0.001 U	0.001 U	0.001 U	0.003 U	0.005 U	4.0 U	NS	NS	NS	NS	Kerosene UST Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	0.2	1.39	1.28	**2,729**	Waste Oil UST Pre-Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	2.86	Waste Oil UST Post-Removal
Bottom	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	0.85	Waste Oil UST Post-Removal
Center	02/01/02		NA		NS	NS	NS	NS	NS	49	NS	NS	NS	NS	Waste Oil UST Post-Removal
PREBURN	07/10/17				NS	NS	NS	NS	NS	NS	0.23 U	0.032 U	0.32	0.32	
SB-1@7-8	07/10/17		7-8		0.00097 U	0.00087 U	0.0011 U	0.003 U	0.0009 U	171	NS	NS	NS	NS	
SB-2@5-6	07/10/17		5-6		0.00096 U	0.00086 U	0.0011 U	0.003 U	0.00089 U	19	NS	NS	NS	NS	
SB-4@1-2	07/10/17		1-2		0.0011 U	0.00095 U	0.0012 U	0.0033 U	0.00098 U	130	NS	NS	NS	NS	

Not included in this SRCO

Notes: NA = Not Available.
NS = Not Sampled.
* = Leachability value may be determined using TCLP.

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

Pre-burn soil analysis from tank closure activities

12/3/01
closed discharge

Florida Department of Environmental Protection -- Bureau of Petroleum Storage Systems

TABLE 2B: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility ID#: 53/8624076 **Facility Name: Hoppy's Shell** See notes at end of table.

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
Leachability Based on Groundwater Criteria (mg/kg)					1.2	3.1	8.5	2.1	27	2500	32000	1200	160	250	880	
Direct Exposure Residential (mg/kg)					55	200	210	2400	1800	21000	2500	3200	2600	2200	2400	
East Bank	12/04/01		NA		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	Kerosene UST Removal
East Bank	12/04/01		NA		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	Waste Oil UST Pre-Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
Bottom	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
Center	02/01/02		NA		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
SB-1@7-8	07/10/17		7-8		0.0027 U	0.0025 U	0.0035 U	0.0033 U	0.0044 U	0.0045 U	0.0061 U	0.0057 U	0.0038 U	0.0035 U	0.0031 U	
SB-2@5-6	07/10/17		5-6		0.0028 U	0.0026 U	0.0036 U	0.0034 U	0.0045 U	0.0047 U	0.0078 I	0.013	0.0039 U	0.0036 U	0.012	
SB-4@1-2	07/10/17		1-2		0.014 U	0.013 U	0.018 U	0.017 U	0.023 U	0.023 U	0.031 U	0.15	0.019 U	0.064	0.15	

12/3/01 discharge

Not included in this SRCO

Notes NA = Not Available
NS = Not Sampled

If analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01), BDL or <0.01 are not acceptable]

Exhibit B-1
Soil Analytical Summary
538624076
Page 3 of 3

TABLE 2C: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility ID#: 53/8624076 **Facility Name: Hoppy's shell**

See notes at end of table.

Sample				OVA	Laboratory Analyses								
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chry-sene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
Leachability Based on Groundwater Criteria (mg/kg)					8	0.8	2.4	24	77	0.7	6.6		
Direct Exposure Residential (mg/kg)					0.1							0.1	
East Bank	12/04/01		NA		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NS	Waste Oil UST Pre-Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Pre-Removal
East Bank	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
Bottom	12/04/01		NA		NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
Center	02/01/02		NA		NS	NS	NS	NS	NS	NS	NS	NS	Waste Oil UST Post-Removal
SB-1@7-8	07/10/17		7-8		0.0075 U	0.0036 U	0.0054 U	0.0055 U	0.0045 U	0.0041 U	0.0045 U	0.00650475	
SB-2@5-6	07/10/17		5-6		0.0085 I	0.0057 I	0.013	0.0057 U	0.0098	0.0042 U	0.0077 I	0.0132783	
SB-4@1-2	07/10/17		1-2		0.039 U	0.035 I	0.039 I	0.029 U	0.057	0.021 U	0.023 U	0.038752	

12/3/01 closed discharge

X Not included in this SRCO

Notes: NA = Not Available.
NS = Not Sampled.
** = Leachability value not applicable.
# = Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent.

If analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

Benzo(a)pyrene Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Facility/Site Name: Hoppy's Shell
Location: U.S. Highway 17/92 abd B Street, Haines City, FL
Facility/Site ID No.: 53/8624076

Soil Sample No. SB-2 @ 5-6'
Sample Date 7/10/2017
Location: SB-2
Depth (ft): 5-6'

INSTRUCTIONS: Calculate Total Benzo(a)pyrene Equivalents if at least one of the carcinogenic PAHs is detected in the sample at a concentration equal to or higher than the Method Detection Limit (MDL), whether quantified with certainty (the concentration reported has no qualifier) or estimated (the concentration reported has a "J", "T" or "I" qualifier). Enter the contaminant concentrations (in mg/kg) for all seven carcinogenic PAHs in the yellow boxes using the following criteria (and see table below):

1. If quantified with certainty, or estimated and has the "J" qualifier, enter the reported value;
2. If not detected at the MDL (the concentration reported is the MDL followed by the "U" qualifier) enter 1/2 of the reported value;
3. If detected at a concentration lower than the MDL and the concentration is estimated (has the "T" qualifier) enter the estimated value;
4. If detected at a concentration equal to or higher than the MDL but lower than the Practical Quantitation Limit (PQL) and the concentration is estimated (has the "I" qualifier) enter the estimated value;
5. If detected at a concentration equal to or higher than the MDL but lower than the PQL and it is not estimated (the concentration reported is the PQL followed by the "M" qualifier) enter 1/2 of the reported value.

Contaminant	Concentration (mg/kg)	Toxic Equivalency Factor	Benzo(a)pyrene Equivalents
Benzo(a)pyrene	0.0085	1.0	0.0085
Benzo(a)anthracene	0.0057	0.1	0.0006
Benzo(b)fluoranthene	0.0130	0.1	0.0013
Benzo(k)fluoranthene	0.00285	0.01	0.0000
Chrysene	0.00980	0.001	0.0000
Dibenz(a,h)anthracene	0.0021	1.0	0.0021
Indeno(1,2,3-cd)pyrene	0.0077	0.1	0.0008

DE Residential = 0.1 mg/kg; DE Industrial = 0.7 mg/kg

Total Benzo(a)pyrene Equivalents = 0.0132783

The concentration shown does not exceed the Residential Direct Exposure SCTL of 0.1 mg/kg.

The concentration shown does not exceed the Industrial Direct Exposure SCTL of 0.7 mg/kg.

Summary Criteria for Table Entries			
Detection	**Concentration Reported**	**Data Qualifier**	**Enter**
Various	Quantified with certainty	None	reported value
Various	Estimated	J	reported (estimated) value
ND at MDL	MDL	U	1/2 reported value
< MDL	Estimated	T	reported (estimated) value
≥ MDL but < PQL	Estimated	I	reported (estimated) value
≥ MDL but < PQL	PQL	M	1/2 reported value

Exhibit B-3
GW Analytical Summary
538624076
Page 1 of 2

TABLE 4A: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals

Facility ID#: 53/8624076 **Facility Name: Hoppy's Shell**

See notes at end of table.

Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total VOAs (µg/L)	MTBE (µg/L)	EDB (µg/L)	1,2-Di-chloro-ethane (µg/L)	Total Arsenic (µg/L)	Total Cad-mium (µg/L)	Total Chro-mium (µg/L)	Total Lead (µg/L)
Chapter 62-780, F.A.C. GCTLs		1	40	30	20	NA	20	0.02	**	**	**	**	15.00
Chapter 62-780, F.A.C. NADCs		100	400	300	200	NA	200	2.00	**	**	**	**	150.00
Center of Kerosene UST Excavation	12/4/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Center of Used Oil UST Excavation	12/4/2001	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	NS	NS	3.0 U	16.8	5.6	11.8	**467.4**
Center	2/4/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.4 U	NS	4.0 U
MW-17-01	7/13/2017	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	0.013 U	0.49 U	NS	NS	NS	1.1 U
MW-17-02	7/13/2017	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
MW-17-03	7/13/2017	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
MW-17-01	10/11/17	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
MW-17-02	10/11/17	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
MW-17-03	10/11/17	0.18 U	0.49 U	0.38 U	1.1 U	2.15 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
TMW-1	3/14/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.5

12/3/01 discharge

Not included in this SRCO

Notes:
NA = Not Available.
NS = Not Sampled.
GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.
NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.
** = As provided in Chapter 62-520, F.A.C.

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01), BDL or <0.01 are not acceptable]
Freshwater Surface Water (FSW), Marine Surface Water (MSW) and Groundwater of Low Yield/Poor Quality (LY/PQ) CTLs should be added to the base of the table as applicable.

TABLE 4B: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#: 53/8624076 **Facility Name: Hoppy's Shell**

See notes at end of table.

Sample Location	Sample Date	TRPHs (µg/L)	Naph-thalene (µg/L)	1-Methyl-naph-thalene (µg/L)	2-Methyl-naph-thalene (µg/L)	Acen-aph-thene (µg/L)	Acen-aph-thylene (µg/L)	Anthra-cene (µg/L)	Benzo (g,h,i) pery-lene (µg/L)	Fluoran-thene (µg/L)	Fluor-ene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Benzo (a) pyrene (µg/L)	Benzo (a) anthra-cene (µg/L)	Benzo (b) fluoran-thene (µg/L)	Benzo (k) fluoran-thene (µg/L)	Chry-sene (µg/L)	Dibenz (a,h) anthra-cene (µg/L)	Indeno (1,2,3-cd) pyrene (µg/L)
Chapter 62-780, F.A.C. GCTLs		5,000	14	28	28	20	210	2,100	210	280	280	210	210	0.2**	0.05*	0.05*	0.5	4.8	0.005*	0.05*
Chapter 62-780, F.A.C. NADCs		50,000	140	280	280	200	2,100	21,000	2,100	2,800	2,800	2,100	2,100	20	5	5	50	480	0.5	5
Center of Kero[illegible] UST Excavation	12/4/2001	NS	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.2 U	0.2 U	0.2 U	0.5 U	5.0 U	0.2 U	0.2 U
Center of Used Oil UST Excavation	12/4/2001	400 U	2.0 U	NS	NS	2.0 U	4.0 U	2.0 U	5.0 U	5.0 U	2.0 U	6.0 U	2.0 U	0.2 U	0.2 U	0.2 U	0.5 U	3.0 U	0.2 U	0.2 U
Center	2/4/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17-01	7/13/2017	670 I	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-02	7/13/2017	610 I	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-03	7/13/2017	690	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-01	10/11/17	750	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-02	10/11/17	600 U	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
MW-17-03	10/11/17	710	0.19 U	0.20 U	0.20 U	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
TMW-1	3/14/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

12/3/01 discharge

Not included in this SRCO

Notes:
NA = Not Available.
NS = Not Sampled.
GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.
NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.
** = As provided in Chapter 62-550, F.A.C.
* = See the October 12, 2004 "Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits" to determine how to evaluate data when the CTL is lower than the PQL.

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].
Freshwater Surface Water (FSW), Marine Surface Water (MSW) and Groundwater of Low Yield/Poor Quality (LY/PQ) CTLs should be added to the base of the table as applicable.

Map ID 33: Quality #119

Deliverable 2004-53-WO3931

Florida Department of Environmental Protection
Division of Waste Management
Bureau of Petroleum Storage Systems
Petroleum Cleanup

RECEIVED
SEP 10 2004
By

TEMPLATE SITE ASSESSMENT REPORT
[Signature Page]

DATE: 9/9/2004

Site FDEP Facility ID #: 538840532 Score: 60

Site Name: Amoco #119 Hop-N-Save

Address: 95 W Highway 17-92

City: Haines City

County: Polk

Consultant Company: Enviro-Logical Solutions, Inc.

Address: 5147 Clifton St

City, State, Zip: Tampa, FL 33634

Consultant Rep.: Daniel Press

Phone #: (813) 890-9500

Responsible Party Name: Quality Petroleum Corp.

Address: PO Box 3889

City, State, Zip: Lakeland, FL 33802

Responsible Party Rep.: Steve Weeks

Phone #: (863) 687-2682

Program 9/13/04 GLS

[X] Preapproval APPROVED

WO#: 2004-53-WO3931

[ ] State Cleanup

TA#:

[ ] Bid Project

Contract #:

Site #:

[ ] Non-Program / Voluntary Cleanup

Cluster Site?	yes	no
	[ ]	[X]

If yes, indicate facility ID #s & Site Names

	Facility ID #	Site Name
1)		
2)		
3)		
4)		
5)		

CERTIFICATION:

A Qualified Registered Professional Engineer or Registered Professional Geologist Certification

I hereby certify that I have supervised the field work (as summarized in the "Recent Site Assessment Activities" section) and preparation of this report, in accordance with Florida Rules and Regulations. As a registered professional geologist and/or professional engineer, as authorized by Chapters 492 or 471, Florida Statutes, I certify that I am a qualified groundwater professional, with knowledge and experience in groundwater contamination assessment and cleanup. To the best of my knowledge, the information and laboratory data summarized in the "Recent Site Assessment Activities" section (including the applicable attachments) are true, accurate, complete, and in accordance with applicable State Rules and Regulations. ***Include a hard (paper) copy of this cover page, signed and sealed, when submitting the report electronically.***

Consultant Name: Daniel P. Press, P.G.

PE or PG License #: 2172

Signature:

Date: 9/9/04

FLORIDA Stamp or Seal

TEMPLATE SITE ASSESSMENT REPORT

Site Name:	Amoco #119 Hop-N-Save
Facility ID #:	538840532
Date:	9/9/2004

TABLE OF CONTENTS

SECTIONS INCLUDED IN REPORT:

Site Name: Amoco #119 Hop-N-Save

Facility ID #: 538840532

Date: 9/9/2004

LIST of ATTACHMENTS

(Format and calculation examples provided in FDEP SOP Manual and in October 1998 Assessment Report Preparation guidance)

TABLES

ATTACHED		*TABLES #*	*APPENDIX #*
Assessment Tables			
X	SOIL SCREENING RESULTS	1	A
X	SOIL ANALYTICAL RESULTS	2	A
X	GROUNDWATER ANALYTICAL RESULTS *(monitoring wells)*	3	A
	GROUNDWATER ANALYTICAL RESULTS *(direct push)*		
X	GROUNDWATER ELEVATION DATA	4	A
	MONITORING WELL CONSTRUCTION DATA		
	SUPPLY WELL CONSTRUCTION DATA *(includes well owner name and address information)*		
	OTHER:		
	OTHER:		
Remediation Tables (if applicable)			
	FREE PRODUCT RECOVERY TABLE		
	VES SYSTEM ANALYTICAL & PERFORMANCE SUMMARY		
	GROUNDWATER INFLUENT/EFFLUENT SUMMARY		
	SYSTEM PERFORMANCE SUMMARY		
	AIR SPARGING DATA		
	VES WELL DATA		
	REMEDIAL SYSTEM SUMMARY		
	OTHER:		

TEMPLATE SITE ASSESSMENT REPORT

Site Name: Amoco #119 Hop-N-Save

Facility ID #: 538840532

Date: 9/9/2004

FIGURES

ATTACHED Assessment Figures		*FIGURE #*	*APPENDIX #*
X	SITE PLAN - *including current and/or former tank locations, piping/utilities, and extent of soil excavations (if applicable)*	1	B
X	SITE VICINITY AREA USE MAP - *including all potential off-site sources of contamination and water wells located within 500 feet*	3	B
X	POTABLE WELL LOCATION MAP - *A USGS quadrangle map illustrating all municipal/public and private supply wells located within 1/2 and 1/4 mile, respectively (respective radii illustrated)*	2	B
X	SOIL SAMPLING LOCATIONS - *including data collected during monitoring well installation*	4	B
	SOIL SCREENING DATA PLOTTED - *including data collected from monitoring well installations.* ***This map can include recommended soil boring locations***		
X	GROUNDWATER SAMPLING LOCATIONS - *including all monitoring well and direct push sampling locations*	5	B
X	GROUNDWATER CONTAMINANT CONCENTRATIONS - *Benzene, BTEX, MTBE & total Naphthalene concentrations plotted at each sampling point.* ***This map can include recommended well locations***	5	B
X	GROUNDWATER ELEVATION CONTOUR MAP(S) - *with flow interpretation for each impacted zone.* ***Note, previous flow interpretations should be submitted when they are not consistent with the current flow interpretation(s)***	6 thru	B
	GROUNDWATER PLUME INTERPRETATION(S) - *with contaminant isoconcentration contours plotted for each significant contaminant of concern (or total VOAs)*	thru	
	ESTIMATED FREE PRODUCT PLUME AREA - *including thickness measured*		
	GEOLOGIC/HYDROLOGIC CROSS-SECTION - *including lithologic, well screen and depth to water fluctuation information*		
	PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS *(if not illustrated in another figure)*		
	OTHER:		

FIGURES (continued)

ATTACHED Remediation Figures	*FIGURE #*	*APPENDIX #*
____ REMEDIAL SYSTEM SITE LAYOUT - *showing remedial system layout and locations of major system components (e.g., monitoring and recovery wells, system housing, effluent discharge, etc.)*	____	____
____ REMEDIATION SYSTEM SCHEMATIC - *showing treatment influent/effluent discharge, etc.*	____	____
____ OTHER: ____	____	____

MISC. ATTACHMENTS

ATTACHED	*APPENDIX #*
X LABORATORY ANALYTICAL REPORTS - *including COCs [form 62-770.900(2) is required for all sampling]*	E
X FIELD SAMPLING SHEETS - *form 62-770.900(3) is required for all groundwater sampling*	E
X WELL COMPLETION REPORTS AND BORING LOGS	D
____ CONTAMINATED SOIL AND/OR GW VOLUME AND CONTAMINANT MASS CALCULATIONS	____
____ COPIES OF OFF-SITE ACCESS AGREEMENTS	____
X COPY OF HEALTH AND SAFETY PLAN	F
X COPY OF APPLICABLE WORK ORDER *(or task assignment)*	G
____ COPY OF APPLICABLE COST AUTHORIZATION FORMS *(verbal authorization forms)*	____
____ COPY OF DISPOSAL MANIFESTS - *to document IDW soil and/or groundwater disposal*	____
____ AQUIFER TEST CALCULATIONS	____
____ CHRONOLOGY OF FIELD WORK PERFORMED *- a list of what was performed and when performed*	____
____ COPY OF PREVIOUS REMEDIAL ACTION PLAN APPROVAL ORDER	____

MISC. ATTACHMENTS (continued)

ATTACHED		*APPENDIX #*
_____	COPY OF PREVIOUS SITE (OR CONTAMINATION) ASSESSMENT REPORT APPROVAL LETTER	_____
_____	PROPOSAL FOR NEXT WORK ORDER OR TASK ASSIGNMENT	_____
_____	COPY OF ALL SUBCONTRACTOR OR MATERIALS INVOICES NEEDED FOR INVOICING	_____
_____	DRAFT CHANGE ORDER TEMPLATE NEEDED FOR INVOICING	_____
X	OTHER: Historical Information	C
_____	OTHER: _____	_____

_____ ORIGINAL SIGNED AND SEALED PROFESSIONAL LAND SURVEY

_____ ELECTRONIC COPY OF PROFESSIONAL LAND SURVEY

X ELECTRONIC COPY OF TEMPLATE SITE ASSESSMENT REPORT

SECTION I - Facility & Discharge Information/Initial Abatement

☐ *Cluster Site*

Part _____ Facility FDEP# _____ Site Name: _____

I-A) Site Description

Please provide a brief description of the site. What type of business or businesses (if any) are currently operating at the present/former facility? Describe where all former and current fuel tanks, lines and dispensers were/are located (indicating how this information was obtained). Describe any access constraints (utility conduits, canopies, land cover, etc.) which also might influence the placement of monitoring wells and/or the installation of soil borings. Indicate whether there are any owner issues or traffic concerns which might effect when the work can be performed? ***Please indicate when the requested information is best illustrated on the site map.***

The subject site is located at the southwest intersection of 1st Street and U.S. Highway 17-92 in Haines City, Polk County, FL. The Hop-N-Save (Former Amoco #119) is currently an active retail gasoline and convenient store. Unleaded and vehicular diesel fuels are sold from the facility. The Underground Storage Tank (UST) information obtained from the site owner agrees with the Florida Department of Environmental Protection (FDEP) tank registration records. A UST inventory summary is listed in Section 1-B of this report. Two pumps are located to the east and west of the store. The UST area is located at the western side of the property. A car wash is located in the southwest corner of the property. A small retention pond is situated due west of the UST area.

Site map (Figure 1) illustrating all current & former tanks, lines and dispensers (including utilities, canopies, etc.) is included in Appendix B

I-B) Petroleum System/Tank History

List current and former UST's and/or AST's operated at site. Systems (PAST AND PRESENT) must be illustrated on Site Plan. This information should be a summary of the Department's STCM database, all tank closure reports (if applicable) and site owner & operator information.

ID#	AST or UST	Size (gallons)	Installation Date	Contents (unleaded gasoline/ diesel/etc.)	Status (active, removed or abandoned [in place])	Date Removed or Abandoned (if applicable)
1	UST	1000	5/01/1988	Unleaded	Active	
2	UST	1000	5/01/1988	Unleaded	Active	
3	UST	1000	5/01/1988	Unleaded	Active	
4	UST	1000	5/01/1988	Vehicular Diesel	Active	

-If above information is different then the Department's STCM database, please indicate source of updated information:

	YES	NO
Active Site? If yes, please indicate method, date and extent of latest tank and line tightness test (include copy of tightness test results). If tank tightness test results are not available, please explain why they are not necessary or indicate when next tightness test will be performed.	X	

A tank and line leak detector test was performed on October 29, 1997. The four 10,000-gallon underground storage tanks (USTs) passed the leak detection tests and were certified as tight.

Copy of tightness test results included in Appendix C

I-B) Petroleum System/Tank History (continued)

	YES	NO
Petroleum System Closure? *If yes, briefly describe type of petroleum system (AST, UST, distribution lines, etc.) and closure activities conducted.* ***Description not needed if copy of system tank closure report included.***	☐	X

Note: Section I-C should be used to document soil, groundwater or product removal performed during closures.

☐ Description of system closure activities included in attached tank closure report.

Copy of tank or system closure report (if applicable) included in Appendix _____

I-C) Release Information

	Discovery Date(s)	Program Type(s): *ATRP, EDI, PCPP, PLRIP or Non-program* *(please indicate if a non-program discharge has been combined with an eligible discharge)*
1st	10-29-1997	PLRIP
2nd		
3rd		
4th		
5th		
6th		

-Source description and release history that includes date(s) of release(s), cause(s) of release(s), where they occurred, type(s) of product released and volume(s) of release(s) [please explain how estimates were derived].

Manual testing of the monitoring wells detected a suspected discharge. A copy of the Discharge Notification Form is included in Appendix C.

- Suspected type(s) of product released:

☐ Leaded Gasoline ☐ Diesel/Kerosene ☐ Unleaded Gasoline
☐ Used Oil ☒ Unknown ☐ Other: _____

I-D) Initial Abatement/Source Removal

(Soil/Groundwater/Free Product removal during tank closures):

	YES	NO	N/A
Was soil contamination detected during petroleum system closure? If yes, please briefly describe extent of petroleum impacts and method(s) used to identify soil contamination.			X

Site map (Figure _____) illustrating soil sampling locations is included in Appendix _____

Tabular summary of soil sampling results (Table _____) is included in Appendix _____

	YES	NO	N/A
Was contaminated soil removed? If yes, please describe the horizontal and vertical extents of the soil removal and indicate where contaminated soil might still exist.			X

Approximate depth to water at time of excavation (if known) _____ *feet bls*

Approximate amount removed _____ *tons* ☐ *yds*^{3} ☐ *Date:* _____

Disposal method: _____

I-D) Initial Abatement/Source Removal (continued)

	YES	NO	N/A
Was groundwater contamination detected during petroleum system closure? If yes, please indicate whether wells were installed (including their construction details if possible) and indicate the maximum levels for petroleum contaminants of concern that were detected.			X

Site map (Figure _____) illustrating groundwater sampling locations is included in Appendix _____

	YES	NO	N/A
Was contaminated water removed? If yes, please identify removal location(s) and describe method of removal.			X

Approximate volume removed: _____ *gallons* *Date(s):* _____

Disposal method: _____

I-D) Initial Abatement/Source Removal (continued)

	YES	NO	N/A
Was free product detected during petroleum system closure? If yes, please describe location(s) where product was observed and thickness observed.			X

Site map (Figure ____) illustrating locations where free product was observed is included in Appendix ____
Tabular summary of product thickness (Table ____) is included in Appendix ____

	YES	NO	N/A
Was free product removed? If yes, please identify removal location(s) and describe method of removal.			X

Volume removed: ____ *gallons* *Date(s):* ____
Disposal method: ____

SECTION II - Background Site Assessment Information

II-A) Risk & Receptor Evaluation

	YES	NO	Unknown
Are large (>100,000 gallons per day) public supply potable wells located within 1/2 mile? *If yes, please indicate distance(s) and direction(s) from site, if they are located downgradient and if the well(s) are screened deeper than contamination. If unknown, please explain.*	X		

A copy of the SUPER Act Survey Form is included in Appendix C.

Potable well survey map (Figure 2) is included in Appendix B
Potable well construction summary (Table _____) is included in Appendix _____

	YES	NO	Unknown
Are water wells, including irrigation, industrial and all potable wells (<100,000 gallons per day), located within1/4 mile? *If yes, please identify the type(s) of wells, their distances and directions from the site, if they are located downgradient and if the well(s) are screened deeper than the contamination. If unknown, please explain.*		X	

Water well survey map (Figure _____) is included in Appendix _____
Water well construction summary (Table _____) is included in Appendix _____

II-A) Risk & Receptor Evaluation (continued)

Was an area use survey performed? *If yes, please identify all water wells within the survey area (as identified in the database searches and walk through survey), all surface waters, any basements or other subsurface structures and any other receptors which might be impacted. Please indicate predominant property use in area and if there are any potential off-site contamination sources located within at least a one block radius of the contaminant plume.*

YES	NO
X	

Land use in the vicinity of the site is comprised of commercial, restaurants, and residential. The area to the south of the facility is comprised of residential housing. The areas to the east, west, and north are commercial.

Area use survey map (Figure 3) is included in Appendix B

Are there any potable wells that have been impacted by contamination? *If yes, please describe what was done to provide users of the contaminated potable well(s) an alternative drinking water supply. If unknown, please explain.*

YES	NO	Unknown
	X	

II-A) Risk & Receptor Evaluation (continued)

	YES	NO	Unknown
Are there any surface water bodies which have been impacted by the contamination? *If yes, please describe what (if anything) has been done to abate or prevent contamination impacting surface water. If unknown, please explain.*		X	

	YES	NO
Are the Chapter 62-777, F.A.C., default Cleanup Target Levels for soil and groundwater the cleanup goals for this site? *If no, please indicate if the cleanup goals of a pre-1999 version of Chapter 62-770, F.A.C. apply to this site (providing the reason why) or if alternative cleanup target levels have been or might be established for this site (outlining all engineering and/or institutional controls which already exist or will need to be implemented in the future).*	X	

II-B) Previous Site Assessment

Information not described in Section I ("release information" or "initial abatement/source removal")

Was site assessment work performed? *If yes, please indicate who performed it (with reason performed) and dates performed (see table below)*

YES [ ] NO [X]

List of all reports where site assessment information was originally submitted to the FDEP (oldest to most recent):

Date of report	Title of report	Company that prepared report

Was soil assessment performed? *If yes, please briefly describe work performed and discuss results.* ***A description of the sampling results can be omitted if the data are included with current tabular summaries and soil plume maps (if applicable).***

YES [ ] NO [X]

[ ] Results included in current soil OVA screening and soil analytical summary tables.

Site map (Figure _____) illustrating sampling locations is included in Appendix _____

Tabular summary of soil sampling results (Table _____) is included in Appendix _____

II-B) Previous Site Assessment (continued)

	YES	NO
Have monitoring wells been installed? *If yes, briefly identify where the wells were installed and describe their construction. Please indicate if the wells are still on-site.* ***The well descriptions and can be omitted if the information is included in a current tabular summaries.***		X

Site map (Figure _____) illustrating well locations is included in Appendix _____
Tabular summary of well construction details (Table _____) is included in Appendix _____

	YES	NO
Has direct push (geoprobe) groundwater grab-sampling been performed? *If yes, briefly identify the locations and depths where the samples were collected..* ***A description of the sample locations and results can be omitted if the information is included in current site maps and tabular summaries***		X

Site map (Figure _____) illustrating the groundwater sampling results is included in Appendix _____
Tabular summary of groundwater sampling results (Table _____) is included in Appendix _____

II-B) Previous Site Assessment (continued)

Was groundwater sampling performed? *If yes, briefly describe what sampling was performed and summarize results.* ***A description of the sampling results can be omitted if the data are included with the current tabular summaries and groundwater plume maps (if applicable).***

YES [ ] NO [X]

☐ Results included in current groundwater analytical summary table.

Site map (Figure _____) illustrating sampling locations is included in Appendix _____
Tabular summary of groundwater results (Table _____) is included in Appendix _____

Has free product been observed in wells or excavations (not including tank and/or system closures)? *If yes, please describe.* ***A description of the thickness measured can be omitted if the previous data are included with the current tabular summaries and illustrated on current free product plume maps (if applicable).***

YES [ ] NO [X]

Site map (Figure _____) illustrating locations where free product was observed is included in Appendix _____
Tabular summary of free product thickness (Table _____) is included in Appendix _____

II-B) Previous Site Assessment (continued)

	YES	NO
Has the previous site assessment been approved by the FDEP (was a CAR or SAR approval letter issued?)		X

Date site assessment (or contamination assessment) was approved: _____

II-C) Previous Remediation

	YES	NO
*Has a Remedial Action Plan been prepared? If yes, please briefly describe the remedial strategy. **The description of the remedial strategy can be omitted if the RAP was implemented (this item will be addressed in the active remediation section that follows).***		X

Date of RAP: _____ Prepared by: _____

☐ Remedial Action Plan approved by FDEP. Date of RAP approval order _____

	YES	NO
Was soil excavation (not associated with a system closure) performed? If yes, please briefly describe work performed and discuss results.		X

The description of the source removal can be omitted if already discussed in the initial abatement section.

Approximate depth to water at time of excavation (if known) _____ *feet*

Site map (Figure_____) illustrating sampling locations and extent of excavation(s) is included in Appendix _____

Tabular summary of soil sampling results (Table_____) is included in Appendix _____

II-C) Previous Remediation (continued)

	YES	NO
Has active remediation been performed? If yes, please indicate dates performed (each applicable technology), evaluate previous system effectiveness and indicate if any previous equipment is still available for cleanup.		X

Applicable RA summary tables are included in Appendix _____

Identify type(s) of active remediation previously performed:

- [ ] Air Sparging & Vapor Extraction
- [ ] Groundwater Recovery (pump & treat)
- [ ] Multiphase Extraction (w/dual phase)
- [ ] Limited scope well over-development
- [ ] Excavation
- [ ] Enhanced Bio-Remediation (ORC, etc.)
- [ ] Free Product Recovery
- [ ] Other: _____

SECTION III - Recent Site Assessment Activities

III-A) Soil Investigation

[soil sampling]

	YES	NO
Was soil (vadose zone and smear zone) investigated? If yes, please provide a brief discussion of soil sampling methodology, including the method(s) used to collect the laboratory samples. If no, please explain.	X	

As no positive OVA responses greater than 10 parts per million (ppm) were produced, only two discrete soil samples were collected above the vadose zone. Soil sample SB-7 (38-40) was collected using Direct Push Technology (DPT). Soil sample SB-9 (40-42) was collected using a stainless steel split spoon. The soil samples were collected and submitted to a State approved laboratory to be analyzed per the Guidelines for Assessment and Source Removal of Petroleum Contaminated Soil, FDEP 1998.

Soil boring logs are included in Appendix D.

Date of last soil screening event (OVA data) with or without laboratory sampling: 7/2/04

Site map (Figure 4) illustrating sampling locations is included in Appendix B

Tabular summary of soil screening results (Table 1) is included in Appendix A

Tabular summary of laboratory soil sampling results (Table 2) is included in Appendix A

Soil sampling logs (for laboratory samples) are included in Appendix _____

Soil samples (previous sampling events included) have been collected and analyzed for:

Required for all suspected GAG & KAG contaminated sites.

[X] BTEX/MTBE (*low//high*) [X] PAHs [X] TRPHs

Required for all sites where Used Oil contamination is suspected.

[ ] Priority Pollutant Volatile Organics & Extractable Organics [ ] As, Cd, Cr, Pb [ ] TRPHs

III-A) Soil Investigation (continued)

	YES	NO	N/A
Was soil Investigative Derived Waste (IDW) generated? *If yes, please describe method used for identifying soil needing disposal:*		X	

Volume of contaminated soil disposed of: _____ ☐ *drums* ☐ *cu. yds.*
Disposal method: _____

[soil results]

	YES	NO	N/A
Was soil contamination above applicable Cleanup Target Levels identified above the water table? If yes, identify where concentrations above CTLs were detected, depths encountered and corresponding OVA readings. If no, please indicate whether laboratory results agree with OVA readings (if they do not agree, please discuss significance of OVA screening data and/or reliability of laboratory results). If "N/A", please explain.		X	

Approximate volume of vadose zone soil contamination: _____ *cu. yds.*

Site map (Figure 4) illustrating extent of soil contamination is included in Appendix B

Soil concentration summary (Table 2) is included in Appendix A

Soil sampling logs (for laboratory samples) are included in Appendix _____

III-A) Soil Investigation (continued)

	YES	NO	N/A
Was vadose zone soil contamination delineated? If no, please describe where additional borings should be located (indicating proposed depths of investigations). If "N/A", please explain.			X

Soil screening data did not indicate vadose zone contamination.

Site map (Figure _____) illustrating proposed sampling locations is included in Appendix _____

	YES	NO	N/A
Has a smear zone been identified? Definition: The "smear zone" is the soil contamination located within the zone of water table fluctuation (it has been described as a "secondary source" of contamination). *If yes, please discuss the horizontal and vertical contaminant mass distribution in the smear zone. If no, please describe what additional information is needed (soil borings, well data, etc.). If "N/A", please explain.*		X	

Soil screening data did not indicate smear zone contamination.

Site map (Figure _____) illustrating proposed sampling locations is included in Appendix _____

III-B) Groundwater Investigation

[monitoring wells/direct push]

	YES	NO
*Were monitoring wells installed (or abandoned)? If yes, briefly identify which wells were installed/abandoned and describe their construction. **The well locations and construction details can be omitted if the information is included in current site maps and tabular summaries.***	X	

Monitoring wells MW-1 through MW-3 were installed on July 2, 2004.

Site map (Figure 5) illustrating the well locations is included in Appendix B
Tabular summary of well construction details (Table 4) is included in Appendix A
Monitoring well completion reports are included in Appendix D

	YES	NO
*Was direct push (geoprobe) groundwater grab-sampling performed? If yes, briefly identify the locations and depths where the samples were collected.. **A description of the sample locations and results can be omitted if the information is included in current site maps and tabular summaries***		X

Site map (Figure _____) illustrating the groundwater sampling results is included in Appendix _____
Tabular summary of groundwater sampling results (Table _____) is included in Appendix _____

III-B) Groundwater Investigation (continued)

[groundwater sampling]

	YES	NO
Was groundwater sampling performed? *If yes, please provide a brief discussion of groundwater purging and sampling methodology and identify the wells that were sampled. If no, please explain.* ***A description of the sampling results can be omitted if the information is illustrated in current contaminant plume maps and tabular summaries***	X	

Groundwater was purged from monitoring wells MW-1 through MW-3 with a submersible pump. The monitoring wells were purged and the groundwater sampled per the FDEP-Standard Operating Procedure (SOP), DEP-SOP-001/01FS 2200 Groundwater Sampling, revision date April 9, 2002.

If groundwater sampling not performed, indicate date of last sampling event (if applicable): _____

Indicate wells sampled on that date (if applicable): _____

Site map (Figure 5) illustrating the groundwater sampling results is included in Appendix B

Tabular summary of groundwater sampling results (Table 3) is included in Appendix A

Groundwater field sampling logs are included in Appendix E

Groundwater samples (previous sampling events included) have been collected and analyzed for:

Required for all suspected GAG/KAG sites.

[X] BTEX/MTBE	[X] PAHs	[X] TRPHs

Required for all contaminated GAG/KAG sites.

[ ] EDB	[X] Lead (Pb)	[X] VOHs

Required for all suspected used oil (or unknown fuel type) contaminated sites.

[ ] Priority Pollutant Volatile Organics & Extractable Organics	[ ] As, Cd, Cr, Pb	[ ] TRPHs

III-B) Groundwater Investigation (continued)

	YES	NO	N/A
Was groundwater IDW generated? If yes, please explain why disposal on-site was not possible.		X	

Volume of contaminated groundwater disposed of: _____ ☐ *drums* ☐ *gallons*

[groundwater results]

	YES	NO	N/A
Was groundwater contamination identified above the applicable Cleanup Target Levels? If yes, indicate locations where highest concentrations detected with depths encountered. If "N/A", please explain.		X	

Approximate volume of contaminated groundwater: _____ *gallons*

Plume maps [Figure(s) 5] illustrating extent of groundwater contamination is/are included in Appendix B

III-B) Groundwater Investigation (continued)

	YES	NO	N/A
Has horizontal delineation been completed in the surficial aquifer? If no, please describe where additional sampling is required (indicating wells and needed analyses) and/or additional monitoring wells should be installed (indicating proposed screened intervals for each). If "N/A", please explain.	X		

Site map (Figure 5) illustrating proposed monitoring well locations is included in Appendix B

	YES	NO	N/A
Has vertical delineation been completed in the plume area? If no, please describe where additional sampling is required (indicating needed analyses) and/or identify locations where vertical extent well(s) should be installed (indicating proposed screened intervals, single or double cased and length of surface casings). If "N/A", please explain.			X

Vertical delineation monitoring wells were not installed as no shallow water-table contamination was discovered.

Site map (Figure _____) illustrating proposed vertical extent well locations is included in Appendix _____

III-B) Groundwater Investigation (continued)

Is the lower aquifer(s) contaminated? *If yes, please describe location and estimated depth of contamination. If unknown, please explain.*

YES	NO	Unknown
	X	

Cross-section (Figure _____) illustrating vertical extent of contamination is included in Appendix _____

Were natural attenuation parameter data collected? *If yes, please specify which parameters were collected (and where collected) and provide interpretation of results.*

YES	NO
	X

Site map (Figure _____) illustrating natural attenuation parameter data is included in Appendix _____

Tabular summary of parameter sampling results (Table _____) is included in Appendix _____

III-B) Groundwater Investigation (continued)

[impacted receptors]

Have any supply wells or surface waters been impacted? *If yes, please indicate concentration(s) of water sample(s) taken and the wells/surface water body/bodies impacted. If unknown, please explain.*

YES	NO	Unknown
	X	

Is surface water and/or sediment sampling required? *If yes, please indicate where samples should be collected, and the proposed analyses. [Note: surface water sampling results should be summarized with the groundwater analytical results and sediment sampling results should be summarized with the soil analytical results.] If unknown, please explain.*

YES	NO	Unknown
	X	

Site map (Figure _____) illustrating sampling locations is included in Appendix _____

Are there any potable wells that need to be sampled? *If yes, please indicate wells to be sampled, and the proposed analyses. If unknown, please explain.*

YES	NO	Unknown
	X	

Site map (Figure _____) illustrating potable well locations is included in Appendix _____

III-C) Free Product Investigation

Is free product present? *If yes, please indicate where product has been observed and its thickness, describe the product (color, odor, etc.) and estimate the type and age of the product.*

YES	NO
	X

Site map (Figure _____) illustrating free product thickness at well locations is included in Appendix _____
Tabular summary of free product thickness (Table _____) is included in Appendix _____

Has the extent of free product been delineated? *If no, please describe where additional wells or piezometers should be located.*

YES	NO	N/A
		X

Site map (Figure _____) illustrating locations of proposed piezometers or wells is included in Appendix _____

Is free product recovery ongoing? *If yes, please indicate the method and frequency of removal and summarize recovery efforts to date.*

YES	NO	N/A
		X

Tabular summary of product recovery amounts (Table _____) is included in Appendix _____

If free product recovery is not ongoing, are free product recovery efforts recommended? *If yes, please indicate the proposed method and frequency of removal. If no, please explain why product removal is not recommended.*

YES	NO	N/A
		X

Site map (Figure _____) illustrating locations of proposed additional piezometers and/or wells for free product recovery is included in Appendix _____

III-D) Comments

Any issues or concerns not addressed in previous questions, which might help better describe the degree and extent of the contamination at this site.

SECTION IV - Impacted Media

IV-A) Lithologic Summary

The impacted aquifer(s) can be best characterized by the following description (predominantly):
Select One

[X] Sands [SW, SP, SM]	[ ] Sandy Clay, Clayey Sand or Silty Clays [SC, ML, CL]	[ ] Clays [CH]
[ ] Intermingled Sands and Clays	[ ] Intermingled Sands, Clays and Limestone	[ ] Limestone [LS]

Please describe a typical soil column and all defined aquifers (perched/upper/lower). This should include a brief description of the site lithology (using the Unified Soil Classification System), and all other geologic and/or hydrogeologic characteristics of the area which might influence migration or transport of the contamination.

Appendix D contains the soil boring logs.

Lithologic cross-section (Figure _____) is included in Appendix _____

Is the lithologic information obtained to date sufficient to characterize the impacted media? If no, please explain [indicating area(s) where additional lithologic data are needed]. ***A map illustrating where the additional borings/wells need to be located can be omitted if those locations have been identified in the soil and/or groundwater sections.***

YES	NO
[X]	[ ]

Site map illustrating proposed lithologic boring locations (Figure _____) is included in Appendix _____

IV-B) Hydrologic Summary

Have all the monitoring well tops-of-casings been surveyed? YES [X] NO [ ]
If no, please describe why this information has not been obtained. [Note, the TOC survey does not have to be performed by a Professional Land Surveyor. However, if the monitoring wells are installed prior to the survey, then the TOCs should be included in the Professional Land Survey.]

Was a professional land survey performed? YES [ ] NO [X]
If yes, please indicate date of survey, whether it was saved on disk (indicating type of program), and who performed it. Also indicate which monitoring wells (if any) were included in the survey. [Note: the site map must be based on the professional land survey.]

Is original signed and sealed professional land survey included? yes [ ] no [ ]

Is copy of electronic version of land survey (labeled with ID #, site name & report date) included? yes [ ] no [ ]

Have depth to groundwater and groundwater flow direction in the upper zone aquifer been determined? YES [X] NO [ ]
If yes, please indicate average depth to water and fluctuation range (low/high stand) in all impacted areas of the site. If no, please explain.

During field activities associated with Work Order 2004-53-WO3931, the depth to water has ranged from 41.55 to 46.31 feet below the top of casing (TOC). Data collected on July 7, 2004 indicates an apparent groundwater flow direction to the east/southeast beneath the Subject Site.

Site map(s) [Figure(s) 6] illustrating upper zone water table elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix B

Tabular summary of all groundwater elevation data (Table 4) is included in Appendix A

IV-B) Hydrologic Summary (continued)

	YES	NO
Have depth to groundwater and groundwater flow direction(s) in lower and/or intermediate aquifer(s) been determined?		X

If yes, please indicate average depth to water and fluctuation range in vertical extent wells (low/high stand). If no, please explain.

No vertical extent monitoring wells were installed during this assessment.

Site map [Figure(s)_____] illustrating lower/intermediate zone water table elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix _____

	YES	NO
Are perched aquifer conditions suspected? *If yes, please indicate estimated depth and thickness of perched zone and whether perched zone extends across entire site.*		X

Site map (Figure _____) illustrating estimated lateral extent of perched zone (when it does not extend across entire site), water level elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix _____

	YES	NO	Unknown
Is the site tidally influenced? *If yes, please indicate tidal fluctuation range and whether groundwater flow direction might change during tidal cycle. If unknown, please indicate whether this issue is important at this site (outlining data collection plan if needed).*		X	

Site map(s) [Figure(s)_____] illustrating changes in flow direction is/are included in Appendix _____

IV-B) Hydrologic Summary (continued)

	YES	NO	Unknown
Is groundwater flow in the impacted aquifers being influenced by pumping from nearby water supply wells?		X	

If yes, please explain how this was determined and indicate which water well(s) are influencing groundwater flow. If unknown, please indicate whether this issue is important at this site (outlining data collection plan if needed).

Site map(s) [Figure(s) _____] illustrating changes in flow direction due to pumping from nearly water supply wells is/are included in Appendix _____

	YES	NO	N/A
Has the average hydraulic gradient (ft/ft) been determined?		X	

If yes, please indicate range of values (if applicable) and whether gradient is uniform across the site. Is there evidence of a vertical gradient? If "N/A", please explain.

Hydraulic gradient data and calculations included in Appendix _____

	YES	NO
Have any aquifer tests been performed at the subject site?		X

If yes, please describe test method (slug test, pumping test, etc.), which wells were used, date performed and summarize test results [transmissivity, hydraulic conductivity, rate of groundwater flow, pumping rates (gpm), etc.]

Aquifer test data and calculations included in Appendix _____

TEMPLATE SITE ASSESSMENT REPORT

Site Name: Amoco #119 Hop-N-Save

Facility ID #: 538840532

Date: 9/9/2004

SECTION V - Post Assessment Summary & Recommendations

Filled out AFTER site assessment has been completed

V-A) Site Assessment Summary

SOIL INVESTIGATION DATA

Is there vadose zone soil contamination? Yes [ ] No [X]

Soil Screening Results — Were SPLP or TCLP extractions & analyses performed? Yes [ ] No [X]

[X] FID [ ] PID [ ] Other _____ Highest OVA concentration (ppm) 2.0

Sample #: SB-1 Depth (ft): 12-14 Date Sampled 6/30/04

Above SCTLs	Contaminants of Concern	Conc. (mg/kg) or if SPLP (ug/l)	Sample #	Depth (ft)	Date Sampled	Leachability SCTL (mg/kg)	Exposure SCTL (mg/kg)
[ ]	Benzene	<0.0025	SB-7	38-40	7/2/04	0.007	1.1
[ ]	Ethylbenzene	<0.0062	SB-7	38-40	7/2/04	0.6	1,100
[ ]	Toluene	<0.0062	SB-7	38-40	7/2/04	0.5	380
[ ]	Total Xylenes	<0.0062	SB-7	38-40	7/2/04	0.2	5,900
[ ]	MTBE	<0.0062	SB-7	38-40	7/2/04	0.2	3,200
[ ]	TRPH	<21	SB-7	38-40	7/2/04	340	340
[ ]	Naphthalene	<0.10	SB-7	38-40	7/2/04	1.7	40
[ ]	Other [_____]						
[ ]	Other [_____]						

GROUNDWATER INVESTIGATION DATA

Is there groundwater contamination? Yes [ ] No [X]

Maximum Contaminant Levels (latest sampling data prior to RA implementation):

Above CTLs	Contaminants of Concern	Conc.(ug/l)	Well #	Date Sampled	GCTL (ug/L)
[ ]	Benzene	<1.0	MW-1	7/7/04	1
[ ]	Toluene	<1.0	MW-1	7/7/04	30
[ ]	Ethylbenzene	<1.0	MW-1	7/7/04	40
[ ]	Total Xylenes	<2.0	MW-1	7/7/04	20
	Total VOAs (BTEX)	<4.0	MW-1	7/7/04	n/a
[ ]	MTBE	<5.0	MW-1	7/7/04	50
[ ]	EDB				0.02
[ ]	TRPHs	<650	MW-1	7/7/04	5000
[ ]	Lead (total)	<5.0	MW-1	7/7/04	15
[ ]	Naphthalene	<1.0	MW-1	7/7/04	20
	Total Naphthalenes	<3.0	MW-1	7/7/04	n/a
	Other PAHs	<10.5	MW-1	7/7/04	n/a
[ ]	Other [_____]				
[ ]	Other [_____]				

Free product present? Yes [ ] No [X] Where? _____ Maximum thickness (ft) _____

Estimated depth of contamination (ft) _____ Lower aquifer(s) contaminated? Yes [ ] No [ ]

GROUNDWATER ELEVATION DATA

Depth to groundwater in upper zone water-table wells (ft): 41.55 to 46.31 Average (ft): -

Depth to groundwater in lower zone vertical extent wells (ft): _____ to _____ Average (ft): _____

Observed maximum range of upper zone fluctuation (ft): _____ Tidally influenced? Yes [ ] No [X]

V-A) Site Assessment Summary (continued)

	YES	NO
Are all the documents submitted to date adequate to meet the site assessment requirements of Rule 62-770.600, Florida Administrative Code (F.A.C.)?	X	

V-B) Recommendations

	YES	NO
Is No Further Action (NFA) without conditions recommended? *If yes, please provide reasons NFA is appropriate.*	X	

No soil or groundwater samples exhibited detectable levels of petroleum constituents above the SCTLs or the GCTLs. Additionally, no OVA screening data indicated elevated levels above 10 ppm.

	YES	NO
Is No Further Action (NFA) with conditions recommended? *If yes, please provide reasons conditional NFA is appropriate and describe the conditions* [the needed institutional or engineering controls] *pursuant to Rule 62-770.680(2), F.A.C.*		X

V-B) Recommendations (continued)

	YES	NO
Is Remediation by Natural Attenuation (RNA) recommended for any portion of the groundwater plume? *If yes, please provide reasons RNA is appropriate and outline proposed monitoring plan. Is/are the temporary point(s) of compliance [the downgradient well(s)] off-site?*		X

Monitoring Wells: _____

Contaminants: _____ Frequency: _____ Duration: _____

	YES	NO
Is Source Removal (soil or free product) recommended? *If yes, please outline proposed method and extent of source removal (is dewatering needed?)*		X

Site map (Figure _____) illustrating proposed extent of excavation is included in Appendix _____

V-B) Recommendations (continued)

	YES	NO
Is a Limited Scope Remedial Action Plan (LSRAP) needed?		X

If yes, please provide reasons for performing limited remediation and briefly outline plan for remediation.

Site map (Figure _____) illustrating locations of any proposed recovery wells (if applicable) is included in Appendix _____

If RAP already approved for site...

	YES	NO
Is a Remedial Action Modification Plan (RAMP) needed?		X

If yes, please provide reasons for continuing approved RA at the site and indicate proposed modifications.

V-B) Recommendations (continued)

Is a Remedial Action Plan (RAP) needed? *If yes, please provide reasons for performing in-situ remediation at the site and indicate which remediation technology or combination of technologies is recommended or should be evaluated (with reasons for recommendation).*

YES [ ] NO [X]

Is a Pilot Test recommended? *If yes, please indicate recommended remedial technology and outline specifics of proposed pilot test. Details include area of site where test is planned, recovery/air sparging well construction details, which wells will be used to evaluate test, proposed recovery and/or pumping and/or blowing rates and plan for IDW disposal (if applicable).*

YES [ ] NO [X]

The FDEP should be consulted before preparing a pilot test outline.

Site map (Figure_____) illustrating pilot test layout is included in Appendix _____

V-C) Comments

Any issues or concerns not addressed in previous questions which might influence remediation decisions at this site.

TEMPLATE SITE ASSESSMENT REPORT

Site Name:	Amoco #119 Hop-N-Save
Facility ID #:	538840532
Date:	9/9/2004

SECTION VI - Program Issues
(for state funded cleanup sites)

List of all consultant company personnel (not subcontractor employees) that participated in the field work or helped to prepare the report:

Name	Duties	Dates On-Site (if applicable)		
Daniel Press	Soil assessment, monitoring well installation oversight	6/30/04	thru	7/2/04
James Fisher	Groundwater sampling	7/7/04	thru	7/7/04
Daniel Press	Reporting		thru	
Joe Fuhr	Reporting		thru	
Terry Frank	Reporting (Drafting)		thru	
Julie Black	Reporting		thru	
			thru	
			thru	
			thru	

VI-A) Work Plan and Cost Summary

Briefly summarize initial work plan.

Per the approved Work Order:
Event 1: Submit HASP to PCHD for review and approval. With hollow stem auger rig, install 15 soil borings w/ split spoons at least 1 foot into the water table, screened with OVA/FID and analyzed for EPA 8021B, EPA 8270C and FL-PRO per sample summary. Collect high, medium and low representative soil samples. Install four (4) 2-inch GW monitor wells to 35 feet bls w/ split spoons. Drum drill cuttings >50 ppm and dispose during a future field event. Collect GW samples from new wells and analyze for BTEX/MTBE, PAHs, FL-PRO, Lead and Total VOA per sample summary. Event 2: Conditional: Install, if necessary, up to 5 additional soil borings, four additional shallow GW monitor wells and one deep double-cased well to 50 feet bls. Collect GW samples and analyze for BTEX/MTBE, PAHs, FL-PRO, Lead and Total VOA per sample summary. Prepare and submit a General Site Assessment Report with analytical and groundwater elevation maps and tables to PCHD for review and approval, along w/ recommendations and conclusions in accordance with the current SOP.

Copy of original work order or task assignment is included in appendix G

Was any extra work authorized? *If yes, please summarize extra work planned for site.*	YES	NO
		X

Copies of all authorization forms are included in Appendix _____

VI-A) Work Plan and Cost Summary (continued)

Was any planned work not performed? *If yes, please describe work not performed with reasons why not performed.*

YES [X] NO [ ]

The Work Order also authorized the analysis of fifteen soil samples during the first event. OVA screening results indicated no elevated readings therefore only two soil samples, one from each "source area", were collected and submitted to the laboratory for analysis.

Four monitoring wells were authorized in the Work Order, only three monitoring wells were installed and sampled. Again due to the apparent lack of petroleum impacts in the subsurface, one well was not installed. The monitoring well would be installed if after a review of the groundwater analytical data indicate petroleum impacts.

The approved Work Order authorized a PLS which was not performed. Only three monitoring wells were installed, with no apparent contamination. If contamination were detected ELS would have the PLS performed during the Second Event.

Are there any changes in cost from original work order or task assignment? *If yes, please describe the changes and cost adjustments that will be required for invoicing.*

YES [X] NO [ ]

Cost reductions are presented on the template spreadsheet.

Copies of all needed subcontractor and/or materials invoices and draft change order cost template included in Appendix _____

VI-B) Next Proposal

Is detailed cost proposal for next scope of work included? *If no, please explain why proposal not provided:*

YES [ ] NO [X]

The site is recommended for No Further Action status. Once the Department has reviewed this TSAR ELS will forward a cost proposal for the next scope of work.

Proposal included in Appendix _____

APPENDICES

APPENDIX A
TABLES

TABLE 1: SOIL SCREENING RESULTS

Facility Name: Hop N Save 119
Facility Address: 95 West Highway #17-92, Haines City, Polk County
Facility ID#: 53/8840532

NA = Not Applicable
NS = Not Sampled
ft bls = feet below land surface
ppm = parts per million
OVA = Organic Vapor Analyzer

Sample				OVA Screening Results		
Boring Number	Date	Depth to Water (ft)	Interval (ft bls)	Total Reading (ppm)	Carbon Filter (ppm)	Net Reading (ppm)
SB-1	6/30/2004	>42	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			4-6	2	--	2
			6-8	2	--	2
			8-10	1	--	1
			10-12	1	--	1
			12-14	2	--	2
			14-16	<1.0	--	<1.0
			16-18	<1.0	--	<1.0
			18-20	2	--	2
			24-26	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			34-36	<1.0	--	<1.0
			38-40	<1.0	--	<1.0
			40-42	<1.0	--	<1.0
SB-2	6/30/2004	>48	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			5-7	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			15-17	<1.0	--	<1.0
			20-22	<1.0	--	<1.0
			25-27	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			34-36	<1.0	--	<1.0
			36-38	<1.0	--	<1.0
			38-40	<1.0	--	<1.0
			40-42	<1.0	--	<1.0
			42-44	<1.0	--	<1.0
			44-46	<1.0	--	<1.0
			46-48	<1.0	--	<1.0
SB-3	6/30/2004	>43	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			5-7	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			15-17	<1.0	--	<1.0
			20-22	<1.0	--	<1.0
			25-27	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			34-36	<1.0	--	<1.0
			36-38	<1.0	--	<1.0
			38-40	<1.0	--	<1.0
			40-42	<1.0	--	<1.0

TABLE 1: SOIL SCREENING RESULTS

Facility Name: Hop N Save 119
Facility Address: 95 West Highway #17-92, Haines City, Polk County
Facility ID#: 53/8840532

NA = Not Applicable
NS = Not Sampled
ft bls = feet below land surface
ppm = parts per million
OVA = Organic Vapor Analyzer

Sample				OVA Screening Results		
Boring Number	Date	Depth to Water (ft)	Interval (ft bls)	Total Reading (ppm)	Carbon Filter (ppm)	Net Reading (ppm)
SB-4	7/1/2004	~46	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			5-7	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			15-17	<1.0	--	<1.0
			20-22	<1.0	--	<1.0
			25-27	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			35-37	<1.0	--	<1.0
			40-42	<1.0	--	<1.0
			44-46	<1.0	--	<1.0
SB-5	6/30/2004	~41	0-2	<1.0	--	<1.0
	through		2-4	<1.0	--	<1.0
	7/1/2004		4-6	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			14-16	<1.0	--	<1.0
			20-22	<1.0	--	<1.0
			24-26	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			34-36	<1.0	--	<1.0
			40-42	<1.0	--	<1.0
			42-44	<1.0	--	<1.0
SB-6	7/1/2004	~42.5	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			4-6	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			14-16	<1.0	--	<1.0
			16-18	<1.0	--	<1.0
			18-20	<1.0	--	<1.0
			22-24	<1.0	--	<1.0
			26-28	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			34-36	<1.0	--	<1.0
			38-40	<1.0	--	<1.0
SB-7	7/1/2004	~42.5	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			4-6	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			14-16	<1.0	--	<1.0
			16-18	<1.0	--	<1.0
			18-20	<1.0	--	<1.0
			22-24	<1.0	--	<1.0
			26-28	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			34-36	<1.0	--	<1.0
			38-40	<1.0	--	<1.0
			42-44	<1.0	--	<1.0

TABLE 1: SOIL SCREENING RESULTS

Facility Name: Hop N Save 119
Facility Address: 95 West Highway #17-92, Haines City, Polk County
Facility ID#: 53/8840532

NA = Not Applicable
NS = Not Sampled
ft bls = feet below land surface
ppm = parts per million
OVA = Organic Vapor Analyzer

Sample				OVA Screening Results		
Boring Number	Date	Depth to Water (ft)	Interval (ft bls)	Total Reading (ppm)	Carbon Filter (ppm)	Net Reading (ppm)
SB-8	7/1/2004	~42.5	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			4-6	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			14-16	<1.0	--	<1.0
			16-18	<1.0	--	<1.0
			18-20	<1.0	--	<1.0
			22-24	<1.0	--	<1.0
			26-28	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			34-36	<1.0	--	<1.0
			38-40	<1.0	--	<1.0
			42-44	<1.0	--	<1.0
SB-9	6/30/2004	~46	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			5-7	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			15-17	<1.0	--	<1.0
			20-22	<1.0	--	<1.0
			25-27	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			35-37	<1.0	--	<1.0
			40-42	<1.0	--	<1.0
			45-47	<1.0	--	<1.0
SB-10	7/2/2004	~46.5	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			5-7	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			15-17	<1.0	--	<1.0
			20-22	<1.0	--	<1.0
			25-27	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			35-37	<1.0	--	<1.0
			40-42	<1.0	--	<1.0
			45-47	<1.0	--	<1.0
SB11	7/1/2004	~46	0-2	<1.0	--	<1.0
			2-4	<1.0	--	<1.0
			5-7	<1.0	--	<1.0
			10-12	<1.0	--	<1.0
			15-17	<1.0	--	<1.0
			20-22	<1.0	--	<1.0
			25-27	<1.0	--	<1.0
			30-32	<1.0	--	<1.0
			35-37	<1.0	--	<1.0
			40-42	<1.0	--	<1.0
			45-47	<1.0	--	<1.0

TABLE 2: SOIL ANALYTICAL RESULTS

Facility Name: Hop N Save 119
Facility Address: 95 West Highway #17-92, Haines City, Polk County
Facility ID#: 53/8840532

NA = Not Analyzed
ppm = parts per million
MTBE = Methyl-Tertiary Butyl Ether
TPH = Total Petroleum Hydrocarbons
mg/kg = milligrams per kilogram
SCTLs = Soil Cleanup Target Levels per Ch. 62-777, F.A.C. Table II
OVA = Organic Vapor Analyzer

Sample					Laboratory Analysis								
Boring Number	Sample Collection Depth (feet)	Date	Depth to Water (feet)	Net OVA (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Naphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	1-Methylnaphthalene (mg/kg)	TPH (mg/kg)
SCTLs Leachability Based on Groundwater					0.007	0.5	0.6	0.2	0.2	1.7	6.1	2.2	340
SCTLs Direct Exposure					1.1	380	1,100	5,900	3,200	40	80	68	340
SB-7 (38-40)	(38-40)	7/2/2004	~42	<1.0	<0.0025	<0.0062	<0.0062	<0.0062	<0.0062	<0.10	<0.21	<0.10	<21
SB-9 (40-42)	(40-42)	7/2/2004	~44	--	<0.0025	<0.0063	<0.0063	<0.0063	<0.0063	<0.10	<0.21	<0.10	<21

TABLE 3: GROUNDWATER ANALYTICAL RESULTS (Monitoring Wells)

Facility Name: Hop N Save 119
Facility Address: 95 West Highway #17-92, Haines City, Polk County
Facility ID #: 53/8840532

TPH - Total Petroleum Hydrocarbons
MTBE = Methyl Tertiary-Butyl Ether
NS = Not Sampled
ug/L - micrograms per liter
mg/L = milligrams per liter

Sample		LABORATORY ANALYTICAL RESULTS									
Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Naphthalene	2-Methyl-naphthalene	1-Methyl-naphthalene	TPH	Lead
Groundwater Cleanup Target Levels Chapter 62-777, FAC		1 ug/L	40 ug/L	30 ug/L	20 ug/L	50 ug/L	20 ug/L	20 ug/L	20 ug/L	5 mg/L	15 mg/L
MW-1	7/7/2004	<1.0	<1.0	<1.0	<2.0	<5.0	<1.0	<1.0	<1.0	<0.65	<0.005
MW-2	7/7/2004	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.65	NS
MW-3	7/7/2004	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.65	NS

TABLE 4: GROUNDWATER ELEVATION AND MONITORING WELL CONSTRUCTION DATA

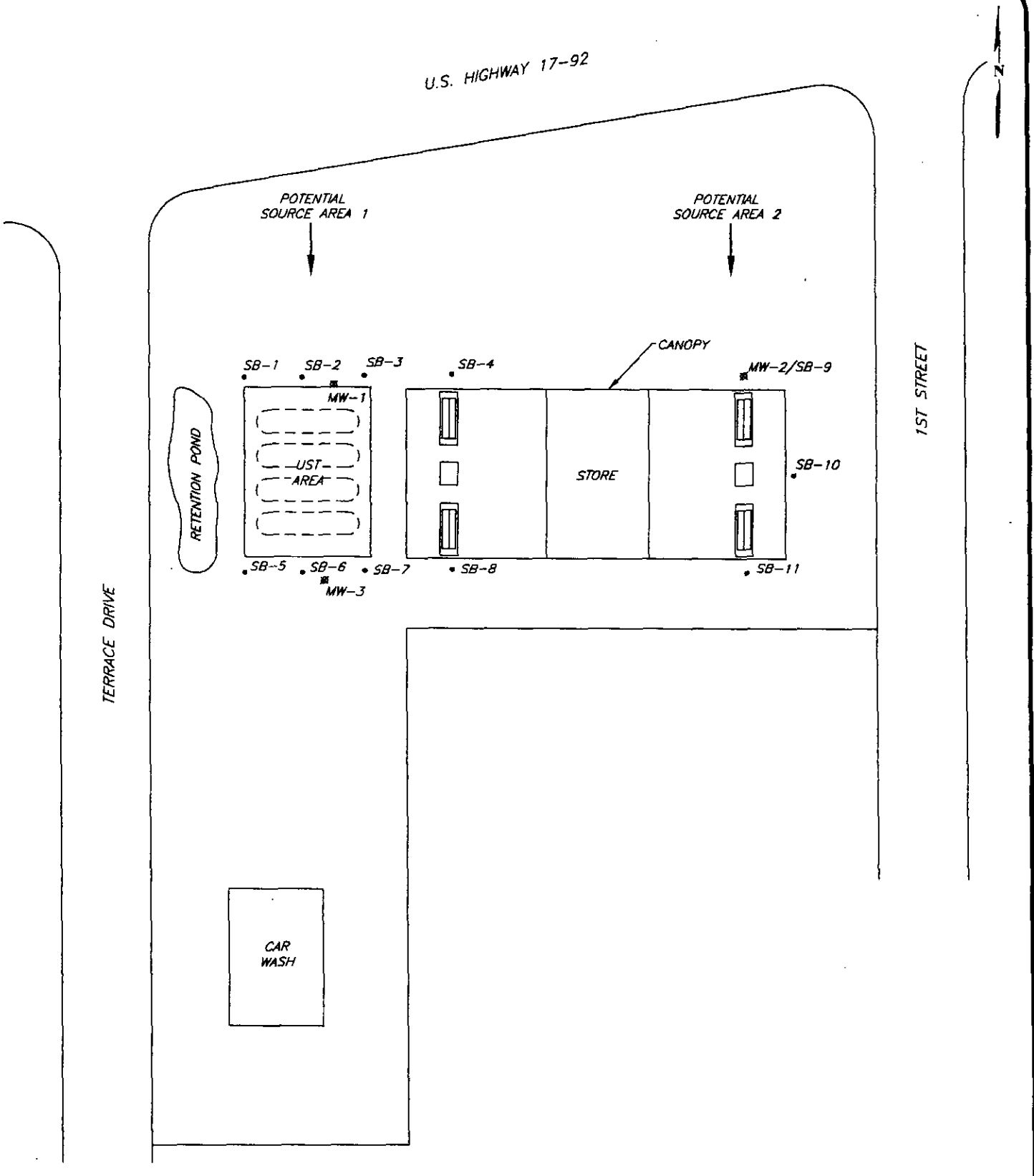
Facility Name: Hop N Save 119
Facility Address: 95 West Highway #17-92, Haines City, Polk County
Facility ID#: 53/8840532

NI = Not Installed
NM = Not Measured
TOC = Relative Top of Casing
ELEV = Relative Groundwater Elevation
DTW = Depth to Water
DTNAPL = Depth to Non-Aqueous Phase Liquids
All measurements in feet unless noted.

WELL NO.	MW-1	MW-2	MW-3		
DIAMETER (inches)	2	2	2		
WELL DEPTH	56	56	55		
SCREEN INTERVAL	(41-56)	(41-56)	(40-55)		
TOC ELEVATION	95.18	98.72	95.31		

DATE	ELEV	DTW	DTNAPL	ELEV	DTW	DTNAPL	ELEV	DTW	DTNAPL						
7/7/2004	53.63	41.55	NA	52.41	46.31	NA	53.51	41.80	NA						

APPENDIX B
FIGURES



DWG DATE: 9/7/04

CAD FILE#: M:\CAD\DWGS\PROJECTS\13-119\SITE\SITE.DWG

DRAFTED BY: LTF

APPROVED BY:

CHECKED BY:

DESIGNED BY:

ENVIRO-LOGICAL SOLUTIONS, INC.
5147 WEST CLIFTON STREET
TAMPA, FL 33634-8011
(813) 890-9500

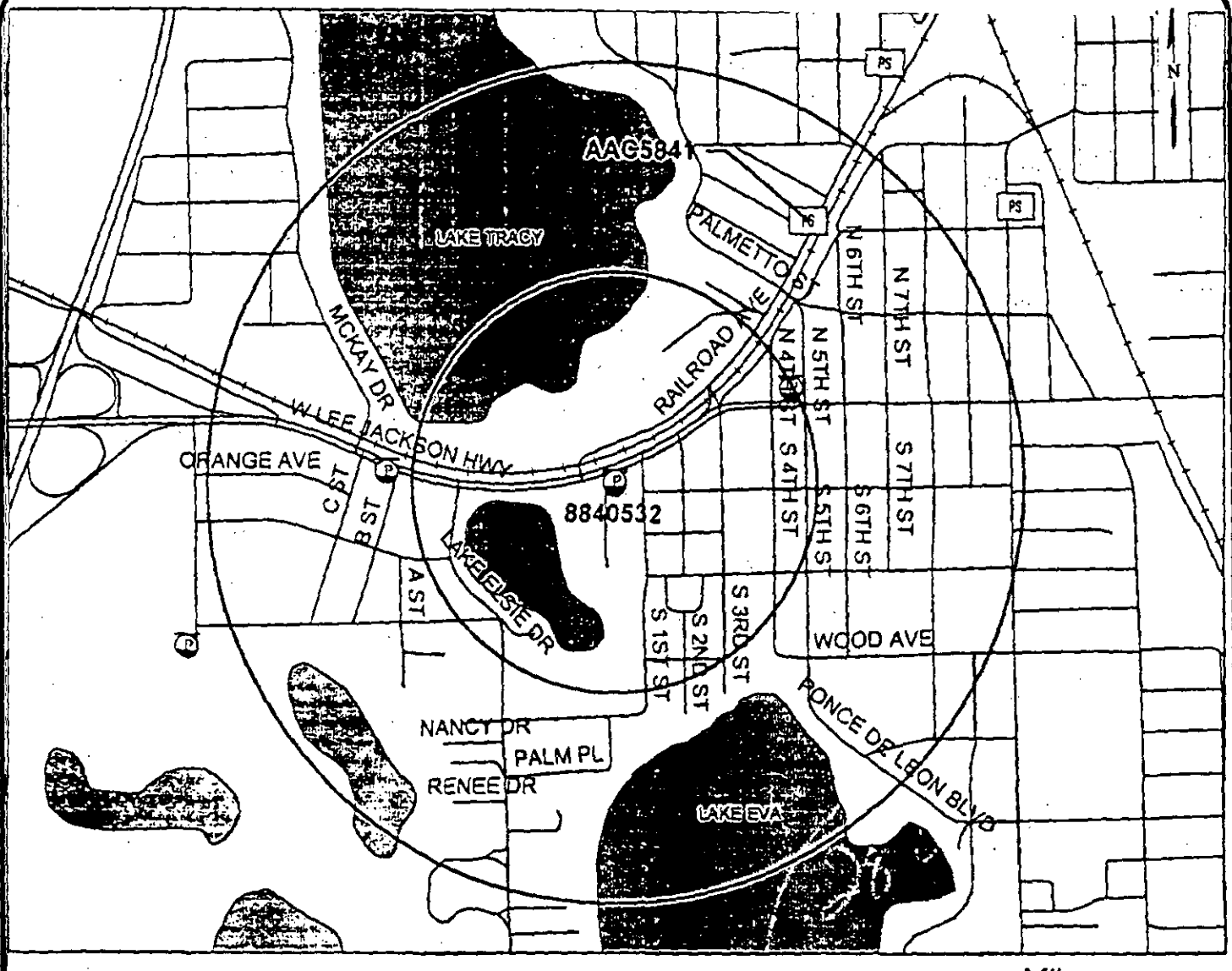
SITE LOCATION

HOP N SAVE
95 WEST HIGHWAY 17-92
HAINES CITY, FL 33844
DEP #53/8840532

TITLE

FIGURE 1
SITE MAP

DWG DATE: 9/9/04 | CAD FILE#: M:\CAD\DWGS\PROJECTS\13-119\SITESEN.RBC | DRAFTED BY: LTP | APPROVED BY: | CHECKED BY:



Legend

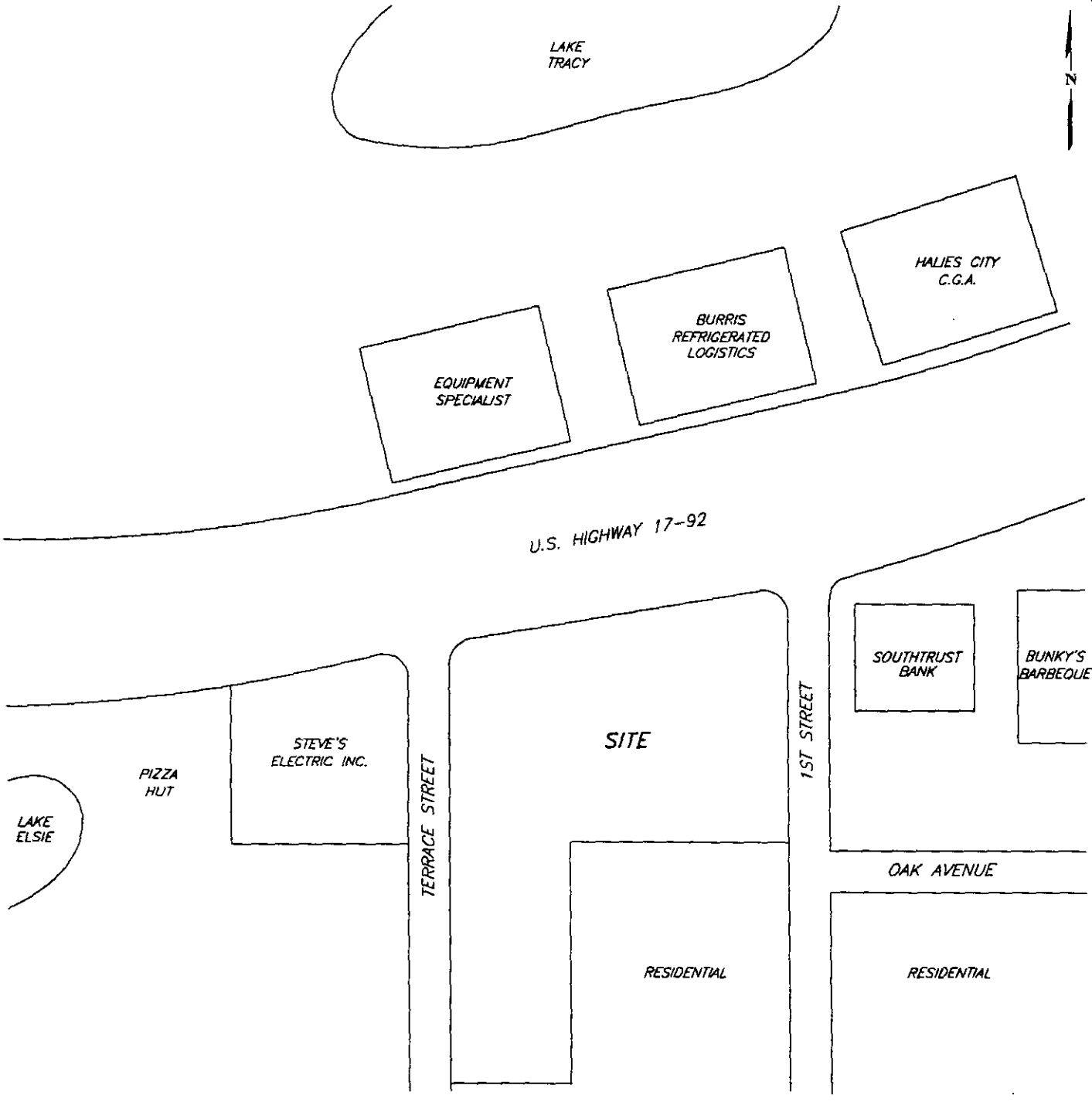
- Petroleum Facilities
- Well Status
  - ★ >1/2 MCL/HAL
  - ■ >1/4 MCL/HAL
  - ● <=1/4 MCL/HAL
- ▲ No Detects
- Not Sampled Within Previous Year
- PS 40 Community Well
- All Streets
- Railroad Lines
- Water Bodies

SOURCE: FLORIDA DEPARTMENT OF HEALTH BUREAU OF WATER PROGRAMS POTABLE WELL SURVEY (JANUARY 21, 2004)

ENVIRO-LOGICAL SOLUTIONS, INC.
5147 WEST CLIFTON STREET
TAMPA, FL 33634-8011
(813) 890-9500

SITE LOCATION
HOP N SAVE
95 WEST HIGHWAY 17-92
HAINES CITY, FL 33844
DEP #53/8840542

TITLE
FIGURE 2
SENSITIVE RECEPTOR SURVEY MAP



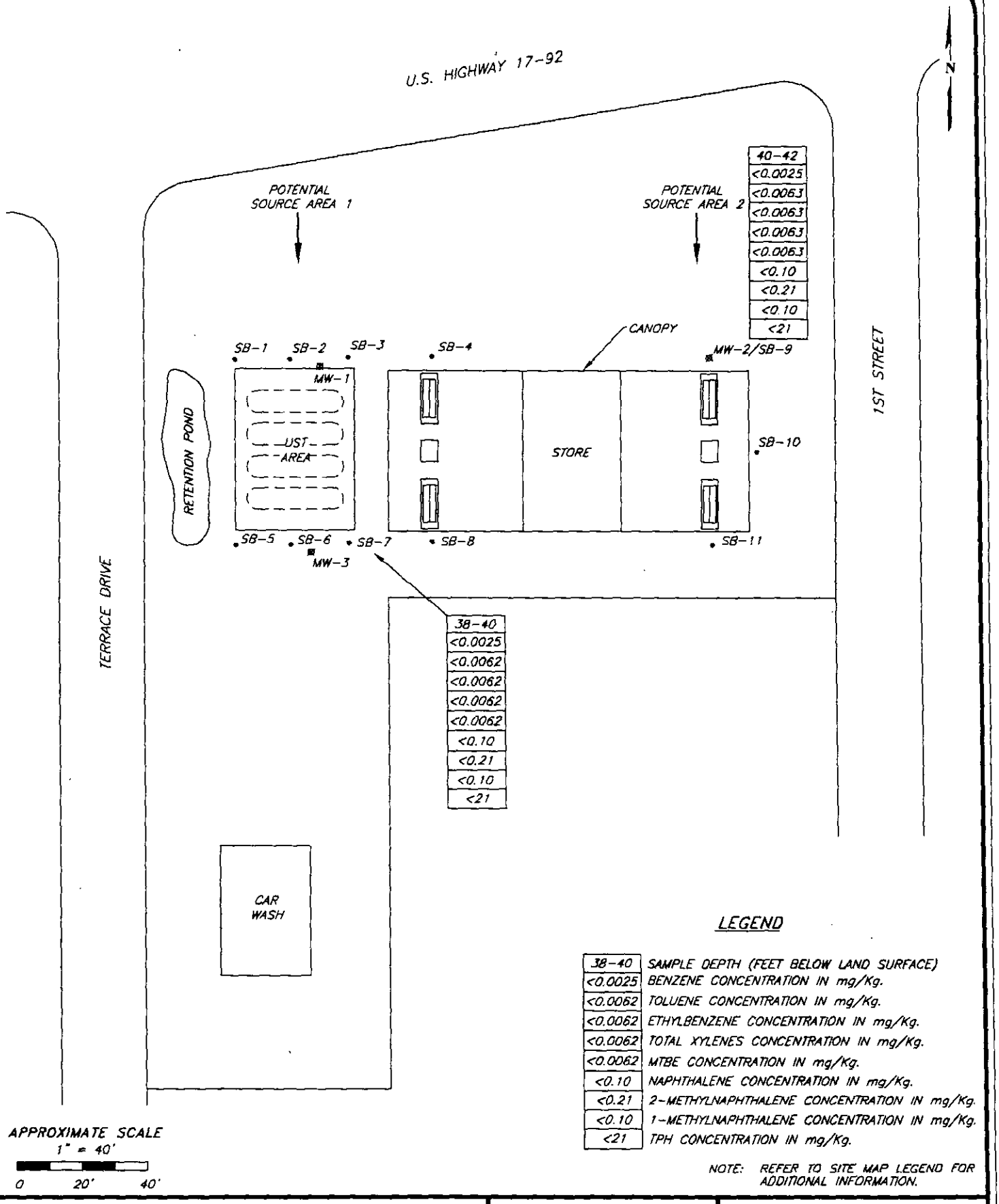
NOT TO SCALE

DESIGNED BY:
CHECKED BY:
APPROVED BY:
DRAFTED BY: LTF
CAD FILE# M:\CAD\DWGS\PROJECTS\13-1193\TE\SITE VICINITY
DWG DATE 9/9/04

ENVIRO-LOGICAL SOLUTIONS, INC.
5147 WEST CLIFTON STREET
TAMPA, FL 33634-8011
(813) 890-9500

SITE LOCATION
HOP N SAVE
95 WEST HIGHWAY 17-92
HAINES CITY, FL 33844
DEP #53/8840532

TITLE
FIGURE 3
SITE VICINITY AREA USE MAP



LEGEND

38-40	SAMPLE DEPTH (FEET BELOW LAND SURFACE)
<0.0025	BENZENE CONCENTRATION IN mg/Kg.
<0.0062	TOLUENE CONCENTRATION IN mg/Kg.
<0.0062	ETHYLBENZENE CONCENTRATION IN mg/Kg.
<0.0062	TOTAL XYLENES CONCENTRATION IN mg/Kg.
<0.0062	MTBE CONCENTRATION IN mg/Kg.
<0.10	NAPHTHALENE CONCENTRATION IN mg/Kg.
<0.21	2-METHYLNAPHTHALENE CONCENTRATION IN mg/Kg.
<0.10	1-METHYLNAPHTHALENE CONCENTRATION IN mg/Kg.
<21	TPH CONCENTRATION IN mg/Kg.

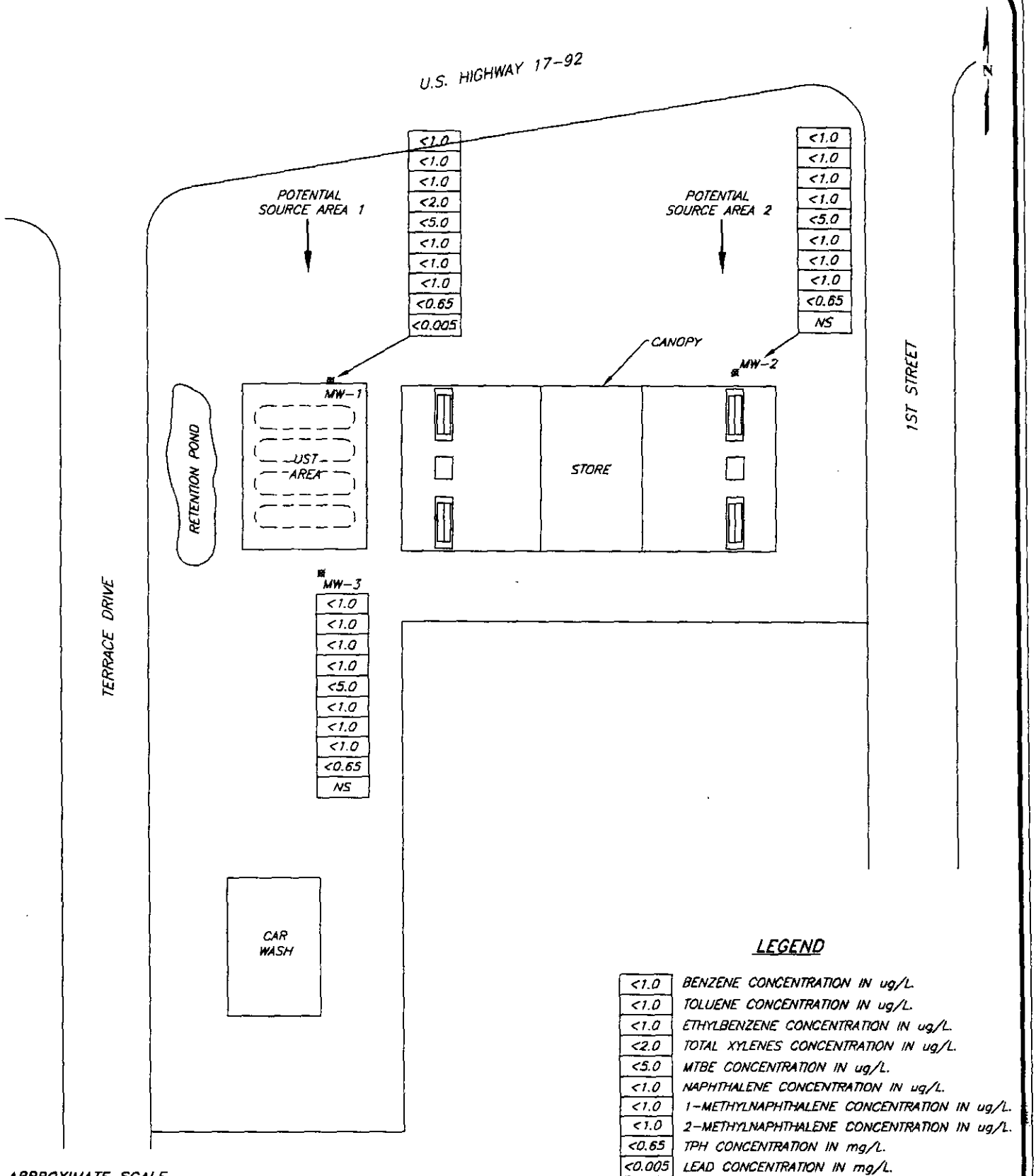
NOTE: REFER TO SITE MAP LEGEND FOR ADDITIONAL INFORMATION.

DESIGNED BY: | CHECKED BY: | APPROVED BY: | DRAFTED BY: LTF | CAD FILE# M:\CAD\DWGS\PROJECTS\13-119\SITE\SITESDATA7-7-04 | DWG DATE: 9/9/04

ENVIRO-LOGICAL SOLUTIONS, INC.
5147 WEST CLIFTON STREET
TAMPA, FL 33634-8011
(813) 890-9500

SITE LOCATION
HOP N SAVE
95 WEST HIGHWAY 17-92
HAINES CITY, FL 33844
DEP #53/8840532

TITLE
FIGURE 4
SOIL SAMPLING LOCATIONS
JULY 2, 2004

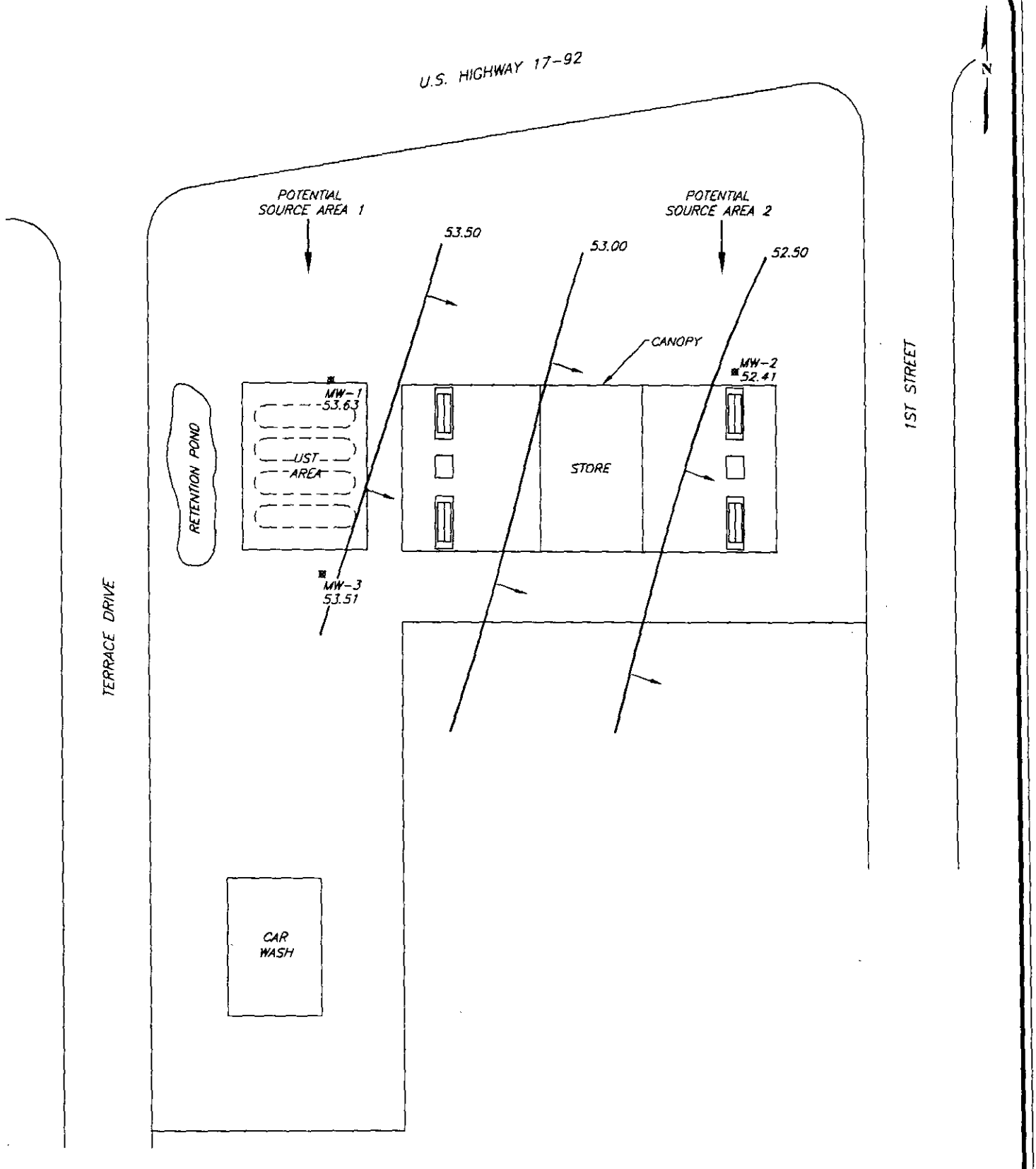


DESIGNED BY: | CHECKED BY: | APPROVED BY: | DRAFTED BY: LTF | CAD FILE# M:\CAD\WGS\PROJECTS\13-119\SITE\SITE\GWQ7-7-04 | DWG DATE: 9/9/04

ENVIRO-LOGICAL SOLUTIONS, INC.
5147 WEST CLIFTON STREET
TAMPA, FL 33634-8011
(813) 890-9500

SITE LOCATION
HOP N SAVE
95 WEST HIGHWAY 17-92
HAINES CITY, FL 33844
DEP #53/8840532

TITLE
FIGURE 5
GROUNDWATER CONTAMINANT CONCENTRATIONS
JULY 7, 2004



APPROXIMATE SCALE
1" = 40'
0 20' 40'

NOTE: REFER TO SITE MAP LEGEND FOR ADDITIONAL INFORMATION.

DESIGNED BY:
CHECKED BY:
APPROVED BY:
DRAFTED BY: LTF
CAD FILE# M:\CAD\DWGS\PROJECTS\13-119SITE\SITE\WTE7-7-04
DWG DATE 9/7/04

ENVIRO-LOGICAL SOLUTIONS, INC.
5147 WEST CLIFTON STREET
TAMPA, FL 33634-8011
(813) 890-9500

SITE LOCATION
HOP N SAVE
95 WEST HIGHWAY 17-92
HAINES CITY, FL 33844
DEP #53/8840532

TITLE
FIGURE 6
GROUNDWATER ELEVATION CONTOURS
JULY 7, 2004

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

FEB 28 2005

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Steve Weeks
Quality Petroleum Corporation
P.O. Box 3889
Lakeland, Fl 33802

Subject: Site Rehabilitation Completion Order
Former Amoco #119 (Hop-N-Save)
95 West Highway 17-92
Haines City, Polk County
FDEP Facility ID# 538840532
Discharge Date: October 29, 1997 (PLRIP)
Discharge Score: 60

Dear Mr. Weeks:

The Polk County Health Department Petroleum Cleanup Program has reviewed the Site Assessment Report (SAR) dated September 9, 2004, (received September 10, 2004) and Well Abandonment Report and No Further Action Proposal (NFAP) dated November 19, 2004 (received November 22, 2004) prepared and submitted by Enviro-Logical Solutions, Inc. for the petroleum product discharge discovered at this site. Documentation submitted with the NFAP confirms that criteria set forth in Rule 62-770.680(1), Florida Administrative Code (F.A.C.), have been met. The NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the site for petroleum product contamination associated with the discharge listed above, except as set forth below.

In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the site, the Florida Department of Environmental Protection (Department) may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the NFAP or otherwise allowed by Chapter 62-770, F.A.C.

Please send a copy of the approved assessment document[s] to Ken Weber of the Southwest Florida Water Management District within 30 days of receiving this Order.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative proceeding (hearing) is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for a hearing are set forth below.

Persons affected by this Order have the following options:

(A) If you choose to accept the Department's decision regarding the NFAP you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

(B) If you choose to challenge the decision, you may do the following:

(1) File a request for an extension of time to file a petition for hearing with the Agency Clerk in the Office of General Counsel of the Department within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for hearing; or

(2) File a petition for administrative hearing with the Agency Clerk in the Office of General Counsel of the Department within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for Administrative Hearing

For good cause shown, pursuant to Rule 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for hearing. Such a request must be filed (received) by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Mr. Steve Weeks, Quality Petroleum Corporation, shall mail a copy of the request to Mr. Steve Weeks, Quality Petroleum Corporation at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for administrative hearing must be made.

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the

Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Mr. Steve Weeks, Quality Petroleum Corporation, shall mail a copy of the petition to Mr. Steve Weeks, Quality Petroleum Corporation at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsections 120.54(5)(b)4. and 120.569(2), F.S., and Rule 28-106.201, F.A.C., a petition for administrative hearing shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the name, address, and telephone number of the petitioner's representative, if any, the site owner's name and address, if different from the petitioner, the FDEP facility number, and the name and address of the facility;
(b) A statement of when and how each petitioner received notice of the Department's action or proposed action;
(c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by the petitioner, or a statement that there are no disputed facts;
(e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida

32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the clerk of the Department (see below).

Questions

Any questions regarding the Polk County Health Department Petroleum Cleanup Program's review of your NFAP should be directed to George A. Sinback at (863) 701-1303 ext 101. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for administrative hearing or request for an extension of time to file a petition for administrative hearing.

The FDEP Facility Number for this site is 538840532. Please use this identification on all future correspondence with the Department or the Polk County Health Department Petroleum Cleanup Program.

Sincerely,

Rebecca Mart, Act

Michael E. Ashey, Chief
Bureau of Petroleum Storage Systems

MEA/gas

cc: Laurel Culbreth, FDEP Southwest District
Grace Rivera, FDEP – BPSS
George A. Sinback, Polk County Health Department Petroleum Cleanup Program
Daniel Press, P.G., Enviro-Logical Solutions, Inc., 5147 West Clifton Street, Tampa, FL 33634
File

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Nancy C Dan — 2-28-2005

Clerk (or Deputy Clerk) — Date

P.G. CERTIFICATION

Site Assessment Report and No Further Action Proposal, Former Amoco #119 (Hop-N-Save), 95 West Highway 17-92, Haines City, Polk County, Florida, FDEP Facility ID# 538840532.

I hereby certify that in my professional judgement, the components of this Site Assessment Report (SAR) dated September 9, 2004 (received September 10, 2004) and Well Abandonment Report and No Further Action Proposal (NFAP) dated November 19, 2004 (received November 22, 2004), prepared and submitted by Enviro-Logical Solutions, Inc. for this site satisfy the requirements set forth in Chapter 62-770, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the objectives stated in Chapter 62-770, F.A.C. have been met.

___ I personally completed this review.

_X_ This review was conducted by George A. Sinback, Environmental Specialist II working under my direct supervision.

George W. Ellsworth, P.G.
Professional Geologist 0000848
Polk County Health Department
Petroleum Cleanup Program

11/23/04
November 23, 2004
Date

Department of Environmental Protection

2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form: 62-761.900(1)
Form Title: Discharge Report Form
Effective Date: January 2017
Incorporated in Rule 62-761.405, F.A.C.

DISCHARGE REPORT FORM

Complete all applicable blanks, and submit copies of any analytical or field test results confirming contamination to soils, surface water, or groundwater to the County via email or mail.

Facility ID Number (If Registered): 8840532 Date of Form Completion: 7/09/18 Date of Discovery: _____

Facility Name: Quality #119 County: Polk

Facility (Property) Owner: Quality Petroleum Corporation Telephone Number: 863-687-2682

Owner Mailing Address: P.O. Box 3889 Lakeland, Fl. 33802

Location of Discharge (Facility Street Address): 95 Hwy. 17/92 Haines City, Fl. 33844 Lat/Long: _____

Date of receipt of any test or analytical results confirming a discharge: 7/05/18 Estimated number of gallons discharged: unknown

Discharge affected: (Check all that apply)

- [■] Soil
- [ ] Groundwater
- [ ] Soil water (water body name) _____
- [ ] Drinking water well(s)
- [ ] Shoreline
- [ ] Other (specify) _____

Evidence of discharge: (Check all that apply)

- [ ] Visual observation of sheen
- [■] Results or receipt of results of analytical tests
- [ ] Stained soils
- [ ] Visual observation of free product
- [ ] Spill or vehicle overfill > 25 gallons to a pervious surface
- [ ] Other (explain in comments)

Method of discovery and confirmation of discharge: (Check all that apply, see rule language explanation on instructions for this form)

- [ ] Visual observation
- [■] Closure/Closure sampling assessment
- [ ] Surface water analytical results
- [ ] Groundwater analytical results
- [■] Soil analytical results
- [ ] Other (specify) _____

Type of regulated substance discharged: (Check all that apply)

- [ ] Gasoline
- [ ] Jet fuel
- [ ] Mineral acids (ASTs)
- [■] Diesel
- [ ] Used/waste oil
- [ ] Ammonia compound [ ] Chlorine compound
- [ ] Heating oil
- [ ] New motor/lube oil
- [ ] Biofuel blends
- [ ] Kerosene
- [ ] Pesticide
- [ ] Unknown
- [ ] Aviation gas
- [ ] Grade 5 & 6 residual oils
- [ ] Other (specify) _____
- [ ] Hazardous substance (USTs) – write name or Chemical Abstract Service (CAS) #: _____

Discharge originated from a: (Check all that apply)

- [ ] Tank
- [ ] Other secondary containment
- [ ] Railroad tankcar
- [ ] Piping
- [ ] Fitting or pipe connection
- [ ] Barge, tanker ship or other vessel
- [■] Spill bucket
- [ ] Valve
- [ ] Pipeline
- [ ] Dispenser
- [ ] Tank truck
- [ ] Drum
- [ ] Piping sump
- [ ] Vehicle or customer vehicle
- [ ] Unknown
- [ ] Dispenser sump
- [ ] Aircraft
- [ ] Other (specify) _____

Cause of the discharge: (Check all that apply)

- [ ] Spill
- [■] Material failure (crack, split, etc.)
- [ ] Collision
- [ ] Weather
- [ ] Overfill
- [ ] Material incompatibility
- [ ] Vehicle accident
- [ ] Human error
- [ ] Corrosion
- [ ] Improper installation
- [ ] Fire/explosion
- [ ] Unknown
- [ ] Puncture
- [ ] Loose connection
- [ ] Vandalism
- [ ] Other (specify) _____

Actions taken in response to the discharge:

Comments:

Agencies notified (as applicable):

- [ ] Fire Department
- [✓] County Program Polk
- [ ] District Office _____
- [ ] State Watch Office 800-320-0519
- [ ] National Response Center 800-424-8802

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

Steve Weeks
Printed Name of Owner, Operator or Authorized Representative

Signature of Owner, Operator or Authorized Representative

AΩTC
YOUR EH&S AND EMERGENCY RESPONSE COMPANY

Total Organic Vapor Analyzer Readings

Generator: EPI, Inc
Location (Nearest City, County, State): Haines City, Polk County, Florida
Sample Date: June 14, 2018

CONFIRMATORY SOIL SAMPLES

Sample Number	Sample Time	Depth Below Land Surface (Feet)	Concentration (mg/kg)	Chemical	SCTL (mg/kg)
Yellow Quadrants	12:16 PM	1.5	1.1	1-methylnaphthalene	3.1
			0.5	2-methylnaphthalene	8.5
			0.19	acenaphthene	0.3
			0.041	anthracene	0.4
			0.015	benz(a)anthracene	0.8
			0.0043	benz(a)pyrene	0.1
			0.0055	benzo(b)fluoranthene	2.4
			0.0054	benzo(ghi)perylene	2500
			0.0082	chrysene	77
			0.037	fluoranthene	1.3
			0.66	fluorene	17
			0.0029	indeno(123-cd)pyrene	6.6
			0.44	naphthalene	1.2
			0.089	phenanthrene	250
			0.57	pyrene	1.3
			0.0023	ethylbenzene	0.6
			0.004	toluene	0.5
			1.3	xylenes	0.2
			6200	TRPH	340
White Quadrants	12:22 PM	1.5	1.8	1-methylnaphthalene	3.1
			3	2-methylnaphthalene	8.5
			0.019	acenaphthene	0.3
			0.0059	anthracene	0.4
			0.0042	benzo(ghi)perylene	2500
			0.019	fluorene	17
			0.0038	indeno(123-cd)pyrene	6.6
			0.92	naphthalene	1.2
			0.0095	phenanthrene	250
			0.011	pyrene	1.3
			0.003	benzene	0.007
			0.018	ethylbenzene	0.6
			0.021	toluene	0.5
			0.019	xylenes	0.2
			160	TRPH	340

AΩTC
YOUR EH&S AND EMERGENCY RESPONSE COMPANY

Total Organic Vapor Analyzer Readings

Generator: EPI, Inc
Location (Nearest City, County, State): Haines City, Polk County, Florida
Sample Date: June 14, 2018

CONFIRMATORY SOIL SAMPLES

Sample Number	Sample Time	Depth Below Land Surface (Feet)	Concentration (mg/kg)	Chemical	SCTL (mg/kg)
Red Quadrants	12:28 PM	1.5	0.65	1-methylnaphthalene	3.1
			1	2-methylnaphthalene	8.5
			0.019	acenaphthene	0.3
			0.026	anthracene	0.4
			0.016	benz(a)anthracene	0.8
			0.0067	benz(a)pyrene	0.1
			0.0038	benzo(b)fluoranthene	2.4
			0.0052	benzo(ghi)perylene	2500
			0.008	chrysene	77
			0.013	fluoranthene	1.3
			0.052	fluorene	17
			0.0046	indeno(123-cd)pyrene	6.6
			0.21	naphthalene	1.2
			0.043	phenanthrene	250
			0.036	pyrene	1.3
			0.00049	ethylbenzene	0.6
			0.00094	toluene	0.5
			0.01	xylenes	0.2
			280	TRPH	340

AOTC, 2018

Note: mg/kg = milligrams /kilogram (parts per million) ; SCTL - Soil Cleanup Target Levels
TRPH - total recoverable petroleum hydrocarbons

September 13, 2018

Ralph J. Meder, PG, CPG
Environmental Manager
Florida Department of Health - Polk County
2090 East Clower Street, Bartow, FL 33830

Ph: (863) 578-2031
Ralph.Meder@flhealth.gov

RE: Site Assessment Report
Quality #119
95 West Highway 17/92
Haines City, Polk County, Florida 33844
DEP Facility No. 53/8840532
Discharge Date: June 14, 2018

Dear Mr. Heintz:

EnviroTrac Ltd. Inc. (EnviroTrac), on behalf of Quality Petroleum, is pleased to provide the Florida Department of Environmental Protection (FDEP) and the Polk County Health Department (PCHD) with this *Site Assessment Report* (SAR) for the above-referenced facility. This report addresses the lateral and vertical extent of contamination associated with the June 1, 2018 Incident Notification Form (INF) and associated June 14, 2018 Discharge Reporting Form (DRF). The ensuing investigation, summarized in the following, were conducted in accordance with the requirements of Chapter 62-780, F.A.C. A copy of the INF/DRF and Site Assessment request letter are provided in **Appendix A**.

Site History

The subject site currently operates as a Marathon-branded gasoline station located on the south side of West Highway (Hwy) 17/92 between Terrace Drive and South 1st Street in southwest Haines City. The facility was formerly known as the Hop-N-Save and Amoco #119. The existing tank farm and area of concern (AOC) is located in the northwest portion of the 1.19-acre subject site parcel. A copy of the "Winter Haven, FL" 1983, 7.5-Minute Series USGS topographic map identifies the site in relation to the surrounding area and is provided in **Appendix B**. The topographic map indicates the subject is located in Section 29 of Township 27S and Range 27E. The facility layout identifying the tank farm and AOC is depicted on the Site Diagram as **Figure 1**.

The facility operates one (1) 20,000-gallon regular unleaded gasoline underground storage tank (UST) and one (1) 20,000-gallon compartmented (premium gasoline and diesel fuel) UST, which were installed in April 2005. Historically, the facility operated three (3) 10,000-gallon gasoline USTs and one (1) 10,000-gallon diesel fuel UST. The former USTs were installed in May 1988 and replaced with the existing 20,000-gallon tanks in 2005. EnviroTrac did not identify any other petroleum storage tanks registered for the facility. A copy of the Storage Tank/Contaminated Facility Database Report is provided in **Appendix C**.

A petroleum discharge was reported for the facility on October 29, 1997 due to "manual test of monitoring wells." The Petroleum Liability Insurance Restoration Program (PLIRP) checklist indicated that the only evidence of soil contamination noted was "mild petrol odor around STPs" and there were elevated organic vapor analyzer (OVA) readings in MWs. However, the checklist comments reported, "all records from facility don't indicate that there has been a release. Inspector OVA results of the MWs were all < 50-ppm."

Enviro-Logical Solutions, Inc. prepared a *Template Site Assessment Report (TSAR)* dated September 9, 2004. The assessment included the installation of fifteen (15) soil borings to one foot into the water table for soil screening; positive OVA responses greater than 10-parts per million (ppm) were not detected. Two soil samples were submitted for laboratory analysis and soil contamination was not detected. Three (3) monitoring wells were installed at the facility and the analytical results did not indicate the presence of groundwater contamination. Depth to groundwater was recorded at 41.55 to 46.31 feet (ft) below land surface (bls) and groundwater flow direction was measured to the east-southeast. The *TSAR* concluded that no soil or groundwater samples exhibited detectable levels of petroleum constituents above soil cleanup target levels (SCTLs) or groundwater CTLs (GCTLs) and no further action without conditions was recommended. The October 29, 1997 discharge received a Site Rehabilitation Completion Order (SRCO) on February 28, 2005.

Following the excavation and replacement of the original USTs in April 2005, a minor amount of soil contamination was discovered around a fill port and laboratory analysis of a soil sample exhibited SCTL exceedances. Enviro-Logical Solutions requested rescinding the SRCO; however, the FDEP indicated that it was highly likely that a small release occurred at the fill port sometime after November 10, 1997 and based on the fact that the small amount of contaminated soil had been excavated, the Department and Polk County did not recommend that a new discharge be reported.

An Incident Notification Form (INF) was submitted for the facility on June 8, 2011 due to visual observations made and the notification notes indicated that repair/replacement of hinges in the dispenser sump were to be scheduled. EnviroTrac did not identify a DRF or further assessment associated with the 2011 INF.

Spill Bucket Replacement

On June 1, 2018, a second INF was submitted due to a failed spill containment bucket integrity test. On June 14, 2018, the three (3) EBW Model 705, single walled, spill containment buckets were removed and replaced with Emco Wheaton, A1004 Series, double-walled spill buckets. EPI Construction Inc., performed a Spill Bucket Closure Assessment which involved soil screening and soil sampling during the replacement of the three spill buckets. One (1) soil sample was collected from 1.5' bls at each of the three spill bucket excavations (Sample ID: Yellow Quadrants, White Quadrants, Red Quadrants). The soil sample collected from the Yellow Quadrant, adjacent to the diesel fuel spill bucket, exhibited total xylenes at a concentration of 1.3 milligrams per kilogram (mg/kg) exceeding the SCTL of 0.2-mg/kg and Total Petroleum Recoverable Hydrocarbons (TRPH) at a concentration of 6,200-mg/kg, exceeding the SCTL of 340-mg/kg and the commercial/industrial SCTL of 2,700-mg/kg. The *Storage Tank Facility Closure Site Inspection Report, Installation Site Inspection Report*, and laboratory results from the spill bucket soil sampling are included in **Appendix D**. Based on the results of the soil assessment, PCHD requested the submittal of a SAR.

Site Operations

The facility layout consists of a 1,260-square-foot convenience store building situated beneath a 4,320-sf dispenser canopy, located in the northern portion of the 1.19-acre parcel. An approximate 600-sf drive-through car wash is located in the western portion of the facility and the southern portion is undeveloped grassed land with sparse tree coverage. Asphalt and concrete pavement cover the northern portion of the subject site and the car wash area is improved with an asphalt paved drive through. Access to the subject site is via HWY 17/92 to the north, Terrace Drive to the west and S. 1st Street to the east.

The facility was inspected by the PCHD on January 19, 2017 and was deemed out-of-compliance due to corroded metal parts, leaking diesel filter seals in dispensers, and dispenser hose seepage. The annual operability and inline leak tests passed, the Veeder Root panel was normal, and the required records were available during the inspection. According to the inspection notes, the facility operates two 20,000-gallon double walled Modern Welding Glasteel II USTs with nonmetallic external jackets constructed of fiberglass and polyester resin (FRP).

Underground piping is Smith Red Thread IIA, double-walled, fiberglass. Three single-walled, EBW Model 705 spill containment buckets were in place and all spill buckets appeared intact; however, some debris and corrosion was present. On July 11, 2017 the facility was re-inspected and the *Storage Tank Facility Compliance Assistance Site Inspection Report* indicated the facility was in compliance and all physical violations were resolved. A complete copy of the January and July 2017 inspection reports are provided in **Appendix D**.

Pertinent Surface & Subsurface Features

Area utilities include overhead electric lines along Terrace Avenue, on the west side of the subject site and extending east to west between the convenience store and the onsite carwash. Stormwater inlets are present along Hwy 17/92 at the northwest corner of the subject site and drainage swales parallel the western site boundary. The pavement in the area of investigation is relatively flat with a gently slope to the west and the adjoining area slopes sharply to the west toward Lake Elsie located approximately 350 ft west of the site. The regional topographic gradient slopes to the northwest toward the larger Lake Tracy.

Area Land Use and Potential Offsite Sources of Contamination

Area land use in the site vicinity is predominantly commercial with S. 1st Street followed by a SunTrust bank to the east, Terrace Drive followed by Steve's Electric and a Pizza Hut to the west, and Hwy 17/92 followed by Burris Logistics shipping facility to the north. The area land use to the south is residential. The nearest surface water bodies include Lake Elsie located approximately 350 ft to the southwest and Lake Tracy approximately 700 ft northwest of the subject site. An aerial depicting Area Land Use is included in **Appendix E**.

The FDEP Map Direct Storage Tank/Contaminated Facilities Database was queried for potential sources of offsite contamination within a 0.25 mile radius of the subject site This query yielded three (3) regulated petroleum/or waste cleanup facilities within 0.25 miles. The nearest monitored facility is located approximately 1,500 ft west of the subject site and does not appear to pose a threat to the AOC. The FDEP Contamination Locator Map is provided in **Appendix F**.

Regional Hydrogeology

The groundwater system in this portion of Polk County consists of the Floridan aquifer system (FAS). This aquifer system is comprised of a sequence of limestone and dolomite, which thickens from about 250 ft in Georgia to about 3000 ft in south Florida. The Floridan aquifer system has been divided into an upper and lower aquifer separated by a unit of lower permeability. The upper Floridan aquifer is the principal source of water supply in most of north and central Florida. In the southern portion of the state, where it is deeper and contains brackish water, the aquifer has been used for the injection of sewage and industrial waste. Groundwater flow is generally from highs near the center of the state towards the coast.

The site is underlain by the Cypresshead Formation which is composed of siliciclastics. It is at or near the surface from northern Nassau County southward to Highlands County forming the peninsular highlands. It appears that the Cypresshead Formation occurs in the subsurface southward from the outcrop region. The Cypresshead Formation is a shallow marine, near shore deposit. The Cypresshead Formation consists of reddish brown to reddish orange, unconsolidated to poorly consolidated, fine to very coarse grained, clean to clayey sands. Cross bedded sands are common within the formation. Discoid quartzite pebbles and mica are often present. Clay beds are scattered and not really extensive. In general, the Cypresshead Formation in exposure occurs above 100 ft above mean sea level (msl). Original fossil material is not present in the sediments although poorly preserved molds and casts of mollusks and burrow structures are occasionally present. The presence of these fossil "ghosts" and trace fossils documents marine influence on deposition of the Cypresshead sediments. The permeable sands of the Cypresshead Formation form part of the surficial aquifer system.

Site Specific Hydrogeology

Site specific geology was evaluated during the installation of the six soil borings and MW-1 during recent assessment activities in August 2018. The onsite lithology, from land surface to the investigative completion depth of 55 ft bls is primarily fine grain sands from the surface to a depth of 5-7 ft bls where a clayey sand was encountered to approximately 20 ft bls; fine sands were then again encountered until approximately 45 ft bls where clayey sand is present to the completion depth of 55' bls. The Lithology Cross Section is included as **Figure 6**.

Groundwater was encountered at approximately 42-45 ft bls at SB-2 and MW-1. Groundwater was not encountered at the remaining soil borings completed to a depth of 25 ft bls.

Potable Well and Well Construction Information

Based on a review of the FDEP Consolidated OCULUS Electronic Document Management System, the most recent Subsurface Underground Petroleum Environmental Response (SUPER) Act potable well survey for the subject site was completed on January 21, 2004. According to the survey, there are no small public or private wells located within 0.25 miles; there is one large public supply well (>100,000 gpd) located within 0.5 miles of the subject site. The public supply well was sampled on January 24, 2002 and no petroleum indicator compounds (BTEX & MTBE) were detected in the sample from this well (Sample ID: 020125-048). During the preparation of this SAR, EnviroTrac also queried the FDOH Division of Environmental Health Bureau of Water Programs Database which identified nearest small public and/or private wells approximately 2,000+ ft northeast of the subject site.

On July 24, 2018, EnviroTrac reviewed well construction permits through the Southwest Florida Water Management District (SWFWMD) Well Construction Permit website (http://www18.swfwmd.state.fl.us/search/search/wcpsimple.aspx). According to the website, there are 32 well permits documented within 0.25-miles of the site and 106 well permits for S 29, T 27S and R 27E. Well permits #419590-419594 were identified for the former onsite Hoppy's Shell Service for the installation of monitoring wells (dated 1986); permit #640705 was issued to Quality Petroleum Corp. for the abandonment of monitoring wells (dated 2000); permit #708500 was issued to Amoco for the abandonment of onsite wells (2004).

On August 1, 2018, EnviroTrac performed a field reconnaissance to ground truth potable water supply well information as per Rule 62-780(5)(p), F.A.C. EnviroTrac did not observe potable water wells in the immediate site vicinity, consistent with the most recent SUPER Act survey. The DOH radius map is provided in **Appendix G.**

Current Assessment Activities

Soil Investigation - On August 1, 2018, EnviroTrac oversaw the installation of six (6) soil borings (SB-1 through SB-6) around the perimeter of the existing tank farm and on the west side of the fuel dispensers. The soil borings were manually hand cleared using a hand-auger from the surface to a depth of 5 ft bls and a direct-push technology (DPT) geoprobe drill rig was used to complete the borings to a depths of 25 ft bls. The exception being SB-2 which was advanced to 50 ft bls in an attempt to locate groundwater. SB-1 and SB-2 were advanced on the south side of the USTs, SB-3 and SB-4 were advanced on the west side of the USTs, and SB-5 and SB-6 were advanced on the north side of the USTs. Due to the dispensers and underground piping, soil borings were not advanced east of the USTs. Groundwater was encountered at a depth of approximately 42 ft bls at SB-2. Soil samples were collected continuously for field screening at one (1) foot intervals to a depth of five (5) ft bls and then at 2.5 foot intervals thereafter to the total depth of the borings (25 ft). The recovered soil samples were field screened using a MiniRae 3000 Organic Vapor Analyzer/Photoionization Detector (OVA/PID) which

was calibrated prior to use using a 100-ppm isobutylene gas standard. Screening for petroleum vapors was conducted in accordance with the headspace reading procedures specified in "*New Soil Sampling Procedures and Recommended EPA Methods (per changes to USEPA SW-846) and other Quality Assurance Issues for the Division of Waste Management*" dated July 15, 1998.

Positive OVA/PID responses, in excess of 0-ppm, were not measured in the six borings advanced in the vicinity of the tank farm on August 1, 2018. Sampling locations and the vapor survey results are depicted on **Figure 2** and a tabular summary of the OVA results is provided on **Table 1**. A copy of the Field Instrument Calibration Records, Boring Logs, and field notes are provided in **Appendix H**.

Soil samples were submitted for laboratory analysis from boring location SB-1, SB-2, and SB-6. Since elevated OVA responses were not recorded, samples were collected at various depths: 3.0' bls at SB-1, 10.0' bls at SB-2, and at 8.0' bls at SB-6. The samples were collected using the procedures outlined in the above-referenced guidance document and submitted to Pace Analytical Services (Pace) for analysis by EPA Methods: 8260 (benzene, toluene, ethylbenzene and total xylenes [BTEX] and methyl tert-butyl ether [MTBE]), 8270 (polynuclear aromatic hydrocarbons [PAHs]), and FL-PRO (total recoverable petroleum hydrocarbons [TRPH]).

The laboratory analytical results did not indicate the presence of any petroleum products' contaminants of concern (COC) above the Method Detection Limits (MDLs) or their respective SCTLs from Table II of Chapter 62-777, F.A.C. (effective August 17, 2005). A tabular summary of the soil analytical results is included as **Table 2**. A complete copy of the laboratory analytical report, including the chain of custody and QA/QC data, is provided in **Appendix I**.

Groundwater Investigation – On August 2, 2018, per a conversation with the PCHD, EnviroTrac oversaw the installation of one (1) properly constructed permanent monitoring well MW-1. The monitoring well was installed southeast of the diesel fuel spill bucket (presumably down-gradient based on the 2004 SAR), adjacent to SB-1. The monitoring well was installed by Preferred Drilling Solutions (PDS) of Largo, Florida via hollow stem auger to a total depth of 55 ft bls and constructed with a fifteen (15) foot section of machine-slotted Poly-vinyl chloride (PVC) well screen (two [2]-inch diameter, Schedule 40 PVC, 0.010-inch screen slot size) flush threaded to forty (40) ft of solid PVC riser. The annulus was sand-packed with 20/30 silica sand up to two (2) ft above the top of the screen interval, followed by a two (2) foot seal of fine 30/65 sand. The remaining annular space (36 ft) was grouted to the surface and completed with a flush-mounted road box formed in a two (2) ft by two (2) ft concrete pad. MW-1 was subsequently developed with a centrifugal pump until the discharged effluent flowed clear. The monitoring well location is depicted on **Figures 1-4** and a well construction diagram is included as **Figure 5**. Copies of the Well Construction and Development Log, the State of Florida Permit to Construct, Repair, Modify, or Abandon a Well, field notes, and photographs are provided in **Appendix J**.

During the well installation, soil samples were collected continuously for field screening at one (1) foot intervals to a depth of five (5) ft bls and then at 2.5 foot intervals thereafter to the total depth of the monitoring well (55 ft). The recovered soil samples were field-screened with a MiniRAE 3000 OVA/PID, which was calibrated prior to use in accordance with manufacturer's specifications as outlined above. Screening for petroleum vapors was conducted using the headspace reading procedure specified in Rule 62.780.200(17) of the FAC. Positive (greater than ten [10] ppm) OVA/PID responses were not measured in the soil samples collected at MW-1 and petroleum odors or staining was not noted. A summary of the OVA/PID vapor survey results is provided on **Table 1** and depicted on **Figure 2**. The field notes, Soil Boring Log, and a copy of the OVA field calibration form (Form FD 9000-8) is included in **Appendix H**.

On August 6, 2018, a groundwater sample was recovered from newly installed MW-1. The depth-to-water measurement and total well depth were used to calculate the well volume. EnviroTrac used a variable speed submersible Geotech SS Geosub sampling pump to purge the monitoring well in accordance with the procedures outlined in FDEP Standard Operating Procedure (SOP) 001/01, FS2200 (revised January 2017 and published

April 16, 2018) and SOP PCS-005 (Variances and Clarifications to the Groundwater Sampling Standard Operating Procedure for Bureau of Petroleum Storage Systems Sites, May 2, 2005). Field stabilization parameters were collected after the first well volume was purged and every three (3) minutes thereafter. The following water quality meters were calibrated and used to collect the requisite parameters during purging: YSI-556 Multimeter (dissolved oxygen, specific conductance, pH, oxidation reduction potential, and temperature) and HACH 2100Q (turbidity).

The groundwater sample collected from MW-1 was placed on ice, logged on a chain of custody, and submitted to Pace for analysis of BTEX/MTBE by EPA Method 8260, PAHs by EPA Method 8270, and TRPH by FL-PRO Method. Copies of the field calibration forms (Form FD 9000-8), groundwater sampling logs (Form FD 9000-24), and field notes are provided in **Appendix K**.

Laboratory analysis of the groundwater sample collected from MW-1 did not indicate the presence of any petroleum products' COC at concentrations above GCTLs. Only naphthalene was detected above the laboratory MDL at a concentration of 0.056 I micrograms per liter (µg/L). A tabular summary of the groundwater analytical results is included as **Table 3**. A complete copy of the laboratory analytical report, including the chain of custody and QA/QC data, is provided in **Appendix L**.

Investigative Derived Waste (IDW)

Investigation derived waste was not generated during assessment activities. The soil cuttings generated during the soil borings were backfilled in the boreholes and soil cuttings generated during the well installation were spread onsite.

Conclusions & Recommendations

The combined results of the soil and groundwater investigations, described herein, indicates that petroleum contamination is not present in the vicinity of the existing tank farm. Based on the results of the assessment, EnviroTrac recommends No Further Action for the June 14, 2018 petroleum discharge discovered during the spill containment bucket closure activities. Please feel free to contact the undersigned with any questions or comments regarding this submittal at 813-626-8443 or kmiller@envirotrac.com.

Respectfully,
EnviroTrac Ltd., Inc.

Kristi Miller
Project Manager

Attachments

Quality #119
September 2018

GEOLOGIST'S CERTIFICATION

I certify that I have reviewed the technical aspects of this *Site Assessment Report*, dated September 13, 2018, for Quality #119 located at 95 W. Highway 17/92, Haines City, Polk County, Florida (FDEP Facility ID# 53/8840532) with information gathered from qualified personnel who properly evaluated the information submitted. The applicable portions of this technical document and associated work comply with standard professional practices, rules of the FDEP and any other laws and rules governing the profession. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Prepared By:
EnviroTrac Ltd.

Name

9/14/18
Date

John Ferrill, P.G.
Florida P.G. License No. 1953

TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Quality #119 (Marathon) **Facility ID#:**
Facility Address: 95 W. Hwy 17/92, Haines City, Polk County, Florida **53/8840532**

SAMPLE				RESULTS	
BORING NO.	DATE	DEPTH WATER (FT)	SAMPLE INTERVAL (FBLS)	NET READING (ppm)	COMMENTS
SB-1	8/1/2018	~45	1	0	
			2	0	
			3	0	
			4	0	
			5	0	Sample ID: SB-1 @5'
			5-7.5	0	
			7.5-10	0	
			10-12.5	0	
			12.5-15	0	
			15-17.5	0	
			17.5-20	0	
			20-22.5	0	
			22.5-25	0	Dry
SB-2	8/1/2018	~45	1	0	
			2	0	
			3	0	
			4	0	
			5	0	
			5-7.5	0	
			7.5-10	0	
			10-12.5	0	Sample ID: SB-2@10'
			12.5-15	0	
			15-17.5	0	
			17.5-20	0	
			20-22.5	0	
			22.5-25	0	
			25-27.5	0	
			27.5-30	0	
			30-32.5	0	
			32.5-35	0	
			35-37.5	0	
			37.5-40	0	
			40-42.5	0	Dry
			42.5-45	0	Moist
			45-47.5	0	Saturated
			47.5-50	0	

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Quality #119 (Marathon) **Facility ID#:**
Facility Address: 95 W. Hwy 17/92, Haines City, Polk County, Florida **53/8840532**

SAMPLE				RESULTS	
BORING NO.	DATE	DEPTH WATER (FT)	SAMPLE INTERVAL (FBLS)	NET READING (ppm)	COMMENTS
SB-3	8/1/2018	~45	1	0	
			2	0	
			3	0	
			4	0	
			5	0	
			5-7.5	0	
			7.5-10	0	
			10-12.5	0	
			12.5-15	0	
			15-17.5	0	
			17.5-20	0	
			20-22.5	0	
			22.5-25	0	Dry
SB-4	8/1/2018	~45	1	0	
			2	0	
			3	0	
			4	0	
			5	0	
			5-7.5	0	
			7.5-10	0	
			10-12.5	0	
			12.5-15	0	
			15-17.5	0	
			17.5-20	0	
			20-22.5	0	
			22.5-25	0	Dry

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Quality #119 (Marathon) **Facility ID#:**
Facility Address: 95 W. Hwy 17/92, Haines City, Polk County, Florida **53/8840532**

SAMPLE				RESULTS	
BORING NO.	DATE	DEPTH WATER (FT)	SAMPLE INTERVAL (FBLS)	NET READING (ppm)	COMMENTS
SB-5	8/1/2018	~45	1	0	
			2	0	
			3	0	
			4	0	
			5	0	
			5-7.5	0	
			7.5-10	0	
			10-12.5	0	
			12.5-15	0	
			15-17.5	0	
			17.5-20	0	
			20-22.5	0	
			22.5-25	0	Dry
SB-6	8/1/2018	~45	1	0	
			2	0	
			3	0	
			4	0	
			5	0	
			5-7.5	0	
			7.5-10	0	Sample ID: SB-6@8'
			10-12.5	0	
			12.5-15	0	
			15-17.5	0	
			17.5-20	0	
			20-22.5	0	
			22.5-25	0	Dry

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Quality #119 (Marathon) **Facility ID#:**
Facility Address: 95 W. Hwy 17/92, Haines City, Polk County, Florida **53/8840532**

SAMPLE				RESULTS	
BORING NO.	DATE	DEPTH WATER (FT)	SAMPLE INTERVAL (FBLS)	NET READING (ppm)	COMMENTS
MW-1	8/2/2018	~45	1	0	
			2	0	
			3	0	
			4	0	
			5	0	
			5-7.5	0	
			7.5-10	0	
			10-12.5	0	
			12.5-15	0	
			15-17.5	0	
			17.5-20	0	
			20-22.5	0	
			22.5-25	0	
			25-27.5	0	
			27.5-30	0	
			30-32.5	0	
			32.5-35	0	
			35-35.7	0	
			35.7-40	0	
			40-42.5	0	Dry
			42.5-45	0	Moist
			45-47.5	0	Saturated
			47.5-50	0	
			50-52.5	0	
			52.5-55	0	

Notes:
ppm = parts per million

TABLE 2: SOIL ANALYTICAL SUMMARY

Facility Name: Quality #119 (Marathon) **Facility ID#: 53/8840532**

Facility Address: 95 W. Hwy 17/92, Haines City, Polk County, Florida

Sample				OVA	Laboratory Analyses												
Soil Sample	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene	Ethyl-benzene	Toluene	Total Xylenes	Total VOAs	MTBE	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(k)
					(mg/kg)												
SB-1@5'	08/01/18	~45	5	0	0.0027 U	0.0030 U	0.0029 U	0.0054 U	<RL	0.0026 U	0.012 U	0.011 U	0.012 U	0.0097 U	0.0084 U	0.0090 U	0.0091 U
SB-2@10'	08/01/18	~45	10	0	0.0026 U	0.0029 U	0.0028 U	0.0053 U	<RL	0.0026 U	0.026 U	0.024 U	0.027 U	0.022 U	0.019 U	0.020 U	0.020 U
SB-6@8'	08/01/18	~45	8	0	0.0026 U	0.0028 U	0.0029 U	0.0053 U	<RL	0.0026 U	0.025 U	0.022 U	0.025 U	0.020 U	0.018 U	0.019 U	0.018 U
Soil Cleanup Target Levels (April 17, 2005)					**0.007**	**0.6**	**0.5**	**0.2**	**-**	**0.09**	**2**	**27**	**2,500**	**0.8**	**8**	**2.4**	**24**
Residential Direct Exposure (April 17, 2005)					**1.2**	**1,500**	**7,500**	**130**	**-**	**4,400**	**2,400**	**1,800**	**21,000**	**-**	**0.1**	**-**	**-**
Industrial Direct Exposure (April 17, 2005)					**1.7**	**9,200**	**60,000**	**700**	**-**	**24,000**	**20,000**	**20,000**	**300,000**	**-**	**0.7**	**-**	**-**

Sample				OVA	Laboratory Analyses												
Soil Sample	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluor-anthene	Fluorene	Indeno-pyrene	Naph-thalene	1-Methyl naphthalene	2-Methyl naphthalene	Phen-anthrene	Pyrene	TRPHs	Benzo (a) pyrene equivalent
					(mg/kg)												
SB-1@5'	08/01/18	~45	5	0	0.0085 U	0.011 U	0.0078 U	0.011 U	0.012 U	0.0077 U	0.012 U	0.013 U	0.013 U	0.011 U	0.011 U	2.6 U	<RL
SB-2@10'	08/01/18	~45	10	0	0.019 U	0.024 U	0.017 U	0.025 U	0.027 U	0.017 U	0.026 U	0.030 U	0.029 U	0.025 U	0.024 U	5.6 U	<RL
SB-6@8'	08/01/18	~45	8	0	0.018 U	0.023 U	0.016 U	0.023 U	0.025 U	0.016 U	0.024 U	0.028 U	0.027 U	0.023 U	0.022 U	5.1 U	<RL
Soil Cleanup Target Levels (April 17, 2005)					**32,000**	**77**	**0.70**	**1,200**	**160**	**6.6**	**1.2**	**3.1**	**8.5**	**250**	**880**	**340**	**
Residential Direct Exposure (April 17, 2005)					**2,500**	**-**	**-**	**3,200**	**2,600**	**-**	**55**	**200**	**210**	**2,200**	**2,400**	**460**	0.1
Industrial Direct Exposure (April 17, 2005)					**52,000**	**-**	**-**	**59,000**	**33,000**	**-**	**300**	**1,800**	**2,100**	**36,000**	**45,000**	**2,700**	0.7

Notes:

fbls = Feet below land surface

mg/kg = milligram per kilogram

ppm = parts per million

U = Compound was analyzed for, but not detected

I = The reported value is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit (PQL).

Less Than Reporting Limit = <RL

TABLE 3: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Quality #119 (Marathon) **Facility ID#:**

Facility Address: 95 W. Hwy 17/92, Haines City, Polk County, Florida **53/8840532**

Sample		Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(g,h,i) perylene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
Location	Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1	8/6/2018	0.10 U	0.50 U	0.50 U	1.5 U	<RL	0.50 U	0.040 U	0.030 U	0.043 U	0.055 U	0.074 U	0.042 U	0.027 U	0.016 U
GCTLs (rev. 04/17/05)		**1**	**40**	**30**	**20**	**-**	**20**	**20**	**210**	**2,100**	**0.05**	**0.2**	**210**	**0.05**	**0.5**
NADCs (rev. 04/17/05)		**100**	**400**	**300**	**200**	**-**	**200**	**200**	**2,100**	**21,000**	**5**	**20**	**2100**	**5**	**5**

Sample		Chrysene	Dibenzo(a,h) anthracene	Fluor-anthene	Fluorene	Indeno-pyrene	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	Phen-anthrene	Pyrene	TRPH (mg/L)	EDB	Lead	Cumene
Location	Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppm)	(ppb)	(ppb)	(ppb)
MW-1	8/6/2018	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.056 I	0.032 U	0.11 U	0.16 U	0.032 U	0.73 U	NA	NA	NA
GCTLs (rev. 04/17/05)		**4.8**	**0.005**	**280**	**280**	**0.05**	**14**	**28**	**28**	**210**	**210**	**5**	**0.02**	**15**	**0.8**
NADCs (rev. 04/17/05)		**48**	**0.5**	**2,800**	**2,800**	**5**	**140**	**280**	**280**	**2,100**	**2,100**	**50**	**2**	**150**	**8**

Notes:

ppb = parts per billion **ppm = parts per million**

U = Compound was analyzed for, but not detected

I = The reported value is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit (PQL).

RL = Reporting limit

GCTLs = Groundwater Cleanup Target Levels per FAC 62-777

NADCs = Natural Attenuation Default Concentrations per FAC 62-777

FIGURES

LEGEND

- E — OVERHEAD ELECTRICAL UTILITY
- T — POLE MOUNTED TRANSFORMER
- T — PAD MOUNTED TRANSFORMER
- MONITORING WELL LOCATION

GRAPHIC SCALE

0 42 84

BURRIS LOGISTICS

OLD DIXIE HIGHWAY (HWY 17/92)

GRASS

SUNTRUST BANK

SIGN

ASPHALT

DISPENSER ISLANDS

CONCRETE

STORE

GRASS

GRASS

CANOPY

MW-1

STEVE'S ELECTRIC INC.

ASPHALT

DUMPSTER

CONCRETE WALL

TERRACE DRIVE

GRASS

GRASS

CAR WASH

1ST STREET

RESIDENTIAL

RESIDENCE

CHURCH

STEVE'S ELECTRIC

UNDEVELOPED

GRASSED LOT

RESIDENCE

PROPERTY BOUNDARY

KEY COVE APARTMENTS

RESIDENCE

EnviroTrac
5309 56TH COMMERCE PARK BLVD. TAMPA, FL 33610
Phone: (813) 626-8443 Fax: (813) 628-8479

QUALITY #119
95 W HWY 17-92
HAINES CITY, POLK COUNTY, FLORIDA
FACILITY ID# 53/8840532

REVISED BY: SP
DATE: JULY 25, 2018

BASE MAP:
GOOGLE 2018

SITE DIAGRAM

FIGURE #1

BURRIS
LOGISTICS

OLD DIXIE HIGHWAY (HWY 17/92)

GRASS

SIGN

ASPHALT

DISPENSER ISLANDS

CONCRETE

STORE

GRASS

GRASS

CANOPY

MW-1

ASPHALT

DUMPSTER

CONCRETE WALL

GRASS

CAR WASH

TERRACE DRIVE

1ST STREET

PROPERTY BOUNDARY

LEGEND

- E — OVERHEAD ELECTRICAL UTILITY
- T — POLE MOUNTED TRANSFORMER
- T — PAD MOUNTED TRANSFORMER
- MW — MONITORING WELL LOCATION
- SB — SOIL BORING LOCATION

SAMPLE RESULTS

- SB-2 08/01/2018 — SAMPLE ID / SAMPLE DATE
- DEPTH/OVA

SB-2 08/01/2018	
1.0'	0
2.0'	0
3.0'	0
4.0'	0
5.0'	0
5'-7.5'	0
7.5'-10'	0
10'-12.5'	0*
12.5'-15'	0
15'-17.5'	0
17.5'-20'	0
20'-22.5'	0
22.5'-25'	0
25'-27.5'	0
27.5'-30'	0
32.5'-35'	0
35'-37.5'	0
37.5'-40'	0
40'-42.5'	0
42.5'-45'	0
45'-47.5'	0
47.5'-50'	0

* - SAMPLE COLLECTED

GRAPHIC SCALE
0 42 84

SB-6 08/01/2018	
1.0'	0
2.0'	0
3.0'	0
4.0'	0
5.0'	0
5'-7.5'	0
7.5'-10'	0*
10'-12.5'	0
12.5'-15'	0
15'-17.5'	0
17.5'-20'	0
20'-22.5'	0
22.5'-25'	0

SB-5 08/01/2018	
1.0'	0
2.0'	0
3.0'	0
4.0'	0
5.0'	0
5'-7.5'	0
7.5'-10'	0
10'-12.5'	0
12.5'-15'	0
15'-17.5'	0
17.5'-20'	0
20'-22.5'	0
22.5'-25'	0

SB-4 08/01/2018	
1.0'	0
2.0'	0
3.0'	0
4.0'	0
5.0'	0
5'-7.5'	0
7.5'-10'	0
10'-12.5'	0
12.5'-15'	0
15'-17.5'	0
17.5'-20'	0
20'-22.5'	0
22.5'-25'	0

SB-3 08/01/2018	
1.0'	0
2.0'	0
3.0'	0
4.0'	0
5.0'	0
5'-7.5'	0
7.5'-10'	0
10'-12.5'	0
12.5'-15'	0
15'-17.5'	0
17.5'-20'	0
20'-22.5'	0
22.5'-25'	0

MW-1 08/02/2018	
1.0'	0
2.0'	0
3.0'	0
4.0'	0
5.0'	0
5'-7.5'	0
7.5'-10'	0
10'-12.5'	0
12.5'-15'	0
15'-17.5'	0
17.5'-20'	0
20'-22.5'	0
22.5'-25'	0
25'-27.5'	0
27.5'-30'	0
32.5'-35'	0
35'-37.5'	0
37.5'-40'	0
40'-42.5'	0
42.5'-45'	0
45'-47.5'	0
47.5'-50'	0
50'-52.5'	0
52.5'-55'	0

SB-1 08/01/2018	
1.0'	0
2.0'	0
3.0'	0
4.0'	0
5.0'	0*
5'-7.5'	0
7.5'-10'	0
10'-12.5'	0
12.5'-15'	0
15'-17.5'	0
17.5'-20'	0
20'-22.5'	0
22.5'-25'	0

EnviroTrac
5309 56TH COMMERCE PARK BLVD. TAMPA, FL 33610
Phone: (813) 626-8443 Fax: (813) 628-8479

QUALITY #119
95 W HWY 17-92
HAINES CITY, POLK COUNTY, FLORIDA
FACILITY ID# 53/8840532

REVISED BY: SP
DATE: JULY 25, 2018

BASE MAP:
GOOGLE 2018

SOIL SCREENING DIAGRAM

FIGURE #2

BURRIS
LOGISTICS

OLD DIXIE HIGHWAY (HWY 17/92)

GRASS

SIGN

ASPHALT

DISPENSER ISLANDS

CONCRETE

STORE

GRASS

CANOPY

MW-1

ASPHALT

DUMPSTER

CONCRETE WALL

GRASS

GRASS

CAR
WASH

TERRACE DRIVE

1ST STREET

STEVE'S
ELECTRIC INC.

SUNTRUST
BANK

PROPERTY BOUNDARY

SB-6@8'	
08/01/2018	
B	0.0026 U
T	0.0028 U
E	0.0029 U
X	0.0053 U
MTBE	0.0026 U
NAPH	0.024 U
1-M	0.028 U
2-M	0.027 U
TRPH	5.1 U

SB-1@5'	
08/01/2018	
B	0.0027 U
T	0.0029 U
E	0.0030 U
X	0.0054 U
MTBE	0.0026 U
NAPH	0.012 U
1-M	0.013 U
2-M	0.013 U
TRPH	2.6 U

SB-2@10'	
08/01/2018	
B	0.0026 U
T	0.0028 U
E	0.0029 U
X	0.0053 U
MTBE	0.0026 U
NAPH	0.026 U
1-M	0.030 U
2-M	0.029 U
TRPH	5.6 U

LEGEND

- E — OVERHEAD ELECTRICAL UTILITY
- T — POLE MOUNTED TRANSFORMER
- T — PAD MOUNTED TRANSFORMER
- MONITORING WELL LOCATION
- SOIL BORING LOCATION

SAMPLE RESULTS

SB-2@10'		
08/01/2018		-SAMPLE DATE
B	0.0026 U	-BENZENE CONC.
T	0.0028 U	-TOLUENE CONC.
E	0.0029 U	-ETHYLBENZENE CONC.
X	0.0053 U	-TOTAL XYLENES CONC.
MTBE	0.0026 U	-MTBE CONC.
NAPH	0.026 U	-NAPHTHALENE CONC.
1-M	0.030 U	-1-METHYLNAPH CONC.
2-M	0.029 U	-2-METHYLNAPH CONC.
TRPH	5.6 U	-TRPH CONC.

U - VALUE IS BELOW THE LAB MDL

GRAPHIC SCALE

0 42 84

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QUALITY #119
95 W HWY 17-92
HAINES CITY, POLK COUNTY, FLORIDA
FACILITY ID# 53/8840532

REVISED BY: SP
DATE: JULY 25, 2018

BASE MAP:
GOOGLE 2018

SOIL CONCENTRATION DIAGRAM

FIGURE #3

BURRIS
LOGISTICS

OLD DIXIE HIGHWAY (HWY 17/92)

GRASS

SIGN

ASPHALT

DISPENSER ISLANDS

CONCRETE

STORE

GRASS

CANOPY

MW-1

ASPHALT

DUMPSTER

CONCRETE WALL

STEVE'S
ELECTRIC INC.

TERRACE DRIVE

GRASS

GRASS

CAR
WASH

MW-1	
08/06/2018	
B	0.10 U
T	0.50 U
E	0.50 U
X	1.5 U
MTBE	0.50 U
NAPH	0.056 I
1-M	0.032 U
2-M	0.11 U
TRPH	730 U

1ST STREET

SUNTRUST
BANK

PROPERTY BOUNDARY

LEGEND

- E — OVERHEAD ELECTRICAL UTILITY
- T — POLE MOUNTED TRANSFORMER
- T — PAD MOUNTED TRANSFORMER
- MONITORING WELL LOCATION
- SOIL BORING LOCATION

SAMPLE RESULTS

MW-1		
08/01/2018		
B	0.10 U	BENZENE CONC.
T	0.50 U	TOLUENE CONC.
E	0.50 U	ETHYLBENZENE CONC.
X	1.5 U	TOTAL XYLENES CONC.
MTBE	0.50 U	MTBE CONC.
NAPH	0.0048 U	NAPHTHALENE CONC.
1-M	0.0036 U	1-METHYLNAPH CONC.
2-M	0.0036 U	2-METHYLNAPH CONC.
TRPH	300 U	TRPH CONC.

U – VALUE IS BELOW LAB MDL
I – VALUE IS BETWEEN THE LAB MDL & PQL

GRAPHIC SCALE

0 42 84

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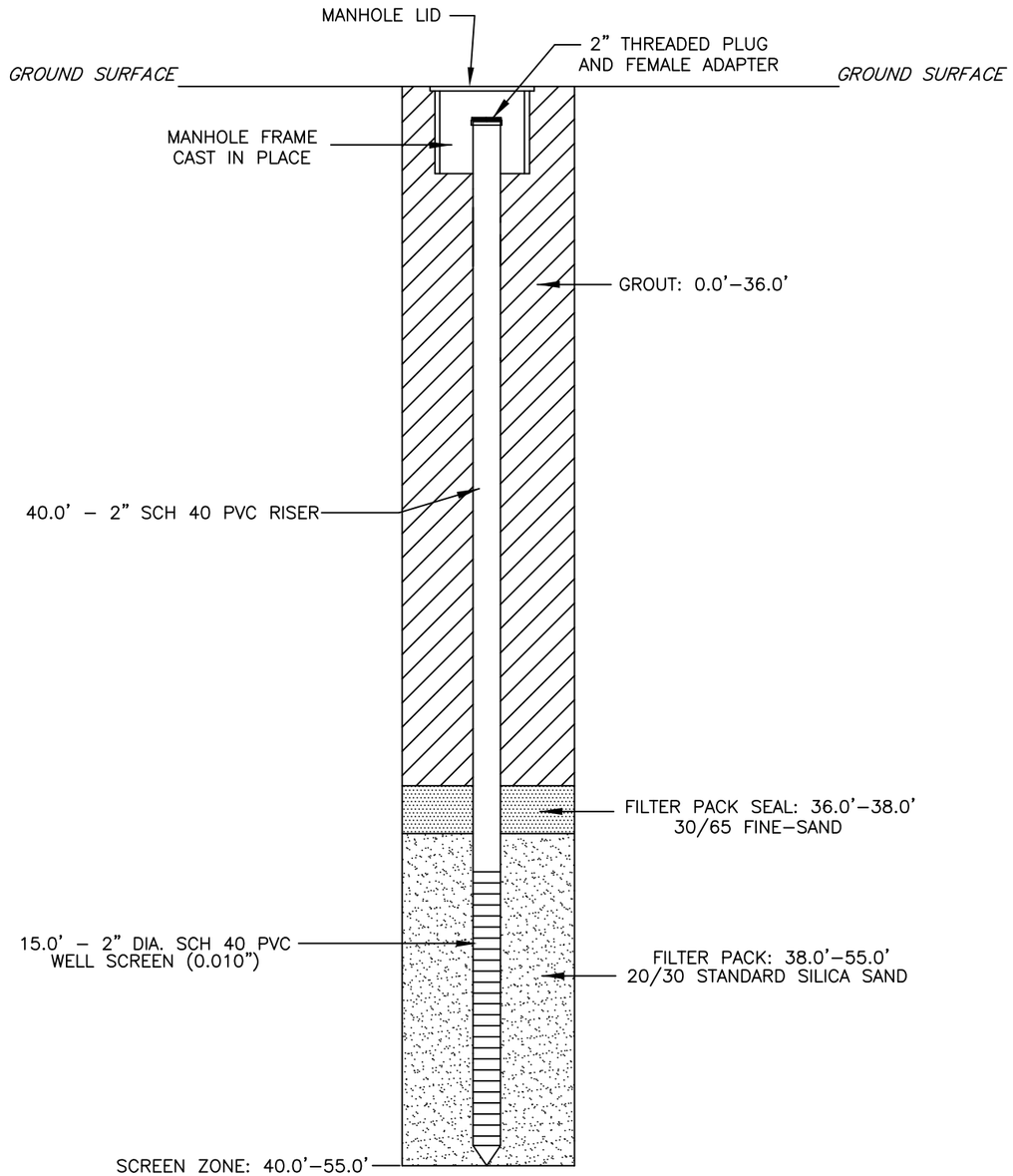
QUALITY #119
95 W HWY 17-92
HAINES CITY, POLK COUNTY, FLORIDA
FACILITY ID# 53/8840532

REVISED BY: SP
DATE: JULY 25, 2018

BASE MAP:
GOOGLE 2018

GW CONCENTRATION DIAGRAM

FIGURE #4



CONSTRUCTION DETAILS FOR MONITORING WELL: MW–1

EnviroTrac
ENVIRONMENTAL SERVICES
5309 56th COMMERCE PARK BLVD., TAMPA, FLORIDA 33610
PHONE: (813)626–8443 FAX: (813)628–8479

NOT TO SCALE

REVISION DATE: AUGUST 24, 2018

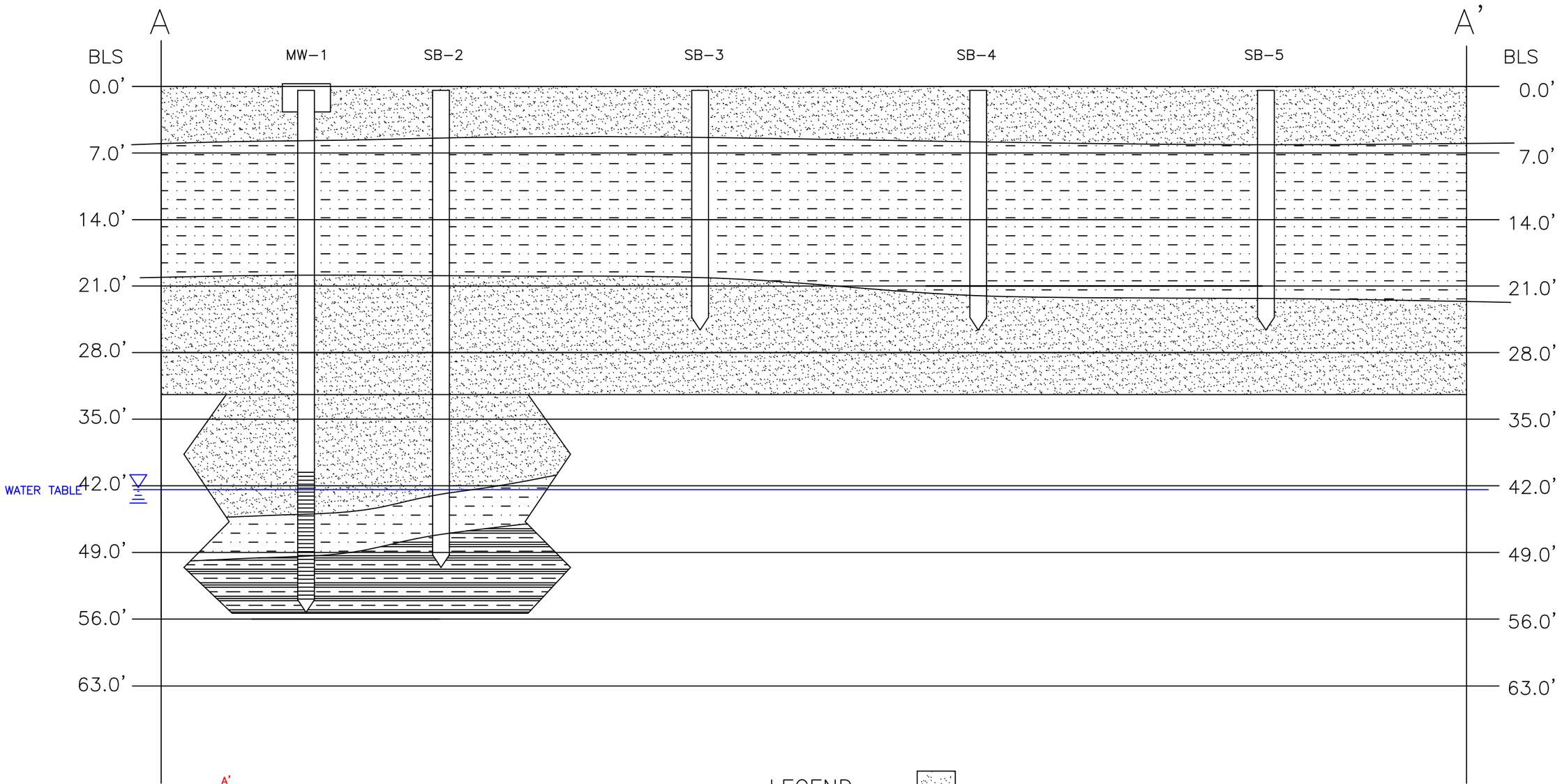
SCALE:

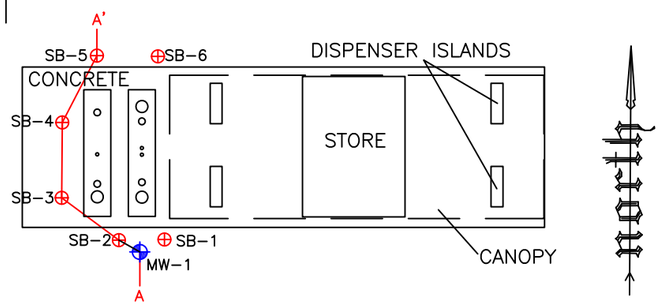
DRAWN BY: SP
CHECKED BY: KM

QUALITY #119
95 W HWY 17–92
HAINES CITY, POLK COUNTY, FLORIDA
FACILITY ID# 53/8840532

MONITORING WELL CONSTRUCTION DETAILS

FIGURE # 5





LEGEND:

- FINE GRAIN SANDS
- CLAYEY SANDS
- CLAYS
- WATER TABLE

EnviroTrac
ENVIRONMENTAL SERVICES
5309 56th COMMERCE PARK BLVD., TAMPA, FLORIDA 33610
PHONE: (813)626-8443 FAX: (813)628-8479

NOT TO SCALE

REVISION DATE: AUSGUST 24, 2018

SCALE:

DRAWN BY: SP
CHECKED BY: KM

QUALITY #119
95 W HWY 17-92
HAINES CITY, POLK COUNTY, FLORIDA
FACILITY ID# 53/8840532

HYDROGEOLOGIC CROSS-SECTION

FIGURE # 6

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

August 13, 2019

CERTIFIED MAIL #7018 2290 0001 3474 7348
RETURN RECEIPT REQUESTED

Mr. R. Stephen Weeks
Quality Petroleum Corporation
PO Box 3889
Lakeland, FL 33802-3889

Subject: Site Rehabilitation Completion Order
Quality #119
95 US Highway 17
Haines City, Polk County
FDEP Facility ID# 538840532
Discharge Date: July 5, 2018 (Non-program)

Dear Mr. Weeks:

The Florida Department of Health in Polk County (FDOH-Polk), on behalf of the Florida Department of Environmental Protection (Department), has reviewed the Site Assessment Report (SAR) and No Further Action Proposal (NFAP) dated September 13, 2018 (received September 13, 2018) for the petroleum product discharge referenced above. All the documents submitted to date are adequate to meet the site assessment requirements of Rule 62-780.600, Florida Administrative Code (F.A.C.). In addition, documentation submitted with the SAR/NFAP confirms that criteria set forth in Subsection 62-780.680(1), F.A.C., have been met. Please refer to the attached maps of the source property and analytical summary tables, Exhibits A and B respectively and hereby incorporated by reference. The SAR/NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the facility for petroleum product contamination associated with the discharge referenced above, except as set forth below.

(1) In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the facility, the Department may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the SAR/NFAP or otherwise allowed by Chapter 62-780, F.A.C.

(2) Additionally, you are required to properly plug and abandon all monitoring wells, injection wells, extraction wells, and sparge wells within 60 days of receipt of this Order unless these wells are

otherwise required for compliance with a local ordinance or another cleanup. The wells must be plugged and abandoned in accordance with the requirements of Subsection 62-532.500(5), F.A.C. A Well Plugging Report shall be submitted within 30 days of well plugging. Other State, county or city requirements for well abandonment may also apply.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until a subsequent order of the Department. Because the administrative hearing process is designed to formulate final agency action, the subsequent order may modify or take a different position than this action.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the addressee at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the addressee must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the addressee must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless

notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver may not apply to persons who have not received a clear point of entry.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Questions

Any questions regarding the FDOH-Polk's review of the SAR/NFAP should be directed to Ralph Meder at 863-578-2031. Questions regarding legal issues should be referred to the Department's Office of General Counsel at 850-245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 538840532. Please use this identification on all future correspondence with the Department.

EXECUTION AND CLERKING

Executed in Tallahassee, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Natasha Lampkin
Program Administrator
Petroleum Restoration Program

Attachment(s):
1. Maps of the Source Property;
2. Analytical Summary Tables

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

cc: Mr. R. Stephen Weeks, Quality Petroleum Corporation, PO Box 3889, Lakeland, FL 33802-3889

ec: Yanisa Angulo, FDEP Southwest District Office – yanisa.angulo@dep.state.fl.us
Ralph Meder, P.G., FDOH-Polk – ralph.meder@flhealth.gov
Jilian Drenning, FDOH-Polk – jilian.drenning@flhealth.gov
Kristi Miller, EnviroTrac Ltd., Inc. – kmiller@envirotrac.com
Darrin W. Herbst, P.G., Southwest Florida Water Management District – darrin.herbst@watermatters.org
David Arnold, Southwest Florida Water Management District – davidn.arnold@watermatters.org
File

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk 8/16/19 Date

P.G. CERTIFICATION

Site Assessment Report/No Further Action Proposal dated September 13, 2018 (received September 13, 2018), for Quality #119, located at 95 US Highway 17, Haines City, FDEP Facility ID# 538840532.

I hereby certify that in my professional judgment, the components of this Site Assessment Report/No Further Action Proposal prepared for the July 5, 2018 petroleum product discharge discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-780, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the site rehabilitation objectives stated in Chapter 62-780, F.A.C., have been met.

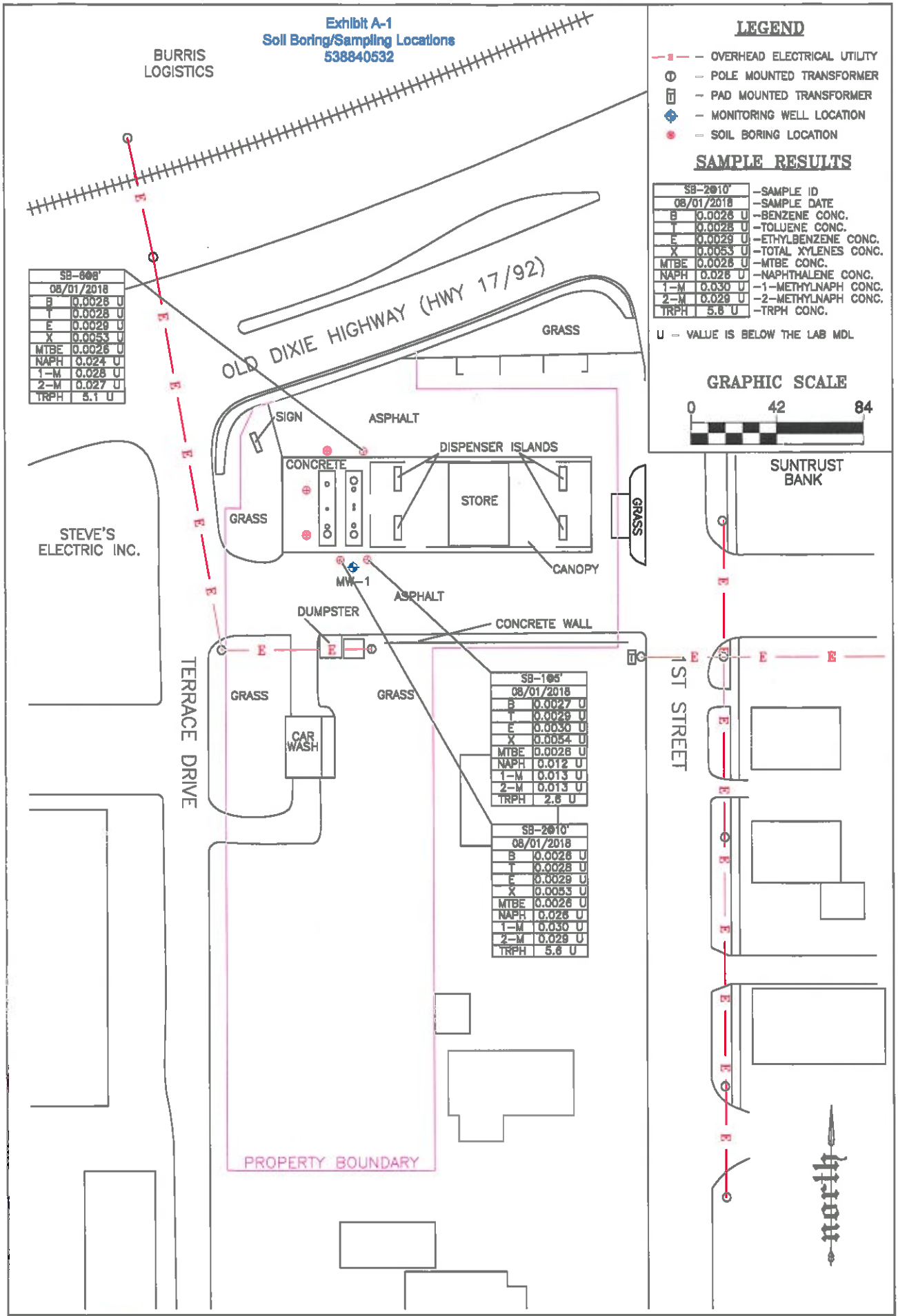
✓ I personally completed this review.

___ This review was conducted by _____ working under my direct supervision.

K.V. Duke Clem, P.G.
Professional Geologist #1579
Florida Department of Health in Polk County
Petroleum Cleanup Program

09/02/2015
Date

Exhibit A-1
Soil Boring/Sampling Locations
538840532



SB-6@8'	
08/01/2018	
B	0.0026 U
T	0.0028 U
E	0.0029 U
X	0.0053 U
MTBE	0.0026 U
NAPH	0.024 U
1-M	0.028 U
2-M	0.027 U
TRPH	5.1 U

SB-1@5'	
08/01/2018	
B	0.0027 U
T	0.0029 U
E	0.0030 U
X	0.0054 U
MTBE	0.0026 U
NAPH	0.012 U
1-M	0.013 U
2-M	0.013 U
TRPH	2.6 U

SB-2@10'	
08/01/2018	
B	0.0026 U
T	0.0028 U
E	0.0029 U
X	0.0053 U
MTBE	0.0026 U
NAPH	0.026 U
1-M	0.030 U
2-M	0.029 U
TRPH	5.6 U

LEGEND

- OVERHEAD ELECTRICAL UTILITY
- POLE MOUNTED TRANSFORMER
- PAD MOUNTED TRANSFORMER
- MONITORING WELL LOCATION
- SOIL BORING LOCATION

SAMPLE RESULTS

SB-2@10'	
08/01/2018	-SAMPLE DATE
B	0.0026 U -BENZENE CONC.
T	0.0028 U -TOLUENE CONC.
E	0.0029 U -ETHYLBENZENE CONC.
X	0.0053 U -TOTAL XYLENES CONC.
MTBE	0.0026 U -MTBE CONC.
NAPH	0.026 U -NAPHTHALENE CONC.
1-M	0.030 U -1-METHYLNAPH CONC.
2-M	0.029 U -2-METHYLNAPH CONC.
TRPH	5.6 U -TRPH CONC.

U = VALUE IS BELOW THE LAB MDL

GRAPHIC SCALE

0 42 84

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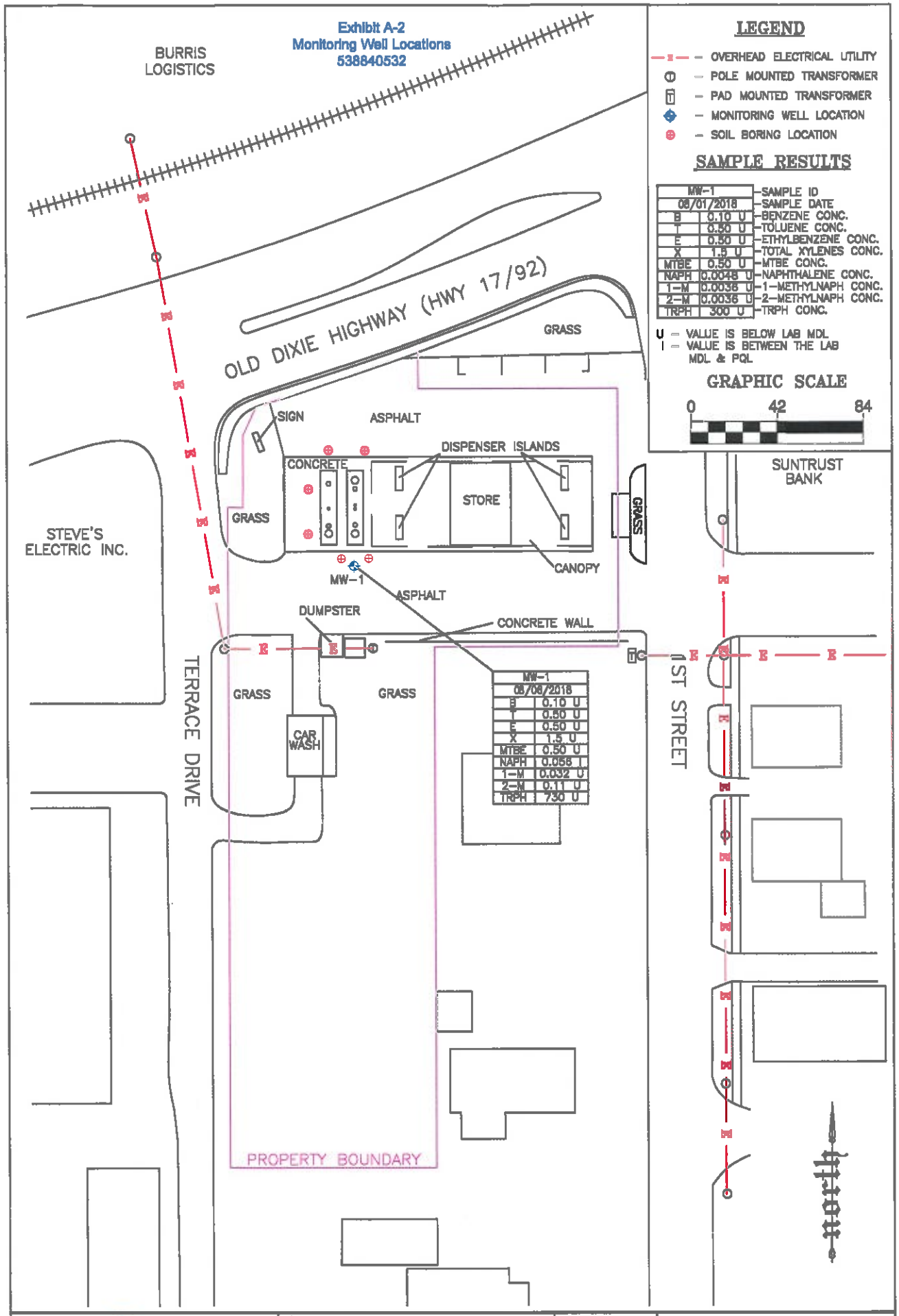
QUALITY #119
95 W HWY 17-92
HAINES CITY, POLK COUNTY, FLORIDA
FACILITY ID# 53/8840532

REVISED BY: SP
DATE: JULY 25, 2018

BASE MAP:
GOOGLE 2018

SOIL CONCENTRATION DIAGRAM

FIGURE #3



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QUALITY #119
95 W HWY 17-92
HAINES CITY, POLK COUNTY, FLORIDA
FACILITY ID# 53/8840532

REVISED BY: SP
DATE: JULY 25, 2018

BASE MAP:
GOOGLE 2018

GW CONCENTRATION DIAGRAM

FIGURE #4

Exhibit B-1
Soil Analytical Summary
538840532

TABLE 2: SOIL ANALYTICAL SUMMARY

Facility Name: Quality #119 (Marathon)
Facility Address: 95 W. Hwy 17/92, Haines City, Polk County, Florida

Facility Id#:
53/8840532

Sample				OVA	Laboratory Analyses												
Soil Sample	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene	Ethyl-benzene	Toluene	Total Xylenes	Total VOAs	MTBE	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(k)
					(mg/kg)												
SB-1@5'	08/01/18	~45	5	0	0.0027 U	0.0030 U	0.0029 U	0.0054 U	<RL	0.0026 U	0.012 U	0.011 U	0.012 U	0.0097 U	0.0084 U	0.0090 U	0.0091 U
SB-2@10'	08/01/18	~45	10	0	0.0026 U	0.0029 U	0.0028 U	0.0053 U	<RL	0.0026 U	0.026 U	0.024 U	0.027 U	0.022 U	0.019 U	0.020 U	0.020 U
SB-6@8'	08/01/18	~45	8	0	0.0026 U	0.0028 U	0.0029 U	0.0053 U	<RL	0.0026 U	0.025 U	0.022 U	0.025 U	0.020 U	0.018 U	0.019 U	0.018 U
Soil Cleanup Target Levels (April 17, 2006)					0.007	0.8	0.5	0.2	-	0.09	2	27	2,500	0.8	8	2.4	24
Residential Direct Exposure (April 17, 2006)					1.2	1,500	7,500	130	-	4,400	2,400	1,800	21,000	-	0.1	-	-
Industrial Direct Exposure (April 17, 2006)					1.7	9,200	60,000	700	-	24,000	20,000	20,000	300,000	-	0.7	-	-

Sample				OVA	Laboratory Analyses												
Soil Sample	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluor-anthene	Fluorene	Indeno-pyrene	Naph-thalene	1-Methyl naphthalene	2-Methyl naphthalene	Phen-anthrene	Pyrene	TRPHs	Benzo (a) pyrene equivalent
					(mg/kg)												
SB-1@5'	08/01/18	~45	5	0	0.0085 U	0.011 U	0.0078 U	0.011 U	0.012 U	0.0077 U	0.012 U	0.013 U	0.013 U	0.011 U	0.011 U	2.6 U	<RL
SB-2@10'	08/01/18	~45	10	0	0.019 U	0.024 U	0.017 U	0.025 U	0.027 U	0.017 U	0.026 U	0.030 U	0.029 U	0.025 U	0.024 U	5.6 U	<RL
SB-6@8'	08/01/18	~45	8	0	0.018 U	0.023 U	0.016 U	0.023 U	0.025 U	0.016 U	0.024 U	0.028 U	0.027 U	0.023 U	0.022 U	5.1 U	<RL
Soil Cleanup Target Levels (April 17, 2006)					32,000	77	0.70	1,200	160	6.6	1.2	3.1	8.5	250	880	340	**
Residential Direct Exposure (April 17, 2006)					2,500	-	-	3,200	2,600	-	55	200	210	2,200	2,400	460	0.1
Industrial Direct Exposure (April 17, 2006)					52,000	-	-	59,000	33,000	-	300	1,800	2,100	36,000	45,000	2,700	0.7

Notes:
fbls = Feet below land surface
mg/kg = milligram per kilogram
ppm = parts per million
U = Compound was analyzed for, but not detected
I = The reported value is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit (PQL).
Less Than Reporting Limit = <RL

TABLE 3: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Exhibit B-2
Groundwater Analytical Summary
538840532

Facility Name: Quality #119 (Marathon)
Facility Address: 95 W. Hwy 17/92, Haines City, Polk County, Florida

Facility ID#:
53/8840532

Sample		Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(g,h,i) perylene	Benzo(b) fluoranthene	Benzo(k) fluoranthene
Location	Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1	8/8/2018	0.10 U	0.50 U	0.50 U	1.5 U	<RL	0.50 U	0.040 U	0.030 U	0.043 U	0.055 U	0.074 U	0.042 U	0.027 U	0.016 U
GCTLs (rev. 04/17/05)		1	40	30	20	-	20	20	210	2,100	0.05	0.2	210	0.05	0.5
NADCs (rev. 04/17/05)		100	400	300	200	-	200	200	2,100	21,000	5	20	2100	5	5

Sample		Chrysene	Dibenzo(a,h) anthracene	Fluor-anthene	Fluorene	Indeno-pyrene	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	Phen-anthrene	Pyrene	TRPH (mg/L)	EDB	Lead	Cumene
Location	Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppm)	(ppb)	(ppb)	(ppb)
MW-1	8/8/2018	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.056 I	0.032 U	0.11 U	0.16 U	0.032 U	0.73 U	NA	NA	NA
GCTLs (rev. 04/17/05)		4.8	0.005	280	280	0.05	14	28	28	210	210	5	0.02	15	0.8
NADCs (rev. 04/17/05)		48	0.5	2,800	2,800	5	140	280	280	2,100	2,100	50	2	150	8

Notes:
ppb = parts per billion ppm = parts per million
U = Compound was analyzed for, but not detected
I = The reported value is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit (PQL).
RL = Reporting limit
GCTLs = Groundwater Cleanup Target Levels per FAC 62-777
NADCs = Natural Attenuation Default Concentrations per FAC 62-777

Map ID 34: Union 76 – Discount

Maliah Moreno

From: noreply@salesforce.com on behalf of Tommy Moore <tommy.moore@dep.state.fl.us>
Sent: Monday, January 23, 2023 4:38 PM
To: Nicole Christensen
Subject: Requested Records [ref:_00DG0i115._5004w2WYYr2:ref]

Good afternoon,

This email relates to your request for 201 E HINSON AVE and RAILROAD AVE, HAINES CITY, FL 33844. The Florida Department of Environmental Protection has included or attached the appropriate records.

201 E HINSON AVE - 8623319

RAILROAD AVE - 8624332

If you have any questions, please feel free to contact us.

Thank you for contacting DEP. Have a wonderful day!

Tommy Moore

Did you know you can access many public records from your personal computer using our free public online resources? The Florida Department of Environmental Protection

has several public online databases where records are stored: OCULUS, DEP Information Portal and Map Direct.

Please look below for more information on each database. For your future records needs, you might try checking out one of these databases before submitting a request.

- OCULUS
  - You can search for records in OCULUS using a facility-site ID, facility address, or facility name.
  - You can open OCULUS here.
  - If you need help maneuvering OCULUS, please use this helpful guide: OCULUS Instruction.
- DEP Information Portal
  - You can search for records in the DEP Information Portal using a facility-site ID, facility address, or facility name.
  - You can open the DEP Information Portal here.
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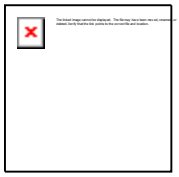
- Map Direct
  - You can search for records using Map Direct using a facility address.
  - You can open Map Direct here.
  - If you need help maneuvering Map Direct, please use this helpful guide: Map Direct Instruction.

In accordance with Chapter 119, Florida Statutes, public records requests will be processed within a reasonable time, and each request is processed in the order that it was received. Depending on the specific request, there may be a fee* assessed for processing.

***Notice of Fees and Charges**: Although many public records are provided at no cost there may be charges for extensive use of staff time and resources (119.07(04) F.S.). Extensive use is defined as more than 30 minutes of staff and/or computer resource time. There may also be charges for paper copies, CD/DVDs, postage and other expenses. When possible we will provide you with an estimate of any costs in advance. Note that when charges are accrued records may not be released until payment has been made in full. For more information on public records please visit our web page at: www.dep.state.fl.us/secretary/ps/default.htm.

***Please note**: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the*

public and media upon request. Your e-mail communications may therefore be subject to public disclosure.



Public Records Request Liaison
Florida Department of Environmental Protection
Division of Water Resource Management
PublicRecordsRequests_Regulatory@dep.state.fl.us
Office: 850.245.8362 & 850.245.8391

ref:_00DG0i115._5004w2WYYr2:ref

www.dep.state.fl.us

Map ID 35: Bordo Citrus Products Inc.

Maliah Moreno

From: noreply@salesforce.com on behalf of Tommy Moore <tommy.moore@dep.state.fl.us>
Sent: Monday, January 23, 2023 4:38 PM
To: Nicole Christensen
Subject: Requested Records [ref:_00DG0i115._5004w2WYYr2:ref]

Good afternoon,

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  - You can search for records in the DEP Information Portal using a facility-site ID, facility address, or facility name.
  - You can open the DEP Information Portal here.
  - If you need help maneuvering the DEP Information Portal, please use this helpful guide: DEP Portal Instruction.
- Map Direct
  - You can search for records using Map Direct using a facility address.
  - You can open Map Direct here.
  - If you need help maneuvering Map Direct, please use this helpful guide: Map Direct Instruction.

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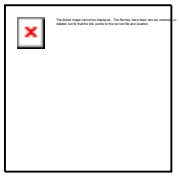
public and media upon request. Your e-mail communications may therefore be subject to public disclosure.



Public Records Request Liaison
Florida Department of Environmental Protection
Division of Water Resource Management
PublicRecordsRequests_Regulatory@dep.state.fl.us
Office: 850.245.8362 & 850.245.8391

ref:_00DG0i115._5004w2WYYr2:ref

www.dep.state.fl.us

Map ID 37: Haines City Service Center Inc.

Florida Department of Environmental Regulation

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

DER Form # 17-761.900(6)
Form Title Closure Assessment Form
Effective Date December 10, 1990
DER Application No. _____ (Filled in by DER)

Closure Assessment Form

ners of storage tank systems that are replacing, removing or closing in place storage tanks shall use this form to demonstrate that a storage tem closure assesment was performed in accordance with Rule 17-761 or 17-762, Florida Administrative Code. Eligible Early Detection Incen- (EDI) and Reimbursement Program sites do not have to perform a closure assessment.

Please Print or Type
Complete All Applicable Blanks

Date: Date of Removal (12/29/97)

DER Facility ID Number: 8624361 3. County: 53

Facility Name: Haines City service Center

Facility Owner: Cheryl, Michael & Joe Pocquette

Facility Address 303 East Hinson Avenue; Haines City, Florida

Mailing Address: 303 East Hinson Avenue; Haines City, Florida 33844

Telephone Number (941) 422-1437 9. Facility Operator: Michael Pocquette

Are the Storage Tank(s). **(Circle one or both)** A. Aboveground or B. Underground

Type of Product(s) Stored. Unleaded Gasoline and Used oil

Were the Tank(s). **(Circle one)** A Replaced B. Removed C. Closed in Place D Upgraded (aboveground tanks only)

Number of Tanks Closed. 4 14. Age of Tanks: 31 years

Facility Assessment Information

No	Not Applicable		
[X]		1.	Is the facility participating in the Florida Petroleum Liability Insurance and Restoration Program (FPLIRP)?
[X]		2.	Was a Discharge Reporting Form submitted to the Department? If yes, When: _____ Where: _____
[X]		3	Is the depth to ground water less than 20 feet?
[ ]	[ ]	4	Are monitoring wells present around the storage system? If yes, specify type: [ ] Water monitoring [X] Vapor monitoring
[X]	[ ]	5.	Is there free product present in the monitoring wells or within the excavation?
[X]	[ ]	6.	Were the petroleum hydrocarbon vapor levels in the soils greater than 500 parts per million for gasoline? Specify sample type: [ ] Vapor Monitoring wells [X] Soil sample(s)
[ ]	[X]	7.	Were the petroleum hydrocarbon vapor levels in the soils greater than 50 parts per million for diesel/kerosene? Specify sample type: [ ] Vapor Monitoring wells [ ] Soil sample(s)
[ ]	[X]	8.	Were the analytical laboratory results of the ground water sample(s) greater than the allowable state target levels? (See target levels on reverse side of this form and supply laboratory data sheets)
[X]	[ ]	9	If a used oil storage system, did a visual inspection detect any discolored soil indicating a release?
[X]		10	Are any potable wells located within ¼ of a mile radius of the facility?
[X]		11	Is there a surface water body within ¼ mile radius of the site? If yes, indicate distance _____

DER Form # 17-761.900(6)
Form Title Closure Assessment Form
Effective Date December 10, 1990
DER Application No. _____ (Filled in by DER)

12. A detailed drawing or sketch of the facility that includes the storage system location, monitoring wells, buildings, storm drains, sample locations, and dispenser locations must accompany this form.
13. If a facility has a pollutant storage tank system that has both gasoline and kerosene/diesel stored on site, both EPA Method 602 and EPA Method 610 must be performed on the ground water samples obtained.
14. Amount of soils removed and receipt of proper disposal.
15. If yes is answered to any one of questions 5-9, a Discharge Reporting Form 17-761.900(1) indicating a suspected release shall be submitted to the Department within one working day.
16. A copy of this form and any attachments must be submitted to the Department's district office in your area and to the locally administered program office under contract with the Department within 60 days of completion of tank removal or filling a tank with an inert material.

Signature of Owner — Date: 1-12-98

Signature of Person Performing Assessment — Date: 1/11/98

Kevin E. Ottman (President) Ottman & Associates, Inc.
Title of Person Performing Assessment

State Ground Water Target Levels That Affect A Pollutant Storage Tank System Closure Assessment

State ground water target levels are as follows:

1 For gasoline (EPA Method 602).

a Benzene 1 ug/l

b. Total VOA 50 ug/l
- Benzene
- Toluene
- Total Xylenes
- Ethylbenzene

c Methyl Test-Butyl Ether (MTBE) 50 ug/l

2. For kerosene/diesel (EPA Method 610):

a. Polynuclear Aromatic Hydrocarbons (PAHS) (Best achievable detection limit, 10 ug/l maximum)

Map ID 38: Phillips 66 Station

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

March 26, 2009

CERTIFIED MAIL #7008 1830 0000 7025 9774
RETURN RECEIPT REQUESTED

Mr. Luc T. Nguyen
163 Lake Thomas Drive
Winter Haven, Florida 33880

Subject: Site Rehabilitation Completion Order
Phillips 66 Station
404 East Hinson Avenue
Haines City, Polk County
FDEP Facility ID# 538624442
Discharge Date: March 1, 1991(ATRP)
Discharge Score: 59

Initials _____
Date _____

Dear Mr. Nguyen:

The Polk County Health Department Petroleum Cleanup Program on behalf of the Florida Department Environmental Protection (Department) has reviewed the Site Assessment Report (SAR) and No Further Action Proposal (NFAP) dated October 29, 2008 and (Received October 30, 2008) and the Monitoring Well Abandonment Report dated February 3, 2009 (received February 10, 2009), prepared and submitted by Environmental Assessments + Consulting, Inc. for the petroleum product discharge referenced above. All the documents submitted to date are adequate to meet the site assessment requirements of Rule 62-770.600, Florida Administrative Code (F.A.C.). In addition, documentation submitted with the SAR/NFAP confirms that criteria set forth in Subsection 62-770.680 (1) Florida Administrative Code (F.A.C.), have been met. Please refer to the attached maps of the source property and analytical summary tables. The SAR/NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order. Therefore, you are released from any further obligation to conduct site rehabilitation at the facility for petroleum product contamination associated with the discharge referenced above, except as set forth below.

In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the facility, the Department may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the SAR/NFAP or otherwise allowed by Chapter 62-770, F.A.C.

Please send a copy of the approved assessment documents to Ken Weber of the Southwest Florida Water Management District within 30 days of receiving this Order.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below.

Persons affected by this Order have the following options:

(A) If you choose to accept the Department's decision regarding the SAR/NFAP you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

(B) If you choose to challenge the decision, you may do the following:

(1) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or

(2) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to Subsection 62-110.106 (4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Mr. Luc T. Nguyen, shall mail a copy of the request to Mr. Luc T. Nguyen at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Mr. Luc T. Nguyen, shall mail a copy of the petition to Mr. Luc T. Nguyen at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

(a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;
(b) A statement of when and how each petitioner received notice of the Department's action or proposed action;
(c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
(d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;
(e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and
(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding Polk County Health Department Petroleum Cleanup Program's review of your SAR/NFAP should be directed to Henry J. Callahan at (863) 413-3325 extension 118. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 53/8624442. Please use this identification on all future correspondence with the Department or Polk County Health Department Petroleum Cleanup Program

Sincerely,

Michael E. Ashey, Chief
Bureau of Petroleum Storage Systems

MEA/hjc

cc: Laurel Culbreth, FDEP Southwest District Office
Grace Rivera, FDEP – PCS2
Henry J. Callahan Polk County Health Department Petroleum Cleanup Program
Drew Scott, Environmental Assessments + Consulting, Inc., 1882 Porter Lake Dr., Ste 105, Sarasota, Florida 34240
Ken Weber, Southwest Florida Water Management District
File

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk
(or Deputy Clerk)

3/31/09
Date

P.G. CERTIFICATION

Site Assessment Report/No Further Action Proposal dated October 29, 2008 (received October 30, 2008), for Phillips 66 Station located at 404 East Hinson Avenue, Haines City, Polk County, FDEP Facility ID# 538624442.

I hereby certify that in my professional judgment, the components of this Site Assessment Report/No Further Action Proposal prepared for the March 1, 1991 petroleum product discharge discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-770, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the site rehabilitation objectives stated in Chapter 62-770, F.A.C., have been met.

___ I personally completed this review.

_X_ This review was conducted by __Henry J. Callahan, Site Manager/ESII__ working under my direct supervision.

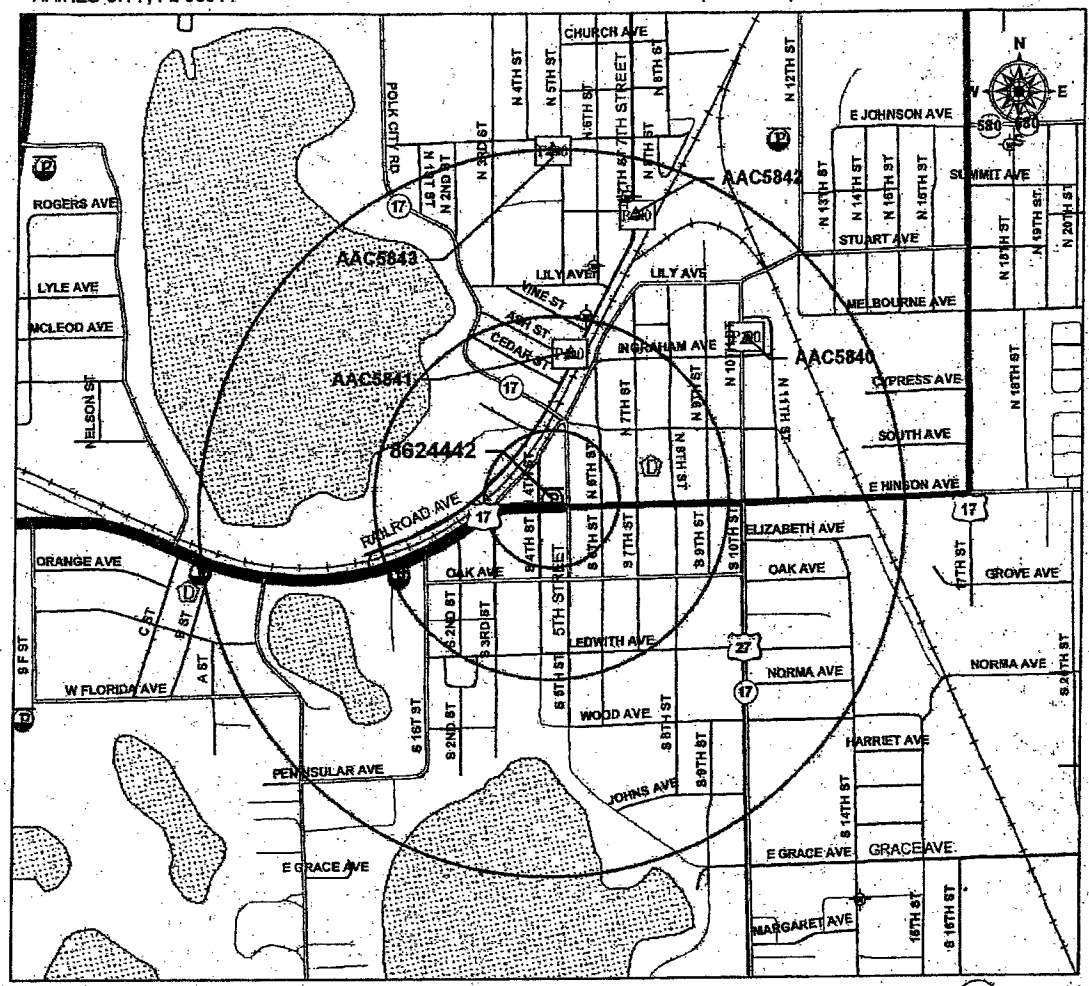
George W. Ellsworth, P.G.
Professional Geologist # 00848
Polk County Health Department Petroleum Cleanup Program

2/26/09
February 26, 2009

GEORGE W. ELLSWORTH ★ LICENSE NO. 848 ★ STATE OF FLORIDA ★ PROFESSIONAL GEOLOGIST

8624442
HOMESTYLE CHICKEN & FISH
404 E HINSON RD
HAINES CITY, FL 33844

Latitude/Longitude: 28.106819 -81.627751
DDMMSS: 28 6 24.5484 81 37 39.9036
Number of large public well (>100,000 gpd) within the 1/2 mile: 4
Number of small public and private wells within the 1/4 mile: 0



Sample Results--Petroleum*

- ★ >1/2 MCL/HAL
- ● <1/2 MCL/HAL
- ■ <1/4 MCL/HAL
- ▲ Sampled, no detect
- ⚑ Not sampled within last year for this analysis.
- ⌖ No sample found for this analysis

0 0.125 0.25 0.375 0.5 Miles

SDWA PWS Wells

- PS <100,000 gpd
- P100 >100,000 gpd

Facility Type

- Ⓟ Petroleum
- Ⓟ Proximity Threat
- Ⓓ Drycleaner
- Ⓣ Toxics
- Ⓞ Other
- © Cattle Dip Vat

* The following chemicals were use for the Petroleum Indicator analysis: Benzene, Ethylbenzene, Toluene, Xylenes, Naphthalene, and Methyl-Tert-Butyl-Ether (MTBE)

Signature: _____

FLORIDA DEPARTMENT OF HEALTH

Florida Department of Health
Bureau of Water Programs
Potable Well Survey

Disclaimer
This product is for reference purposes only and is not to be construed as a legal document. Any reliance on the information contained herein is at the user's own risk. The Florida Department of Health and it's agents assume no responsibility for any use of the information contained herein or any loss resulting therefrom.

4/23/2007
haywooddx
POLK

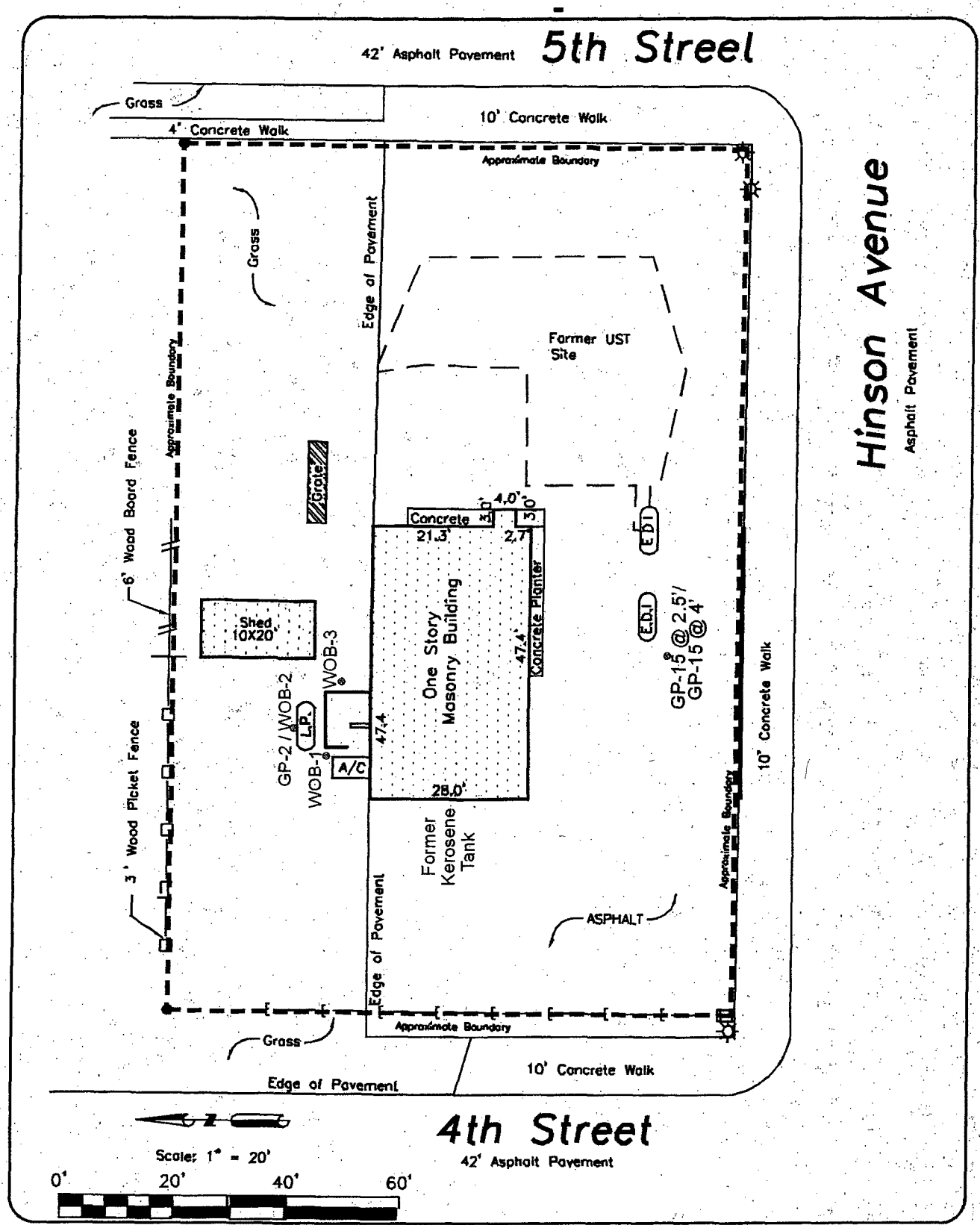
eac

Project No.: P07-0712

FIGURE 3

POTABLE WELL LOCATION MAP

FORMER PHILLIPS 66 STATION
400 Hinson Ave East
Haines City, Florida



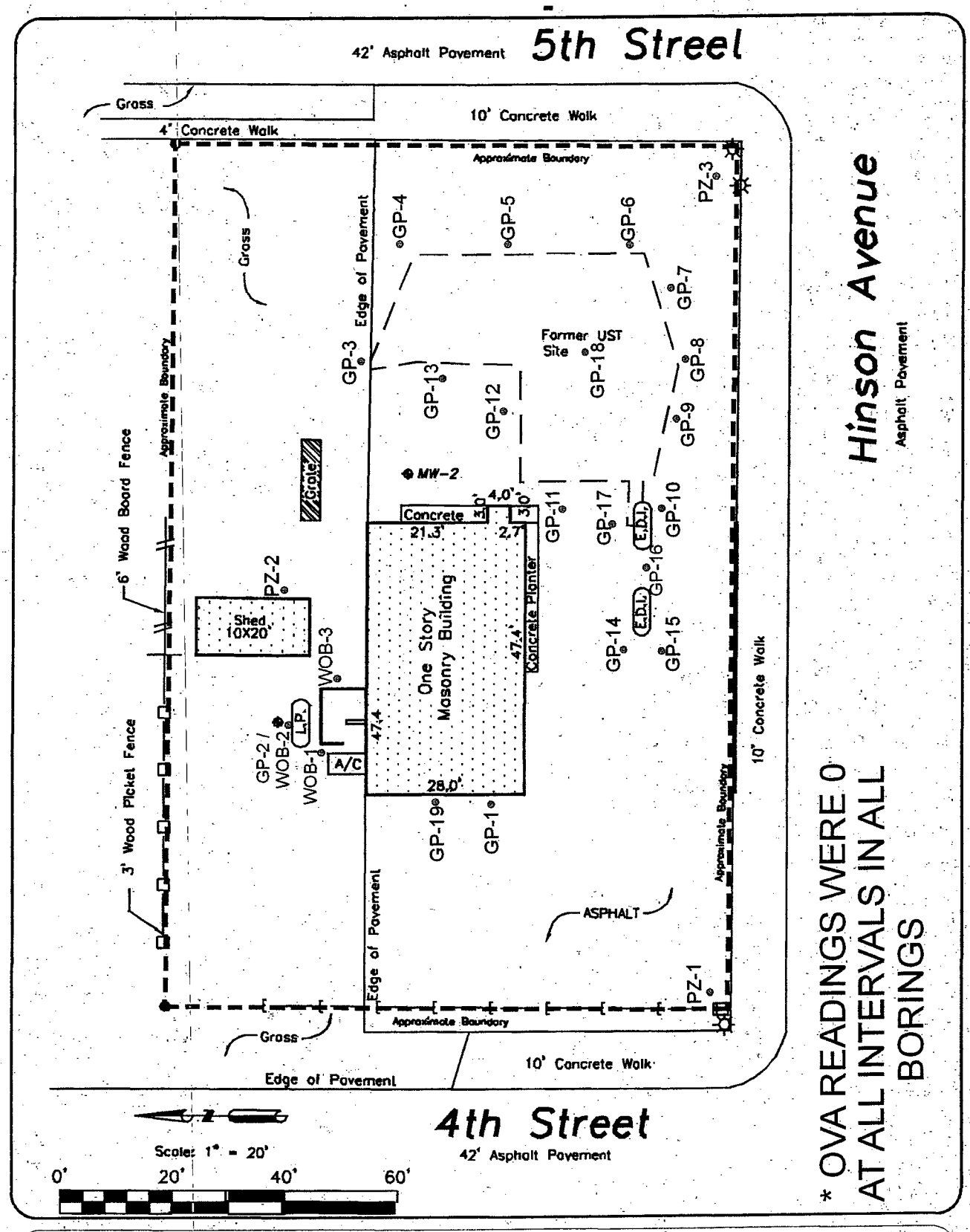
Project No.: P07-0712

FIGURE 4

Scale:
1" = 20'

SOIL SAMPLING LOCATIONS

FORMER PHILLIPS 66 STATION
400 Hinson Ave East
Haines City, Florida



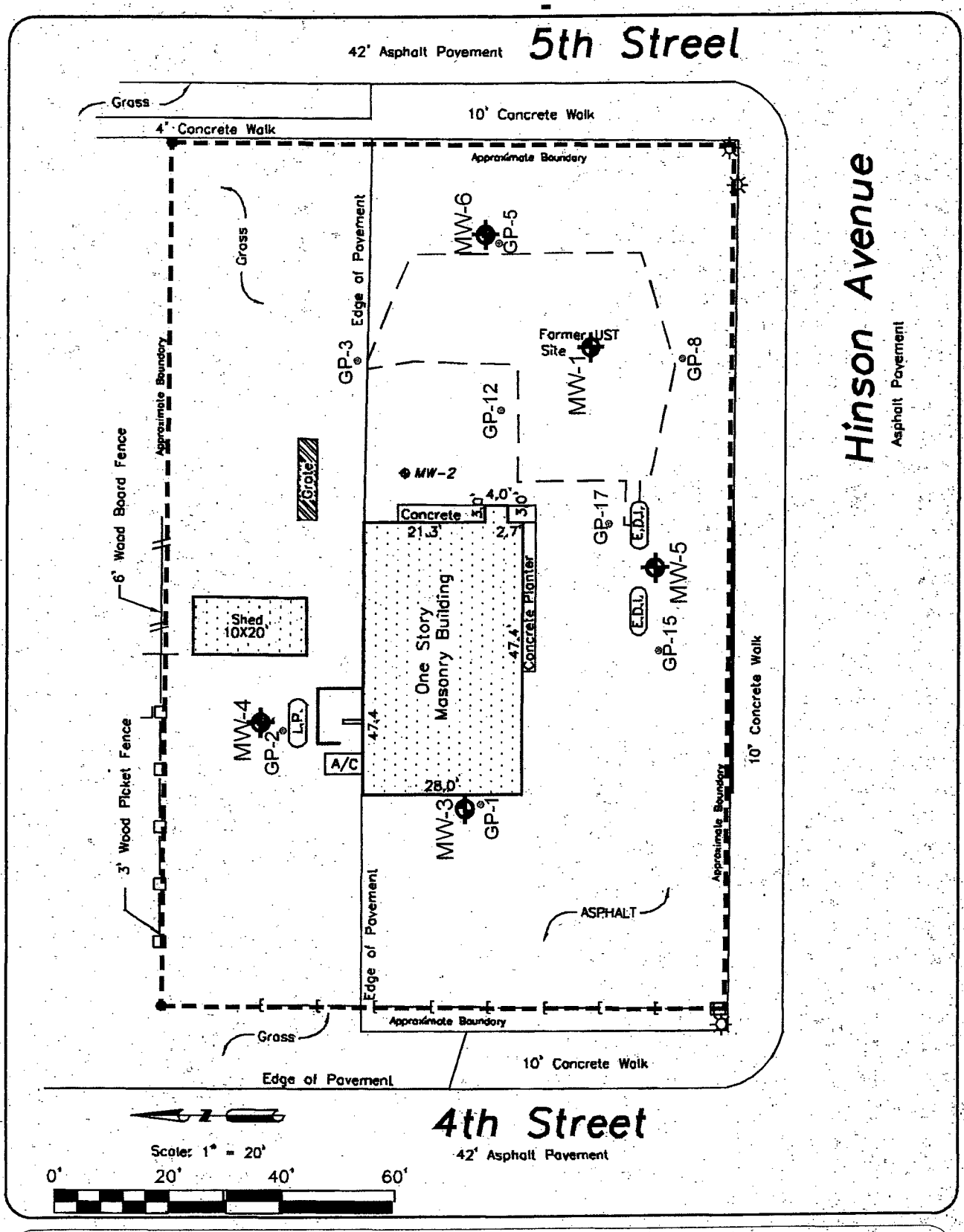
Project No.: P07-0712

FIGURE 5

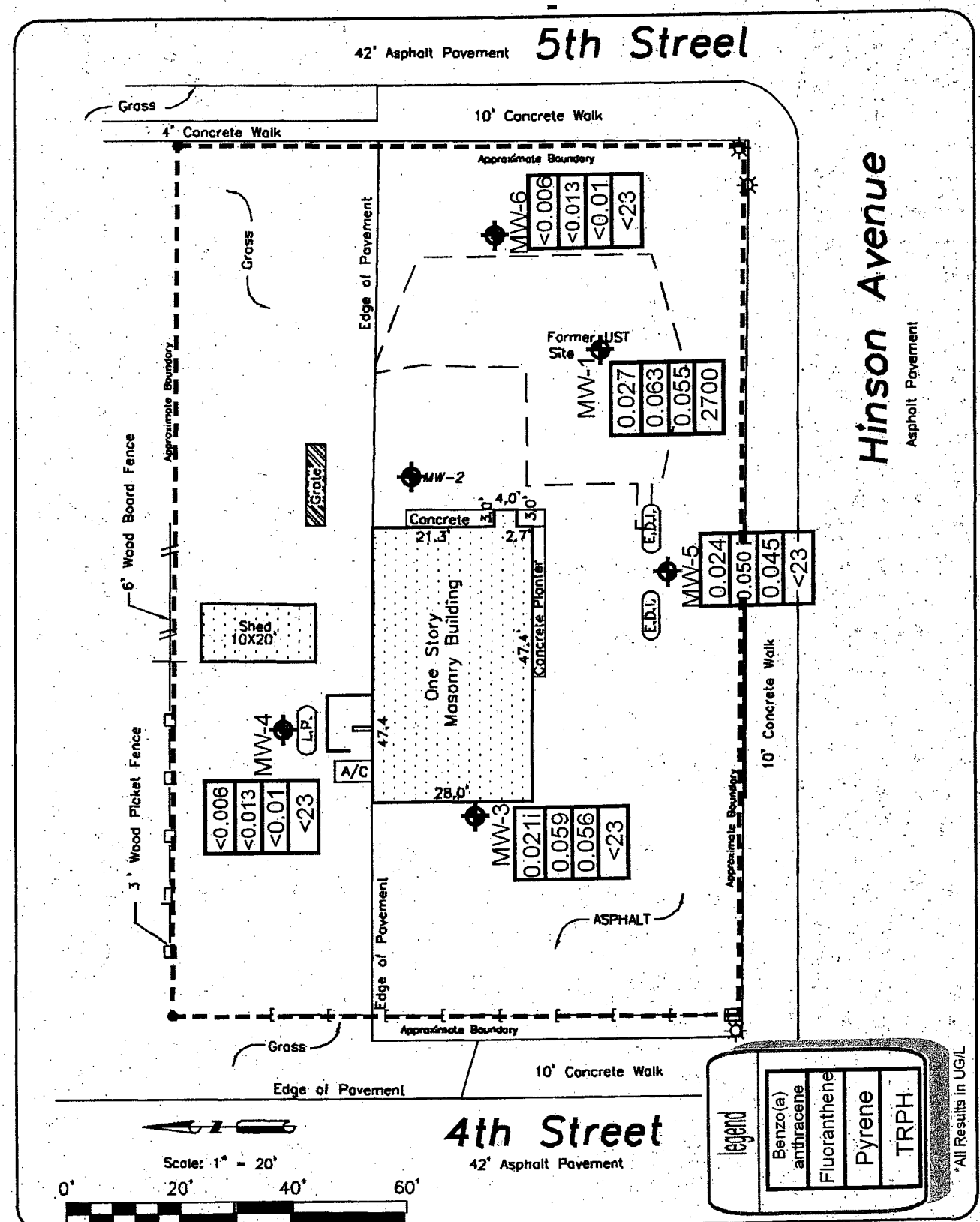
Scale: 1" = 20'

SOIL BORING LOCATION / SCREENING MAP

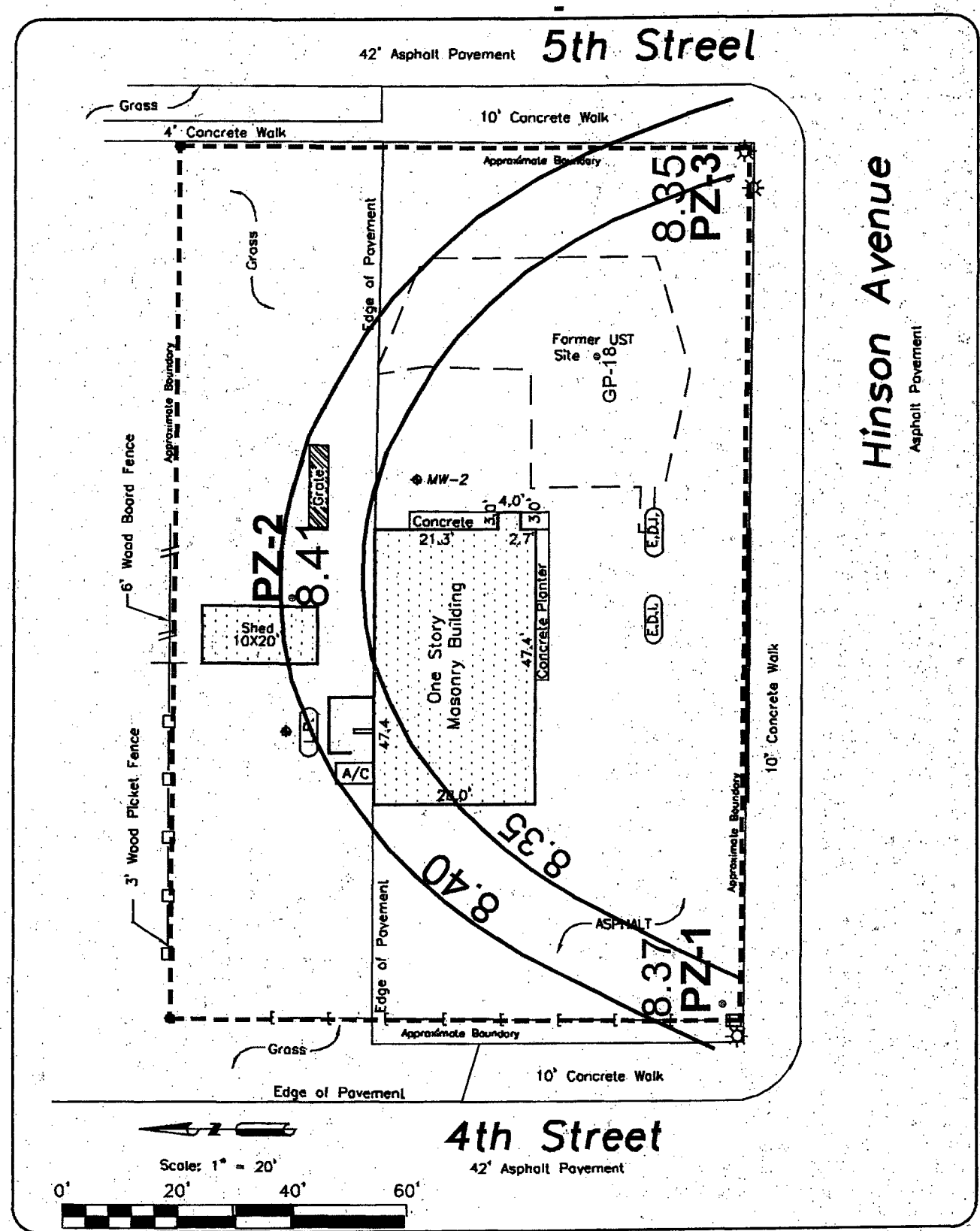
FORMER PHILLIPS 66 STATION
400 Hinson Ave East
Haines City, Florida



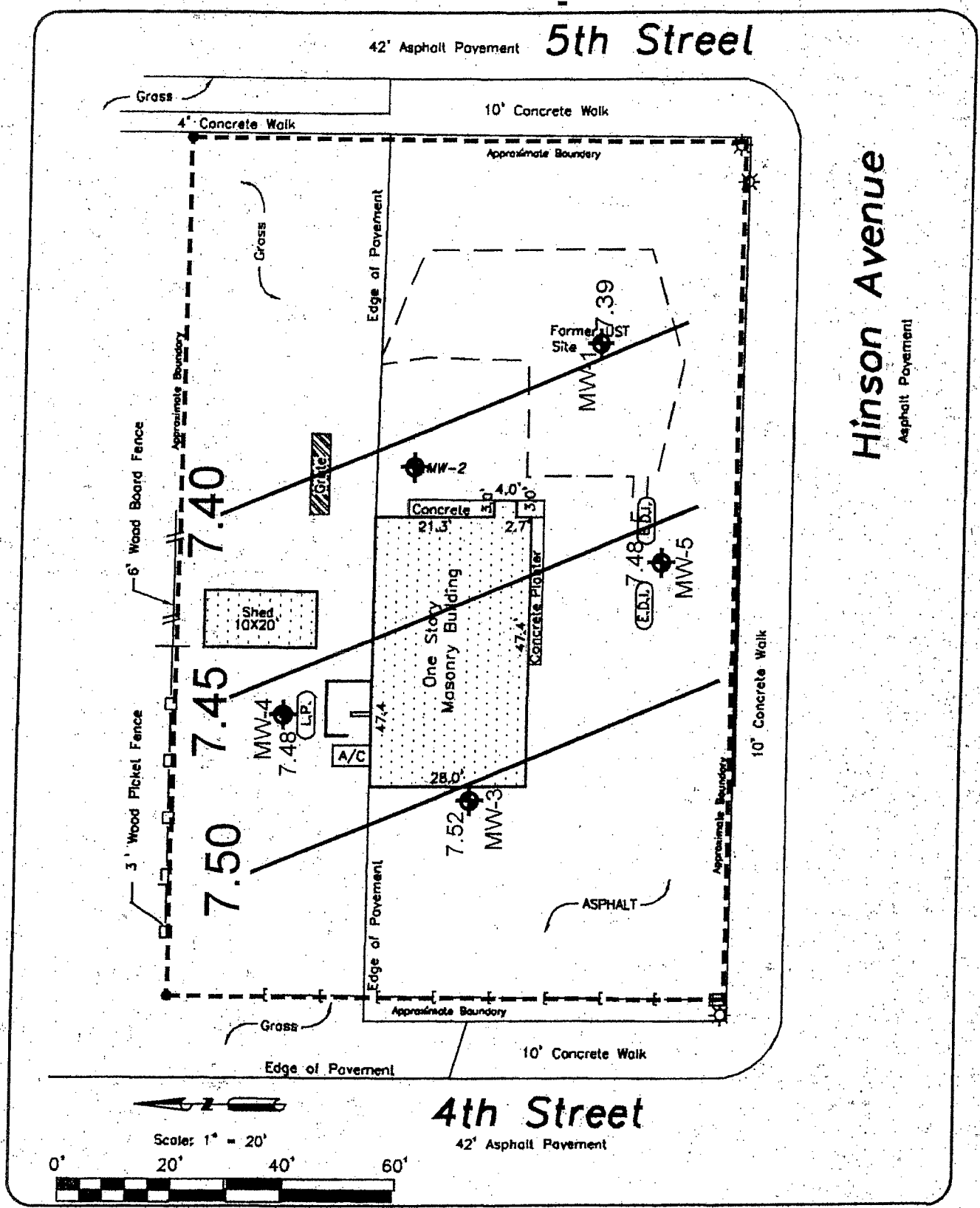
	Project No.: P07-0712 FIGURE 6 Scale: 1" = 20'	**GROUNDWATER SAMPLE LOCATION MAP** **FORMER PHILLIPS 66 STATION** **400 Hinson Ave East** **Haines City, Florida**



eac	Project No.: P07-0712 FIGURE 7 Scale: 1" = 20'	MW-1 - MW-5 4/14/08 MW-6 5/20/08	**Groundwater Contaminant Concentration Map** **FORMER PHILLIPS 66 STATION** **400 Hinson Ave East** **Haines City, Florida**



eac	Project No.: P07-0712 FIGURE 8a Scale: 1" = 20'	2/13/08	**GROUNDWATER FLOW DIRECTION MAP** **FORMER PHILLIPS 66 STATION** **400 Hinson Ave East** **Haines City, Florida**



Project No.: P07-0712

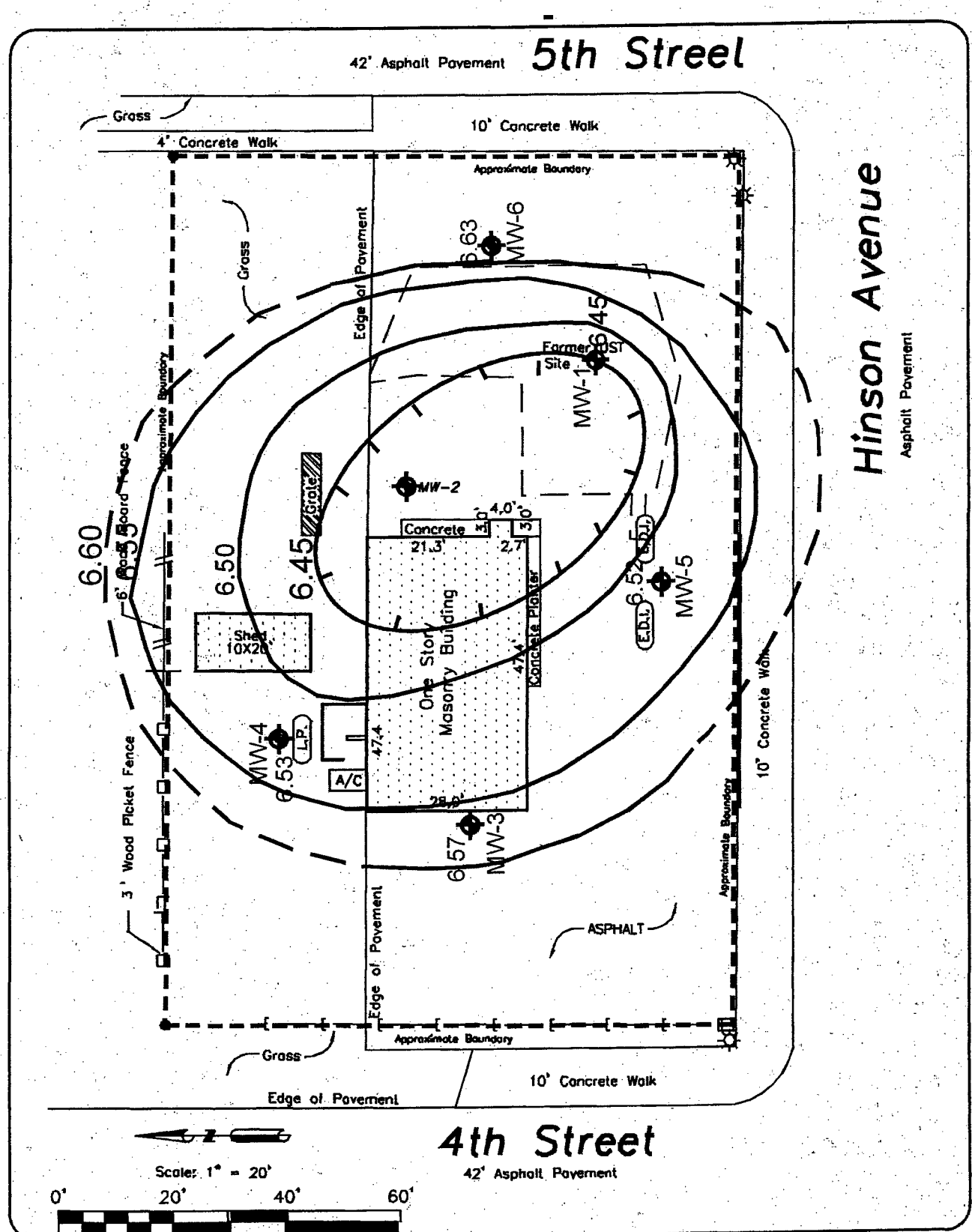
FIGURE 8b

Scale: 1" = 20'

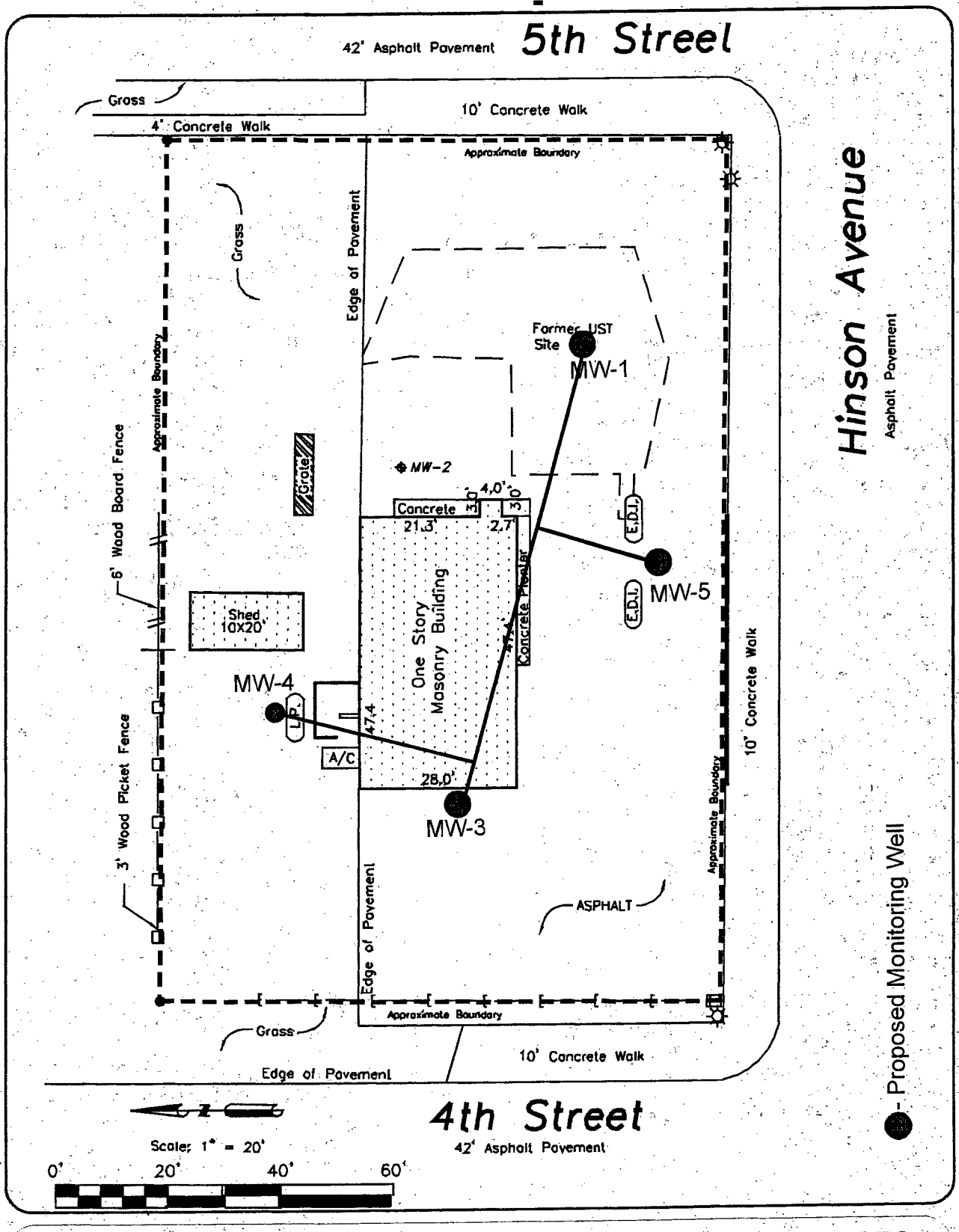
4/14/08

GROUNDWATER FLOW DIRECTION MAP

FORMER PHILLIPS 66 STATION
400 Hinson Ave East
Haines City, Florida



eac	Project No.: P07-0712 FIGURE 8c Scale: 1" = 20'	5/20/08	**GROUNDWATER FLOW DIRECTION MAP** **FORMER PHILLIPS 66 STATION** **400 Hinson Ave East** **Haines City, Florida**



Project No.: P07-0712	**CROSS SECTION TRACES**	
Scale: 1" = 20'	FIGURE 9-A	**FORMER PHILLIPS 66 STATION** **400 Hinson Ave East** **Haines City, Florida**

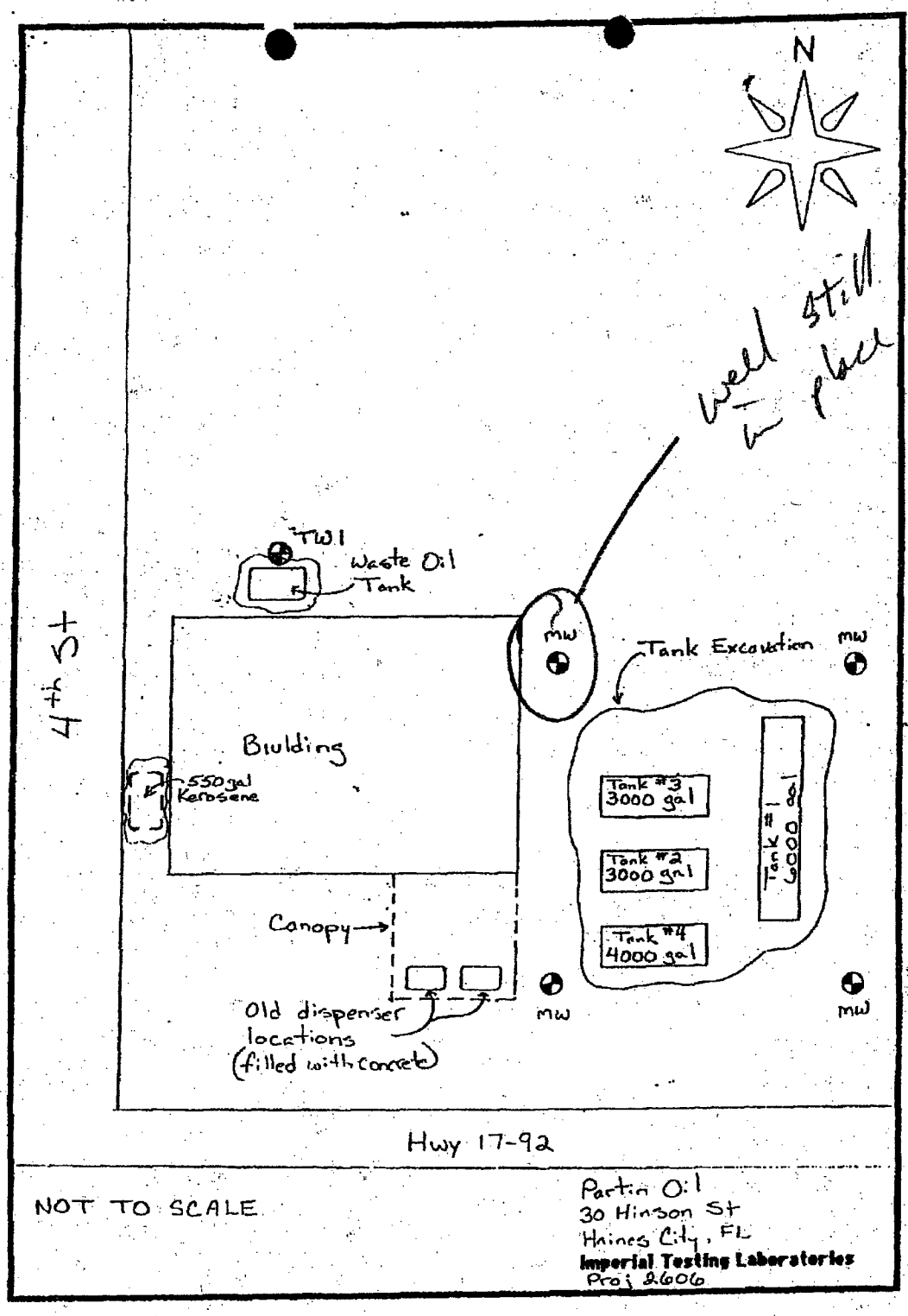
Project No.: P07-0712

Scale: 1" = 20'

FIGURE 9-B

CROSS SECTION Q-Q

FORMER PHILLIPS 66 STATION
400 Hinson Ave East
Haines City, Florida



N

Project No.: P07-0712

FIGURE 10

TANK CLOSURE FIGURE

FORMER PHILLIPS 66 STATION
400 Hinson Ave East
Haines City, Florida

Map ID 39: Haines City ROW – Jones Ave

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June 6, 2009

Polk County Health Department
Environmental Engineering Division
200 N. Kentucky Avenue, Suite 404
Lakeland, Florida 33801

Attention: Mr. Wayne (Jay) Dery

Reference: **Underground Storage Tank Removal Report**
SWC 5th Street and Jones Avenue
Haines City, Polk County, Florida
FAC ID: 539811431/ STCM # 9199
UES Project No. 0140.0900092.0000
Report No. 774783

Dear Mr. Dery:

Universal Engineering Sciences, Inc. (UES) has prepared this report to document the Closure Assessment activities associated with the removal of five (5) Underground Storage Tanks (USTs) which reportedly formerly contained heating oil and used oil. The location of the tank excavation is documented on **Figure 1** found in **Attachment A** of this report. Removal activities were conducted by Andrew Bell, Inc., a Pollutant Storage System Specialty Contractor (#PCC048399). Removal of the tanks was performed on May 7, 2009; soil confirmation soil samples were collected on December 7; no groundwater sample was collected, since depth to groundwater was greater than 20 feet below land surface and no soil impacts were visually observed or indicated by laboratory analyses of confirmatory soil samples.

On May 7, 2009, UES collected five (5) confirmation soil samples, one from each side wall of the excavation (at cardinal directions north, east, south, and west) at a depth of 3.5 to 4 feet bls and one (1) soil sample from the bottom of the excavation. Groundwater was not encountered in the excavation which terminated at approximately 5 feet bls. Soil sample locations are shown on **Figure 1**. The soil samples were transported to Phoslab Environmental Services, Inc. in Lakeland, Florida for laboratory analysis for VOCs by EPA Method 8260 (and tentatively identified compounds), for PAHs by EPA Method 8270 PAH SIM (with library search), for TRPH by the FLRPO method, PCBs by EPA Method 8082, for the metals arsenic, cadmium, chromium, and lead by EPA Method 6010B, and TCLP for the metals arsenic, cadmium, chromium, and lead by SW-846 Method 1311 / EPA Method 6010B. Please refer to **Attachment B** for a complete copy of the laboratory analytical report, including chain-of-custody information.

Laboratory analyses of the confirmation soil samples indicated only arsenic at a concentration of 9.73 mg/kg, in excess of the residential direct exposure Soil Cleanup Target Level (SCTL) of 2.1 mg/kg, as established in Table 2, 62-777, FAC in soil sample SS-W, obtained from the western side wall of the excavation at a depth of 3.5 feet bls. Although the concentration of arsenic in the soil at sample location SS-W along the western sidewall of the excavation exceeded the residential direct exposure SCTL, the concentration does not exceed the commercial direct exposure SCTL. This area is currently being redeveloped into a hardscaped public area that will reportedly be covered with concrete pavers. Due to the fact that this soil will be covered with more than 3 feet of soil, and capped with concrete pavers, UES does not recommend further assessment of the soils at that location. Results of contaminants above laboratory detection limits of the five (5) soil samples are tabulated in **Table 1**.

Based on the results of the tank closure assessment performed for the five (5) Underground Storage Tanks (USTs) of varying capacities which reportedly formerly contained heating oil and used oil, UES does not recommend further assessment of the soil or groundwater at this site.

Please call if you have any questions.

Respectfully submitted,
Universal Engineering Sciences, Inc.

Daniel J. Townsend
Environmental Project Manager

DJT/MJG:vco

Cc: Russell Garrison, Wharton Smith

UNDERGROUND STORAGE TANK CLOSURE REPORT
COMMERCIAL PROPERTY – FAC ID 539811431
SWC 5TH STREET AND JONES AVENUE
HAINES CITY, POLK COUNTY, FLORIDA

UES Project No. 0140.0900092.0000
Report No. 774783
Date: June 2009

Prepared For:

Polk County Health Department
Environmental Engineering Division
200 N. Kentucky Avenue, Suite 404
Lakeland, Florida 33801

Prepared By:

Universal Engineering Sciences, Inc.
3532 Maggie Boulevard
Orlando, Florida 32811
(407)423-0504
www.uesorl.com
COA# 00000549

Report Preparation:

Daniel J. Townsend
Environmental Project Manager

Reviewed By:

Michael J. Geden, P.G.
Date: 06/06/09
Senior Project Geologist
Florida License No. 0000408

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LIST OF APPENDICES

1.0 INTRODUCTION

UES was contracted by Mr. Russell Garrison, Project Manager for Wharton-Smith, Inc. to provide services associated with the oversight of the removal of five (5) underground storage tanks (USTs) of varying capacities which reportedly formerly contained heating oil and used oil. The project site is a property owned by the city of Haines City located at the southwest corner of the intersection of 5th Street and Jones Avenue in Haines City, Polk County, Florida. Environmental assessment of the soil and groundwater for this project was performed by UES. Decontamination, sampling, and chain-of-custody procedures were conducted in accordance with the FDEP's Standard Operating Procedures (SOPs): DEP-SOP-001/01. A site plan of the facility and the used oil UST location accompanies this submittal as **Figure 1** included as **Attachment A**.

One tank was approximately 500 gallons in capacity. This tank was approximately half full of water (assumed) and was emptied of the contents prior to excavation. Once this tank was excavated, the end of another tank became visible, lying end-to-end with the original tank. Upon further investigation with a probe rod, three additional approximately 150-gallon USTs were discovered. In the process of removing dirt from the sides of the three smaller tanks, the backhoe ruptured the end of an additional approximately 300-gallon UST. The fluid leaking from the tank also appeared to be water, with a slight petroleum odor. Once all tanks were excavated from the area, approximately 6 to 8 cubic yards of soil which absorbed the liquid spilling from the last tank were excavated and stockpiled. The impacted soil was placed on 6 mil plastic sheeting and sampled for characterization for disposal. The soil was then covered with plastic sheeting to protect from rain.

2.0 CLOSURE ACTIVITIES

UES observed the excavation of five (5) USTs of varying capacities which reportedly formerly contained heating oil and used oil by Andrew Bell, Inc. During the excavation, soil was visually screened for staining. The soils surrounding the tank were orange in color, which would provide a very good contrast to visible staining that may indicate a release.

One tank was approximately 500 gallons in capacity. This tank was approximately half full of water (assumed) and was emptied of the contents prior to excavation. Once this tank was excavated, the end of another tank became visible, lying end-to-end with the original tank. Upon further investigation with a probe rod, three additional approximately 150-gallon USTs were discovered. In the process of removing dirt from the sides of the three smaller tanks, the backhoe ruptured the end of an additional approximately 300-gallon UST. The fluid leaking from the tank also appeared to be water, with a slight petroleum odor. Once all tanks were excavated from the area, approximately 6 to 8 cubic yards of soil which absorbed the liquid spilling from the last tank were excavated and stockpiled. The impacted soil was placed on 6 mil plastic sheeting and sampled for characterization for disposal. The soil was then covered with plastic sheeting to protect from rain. The 5 tanks were transported by Andrew Bell, Inc. to their shop for cleaning prior to disposal. The tanks were taken to E & H Car Crushing for recycling. A copy of the Decontamination Certificate is included in **Appendix B**.

The size of the excavation was approximately 7 feet wide by 18 feet long by 5 feet deep. The clean overburden soil was placed beside the excavation to be used as backfill. Following the excavation activities, 5 confirmatory soil samples were collected - one from each of the sidewalls of the excavation and one from the bottom. The soil samples were submitted for laboratory analysis for Volatile Organic Compounds (VOCs) by EPA Method 8260 (and tentatively identified compounds), for Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270 PAH SIM (with library search), for Total Recoverable Petroleum Hydrocarbons (TRPH) by the FLRPO method, PCBs by EPA Method 8082, for the metals arsenic, cadmium, chromium, and lead by EPA Method 6010B, and Toxicity Characteristic Leaching Procedure (TCLP) for the metals arsenic, cadmium, chromium, and lead by SW-846 Method 1311 / EPA Method 6010B. After the confirmation samples were collected, the excavation was secured and left open, pending the results of the laboratory analyses.

3.0 ASSESSMENT RESULTS

Soil

On May 7, 2009, UES collected five (5) confirmation soil samples, one from each side wall of the excavation (at cardinal directions north, east, south, and west) at a depth of 3.5 to 4 feet bls and one (1) soil sample from the bottom of the excavation. Groundwater was not encountered in the excavation which terminated at approximately 5 feet bls. Soil sample locations are shown on **Figure 1**. The soil samples were placed on wet ice and transported to Phoslab Environmental Services, Inc. in Lakeland, Florida for laboratory analysis for VOCs by EPA Method 8260 (and tentatively identified compounds), for PAHs by EPA Method 8270 PAH SIM (with library search), for TRPH by the FLRPO method, PCBs by EPA Method 8082, for the metals arsenic, cadmium, chromium, and lead by EPA Method 6010B, and TCLP for the metals arsenic, cadmium, chromium, and lead by SW-846 Method 1311 / EPA Method 6010B. Please refer to **Attachment C** for a complete copy of the laboratory analytical report, including chain-of-custody information.

Laboratory analyses of the confirmation soil samples indicated only arsenic at a concentration of 9.73 mg/kg, in excess of the residential direct exposure Soil Cleanup Target Level of 2.1 mg/kg, as established in Table 2, 62-777, FAC in soil sample SS-W, obtained from the western side wall of the excavation at a depth of 3.5 feet bls. Results of contaminants above laboratory detection limits of the five (5) soil samples are tabulated in **Table 1**.

Groundwater

In accordance with Section C(2) of FDEP's Storage Tank System Closure Assessment Requirements for storage tank removal, [if the tank appears to have discharged or if soil staining is documented, and the depth to the groundwater table is less than 20 feet, a temporary monitoring well should be installed in the area that represents the "worst case" contamination as determined by the visual observations of the soil samples. If the depth to groundwater table is greater than 20 feet, a groundwater sample is not required if the visual observations indicated that contaminated soil was not present, or if contaminated soil was identified and excavated and it is demonstrated based on the degree and horizontal and vertical extent of contamination in the excavated soil, and on the site stratigraphy, that groundwater should not have been affected.]

Although the backhoe ruptured the end of the approximately 300-gallon UST, spilling fluid from the tank, approximately 6 to 8 cubic yards of soil which absorbed the liquid spilling from the tank were excavated and stockpiled. Soil confirmation samples were from each side wall of the excavation (at cardinal directions north, east, south, and west) at a depth of 3.5 to 4 feet bls and one (1) soil sample from the bottom of the excavation. Laboratory analyses of the confirmation soil samples indicated only arsenic in excess of the residential direct exposure Soil Cleanup Target Level in soil sample SS-W, obtained from the western side wall of the excavation at a depth of 3.5 feet bls.

On May 28, 2009, UES attempted to determine the depth to the groundwater table onsite using a GeoProbe® Model 6620DT to advance a groundwater sampler probe. The Geoprobe® sampler was advanced to a depth of 21 feet bls at the center of the tank excavation and then retracted to reveal a 4-foot stainless steel screen section. The probe remained in the ground at that depth for more than 15 minutes without encountering groundwater. Due to the fact that the groundwater table was not encountered within 20 feet of the land surface, no groundwater sample was collected.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Universal Engineering Sciences, Inc. (UES) has prepared this report to document the Closure Assessment activities associated with the removal of five (5) Underground Storage Tank (UST) of varying capacities which reportedly formerly contained heating oil and used oil in accordance with applicable Florida Administrative Code and the *Florida Department of Environmental Protection Storage Tank System Closure Assessment Requirements* guidance document Section C, dated April 1998. Environmental assessment of the soil and groundwater for this project was performed by UES. Decontamination, sampling, and chain-of-custody procedures were conducted in accordance with the FDEP's Standard Operating Procedures (SOPs): DEP-SOP-001/01. The project site is a property owned by the city of Haines City located at the southwest corner of the intersection of 5th Street and Jones Avenue in Haines City, Polk County, Florida.

On May 7, 2009, UES collected five (5) confirmation soil samples, one from each side wall of the excavation (at cardinal directions north, east, south, and west) at a depth of 3.5 to 4 feet bls and one (1) soil sample from the bottom of the excavation. Groundwater was not encountered in the excavation which terminated at approximately 5 feet bls. The soil samples were placed on wet ice and transported to Phoslab Environmental Services, Inc. in Lakeland, Florida for laboratory analysis for VOCs by EPA Method 8260 (and tentatively identified compounds), for PAHs by EPA Method 8270 PAH SIM (with library search), for TRPH by the FLRPO method, PCBs by EPA Method 8082, for the metals arsenic, cadmium, chromium, and lead by EPA Method 6010B, and TCLP for the metals arsenic, cadmium, chromium, and lead by SW-846 Method 1311 / EPA Method 6010B. Laboratory analyses of the confirmation soil samples indicated only arsenic at a concentration of 9.73 mg/kg, in excess of the residential direct exposure Soil Cleanup Target Level of 2.1 mg/kg, as established in Table 2, 62-777, FAC in soil sample SS-W, obtained from the western side wall of the excavation at a depth of 3.5 to 4 feet bls. Although the concentration of arsenic in the soil at sample location SS-W along the western sidewall of the excavation exceeded the residential direct exposure SCTL, the concentration does not exceed the commercial direct exposure SCTL. This area is currently being redeveloped into a hardscaped public area that will reportedly be covered with concrete pavers. Due to the fact that this soil will be covered with more than 3 feet of soil, and capped with concrete pavers, UES does not recommend further assessment of the soils at that location.

Following the backfilling of the excavation, UES attempted to determine the depth to the groundwater table onsite using a GeoProbe® Model 6620DT to advance a groundwater sampler probe. The Geoprobe® sampler was advanced to a depth of 21 feet bls at the center of the tank excavation and then retracted to reveal a 4-foot stainless steel screen section. The probe remained in the ground at that depth for more than 15 minutes without encountering groundwater.

Based on the results of the tank closure assessment performed for the five (5) Underground Storage Tanks (USTs) of varying capacities which reportedly formerly contained heating oil and used oil, UES does not recommend further assessment of the soil or groundwater at this site.

TABLE 1

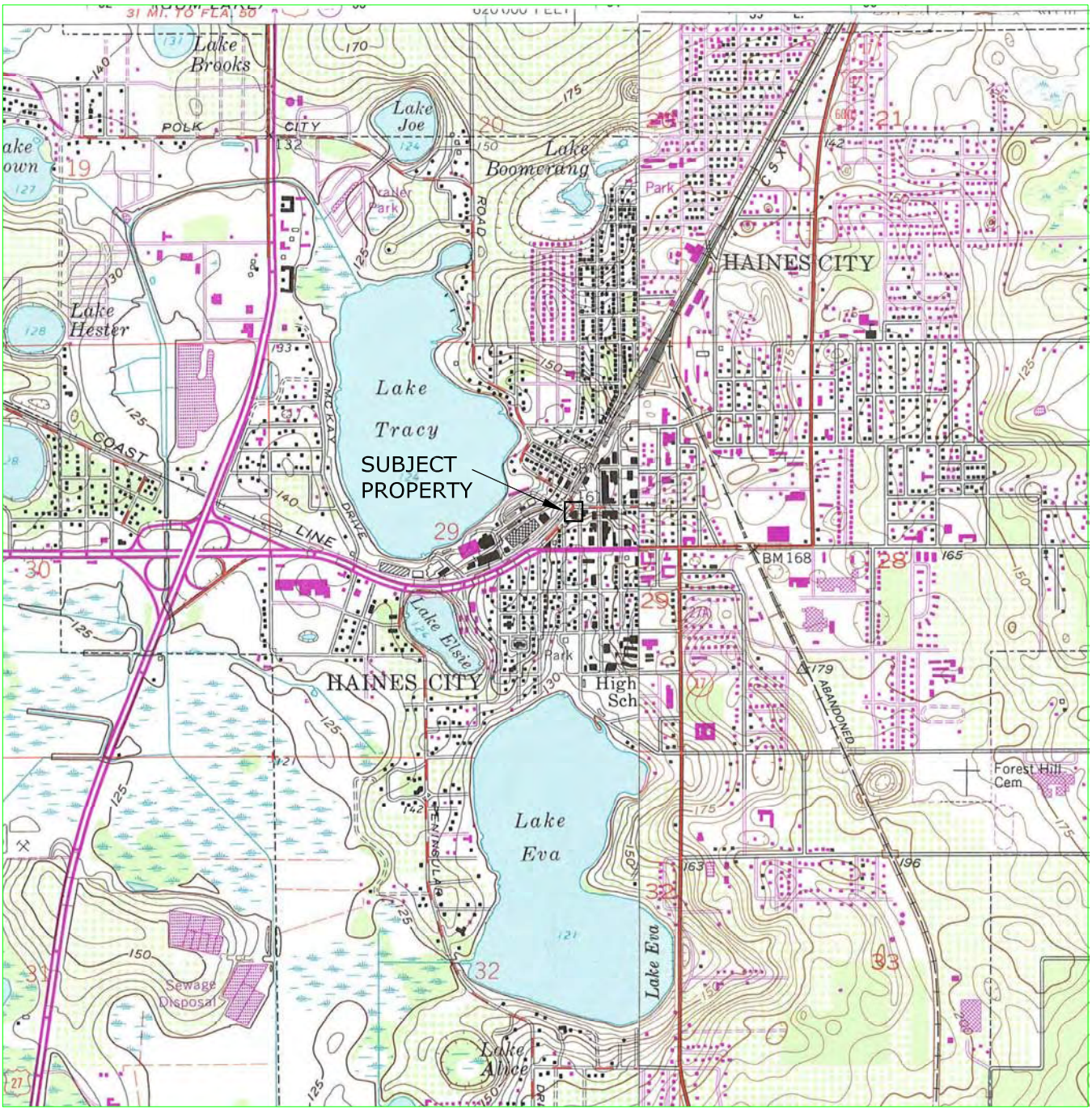
Soil Analytical Summary

Sample ID	Residential Direct Exposure (mg/kg)	Commercial / Industrial Direct Exposure (mg/kg)	Leachability Based on Groundwater Criteria (mg/kg)	SS-N	SS-E	SS-S	SS-W	SS-B
Location				**North Wall @ 3.5' bls**	**East Wall @ 3.5' bls**	**South Wall @ 3.5' bls**	**West Wall @ 3.5' bls**	**Bottom of Excavation @ 5' bls**
TRPH	460	2,700	340	<10	<10	<10	<10	<10
Arsenic	2.1	12	***	0.93	<0.19	0.33	**9.73**	0.80
Cadmium	82	1,700	7.5	<0.07	0.081 I	<0.07	<0.07	<0.70
Chromium	210	470	38	2.98	2.47	2.07	2.38	2.39
Lead	400	1,400	***	2.81	3.18	1.75	1.23	2.32
Acetone	11,000	68,000	25	0.0546 V	<0.00636	0.0410 V	<0.00606	0.0475 V
Di-N-Butyl Phthalate	@	@	@	<0.0358	0.1220	0.0775 I	0.1050 I	0.1250
Methyl Ethyl Ketone	16,000	110,000	17	<0.00080	0.0033 V	<0.00077	<0.00077	0.0013 V, I
Methyl tert butyl ether	4,400	24,000	0.09	<0.00074	0.0029 V	<0.00071	<0.00071	<0.00089
Naphthalene (by 8260)	55	300	1.2	<0.00035	<0.00036	0.00296	<0.00034	<0.00043
Naphthalene (by 8270)	55	300	1.2	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011

Notes: "I" indicates the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

"@" indicates there is no Soil Cleanup Target Level specified for this compound.

"***" indicates leachability values may be derived using the SPLP Test to calculate the site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.



BASE MAP: "WINTER HAVEN AND DUNDEE, FLA.", U.S.G.S. QUADRANGLE MAPS

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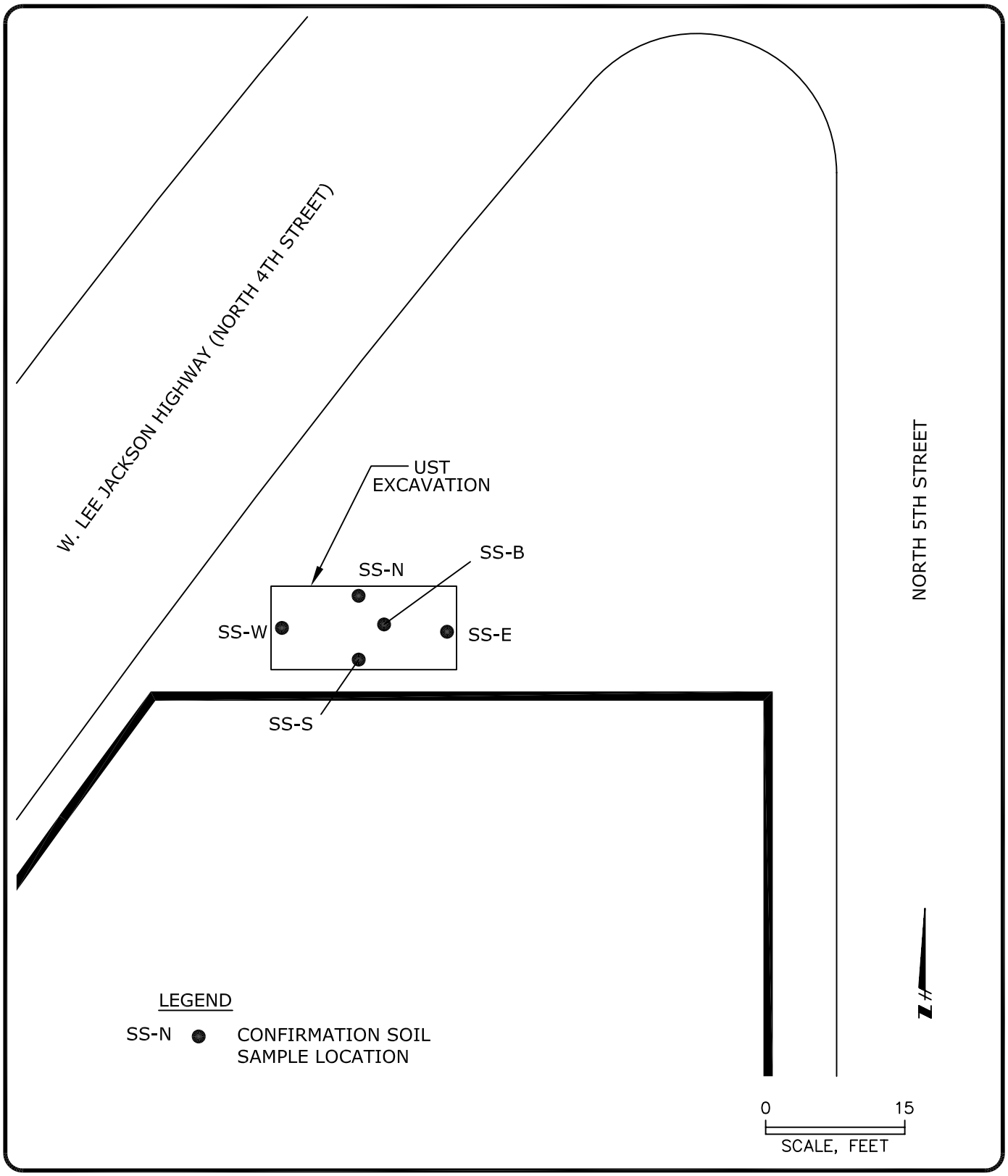
TANK CLOSURE REPORT - FAC ID 539811431
SWC OF 5TH STREET AND JONES AVENUE
HAINES CITY, POLK COUNTY, FLORIDA

SITE LOCATION MAP

DRAWN BY: DJT	DATE: 06/03/09	CHECKED BY:	DATE:		
SCALE: AS SHOWN	PROJECT NO: 0140.09000XX.0000	REPORT NO:	PAGE NO: A–1		



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ENGINEERING SCIENCES

TANK CLOSURE REPORT - FAC ID 539811431
SWC OF 5TH STREET AND JONES AVENUE
HAINES CITY, POLK COUNTY, FLORIDA

SAMPLE LOCATION PLAN

DRAWN BY:	DJT	DATE:	06/03/09	CHECKED BY:		DATE:	
SCALE:	AS SHOWN	PROJECT NO: 0140.09000XX.0000		REPORT NO:		PAGE NO:	A-2

Cleanup / Site Assessment Related "NREQ"

FLORIDA DEPARTMENT OF HEALTH

Charlie Crist
Governor

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Memorandum

TO: Lewis Cornman, Eligibility Coordinator, FDEP-BPSS

THROUGH: Laura Mills, Environmental Specialist II, FDEP-BPSS

THROUGH: Corey S. Franklin, Environmental Manager, PCHD

THROUGH: George W. Ellsworth, Professional Geologist, PCHD

FROM: Tomika A. Cole, Site Manager/ES II, PCHD

RMC QA'ed
Initials____ Date____

DATE: May 11, 2010

SUBJECT: Request for No Cleanup Required (NREQ)
HAINES CITY ROW- JONES AVE
CORNER OF JONES AVE E & 5TH ST N
Haines City, Polk County
FDEP Facility ID #5398111431
Discharge Date: 5/12/2009

The Polk County Health Department Petroleum Cleanup Program (PCHD) is recommending that the discharge dated May 12, 2009 be designated as No Cleanup Required (NREQ) status in the Storage Tank Contamination Monitoring (STCM) database. All documentation supporting the PCHD's recommendation has been attached.

May 7, 2009- Andrew Bell, Inc., removed five underground storage tanks (UST) from the facility. The USTs reportedly contained heating and used oil. The tank capacities were: one 500 gallon, one 300 gallon and three 150 gallons. During the removal of the 300 gallon UST, a backhoe inadvertently punctured it causing petroleum impacted fluid to spill into the excavation. Approximately six to eight cubic yards of soil was impacted. This soil was excavated. Five confirmatory soil samples were collected (one from each side wall and at the bottom of the excavation at a depth of 3.5 to 4 feet below land surface (bls)). The samples were analyzed in accordance with Table C of Chapter 62-770, Florida Administrative Code. Laboratory analyses indicated an exceedance in arsenic only (9.73 mg/kg) from soil sample SS-W (collected from the western wall). Because the depth to groundwater exceeded 20 feet, no groundwater sample was collected during these closure activities. See the Underground Storage Tank Removal Report dated June 6, 2009.

March 25, 2010- According to the Additional Soil and Groundwater Sampling Report dated April 22, 2010, Universal Engineering Sciences, Inc., (UES) mobilized to the site to collect one soil and groundwater sample. The samples were analyzed for arsenic only and did not exceed residential cleanup target levels. In addition, petroleum compounds that typically accompanying used oil and diesel releases

likely that of background levels (note: a railroad is located about 40 feet west from the site) or possibly from a previous land use. The PCHD concurs with UES's conclusion.

Hence, the PCHD recommends that the May 12, 2009 discharge should be given a NREQ status in STCM. Supporting documents are attached.

UST Removal Rpt dated 6/6/09
Submitted by Universal Engineering Sciences

TABLE 1

Soil Analytical Summary

Sample ID / Location	Residential Direct Exposure (mg/kg)	Commercial / Industrial Direct Exposure (mg/kg)	Leachability Based on Groundwater Criteria (mg/kg)	SS-N North Wall @ 3.5' bls	SS-E East Wall @ 3.5' bls	SS-S South Wall @ 3.5' bls	SS-W West Wall @ 3.5' bls	SS-B Bottom of Excavation @ 5' bls
TRPH	460	2,700	340	<10	<10	<10	<10	<10
Arsenic	2.1	12	***	0.93	<0.19	0.33	**9.73**	0.80
Cadmium	82	1,700	7.5	<0.07	0.081 I	<0.07	<0.07	<0.70
Chromium	210	470	38	2.98	2.47	2.07	2.38	2.39
Lead	400	1,400	***	2.81	3.18	1.75	1.23	2.32
Acetone	11,000	68,000	25	0.0546 V	<0.00636	0.0410 V	<0.00606	0.0475 V
Di-N-Butyl Phthalate	@	@	@	<0.0358	0.1220	0.0775 I	0.1050 I	0.1250
Methyl Ethyl Ketone	16,000	110,000	17	<0.00080	0.0033 V	<0.00077	<0.00077	0.0013 V, I
Methyl tert butyl ether	4,400	24,000	0.09	<0.00074	0.0029 V	<0.00071	<0.00071	<0.00089
Naphthalene (by 8260)	55	300	1.2	<0.00035	<0.00036	0.00296	<0.00034	<0.00043
Naphthalene (by 8270)	55	300	1.2	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011

Notes: "I" indicates the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

"@" indicates there is no Soil Cleanup Target Level specified for this compound.

"***" indicates leachability values may be derived using the SPLP Test to calculate the site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:		050709-19			050709-20				
Sample Description/Matrix:		SS-N	SO		SS-E	SO			
Sample Date:		05/07/09	12:20		05/07/09	12:23			
Preparation Date/Method:		05/11/09	5035		05/11/09	5035			
Analysis Date/Time:		05/12/09	13:18		05/12/09	13:24			
Method:		EPA 6010B			EPA 6010B				
Batch No.		051209A-S210			051209A-S210				
Initials:		MS			MS				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
Arsenic (As)	7440-38-2	**0.93**	mg/Kg	1x	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium Cd)	7440-43-9	0.07 U	mg/Kg	1x	**0.081** I	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**2.98**	mg/Kg	1x	**2.47**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**2.81**	mg/Kg	1x	**3.18**	mg/Kg	1x	0.16	0.25

Sample ID:		050709-21			050709-22				
Sample Description/Matrix:		SS-S	SO		SS-W	SO			
Sample Date:		05/07/09	12:26		05/07/09	12:29			
Preparation Date/Method:		05/11/09	5035		05/11/09	5035			
Analysis Date/Time:		05/12/09	13:29		05/12/09	13:35			
Method:		EPA 6010B			EPA 6010B				
Batch No.		051209A-S210			051209A-S210				
Initials:		MS			MS				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
Arsenic (As)	7440-38-2	**0.33**	mg/Kg	1x	**9.73**	mg/Kg	1x	0.19	0.25
Cadmium Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**2.07**	mg/Kg	1x	**2.38**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**1.75**	mg/Kg	1x	**1.23**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:	050709-23	
Sample Description/Matrix:	SS-B	SO
Sample Date:	05/07/09	12:32
Preparation Date/Method:	05/11/09	5035
Analysis Date/Time:	05/12/09	13:35
Method:	EPA 6010B	
Batch No.	051209A-S210	
Initials:	MS	

Analytes:	Cas No.	Results	Units	Dilution	MDL	PQL
Arsenic (As)	7440-38-2	**0.80**	mg/Kg	1x	0.19	0.25
Cadmium Cd)	7440-43-9	0.07 *U*	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**2.39**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**2.32**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
TCLP Metals

Sample ID:	050709-23	
Sample Description/Matrix:	SS-B	SO
Sample Date:	05/07/09	12:32
Date Received:	05/07/09	14:12
Preparation Date/Method:	05/11/09	1311
Analysis Date/Time:	05/12/09	11:46
Method:	1311 / EPA 6010B	
Batch:	051209A-L426	
Dilution:	10x	
Initials:	MS	

Analytes:	Cas No.	Results	Units	MDL	PQL		Reg. Limits	Units
Arsenic (As)	7440-38-2	0.03 U	mg/L	0.03	0.10	*under limit*	5.0	mg/L
Cadmium (Cd)	7440-43-9	0.02 U	mg/L	0.02	0.10	*under limit*	1.0	mg/L
Chromium (Cr)	7440-47-3	0.02 U	mg/L	0.02	0.10	*under limit*	5.0	mg/L
Lead (Pb)	7439-92-1	0.03 U	mg/L	0.03	0.10	*under limit*	5.0	mg/L

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
FL-PRO

Sample ID:		050709-19			050709-20				
Sample Description/Matrix:		SS-N	SO		SS-E	SO			
Sample Date/Time:		05/07/09	12:20		05/07/09	12:23			
Preparation Date/Method:		05/07/09	3550		05/07/09	3550			
Analysis Date/Time:		05/08/09	5:28		05/08/09	6:33			
Method:		FL-Pro			FL-Pro				
Batch:		050609			050609				
Initials:		XH			XH				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
TRPH	no cas	10 U	mg/Kg	1x	10 U	mg/Kg	1x	10	40
Surrogate:		**% Recovery**	**Limits**		**% Recovery**	**Limits**			
o-Terphenyl		99	62-109		99	62-109			
nonatriacontane		115	60-118		115	60-118			

Sample ID:		050709-21			050709-22				
Sample Description/Matrix:		SS-S	SO		SS-W	SO			
Sample Date/Time:		05/07/09	12:26		05/07/09	12:29			
Preparation Date/Method:		05/07/09	3550		05/07/09	3550			
Analysis Date/Time:		05/08/09	7:39		05/08/09	8:44			
Method:		FL-Pro			FL-Pro				
Batch:		050609			050609				
Initials:		XH			XH				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
TRPH	no cas	10 U	mg/Kg	1x	10 U	mg/Kg	1x	10	40
Surrogate:		**% Recovery**	**Limits**		**% Recovery**	**Limits**			
o-Terphenyl		103	62-109		103	62-109			
nonatriacontane		113	60-118		104	60-118			

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
FL-PRO

Sample ID:	050709-23	
Sample Description/Matrix:	SS-B	SO
Sample Date/Time:	05/07/09	12:32
Preparation Date/Method:	05/07/09	3550
Analysis Date/Time:	05/08/09	9:50
Method:	FL-Pro	
Batch:	050609	
Initials:	XH	

Analytes:	Cas No.	Results	Units	Dilution	MDL	PQL
TRPH	no cas	10 U	mg/Kg	1x	10	40

Surrogate:	% Recovery	Limits
o-Terphenyl	106	62-109
nonatriacontane	111	60-118

Excerpt From
Additional Soil & Groundwater Sampling
Rpt dated 4/22/10
prepared by Universal Engineering Sciences

www.encolabs.com

ANALYTICAL RESULTS

Description: SS#1
Matrix: Soil
Project: Haines City

Lab Sample ID: A001572-01
Sampled: 03/25/10 08:25
Sampled By: John Munsch

Received: 03/25/10 10:59
Work Order: A001572
% Solids: 94.45

Metals by EPA 6000/7000 Series Methods

^ - *ENCO Orlando certified analyte [NELAC E83162]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	0.540	U	mg/kg dry	1	0.540	1.06	0C26023	EPA 6020A	03/30/10 18:16	JAY	

www.encolabs.com

Description: GP1
Matrix: Ground Water
Project: Haines City

Lab Sample ID: A001572-02
Sampled: 03/25/10 09:35
Sampled By: John Munsch

Received: 03/25/10 10:59
Work Order: A001572

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	4.00	U	ug/L	1	4.00	10.0	0C26025	EPA 6020A	03/31/10 17:36	JAY	

www.encolabs.com

Description: GP1
Matrix: Ground Water
Project: Haines City

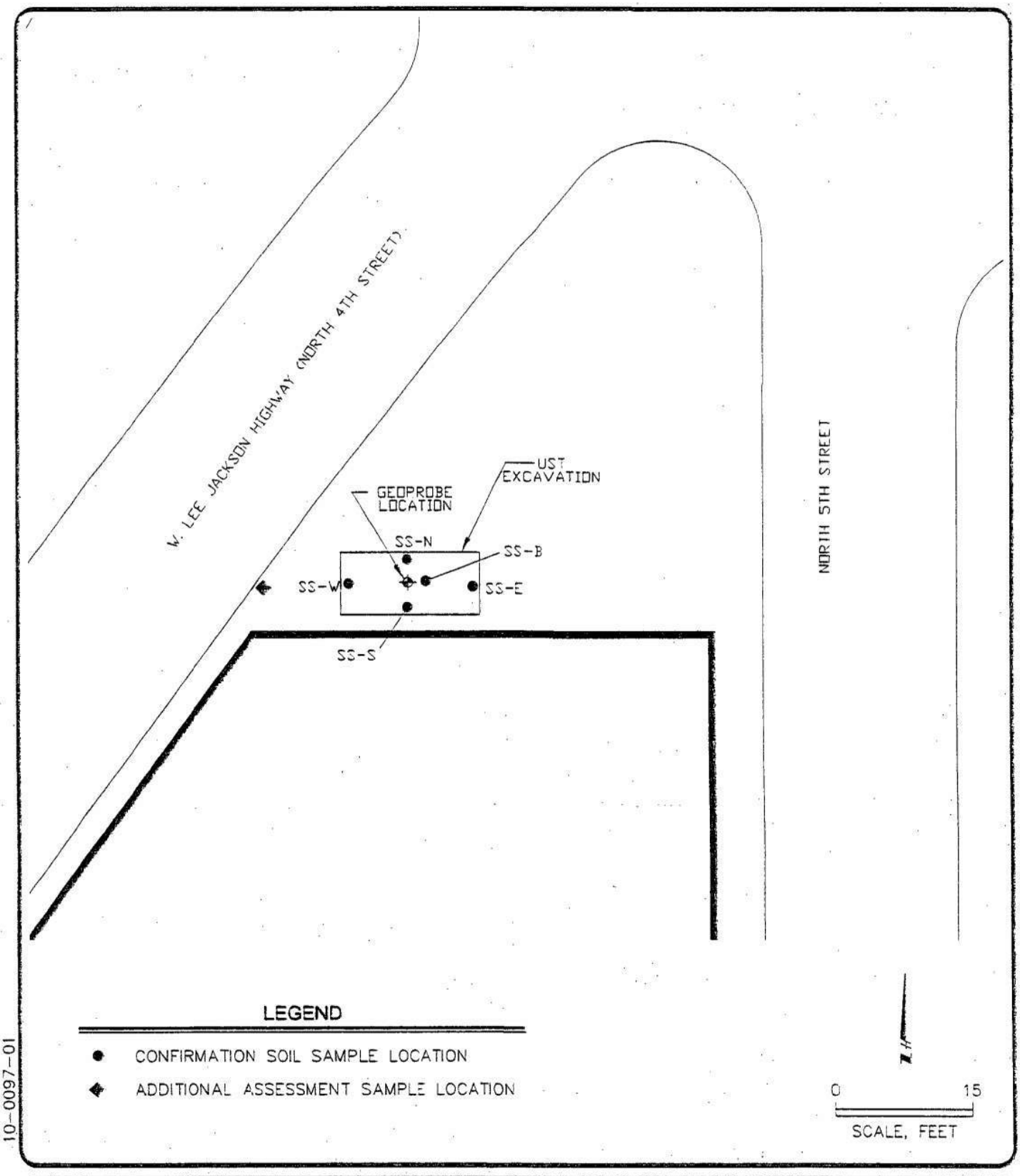
Lab Sample ID: A001572-02
Sampled: 03/25/10 09:35
Sampled By: John Munsch

Received: 03/25/10 10:59
Work Order: A001572

Metals (Dissolved) by EPA 6000/7000 Series Methods

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	4.00	U	ug/L	1	4.00	10.0	0C26025	EPA 6020A	03/31/10 17:29	JAY	



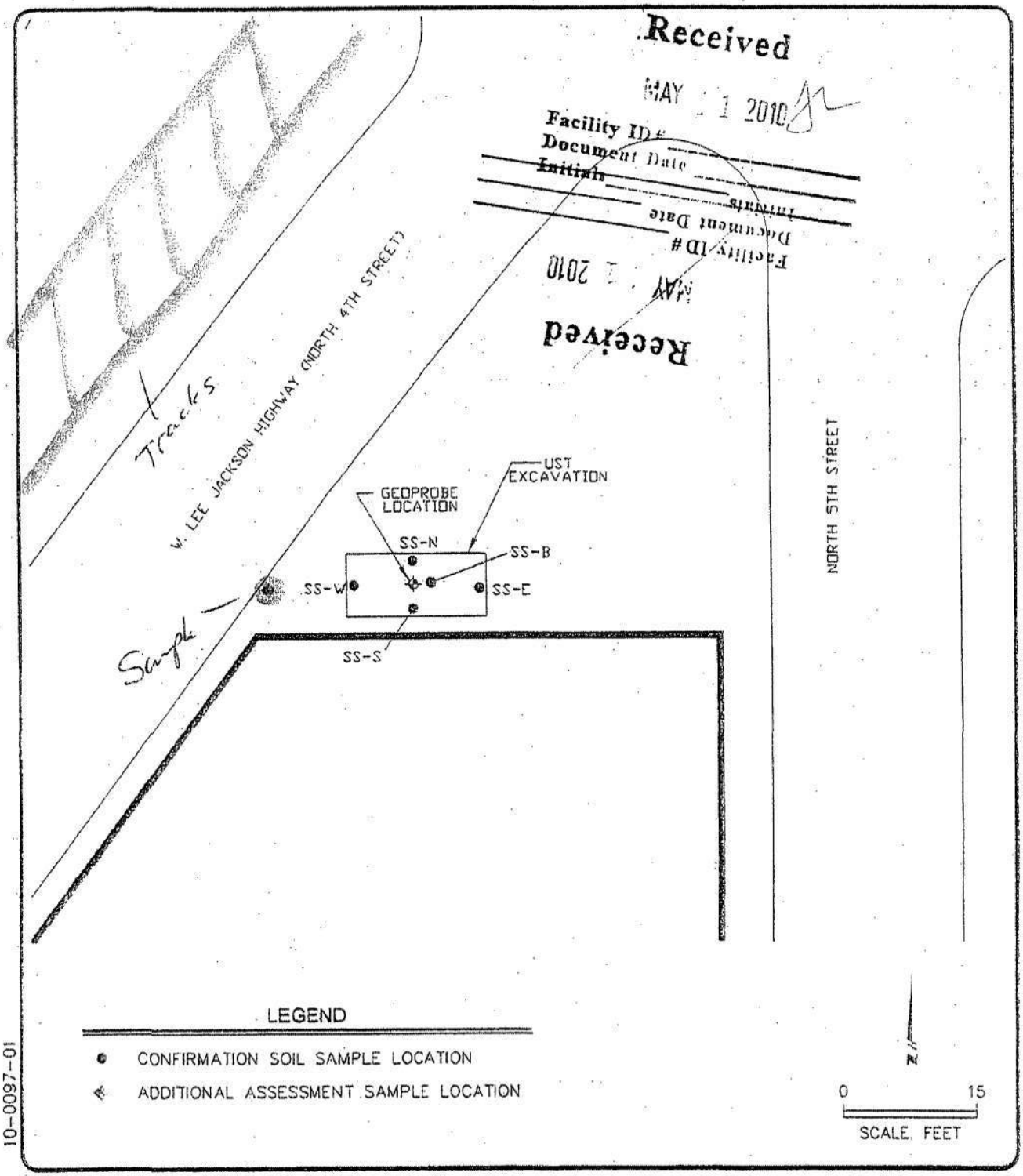
10-0097-01

UNIVERSAL
ENGINEERING SCIENCES

ADDITIONAL ASSESSMENT
FAC ID 539811431
S.W.C. OF 5TH STREET AND JONES AVENUE
HAINES CITY, POLK COUNTY, FLORIDA

SAMPLE LOCATION PLAN

DRAWN BY:	G.B.	DATE:	4/16/10	CHECKED BY:		DATE:	4/22/10
SCALE:	AS SHOWN	PROJECT NO:	0140.1000035.0000	REPORT NO:	833387	PAGE NO:	A-2



10-0097-01

UNIVERSAL
ENGINEERING SCIENCES

ADDITIONAL ASSESSMENT
FAC ID 539811431
S.W.C. OF 5TH STREET AND JONES AVENUE
HAINES CITY, POLK COUNTY, FLORIDA

SAMPLE LOCATION PLAN

DRAWN BY:	G.B.	DATE:	4/16/10	CHECKED BY:		DATE:	4/22/10
SCALE:	AS SHOWN	PROJECT NO:	0140.1000035.0000	REPORT NO:	833387	PAGE NO:	A-2

Cole, Tomika A

From: Mike Geden [mgeden@universalengineering.com]
Sent: Tuesday, May 11, 2010 4:14 PM
To: Cole, Tomika A
Cc: MStripling@ci.haines-city.fl.us
Subject: RE: 53/9811431; Field Notice Requirement
Attachments: Appraiser Map.jpg; Appraiser Report.pdf; Site Map.pdf

Thanks for the quick review. I've been in the field for a bit so I apologize for my delayed response.

We don't really have a site history. The current building was constructed in 1910 according to the property appraiser (attached). It is currently a TV repair store and judging by the layout of the buildings it probably has been commercial since construction. Since the site is located within historic downtown Haines City there is a possibility it could have been a historic hardware or feed store. That would account for the multiple small tanks which did not have the capacity to support a fuel station.

The railroad is directly across the street and I marked in on the attached site map. On the appraiser map Lee Jackson Highway is also referred to as Railroad Ave. Again, since its historic downtown, including the old rail depot up the road, I would guess the usage as a railroad pre-dates the 1910 construction of the building.

As to the sample analysis, the e-mails we (you, I, Corey & the City) exchanged in February said we were only focused on the arsenic issue as no petroleum products were an issue with the original closure.

Thanks

Michael J. Geden, P.G.
Universal Engineering Sciences, Inc.
Senior Project Manager

(407) 423-0504 (p)
(407) 423-3106 (f)

From: Tomika_Cole@doh.state.fl.us [mailto:Tomika_Cole@doh.state.fl.us]
Sent: Tuesday, May 04, 2010 11:05 AM
To: Mike Geden
Cc: MStripling@ci.haines-city.fl.us
Subject: RE: 53/9811431; Field Notice Requirement

Hello,

I need a site history (not just the background of the UST removal/tank closure).
What was formerly on this site? What was the former land use(s)?
How far is the railroad track from this site?

Please forward this information to me no later than May 18, 2010. You can e-mail it.

There are several issues with the Additional Soil and Groundwater Sampling Report dated April 22, 2010.

The March 25, 2010 groundwater and soil samples should have been analyzed in accordance with all of Table C- Chapter 62-770, FAC.

Because this was the first groundwater sample collected for this discharge, this sample should have been analyzed for BTEX/MTBE, PAHs, RCRA 4, TRPHs, etc (all of Table C).

In review of the groundwater sampling log, at least (3) consecutive measurements of temp, pH, conductivity, DO and turbidity should have been recorded. However, the Department notes that the depth to water was below 30 feet and the peristaltic pump was more than likely struggling to draw the water.

Concerning the soil sample, if action levels are exceeded or if there are quality control issues you can analyze for a **specific contaminant** (in this case arsenic) within 30 days of receiving the laboratory results. But because the last soil sampling event occurred in May 2009, the full suite of Table C should have been ran.

Because this report does not meet the requirements of Chapter 62-770.600(8), FAC., I will prepare a NREQ (no cleanup required) memo. If my Supervisor (Corey Franklin) **and/or** the FDEP rejects the memo, a full site assessment will have to be performed and a Site Assessment Report will have to be submitted to the Department.

If this site was used by the rail road industry (or is relatively close to a railroad track) or another industry know to use arsenic, the FDEP may concur that the exceedance is from a previous industry use or background level. I need this information to include in the NREQ memo.

Thanks,

Tomika Cole

Site Manager/ ESII
Polk County Health Department
Petroleum Cleanup Program
200 N. Kentucky Ave, Suite 404
Lakeland, FL 33801
Tomika_Cole@doh.state.fl.us.
M-Thr 7:45 am - 5:15 pm/ Friday 7:45 am - 11:45 am
Office: (863) 413-3325 ext 18115
Fax: (863) 413-3334

From: Mike Geden [mailto:mgeden@universalengineering.com]
Sent: Friday, April 23, 2010 1:38 PM
To: Cole, Tomika A
Subject: RE: 53/9811431; Field Notice Requirement

Two hard copies are in the mail

Michael J. Geden, P.G.
Universal Engineering Sciences, Inc.
Senior Project Manager

(407) 423-0504 (p)
(407) 423-3106 (f)

From: Tomika_Cole@doh.state.fl.us [mailto:Tomika_Cole@doh.state.fl.us]
Sent: Thursday, April 15, 2010 3:15 PM
To: Mike Geden
Subject: RE: 53/9811431; Field Notice Requirement
Importance: High

Hello Mike,

Map ID 40: Haines City – City Hall

M. P. Brown & Associates, Inc.
Environmental Consulting & Services
Geologists, Engineers & Drillers

17830 N.E. 5 Avenue
Miami, Florida 33162
Phone (305) 770-1105
FAX (305) 651-5455

October 18, 1995

Ms. Leslie Pedigo
Florida Department of
Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619

RE: CONTAMINATION ASSESSMENT ADDENDUM II; HAINES CITY POLICE DEPARTMENT, 502 HINSON AVENUE, HAINES CITY, POLK COUNTY, FLORIDA; DEP FACILITY ID #538624058

Dear Ms. Pedigo:

At your request, please find enclosed another copy of the October 12, 1995 Contamination Assessment Addendum II for the Haines City Police Department.

Should you have any questions, please do not hesitate to call.

Sincerely,
M.P. BROWN & ASSOCIATES, INC.

Bonnie J. Novak, P.G.
Sr. Environmental Geologist

BJN/tpb

cc: Ann Toney; City of Haines City

672.c.tpb.pedigo.lt5

M. P. Brown & Associates, Inc.
Environmental Consulting & Services
Geologists, Engineers & Drillers

17830 N.E. 5 Avenue
Miami, Florida 33162
Phone (305) 770-1105
FAX (305) 651-5455

October 12, 1995

Ms. Leslie Pedigo
Florida Department of
Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619

RE: CONTAMINATION ASSESSMENT ADDENDUM II; HAINES CITY POLICE DEPARTMENT, 502 HINSON AVENUE, HAINES CITY, POLK COUNTY, FLORIDA; DEP FACILITY ID #538624058

Dear Ms. Pedigo:

Pursuant to your August 6, 1995 correspondence concerning the above reference site the following work tasks were performed accordingly.

WORK PERFORMED

Water Level Measurement & Groundwater Flow Direction

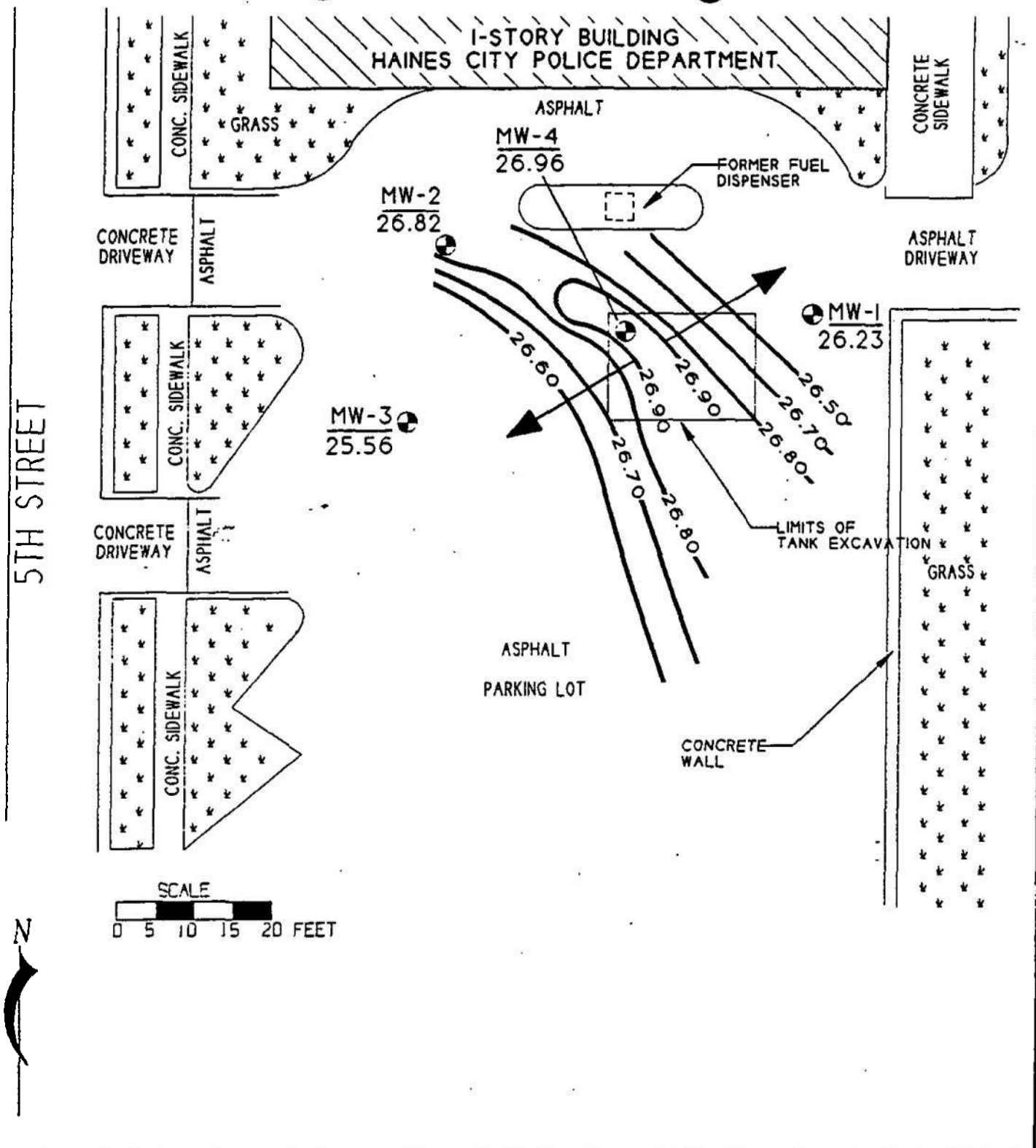
On October 2, 1995 water level measurements were collected from monitor wells MW-1 through MW-4 located at the site. Groundwater level measurements indicate groundwater high at the former excavated area. Groundwater flows outward towards the northeast, north-northwest, and the south-southwest. Table 1 summarizes the water level data collected. Figure 1 shows the groundwater flow direction.

TABLE 1
WATER TABLE ELEVATION MEASUREMENTS
COLLECTED MAY 18, 1994 & OCTOBER 2, 1995
HAINES CITY POLICE DEPARTMENT
502 HINSON AVENUE, HAINES CITY, FLORIDA

WELL #	REFERENCE ELEVATION (ft datum)	DEPTH TO WATER (ft BTC)		WATER TABLE ELEVATION (ft datum)	
		5-18-94	10-02-95	5-18-94	10-02-95
MW-1	48.95	28.09	22.72	20.86	26.23
MW-2	48.77	28.90	21.95	19.87	26.82
MW-3	47.31	26.44	21.75	20.87	25.56
MW-4	49.26	28.36	22.30	20.90	26.96

Note:

ft datum = elevation based on a fixed datum of 50.0 feet.
ft BTC = feet below top of casing



REVISION: 0	DATE: 10-3-95	APPROVED BY: BONNIE J. NOVAK

M.P. BROWN & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTING & SERVICES
GEOLOGISTS, ENGINEERS & DRILLERS

DRAWN BY: G. REQUENA	FILE NAME: MWLOC.GCD	PROJ#: 672

SITE: HAINES CITY POLICE DEPARTMENT
502 HINSON AVENUE, HAINES CITY, POLK COUNTY, FL.

MONITOR WELL LOCATION MAP

FIGURE 1

EXPLANATION

MW-1	MONITOR WELL LOCATION AND NUMBER
26.23	WATER LEVEL MEASUREMENT IN FEET
26.70	CONTOUR OF EQUAL WATER TABLE MEASUREMENT
→	DIRECTION OF GROUNDWATER FLOW

Groundwater Sampling

M.P. Brown & Associates, Inc. collected groundwater samples from monitor well MW-4 on September 29, 1995. Prior to sampling, a minimum of five (5) well volumes were purged using a Teflon bailer. Groundwater samples were collected using a Teflon bailer, bottled and shipped to Precision Environmental Laboratory in Miami, Florida, in accordance with Comprehensive Quality Assurance Project Plan (CompQAPP) procedures, M.P. Brown & Associates, Inc., 1995. Groundwater samples were analyzed for purgeable aromatics by EPA Method 8021. Attachment A contains the sample collection field forms and the chain of custody form.

Groundwater Chemical Analysis

Laboratory analytical results of the September 29, 1995 groundwater samples collected from monitor well MW-4 showed no detectable purgeable aromatics. Attachment B contains a copy of the laboratory analytical results.

RECOMMENDATION

Based on the water levels collected and the results of the groundwater sampling, M.P. Brown & Associates, Inc. is recommending a "No Further Action" (NFA) on the subject site.

Should you have any questions, please do not hesitate to call.

Sincerely,
M.P. BROWN & ASSOCIATES, INC.

Bonnie J. Novak, P.G.
Sr. Environmental Geologist

BJN/tpb

cc: Ann Toney; City of Haines City

Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

DEC 21 1995
BUREAU OF WASTE CLEANUP
DEC 27 1995
TECHNICAL SECTION

Ms. Ann Toney
City Manager
Post Office Box 1502
Haines City, FL 33845

RE: Haines City Police Department
502 Hinson Avenue
Haines City, Polk County, Florida
Facility ID #538624058

Dear Ms. Toney:

Tom Stodd of the Bureau of Waste Cleanup has reviewed the Contamination Assessment Report (CAR) Addendum and No Further Action Proposal (NFAP) dated October 18, 1995 (received October 23, 1995) prepared and submitted by M.P. Brown & Associates, Inc. for this site. Documentation submitted with the NFAP confirms that criteria set forth in Section 62-770.600(5), Florida Administrative Code (F.A.C.), have been met. The NFAP is hereby incorporated by reference in this Order. Therefore, you are released from any further obligation to conduct site rehabilitation at the site, except as set forth below.

If a subsequent discharge of petroleum or petroleum product occurs at the site, the Department may require site rehabilitation in order to reduce contaminant concentrations to the levels approved through review of the NFAP or otherwise allowed by Chapter 62-770, F.A.C.

Additionally, you are required to properly abandon all monitoring wells except compliance wells required by Chapter 62-761, F.A.C., for release detection. The wells must be abandoned in accordance with the requirements of Rule 62-532.500(4), F.A.C.

Persons whose substantial interests are affected by this Site Rehabilitation Completion Order have a right to challenge the Department's decision. Such a challenge may include filing a petition for an administrative determination (hearing) as described in the following paragraphs. However, pursuant to Chapter 62-103, F.A.C., you may request an extension of time to file the Petition. All requests for extensions of time or petitions for administrative determinations must be filed directly with

the Department's Office of General Counsel at the address given below within twenty-one (21) days of receipt of this notice (do not send them to the Bureau of Waste Cleanup).

Notwithstanding the above, a person whose substantial interests are affected by this Site Rehabilitation Completion Order may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within twenty-one (21) days of receipt of this notice. Failure to file a petition within this time period shall constitute a waiver of any right such persons have to request an administrative determination (hearing) pursuant to Section 120.57. F.S.

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the Department file number (DEP facility number), and the name and address of the facility;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by each petitioner, if any;

(e) A statement of facts which each petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes each petitioner contends required reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action.

This Site Rehabilitation Completion Order is final and effective on the date of receipt of this Order unless a petition (or time extension) is filed in accordance with the preceding paragraph. Upon the timely filing of the petition, this Order will not be effective until further order of the Department.

When the Order is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate

Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty (30) days from the date the Final Order is filed with the clerk of the Department.

Please send a copy of the approved CAR document(s) to Mr. Ken Weber of the Southwest Florida Water Management District within thirty (30) days of receiving this Site Rehabilitation Completion Order.

The DEP Facility Number for this site is 538624058. Please use this identification on all future correspondence with the Department.

Any questions you may have on the technical aspects of this Site Rehabilitation Completion Order should be directed to Leslie Pedigo at (813) 744-6100, ext. 458. Contact with the above named person does not constitute a petition for administrative determination.

Sincerely,

William Kutash
Program Administrator
Division of Waste Management
Southwest District

WK/lp

cc: Bonnie Novak, M.P. Brown & Associates, Inc.
Charles Callaham, Polk County PHU
Tom Stodd, FDEP-BWC
Leslie Pedigo, FDEP-SWD

Map ID 41: Frontier Florida LLC – Haines City Co.

3054

Florida Department of Environmental Regulation
Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

DER Form # 17-761.900(5)
Form Title: Underground Storage Tank Installation & Removal Form for Certified Contractors
Effective Date: December 10, 1990
DER Application No. _____ (Filled in by DER)

Underground Storage Tank Installation and Removal Form For Certified Contractors

Pollutant Storage System Specialty Contractors as defined in Section 489.113, Florida Statutes (Certified contractors as defined in Section 17-761.200, Florida Administrative Code) shall use this form to certify that the installation, replacement or removal of the storage tank system(s) located at the address listed below was performed in accordance with Department Reference Standards.

RECEIVED
DEPARTMENT OF ENVIRONMENTAL PROTECTION
96 SEP 17 PM 2:48
BUREAU OF WASTE CLEANUP
DOCUMENT MANAGEMENT CENTER

General Facility Information

1. DER Facility Identification No.: 53/8628680
2. Facility Name: General Telephone Co of FL - Haines Telephone: (____)
3. Street Address (physical location): 520 Oak Trail
   Haines City, FL 33844-9537
4. Owner Name: General Telephone Co. of Florida Telephone: (813) 620-2530
5. Owner Address: 8800 Adamo Dr., MC: FLTP0712, Tampa, FL 33619
6. Number of Tanks: a. Installed at this time (1) 2,000 b. Removed at this time (1) 2,000
7. Tank(s) Manufactured by: Convault
8. Date Work Initiated: 8-28-96 9. Date Work Completed: 8-28-96

Underground Pollutant Tank Installation Checklist

Please certify the completion of the following installation requirements by placing an (X) in the appropriate box.

1. The tanks and piping are corrosion resistant and approved for use by State and Federal Laws. ☐
2. Excavation, backfill and compaction completed in accordance with NFPA (National Fire Protection Association) 30(87), API (American Petroleum Institute) 1615, PEI (Petroleum Equipment Institute) RP100-87 and the manufacturers' specifications. ☐
3. Tanks and piping pretested and installed in accordance with NFPA 30(87), API 1615, PEI/RP100(87) and the manufacturers' specifications. ☐
4. Steel tanks and piping are cathodically protected in accordance with NFPA 30(87), API 1632, UL (Underwriters Laboratory) 1746, STI (Steel Tank Institute) R892-89 and the manufacturer's specifications. ☐
5. Tanks and piping tested for tightness after installation in accordance with NFPA 30(87) and PEI/RP100-87. ☐
6. Monitoring well(s) or other leak detection devices installed and tested in accordance with Section 17-761.640, Florida Administrative Code (F.A.C.) ☐
7. Spill and overfill protection devices installed in accordance with Section 17-761.500, F.A.C. ☐
8. Secondary containment installed for tanks and piping as applicable in accordance with Section 17-761.500, F.A.C. ☐

Please Note: The numbers following the abbreviations (e.g. API 1615) are publication or specification numbers issued by these instulutions.

Underground Pollutant Tank Removal Checklist

1. Closure assessment performed in accordance with Section 17-761.800, F.A.C. By Mevers + Assoc ☒
2. Underground tank removed and disposed of as specified in API 1604 in acordance with Section 17-761.800, F.A.C. ☒

Northwest District 160 Governmental Center
Northeast District 7825 Baymeadows Way, Suite B 200
Central District 3319 Maguire Blvd Suite 232
Southwest District 4520 Oak Fair Blvd
South District 2269 Bay St.
Southeast District

DER Form # 17-761.900(5)
Form Title Underground Storage Tank Installation & Removal Form for Certified Contractors
Effective Date December 10, 1990
DER Application No _____ (Filled in by DER)

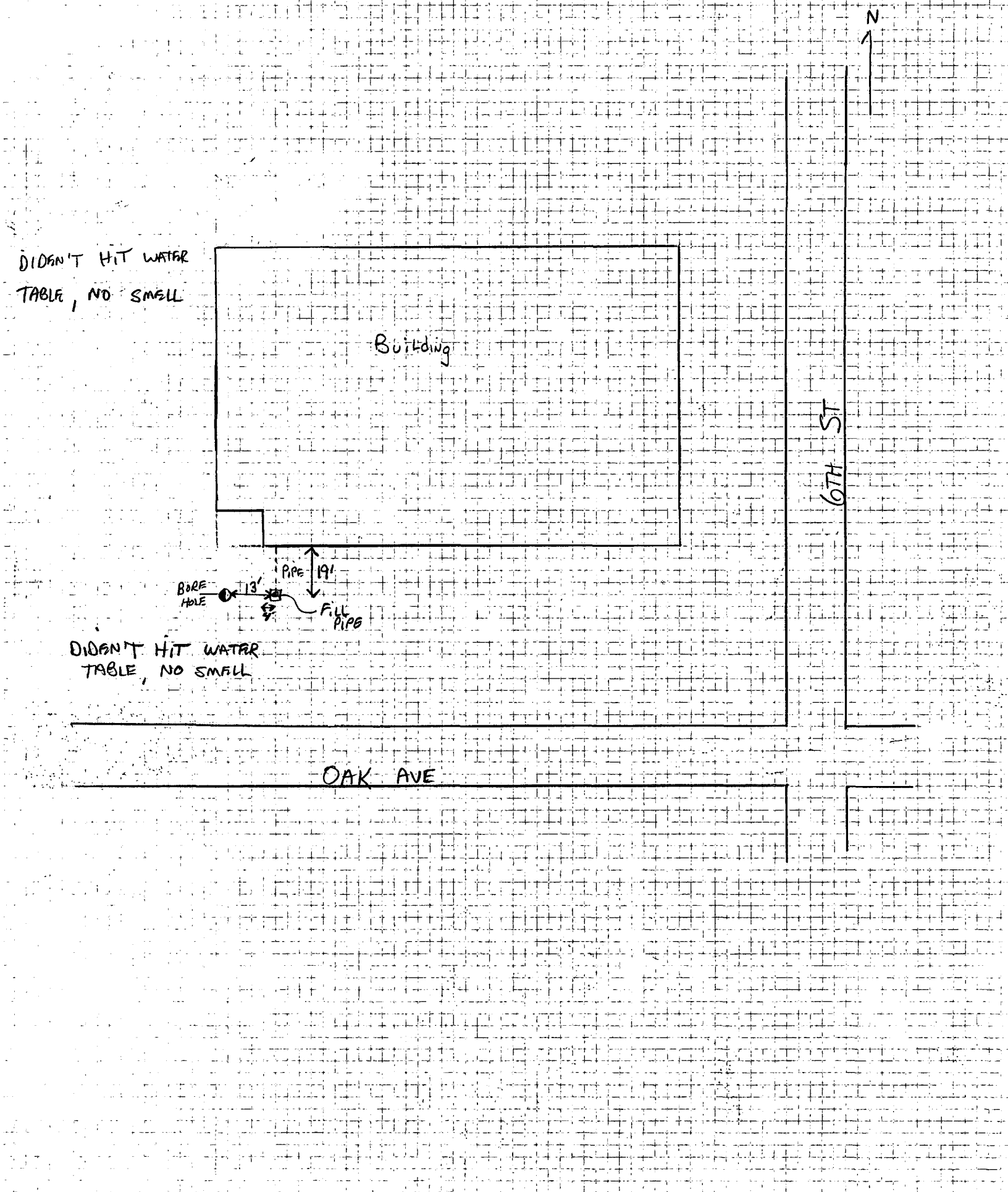
Certification

I hereby certify and attest that I am familiar with the facility that is registered with the Florida Department of Environmental Regulation; that to the best of my knowledge and belief, the tank installation, replacement or removal at this facility was conducted in accordance with Chapter 489 and Section 376.303, Florida Statutes and Chapter 17-761, Florida Administrative Code (and its adopted reference sources from publications and standards of the National Fire Protection Association (NFPA), the American Petroleum Institute (API), the National Association of Corrosion Engineers (NACE), American Society for Testing and Materials (ASTM); Petroleum Equipment Institute (PEI); Steel Tank Institute (STI); Underwriters Laboratory (UL); and the tank and integral piping manufacturers' specifications; and that the operations on the checklist were performed accordingly.

Arthur J. Clemens	PCC050649
(Type or Print) Certified Pollutant Tank Contractor Name Pollutant Storage System Specialty Contractor License Number (PSSSC)	PSSSC Number
A J Clemens	9/3/96
Certified Tank Contractor Signature	Date
Carl Mooney	
(Type or Print) Field Supervisor Name	Date
Carl Mooney	9/3/96
Field Supervisor Signature	Date

The owner or operator of the facility must register the tanks with the Department at least 10 days before the installation. The installer must submit this form no more than 30 days after the completion of installation to the Department of Environmental Regulation at the address printed at the top of page one.

(6) HAINES CITY
520 OAK AVE, HAINES CITY



Map ID 42: Haines City 7th Avenue Right-of-Way

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UST Closure Assessment
Former Service Station
N. 7th Street at Ingraham Avenue
Haines City, Polk County, Florida

UES Project No. 0140.1200048.0000
Report No. 959143v1
Date: April 2012

Prepared For:

City of Haines City Public Works/Utilities
300 N. 5th Street, P.O. Box 1507
Haines City, Florida 33845-1507

Prepared By:

Universal Engineering Sciences, Inc.
3532 Maggie Boulevard
Orlando, Florida 32811
(407)423-0504
www.universalengineering.com

Prepared By:

Ronald V. Sanzi
Contract Manager

Reviewed By:

Michael J. Geden, P.G.
Senior Geologist 4/23/12
Florida License No. 0000408

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Building Inspection • Plan Review • Building Code Administration

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- Fort Pierce
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- Jacksonville
- Kissimmee
- Leesburg
- Miami
- Ocala
- Orlando (Headquarters)
- Palm Coast
- Panama City
- Pensacola
- Rockledge
- Sarasota
- Tampa
- West Palm Beach

April 23, 2012

Mr. Michael Stripling, Director
City of Haines City Public Works/Utilities
300 N. 5th Street, P.O. Box 1507
Haines City, Florida 33845-1507

Reference: **UST Closure and Assessment Report**
Former Service Station, N. 7th Street at Ingraham Avenue
Haines City, Polk County, Florida
UES Report No. 959143v1

Dear Mr. Stripling:

Universal Engineering Sciences, Inc. (UES) has prepared this report to document the Tank Closure Assessment activities associated with the removal of two (2) USTs located in the right of way at the southeast corner of 220 N. 7th Street (House of David Auctions). The tanks were observed to be constructed of uncoated riveted steel and were not closed in place prior to our field work.

UST removal tasks were completed by Andrew Bell, Incorporated (ABI). ABI is a State of Florida licensed tank contractor (License Number PCC-048399). Dispensing system components, sumps, vent pipe, and/or electrical components were not observed. Remnants of the supply and return piping system were encountered during the closure tasks and were removed. All UST components were removed from the site and disposed of properly.

UST closure assessment activities were conducted simultaneously with the tank removal on March 14, 2012. UES observed the process, screened soil samples with an Organic Vapor Analyzer (OVA) during the closure tasks, and collected confirmation soil samples for laboratory analysis. Based on the results of the field assessment, UES believes that the UST closure was successful and that no vadose zone soil impacts are present which would require any additional assessment or remediation.

Respectfully submitted,
Universal Engineering Sciences, Inc.

Ronald V. Sanzi

Ronald V. Sanzi
Contract Manager

RVS/rvs
Enclosures: UST Closure Assessment Report

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FIGURES

LIST OF APPENDICES

1.0 SCOPE OF WORK

Universal Engineering Sciences (UES) was contracted by The City of Haines City (HC) to provide services associated with the removal of two (2) Underground Storage Tanks (UST) which formerly stored petroleum products. The scope of work is outlined below.

Sticky Note haines_m

Please note that this was received and inserted into Oculus AS IS!!

UES provided field management, subcontractor management, and the environmental field services required to perform the work, including:

a. **Exploratory Evaluation of UST Location** - UES retained Andrew Bell Incorporated (ABI), a State of Florida Licensed Pollutant Storage System Specialty Contractor (PSSSC). ABI mobilized to the site, broke and removed concrete, and removed soil to uncover the tanks. UES provided preliminary soil screening assessment services during this process. The purpose of this exploratory event was to gain an understanding of how the tanks are actually positioned in the right of way, how far the tanks extend under the existing building if at all, and determine if it is possible to immediately remove the USTs without engineered support of the existing building. Prior to mobilization, it was not clear what size the tanks actually were and how far they extend under the building. These two critical issues needed to be resolved in order to remove the tanks permanently. HC requested that if it is possible to immediately remove the USTs during the exploratory phase, UES and ABI should complete the removal and full closure assessment. UES assigned the following tasks to ABI:

   i. Clear Utilities.
   ii. Perform exploratory services.
   iii. Clean, remove, and properly dispose of USTs if possible.
   iv. Excavate contaminated soil if present.
   v. Backfill and compact.

b. **Soil Assessment -** UES assessed for potential petroleum impacts to the soil in the vadose zone during removal of the UST in accordance with FDEP FAC 62-761, and the FDEP Storage Tank System Closure Assessment Requirements dated April 1998. An organic vapor analyzer (OVA) photo-ionization detector (PID) was be used to screen soils exposed during excavation for indications of petroleum impacts.

c. **Groundwater Assessment** – Groundwater samples are required during tank closures if the depth to water is less than 20 feet. UES prepared to install a well if the groundwater table was located before 20 feet below natural grade.

d. **Tank Closure Assessment Report** – UES proposed to complete this Tank Closure Assessment Report documenting the work performed. Revised storage tank registration, petroleum contact water removal documentation, and tank disposal certification are included.

2.0 UST CLOSURE ACTIVITIES

On March 14, 2012, the UST closure process was initiated. This work was commenced at 220 North 7th Street at the corner of 7th Street and Ingraham Avenue, Polk County, Haines City, Florida. UES has prepared four drawings representing the site and work performed:

- **Figure 1:** USGS Site Location Map depicting the topographic location of the site.
- **Figure 2:** General Site Plan; 2010 Aerial Photograph depicting the limits of work and general site features.
- **Figure 3:** General Site Plan with a scaled layout of the former USTs.
- **Figure 4:** Post UST Removal Sampling Location Plan showing OVA screening locations and confirmation sample locations.

UST removal tasks were completed by Andrew Bell, Incorporated (ABI). ABI is a State of Florida licensed tank contractor (License Number PCC-048399). The dispensing system, sumps, vent pipe, and electrical components were already removed prior to UST removal. Remnants of the supply and return piping that were encountered during the closure tasks were also removed. All UST components were loaded into a dump truck for disposal at a landfill.

ABI initiated the UST removal by removing concrete and fill cover from the top of the tanks to begin the exploratory process. ABI began on the southern side of the UST bed at the fill port and worked in a northward direction. The fill port and piping were uncovered by hand tools. After observing the fill port and supply and return piping layout, the edges of the tanks were located by hand as well. This work showed that the USTs were not installed under the footings of the 220 N. 7th Street structure as originally thought. The USTs were noted to be positioned parallel to the 220 N. 7th Street structure. On this basis, The City of Haines City and UES began the UST removal process. The USTs were observed to be very old and were constructed with riveted steel. The supply and return lines were heavy steel pipe. Although these components were rusted, all appeared to be intact and no soil staining was present around them. All fill material was tan to orange sand.

UES telephoned Ms. Leslie Pedigo, a case Manager with the FDEP Southwest District Office to inform her that we planned on removing the USTs after discovering that it was possible without engineered shoring of the building. Ms. Pedigo contacted the Polk County Health Department Storage Tank Section (PCHD). Mr. Dennis Newberg, a PCHD Tank Inspector, arrived at the site shortly thereafter.

Mr. Newberg's inspection report is presented in **Appendix A.**

Upon removal of the supply and return lines of the southern UST, UES observed that the southern tank was full of petroleum contact water. It appeared as though rain water infiltrated the UST from the fill port over time. ABI contacted Aqua Clean to mobilize to the site and pump out the tank. Aqua Clean pumped 575 gallons from the tank. After the PCW was removed from the UST, removal operations proceeded. The northern UST was completely empty. There was no visible product or sludge on the tank bottom, but there was a distinct petroleum odor emanating from the UST. Both USTs were removed along with the supply and return piping that connected to each tank.

Photos depicting the general UST removal process are presented in **Appendix B.** The Storage Tank Registration Form, Aqua Clean Non-Hazardous Waste Manifest, and UST recycling certificate are presented in **Appendix C.**

2.1 SOIL ASSESSMENT AND RESULTS

UES screened cover material and material between the USTs with the Organic Vapor Analyzer (OVA); no VOC detections were observed and no petroleum odors emanated from the pit. UES did not observe any odors associated with petroleum releases within the UST bed when the surface soil was removed to uncover the USTs and/or when the USTs were being removed. The soils were evaluated for visual and olfactory indications of petroleum impacts. No physical indications of a release were noted in the excavation pit.

UES collected 8 soil samples after the UST removal for OVA screening. The OVA is useful for the detection of petroleum hydrocarbon vapors in soil samples. UES screened soil samples with the OVA in the top fill material, vadose zone around the perimeter of the USTs, and under the UST. The soil sample locations are shown on Figure 4.

The soils were placed into clean 16-ounce sample jars to half capacity, and covered with aluminum foil. The container headspace of each sample jar was then screened for organic vapors using a Rae Systems, Incorporated, Mini-Rae Model 2000 Photo Ionization Detector (PID), OVA. The OVA-PID is used to screen for organic vapors to a lower limit of 0.1 part per million (ppm) calibration gas equivalent. Before screening the soil samples, UES checked the OVA to ensure proper functioning and then field calibrated the instrument using isobutylene gas.

No positive OVA responses were recorded.

After the UST removal and soil OVA screening tasks, UES collected five (5) confirmation soil samples for laboratory analysis. On March 14, 2012, UES collected soil cleanup confirmation samples North, South, East, West, and Bottom areas of the pit for laboratory analysis by Environmental Protection Agency (EPA) Methods 8260 VOA, 8270 PAH, and FL-PRO. The side wall samples were collected at an approximate depth of 3 feet below grade corresponding to the approximate top of the UST. **Figure 4** shows the confirmation soil sample locations. The bottom sample was collected in a central location between the two USTs.

The laboratory report for the confirmation samples indicate that no constituent associated with the referenced EPA analytical methods were reported at concentrations above FDEP soil cleanup target levels (SCTL) or the method detection limit in SS- E, SS-W, SS-S and SS-Bottom. 159 mg/Kg total TRPH by the Florida Pro Method was detected in the SS-N sample. This TRPH value is below the SCTL. UES does not believe that the detected TRPH in SS-N is associated with the USTs; the back hoe deployed to remove the USTs was perched on the north side of the excavation. UES observed and commented to ABI regarding a small hydraulic leak on the boom of the machine. UES believes that the source of the TRPH was the back hoe. The confirmation sampling laboratory report is presented in **Appendix D.**

The excavation was backfilled and compacted with soil provided by the City of Haines City from a stockpile located nearby. The fill material was also subjected to laboratory analysis. The clean fill did not contain target analytes associated with EPA Methods 8260 VOA, 8270 PAH, and/or FL-PRO which exceeded the laboratory method detection limit (Appendix D).

2.2 GROUNDWATER ASSESSMENT AND RESULTS

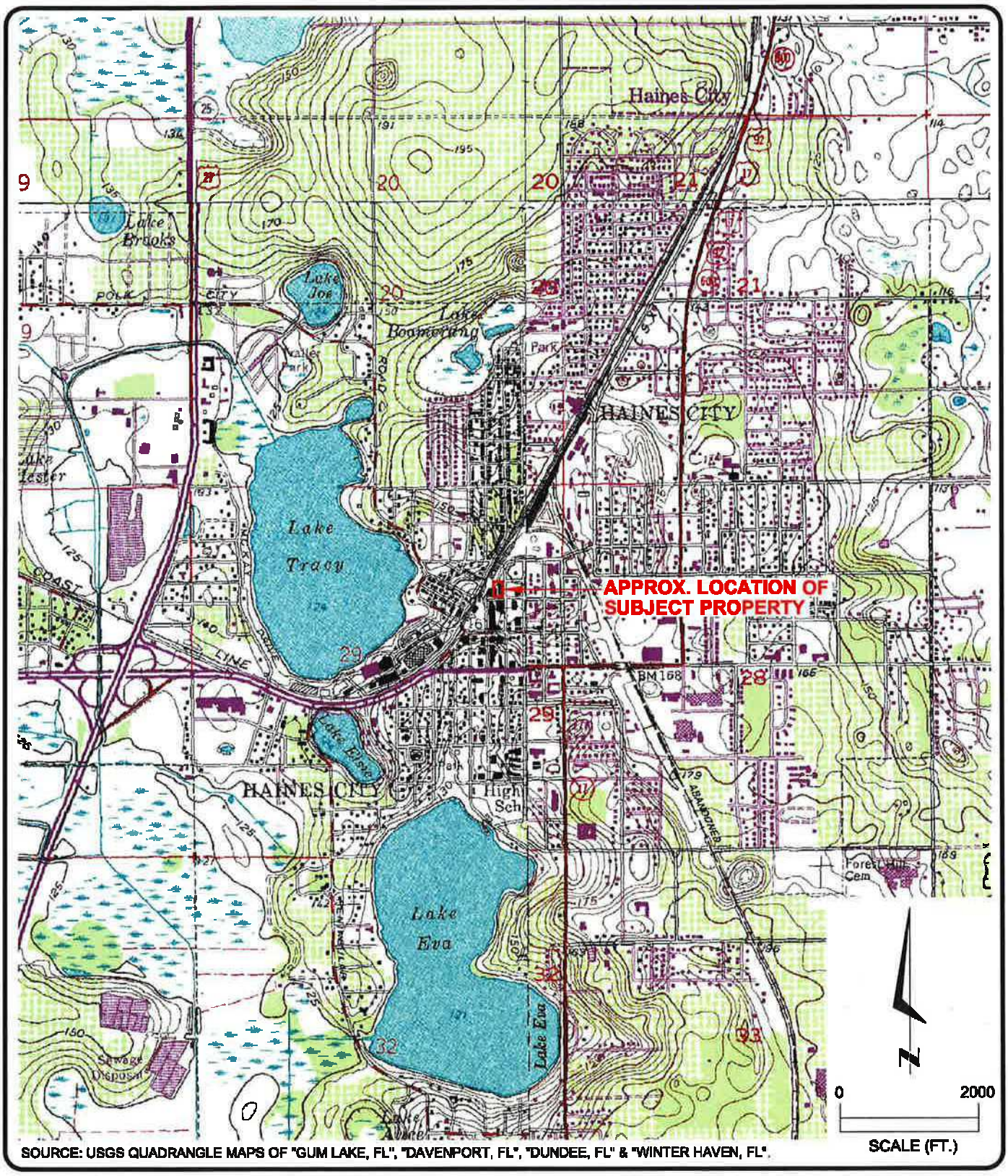
UES performed a 21 ft. hand auger boring through the location of SS-Bottom, in the bottom of the excavation. The groundwater table was not reached. The total depth attained was approximately 26 feet

since the bottom of the excavation was approximately 5 feet below grade at initiation of the hand auger boring. On this basis, no groundwater sampling is required by rule.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the field assessment, UES believes that the UST closure was successful and that no soil impacts are present in the former UST bed which would require any additional assessment or remediation. Based on the results of the Tank Closure Assessment, UES recommends no further assessment.

FIGURES



SOURCE: USGS QUADRANGLE MAPS OF "GUM LAKE, FL", "DAVENPORT, FL", "DUNDEE, FL" & "WINTER HAVEN, FL".

12-0100-01

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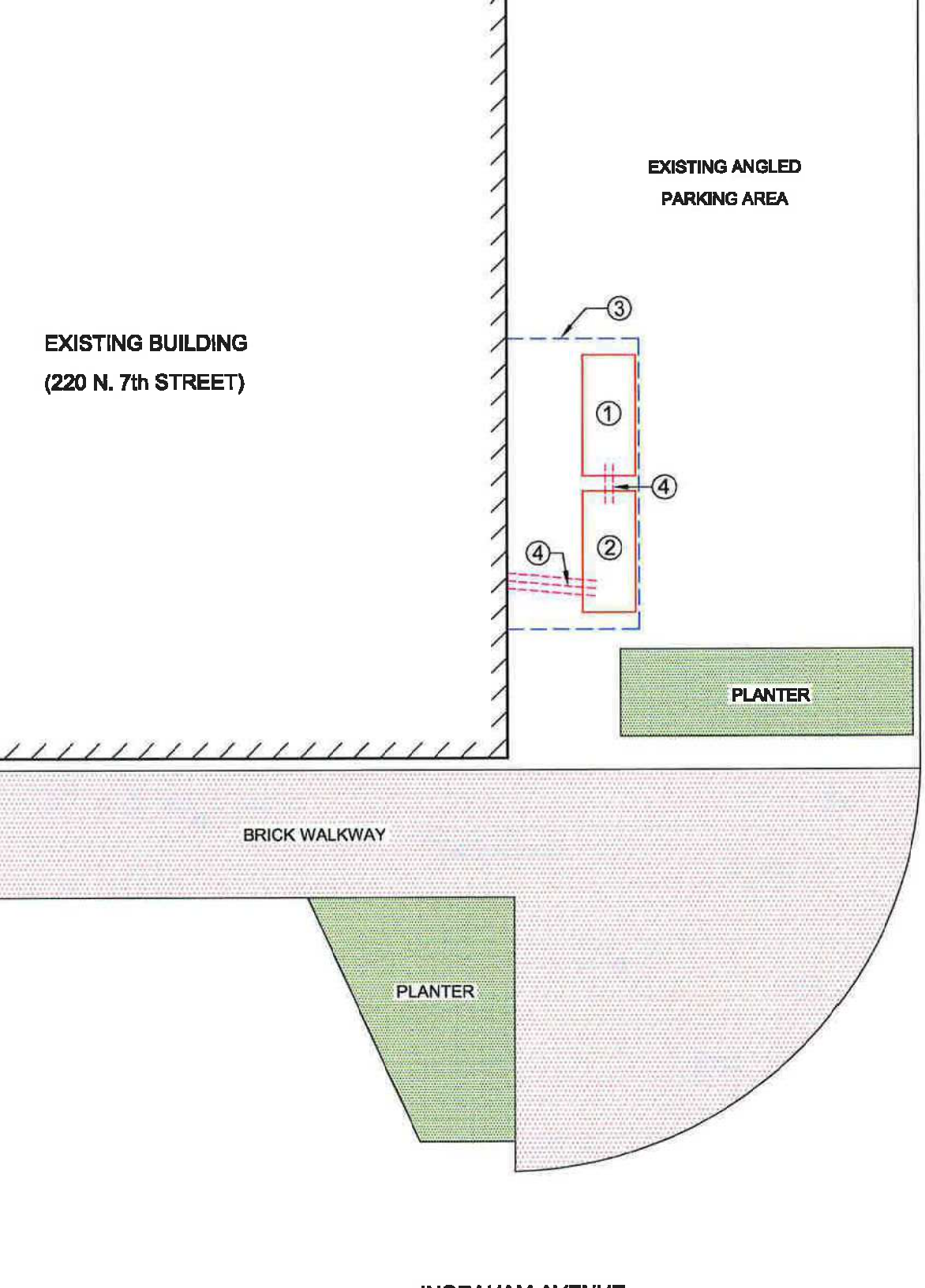
TANK CLOSURE ASSESSMENT REPORT
N. 7th STREET AT INGRAHAM AVENUE
HAINES CITY, POLK COUNTY, FLORIDA

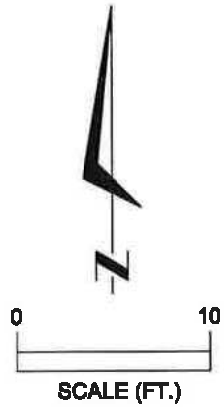
SITE LOCATION MAP

DRAWN BY:	R.K.S.	DATE:	4 - 2 - 12	CHECKED BY:		DATE:	
SCALE:	AS SHOWN	PROJECT NO: 0140.1200048.0000		REPORT NO:		FIGURE:	1

LIMITS OF
WORK



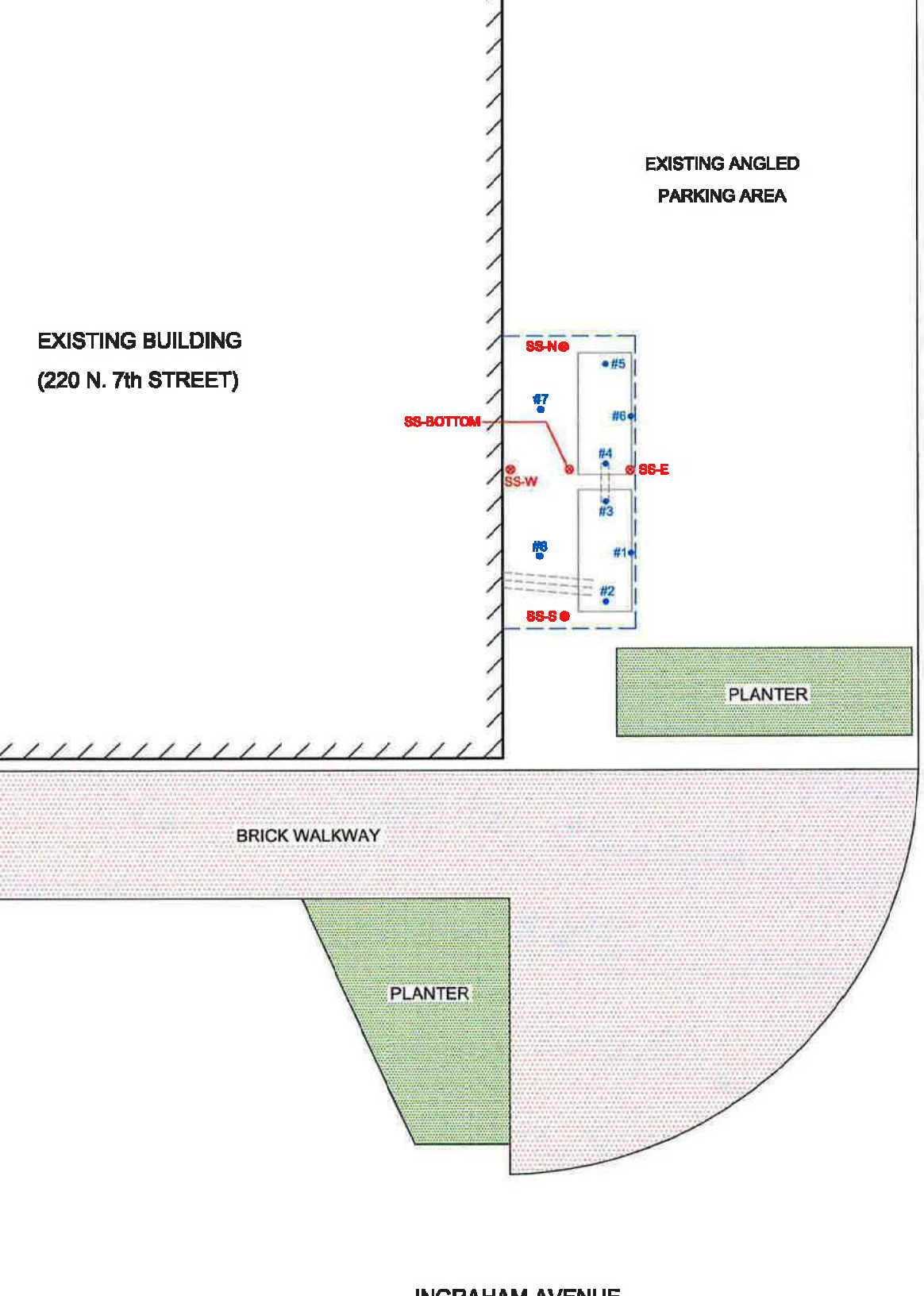
N. 7th STREET



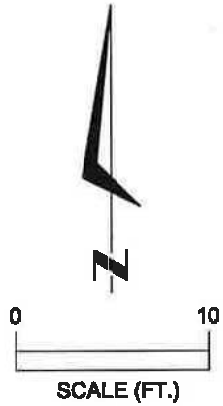
LEGEND

1. NORTH UNDERGROUND STORAGE TA
2. SOUTH UNDERGROUND STORAGE TA
3. EXCAVATION PIT
4. PIPING & VENT SYSTEM

NOTE: NORTH & SOUTH UNDERGROUND ST
DIMENSIONS ARE 3.5 FT. WIDE BY 8
THESE DIMENSIONS ARE COMMONL
WITH 560-GALLON UST's.



N. 7th STREET



LEGEND

- OVA SCREENING LOCATION (#1)
- CONFIRMATION SAMPLE LOCATION LOCA

NOTE: U.E.S. PERFORMED A 21 FT. HAND AUG
AT THE LOCATION OF SS-BOTTOM AFT
HAD BEEN REMOVED (26 FT. TOTAL DE
THE WATER TABLE WAS NOT REACHE
NO GROUNDWATER SAMPLES WERE C

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- Palm Coast
- Panama City
- Pensacola
- Rockledge
- Sarasota
- Tampa
- West Palm Beach

October 3, 2012

Mr. Michael Stripling, Director
City of Haines City Public Works/Utilities
300 N. 5th Street, P.O. Box 1507
Haines City, Florida 33845-1507

Reference: **Supplementary Soil Assessment, Tank #1 Location**
Former Service Station, N. 7th Street at Ingraham Avenue
Haines City, Polk County, Florida
UES Report No. 959143v2

Dear Mr. Stripling:

Universal Engineering Sciences, Inc. (UES) has prepared this letter report to document the supplemental soil assessment work completed at the Former "Tank #1" Location at the southeast corner of 220 N. 7th Street (House of David Auctions). The purpose of this assessment was to assess the soil in an area where a fuel tank was removed during sidewalk renovations.

Previously, UES supervised the removal of two (2) Underground Storage Tanks (UST) located in the right of way at the same address. UES documented the UST removal (UST Closure and Assessment Report Former Service Station, N. 7th Street at Ingraham Avenue, UES Report No. 959143v1, Dated April 23, 2012). The removal tasks were completed by Andrew Bell, Incorporated (ABI). ABI is a State of Florida licensed tank contractor (License Number PCC-048399).

Based on the results of the field assessment for Tank #1, UES believes that no vadose zone soil impacts are present which would require any additional assessment or remediation.

Respectfully submitted,
Universal Engineering Sciences, Inc.

Ronald V. Sanzi

Ronald V. Sanzi
Contract Manager

RVS/rvs
Enclosures: UST Closure Assessment Report

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Supplementary Sampling at Tank #1
Former Service Station
N. 7th Street at Ingraham Avenue
Haines City, Polk County, Florida

UES Project No. 0140.1200048.0000
Report No. 959143v2
Date: October 2012

Prepared For:

City of Haines City Public Works/Utilities
300 N. 5th Street, P.O. Box 1507
Haines City, Florida 33845-1507

Prepared By:

Universal Engineering Sciences, Inc.
3532 Maggie Boulevard
Orlando, Florida 32811
(407)423-0504
www.universalengineering.com

Prepared By:

Ronald V. Sanzi
Contract Manager

Reviewed By:

Michael J. Geden, P.G.
Senior Geologist
Florida License No. 0000408

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FIGURES

LIST OF APPENDICES

1.0 SCOPE OF WORK

Universal Engineering Sciences (UES) was contracted by The City of Haines City (HC) to provide supplemental soil assessment services associated with the location of a former UST. The UST was removed during sidewalk renovations and subsequently covered with paving bricks. The City of Haines City personnel removed the paving bricks in the area of the former Tank #1 location to allow access for the assessment. UES provided the environmental field services required to perform the work, including:

a. **Soil Assessment** - UES assessed for potential petroleum impacts to the soil in the vadose zone by completing five (5) soil borings (four perimeter borings, one central boring). Soil samples were collected at the 0" – 2', 2' – 4' depth interval, and at the 4' – 6' depth interval. An organic vapor analyzer (OVA) photo-ionization detector (PID) was used to screen soils.

2.0 SOIL ASSESSMENT ACTIVITIES

On May 16, 2012, UES mobilized to the site to complete the soil assessment. This work was commenced at 220 North 7th Street at the corner of 7th Street and Ingraham Avenue, Polk County, Haines City, Florida. UES has prepared the following drawing to represent the site and work performed:

- **Figure 1:** Post UST Removal Sampling Location Plan (includes OVA Screening data table).

2.1 SOIL ASSESSMENT AND RESULTS

UES collected soil samples from five (5) soil borings (four perimeter borings, one central boring) for OVA screening. The OVA is useful for the detection of petroleum hydrocarbon vapors in soil samples. Soil samples were collected at the 0" – 2', 2' – 4' depth interval, and at the 4' – 6' depth interval. UES screened soil samples with the OVA in the vadose zone around the perimeter of the Tank #1 location, and under in the approximate center of the tank pit. The soils were placed into clean 16-ounce sample jars to half capacity, and covered with aluminum foil. The container headspace of each sample jar was then screened for organic vapors using a Rae Systems, Incorporated, Mini-Rae Model 2000 Photo Ionization Detector (PID), OVA. The OVA-PID is used to screen for organic vapors to a lower limit of 0.1 part per million (ppm) calibration gas equivalent. Before screening the soil samples, UES checked the OVA to ensure proper functioning and then field calibrated the instrument using isobutylene gas.

The soil sample locations are shown on **Figure 1.** No positive OVA responses were recorded. No VOC detections were observed and no petroleum odors emanated from the borings. UES did not observe any signs or odors associated with petroleum releases.

After completion of the soil OVA screening tasks, UES collected five (5) confirmation soil samples for laboratory analysis. On May 16, 2012, UES collected soil cleanup confirmation samples North (CS-2), South (CS-4), East (CS-3), West (CS-1), and Bottom (CS-5) areas of the former Tank #1 location zone for laboratory

analysis by Environmental Protection Agency (EPA) Methods 8260 VOA, 8270 PAH, and FL-PRO. **Figure 1** shows the confirmation soil sample locations and depths.

The laboratory report for the confirmation soil samples indicates that trace concentrations for constituents belonging to the polynuclear aromatic hydrocarbon (PAH) group were detected in sample CS-1 and CS-5. Due to the presence of carcinogenic PAHs, the benzo(a)pyrene equivalents were calculated using the Benzo(a)Pyrene Conversion Table. The equivalent concentrations were calculated to be below the Soil Cleanup Target Level (SCTL), set forth in Chapter 62-777, Florida Administrative Code (FAC) for residential and commercial use properties in confirmation samples CS-1 and CS-5. The Benzo(a)pyrene Conversion Table results are presented in **Appendix A.**

No other constituent associated with the referenced EPA analytical methods were reported at concentrations above FDEP soil cleanup target levels (SCTL) or the method detection limit in CS-2, CS-3, or CS-4. The complete confirmation sampling laboratory report is presented in **Appendix B.**

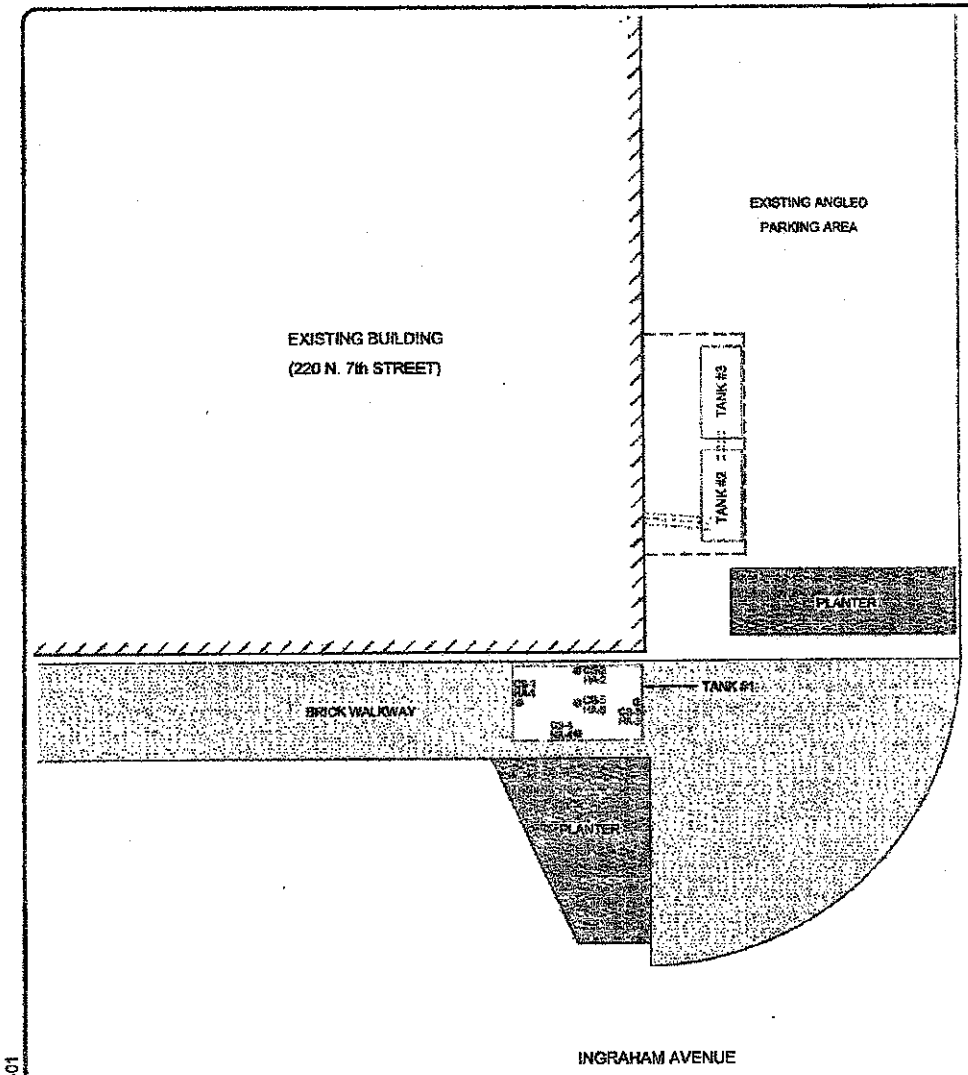
2.2 GROUNDWATER ASSESSMENT

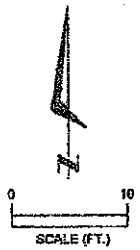
During the performance of the UST Closure for Tank #2 and Tank #3 in April 2012, UES performed a 21 ft. hand auger boring through the bottom of the excavation. The groundwater table was not reached. The total depth attained was approximately 26 feet since the bottom of the excavation was approximately 5 feet below grade at initiation of the hand auger boring. On this basis, no groundwater sampling is required by rule at the Tank #1 location.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the field assessment, UES believes that the UST removal was successful and that no soil impacts are present in the former UST bed which would require any additional assessment or remediation. Based on these results, UES recommends no further assessment.

FIGURES





SOIL SCREENING DATA (OVA RESPONSE, ppm)				
LOCATION	0' - 2'	2' - 4'	4' - 6'	CONFIRMATION SOIL SAMPLE COLLECTION DEPTH (FT.)
HA-1 (CS-1)	0	0	0	3
HA-2 (CS-2)	0	0	0	3
HA-3 (CS-3)	0	0	0	3
HA-4 (CS-4)	0	0	0	3
HA-5 (CS-5)	0	0	0	6

LEGEND

⊕ CONFIRMATION SAMPLE LOCATION (CS-1)
& HAND AUGER BORING LOCATION (HA-1)

NOTES

1) CITY OF HAINES CITY PUBLIC WORKS REMOVED THE PAVER BRICKS TO PREPARE FOR ASSESSMENT (APPROXIMATELY).

2) UST REMOVED PRIOR TO ASSESSMENT.

THIS DRAWING CREATED FROM 2010 AERIAL PHOTOGRAPH.

FOR: CITY OF HAINES CITY
PUBLIC WORKS

DRAWN BY: K.K.S. DATE: 8-3-12
CHECKED BY: DATE:
REPORT NO: SCALE: AS SHOWN
PROJECT NO: 0140.12000446.0000

TANK CLOSURE ASSESSMENT - TANK #1
N. 7th STREET AT INGRAHAM AVENUE
HAINES CITY, POLK COUNTY, FLORIDA

POST UST REMOVAL SAMPLING LOCATIONS

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ENGINEERING SCIENCES

FIGURE: 1

12-0100-01

Map ID 44: Bacons Cleaners & Laundry Service

ARCADIS Design & Consultancy for natural and built assets

Florida Department of Environmental Protection

SITE ASSESSMENT REPORT

Bacons Cleaners & Laundry Service
21 North 7th Street, Haines City,
Polk County, Florida

FDEP Facility ID No. ERIC_5362

Task Assignment No. DC052B

April 13, 2021

SITE ASSESSMENT REPORT

Bacons Cleaners & Laundry Service

21 North 7th Street, Haines City, Polk County, Florida

Eric Brooks
Environmental Scientist

Brian Burke, P.G.
Principal Geologist

William D. Vogelsong, P.G.
Principal Hydrogeologist

Prepared for:

Theresa Pepe

Florida Department of Environmental Protection

2600 Blair Stone Road

Tallahassee, Florida 32399

Prepared by:

Arcadis U.S., Inc.

3109 W Dr. Martin Luther King Jr. Blvd

Suite 350

Tampa

Florida 33607

Tel 813 903 3100

Fax 813 903 9115

Our Ref.:

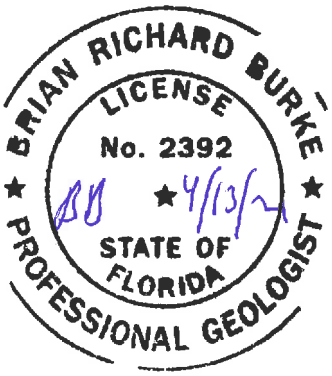
30061946

Date:

April 13, 2021

CERTIFICATION

In accordance with the provisions of Florida Statute Chapter 492, and Chapter 62-780, Florida Administrative Code, this Site Assessment Report for the former Bacon Cleaners & Laundry Service located at 21 North 7th Street, Haines City, Polk County, Florida, has been reviewed by a Professional Geologist licensed in the State of Florida familiar with current state drycleaning solvent cleanup criteria. I hereby certify that the assessment work was performed in accordance with the Initial Site Assessment Work Plan, Health & Safety Plan, FDEP Standard Operating Procedures, various task assignments, and under my direct supervision.



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State of Florida License No. 2392

Date: 4-13-2021

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1 INTRODUCTION

Arcadis U.S., Inc. (Arcadis) was tasked by the Florida Department of Environmental Protection (FDEP) with Task Assignment #DC052B to complete site assessment activities for the former Bacon Cleaners & Laundry Service (Site) located at 21 North 7th Street, Haines City, Polk County, Florida (**Figure 1**). The FDEP Facility ID for the Site is ERIC_5362.

The objective of this Site investigation was to determine absence/presence of soil and/or groundwater impacts from drycleaning solvents. If confirmed, determine the magnitude and approximate extent of impacts to assist the FDEP in determining an appropriate course of risk-based corrective action.

Site assessment activities were performed in accordance with Arcadis' Initial Site Assessment Work Plan (ISAWP) submitted on March 8, 2020 (Arcadis, 2020) and revised on August 3, 2020, FDEP comments to the ISAWP issued on July 14, 2020, FDEP Standard Operating Procedures (001/01), drycleaning solvent cleanup criteria in Chapter 62-780, Florida Administrative Code (FAC), State cleanup target levels in Chapter 62-777, FAC, Site-specific health and safety plan (HASP), and FDEP's Consideration of Assessment of Drycleaning Solvent Contaminated Sites (Revised July 2002).

This Site Assessment Report (SAR) includes a summary of Site information, a description of assessment methodologies, results of soil and groundwater assessment activities performed from October 2020 to February 2021, conclusions, and recommendations.

2 SITE INFORMATION

2.1 Site Location and Surrounding Property Use

The Site is located on the east side of North 7th Street, north of East Hinson Avenue in Haines City, Polk County, Florida. The geographic coordinates are 28°06'26.77" North latitude and 82°37'32.03" West longitude. The Site is situated in Section 29, Township 27 South, Range 27 East. The former drycleaner facility is rectangular in shape, approximately 65 feet long (north to south) and 30 feet wide (east to west). The property is primarily paved with asphalt surrounding the building with vegetated areas along the exterior perimeter.

The Site has an elevation of approximately 150 feet above mean sea level (amsl) and land surface within the study area has moderate topographic relief, with approximately a 10-foot elevation variance across the property. The main hydrologic features in the vicinity of the Site include Lake Tracy, Lake Elsie, and Lake Eva, located approximately 0.36 miles to the west, 0.47 miles to the southwest, and 0.44 miles to the south-southwest, respectively. All surface water runoff is guided to nearby stormwater sewers.

According to the Polk County Property Appraiser's website, the Site property is owned by Frontier Properties Florida LLC, who acquired it on June 24, 2011. The area surrounding the former drycleaners facility (**Figure 2**) consists of the following:

- **North**: An unimproved vacant lot exists to the north. A martial arts studio and East Main Street is located north of the vacant lot.

- **East**: An abandoned automotive maintenance facility is located immediately to the east. 8th Street North and mixed commercial/residential properties exist to the east past the abandoned automotive facility.
- **South**: O'Reilly Auto Parts, a retail automotive parts dealer, exists immediately to the south. East Hinson Avenue borders the southern boundary of O'Reilly Auto parts.
- **West**: North 7th Street bounds the property to the west. Vacant and various commercial properties are located west of North 7th Street.

The Site vicinity identifying surrounding properties/land use is presented as **Figure 2**. Surrounding area land use is generally mixed residential and commercial in the vicinity of the Site. A Site layout is provided as **Figure 3**. As identified during the utility locate mentioned below, multiple utilities exist within the investigation area, including sanitary sewer, overhead electric, and several unknown lines.

2.2 Geologic and Hydrogeologic Setting

According to *Hydrology of Polk County* (USGS, 2007), three principal hydrostratigraphic units are present beneath the Site. These hydrostratigraphic units include the Surficial Aquifer System (SAS), the Intermediate Confining Unit (ICU), and the Floridan Aquifer System (FAS). The SAS is the primary aquifer of focus at this Site with regard to the drycleaning solvents.

The SAS, which is unconfined and delineated at the top by the water table, is comprised of unconsolidated clastic deposits that range in age from Pliocene to Holocene. The unit is composed primarily of fine to medium-grained quartz sand near land surface that grades with depth to silty and clayey sands. The base of the SAS is defined by the first persistent beds of Miocene or Pliocene age sediments containing a substantial increase in clay or silt matrix of primarily quartz sand, clay and shells. Thickness of the SAS in Polk county is highly variable, being documented near land surface in the western one-third of the county to thicknesses greater than 200-feet in the eastern portion. This aquifer system essentially underlies all of Polk County and supplies water for domestic and low volume irrigation.

The ICU is comprised of interbedded clay, silt, phosphate, and sand of the late Oligocene to Pliocene age. The principal stratigraphic unit comprising the ICU is the Hawthorn Group. The Hawthorn Group consists of limestones, clays and sandy clays. The clays and sandy clays typically contain phosphate. Local units in the Hawthorn Group (typically in limestones found near the base of the Group) are water-bearing and can provide limited quantities of water. In general, the Hawthorn Group forms a confining layer separating the underlying FAS and the overlying SAS. In the Polk County area, the thickness of the intermediate confining unit is generally between 25 to 200 feet. The principal uses for this aquifer include domestic and irrigation wells, some of which are large volume.

The FAS is the primary drinking water supply for East-Central Florida and consists of a vertically continuous sequence of carbonate rocks of generally high permeability that are mostly of Tertiary age. The principal formations of the FAS in this area are the Eocene Age Avon Park Formation and the Ocala Limestone. The Avon Park Limestone tends to have lower permeability and often acts as a confining unit within the FAS subdividing the FAS into upper and lower aquifer systems. The overlying Ocala Formation tends to be a very permeable formation and dominant water-bearing unit of the FAS in peninsular Florida. The Oligocene Age Suwannee Limestone is also a lithologic unit of the upper FAS. The Suwannee

Limestone exists as erosional remnants overlying the Ocala Formation. In Polk County, the Upper Floridan aquifer contains freshwater and the Lower Floridan aquifer contains more mineralized water.

Site-specific local geology and hydrogeology information was ascertained from these sources:

- The *Hydrology of Polk County* (USGS, 2007) indicates the SAS is generally 85 feet thick in the Site area.
- The AECOM Technical Services, Inc. November 2018 SAR for the Haines City Quality Cleaners, located approximately 0.7 miles to the southwest at 511 Haines City Mall, indicated that the surficial lithology consisted of predominantly fine-grained sand from land surface to 20 feet below ground (ft bg), clayey sand and clay from 20 to 40 ft bg, fine-grained sand from 40 to 60 ft bg, and clayey silty sand from 60 to 85 ft bg.

2.3 Site Geology

During the installation of soil borings at the Site, Arcadis recorded the lithology on soil boring logs from ground surface to a depth of 55 ft bg. The lithology observed at the Site generally consisted of very fine to fine-grain quartz sand with trace amounts of silt and clay and a moderately plastic, soft, sandy clay (**Figures 4** and **5**). Based on the regional geology description provided by the referenced sources above, the lithology described during this assessment appears to be consistent with the SAS sand deposits and the Hawthorn Group clay unit contained within the Intermediate Confining Unit. The Floridan Aquifer System was not encountered during this assessment.

2.4 Site Hydrogeology

During the installation of the soil borings, moist to wet sediments were generally observed between 43.5 and 45 ft bg and continued to 55 ft bg, the maximum depth investigated. The top of casing elevations of the four new monitor wells (MW001 through MW004) installed during this assessment were surveyed relative to each other by using MW001 as an arbitrary benchmark. By subtracting the depth-to-water measurements collected on November 18, 2020 from the top of casing elevations, the water table elevation was determined at each well (**Table 1**). Water elevations and gradient conditions are presented on **Figure 6**. As illustrated on the figure, the Site groundwater gradient is primarily flat with a minor flow component towards the southeast in the SAS zone, with an average horizontal gradient of approximately 0.001 feet per foot (ft/ft) as measured between monitor wells MW001 and MW003.

2.5 Well Survey

According to the August 1996 Site Screening Report Form, the ranking drinking water well for this Site is reportedly located at 501 Hinson Avenue, Haines City and is owned by the City of Haines City; however, this address does not appear to be the location of the supply well, but perhaps the City Building Department. The well is a public supply well (more than 100,000 gallons per day but less than 1-million gallons per day) completed to a depth of 850 feet.

Arcadis also searched additional databases to locate potential wells and receptors. A summary of pertinent information is provided below:

- The Florida Department of Health (FDOH) records for this Site indicate that there are four large public supply wells within 0.5-mile and one private well within 0.25-mile of the Site (**Figure 1**).
- A Haines City Coin Laundry active supply well is located approximately 0.5-miles to the east (**Figure 1**).

2.6 Property Use History

The former Bacons Cleaners and Laundry Service reportedly operated from the single-story masonry structure (constructed in 1954) at 21 North 7th Street from at least 1957 to 1998. According to the Polk County Property Appraisers website, the Site is currently owned by Frontier Properties Florida LLC, who purchased the property in 2011. The property currently operates as a convenience market.

The historical City Directory Report was acquired which lists the property owners in approximate five-year increments from 1971 to 2014. Bacons Cleaners was listed as the property occupant from 1971 to 1995. The next listing (for 2000) indicated Michael Keen was the property owner. Prestige Cleaners was listed for 2005 and City Food Inc. was listed for 2010 and 2014.

2.7 Regulatory History

According to a Drycleaning Solvent Cleanup Program Application submitted to the FDEP on August 13, 1996, approximately one gallon of drycleaning solvent was discharged to the surface as a result of transfer machine overfilling. The solvent was immediately cleaned up, stored in containers, and sent off-site for disposal at the Polk County landfill. The associated Site Screening Report Form (SSRF) documented the collection of one soil sample (BDC-001) from land surface to six inches in depth near the former rear entrance, within the former boiler room, in June 1996. The soil sample was subsequently submitted to Progress Environmental Laboratories and was reported to contain Mineral Spirits at a concentration of 3,890 milligrams per kilogram (mg/kg). The SSRF included a Site figure showing the location of the BDC-001 sample, drycleaning equipment locations, and an aboveground storage tank (AST) containment pad where a solvent tank was present in the north portion and a diesel tank was located in the southern half of the containment area. **Figure 3** presents the approximate location of the site screening soil sample.

Following evaluation of Site receptors, impacts, and pertinent environmental settings, the Bacons Cleaners and Laundry Service was given a priority score of 84 and determined to be eligible for state-administered cleanup under the Drycleaning Solvent Cleanup Program in a letter dated November 12, 1996. It is not known if only petroleum-based solvents were used at the facility.

A Rapid Risk Screening Form (RRSF) was completed and submitted to FDEP in January 2012. The screening identified four large (>100,000 gallons per day) public water supply wells within 0.5-mile radius of the Site and no small potable wells within 0.25-mile of the Site. Potable well surveys, conducted by the FDOH, identified no VOC detections in the four public supply wells in December 2006. As part of the screening activity, a receptor survey was conducted around the immediate area of the subject Site. Additionally, Richard's Auto Parts was identified as a nearby business (within 150 feet of the facility to the east) that may use solvents.

3 SITE CHARACTERIZATION

This section describes the methodologies used in field sampling, testing, and sample laboratory analyses during the assessment conducted from October 2020 to February 2021, and the results of these activities. A flexible assessment approach was used to create a Site-specific unsaturated soil and groundwater database capable of determining the presence and extent of chlorinated and/or petroleum-based drycleaning solvents above soil and groundwater CTLs. The assessment activities were completed in accordance with FDEP's Standard Operating Procedures (SOP) (001/01), the site-specific HASP, FDEP's Considerations for Assessment of Drycleaning Solvent Contaminated Sites (FDEP, 2002), and Conducting Contamination Assessment Work at Drycleaning Sites (SCRD, 2010). Site assessment methods and techniques are described in detail below.

3.1 GPR Utility Locate Survey and Sewer Camera Investigation

Arcadis contracted Blood Hound, LLC. to perform a subsurface private utility locate using ground penetrating radar (GPR) on October 21, 2020. The GPR utility locate was completed within the former facility interior and paved travel ways/parking areas to the west, south, and east of the facility. The purpose of the utility locate was to establish/confirm the suspected locations of underground utilities. The subsurface utilities identified during the survey included sanitary sewer, water, and several unknown lines.

A sewer camera investigation was also completed on October 21, 2020 by Roto-Rooter Plumbing & Water Cleanup. The investigation, which was performed from the Site's sewer cleanout (located near southwest corner of building), determined that the sewer line runs westward across North 7th Street. Several deficiencies were identified in the section of sewer line that exits the building and crosses North 7th Street; however, the sewer line section from the cleanout to the interior of the building appeared to be in good condition.

3.2 Unsaturated Soil Assessment/Results

Arcadis performed a soil investigation as part of this assessment that included the completion of a Modified Active Gas Survey (MAGS), the installation of 10 soil borings (SB001 through SB010) using a hand auger and/or Direct Push Technology (DPT), along with soil sample collection for soil vapor screening and laboratory analysis of selected volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total recoverable petroleum hydrocarbons (TRPH).

3.2.1 MAGS Methodology

Arcadis performed a MAGS investigation from October to December 2020 to assess the unsaturated soil quality beneath the facility. Nine MAGS wells (MAGS01 through MAGS09) were installed on October 22 and November 13, 2020 in suspected source areas. MAGS testing was later conducted on December 15, 2020. The locations of the MAGS wells are shown on **Figure 3**.

The MAGS wells were installed with a stainless-steel hand auger to approximately 5.5 ft bg. The wells were constructed with five feet of 2-inch diameter, 0.010-inch slotted Schedule 40 PVC well screen flush-threaded to 0.5 feet of 2-inch diameter Schedule 40 PVC riser. The annular space of the boreholes was

filled with 20/30 grade silica sand and the top of the boreholes were sealed with Portland Cement Type I/II against the existing foundation to prevent short circuiting. Proper decontamination practices were implemented throughout MAGS well installations to minimize potential cross-contamination. The soils where MAGS wells were collocated with a soil boring were field-analyzed for the presence of synthetic organic vapors using a MiniRAE 3000 photoionization detector (PID) capable of detecting to parts per million (**Table 2**). The instrument was calibrated daily in accordance with the manufacturer's instructions.

Soil vapor was extracted from the MAGS wells using a portable regenerative blower typical of a traditional soil vapor extraction (SVE) system. A Rotron three-phase sealed regenerative blower, capable of generating flow rates up to 350 cubic feet per minute (cfm) and a maximum vacuum of 90 inches of water column (IWC), was used for the test. Power was supplied to the regenerative blower using a 50,000-watt portable generator. The connection between the MAGS wellhead and blower was made using 2-inch diameter vacuum-rated hose and schedule 40 PVC pipe. A vacuum gauge and flow control valve were installed to measure and regulate vacuum/flow at the wellhead. Soil vapors from each MAGS well were extracted for approximately 40-80 minutes and wellhead vacuum readings at the surrounding MAGS wells were collected at regular intervals. In addition, organic vapor concentration in the MAGS influent was monitored at the wellhead using a MiniRAE 3000. Wellhead vacuum/influence, organic vapor data, and field notes are provided in **Appendix A**. Soil vapor samples were collected in SUMMA® canisters and shipped to Eurofins Environment Testing America, Inc. (Eurofins) in Tampa, Florida for fixed laboratory analysis of VOCs using EPA Method Total Organics (TO-15).

3.2.2 MAGS Results

In general, well head vacuums of approximately 15-36 IWC created air flow rates ranging from 22 to 121 cfm across the Site. Based upon a minimum effective vacuum of 0.1 IWC, as observed on a nearby MAGS well, the radius of influence (ROI) is estimated to be 27-46 feet for all MAGS wells.

Soil vapor concentrations greater than 3 parts per million (ppm) (MAGS08) were not observed in the influent stream during the MAGS test. Soil gas laboratory analytical results indicate that PCE concentrations ranged between the method detection limit of 0.0027 milligrams per meter cubed (mg/m^3) and was estimated with no detections above the practical quantitation limit (0.014 mg/m^3). The highest concentration of PCE (0.0067 mg/m^3) was measured at MAGS02, located near the former boiler room, while the highest total VOCs (sum of all detections) was reported at MAGS07 near the southeast corner of the building. A summary of the soil gas analytical results is presented in **Table 3** and shown on **Figure 7**. A copy of the laboratory analytical report is provided in **Appendix B**.

3.2.3 Soil Boring Installation Methodology

In November and December 2020, Arcadis installed 10 soil borings (**Figure 3**) for the collection of samples for screening with a MiniRAE 3000 and fixed-base analysis. Soil borings SB001 through SB008 were installed to a depth of 55 ft bls using a stainless-steel hand auger and DPT equipment. Soil borings SB009 and SB010 were installed to a depth of 5.5 ft bls using a stainless-steel hand auger. The hand auger and DPT equipment were decontaminated between sampling locations to minimize the potential for cross-contamination.

Soil samples were collected and transferred to 16-ounce mason jars, covered with aluminum foil, and screened in selected intervals using a MiniRAE 3000. In accordance with the ISAWP, A total of 60 soil samples were submitted to Eurofins for analysis of EPA Method 8260B VOCs, EPA Method 8270D SVOCs, and US EPA Method FL-PRO petroleum range organics.

As discussed below, confirmation soil sampling activities were performed on February 23, 2021 at select soil borings and discrete intervals that exhibited soil cleanup target level (SCTL) exceedances. The soil samples were submitted to Eurofins for analysis of EPA Method 8270D SVOCs and US EPA Method FL-PRO petroleum range organics.

3.2.4 Soil Sampling Analytical Results

Based on site assessment data, the vadose zone appears to be present between land surface and approximately 38 ft bg. Soil screening results obtained in October and November 2020 indicated the absence of organic vapors greater than 10 ppm in vadose zone soils across the Site. The highest PID reading in soils located in the smear zone and at the top of the saturated zone was detected at SB003 in the 45-50 ft depth interval (2,085 ppm). Soil boring field logs are included in **Appendix A** and soil screening results from the soil borings are presented in **Table 2**.

Reported PCE concentrations for all 60 soil samples were less than the laboratory method detection limits. However, concentrations of TRPH and several PAHs were reported above their applicable SCTLs at soil boring locations SB001 (0.5 and 2 ft bg), SB002 (0.5 ft bg), SB003 (0.5 and 2 ft bg), SB005 (0.5 ft bg), SB006 (0.5 ft bg), and SB007 (4 ft bg).

Confirmatory soil samples were collected at soil borings SB001, SB002, SB003, and SB006 on February 23, 2021 to determine if TRPH and select PAHs were still in exceedance of their respective SCTLs after the MAGS event performed in December 2020. Soil analytical results indicated TRPH concentrations at SB001, SB002, SB003, and SB006 had decreased below the SCTL. PAH concentrations greater than the applicable SCTLs were again reported at SB001 and SB003.

Soil analytical results are presented in **Table 4** and shown on **Figure 8**. A copy of the laboratory analytical report is provided in **Appendix B**.

3.3 Groundwater Assessment

Arcadis performed a groundwater investigation as part of this assessment that included installation, sampling, and analysis of groundwater from four new monitor wells.

3.3.1 Monitor Well Installation and Sampling

Arcadis installed a total of four 2-inch diameter monitor wells (MW001, MW002, MW003, and MW004) at select locations presented on **Figures 3** and **9**. The monitoring wells were installed as follows:

- MW001 was installed with 15-feet of 0.010 inch slot screen, between 40 to 55 ft bg;
- MW002 and MW003 were installed with 15-feet of 0.010 inch slot screen, between 37 to 52 ft bg, and;
- MW004 was installed with 15-feet of 0.010 inch slot screen, between 35 to 50 ft bg.

The wells were completed within 8-inch steel manholes and concrete protective pads. Following installation, the wells were developed until purge water was relatively clear and free of sediment. Well construction details are presented in **Table 1**. Well Construction Logs are presented in **Appendix A**. A typical monitor well schematic is presented on **Figure 10**. Well Completion Reports are provided in **Appendix C**.

On November 18, 2020, Arcadis collected groundwater samples from the newly installed monitoring wells for EPA Method 8260B VOCs, EPA Method 8270D SVOCs, and US EPA Method FL-PRO petroleum range organics analysis by Eurofins in Tampa, Florida. The wells were sampled by Arcadis using the low-flow sampling method described in the FDEP SOP 001/01. The field logs including measurements recorded during the sampling activities are included in **Appendix A**.

3.3.2 Groundwater Analytical Results

As presented on **Figure 9** and summarized in **Table 5,** none of the monitor well samples exhibited VOC, PAH, or TRPH concentrations above their respective laboratory method detection limit and/or Groundwater Cleanup Target Level (GCTL).

4 INVESTIGATION DERIVED WASTE

Soil cuttings and purge/decontamination water (investigation derived waste [IDW]) generated during the assessment activities were drummed and temporarily staged at the Site in Department of Transportation (DOT)-approved 55-gallon drums. These drums, which included 17 soil and three water drums, were removed from the Site by Clark Environmental Inc. on March 2, 2021 for disposal. A copy of the final disposal manifest is included in **Appendix D**.

5 QUALITY ASSURANCE & QUALITY CONTROL

This section summarizes the quality assurance/quality control (QA/QC) procedures followed during this assessment. The soil and groundwater samples were collected in accordance with FDEP SOP 001/01. The MAGS soil vapor analyses were performed by Eurofins for Method TO-15. Eurofins also performed soil and groundwater analyses by EPA Method 8260B VOCs, EPA Method 8270D SVOCs, and USEPA Method FL-PRO petroleum range organics.

The analytical data provided by the laboratories were reviewed for laboratory precision, accuracy, and completeness.

The laboratory data was deemed acceptable based on the following information:

- All samples were prepared and analyzed within hold time.
- Each laboratory method blank was analyzed for VOC target compounds; all target compounds were reported below the method detection limit.
- All laboratory control sample (LCS) recoveries were within control limits.

- The laboratory matrix spike/matrix spike duplicate pairs were within quality assurance and quality control (QA/QC) criteria relative percent difference and spike recoveries, unless otherwise noted in the laboratory report narrative.
- Surrogate recovery results were within acceptable limits.
- There are no other discrepancies or data qualifications that require discussion.

Based on these results, the samples collected during this assessment are an accurate representation of soil and groundwater-quality conditions. Copies of Water Sampling Logs are included in **Appendix A**. Copies of laboratory reports are included in **Appendix B**.

6 CONCLUSIONS

Based on the results of the Site assessment performed at the Former Bacon Cleaners & Laundry Service Site, state drycleaner cleanup criteria in 62-780 FAC, and cleanup target levels in 62-777 FAC, the following can be concluded:

- The subject property had operated as drycleaner for approximately 41 years (~1957 to 1998). A soil sample identified the presence of Mineral Spirits (3,890 mg/kg) in shallow soils collected outside the rear of the facility in June 1996.
- The lithology observed at the Site generally consisted of very fine to fine-grain quartz sand with trace amounts of silt and clay, and a moderately plastic, soft, sandy clay (**Figures 4** and **5**).
- Moist/wet soil was observed at a depth of 43.5 and 45 ft bg during soil boring installation activities, which generally coincides with depth to water measurements collected on November 18, 2020. A predominantly flat groundwater gradient direction, with a minor component to the southeast, was identified in the shallow surficial aquifer unit during this assessment with a horizontal gradient of approximately 0.001 ft/ft as measured between MW001 and MW003.
- The MAGS testing identified concentrations of PCE, ranging from below the detection limit of 0.0027mg/m^3 to 0.0067 mg/m^3, in all nine soil vapor samples submitted for laboratory analysis. The highest concentration of PCE (0.0067 mg/m^3) was detected in the soil vapor sample collected from MAGS02, located near the former boiler room.
- Based upon a minimum effective vacuum of 0.1 IWC, as observed on a nearby MAGS well, the ROI is estimated to be 27-46 feet for all MAGS wells.
- Reported PCE concentrations for all 60 soil samples were less than the laboratory method detection limits. However, concentrations of TRPH and several PAHs were reported above their applicable SCTLs at soil boring locations SB001 (0.5 and 2 ft bg), SB002 (0.5 ft bg), SB003 (0.5 and 2 ft bg), SB005 (0.5 ft bg), SB006 (0.5 ft bg), and SB007 (4 ft bg).
- Confirmatory soil samples collected at soil borings SB001, SB002, SB003, and SB006 on February 23, 2021 indicated TRPH concentrations at SB001, SB002, SB003, and SB006 had decreased below the SCTL. PAH concentrations greater than the applicable SCTLs were again reported at SB001 and SB003.

- Groundwater samples collected from the monitoring well network reported target VOC, PAH, and TRPH concentrations below the applicable laboratory method detection limits and GCTLs.
- Site assessment activities conducted from October 2020 to February 2021 revealed PAH concentrations greater than the applicable SCTLs in shallow (less than 4 ft bg) soils.
- The soil PAH exceedances are primarily located beneath asphalt-paved areas of the Site. Additional sampling can be conducted to delineate and identify the potential sources of PAHs detected (i.e. past drycleaner operations or asphalt related).

7 RECOMMENDATIONS

Based on the conclusions, state drycleaner cleanup criteria in 62-780 FAC, and cleanup target levels in 62-777 FAC, Arcadis recommends collecting additional shallow soil borings to delineate the nature and extent of PAHs in soil. The additional soil data will be used to determine the appropriate path to closure for the Site.

8 REFERENCES

AECOM Technical Services, Inc. 2018. Site Assessment Report, Haines City Quality Cleaners.

Arcadis. 2020. Initial Site Assessment Work Plan. March 2020.

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TABLES

TABLE 1
MONITOR WELL CONSTRUCTION AND GROUNDWATER ELEVATIONS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Well I.D.	Screen Interval (ft bls)	Top-of-Casing Elevation* (ft)	WLM Date	Water Level (ft btoc)	Relative Water Elevation (ft)
MW001	40 - 55	95.85	11/18/2020	40.88	54.97
MW002	37 - 52	95.48	11/18/2020	40.54	54.94
MW003	37 - 52	95.10	11/18/2020	40.18	54.92
MW004	35 - 50	92.76	11/18/2020	37.80	54.96

Footnotes:
ft - feet
ft bls - feet below land surface
ft btoc - feet below top of casing
* Survey completed on November 13, 2020; MW001 established as arbitrary benchmark
WLM - Water level Measurement

TABLE 2
SOIL SCREENING RESULTS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Soil Boring ID: MAGS ID: DATE:	SB001 MG01 10/22/20	SB002 MG03 10/21/20	SB003 MG04 10/22/20	SB004 MG06 10/21/20	SB005 N/A 10/22/20	SB006 N/A 10/23/20	SB007 N/A 10/23/20	SB008 N/A 10/23/20	SB009 MG08 11/13/20	SB010 MG09 11/13/20
Depth (ft BG)	**Photoionization Detector Screening Results (ppm)**									
0-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
0.5-2	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0	0	0.1
2-4	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0	0.1	0.1
4-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
6-8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
8-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
10-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	N/A	N/A
15-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
20-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
25-30	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0	N/A	N/A
30-35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
35-40	0.0	0.0	0.2	0.8	0.0	0.0	0.0	0	N/A	N/A
43.5-45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A
44-45	N/A	1,495	65.4	1,745	0.0	0.0	N/A	N/A	N/A	N/A
44.5-45	68.4	N/A	N/A	N/A	N/A	N/A	261.3	N/A	N/A	N/A
45-50	N/A	N/A	2,085	6.9	3.3	13.3	N/A	N/A	N/A	N/A
48-50	21.6	976.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
49-50	N/A	N/A	N/A	N/A	N/A	N/A	12.2	2.8	N/A	N/A
50-55	N/A	N/A	N/A	N/A	N/A	0.0	N/A	0	N/A	N/A
51.5-53	N/A	N/A	N/A	N/A	N/A	N/A	6.9	N/A	N/A	N/A
53-55	1.8	N/A	N/A	3.5	0.0	N/A	N/A	N/A	N/A	N/A
54-55	N/A	6.9	2.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Footnotes:
MAGS - modified active gas survey
ppm - parts per million
ft BG - feet below grade
N/A - not applicable

TABLE 3
MODIFIED ACTIVE GAS SURVEY ANALYTICAL RESULTS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Sample		MG01	MG02	MG03	MG04	MG05	MG06	MG07	MG08	MG09
Date		12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020
Flow (cfm)		114	110	110	100	105	103	82	82	68
Estimated Radius of Influence (ft)		38	39	30	32	27	38	46	36	36
PID reading at sample time (ppm)		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2
Compounds	**Units**									
Tetrachloroethene (PCE)	mg/m^3	0.0027 U	0.0067 I	0.0027 U	0.0057 I	0.0027 U	0.0045 I	0.0060 I	0.0027 U	0.0027 U
Trichloroethene (TCE)	mg/m^3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Total VOCs	mg/m^3	0.326	0.267	0.291	0.432	0.482	0.706	0.909	0.0984	0.161
Total VOCs Influent Rate	(lbs/day)	0.003	0.003	0.003	0.004	0.005	0.007	0.007	0.001	0.001

Footnotes:

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

U - Indicates that the compound was analyzed for but not detected

VOCs - volatile organic compounds

cfm: cubic feet per minute

ppm - parts per million

mg/m^3: Milligrams per meter cubed

PID - photoionization detector

lbs/day - pounds per day

Total VOCs Influent Rate = (total VOCs x flow rate x 24 hours x 60 minutes x 2.2 pounds per kilogram)/3.28^3 x 10^6

TABLE 4
SOIL ANALYTICAL RESULTS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Analyte (Method 8260)	FDEP SCTLs (mg/kg) Direct Exposure Residential	Direct Exposure Industrial	Leachability Based on Groundwater Criteria	Sample Location:	SB001															
				Sample Date:	10/22/20	2/23/21	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20
				Depth (ft BG):	0.5		2	4	6	8	10	15	20	25	30	35	40	45	50	55
Purgeable Aromatics				**Unit**																
Tetrachloroethene	8.8	18	0.03	mg/kg	0.0034 U	NA	0.0017 U	0.0033 U	0.0032 U	0.0033 U	0.0033 U	0.0034 U	0.0034 U	0.0034 U	0.0033 U	0.0034 U	0.0034 U	0.0033 U	0.0029 U	0.0051 U
Trichloroethene	6.4	9.3	0.03	mg/kg	0.0033 U	NA	0.0016 U	0.0032 U	0.0031 U	0.0031 U	0.0031 U	0.0033 U	0.0032 U	0.0033 U	0.0032 U	0.0032 U	0.0033 U	0.0031 U	0.0027 U	0.0049 U
cis-1,2-Dichloroethene	33	180	0.4	mg/kg	0.0031 U	NA	0.0015 U	0.0030 U	0.0029 U	0.0029 U	0.0030 U	0.0031 U	0.0030 U	0.0031 U	0.0030 U	0.0030 U	0.0031 U	0.0029 U	0.0026 U	0.0046 U
trans-1,2-Dichloroethene	53	290	0.7	mg/kg	0.0038 U	NA	0.0019 U	0.0037 U	0.0036 U	0.0037 U	0.0037 U	0.0039 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U	0.0038 U	0.0037 U	0.0032 U	0.0058 U
1,1-Dichloroethene	95	510	0.06	mg/kg	0.0024 U	NA	0.0011 U	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	0.0023 U	0.0023 U	0.0024 U	0.0023 U	0.0020 U	0.0036 U
Vinyl chloride	0.2	0.8	0.007	mg/kg	0.0027 U	NA	0.0013 U	0.0026 U	0.0025 U	0.0026 U	0.0026 U	0.0027 U	0.0027 U	0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0026 U	0.0023 U	0.0041 U
Benzene	1.2	1.7	0.007	mg/kg	0.0035 U	NA	0.0017 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0036 U	0.0035 U	0.0036 U	0.0035 U	0.0035 U	0.0035 U	0.0034 U	0.0030 U	0.0053 U
Toluene	7,500	60,000	0.5	mg/kg	0.0041 U	NA	0.0020 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0041 U	0.0041 U	0.0041 U	0.0040 U	0.0040 U	0.0041 U	0.0039 U	0.0034 U	0.0062 U
Ethylbenzene	1,500	9,200	0.6	mg/kg	0.0031 U	NA	0.0015 U	0.0030 U	0.0029 U	0.0030 U	0.0030 U	0.0031 U	0.0031 U	0.0031 U	0.0030 U	0.0031 U	0.0031 U	0.0030 U	0.0026 U	0.0047 U
m/p-Xylene	--	--	--	mg/kg	0.0030 U	NA	0.0015 U	0.0029 U	0.0028 U	0.0029 U	0.0029 U	0.0030 U	0.0030 U	0.0030 U	0.0029 U	0.0030 U	0.0030 U	0.0029 U	0.0025 U	0.0045 U
o-Xylene	--	--	--	mg/kg	0.0015 U	NA	0.00072 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U	0.0015 U	0.0015 U	0.0014 U	0.0012 U	0.0022 U
MTBE	4,400	24,000	0.09	mg/kg	0.0017 U	NA	0.00082 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0017 U	0.0017 U	0.0016 U	0.0014 U	0.0025 U
TRPHs	460	2,700	340	mg/kg	**440**	37	36	17 I	12 I	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	13 U	14 U	22 I
Bromodichloromethane	1.5	2.2	0.004	mg/kg	0.0015 U	NA	0.00070 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0012 U	0.0022 U
Bromoform	48	93	0.03	mg/kg	0.0046 U	NA	0.0022 U	0.0044 U	0.0043 U	0.0044 U	0.0044 U	0.0046 U	0.0045 U	0.0046 U	0.0044 U	0.0045 U	0.0045 U	0.0044 U	0.0038 U	0.0069 U
Bromomethane	3.1	16	0.05	mg/kg	0.0043 U	NA	0.0021 U	0.0041 U	0.0040 U	0.0041 U	0.0041 U	0.0043 U	0.0042 U	0.0043 U	0.0042 U	0.0042 U	0.0043 U	0.0041 U	0.0036 U	0.0064 U
Carbon Tetrachloride	0.5	0.7	0.04	mg/kg	0.0036 U	NA	0.0018 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0036 U	0.0036 U	0.0036 U	0.0035 U	0.0036 U	0.0036 U	0.0035 U	0.0030 U	0.0054 U
Chlorobenzene	120	650	1.3	mg/kg	0.0028 U	NA	0.0014 U	0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0028 U	0.0028 U	0.0028 U	0.0027 U	0.0027 U	0.0028 U	0.0027 U	0.0023 U	0.0042 U
Chloroethane	3.9	5.4	0.06	mg/kg	0.0024 U	NA	0.0011 U	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	0.0023 U	0.0023 U	0.0024 U	0.0023 U	0.0020 U	0.0036 U
Chloroform	0.4	0.6	0.4	mg/kg	0.0035 U	NA	0.0017 U	0.0034 U	0.0033 U	0.0034 U	0.0034 U	0.0036 U	0.0035 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.0030 U	0.0053 U
Chloromethane	4	5.7	0.01	mg/kg	0.0031 U	NA	0.0015 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0031 U	0.0030 U	0.0031 U	0.0030 U	0.0030 U	0.0030 U	0.0029 U	0.0026 U	0.0046 U
Dibromochloromethane	1.5	2.3	0.003	mg/kg	0.0037 U	NA	0.0018 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0037 U	0.0036 U	0.0037 U	0.0036 U	0.0036 U	0.0037 U	0.0035 U	0.0031 U	0.0055 U
Dichlorodifluoromethane	77	410	44	mg/kg	0.0026 U	NA	0.0022 I	0.0025 U	0.0024 U	0.0025 U	0.0025 U	0.0026 U	0.0026 U	0.0026 U	0.0025 U	0.0025 U	0.0026 U	0.0025 U	0.0022 U	0.0039 U
1,2-Dichlorobenzene	880	5,000	17	mg/kg	0.0012 U	NA	0.00060 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0010 U	0.0019 U
1,3-Dichlorobenzene	380	2,200	7	mg/kg	0.0028 U	NA	0.0013 U	0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0028 U	0.0027 U	0.0028 U	0.0027 U	0.0027 U	0.0028 U	0.0027 U	0.0023 U	0.0042 U
1,4-Dichlorobenzene	6.4	9.9	2.2	mg/kg	0.0026 U	NA	0.0013 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0027 U	0.0026 U	0.0027 U	0.0026 U	0.0026 U	0.0026 U	0.0025 U	0.0022 U	0.0040 U
1,2-Dichloroethane	0.5	0.7	0.01	mg/kg	0.0014 U	NA	0.00069 U	0.0014 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0012 U	0.0021 U
1,1-Dichloroethane	390	2,100	0.4	mg/kg	0.0033 U	NA	0.0016 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0033 U	0.0032 U	0.0033 U	0.0032 U	0.0032 U	0.0032 U	0.0031 U	0.0027 U	0.0049 U
1,2-Dichloropropane	0.6	0.9	0.03	mg/kg	0.0028 U	NA	0.0014 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0027 U	0.0024 U	0.0043 U
trans-1,3-Dichloropropene	--	--	--	mg/kg	0.0039 U	NA	0.0019 U	0.0038 U	0.0037 U	0.0037 U	0.0038 U	0.0039 U	0.0039 U	0.0039 U	0.0038 U	0.0039 U	0.0039 U	0.0038 U	0.0033 U	0.0059 U
cis-1,3-Dichloropropene	--	--	--	mg/kg	0.0013 U	NA	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0012 U	0.0011 U	0.0019 U
Methylene Chloride	17	26	0.02	mg/kg	0.024 U	NA	0.011 U	0.023 U	0.022 U	0.023 U	0.023 U	0.024 U	0.023 U	0.024 U	0.023 U	0.023 U	0.024 U	0.023 U	0.020 U	0.036 U
1,1,2,2-Tetrachloroethane	0.7	1.2	0.001	mg/kg	0.0015 U	NA	0.00071 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0012 U	0.0022 U
1,1,2-Trichloroethane	1.4	2	0.03	mg/kg	0.0016 U	NA	0.00079 U	0.0016 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0014 U	0.0024 U
1,1,1-Trichloroethane	730	3,900	1.9	mg/kg	0.0023 U	NA	0.0011 U	0.0022 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0019 U	0.0034 U
Trichlorofluoromethane	270	1,500	33	mg/kg	0.0030 U	NA	0.0015 U	0.0029 U	0.0028 U	0.0029 U	0.0029 U	0.0030 U	0.0030 U	0.0030 U	0.0029 U	0.0030 U	0.0030 U	0.0029 U	0.0025 U	0.0045 U
Acenaphthene	2,400	20,000	2.1	mg/kg	0.015 U	0.17	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U	0.0015 U	0.0017 U	0.0017 U	0.0021 U
Acenaphthylene	1,800	20,000	27	mg/kg	0.015 U	0.031	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0017 U	0.0018 U	0.0021 U
Anthracene	21,000	300,000	2,500	mg/kg	0.026 I	0.55	0.015	0.00062 U	0.0010 I	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00062 U	0.00062 U	0.00065 U	0.00071 U	0.00073 U	0.00089 U
Benzo(a)anthracene	#	#	0.8	mg/kg	0.29	**3.8**	0.19	0.0015 U	0.0054 I	0.0016 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0018 U	0.0022 U
Benzo(a)pyrene	0.1	0.7	8	mg/kg	**0.7**	**3.5**	**0.49**	0.0027 I	0.0097	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0017 U	0.0019 U	0.0022 I	0.0024 U
Benzo(a)pyrene equivalent	0.1	0.7	**	mg/kg	**1**	**5.3**	**0.7**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benzo(b)fluoranthene	#	#	2.4	mg/kg	1.5	**6**	0.86	0.0047 I	0.02	0.0029 I	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0016 U	0.0017 I	0.0019 U	0.0051 I	0.0023 U
Benzo(g,h,i)perylene	2,500	52,000	32,000	mg/kg	0.37	2.4	0.24	0.0032 I	0.0091	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0019 U	0.0030 I	0.0024 U
Benzo(k)fluoranthene	#	#	24	mg/kg	0.43	1.8	0.28	0.0019 U	0.0072	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0020 U	0.0021 U	0.0026 I	0.0027 U
Chrysene	#	#	77	mg/kg	0.54	4.6	0.31	0.0021 I	0.011	0.0019 I	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0018 U	0.0039 I	0.0023 U
Dibenzo(a,h)anthracene	#	#	0.7	mg/kg	0.11	0.62	0.074	0.0016 U	0.0025 I	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0017 U	0.0019 U	0.0019 U	0.0024 U
Fluoranthene	3,200	59,000	1,200	mg/kg	0.47	10	0.18	0.0049 U	0.016	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U	0.0051 U	0.0055 U	0.0074 I	0.0069 U
Fluorene	2,600	33,000	160	mg/kg	0.036 U	0.12	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0036 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0036 U	0.0040 U	0.0041 U	0.0050 U
Indeno(1,2,3-cd)pyrene	#	#	6.6	mg/kg	0.24	2.2	0.17	0.0024 I	0.0077	0.0016 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0027 I	0.0022 U
1-Methylnaphthalene	200	1,800	3.1	mg/kg	0.018 U	0.011	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0020 U	0.0021 U	0.0025 U
2-Methylnaphthalene	210	2,100	8.5	mg/kg	0.032 U	0.0078 I	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0030 U	0.0032 U	0.0035 U	0.0036 U	0.0044 U
Naphthalene	55	300	1.2	mg/kg	0.033 U	0.011	0.0032 U	0.0032 U	0.0032 U	0.0032 U	0.0032 U	0.0033 U	0.0032 U	0.0032 U	0.0032 U	0.0032 U	0.0033 U	0.0036 U	0.0038 U	0.0046 U
Phenanthrene	2,200	36,000	250	mg/kg	0.082	5.1	0.03	0.0046 U	0.0081	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0046 U	0.0046 U	0.0048 U	0.0053 U	0.0055 U	0.0066 U
Pyrene	2,400	45,000	880	mg/kg	0.45	7.5	0.21	0.0020 I	0.014	0.0028 I	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0018 U	0.0053 I	0.0023 U

Analyte (Method 8260)	SB002					SB003															
Sample Date:	10/21/20	2/23/21	10/21/20	10/21/20	10/21/20	10/22/20	2/23/21	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20
Depth (ft BG):	0.5		2	4	45	0.5		2	4	6	8	10	15	20	25	30	35	40	45	50	55
Purgeable Aromatics																					
Tetrachloroethene	0.0044 U	NA	0.0035 U	0.0040 U	0.0027 U	0.0032 U	NA	0.0033 U	0.0032 U	0.0032 U	0.0033 U	0.0033 U	0.0037 U	0.0037 U	0.0040 U	0.0034 U	0.0037 U	0.0033 U	0.0034 U	0.0036 U	0.0030 U
Trichloroethene	0.0042 U	NA	0.0034 U	0.0038 U	0.0026 U	0.0031 U	NA	0.0032 U	0.0031 U	0.0031 U	0.0031 U	0.0032 U	0.0036 U	0.0035 U	0.0039 U	0.0033 U	0.0035 U	0.0031 U	0.0033 U	0.0035 U	0.0028 U
cis-1,2-Dichloroethene	0.0039 U	NA	0.0032 U	0.0036 U	0.0025 U	0.0029 U	NA	0.0030 U	0.0029 U	0.0029 U	0.0029 U	0.0030 U	0.0033 U	0.0033 U	0.0037 U	0.0031 U	0.0033 U	0.0030 U	0.0031 U	0.0032 U	0.0027 U
trans-1,2-Dichloroethene	0.0049 U	NA	0.0040 U	0.0045 U	0.0031 U	0.0036 U	NA	0.0037 U	0.0036 U	0.0037 U	0.0037 U	0.0038 U	0.0042 U	0.0041 U	0.0046 U	0.0039 U	0.0041 U	0.0037 U	0.0038 U	0.0041 U	0.0034 U
1,1-Dichloroethene	0.0030 U	NA	0.0024 U	0.0027 U	0.0019 U	0.0022 U	NA	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0023 U	0.0026 U	0.0025 U	0.0028 U	0.0024 U	0.0025 U	0.0023 U	0.0024 U	0.0025 U	0.0021 U
Vinyl chloride	0.0034 U	NA	0.0028 U	0.0031 U	0.0021 U	0.0025 U	NA	0.0026 U	0.0025 U	0.0026 U	0.0026 U	0.0026 U	0.0029 U	0.0029 U	0.0032 U	0.0027 U	0.0029 U	0.0026 U	0.0027 U	0.0028 U	0.0023 U
Benzene	0.0045 U	NA	0.0036 U	0.0041 U	0.0028 U	0.0034 U	NA	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0035 U	0.0039 U	0.0038 U	0.0042 U	0.0036 U	0.0038 U	0.0034 U	0.0035 U	0.0037 U	0.0031 U
Toluene	0.0052 U	NA	0.0042 U	0.0048 U	0.0033 U	0.0039 U	NA	0.0040 U	0.0039 U	0.0039 U	0.0039 U	0.0040 U	0.0044 U	0.0044 U	0.0049 U	0.0041 U	0.0044 U	0.0039 U	0.0041 U	0.0043 U	0.0036 U
Ethylbenzene	0.0040 U	NA	0.0032 U	0.0036 U	0.0025 U	0.0029 U	NA	0.0030 U	0.0029 U	0.0030 U	0.0030 U	0.0030 U	0.0034 U	0.0033 U	0.0037 U	0.0031 U	0.0033 U	0.0030 U	0.0031 U	0.0033 U	0.0027 U
m/p-Xylene	0.0038 U	NA	0.0031 U	0.0035 U	0.0024 U	0.0028 U	NA	0.0029 U	0.0028 U	0.0029 U	0.0029 U	0.0029 U	0.0033 U	0.0032 U	0.0036 U	0.0030 U	0.0032 U	0.0029 U	0.0030 U	0.0032 U	0.0026 U
o-Xylene	0.0019 U	NA	0.0015 U	0.0017 U	0.0012 U	0.0014 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0018 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0016 U	0.0013 U
MTBE	0.0022 U	NA	0.0017 U	0.0020 U	0.0013 U	0.0016 U	NA	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0018 U	0.0018 U	0.0020 U	0.0017 U	0.0018 U	0.0016 U	0.0017 U	0.0018 U	0.0015 U
TRPHs	**390**	34	32	22	110	**380**	180	300	25	31	22	15 I	13 U	13 U	14 U	13 U	13 U	13 U	13 U	100	14 U
Bromodichloromethane	0.0019 U	NA	0.0015 U	0.0017 U	0.0012 U	0.0014 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0017 U	0.0015 U	0.0016 U	0.0014 U	0.0014 U	0.0015 U	0.0013 U
Bromoform	0.0058 U	NA	0.0047 U	0.0053 U	0.0036 U	0.0043 U	NA	0.0044 U	0.0043 U	0.0043 U	0.0044 U	0.0044 U	0.0050 U	0.0049 U	0.0054 U	0.0046 U	0.0049 U	0.0044 U	0.0046 U	0.0048 U	0.0040 U
Bromomethane	0.0055 U	NA	0.0044 U	0.0050 U	0.0034 U	0.0040 U	NA	0.0041 U	0.0040 U	0.0041 U	0.0041 U	0.0042 U	0.0046 U	0.0046 U	0.0051 U	0.0043 U	0.0046 U	0.0041 U	0.0043 U	0.0045 U	0.0037 U
Carbon Tetrachloride	0.0046 U	NA	0.0037 U	0.0042 U	0.0029 U	0.0034 U	NA	0.0035 U	0.0034 U	0.0034 U	0.0035 U	0.0035 U	0.0039 U	0.0039 U	0.0043 U	0.0036 U	0.0039 U	0.0035 U	0.0036 U	0.0038 U	0.0031 U
Chlorobenzene	0.0036 U	NA	0.0029 U	0.0032 U	0.0022 U	0.0026 U	NA	0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0027 U	0.0030 U	0.0030 U	0.0033 U	0.0028 U	0.0030 U	0.0027 U	0.0028 U	0.0029 U	0.0024 U
Chloroethane	0.0030 U	NA	0.0024 U	0.0027 U	0.0019 U	0.0022 U	NA	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0023 U	0.0026 U	0.0025 U	0.0028 U	0.0024 U	0.0025 U	0.0023 U	0.0024 U	0.0025 U	0.0021 U
Chloroform	0.0045 U	NA	0.0036 U	0.0041 U	0.0028 U	0.0033 U	NA	0.0034 U	0.0033 U	0.0034 U	0.0034 U	0.0034 U	0.0038 U	0.0038 U	0.0042 U	0.0036 U	0.0038 U	0.0034 U	0.0035 U	0.0037 U	0.0031 U
Chloromethane	0.0039 U	NA	0.0031 U	0.0035 U	0.0024 U	0.0029 U	NA	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0030 U	0.0033 U	0.0033 U	0.0036 U	0.0031 U	0.0033 U	0.0029 U	0.0030 U	0.0032 U	0.0027 U
Dibromochloromethane	0.0047 U	NA	0.0038 U	0.0043 U	0.0029 U	0.0035 U	NA	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0036 U	0.0040 U	0.0039 U	0.0044 U	0.0037 U	0.0040 U	0.0035 U	0.0037 U	0.0039 U	0.0032 U
Dichlorodifluoromethane	0.0033 U	NA	0.0026 U	0.0030 U	0.0021 U	0.0024 U	NA	0.0025 U	0.0024 U	0.0047 I	0.0025 U	0.0025 U	0.0028 U	0.0028 U	0.0031 U	0.0026 U	0.0028 U	0.0057 I	0.0026 U	0.0044 I	0.0022 U
1,2-Dichlorobenzene	0.0016 U	NA	0.0013 U	0.0014 U	0.0010 U	0.0012 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U	0.0011 U
1,3-Dichlorobenzene	0.0036 U	NA	0.0028 U	0.0032 U	0.0022 U	0.0026 U	NA	0.0027 U	0.0026 U	0.0026 U	0.0027 U	0.0027 U	0.0030 U	0.0030 U	0.0033 U	0.0028 U	0.0030 U	0.0027 U	0.0028 U	0.0029 U	0.0024 U
1,4-Dichlorobenzene	0.0034 U	NA	0.0027 U	0.0031 U	0.0021 U	0.0025 U	NA	0.0026 U	0.0025 U	0.0025 U	0.0025 U	0.0026 U	0.0029 U	0.0028 U	0.0031 U	0.0027 U	0.0028 U	0.0025 U	0.0026 U	0.0028 U	0.0023 U
1,2-Dichloroethane	0.0018 U	NA	0.0015 U	0.0016 U	0.0011 U	0.0013 U	NA	0.0014 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0017 U	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0015 U	0.0012 U
1,1-Dichloroethane	0.0042 U	NA	0.0033 U	0.0038 U	0.0026 U	0.0031 U	NA	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0032 U	0.0035 U	0.0035 U	0.0039 U	0.0033 U	0.0035 U	0.0031 U	0.0033 U	0.0034 U	0.0028 U
1,2-Dichloropropane	0.0036 U	NA	0.0029 U	0.0033 U	0.0023 U	0.0027 U	NA	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0028 U	0.0031 U	0.0030 U	0.0034 U	0.0028 U	0.0030 U	0.0027 U	0.0028 U	0.0030 U	0.0025 U
trans-1,3-Dichloropropene	0.0050 U	NA	0.0040 U	0.0045 U	0.0031 U	0.0037 U	NA	0.0038 U	0.0037 U	0.0037 U	0.0037 U	0.0038 U	0.0043 U	0.0042 U	0.0046 U	0.0039 U	0.0042 U	0.0038 U	0.0039 U	0.0041 U	0.0034 U
cis-1,3-Dichloropropene	0.0016 U	NA	0.0013 U	0.0015 U	0.0010 U	0.0012 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0014 U	0.0015 U	0.0013 U	0.0014 U	0.0012 U	0.0013 U	0.0014 U	0.0011 U
Methylene Chloride	0.030 U	NA	0.024 U	0.027 U	0.019 U	0.022 U	NA	0.023 U	0.022 U	0.023 U	0.023 U	0.023 U	0.026 U	0.025 U	0.028 U	0.024 U	0.025 U	0.023 U	0.024 U	0.025 U	0.021 U
1,1,2,2-Tetrachloroethane	0.0019 U	NA	0.0015 U	0.0017 U	0.0012 U	0.0014 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0017 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0015 U	0.0013 U
1,1,2-Trichloroethane	0.0021 U	NA	0.0017 U	0.0019 U	0.0013 U	0.0015 U	NA	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0018 U	0.0017 U	0.0019 U	0.0016 U	0.0017 U	0.0016 U	0.0016 U	0.0017 U	0.0014 U
1,1,1-Trichloroethane	0.0029 U	NA	0.0023 U	0.0026 U	0.0018 U	0.0021 U	NA	0.0022 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U	0.0025 U	0.0024 U	0.0027 U	0.0023 U	0.0024 U	0.0022 U	0.0023 U	0.0024 U	0.0020 U
Trichlorofluoromethane	0.0039 U	NA	0.0031 U	0.0035 U	0.0024 U	0.0029 U	NA	0.0029 U	0.0028 U	0.0029 U	0.0029 U J	0.0029 U J	0.0033 U J	0.0032 U J	0.0036 U J	0.0030 U J	0.0032 U J	0.0029 U J	0.0030 U J	0.0032 U J	0.0026 U J
Acenaphthene	0.0074 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0081	0.045	0.015 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0016 U	0.0016 U	0.0017 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0017 U
Acenaphthylene	0.0076 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U	0.0037 I	0.018	0.015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0018 U	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0018 U	0.0017 U
Anthracene	0.0032 U	0.00065 U	0.00064 U	0.00063 U	0.00064 U	0.029	0.13	0.028 I	0.0019 I	0.0039 I	0.00062 U	0.00062 U	0.00069 U	0.00069 U	0.00075 U	0.00067 U	0.00068 U	0.00070 U	0.00072 U	0.00074 U	0.00071 U
Benzo(a)anthracene	0.039	0.0068 I	0.0047 I	0.0017 I	0.0033 I	0.24	**1.4 J**	0.16	0.014	0.033	0.0015 U	0.0015 U	0.0017 U	0.0017 U	0.0018 U	0.0019 I	0.0020 I	0.0037 I	0.0018 U	0.0018 U	0.0032 I
Benzo(a)pyrene	0.11	0.013	0.011	0.0041 I	0.0079	**0.26**	**2 J**	**0.27**	0.022	0.046	0.0017 U	0.0016 U	0.0031 I	0.0027 I	0.0020 U	0.0035 I	0.0041 I	0.0066 I	0.0019 U	0.0020 U	0.0056 I
Benzo(a)pyrene equivalent	**0.2**	0.0	0.0	0.0	0.0	**0.4**	**3.0**	**0.4**	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benzo(b)fluoranthene	0.28	0.03	0.022	0.0069	0.019	0.45	**3.9 J**	0.49	0.037	0.078	0.0016 U	0.0016 U	0.0068 I	0.0056 I	0.0030 I	0.0084	0.0083	0.016	0.0040 I	0.0029 I	0.0094
Benzo(g,h,i)perylene	0.054	0.0063 I	0.01	0.0050 I	0.012	0.18	0.98 J	0.15	0.025	0.045	0.0017 U	0.0017 U	0.0037 I	0.0036 I	0.0020 U	0.0048 I	0.0044 I	0.0081	0.0022 I	0.0020 U	0.0060 I
Benzo(k)fluoranthene	0.098	0.011	0.0076	0.0026 I	0.0057 I	0.16	1.3 J	0.16	0.013	0.023	0.0019 U	0.0019 U	0.0023 I	0.0022 I	0.0023 U	0.0029 I	0.0036 I	0.0057 I	0.0022 U	0.0022 U	0.0043 I
Chrysene	0.1	0.013	0.0098	0.0041 I	0.0099	0.36	2.5 J	0.3	0.024	0.051	0.0016 U	0.0016 U	0.0040 I	0.0037 I	0.0020 I	0.0053 I	0.0053 I	0.0091	0.0026 I	0.0020 I	0.0061 I
Dibenzo(a,h)anthracene	0.011 I	0.0022 I	0.0019 I	0.0017 U	0.0026 I	0.052	0.38	0.021 I	0.0050 I	0.01	0.0017 U	0.0016 U	0.0018 U	0.0018 U	0.0020 U	0.0018 U	0.0018 U	0.0019 I	0.0019 U	0.0020 U	0.0019 U
Fluoranthene	0.07	0.013	0.011	0.0050 U	0.011	0.61	4.4 J	0.54	0.037	0.074	0.0049 U	0.0048 U	0.0054 U	0.0056 I	0.0058 U	0.0070 I	0.0070 I	0.011	0.0056 U	0.0058 U	0.0095
Fluorene	0.018 U	0.0037 U	0.0036 U	0.0036 U	0.0036 U	0.0071	0.04	0.035 U	0.0034 U	0.0034 U	0.0035 U	0.0035 U	0.0039 U	0.0039 U	0.0042 U	0.0038 U	0.0038 U	0.0040 U	0.0040 U	0.0042 U	0.0040 U
Indeno(1,2,3-cd)pyrene	0.04	0.003 I	0.009	0.0040 I	0.0085	0.17	0.59	0.091	0.018	0.038	0.0015 U	0.0015 U	0.0031 I	0.0028 I	0.0018 U	0.0041 I	0.0037 I	0.0074 I	0.0021 I	0.0018 U	0.0054 I
1-Methylnaphthalene	0.0090 U	0.0019 U	0.0018 U	0.0018 U	0.0093	0.0018 I	0.0098	0.019 I	0.0017 U	0.0017 U	0.0018 U	0.0017 U	0.0020 U	0.0019 U	0.0021 U	0.0019 U	0.0019 U	0.0020 U	0.0020 U	0.017	0.0020 U
2-Methylnaphthalene	0.016 U	0.0032 U	0.0032 U	0.0031 U	0.013	0.0031 U	0.011	0.031 U	0.0030 U	0.0030 U	0.0031 U	0.0030 U	0.0034 U	0.0034 U	0.0037 U	0.0033 U	0.0034 U	0.0035 U	0.0035 U	0.034	0.0035 U
Naphthalene	0.016 U	0.0034 U	0.0033 U	0.0033 U	0.02	0.0032 I	0.015	0.032 U	0.0031 U	0.0031 U	0.0032 U	0.0032 U	0.0035 U	0.0035 U	0.0038 U	0.0034 U	0.0035 U	0.0036 U	0.0037 U	0.0038 U	0.0037 U
Phenanthrene	0.024 U	0.0049 I	0.0048 U	0.0047 U	0.0060 I	0.3	2.4 J	0.23	0.013	0.017	0.0046 U	0.0046 U	0.0051 U	0.0051 U	0.0056 U	0.0050 U	0.0051 U	0.0052 U	0.0054 U	0.0055 U	0.0053 U
Pyrene	0.077	0.013	0.01	0.0035 I	0.0096	0.47	3.4 J	0.41	0.028	0.06	0.0016 U	0.0016 U	0.0041 I	0.0044 I	0.0023 I	0.0052 I	0.0055 I	0.0089	0.0026 I	0.0020 I	0.0065 I

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TABLE 4
SOIL ANALYTICAL RESULTS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Analyte (Method 8260)	FDEP SCTLs (mg/kg)				SB004				SB005				SB006						SB007				SB008				SB009			SB010		
	Direct Exposure Residential	Direct Exposure Industrial	Leachability Based on Groundwater Criteria	Sample Location:																												
				Sample Date:	10/21/20	10/21/20	10/21/20	10/21/20	10/22/20	10/22/20	10/22/20	10/22/20	10/23/20	2/23/21	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	11/13/20	11/13/20	11/13/20	11/13/20	11/13/20	11/13/20
				Depth (ft BG):	0.5	2	4	45	0.5	2	4	50	0.5		2	4	50	0.5	2	4	45	0.5	2	4	50	0.5	2	4	0.5	2	4
Purgeable Aromatics				**Unit**																												
Tetrachloroethene	8.8	18	0.03	mg/kg	0.0031 U	0.0032 U	0.0038 U	0.0030 U	0.0031 U	0.0034 U	0.0034 U	0.0033 U	0.0034 U	NA	0.0032 U	0.0033 U	0.0032 U	0.0036 U	0.0032 U	0.0035 U	0.0034 U	0.0035 U	0.0034 U	0.0035 U	0.0092 U	0.0033 U	0.0034 U	0.0034 U	0.0035 U	0.0032 U	0.0035 U
Trichloroethene	6.4	9.3	0.03	mg/kg	0.0030 U	0.0031 U	0.0037 U	0.0029 U	0.0030 U	0.0032 U	0.0033 U	0.0032 U	0.0033 U	NA	0.0030 U	0.0031 U	0.0031 U	0.0034 U	0.0031 U	0.0034 U	0.0032 U	0.0034 U	0.0032 U	0.0034 U	0.0089 U	0.0031 U	0.0033 U	0.0032 U	0.0033 U	0.0031 U	0.0033 U
cis-1,2-Dichloroethene	33	180	0.4	mg/kg	0.0028 U	0.0029 U	0.0035 U	0.0027 U	0.0028 U	0.0030 U	0.0031 U	0.0030 U	0.0031 U	NA	0.0029 U	0.0030 U	0.0029 U	0.0032 U	0.0029 U	0.0032 U	0.0031 U	0.0032 U	0.0030 U	0.0032 U	0.0083 U	0.0029 U	0.0031 U	0.003 U	0.0031 U	0.0029 U	0.0031 U
trans-1,2-Dichloroethene	53	290	0.7	mg/kg	0.0035 U	0.0036 U	0.0043 U	0.0034 U	0.0035 U	0.0038 U	0.0038 U	0.0037 U	0.0039 U	NA	0.0036 U	0.0037 U	0.0036 U	0.0041 U	0.0036 U	0.0039 U	0.0038 U	0.0040 U	0.0038 U	0.0040 U	0.01 U	0.0037 U	0.0038 U	0.0038 U	0.0039 U	0.0036 U	0.0039 U
1,1-Dichloroethene	95	510	0.06	mg/kg	0.0021 U	0.0022 U	0.0027 U	0.0021 U	0.0021 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	NA	0.0022 U	0.0023 U	0.0022 U	0.0025 U	0.0022 U	0.0024 U	0.0023 U	0.0025 U	0.0023 U	0.0024 U	0.0064 U	0.0031 U	0.0032 U	0.0032 U	0.0033 U	0.0031 U	0.0033 U
Vinyl chloride	0.2	0.8	0.007	mg/kg	0.0024 U	0.0025 U	0.0030 U	0.0024 U	0.0024 U	0.0026 U	0.0027 U	0.0026 U	0.0027 U	NA	0.0025 U	0.0026 U	0.0025 U	0.0028 U	0.0025 U	0.0028 U	0.0027 U	0.0028 U	0.0026 U	0.0028 U	0.0073 U	0.0026 U	0.0027 U	0.0027 U	0.0027 U	0.0025 U	0.0027 U
Benzene	1.2	1.7	0.007	mg/kg	0.0032 U	0.0034 U	0.0040 U	0.0032 U	0.0032 U	0.0035 U	0.0035 U	0.0034 U	0.0036 U	NA	0.0033 U	0.0034 U	0.0033 U	0.0037 U	0.0033 U	0.0036 U	0.0035 U	0.0037 U	0.0035 U	0.0037 U	0.0096 U	0.0034 U	0.0035 U	0.0035 U	0.0036 U	0.0033 U	0.0036 U
Toluene	7,500	60,000	0.5	mg/kg	0.0037 U	0.0039 U	0.0046 U	0.0036 U	0.0037 U	0.0040 U	0.0041 U	0.0040 U	0.0041 U	NA	0.0038 U	0.0039 U	0.0039 U	0.0043 U	0.0038 U	0.0042 U	0.0041 U	0.0043 U	0.0040 U	0.0042 U	0.011 U	0.0039 U	0.0041 U	0.0041 U	0.0042 U	0.0038 U	0.0042 U
Ethylbenzene	1,500	9,200	0.6	mg/kg	0.0028 U	0.0029 U	0.0035 U	0.0028 U	0.0028 U	0.0031 U	0.0031 U	0.0030 U	0.0031 U	NA	0.0029 U	0.0030 U	0.0029 U	0.0033 U	0.0029 U	0.0032 U	0.0031 U	0.0032 U	0.0031 U	0.0032 U	0.0084 U	0.003 U	0.0031 U	0.0031 U	0.0032 U	0.0029 U	0.0032 U
m/p-Xylene	--	--	--	mg/kg	0.0027 U	0.0028 U	0.0034 U	0.0027 U	0.0027 U	0.0030 U	0.0030 U	0.0029 U	0.0030 U	NA	0.0028 U	0.0029 U	0.0028 U	0.0032 U	0.0028 U	0.0031 U	0.0030 U	0.0031 U	0.0030 U	0.0031 U	0.0081 U	0.0029 U	0.003 U	0.003 U	0.0031 U	0.0028 U	0.003 U
o-Xylene	--	--	--	mg/kg	0.0013 U	0.0014 U	0.0017 U	0.0013 U	0.0013 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0016 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.004 U	0.0046 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U	0.0015 U
MTBE	4,400	24,000	0.09	mg/kg	0.0015 U	0.0016 U	0.0019 U	0.0015 U	0.0015 U	0.0017 U	0.0017 U	0.0016 U	0.0017 U	NA	0.0016 U	0.0016 U	0.0016 U	0.0018 U	0.0016 U	0.0017 U	0.0017 U	0.0018 U	0.0017 U	0.0017 U	0.0046 U	0.0016 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0017 U
TRPHs	460	2,700	340	mg/kg	76	12 U	12 U	43	59	25	12 U	14 U	**680**	15 I	12 U	12 U	13 U	12 U	12 U	39	13 U	54	18 I	21	18 U	57	74	17 I	21	20	12 U
Bromodichloromethane	1.5	2.2	0.004	mg/kg	0.0013 U	0.0014 U	0.0016 U	0.0013 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0039 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U
Bromoform	48	93	0.03	mg/kg	0.0041 U	0.0043 U	0.0051 U	0.0041 U	0.0041 U	0.0045 U	0.0045 U	0.0044 U	0.0046 U	NA	0.0042 U	0.0044 U	0.0043 U	0.0048 U	0.0043 U	0.0047 U	0.0045 U	0.0047 U	0.0045 U	0.0047 U	0.012 U	0.0044 U	0.0045 U	0.0045 U	0.0046 U	0.0043 U	0.0046 U
Bromomethane	3.1	16	0.05	mg/kg	0.0039 U	0.0040 U	0.0048 U	0.0038 U	0.0039 U	0.0042 U	0.0043 U	0.0041 U	0.0043 U	NA	0.0040 U	0.0041 U	0.0040 U	0.0045 U	0.0040 U	0.0044 U	0.0042 U	0.0044 U	0.0042 U	0.0044 U	0.012 U	0.0041 U	0.0043 U	0.0042 U	0.0044 U	0.004 U	0.0043 U
Carbon Tetrachloride	0.5	0.7	0.04	mg/kg	0.0033 U	0.0034 U	0.0041 U	0.0032 U	0.0033 U	0.0036 U	0.0036 U	0.0035 U	0.0036 U	NA	0.0034 U	0.0035 U	0.0034 U	0.0038 U	0.0034 U	0.0037 U	0.0036 U	0.0038 U	0.0036 U	0.0037 U	0.0098 U	0.0035 U	0.0036 U	0.0036 U	0.0037 U	0.0034 U	0.0037 U
Chlorobenzene	120	650	1.3	mg/kg	0.0025 U	0.0026 U	0.0031 U	0.0025 U	0.0025 U	0.0027 U	0.0028 U	0.0027 U	0.0028 U	NA	0.0026 U	0.0027 U	0.0026 U	0.0029 U	0.0026 U	0.0029 U	0.0028 U	0.0029 U	0.0027 U	0.0029 U	0.0075 U	0.0027 U	0.0028 U	0.0028 U	0.0028 U	0.0026 U	0.0028 U
Chloroethane	3.9	5.4	0.06	mg/kg	0.0021 U	0.0022 U	0.0027 U	0.0021 U	0.0021 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	NA	0.0022 U	0.0023 U	0.0022 U	0.0025 U	0.0022 U	0.0024 U	0.0023 U	0.0025 U	0.0023 U	0.0024 U	0.0064 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	0.0022 U	0.0024 U
Chloroform	0.4	0.6	0.4	mg/kg	0.0032 U	0.0033 U	0.0040 U	0.0031 U	0.0032 U	0.0035 U	0.0035 U	0.0034 U	0.0036 U	NA	0.0033 U	0.0034 U	0.0033 U	0.0037 U	0.0033 U	0.0036 U	0.0035 U	0.0037 U	0.0035 U	0.0036 U	0.0095 U	0.0034 U	0.0035 U	0.0035 U	0.0036 U	0.0033 U	0.0036 U
Chloromethane	4	5.7	0.01	mg/kg	0.0028 U	0.0029 U	0.0034 U	0.0027 U	0.0028 U	0.0030 U	0.0030 U	0.0029 U	0.0031 U	NA	0.0029 U	0.0030 U	0.0029 U	0.0032 U	0.0029 U	0.0031 U	0.0030 U	0.0032 U	0.0030 U	0.0031 U	0.0083 U	0.0029 U	0.003 U	0.003 U	0.0031 U	0.0029 U	0.0031 U
Dibromochloromethane	1.5	2.3	0.003	mg/kg	0.0033 U	0.0035 U	0.0041 U	0.0033 U	0.0033 U	0.0036 U	0.0037 U	0.0036 U	0.0037 U	NA	0.0034 U	0.0035 U	0.0035 U	0.0039 U	0.0034 U	0.0038 U	0.0036 U	0.0038 U	0.0036 U	0.0038 U	0.01 U	0.0035 U	0.0037 U	0.0036 U	0.0037 U	0.0035 U	0.0037 U
Dichlorodifluoromethane	77	410	44	mg/kg	0.0023 U	0.0024 U	0.0029 U	0.0023 U	0.0023 U	0.0025 U	0.0026 U	0.0025 U	0.0026 U	NA	0.0024 U	0.0025 U	0.0024 U	0.0027 U	0.0024 U	0.0026 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U	0.007 U	0.0025 U	0.0026 U	0.0026 U	0.0026 U	0.0024 U	0.0026 U
1,2-Dichlorobenzene	880	5,000	17	mg/kg	0.0011 U	0.0012 U	0.0014 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U	0.0034 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U
1,3-Dichlorobenzene	380	2,200	7	mg/kg	0.0025 U	0.0026 U	0.0031 U	0.0025 U	0.0025 U	0.0027 U	0.0028 U	0.0027 U	0.0028 U	NA	0.0026 U	0.0027 U	0.0026 U	0.0029 U	0.0026 U	0.0028 U	0.0028 U	0.0029 U	0.0027 U	0.0029 U	0.0075 U	0.0026 U	0.0028 U	0.0027 U	0.0028 U	0.0026 U	0.0028 U
1,4-Dichlorobenzene	6.4	9.9	2.2	mg/kg	0.0024 U	0.0025 U	0.0030 U	0.0024 U	0.0024 U	0.0026 U	0.0026 U	0.0026 U	0.0027 U	NA	0.0025 U	0.0025 U	0.0025 U	0.0028 U	0.0025 U	0.0027 U	0.0026 U	0.0027 U	0.0026 U	0.0027 U	0.0072 U	0.0025 U	0.0026 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
1,2-Dichloroethane	0.5	0.7	0.01	mg/kg	0.0013 U	0.0013 U	0.0016 U	0.0013 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	NA	0.0013 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0038 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0014 U
1,1-Dichloroethane	390	2,100	0.4	mg/kg	0.0029 U	0.0031 U	0.0037 U	0.0029 U	0.0029 U	0.0032 U	0.0033 U	0.0032 U	0.0033 U	NA	0.0030 U	0.0031 U	0.0031 U	0.0034 U	0.0030 U	0.0033 U	0.0032 U	0.0034 U	0.0032 U	0.0034 U	0.0088 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	0.0022 U	0.0024 U
1,2-Dichloropropane	0.6	0.9	0.03	mg/kg	0.0026 U	0.0027 U	0.0032 U	0.0025 U	0.0026 U	0.0028 U	0.0028 U	0.0027 U	0.0029 U	NA	0.0026 U	0.0027 U	0.0027 U	0.0030 U	0.0026 U	0.0029 U	0.0028 U	0.0029 U	0.0028 U	0.0029 U	0.0077 U	0.0027 U	0.0028 U	0.0028 U	0.0029 U	0.0027 U	0.0029 U
trans-1,3-Dichloropropene	--	--	--	mg/kg	0.0035 U	0.0037 U	0.0044 U	0.0035 U	0.0035 U	0.0039 U	0.0039 U	0.0038 U	0.0039 U	NA	0.0036 U	0.0038 U	0.0037 U	0.0041 U	0.0037 U	0.0040 U	0.0039 U	0.0041 U	0.0039 U	0.0040 U	0.011 U	0.0037 U	0.0039 U	0.0039 U	0.004 U	0.0037 U	0.004 U
cis-1,3-Dichloropropene	--	--	--	mg/kg	0.0012 U	0.0012 U	0.0014 U	0.0011 U	0.0012 U	0.0013 U	0.0013 U	0.0012 U	0.0013 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0035 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0013 U
Methylene Chloride	17	26	0.02	mg/kg	0.021 U	0.022 U	0.027 U	0.021 U	0.021 U	0.023 U	0.024 U	0.023 U	0.024 U	NA	0.022 U	0.023 U	0.022 U	0.025 U	0.022 U	0.024 U	0.023 U	0.025 U	0.023 U	0.024 U	0.064 U	0.023 U	0.024 U	0.023 U	0.024 U	0.022 U	0.024 U
1,1,2,2-Tetrachloroethane	0.7	1.2	0.001	mg/kg	0.0013 U	0.0014 U	0.0016 U	0.0013 U	0.0013 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U	0.0015 U	0.0042 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U
1,1,2-Trichloroethane	1.4	2	0.03	mg/kg	0.0015 U	0.0015 U	0.0018 U	0.0014 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	NA	0.0015 U	0.0016 U	0.0015 U	0.0017 U	0.0015 U	0.0017 U	0.0016 U	0.0017 U	0.0016 U	0.0017 U	0.0044 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0015 U	0.0016 U
1,1,1-Trichloroethane	730	3,900	1.9	mg/kg	0.0020 U	0.0021 U	0.0025 U	0.0020 U	0.0020 U	0.0022 U	0.0023 U	0.0022 U	0.0023 U	NA	0.0021 U	0.0022 U	0.0021 U	0.0024 U	0.0021 U	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0023 U	0.0061 U	0.0022 U	0.0023 U	0.0022 U	0.0023 U	0.0021 U	0.0023 U
Trichlorofluoromethane	270	1,500	33	mg/kg	0.0027 U	0.0028 U	0.0034 U	0.0027 U	0.0027 U J	0.0030 U J	0.0030 U J	0.0029 U J	0.0030 U	NA	0.0028 U	0.0029 U	0.0028 U	0.0032 U	0.0028 U	0.0031 U	0.0030 U	0.0031 U	0.0030 U	0.0031 U	0.0082 U	0.0029 U	0.003 U	0.003 U	0.0031 U	0.0028 U	0.0031 U
Acenaphthene	2,400	20,000	2.1	mg/kg	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0077 U	0.0015 U	0.0015 U	0.0017 U	0.016 U	0.0015 U	0.0015 U	0.0015 U	0.0017 U	0.0015 U	0.0015 U	0.0073 U	0.0017 U	0.015 U	0.0015 U	0.0015 U	0.0022 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U
Acenaphthylene	1,800	20,000	27	mg/kg	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0078 U	0.0029 I	0.0015 U	0.0018 U	0.016 U	0.0015 U	0.0019 I	0.0015 U	0.0017 U	0.0016 U	0.0015 U	0.0075 U	0.0017 U	0.015 U	0.0015 U	0.0015 U	0.0022 U	0.0021 I	0.0035 I	0.0015 U	0.0015 U	0.0015 U	0.0015 U
Anthracene	21,000	300,000	2,500	mg/kg	0.00064 U	0.00063 U	0.00063 U	0.00068 U	0.055	0.0024 I	0.0013 I	0.00074 U	0.14	0.00063 U	0.0020 I	0.0012 I	0.00072 U	0.00067 I	0.00063 U	0.0080 I	0.0044 I	0.012 I	0.00063 U	0.00063 U	0.00093 U	0.00092 I	0.0014 I	0.00061 U	0.0011 I	0.00061 U	0.00062 U
Benzo(a)anthracene	#	#	0.8	mg/kg	0.0033 I	0.0039 I	0.0016 U	0.0017 U	0.76 J	0.0092	0.01	0.0018 U	**1.4**	0.0021 I	0.014	0.0059 I	0.0018 U	0.0017 I	0.0015 U	0.027 I	0.026	0.063 I	0.0016 U	0.0015 U	0.0036 I	0.0031 I	0.0031 I	0.0015 U	0.0023 I	0.0015 U	0.0015 U
Benzo(a)pyrene	0.1	0.7	8	mg/kg	0.0056 I	0.0048 I	0.0017 U	0.0018 U	**0.62 J**	0.01	0.012	0.0020 U	**1.2**	0.0028 I	0.011	0.0066 I	0.0019 U	0.0036 I	0.0017 U	0.13	0.074	0.065 I	0.0017 U	0.0017 U	0.0025 U	0.0033 I	0.0044 I	0.0016 U	0.0026 I	0.0016 U	0.0017 U
Benzo(a)pyrene equivalent	0.1	0.7	**	mg/kg	0.0	0.0	0.0	0.0	**1**	0.0	0.0	0.0	**1.8**	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benzo(b)fluoranthene	#	#	2.4	mg/kg	0.011	0.0088	0.0017 U	0.0018 U	1.6 J	0.019	0.021	0.0020 U	**3.2**	0.0059 I	0.024	0.013	0.0019 U	0.0053 I	0.0024 I	0.23	0.11	0.11	0.0017 U	0.0016 U	0.026	0.0082	0.0097	0.0016 U	0.0047 I	0.0016 U	0.0016 U
Benzo(g,h,i)perylene	2,500	52,000	32,000	mg/kg	0.0069 I	0.0044 I	0.0017 U	0.0018 U	0.23 J	0.011	0.011	0.0020 U	0.45	0.002 I	0.0062 I	0.0053 I	0.0019 U	0.0036 I	0.0017 U	0.059	0.071	0.024 I	0.0017 U	0.0017 U	0.011	0.0046 I	0.0075	0.0016 U	0.0022 I	0.0016 U	0.0017 U
Benzo(k)fluoranthene	#	#	24	mg/kg	0.0040 I	0.0034 I	0.0019 U	0.0020 U	0.51 J	0.0054 I	0.0075	0.0022 U	1	0.0022 I	0.0098	0.0047 I	0.0022 U	0.0020 U	0.0019 U	0.088	0.032	0.046 I	0.0019 U	0.0019 U	0.0085 I	0.0035 I	0.0036 I	0.0019 U	0.0018 U	0.0018 U	0.0019 U
Chrysene	#	#	77	mg/kg	0.0067 I	0.0069	0.0016 U	0.0017 U	1.2 J	0.013	0.015	0.0019 U	1.9	0.0031 I	0.021	0.01	0.0018 U	0.0029 I	0.0016 U	0.076	0.05	0.081	0.0016 U	0.0016 U	0.015	0.006 I	0.006 I	0.0016 U	0.0036 I	0.0016 U	0.0016 U
Dibenzo(a,h)anthracene	#	#	0.7	mg/kg	0.0017 U	0.0017 U	0.0017 U	0.0018 U	0.074 J	0.0031 I	0.0029 I	0.0020 U	0.13	0.0017 U	0.0022 I	0.0017 U	0.0019 U	0.0017 U	0.0017 U	0.013 I	0.018	0.017 U	0.0017 U	0.0017 U	0.0028 I	0.0016 U	0.0017 I	0.0016 U	0.0016 U	0.0016 U	0.0017 U
Fluoranthene	3,200	59,000	1,200	mg/kg	0.0087	0.01	0.0049 U	0.0053 U	2.1 J	0.019	0.025	0.0058 U	4.1	0.005 U	0.035	0.018	0.0057 U	0.0051 U	0.0049 U	0.074	0.064	0.27	0.0049 U	0.0049 U	0.019	0.0058 I	0.0063 I	0.0048 U	0.0052 I	0.0048 U	0.0049 U
Fluorene	2,600	33,000	160	mg/kg	0.0036 U	0.0035 U	0.0035 U	0.0038 U	0.018 U	0.0036 U	0.0035 U	0.0042 U	0.038 U	0.0036 U	0.0036 U	0.0035 U	0.0041 U	0.0037 U	0.0035 U	0.018 U	0.0040 U	0.036 U	0.0035 U	0.0035 U	0.0052 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0035 U
Indeno(1,2,3-cd)pyrene	#	#	6.6	mg/kg	0.0065 I	0.0044 I	0.0016 U	0.0017 U	0.26 J	0.0098	0.012	0.0018 U	0.39	0.0016 U	0.0087	0.0069	0.0018 U	0.0038 I	0.0015 I	0.046	0.068	0.019 I	0.0016 U	0.0015 U	0.011	0.0039 I	0.0052 I	0.0015 U	0.002 I	0.0015 U	0.0015 U
1-Methylnaphthalene	200	1,800	3.1	mg/kg	0.0018 U	0.0018 U	0.0018 U	0.0023 I	0.0093 U	0.0018 U	0.0018 U	0.0021 U	0.019 U	0.0018 U	0.0018 U	0.0018 U	0.0020 U	0.0018 U	0.0018 U	0.0089 U	0.0020 U	0.018 U	0.0018 U	0.0018 U	0.0026 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0018 U
2-Methylnaphthalene	210	2,100	8.5	mg/kg	0.0032 U	0.0031 U	0.0031 U	0.0033 I	0.016 U	0.0031 U	0.0031 U	0.0037 U	0.034 U	0.0031 U	0.0031 U	0.0031 U	0.0036 U	0.0032 U	0.0031 U	0.015 U	0.0035 U	0.032 U	0.0031 U	0.0031 U	0.0046 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.0031 U
Naphthalene	55	300	1.2	mg/kg	0.0033 U	0.0032 U	0.0032 U	0.0035 U	0.017 U	0.0033 U	0.0032 U	0.0038 U	0.035 U	0.0033 U	0.0033 U	0.0042 I	0.0037 U	0.0034 U	0.0032 U	0.016 U	0.0036 U	0.033 U	0.0032 U	0.0032 U	0.0048 U	0.0032 U	0.0031 U	0.0032 U	0.0031 U	0.0031 U	0.0032 U
Phenanthrene	2,200	36,000	250	mg/kg	0.0048 U	0.0047 U	0.0047 U	0.0050 U	0.31 J	0.011	0.0062 I	0.0055 U	0.75	0.0047 U	0.0051 I	0.0056 I	0.0054 U	0.0049 U	0.0047 U	0.023 U	0.024	0.050 I	0.0047 U	0.0047 U	0.0069 U	0.0046 U	0.0045 U	0.0046 U	0.0045 U	0.0045 U	0.0046 U
Pyrene	2,400	45,000	880	mg/kg	0.0072	0.0083	0.0016 U	0.0019 I	2.1 J	0.015	0.02	0.0019 U	4.3	0.0038 I	0.034	0.018	0.0019 U	0.0026 I	0.0016 U	0.077	0.047	0.22	0.0016 U	0.0016 U	0.011	0.0049 I	0.005 I	0.0016 U	0.004 I	0.0016 U	0.0016 U

Footnotes:
FDEP SCTLs - Florida Department of Environmental Protection Soil Cleanup
Target Levels per Chapter 62-777, Florida Administrative Code
mg/kg - milligrams per kilogram
ft BG - Feet below grade
J - Estimated value
U - Compound was analyzed for but not detected above the method detection limit
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
** - Leachability value may be determined using TCLP
# - Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent
NS - Not sampled
NA - Not analyzed

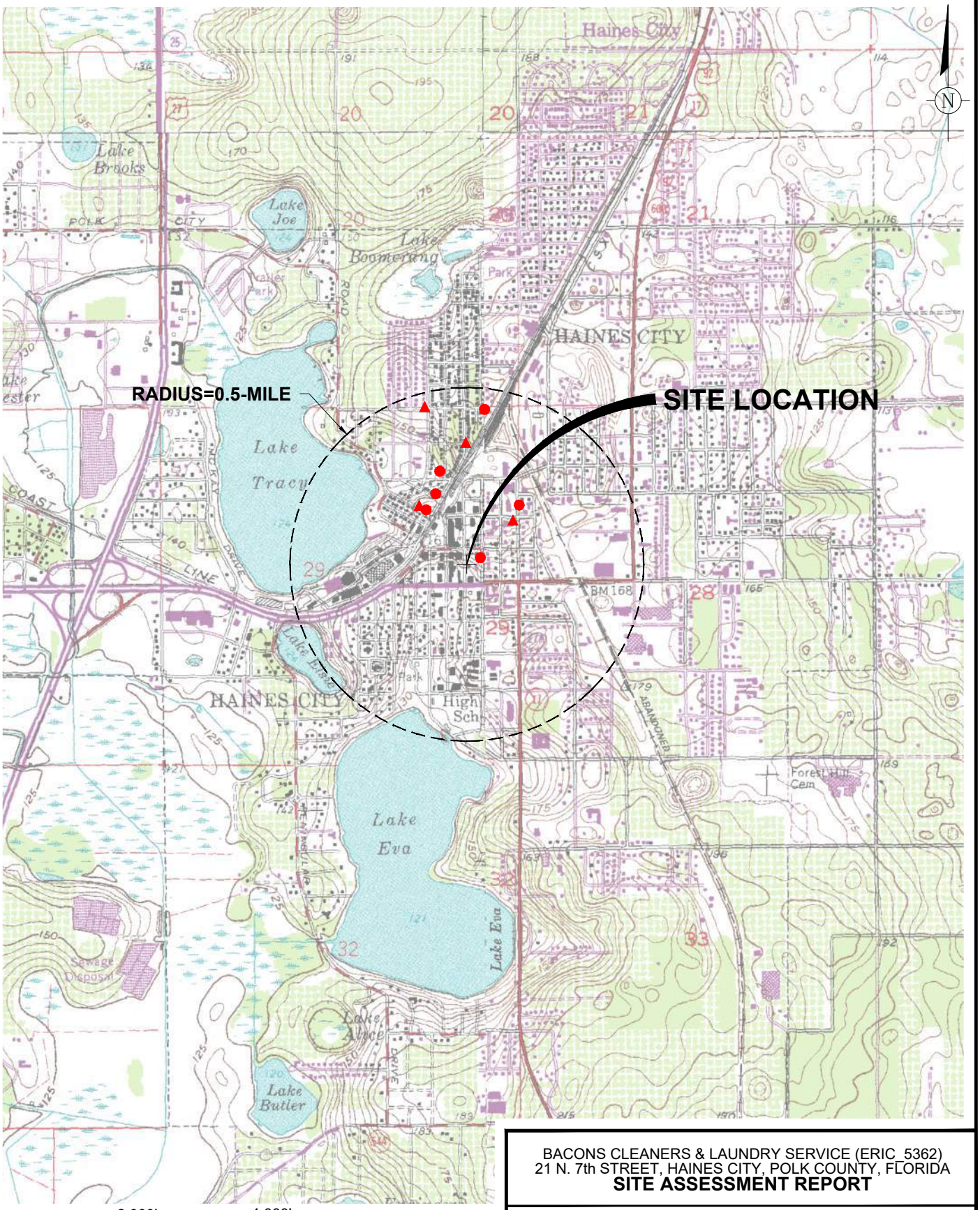
TABLE 5
GROUNDWATER ANALYTICAL DATA
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Location ID:			MW001	MW002	MW003	MW004
Screen Interval (ft bg):			40-55	37-52	37-52	35-50
Date Collected:			11/18/20	11/18/20	11/18/20	11/18/20
Sample Name:	FDEP GCTLs	Units	MW001 (11/18/20)	MW002 (11/18/20)	MW003 (11/18/20)	MW004 (11/18/20)
Tetrachloroethene	3	µg/L	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	3	µg/L	0.61 U	0.61 U	0.61 U	0.61 U
cis-1,2-Dichloroethene	70	µg/L	0.32 U	0.32 U	0.32 U	0.32 U
trans-1,2-Dichloroethene	100	µg/L	0.39 U	0.39 U	0.39 U	0.39 U
1,1-Dichloroethene	7	µg/L	0.26 U	0.26 U	0.26 U	0.26 U
Vinyl chloride	1	µg/L	0.26 U	0.26 U	0.26 U	0.26 U
Benzene	1	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	40	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
Ethylbenzene	30	µg/L	0.27 U	0.27 U	0.27 U	0.50 I
m/p-Xylene	--	µg/L	0.36 U	0.36 U	0.36 U	0.36 U
o-Xylene	--	µg/L	0.50 U	0.50 U	0.50 U	0.50 U
MTBE	20	µg/L	0.44 U	0.44 U	0.44 U	0.44 U
TRPHs	5,000	µg/L	1200	240 U	1600	240 U
Bromodichloromethane	0.6	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Bromoform	4.4	µg/L	1.1 U	1.1 U	1.1 U	1.1 U
Bromomethane	9.8	µg/L	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Tetrachloride	3	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Chlorobenzene	100	µg/L	0.27 U	0.27 U	0.27 U	0.27 U
Chloroethane	12	µg/L	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	70	µg/L	0.29 U	0.29 U	0.94 I	0.42 I
Chloromethane	2.7	µg/L	0.76 U	0.76 U	0.76 U	0.76 U
Dibromochloromethane	0.4	µg/L	0.31 U	0.31 U	0.31 U	0.31 U
Dichlorodifluoromethane	1400	µg/L	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichlorobenzene	600	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
1,3-Dichlorobenzene	210	µg/L	0.26 U	0.26 U	0.26 U	0.26 U
1,4-Dichlorobenzene	75	µg/L	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloroethane	3	µg/L	0.31 U J	0.31 U J	0.31 U J	0.31 U J
1,1-Dichloroethane	70	µg/L	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloropropane	5	µg/L	0.52 U	0.52 U	0.52 U	0.52 U
trans-1,3-Dichloropropene	--	µg/L	0.27 U	0.27 U	0.27 U	0.27 U
cis-1,3-Dichloropropene	--	µg/L	0.39 U	0.39 U	0.39 U	0.39 U
Methylene Chloride	5	µg/L	1.4 U	1.4 U	1.4 U	1.4 U
1,1,2,2-Tetrachloroethane	0.2	µg/L	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2-Trichloroethane	5	µg/L	0.29 U	0.29 U	0.29 U	0.29 U
1,1,1-Trichloroethane	200	µg/L	0.30 U	0.30 U	0.30 U	0.30 U
Trichlorofluoromethane	2,100	µg/L	0.49 U	0.49 U	0.49 U	0.49 U
Acenaphthene	20	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Acenaphthylene	210	µg/L	0.081 U	0.081 U	0.081 U	0.081 U
Anthracene	2,100	µg/L	0.090 U	0.090 U	0.090 U	0.090 U
Benzo(a)anthracene	0.05a	µg/L	0.050 U	0.050 U	0.050 U	0.050 U
Benzo(a)pyrene	0.2**	µg/L	0.073 U	0.073 U	0.073 U	0.073 U
Benzo(b)fluoranthene	0.05a	µg/L	0.050 U	0.050 U	0.050 U	0.050 U
Benzo(g,h,i)perylene	210	µg/L	0.070 U	0.070 U	0.070 U	0.070 U
Benzo(k)fluoranthene	0.5	µg/L	0.083 U	0.083 U	0.083 U	0.083 U
Chrysene	4.8	µg/L	0.068 U	0.068 U	0.068 U	0.068 U
Dibenzo(a,h)anthracene	0.005a	µg/L	0.077 U	0.077 U	0.077 U	0.077 U
Fluoranthene	280	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Fluorene	280	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Indeno(1,2,3-cd)pyrene	0.05a	µg/L	0.050 U	0.050 U	0.050 U	0.050 U
1-Methylnaphthalene	28	µg/L	0.64 U	1.1	0.64 U	0.64 U
2-Methylnaphthalene	28	µg/L	0.67 U	1.9	0.67 U	0.83
Naphthalene	14	µg/L	1.3 U	1.3 U	1.3 U	3.6 I
Phenanthrene	210	µg/L	0.86 U	0.86 U	0.86 U	0.86 U
Pyrene	210	µg/L	0.22 U	0.22 U	0.22 U	0.22 U

Footnotes:

FDEP GCTL - Florida Department of Environmental Protection Groundwater Cleanup Target Level per Chapter 62-777, Florida Administrative Code
FDEP NADC- Florida Department of Environmental Protection Natural Attenuation Default Concentration
ug/L - micrograms per liter
I - reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value
U -The compound was analyzed for but not detected.
SVOC - Semi-Volatile Organic Compound
VOC - Volatile Organic Compound
Analysis methods included EPA Method SW-846 8260B for VOCs
ft bg - feet below ground

FIGURES



0 2,000' 4,000'

GRAPHIC SCALE

LEGEND

- ▲ PUBLIC WATER SUPPLY (PWS) WELL
- ● PRIVATE DRINKING WATER WELL

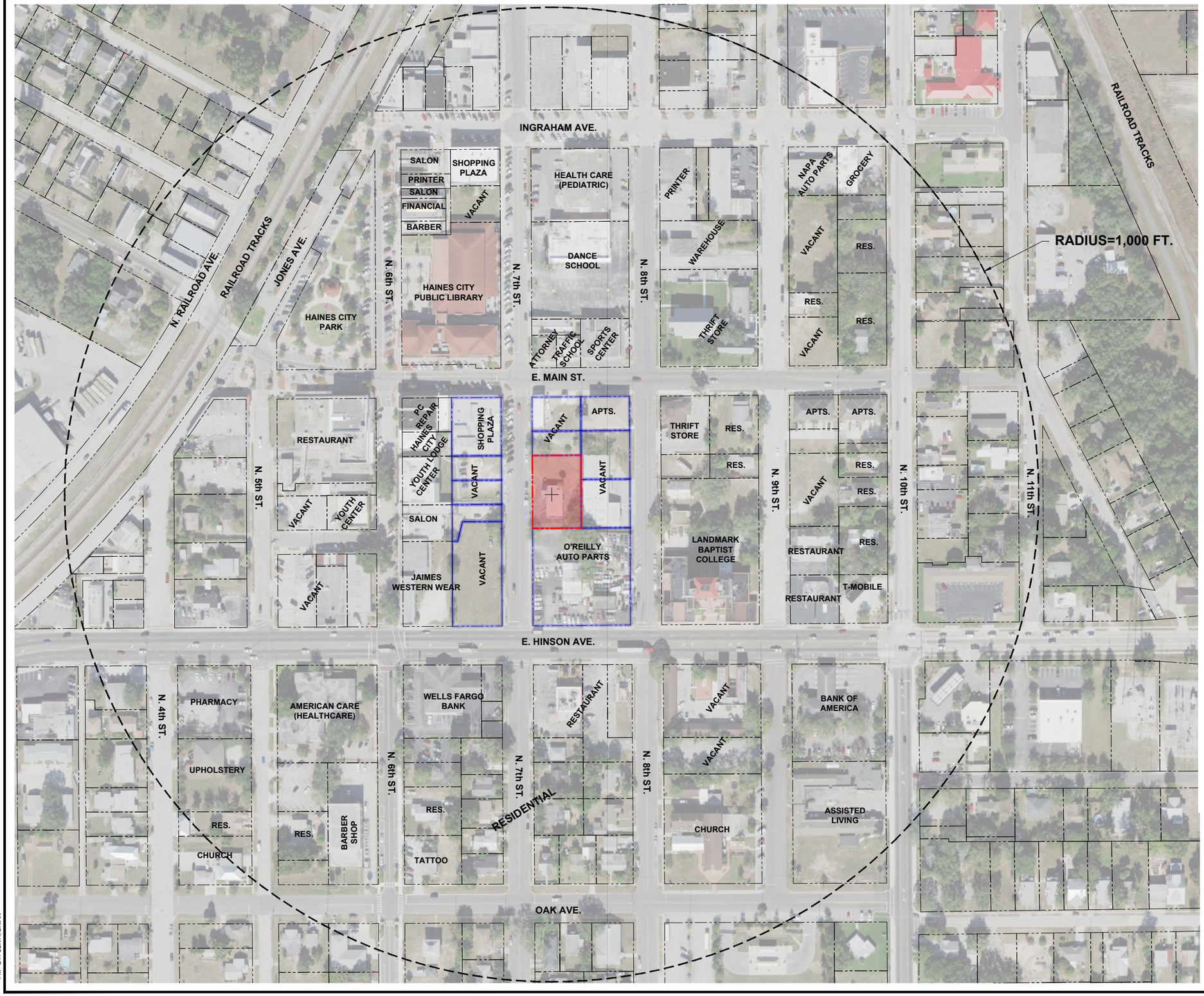
BASE MAP SOURCE: USGS 7.5 minute series (topographic)
Winter Haven, Florida quadrangle, 1983.

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

SITE LOCATION

ARCADIS

FIGURE
1



LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- ADJACENT PARCELS

0 200' 400'

GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

SITE VICINITY

ARCADIS

FIGURE
2

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- UGE — UNDERGROUND ELECTRIC UTILITY
- OHE — OVERHEAD ELECTRIC UTILITY
- NG — NG — NATURAL GAS UTILITY
- W — WATER UTILITY
- SW — STORM WATER UTILITY
- SS — SANITARY SEWER UTILITY
- CATV — CABLE TV
- CDM — COMMUNICATION UTILITY
- UNK — UNKNOWN UTILITY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION
- A — A' LINE OF CROSS SECTION

0 30' 60'

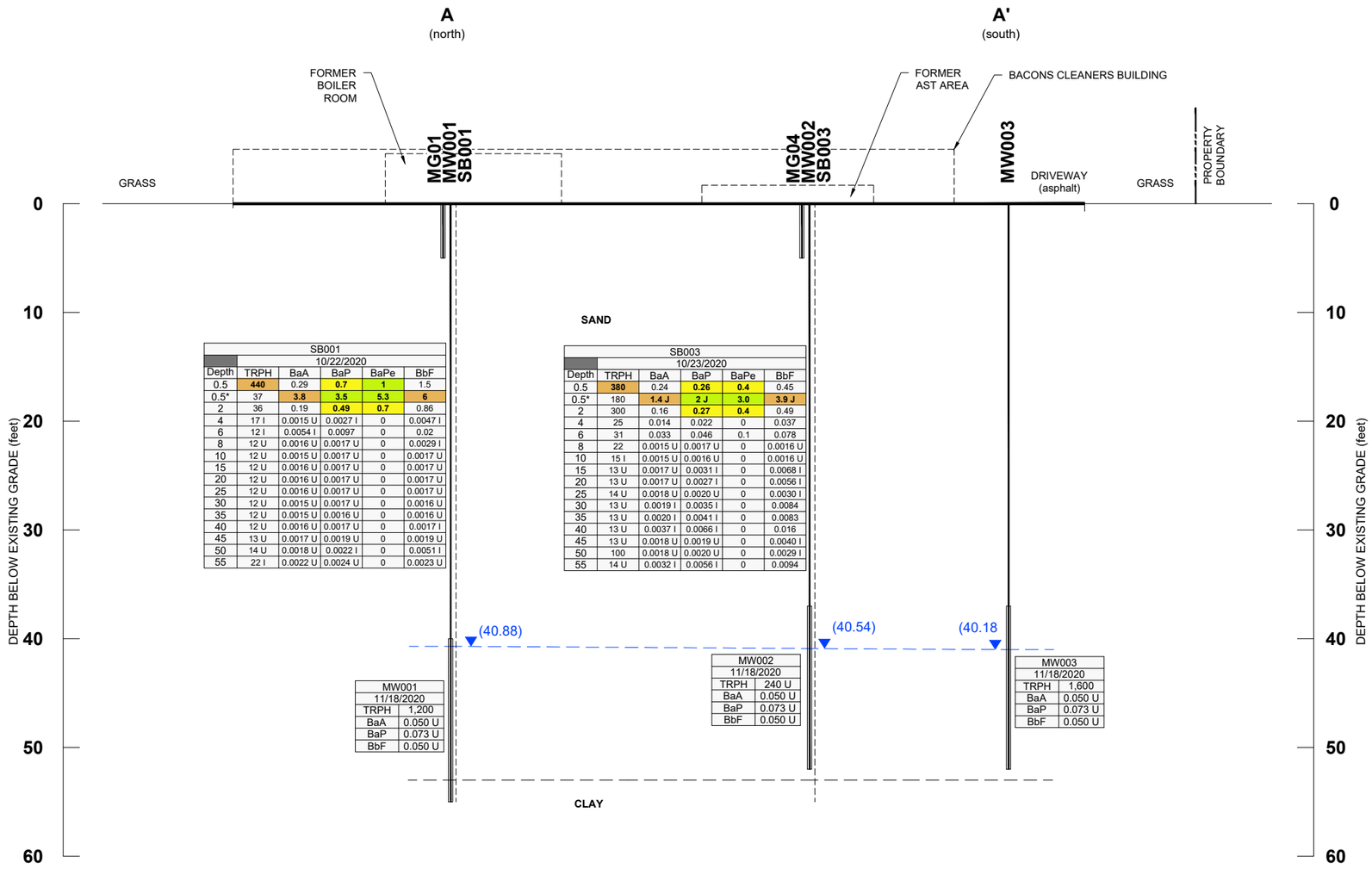
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

SITE LAYOUT

ARCADIS

FIGURE
3



SB001					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**440**	0.29	**0.7**	**1**	1.5
0.5*	37	**3.8**	**3.5**	**5.3**	**6**
2	36	0.19	**0.49**	**0.7**	0.86
4	17 I	0.0015 U	0.0027 I	0	0.0047 I
6	12 I	0.0054 I	0.0097	0	0.02
8	12 U	0.0016 U	0.0017 U	0	0.0029 I
10	12 U	0.0015 U	0.0017 U	0	0.0017 U
15	12 U	0.0016 U	0.0017 U	0	0.0017 U
20	12 U	0.0016 U	0.0017 U	0	0.0017 U
25	12 U	0.0016 U	0.0017 U	0	0.0017 U
30	12 U	0.0015 U	0.0017 U	0	0.0016 U
35	12 U	0.0015 U	0.0016 U	0	0.0016 U
40	12 U	0.0016 U	0.0017 U	0	0.0017 I
45	13 U	0.0017 U	0.0019 U	0	0.0019 U
50	14 U	0.0018 U	0.0022 I	0	0.0051 I
55	22 I	0.0022 U	0.0024 U	0	0.0023 U

SB003					
	10/23/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**380**	0.24	**0.26**	**0.4**	0.45
0.5*	180	**1.4 J**	**2 J**	**3.0**	**3.9 J**
2	300	0.16	**0.27**	**0.4**	0.49
4	25	0.014	0.022	0	0.037
6	31	0.033	0.046	0.1	0.078
8	22	0.0015 U	0.0017 U	0	0.0016 U
10	15 I	0.0015 U	0.0016 U	0	0.0016 U
15	13 U	0.0017 U	0.0031 I	0	0.0068 I
20	13 U	0.0017 U	0.0027 I	0	0.0056 I
25	14 U	0.0018 U	0.0020 U	0	0.0030 I
30	13 U	0.0019 I	0.0035 I	0	0.0084
35	13 U	0.0020 I	0.0041 I	0	0.0083
40	13 U	0.0037 I	0.0066 I	0	0.016
45	13 U	0.0018 U	0.0019 U	0	0.0040 I
50	100	0.0018 U	0.0020 U	0	0.0029 I
55	14 U	0.0032 I	0.0056 I	0	0.0094

MW001	
11/18/2020	
TRPH	1,200
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

MW002	
11/18/2020	
TRPH	240 U
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

MW003	
11/18/2020	
TRPH	1,600
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

LEGEND

MONITOR WELL AND SCREENED INTERVAL

MW003	SAMPLE I.D.
11/18/2020	SAMPLE DATE
TRPH 1,600	TRPH CONCENTRATION (ug/L)
BaA 0.050 U	BENZO(a)ANTHRACENE CONCENTRATION (ug/L)
BaP 0.073 U	BENZO(a)PYRENE CONCENTRATION (ug/L)
BbF 0.050 U	BENZO(b)FLUORANTHENE CONCENTRATION (ug/L)

(40.88) DEPTH TO WATER MEASURED ON 11/18/2020

NOTES
1. **Bold** indicates GCTL exceedance.
2. ***Bold italic*** indicates NADC exceedance.
3. FDEP GCTLs - Florida Department of Environmental Protection Groundwater Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
4. **Bold** indicates SCTL exceedance.
5. FDEP SCTLs - Florida Department of Environmental Protection Soil Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
6. "U" indicates compound was analyzed for but not detected.
7. "I" indicates result is between laboratory Practical Quantifiable Limit [PQL] and laboratory Method Detection Limit [MDL].
8. "J" indicates laboratory estimated value.
9. "NS" indicates not sampled.
10. " * " indicates confirmatory result collected on 2/23/2021.
11. TRPH=Total Recoverable Petroleum Hydrocarbons.
12. BaA=Benzo(a)Anthracene.
13. BaP=Benzo(a)Pyrene.
14. BaPe=Benzo(a)Pyrene equivalents
15. BbF=Benzo(b)Fluoranthene
16. Aqueous results reported in micrograms per liter (ug/L).
17. Solid results reported in milligrams per kilogram (mg/kg).
18. "**" Leachability value may be determined using TCLP.
19. "#" Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent

GCTL			
TRPH	BaA	BaP	BbF
5,000	0.05a	0.2**	0.05a

Soil Cleanup Target Level (SCTL) Shading Index
Direct Exposure Residential Soil Cleanup Target Level Exceedance
Direct Exposure Commercial Soil Cleanup Target Level Exceedance
Leachability Based on Groundwater Criteria Exceedance

SCTL					
	TRPH	BaA	BaP	BaPe	BbF
	460	#	0.1	0.1	#
	2,700	#	0.7	0.7	#
	340	0.8	8	**	2.4

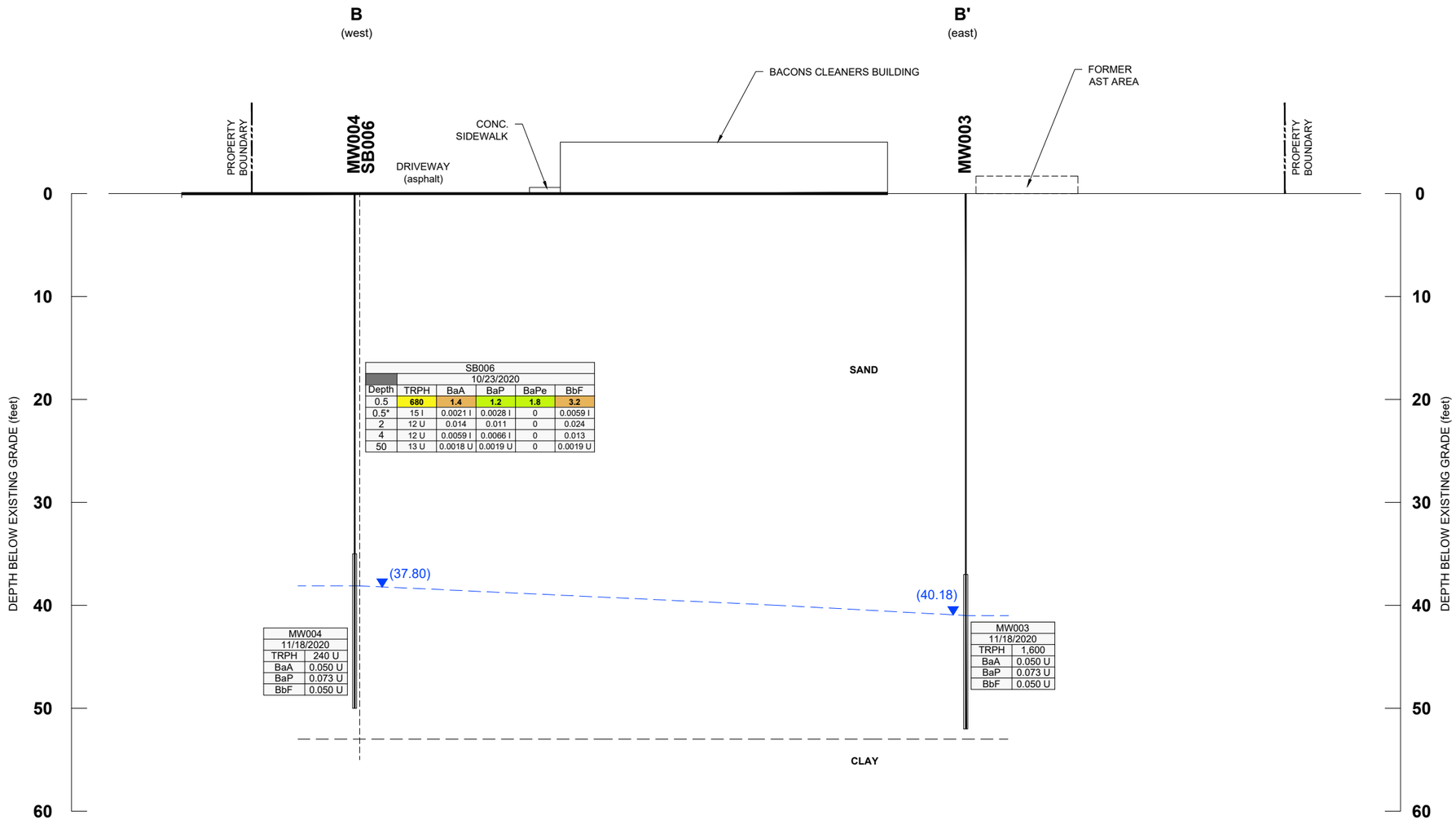
0 12' 24'
HORIZONTAL GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

CROSS SECTION A-A'
WITH TRPH/PAH IN SOIL/GROUNDWATER ANALYTICAL RESULTS
OCTOBER/NOVEMBER 2020 AND FEBRUARY 2021

ARCADIS

FIGURE
4



SB006					
	10/23/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**680**	**1.4**	**1.2**	**1.8**	**3.2**
0.5*	15 I	0.0021 I	0.0028 I	0	0.0059 I
2	12 U	0.014	0.011	0	0.024
4	12 U	0.0059 I	0.0066 I	0	0.013
50	13 U	0.0018 U	0.0019 U	0	0.0019 U

MW004	
11/18/2020	
TRPH	240 U
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

MW003	
11/18/2020	
TRPH	1,600
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

LEGEND

MONITOR WELL AND SCREENED INTERVAL

MW003	SAMPLE I.D.
11/18/2020	SAMPLE DATE
TRPH 1,600	TRPH CONCENTRATION (ug/L)
BaA 0.050 U	BENZO(a)ANTHRACENE CONCENTRATION (ug/L)
BaP 0.073 U	BENZO(a)PYRENE CONCENTRATION (ug/L)
BbF 0.050 U	BENZO(b)FLUORANTHENE CONCENTRATION (ug/L)

(40.18) DEPTH TO WATER MEASURED ON 11/18/2020.

NOTES
1. **Bold** indicates GCTL exceedance.
2. ***Bold italic*** indicates NADC exceedance.
3. FDEP GCTLs - Florida Department of Environmental Protection Groundwater Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
4. **Bold** indicates SCTL exceedance.
5. FDEP SCTLs - Florida Department of Environmental Protection Soil Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
6. "U" indicates compound was analyzed for but not detected.
7. "I" indicates result is between laboratory Practical Quantifiable Limit [PQL] and laboratory Method Detection Limit [MDL].
8. "J" indicates laboratory estimated value.
9. "NS" indicates not sampled.
10. " * " indicates confirmatory result collected on 2/23/2021.
11. TRPH=Total Recoverable Petroleum Hydrocarbons.
12. BaA=Benzo(a)Anthracene.
13. BaP=Benzo(a)Pyrene.
14. BaPe=Benzo(a)Pyrene equivalents
15. BbF=Benzo(b)Fluoranthene
16. Aqueous results reported in milligrams per liter (mg/L).
17. Solid results reported in milligrams per kilogram (mg/kg).
18. "**" Leachability value may be determined using TCLP.
19. "#" Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent

GCTL			
TRPH	BaA	BaP	BbF
5,000	0.05a	0.2**	0.05a

Soil Cleanup Target Level (SCTL) Shading Index
Direct Exposure Residential Soil Cleanup Target Level Exceedance
Direct Exposure Commercial Soil Cleanup Target Level Exceedance
Leachability Based on Groundwater Criteria Exceedance

SCTL					
	TRPH	BaA	BaP	BaPe	BbF
	460	#	0.1	0.1	#
	2,700	#	0.7	0.7	#
	340	0.8	8	**	2.4

0 12' 24'
HORIZONTAL GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

CROSS SECTION B-B' WITH TRPH/PAH IN SOIL/GROUNDWATER ANALYTICAL RESULTS OCTOBER/NOVEMBER 2020 AND FEBRUARY 2021

ARCADIS

FIGURE
5

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION
- (54.96) GROUNDWATER ELEVATION (ft. relative to an arbitrary datum)
- 54.94 GROUNDWATER ELEVATION CONTOUR (ft. relative to an arbitrary datum)
- INDICATES PREDOMINANT DIRECTION OF GROUNDWATER FLOW

0 30' 60'

GRAPHIC SCALE

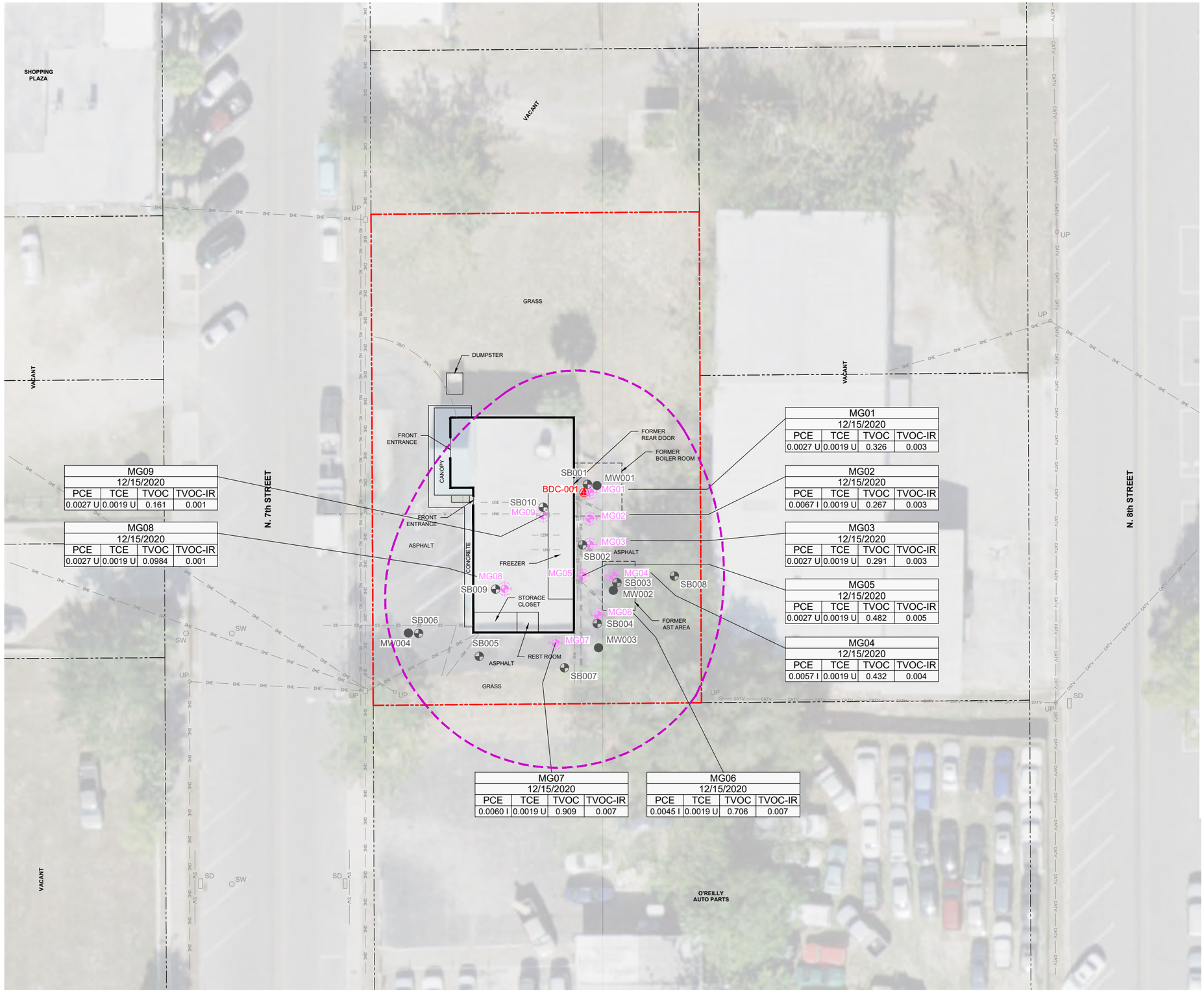
BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

SHALLOW (WT-55 FT. BG) GROUNDWATER GRADIENT - NOVEMBER 18, 2020

ARCADIS

FIGURE 6

CITY: BB_FL DIV/GROUP: EN DB: B.OLIVA LD: (Opt) PIC: W.VOGELSONG PM: B.BURKE TM: E.BROOKS LYR:(On)=*;OFF=*REF*
C:\Users\brian.oliva\ARCADIS\ANA - FLORIDA DEPT OF ENVIRONMENTAL PROTECTION\Project Files\Bacons DO\2021\01-DWG\3006\1946-SM.dwg LAYOUT: SAR-F6_SGWE 20201118 SAVED: 3/18/2021 3:55 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ACS-COLOR_ANALYTICAL.CTB PLOTTED: 3/18/2021 3:56 PM BY: OLIVA, BRIAN



MG09			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.161	0.001

MG08			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.0984	0.001

MG01			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.326	0.003

MG02			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0067 I	0.0019 U	0.267	0.003

MG03			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.291	0.003

MG05			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.482	0.005

MG04			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0057 I	0.0019 U	0.432	0.004

MG07			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0060 I	0.0019 U	0.909	0.007

MG06			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0045 I	0.0019 U	0.706	0.007

N

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION

MG01			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.326	0.003

SAMPLE I.D.
SAMPLE DATE
ANALYTICAL RESULTS (mg/m^3) AND INFLUENT RATE (lbs./day)

MAGS INFLUENCE

NOTES
1. "I" indicates result is between laboratory Practical Quantifiable Limit [PQL] and laboratory Method Detection Limit [MDL].
2. "U" indicates compound was analyzed for but not detected.
3. PCE=Tetrachloroethene.
4. TCE=Trichloroethene.
5. TVOC=Total Volatile Organic Compound.
6. TVOC-IR=Total Volatile Organic Compound Influent Rate.

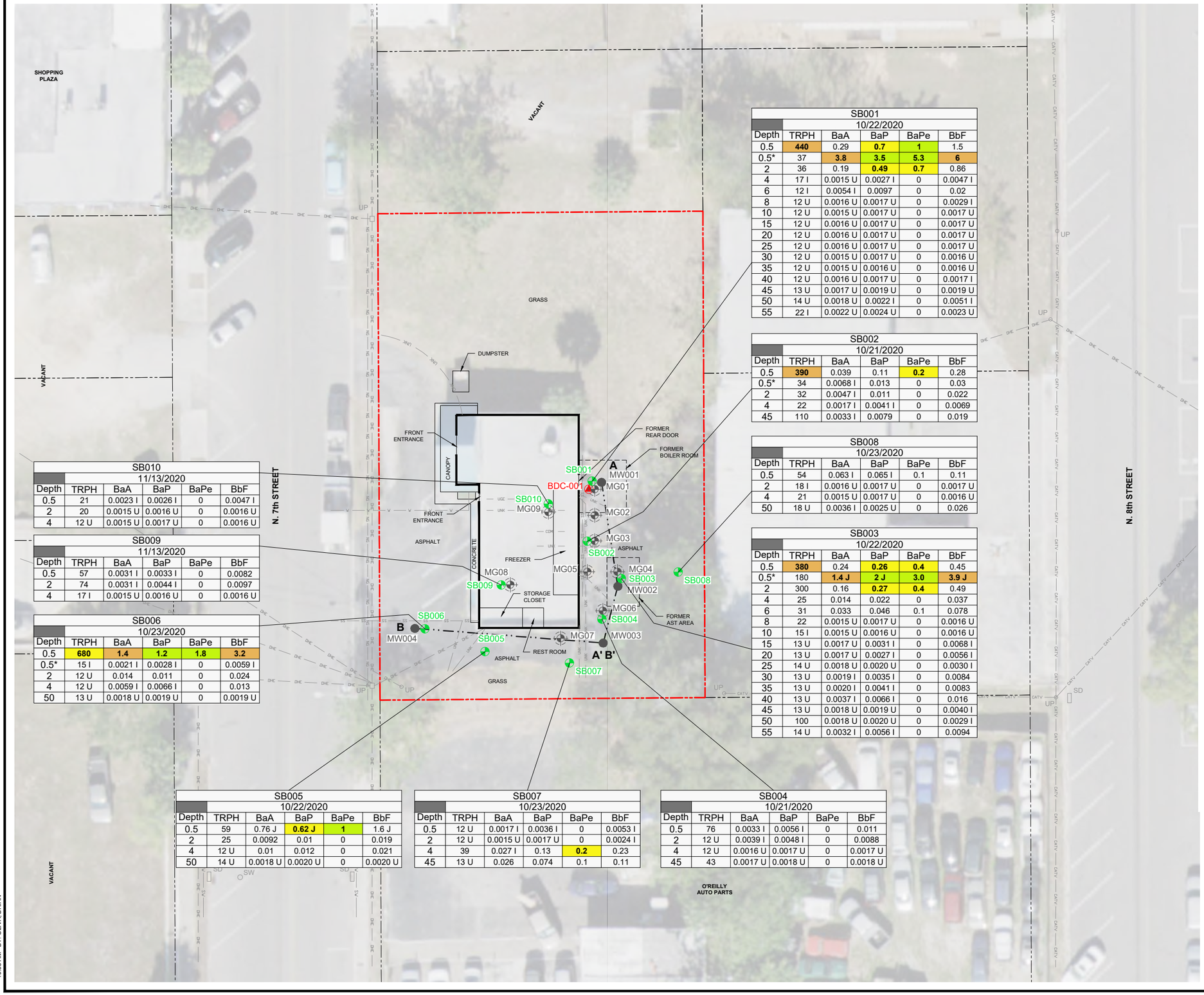
0 30' 60'
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

SOIL GAS ANALYTICAL RESULTS DECEMBER 2020

ARCADIS

FIGURE 7



SB001					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**440**	0.29	**0.7**	**1**	1.5
0.5*	37	**3.8**	**3.5**	**5.3**	**6**
2	36	0.19	**0.49**	**0.7**	0.86
4	17 I	0.0015 U	0.0027 I	0	0.0047 I
6	12 I	0.0054 I	0.0097	0	0.02
8	12 U	0.0016 U	0.0017 U	0	0.0029 I
10	12 U	0.0015 U	0.0017 U	0	0.0017 U
15	12 U	0.0016 U	0.0017 U	0	0.0017 U
20	12 U	0.0016 U	0.0017 U	0	0.0017 U
25	12 U	0.0016 U	0.0017 U	0	0.0017 U
30	12 U	0.0015 U	0.0017 U	0	0.0016 U
35	12 U	0.0015 U	0.0016 U	0	0.0016 U
40	12 U	0.0016 U	0.0017 U	0	0.0017 I
45	13 U	0.0017 U	0.0019 U	0	0.0019 U
50	14 U	0.0018 U	0.0022 I	0	0.0051 I
55	22 I	0.0022 U	0.0024 U	0	0.0023 U

SB002					
	10/21/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**390**	0.039	0.11	**0.2**	0.28
0.5*	34	0.0068 I	0.013	0	0.03
2	32	0.0047 I	0.011	0	0.022
4	22	0.0017 I	0.0041 I	0	0.0069
45	110	0.0033 I	0.0079	0	0.019

SB008					
	10/23/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	54	0.063 I	0.065 I	0.1	0.11
2	18 I	0.0016 U	0.0017 U	0	0.0017 U
4	21	0.0015 U	0.0017 U	0	0.0016 U
50	18 U	0.0036 I	0.0025 U	0	0.026

SB003					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**380**	0.24	**0.26**	**0.4**	0.45
0.5*	180	**1.4 J**	**2 J**	**3.0**	**3.9 J**
2	300	0.16	**0.27**	**0.4**	0.49
4	25	0.014	0.022	0	0.037
6	31	0.033	0.046	0.1	0.078
8	22	0.0015 U	0.0017 U	0	0.0016 U
10	15 I	0.0015 U	0.0016 U	0	0.0016 U
15	13 U	0.0017 U	0.0031 I	0	0.0068 I
20	13 U	0.0017 U	0.0027 I	0	0.0056 I
25	14 U	0.0018 U	0.0020 U	0	0.0030 I
30	13 U	0.0019 I	0.0035 I	0	0.0084
35	13 U	0.0020 I	0.0041 I	0	0.0083
40	13 U	0.0037 I	0.0066 I	0	0.016
45	13 U	0.0018 U	0.0019 U	0	0.0040 I
50	100	0.0018 U	0.0020 U	0	0.0029 I
55	14 U	0.0032 I	0.0056 I	0	0.0094

SB010					
	11/13/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	21	0.0023 I	0.0026 I	0	0.0047 I
2	20	0.0015 U	0.0016 U	0	0.0016 U
4	12 U	0.0015 U	0.0017 U	0	0.0016 U

SB009					
	11/13/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	57	0.0031 I	0.0033 I	0	0.0082
2	74	0.0031 I	0.0044 I	0	0.0097
4	17 I	0.0015 U	0.0016 U	0	0.0016 U

SB006					
	10/23/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**680**	**1.4**	**1.2**	**1.8**	**3.2**
0.5*	15 I	0.0021 I	0.0028 I	0	0.0059 I
2	12 U	0.014	0.011	0	0.024
4	12 U	0.0059 I	0.0066 I	0	0.013
50	13 U	0.0018 U	0.0019 U	0	0.0019 U

SB005					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	59	0.76 J	**0.62 J**	**1**	1.6 J
2	25	0.0092	0.01	0	0.019
4	12 U	0.01	0.012	0	0.021
50	14 U	0.0018 U	0.0020 U	0	0.0020 U

SB007					
	10/23/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	12 U	0.0017 I	0.0036 I	0	0.0053 I
2	12 U	0.0015 U	0.0017 U	0	0.0024 I
4	39	0.027 I	0.13	**0.2**	0.23
45	13 U	0.026	0.074	0.1	0.11

SB004					
	10/21/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	76	0.0033 I	0.0056 I	0	0.011
2	12 U	0.0039 I	0.0048 I	0	0.0088
4	12 U	0.0016 U	0.0017 U	0	0.0017 U
45	43	0.0017 U	0.0018 U	0	0.0018 U

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION
- A - - A' LINE OF CROSS SECTION

SB010					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	21	0.0023 I	0.0026 I	NS	0.0047 I
2	20	0.0015 U	0.0016 U	NS	0.0016 U
4	12 U	0.0015 U	0.0017 U	NS	0.0016 U

NOTES
1. **Bold** indicates SCTL exceedance.
2. FDEP SCTLs - Florida Department of Environmental Protection Soil Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
3. "U" indicates compound was analyzed for but not detected
4. "I" indicates result is between laboratory Practical Quantifiable Limit [PQL] and laboratory Method Detection Limit [MDL].
5. "J" indicates laboratory estimated value.
6. "NS" indicates not sampled.
7. " * " indicates confirmatory result collected on 2/23/2021.
8. TRPH=Total Recoverable Petroleum Hydrocarbons.
9. BaA=Benzo(a)Anthracene.
10. BaP=Benzo(a)Pyrene.
11. BaPe=Benzo(a)Pyrene equivalents
12. BbF=Benzo(b)Fluoranthene
13. All results reported in milligrams per kilogram (mg/kg).
14. "**" Leachability value may be determined using TCLP.
15. "#" Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent

Soil Cleanup Target Level (SCTL) Shading Index
Direct Exposure Residential Soil Cleanup Target Level Exceedance
Direct Exposure Commercial Soil Cleanup Target Level Exceedance
Leachability Based on Groundwater Criteria Exceedance

SCTL					
	TRPH	BaA	BaP	BaPe	BbF
	460	#	0.1	0.1	#
	2,700	#	0.7	0.7	#
	340	0.8	8	**	2.4

0 30' 60'
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

TRPH AND PAH CONCENTRATIONS IN SOIL OCTOBER 2020 AND FEBRUARY 2021

ARCADIS

FIGURE
8

CITY: BB_FL DIVGROUP: EN DB: B.OLIVA LD:(Opt) PIC: W.VOGELSONG PM: B.BURKE TM: E.BROOKS LYR:(Opt)ON=*;OFF=*REF*
C:\Users\brian\BIM 360\Arcadis\ANA - FLORIDA DEPT OF ENVIRONMENTAL PROTECTION\Project Files\Basins DO\2021\01\DWG\30091946-SM.dwg LAYOUT: SAR-F8_SQ 20201118 SAVED: 4/14/2021 10:29 AM ACADVER: 23.0S (LMS TECH) PAGESETUP:---- PLOTSTYLETABLE: ACS-COLOR_ANALYTICAL.CTB PLOTTED: 4/14/2021 10:38 AM BY: OLIVA, BRIAN

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION
- A — A' LINE OF CROSS SECTION

MW001	SAMPLE I.D.
11/18/2020	SAMPLE DATE
TRPH 1,200	TRPH CONCENTRATION (ug/L)
BaA 0.050 U	BENZO(a)ANTHRACENE CONCENTRATION (ug/L)
BaP 0.073 U	BENZO(a)PYRENE CONCENTRATION (ug/L)
BbF 0.050 U	BENZO(b)FLUORANTHENE CONCENTRATION (ug/L)

NOTES
1. **Bold** indicates GCTL exceedance.
2. ***Bold italic*** indicates NADC exceedance.
2. FDEP GCTLs - Florida Department of Environmental Protection Groundwater Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
3. "U" indicates compound was analyzed for but not detected.
4. TRPH=Total Recoverable Petroleum Hydrocarbons.
5. All results reported in micrograms per liter (ug/L).

GCTL			
TRPH	BaA	BaP	BbF
5,000	0.05a	0.2**	0.05a

0 30' 60'
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
SITE ASSESSMENT REPORT

TRPH AND PAH CONCENTRATIONS IN GROUNDWATER NOVEMBER 18, 2020

ARCADIS

FIGURE 9

CITY: BB, FL DIV/GROUP: EN DB: B.OLIVA LD: (Opt) PIC: W.VOGELSONG PM: B.BURKE TM: E.BROOKS LYR:(Opt)ON=*;OFF=*REF*
C:\Users\boliva\BIM 360\Arcadis\ANA - FLORIDA DEPT OF ENVIRONMENTAL PROTECTION\Project Files\Basons DC\20210101-DWG\30061946SM.dwg LAYOUT: SAR-F9_SGWQ 20201118 SAVED: 4/12/2021 1:57 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ACS-COLOR_ANALYTICAL.CTB PLOTTED: 4/14/2021
10:29 AM BY: OLIVA, BRIAN

Theresa Pepe
Hazardous Waste Cleanup Section
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399

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FL Engineering License #7917
FL Geology License #GB564
FL Surveying License #LB7062

Date: January 24, 2022
Our Ref: 30106538
Subject: Confirmatory Soil Sampling and No Further Action Proposal
Bacons Cleaners & Laundry Service
21 North 7th Street, Haines City
Polk County, Florida

Dear Ms. Pepe,

Arcadis U.S., Inc. (Arcadis) was tasked by the Florida Department of Environmental Protection (FDEP) with Task Assignment #DC052C to complete confirmatory soil sampling for the former Bacons Cleaners and Laundry Service (Site) located at 21 North 7th Street, Haines City, Polk County, Florida (**Figure 1**). The FDEP Facility ID for the Site is ERIC_5362.

On April 13, 2021, Arcadis submitted a Site Assessment Report (SAR) to the FDEP. The report summarized soil and groundwater investigation activities performed from October 2020 to February 2021 and included: historical Site information; a description of assessment methodologies; soil and groundwater analytical results; and recommendations moving forward. The FDEP reviewed the SAR and requested a teleconference to discuss additional soil sampling. The teleconference was held with FDEP and Arcadis representatives on July 20, 2021. During the call, agreement on a soil sampling plan and methodology was reached. The following sections provide a brief Site description and discuss the methodology and results of the initial and supplemental Site assessment activities. Detailed information regarding the initial investigation can be found in the SAR.

Site Location and Surrounding Property Use

The Site is located on the east side of North 7th Street, north of East Hinson Avenue in Haines City, Polk County, Florida. The geographic coordinates are 28°06'26.77" North latitude and 82°37'32.03" West longitude. The Site is situated in Section 29, Township 27 South, Range 27 East. The former drycleaner facility is rectangular in shape, approximately 65 feet long (north to south) and 30 feet wide (east to west). The property is primarily paved with asphalt surrounding the building with vegetated areas along the exterior perimeter.

According to the Polk County Property Appraiser's website, the Site property is owned by Frontier Properties Florida LLC, who acquired it on June 24, 2011. The area surrounding the former drycleaners facility (**Figure 2**) consists of the following:

- **North**: An unimproved vacant lot exists to the north. A martial arts studio and East Main Street is located north of the vacant lot.

- **East**: An abandoned automotive maintenance facility is located immediately to the east. 8th Street North and mixed commercial/residential properties exist to the east past the abandoned automotive facility.
- **South**: O'Reilly Auto Parts, a retail automotive parts dealer, exists immediately to the south. East Hinson Avenue borders the southern boundary of O'Reilly Auto parts.
- **West**: North 7th Street bounds the property to the west. Vacant and various commercial properties are located west of North 7th Street.

The Site vicinity identifying surrounding properties/land use is presented as **Figure 2**. Surrounding area land use is generally mixed residential and commercial in the vicinity of the Site. A Site layout is provided as **Figure 3**.

Site Geology and Hydrogeology

During the installation of soil borings at the Site, Arcadis recorded the lithology on soil boring logs from ground surface to a depth of 55 ft bg. The lithology observed at the Site generally consisted of very fine to fine-grain quartz sand with trace amounts of silt and clay and a moderately plastic, soft, sandy clay (**Figures 4** and **5**).

The top of casing elevations of the four monitor wells (MW001 through MW004) were surveyed relative to each other by using MW001 as an arbitrary benchmark. By subtracting the depth-to-water measurements collected on November 18, 2020 from the top of casing elevations, the water table elevation was determined at each well (**Table 1**). Water elevations and gradient conditions are presented on **Figure 6**. As illustrated on the figure, the Site groundwater gradient is primarily flat with a minor flow component towards the southeast in the Surficial Aquifer System (SAS) zone, with an average horizontal gradient of approximately 0.001 feet per foot (ft/ft) as measured between monitor wells MW001 and MW003.

UNSATURATED SOIL ASSESSMENT/RESULTS

Soil investigations included the completion of a Modified Active Gas Survey (MAGS), the installation of 10 soil borings (SB001 through SB010) using a hand auger and/or Direct Push Technology (DPT), along with soil sample collection for soil vapor screening and laboratory analysis of selected volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total recoverable petroleum hydrocarbons (TRPH).

MAGS Methodology and Results

Arcadis performed a MAGS investigation from October to December 2020 to assess the unsaturated soil quality beneath the facility. Nine MAGS wells (MAGS01 through MAGS09) were installed on October 22 and November 13, 2020 in suspected source areas. MAGS testing was later conducted on December 15, 2020. The locations of the MAGS wells are shown on **Figure 3**.

The MAGS wells were installed with a stainless-steel hand auger to approximately 5.5 ft bg. The wells were constructed with five feet of 2-inch diameter, 0.010-inch slotted Schedule 40 PVC well screen flush-threaded to 0.5 feet of 2-inch diameter Schedule 40 PVC riser. The annular space of the boreholes was filled with 20/30 grade silica sand and the top of the boreholes were sealed with Portland Cement Type I/II against the existing foundation to prevent short circuiting. Proper decontamination practices were implemented throughout MAGS well installations to minimize potential cross-contamination. The soils where MAGS wells were collocated with a soil boring were field-analyzed for the presence of synthetic organic vapors using a MiniRAE 3000 photoionization detector (PID) capable of detecting to parts per million (**Table 2**). The instrument was calibrated daily in accordance with the manufacturer's instructions.

Soil vapor was extracted from the MAGS wells using a portable regenerative blower typical of a traditional soil vapor extraction (SVE) system. A Rotron three-phase sealed regenerative blower, capable of generating flow rates up to 350 cubic feet per minute (cfm) and a maximum vacuum of 90 inches of water column (IWC), was used for the test. Power was supplied to the regenerative blower using a 50,000-watt portable generator. The connection between the MAGS wellhead and blower was made using 2-inch diameter vacuum-rated hose and schedule 40 PVC pipe. A vacuum gauge and flow control valve were installed to measure and regulate vacuum/flow at the wellhead. Soil vapors from each MAGS well were extracted for approximately 40-80 minutes and wellhead vacuum readings at the surrounding MAGS wells were collected at regular intervals. In addition, organic vapor concentration in the MAGS influent was monitored at the wellhead using a MiniRAE 3000. Soil vapor samples were collected in SUMMA® canisters and shipped to Eurofins Environment Testing America, Inc. (Eurofins) in Tampa, Florida for fixed laboratory analysis of VOCs using EPA Method Total Organics (TO-15).

In general, well head vacuums of approximately 15-36 IWC created air flow rates ranging from 22 to 121 cfm across the Site. Based upon a minimum effective vacuum of 0.1 IWC, as observed on a nearby MAGS well, the radius of influence (ROI) is estimated to be 27-46 feet for all MAGS wells.

Soil vapor concentrations greater than 3 parts per million (ppm) (MAGS08) were not observed in the influent stream during the MAGS test. Soil gas laboratory analytical results indicate that PCE concentrations ranged between the method detection limit of 0.0027 milligrams per meter cubed (mg/m^3) and was estimated with no detections above the practical quantitation limit (0.014 mg/m^3). The highest concentration of PCE (0.0067 mg/m^3) was measured at MAGS02, located near the former boiler room, while the highest total VOCs (sum of all detections) was reported at MAGS07 near the southeast corner of the building. A summary of the soil gas analytical results is presented in **Table 3** and shown on **Figure 7**.

Soil Sampling Methodology and Results

In November and December 2020, Arcadis installed 10 soil borings (**Figure 3**) for the collection of samples for screening with a MiniRAE 3000 and fixed-base analysis. Soil borings SB001 through SB008 were installed to a depth of 55 ft bls using a stainless-steel hand auger and DPT equipment. Soil borings SB009 and SB010 were installed to a depth of 5.5 ft bls using a stainless-steel hand auger. The hand auger and DPT equipment were decontaminated between sampling locations to minimize the potential for cross-contamination.

Soil samples were collected and transferred to 16-ounce mason jars, covered with aluminum foil, and screened in selected intervals using a MiniRAE 3000. A total of 60 soil samples were submitted to Eurofins for analysis of EPA Method 8260B VOCs, EPA Method 8270D SVOCs, and US EPA Method FL-PRO petroleum range organics.

Confirmation soil sampling activities were performed on February 23, 2021 at select soil borings and discrete intervals that exhibited soil cleanup target level (SCTL) exceedances. The soil samples were submitted to Eurofins for analysis of EPA Method 8270D SVOCs and US EPA Method FL-PRO petroleum range organics.

Based on site assessment data, the vadose zone appears to be present between land surface and approximately 38 ft bg. Soil screening results obtained in October and November 2020 indicated the absence of organic vapors greater than 10 ppm in vadose zone soils across the Site. The highest PID reading in soils located in the smear zone and at the top of the saturated zone was detected at SB003 in the 45-50 ft depth interval (2,085 ppm). Soil screening results from the soil borings are presented in **Table 2**.

Reported PCE concentrations for all 60 soil samples were less than the laboratory method detection limits. However, concentrations of TRPH and several PAHs were reported above their applicable SCTLs at soil boring

locations SB001 (0.5 and 2 ft bg), SB002 (0.5 ft bg), SB003 (0.5 and 2 ft bg), SB005 (0.5 ft bg), SB006 (0.5 ft bg), and SB007 (4 ft bg).

Confirmatory soil samples were collected at soil borings SB001, SB002, SB003, and SB006 on February 23, 2021 to determine if TRPH and select PAHs were still in exceedance of their respective SCTLs after the MAGS event performed in December 2020. Soil analytical results indicated TRPH concentrations at SB001, SB002, SB003, and SB006 had decreased below the SCTL. PAH concentrations greater than the applicable SCTLs were again reported at SB001 and SB003.

Additional soil sampling was completed on November 15, 2021, using a modified technique to rule out asphalt as the source of the PAHs above SCTLs. Drilling subcontractor, Preferred Drilling Solutions, cut 18-inch x 18-inch squares in the asphalt adjacent to the four target soil borings (SB001, SB003, SB005, and SB007), carefully removed the asphalt and underlying limerock/road base to expose the native soil, and collected samples (SB001 at 0.5 and 2 ft bg, SB003 at 0.5 and 2 ft bg, SB005 at 0.5 ft bg, and SB007 at 4 and 6 ft bg) from dedicated liner cores within decontaminated DPT rods for PAHs analysis. Soils remaining after sample collection were used to backfill the boring and the location was patched with black dyed concrete. No investigation derived waste was generated during the confirmatory sampling event. Field logs for the confirmatory samples collected on November 15, 2021 are included in **Attachment 1**.

All of the confirmatory samples collected in November 2021 reported concentrations of PAHs below their respective SCTLs, with the exception of benzo(a)pyrene and benzo(a)pyrene equivalents reported above the residential direct exposure SCTLs in the samples collected at 0.5 ft and 2 ft bg in SB003. Soil analytical results are presented in **Table 4** and shown on **Figure 8**. A copy of the laboratory analytical report for the confirmatory soil sampled collected on November 15, 2021, is provided in **Attachment 2**.

GROUNDWATER ASSESSMENT/RESULTS

A groundwater investigation was conducted as part of the initial assessment that included installation, sampling, and analysis of groundwater from four 2-inch diameter monitor wells (MW001, MW002, MW003, and MW004). Locations of the wells are presented on **Figures 3** and **9**. The monitoring wells were installed as follows:

- MW001 was installed with 15-feet of 0.010 inch slot screen, between 40 to 55 ft bg;
- MW002 and MW003 were installed with 15-feet of 0.010 inch slot screen, between 37 to 52 ft bg, and;
- MW004 was installed with 15-feet of 0.010 inch slot screen, between 35 to 50 ft bg.

Each well was completed within an 8-inch steel manhole and 2-ft by 2-ft concrete protective pads. Following installation, the wells were developed until purge water was relatively clear and free of sediment. Well construction details are presented in **Table 1**. A typical monitor well schematic is presented on **Figure 10**.

On November 18, 2020, Arcadis collected groundwater samples from the newly installed monitoring wells for EPA Method 8260B VOCs, EPA Method 8270D SVOCs, and US EPA Method FL-PRO petroleum range organics analysis by Eurofins in Tampa, Florida. The wells were sampled by Arcadis using the low-flow sampling method described in the FDEP SOP 001/01.

As presented on **Figure 9** and summarized in **Table 5,** none of the monitor well samples exhibited VOC, PAH, or TRPH concentrations above their respective laboratory method detection limit and/or Groundwater Cleanup Target Level (GCTL).

QUALITY ASSURANCE & QUALITY CONTROL

This section summarizes the quality assurance/quality control (QA/QC) procedures followed during the November 2021 confirmatory soil sampling event. The soil samples were collected in general accordance with FDEP SOP 001/01. Eurofins performed soil analyses by EPA Method 8270D SVOCs. The analytical data provided by the laboratory was reviewed for laboratory precision, accuracy, and completeness.

The laboratory data was deemed acceptable based on the following information:

- Samples were prepared and analyzed within specified method holding times.
- QC criteria were met and the test results shown in the reports meet all applicable NELAC requirements.
- The laboratory method blank was free of target analytes.
- The laboratory control sample results were within QA/QC criteria relative percent difference and spike recoveries.

Based on these results, the samples collected during the event are an accurate representation of soil-quality conditions at the Site. Copies of Sampling Logs are included in **Attachment 1**. A copy of the laboratory report is included in **Attachment 2**.

CONCLUSIONS

Based on the results of the 2020 assessment and 2021 confirmatory soil sampling activities performed at the Former Bacons Cleaners & Laundry Service Site, state drycleaner cleanup criteria in 62-780 FAC, and cleanup target levels in 62-777 FAC, the following can be concluded:

- The MAGS testing identified concentrations of PCE, ranging from below the detection limit of 0.0027mg/m^3 to 0.0067 mg/m^3, in all nine soil vapor samples submitted for laboratory analysis. The highest concentration of PCE (0.0067 mg/m^3) was detected in the soil vapor sample collected from MAGS02, located near the former boiler room.
- Reported PCE concentrations for all 60 soil samples were less than the laboratory method detection limits. However, concentrations of TRPH and several PAHs were reported above their applicable SCTLs at soil boring locations SB001 (0.5 and 2 ft bg), SB002 (0.5 ft bg), SB003 (0.5 and 2 ft bg), SB005 (0.5 ft bg), SB006 (0.5 ft bg), and SB007 (4 ft bg).
- Confirmatory soil samples collected at soil borings SB001, SB002, SB003, and SB006 on February 23, 2021 indicated TRPH concentrations at SB001, SB002, SB003, and SB006 had decreased below the SCTL. PAH concentrations greater than the applicable SCTLs were again reported at SB001 and SB003.
- Confirmatory soil samples collected at soil borings SB001, SB003, SB005, and SB007 on November 15, 2021 reported PAH concentrations below applicable SCTLs, with the exception of benzo(a)pyrene and benzo(a)pyrene equivalents reported above the residential direct exposure SCTLs in the samples collected at 0.5 ft and 2 ft bg in SB003.
- Based on depth to water measurements collected on November 18, 2020, a predominantly flat groundwater gradient direction, with a minor component to the southeast, was identified in the shallow surficial aquifer unit.
- Groundwater samples collected from the monitoring well network reported target VOC, PAH, and TRPH concentrations below the applicable laboratory method detection limits and GCTLs.

Ms. Theresa Pepe
Florida Department of Environmental Protection
January 24, 2022

RECOMMENDATIONS

Based on the conclusions provided above, Arcadis recommends no further action (NFA) status with regard to state drycleaning solvent contaminants of concern listed in Table B of Chapter 62-780, Florida Administrative Code. All Site wells shall be abandoned upon concurrence of the FDEP with this NFA proposal.

Sincerely,
Arcadis U.S., Inc.

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Ms. Theresa Pepe
Florida Department of Environmental Protection
January 24, 2022

CERTIFICATION

In accordance with the provisions of Florida Statute Chapter 492, and Chapter 62-780, Florida Administrative Code, this Confirmatory Soil Sampling and No Further Action Proposal Letter Report for the Former Bacons Cleaners & Laundry Service Site located at 21 North 7th Street, Haines City, Florida, has been reviewed by a Professional Geologist licensed in the State of Florida familiar with current state drycleaning solvent cleanup criteria. I hereby certify that the assessment work was performed in accordance with the Health & Safety Plan, FDEP Standard Operating Procedures, various task assignments, and under my direct supervision.

Brian Burke, P.G.

State of Florida License No. 2392

Date: 1-24-2022

Tables

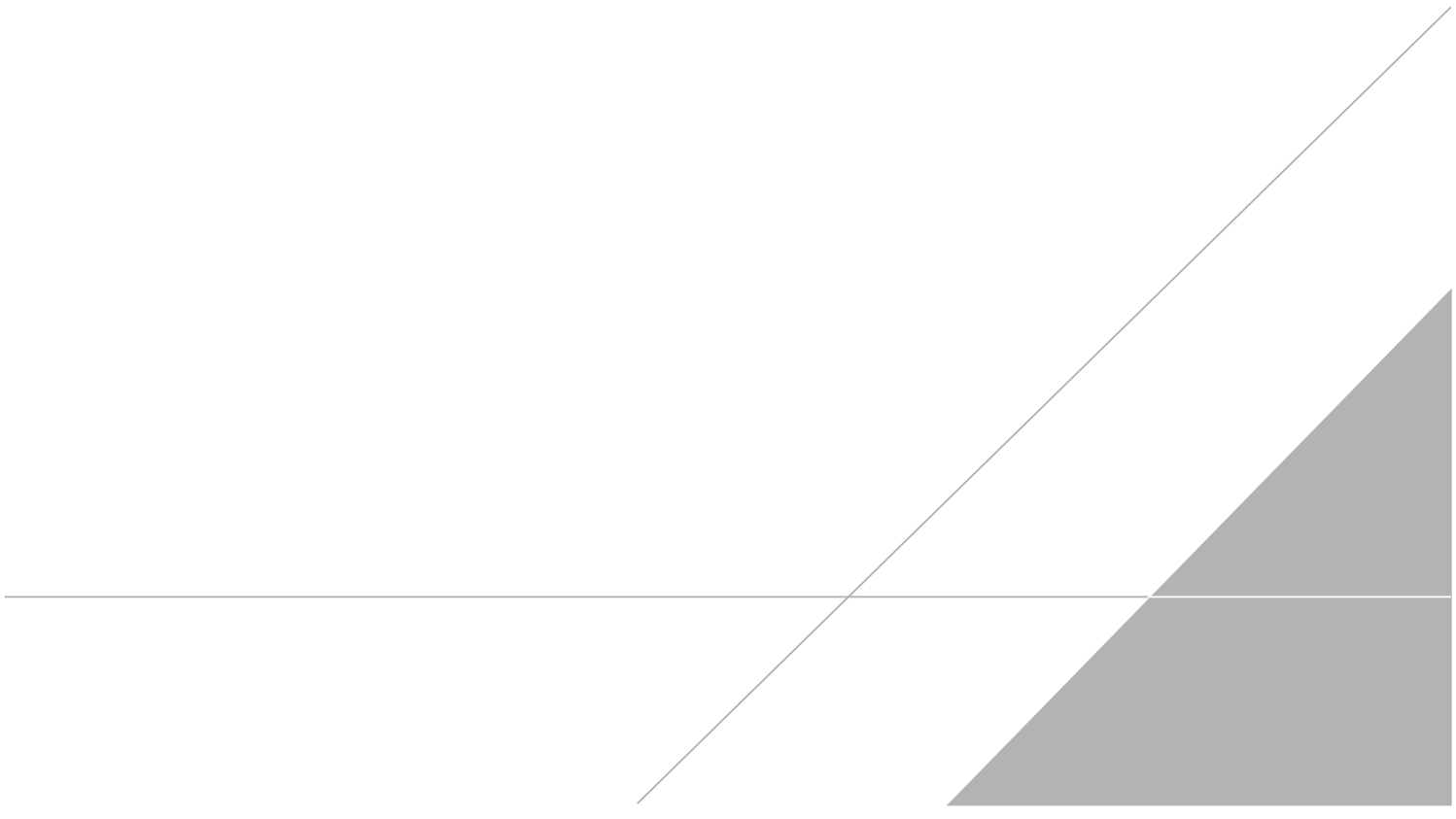

TABLE 1
MONITOR WELL CONSTRUCTION AND GROUNDWATER ELEVATIONS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Well I.D.	Screen Interval (ft bls)	Top-of-Casing Elevation* (ft)	WLM Date	Water Level (ft btoc)	Relative Water Elevation (ft)
MW001	40 - 55	95.85	11/18/2020	40.88	54.97
MW002	37 - 52	95.48	11/18/2020	40.54	54.94
MW003	37 - 52	95.10	11/18/2020	40.18	54.92
MW004	35 - 50	92.76	11/18/2020	37.80	54.96

Footnotes:

ft - feet

ft bls - feet below land surface

ft btoc - feet below top of casing

* Survey completed on November 13, 2020; MW001 established as arbitrary benchmark

WLM - Water level Measurement

TABLE 2
SOIL SCREENING RESULTS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Soil Boring ID: MAGS ID: DATE:	SB001 MG01 10/22/20	SB002 MG03 10/21/20	SB003 MG04 10/22/20	SB004 MG06 10/21/20	SB005 N/A 10/22/20	SB006 N/A 10/23/20	SB007 N/A 10/23/20	SB008 N/A 10/23/20	SB009 MG08 11/13/20	SB010 MG09 11/13/20
Depth (ft BG)	**Photoionization Detector Screening Results (ppm)**									
0-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
0.5-2	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0	0	0.1
2-4	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0	0.1	0.1
4-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
6-8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
8-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
10-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	N/A	N/A
15-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
20-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
25-30	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0	N/A	N/A
30-35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	N/A	N/A
35-40	0.0	0.0	0.2	0.8	0.0	0.0	0.0	0	N/A	N/A
43.5-45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A
44-45	N/A	1,495	65.4	1,745	0.0	0.0	N/A	N/A	N/A	N/A
44.5-45	68.4	N/A	N/A	N/A	N/A	N/A	261.3	N/A	N/A	N/A
45-50	N/A	N/A	2,085	6.9	3.3	13.3	N/A	N/A	N/A	N/A
48-50	21.6	976.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
49-50	N/A	N/A	N/A	N/A	N/A	N/A	12.2	2.8	N/A	N/A
50-55	N/A	N/A	N/A	N/A	N/A	0.0	N/A	0	N/A	N/A
51.5-53	N/A	N/A	N/A	N/A	N/A	N/A	6.9	N/A	N/A	N/A
53-55	1.8	N/A	N/A	3.5	0.0	N/A	N/A	N/A	N/A	N/A
54-55	N/A	6.9	2.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Footnotes:
MAGS - modified active gas survey
ppm - parts per million
ft BG - feet below grade
N/A - not applicable

TABLE 3
MODIFIED ACTIVE GAS SURVEY ANALYTICAL RESULTS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Sample		MG01	MG02	MG03	MG04	MG05	MG06	MG07	MG08	MG09
Date		12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020	12/15/2020
Flow (cfm)		114	110	110	100	105	103	82	82	68
Estimated Radius of Influence (ft)		38	39	30	32	27	38	46	36	36
PID reading at sample time (ppm)		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2
Compounds	**Units**									
Tetrachloroethene (PCE)	mg/m^3	0.0027 U	0.0067 I	0.0027 U	0.0057 I	0.0027 U	0.0045 I	0.0060 I	0.0027 U	0.0027 U
Trichloroethene (TCE)	mg/m^3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Total VOCs	mg/m^3	0.326	0.267	0.291	0.432	0.482	0.706	0.909	0.0984	0.161
Total VOCs Influent Rate	(lbs/day)	0.003	0.003	0.003	0.004	0.005	0.007	0.007	0.001	0.001

Footnotes:

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

U - Indicates that the compound was analyzed for but not detected

VOCs - volatile organic compounds

cfm: cubic feet per minute

ppm - parts per million

mg/m^3: Milligrams per meter cubed

PID - photoionization detector

lbs/day - pounds per day

Total VOCs Influent Rate = (total VOCs x flow rate x 24 hours x 60 minutes x 2.2 pounds per kilogram)/3.28^3 x 10^6

TABLE 4
SOIL ANALYTICAL RESULTS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Analyte (Method 8260)	FDEP SCTLs (mg/kg) Direct Exposure Residential	FDEP SCTLs (mg/kg) Direct Exposure Industrial	FDEP SCTLs (mg/kg) Leachability Based on Groundwater Criteria	Sample Location:	SB001																	
				Sample Date:	10/22/20	2/23/21	11/15/21	10/22/20	11/15/21	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20
				Depth (ft BG):		0.5		2		4	6	8	10	15	20	25	30	35	40	45	50	55
Purgeable Aromatics				**Unit**																		
Tetrachloroethene	8.8	18	0.03	mg/kg	0.0034 U	NA	NA	0.0017 U	NA	0.0033 U	0.0032 U	0.0033 U	0.0033 U	0.0034 U	0.0034 U	0.0034 U	0.0033 U	0.0034 U	0.0034 U	0.0033 U	0.0029 U	0.0051 U
Trichloroethene	6.4	9.3	0.03	mg/kg	0.0033 U	NA	NA	0.0016 U	NA	0.0032 U	0.0031 U	0.0031 U	0.0031 U	0.0033 U	0.0032 U	0.0033 U	0.0032 U	0.0032 U	0.0033 U	0.0031 U	0.0027 U	0.0049 U
cis-1,2-Dichloroethene	33	180	0.4	mg/kg	0.0031 U	NA	NA	0.0015 U	NA	0.0030 U	0.0029 U	0.0029 U	0.0030 U	0.0031 U	0.0030 U	0.0031 U	0.0030 U	0.0030 U	0.0031 U	0.0029 U	0.0026 U	0.0046 U
trans-1,2-Dichloroethene	53	290	0.7	mg/kg	0.0038 U	NA	NA	0.0019 U	NA	0.0037 U	0.0036 U	0.0037 U	0.0037 U	0.0039 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U	0.0038 U	0.0037 U	0.0032 U	0.0058 U
1,1-Dichloroethene	95	510	0.06	mg/kg	0.0024 U	NA	NA	0.0011 U	NA	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	0.0023 U	0.0023 U	0.0024 U	0.0023 U	0.0020 U	0.0036 U
Vinyl chloride	0.2	0.8	0.007	mg/kg	0.0027 U	NA	NA	0.0013 U	NA	0.0026 U	0.0025 U	0.0026 U	0.0026 U	0.0027 U	0.0027 U	0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0026 U	0.0023 U	0.0041 U
Benzene	1.2	1.7	0.007	mg/kg	0.0035 U	NA	NA	0.0017 U	NA	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0036 U	0.0035 U	0.0036 U	0.0035 U	0.0035 U	0.0035 U	0.0034 U	0.0030 U	0.0053 U
Toluene	7,500	60,000	0.5	mg/kg	0.0041 U	NA	NA	0.0020 U	NA	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0041 U	0.0041 U	0.0041 U	0.0040 U	0.0040 U	0.0041 U	0.0039 U	0.0034 U	0.0062 U
Ethylbenzene	1,500	9,200	0.6	mg/kg	0.0031 U	NA	NA	0.0015 U	NA	0.0030 U	0.0029 U	0.0030 U	0.0030 U	0.0031 U	0.0031 U	0.0031 U	0.0030 U	0.0031 U	0.0031 U	0.0030 U	0.0026 U	0.0047 U
m/p-Xylene	--	--	--	mg/kg	0.0030 U	NA	NA	0.0015 U	NA	0.0029 U	0.0028 U	0.0029 U	0.0029 U	0.0030 U	0.0030 U	0.0030 U	0.0029 U	0.0030 U	0.0030 U	0.0029 U	0.0025 U	0.0045 U
o-Xylene	--	--	--	mg/kg	0.0015 U	NA	NA	0.00072 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U	0.0015 U	0.0015 U	0.0014 U	0.0012 U	0.0022 U
MTBE	4,400	24,000	0.09	mg/kg	0.0017 U	NA	NA	0.00082 U	NA	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0017 U	0.0017 U	0.0016 U	0.0014 U	0.0025 U
TRPHs	460	2,700	340	mg/kg	**440**	37	NA	36	NA	17 I	12 I	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	13 U	14 U	22 I
Bromodichloromethane	1.5	2.2	0.004	mg/kg	0.0015 U	NA	NA	0.00070 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0012 U	0.0022 U
Bromoform	48	93	0.03	mg/kg	0.0046 U	NA	NA	0.0022 U	NA	0.0044 U	0.0043 U	0.0044 U	0.0044 U	0.0046 U	0.0045 U	0.0046 U	0.0044 U	0.0045 U	0.0045 U	0.0044 U	0.0038 U	0.0069 U
Bromomethane	3.1	16	0.05	mg/kg	0.0043 U	NA	NA	0.0021 U	NA	0.0041 U	0.0040 U	0.0041 U	0.0041 U	0.0043 U	0.0042 U	0.0043 U	0.0042 U	0.0042 U	0.0043 U	0.0041 U	0.0036 U	0.0064 U
Carbon Tetrachloride	0.5	0.7	0.04	mg/kg	0.0036 U	NA	NA	0.0018 U	NA	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0036 U	0.0036 U	0.0036 U	0.0035 U	0.0036 U	0.0036 U	0.0035 U	0.0030 U	0.0054 U
Chlorobenzene	120	650	1.3	mg/kg	0.0028 U	NA	NA	0.0014 U	NA	0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0028 U	0.0028 U	0.0028 U	0.0027 U	0.0027 U	0.0028 U	0.0027 U	0.0023 U	0.0042 U
Chloroethane	3.9	5.4	0.06	mg/kg	0.0024 U	NA	NA	0.0011 U	NA	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	0.0023 U	0.0023 U	0.0024 U	0.0023 U	0.0020 U	0.0036 U
Chloroform	0.4	0.6	0.4	mg/kg	0.0035 U	NA	NA	0.0017 U	NA	0.0034 U	0.0033 U	0.0034 U	0.0034 U	0.0036 U	0.0035 U	0.0035 U	0.0034 U	0.0035 U	0.0035 U	0.0034 U	0.0030 U	0.0053 U
Chloromethane	4	5.7	0.01	mg/kg	0.0031 U	NA	NA	0.0015 U	NA	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0031 U	0.0030 U	0.0031 U	0.0030 U	0.0030 U	0.0030 U	0.0029 U	0.0026 U	0.0046 U
Dibromochloromethane	1.5	2.3	0.003	mg/kg	0.0037 U	NA	NA	0.0018 U	NA	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0037 U	0.0036 U	0.0037 U	0.0036 U	0.0036 U	0.0037 U	0.0035 U	0.0031 U	0.0055 U
Dichlorodifluoromethane	77	410	44	mg/kg	0.0026 U	NA	NA	0.0022 I	NA	0.0025 U	0.0024 U	0.0025 U	0.0025 U	0.0026 U	0.0026 U	0.0026 U	0.0025 U	0.0025 U	0.0026 U	0.0025 U	0.0022 U	0.0039 U
1,2-Dichlorobenzene	880	5,000	17	mg/kg	0.0012 U	NA	NA	0.00060 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0010 U	0.0019 U
1,3-Dichlorobenzene	380	2,200	7	mg/kg	0.0028 U	NA	NA	0.0013 U	NA	0.0027 U	0.0026 U	0.0027 U	0.0027 U	0.0028 U	0.0027 U	0.0028 U	0.0027 U	0.0027 U	0.0028 U	0.0027 U	0.0023 U	0.0042 U
1,4-Dichlorobenzene	6.4	9.9	2.2	mg/kg	0.0026 U	NA	NA	0.0013 U	NA	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0027 U	0.0026 U	0.0027 U	0.0026 U	0.0026 U	0.0026 U	0.0025 U	0.0022 U	0.0040 U
1,2-Dichloroethane	0.5	0.7	0.01	mg/kg	0.0014 U	NA	NA	0.00069 U	NA	0.0014 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0012 U	0.0021 U
1,1-Dichloroethane	390	2,100	0.4	mg/kg	0.0033 U	NA	NA	0.0016 U	NA	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0033 U	0.0032 U	0.0033 U	0.0032 U	0.0032 U	0.0032 U	0.0031 U	0.0027 U	0.0049 U
1,2-Dichloropropane	0.6	0.9	0.03	mg/kg	0.0028 U	NA	NA	0.0014 U	NA	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0027 U	0.0024 U	0.0043 U
trans-1,3-Dichloropropene	--	--	--	mg/kg	0.0039 U	NA	NA	0.0019 U	NA	0.0038 U	0.0037 U	0.0037 U	0.0038 U	0.0039 U	0.0039 U	0.0039 U	0.0038 U	0.0039 U	0.0039 U	0.0038 U	0.0033 U	0.0059 U
cis-1,3-Dichloropropene	--	--	--	mg/kg	0.0013 U	NA	NA	0.00062 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0012 U	0.0011 U	0.0019 U
Methylene Chloride	17	26	0.02	mg/kg	0.024 U	NA	NA	0.011 U	NA	0.023 U	0.022 U	0.023 U	0.023 U	0.024 U	0.023 U	0.024 U	0.023 U	0.023 U	0.024 U	0.023 U	0.020 U	0.036 U
1,1,2,2-Tetrachloroethane	0.7	1.2	0.001	mg/kg	0.0015 U	NA	NA	0.00071 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0012 U	0.0022 U
1,1,2-Trichloroethane	1.4	2	0.03	mg/kg	0.0016 U	NA	NA	0.00079 U	NA	0.0016 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0014 U	0.0024 U
1,1,1-Trichloroethane	730	3,900	1.9	mg/kg	0.0023 U	NA	NA	0.0011 U	NA	0.0022 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0019 U	0.0034 U
Trichlorofluoromethane	270	1,500	33	mg/kg	0.0030 U	NA	NA	0.0015 U	NA	0.0029 U	0.0028 U	0.0029 U	0.0029 U	0.0030 U	0.0030 U	0.0030 U	0.0029 U	0.0030 U	0.0030 U	0.0029 U	0.0025 U	0.0045 U
Acenaphthene	2,400	20,000	2.1	mg/kg	0.015 U	0.17	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U	0.0015 U	0.0017 U	0.0017 U	0.0021 U
Acenaphthylene	1,800	20,000	27	mg/kg	0.015 U	0.031	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0017 U	0.0018 U	0.0021 U
Anthracene	21,000	300,000	2,500	mg/kg	0.026 I	0.55	0.00063 U	0.015	0.00063 U	0.00062 U	0.0010 I	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00062 U	0.00062 U	0.00065 U	0.00071 U	0.00073 U	0.00089 U
Benzo(a)anthracene	#	#	0.8	mg/kg	0.29	**3.8**	0.0016 U	0.19	0.0016 U	0.0015 U	0.0054 I	0.0016 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0018 U	0.0022 U
Benzo(a)pyrene	0.1	0.7	8	mg/kg	**0.7**	**3.5**	0.0017 U	**0.49**	0.0017 U	0.0027 I	0.0097	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0017 U	0.0019 U	0.0022 I	0.0024 U
Benzo(a)pyrene equivalent	0.1	0.7	**	mg/kg	**1**	**5.3**	0.0	**0.7**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benzo(b)fluoranthene	#	#	2.4	mg/kg	1.5	**6**	0.0017 U	0.86	0.0017 U	0.0047 I	0.02	0.0029 I	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0016 U	0.0017 I	0.0019 U	0.0051 I	0.0023 U
Benzo(g,h,i)perylene	2,500	52,000	32,000	mg/kg	0.37	2.4	0.0017 U	0.24	0.0017 U	0.0032 I	0.0091	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0019 U	0.0030 I	0.0024 U
Benzo(k)fluoranthene	#	#	24	mg/kg	0.43	1.8	0.0019 U	0.28	0.0019 U	0.0019 U	0.0072	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0020 U	0.0021 U	0.0026 I	0.0027 U
Chrysene	#	#	77	mg/kg	0.54	4.6	0.0016 U	0.31	0.0016 U	0.0021 I	0.011	0.0019 I	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0018 U	0.0039 I	0.0023 U
Dibenzo(a,h)anthracene	#	#	0.7	mg/kg	0.11	0.62	0.0017 U	0.074	0.0017 U	0.0016 U	0.0025 I	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0017 U	0.0019 U	0.0019 U	0.0024 U
Fluoranthene	3,200	59,000	1,200	mg/kg	0.47	10	0.0022 U	0.18	0.0022 U	0.0049 U	0.016	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U	0.0051 U	0.0055 U	0.0074 I	0.0069 U
Fluorene	2,600	33,000	160	mg/kg	0.036 U	0.12	0.0015 U	0.0035 U	0.0015 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0036 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0036 U	0.0040 U	0.0041 U	0.0050 U
Indeno(1,2,3-cd)pyrene	#	#	6.6	mg/kg	0.24	2.2	0.0016 U	0.17	0.0016 U	0.0024 I	0.0077	0.0016 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0027 I	0.0022 U
1-Methylnaphthalene	200	1,800	3.1	mg/kg	0.018 U	0.011	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0020 U	0.0021 U	0.0025 U
2-Methylnaphthalene	210	2,100	8.5	mg/kg	0.032 U	0.0078 I	0.0014 U	0.0031 U	0.0014 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0030 U	0.0032 U	0.0035 U	0.0036 U	0.0044 U
Naphthalene	55	300	1.2	mg/kg	0.033 U	0.011	0.0032 U	0.0032 U	0.0032 U	0.0032 U	0.0032 U	0.0032 U	0.0032 U	0.0033 U	0.0032 U	0.0032 U	0.0032 U	0.0032 U	0.0033 U	0.0036 U	0.0038 U	0.0046 U
Phenanthrene	2,200	36,000	250	mg/kg	0.082	5.1	0.0047 U	0.03	0.0047 U	0.0046 U	0.0081	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0046 U	0.0046 U	0.0048 U	0.0053 U	0.0055 U	0.0066 U
Pyrene	2,400	45,000	880	mg/kg	0.45	7.5	0.0016 U	0.21	0.0016 U	0.0020 I	0.014	0.0028 I	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0018 U	0.0053 I	0.0023 U

Analyte (Method 8260)	SB002				
Sample Date:	10/21/20	2/23/21	10/21/20	10/21/20	10/21/20
Depth (ft BG):		0.5	2	4	45
Purgeable Aromatics					
Tetrachloroethene	0.0044 U	NA	0.0035 U	0.0040 U	0.0027 U
Trichloroethene	0.0042 U	NA	0.0034 U	0.0038 U	0.0026 U
cis-1,2-Dichloroethene	0.0039 U	NA	0.0032 U	0.0036 U	0.0025 U
trans-1,2-Dichloroethene	0.0049 U	NA	0.0040 U	0.0045 U	0.0031 U
1,1-Dichloroethene	0.0030 U	NA	0.0024 U	0.0027 U	0.0019 U
Vinyl chloride	0.0034 U	NA	0.0028 U	0.0031 U	0.0021 U
Benzene	0.0045 U	NA	0.0036 U	0.0041 U	0.0028 U
Toluene	0.0052 U	NA	0.0042 U	0.0048 U	0.0033 U
Ethylbenzene	0.0040 U	NA	0.0032 U	0.0036 U	0.0025 U
m/p-Xylene	0.0038 U	NA	0.0031 U	0.0035 U	0.0024 U
o-Xylene	0.0019 U	NA	0.0015 U	0.0017 U	0.0012 U
MTBE	0.0022 U	NA	0.0017 U	0.0020 U	0.0013 U
TRPHs	**390**	34	32	22	110
Bromodichloromethane	0.0019 U	NA	0.0015 U	0.0017 U	0.0012 U
Bromoform	0.0058 U	NA	0.0047 U	0.0053 U	0.0036 U
Bromomethane	0.0055 U	NA	0.0044 U	0.0050 U	0.0034 U
Carbon Tetrachloride	0.0046 U	NA	0.0037 U	0.0042 U	0.0029 U
Chlorobenzene	0.0036 U	NA	0.0029 U	0.0032 U	0.0022 U
Chloroethane	0.0030 U	NA	0.0024 U	0.0027 U	0.0019 U
Chloroform	0.0045 U	NA	0.0036 U	0.0041 U	0.0028 U
Chloromethane	0.0039 U	NA	0.0031 U	0.0035 U	0.0024 U
Dibromochloromethane	0.0047 U	NA	0.0038 U	0.0043 U	0.0029 U
Dichlorodifluoromethane	0.0033 U	NA	0.0026 U	0.0030 U	0.0021 U
1,2-Dichlorobenzene	0.0016 U	NA	0.0013 U	0.0014 U	0.0010 U
1,3-Dichlorobenzene	0.0036 U	NA	0.0028 U	0.0032 U	0.0022 U
1,4-Dichlorobenzene	0.0034 U	NA	0.0027 U	0.0031 U	0.0021 U
1,2-Dichloroethane	0.0018 U	NA	0.0015 U	0.0016 U	0.0011 U
1,1-Dichloroethane	0.0042 U	NA	0.0033 U	0.0038 U	0.0026 U
1,2-Dichloropropane	0.0036 U	NA	0.0029 U	0.0033 U	0.0023 U
trans-1,3-Dichloropropene	0.0050 U	NA	0.0040 U	0.0045 U	0.0031 U
cis-1,3-Dichloropropene	0.0016 U	NA	0.0013 U	0.0015 U	0.0010 U
Methylene Chloride	0.030 U	NA	0.024 U	0.027 U	0.019 U
1,1,2,2-Tetrachloroethane	0.0019 U	NA	0.0015 U	0.0017 U	0.0012 U
1,1,2-Trichloroethane	0.0021 U	NA	0.0017 U	0.0019 U	0.0013 U
1,1,1-Trichloroethane	0.0029 U	NA	0.0023 U	0.0026 U	0.0018 U
Trichlorofluoromethane	0.0039 U	NA	0.0031 U	0.0035 U	0.0024 U
Acenaphthene	0.0074 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
Acenaphthylene	0.0076 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U
Anthracene	0.0032 U	0.00065 U	0.00064 U	0.00063 U	0.00064 U
Benzo(a)anthracene	0.039	0.0068 I	0.0047 I	0.0017 I	0.0033 I
Benzo(a)pyrene	0.11	0.013	0.011	0.0041 I	0.0079
Benzo(a)pyrene equivalent	**0.2**	0.0	0.0	0.0	0.0
Benzo(b)fluoranthene	0.28	0.03	0.022	0.0069	0.019
Benzo(g,h,i)perylene	0.054	0.0063 I	0.01	0.0050 I	0.012
Benzo(k)fluoranthene	0.098	0.011	0.0076	0.0026 I	0.0057 I
Chrysene	0.1	0.013	0.0098	0.0041 I	0.0099
Dibenzo(a,h)anthracene	0.011 I	0.0022 I	0.0019 I	0.0017 U	0.0026 I
Fluoranthene	0.07	0.013	0.011	0.0050 U	0.011
Fluorene	0.018 U	0.0037 U	0.0036 U	0.0036 U	0.0036 U
Indeno(1,2,3-cd)pyrene	0.04	0.003 I	0.009	0.0040 I	0.0085
1-Methylnaphthalene	0.0090 U	0.0019 U	0.0018 U	0.0018 U	0.0093
2-Methylnaphthalene	0.016 U	0.0032 U	0.0032 U	0.0031 U	0.013
Naphthalene	0.016 U	0.0034 U	0.0033 U	0.0033 U	0.02
Phenanthrene	0.024 U	0.0049 I	0.0048 U	0.0047 U	0.0060 I
Pyrene	0.077	0.013	0.01	0.0035 I	0.0096

Analyte (Method 8260)	SB003																	
Sample Date:	10/22/20	2/23/21	11/15/21	10/22/20	11.15/21	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20	10/22/20
Depth (ft BG):		0.5		2		4	6	8	10	15	20	25	30	35	40	45	50	55
Purgeable Aromatics																		
Tetrachloroethene	0.0032 U	NA	NA	0.0033 U	NA	0.0032 U	0.0032 U	0.0033 U	0.0033 U	0.0037 U	0.0037 U	0.0040 U	0.0034 U	0.0037 U	0.0033 U	0.0034 U	0.0036 U	0.0030 U
Trichloroethene	0.0031 U	NA	NA	0.0032 U	NA	0.0031 U	0.0031 U	0.0031 U	0.0032 U	0.0036 U	0.0035 U	0.0039 U	0.0033 U	0.0035 U	0.0031 U	0.0033 U	0.0035 U	0.0028 U
cis-1,2-Dichloroethene	0.0029 U	NA	NA	0.0030 U	NA	0.0029 U	0.0029 U	0.0029 U	0.0030 U	0.0033 U	0.0033 U	0.0037 U	0.0031 U	0.0033 U	0.0030 U	0.0031 U	0.0032 U	0.0027 U
trans-1,2-Dichloroethene	0.0036 U	NA	NA	0.0037 U	NA	0.0036 U	0.0037 U	0.0037 U	0.0038 U	0.0042 U	0.0041 U	0.0046 U	0.0039 U	0.0041 U	0.0037 U	0.0038 U	0.0041 U	0.0034 U
1,1-Dichloroethene	0.0022 U	NA	NA	0.0023 U	NA	0.0022 U	0.0023 U	0.0023 U	0.0023 U	0.0026 U	0.0025 U	0.0028 U	0.0024 U	0.0025 U	0.0023 U	0.0024 U	0.0025 U	0.0021 U
Vinyl chloride	0.0025 U	NA	NA	0.0026 U	NA	0.0025 U	0.0026 U	0.0026 U	0.0026 U	0.0029 U	0.0029 U	0.0032 U	0.0027 U	0.0029 U	0.0026 U	0.0027 U	0.0028 U	0.0023 U
Benzene	0.0034 U	NA	NA	0.0034 U	NA	0.0034 U	0.0034 U	0.0034 U	0.0035 U	0.0039 U	0.0038 U	0.0042 U	0.0036 U	0.0038 U	0.0034 U	0.0035 U	0.0037 U	0.0031 U
Toluene	0.0039 U	NA	NA	0.0040 U	NA	0.0039 U	0.0039 U	0.0039 U	0.0040 U	0.0044 U	0.0044 U	0.0049 U	0.0041 U	0.0044 U	0.0039 U	0.0041 U	0.0043 U	0.0036 U
Ethylbenzene	0.0029 U	NA	NA	0.0030 U	NA	0.0029 U	0.0030 U	0.0030 U	0.0030 U	0.0034 U	0.0033 U	0.0037 U	0.0031 U	0.0033 U	0.0030 U	0.0031 U	0.0033 U	0.0027 U
m/p-Xylene	0.0028 U	NA	NA	0.0029 U	NA	0.0028 U	0.0029 U	0.0029 U	0.0029 U	0.0033 U	0.0032 U	0.0036 U	0.0030 U	0.0032 U	0.0029 U	0.0030 U	0.0032 U	0.0026 U
o-Xylene	0.0014 U	NA	NA	0.0014 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0018 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0016 U	0.0013 U
MTBE	0.0016 U	NA	NA	0.0016 U	NA	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0018 U	0.0018 U	0.0020 U	0.0017 U	0.0018 U	0.0016 U	0.0017 U	0.0018 U	0.0015 U
TRPHs	**380**	180	NA	300	NA	25	31	22	15 I	13 U	13 U	14 U	13 U	13 U	13 U	13 U	100	14 U
Bromodichloromethane	0.0014 U	NA	NA	0.0014 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0017 U	0.0015 U	0.0016 U	0.0014 U	0.0014 U	0.0015 U	0.0013 U
Bromoform	0.0043 U	NA	NA	0.0044 U	NA	0.0043 U	0.0043 U	0.0044 U	0.0044 U	0.0050 U	0.0049 U	0.0054 U	0.0046 U	0.0049 U	0.0044 U	0.0046 U	0.0048 U	0.0040 U
Bromomethane	0.0040 U	NA	NA	0.0041 U	NA	0.0040 U	0.0041 U	0.0041 U	0.0042 U	0.0046 U	0.0046 U	0.0051 U	0.0043 U	0.0046 U	0.0041 U	0.0043 U	0.0045 U	0.0037 U
Carbon Tetrachloride	0.0034 U	NA	NA	0.0035 U	NA	0.0034 U	0.0034 U	0.0035 U	0.0035 U	0.0039 U	0.0039 U	0.0043 U	0.0036 U	0.0039 U	0.0035 U	0.0036 U	0.0038 U	0.0031 U
Chlorobenzene	0.0026 U	NA	NA	0.0027 U	NA	0.0026 U	0.0027 U	0.0027 U	0.0027 U	0.0030 U	0.0030 U	0.0033 U	0.0028 U	0.0030 U	0.0027 U	0.0028 U	0.0029 U	0.0024 U
Chloroethane	0.0022 U	NA	NA	0.0023 U	NA	0.0022 U	0.0023 U	0.0023 U	0.0023 U	0.0026 U	0.0025 U	0.0028 U	0.0024 U	0.0025 U	0.0023 U	0.0024 U	0.0025 U	0.0021 U
Chloroform	0.0033 U	NA	NA	0.0034 U	NA	0.0033 U	0.0034 U	0.0034 U	0.0034 U	0.0038 U	0.0038 U	0.0042 U	0.0036 U	0.0038 U	0.0034 U	0.0035 U	0.0037 U	0.0031 U
Chloromethane	0.0029 U	NA	NA	0.0029 U	NA	0.0029 U	0.0029 U	0.0029 U	0.0030 U	0.0033 U	0.0033 U	0.0036 U	0.0031 U	0.0033 U	0.0029 U	0.0030 U	0.0032 U	0.0027 U
Dibromochloromethane	0.0035 U	NA	NA	0.0035 U	NA	0.0035 U	0.0035 U	0.0035 U	0.0036 U	0.0040 U	0.0039 U	0.0044 U	0.0037 U	0.0040 U	0.0035 U	0.0037 U	0.0039 U	0.0032 U
Dichlorodifluoromethane	0.0024 U	NA	NA	0.0025 U	NA	0.0024 U	0.0047 I	0.0025 U	0.0025 U	0.0028 U	0.0028 U	0.0031 U	0.0026 U	0.0028 U	0.0057 I	0.0026 U	0.0044 I	0.0022 U
1,2-Dichlorobenzene	0.0012 U	NA	NA	0.0012 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U	0.0011 U
1,3-Dichlorobenzene	0.0026 U	NA	NA	0.0027 U	NA	0.0026 U	0.0026 U	0.0027 U	0.0027 U	0.0030 U	0.0030 U	0.0033 U	0.0028 U	0.0030 U	0.0027 U	0.0028 U	0.0029 U	0.0024 U
1,4-Dichlorobenzene	0.0025 U	NA	NA	0.0026 U	NA	0.0025 U	0.0025 U	0.0025 U	0.0026 U	0.0029 U	0.0028 U	0.0031 U	0.0027 U	0.0028 U	0.0025 U	0.0026 U	0.0028 U	0.0023 U
1,2-Dichloroethane	0.0013 U	NA	NA	0.0014 U	NA	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0017 U	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0015 U	0.0012 U
1,1-Dichloroethane	0.0031 U	NA	NA	0.0031 U	NA	0.0031 U	0.0031 U	0.0031 U	0.0032 U	0.0035 U	0.0035 U	0.0039 U	0.0033 U	0.0035 U	0.0031 U	0.0033 U	0.0034 U	0.0028 U
1,2-Dichloropropane	0.0027 U	NA	NA	0.0027 U	NA	0.0027 U	0.0027 U	0.0027 U	0.0028 U	0.0031 U	0.0030 U	0.0034 U	0.0028 U	0.0030 U	0.0027 U	0.0028 U	0.0030 U	0.0025 U
trans-1,3-Dichloropropene	0.0037 U	NA	NA	0.0038 U	NA	0.0037 U	0.0037 U	0.0037 U	0.0038 U	0.0043 U	0.0042 U	0.0046 U	0.0039 U	0.0042 U	0.0038 U	0.0039 U	0.0041 U	0.0034 U
cis-1,3-Dichloropropene	0.0012 U	NA	NA	0.0012 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0014 U	0.0015 U	0.0013 U	0.0014 U	0.0012 U	0.0013 U	0.0014 U	0.0011 U
Methylene Chloride	0.022 U	NA	NA	0.023 U	NA	0.022 U	0.023 U	0.023 U	0.023 U	0.026 U	0.025 U	0.028 U	0.024 U	0.025 U	0.023 U	0.024 U	0.025 U	0.021 U
1,1,2,2-Tetrachloroethane	0.0014 U	NA	NA	0.0014 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0017 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0015 U	0.0013 U
1,1,2-Trichloroethane	0.0015 U	NA	NA	0.0016 U	NA	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0018 U	0.0017 U	0.0019 U	0.0016 U	0.0017 U	0.0016 U	0.0016 U	0.0017 U	0.0014 U
1,1,1-Trichloroethane	0.0021 U	NA	NA	0.0022 U	NA	0.0021 U	0.0021 U	0.0022 U	0.0022 U	0.0025 U	0.0024 U	0.0027 U	0.0023 U	0.0024 U	0.0022 U	0.0023 U	0.0024 U	0.0020 U
Trichlorofluoromethane	0.0029 U	NA	NA	0.0029 U	NA	0.0028 U	0.0029 U	0.0029 U J	0.0029 U J	0.0033 U J	0.0032 U J	0.0036 U J	0.0030 U J	0.0032 U J	0.0029 U J	0.0030 U J	0.0032 U J	0.0026 U J
Acenaphthene	0.0081	0.045	0.0062 I	0.015 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0016 U	0.0016 U	0.0017 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0017 U
Acenaphthylene	0.0037 I	0.018	0.0018 I	0.015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0018 U	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0018 U	0.0017 U
Anthracene	0.029	0.13	0.017	0.028 I	0.0074	0.0019 I	0.0039 I	0.00062 U	0.00062 U	0.00069 U	0.00069 U	0.00075 U	0.00067 U	0.00068 U	0.00070 U	0.00072 U	0.00074 U	0.00071 U
Benzo(a)anthracene	0.24	**1.4 J**	0.31	0.16	0.11	0.014	0.033	0.0015 U	0.0015 U	0.0017 U	0.0017 U	0.0018 U	0.0019 I	0.0020 I	0.0037 I	0.0018 U	0.0018 U	0.0032 I
Benzo(a)pyrene	**0.26**	**2 J**	**0.44**	**0.27**	**0.19**	0.022	0.046	0.0017 U	0.0016 U	0.0031 I	0.0027 I	0.0020 U	0.0035 I	0.0041 I	0.0066 I	0.0019 U	0.0020 U	0.0056 I
Benzo(a)pyrene equivalent	**0.4**	**3.0**	**0.6**	**0.4**	**0.3**	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benzo(b)fluoranthene	0.45	**3.9 J**	0.64	0.49	0.32	0.037	0.078	0.0016 U	0.0016 U	0.0068 I	0.0056 I	0.0030 I	0.0084	0.0083	0.016	0.0040 I	0.0029 I	0.0094
Benzo(g,h,i)perylene	0.18	0.98 J	0.22	0.15	0.1	0.025	0.045	0.0017 U	0.0017 U	0.0037 I	0.0036 I	0.0020 U	0.0048 I	0.0044 I	0.0081	0.0022 I	0.0020 U	0.0060 I
Benzo(k)fluoranthene	0.16	1.3 J	0.29	0.16	0.13	0.013	0.023	0.0019 U	0.0019 U	0.0023 I	0.0022 I	0.0023 U	0.0029 I	0.0036 I	0.0057 I	0.0022 U	0.0022 U	0.0043 I
Chrysene	0.36	2.5 J	0.51	0.3	0.2	0.024	0.051	0.0016 U	0.0016 U	0.0040 I	0.0037 I	0.0020 I	0.0053 I	0.0053 I	0.0091	0.0026 I	0.0020 I	0.0061 I
Dibenzo(a,h)anthracene	0.052	0.38	0.059	0.021 I	0.022	0.0050 I	0.01	0.0017 U	0.0016 U	0.0018 U	0.0018 U	0.0020 U	0.0018 U	0.0018 U	0.0019 I	0.0019 U	0.0020 U	0.0019 U
Fluoranthene	0.61	4.4 J	0.78	0.54	0.25	0.037	0.074	0.0049 U	0.0048 U	0.0054 U	0.0056 I	0.0058 U	0.0070 I	0.0070 I	0.011	0.0056 U	0.0058 U	0.0095
Fluorene	0.0071	0.04	0.0057 I	0.035 U	0.0015 U	0.0034 U	0.0034 U	0.0035 U	0.0035 U	0.0039 U	0.0039 U	0.0042 U	0.0038 U	0.0038 U	0.0040 U	0.0040 U	0.0042 U	0.0040 U
Indeno(1,2,3-cd)pyrene	0.17	0.59	0.16	0.091	0.053	0.018	0.038	0.0015 U	0.0015 U	0.0031 I	0.0028 I	0.0018 U	0.0041 I	0.0037 I	0.0074 I	0.0021 I	0.0018 U	0.0054 I
1-Methylnaphthalene	0.0018 I	0.0098	0.0017 U	0.019 I	0.0017 U	0.0017 U	0.0017 U	0.0018 U	0.0017 U	0.0020 U	0.0019 U	0.0021 U	0.0019 U	0.0019 U	0.0020 U	0.0020 U	0.017	0.0020 U
2-Methylnaphthalene	0.0031 U	0.011	0.0019 I	0.031 U	0.0014 U	0.0030 U	0.0030 U	0.0031 U	0.0030 U	0.0034 U	0.0034 U	0.0037 U	0.0033 U	0.0034 U	0.0035 U	0.0035 U	0.034	0.0035 U
Naphthalene	0.0032 I	0.015	0.0031 U	0.032 U	0.0032 U	0.0031 U	0.0031 U	0.0032 U	0.0032 U	0.0035 U	0.0035 U	0.0038 U	0.0034 U	0.0035 U	0.0036 U	0.0037 U	0.0038 U	0.0037 U
Phenanthrene	0.3	2.4 J	0.43	0.23	0.081	0.013	0.017	0.0046 U	0.0046 U	0.0051 U	0.0051 U	0.0056 U	0.0050 U	0.0051 U	0.0052 U	0.0054 U	0.0055 U	0.0053 U
Pyrene	0.47	3.4 J	0.66	0.41	0.23	0.028	0.06	0.0016 U	0.0016 U	0.0041 I	0.0044 I	0.0023 I	0.0052 I	0.0055 I	0.0089	0.0026 I	0.0020 I	0.0065 I

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TABLE 4
SOIL ANALYTICAL RESULTS
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Analyte (Method 8260)	FDEP SCTLs (mg/kg)				SB004				SB005					SB006					SB007							SB008				SB009			SB010		
	Direct Exposure Residential	Direct Exposure Industrial	Leachability Based on Groundwater Criteria	Unit																														
Sample Location:					SB004				SB005					SB006					SB007							SB008				SB009			SB010		
Sample Date:					10/21/20	10/21/20	10/21/20	10/21/20	10/22/20	11/15/21	10/22/20	10/22/20	10/22/20	10/23/20	2/23/21	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	11/15/21	11/15/21	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	10/23/20	11/13/20	11/13/20	11/13/20	11/13/20	11/13/20	11/13/20
Depth (ft BG):					0.5	2	4	45	0.5		2	4	50	0.5		2	4	50	0.5	2	4		6	45	0.5	2	4	50	0.5	2	4	0.5	2	4
Purgeable Aromatics																																		
Tetrachloroethene	8.8	18	0.03	mg/kg	0.0031 U	0.0032 U	0.0038 U	0.0030 U	0.0031 U	NA	0.0034 U	0.0034 U	0.0033 U	0.0034 U	NA	0.0032 U	0.0033 U	0.0032 U	0.0036 U	0.0032 U	0.0035 U	NA	NA	0.0034 U	0.0035 U	0.0034 U	0.0035 U	0.0092 U	0.0033 U	0.0034 U	0.0034 U	0.0035 U	0.0032 U	0.0035 U
Trichloroethene	6.4	9.3	0.03	mg/kg	0.0030 U	0.0031 U	0.0037 U	0.0029 U	0.0030 U	NA	0.0032 U	0.0033 U	0.0032 U	0.0033 U	NA	0.0030 U	0.0031 U	0.0031 U	0.0034 U	0.0031 U	0.0034 U	NA	NA	0.0032 U	0.0034 U	0.0032 U	0.0034 U	0.0089 U	0.0031 U	0.0033 U	0.0032 U	0.0033 U	0.0031 U	0.0033 U
cis-1,2-Dichloroethene	33	180	0.4	mg/kg	0.0028 U	0.0029 U	0.0035 U	0.0027 U	0.0028 U	NA	0.0030 U	0.0031 U	0.0030 U	0.0031 U	NA	0.0029 U	0.0030 U	0.0029 U	0.0032 U	0.0029 U	0.0032 U	NA	NA	0.0031 U	0.0032 U	0.0030 U	0.0032 U	0.0083 U	0.0029 U	0.0031 U	0.003 U	0.0031 U	0.0029 U	0.0031 U
trans-1,2-Dichloroethene	53	290	0.7	mg/kg	0.0035 U	0.0036 U	0.0043 U	0.0034 U	0.0035 U	NA	0.0038 U	0.0038 U	0.0037 U	0.0039 U	NA	0.0037 U	0.0036 U	0.0041 U	0.0036 U	0.0039 U	NA	NA	0.0038 U	0.0040 U	0.0038 U	0.0040 U	0.01 U	0.0037 U	0.0038 U	0.0038 U	0.0039 U	0.0036 U	0.0039 U
1,1-Dichloroethene	95	510	0.06	mg/kg	0.0021 U	0.0022 U	0.0027 U	0.0021 U	0.0021 U	NA	0.0023 U	0.0024 U	0.0023 U	0.0024 U	NA	0.0022 U	0.0023 U	0.0022 U	0.0025 U	0.0022 U	0.0024 U	NA	NA	0.0023 U	0.0025 U	0.0023 U	0.0024 U	0.0064 U	0.0031 U	0.0032 U	0.0032 U	0.0033 U	0.0031 U	0.0033 U
Vinyl chloride	0.2	0.8	0.007	mg/kg	0.0024 U	0.0025 U	0.0030 U	0.0024 U	0.0024 U	NA	0.0026 U	0.0027 U	0.0026 U	0.0027 U	NA	0.0025 U	0.0026 U	0.0025 U	0.0028 U	0.0025 U	0.0028 U	NA	NA	0.0027 U	0.0028 U	0.0026 U	0.0028 U	0.0073 U	0.0026 U	0.0027 U	0.0027 U	0.0027 U	0.0025 U	0.0027 U
Benzene	1.2	1.7	0.007	mg/kg	0.0032 U	0.0034 U	0.0040 U	0.0032 U	0.0032 U	NA	0.0035 U	0.0035 U	0.0034 U	0.0036 U	NA	0.0033 U	0.0034 U	0.0033 U	0.0037 U	0.0033 U	0.0036 U	NA	NA	0.0035 U	0.0037 U	0.0035 U	0.0037 U	0.0096 U	0.0034 U	0.0035 U	0.0035 U	0.0036 U	0.0033 U	0.0036 U
Toluene	7,500	60,000	0.5	mg/kg	0.0037 U	0.0039 U	0.0046 U	0.0036 U	0.0037 U	NA	0.0040 U	0.0041 U	0.0040 U	0.0041 U	NA	0.0038 U	0.0039 U	0.0039 U	0.0043 U	0.0038 U	0.0042 U	NA	NA	0.0041 U	0.0043 U	0.0040 U	0.0042 U	0.011 U	0.0039 U	0.0041 U	0.0041 U	0.0042 U	0.0038 U	0.0042 U
Ethylbenzene	1,500	9,200	0.6	mg/kg	0.0028 U	0.0029 U	0.0035 U	0.0028 U	0.0028 U	NA	0.0031 U	0.0031 U	0.0030 U	0.0031 U	NA	0.0029 U	0.0030 U	0.0029 U	0.0033 U	0.0029 U	0.0032 U	NA	NA	0.0031 U	0.0032 U	0.0031 U	0.0032 U	0.0084 U	0.003 U	0.0031 U	0.0031 U	0.0032 U	0.0029 U	0.0032 U
m/p-Xylene	--	--	--	mg/kg	0.0027 U	0.0028 U	0.0034 U	0.0027 U	0.0027 U	NA	0.0030 U	0.0030 U	0.0029 U	0.0030 U	NA	0.0028 U	0.0029 U	0.0028 U	0.0032 U	0.0028 U	0.0031 U	NA	NA	0.0030 U	0.0031 U	0.0030 U	0.0031 U	0.0081 U	0.0029 U	0.003 U	0.003 U	0.0031 U	0.0028 U	0.003 U
o-Xylene	--	--	--	mg/kg	0.0013 U	0.0014 U	0.0017 U	0.0013 U	0.0013 U	NA	0.0015 U	0.0015 U	0.0014 U	0.0015 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0016 U	0.0014 U	0.0015 U	NA	NA	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.004 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U	0.0015 U
MTBE	4,450	24,000	0.09	mg/kg	0.0035 U	0.0036 U	0.0043 U	0.0035 U	0.0035 U	NA	0.0037 U	0.0038 U	0.0036 U	0.0037 U	NA	0.0036 U	0.0036 U	0.0036 U	0.0018 U	0.0036 U	0.0037 U	NA	NA	0.0037 U	0.0018 U	0.0037 U	0.0037 U	0.0046 U	0.0036 U	0.0037 U	0.0037 U	0.0037 U	0.0036 U	0.0037 U
TRPHs	460	2,700	340	mg/kg	76	12 U	12 U	43	59	NA	25	12 U	14 U	**680**	15 I	12 U	12 U	13 U	12 U	12 U	39	NA	NA	13 U	54	18 I	21	18 U	57	74	17 I	21	20	12 U
Bromodichloromethane	1.5	2.2	0.004	mg/kg	0.0013 U	0.0014 U	0.0016 U	0.0013 U	0.0013 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0015 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	NA	NA	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0039 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U
Bromoform	48	93	0.03	mg/kg	0.0041 U	0.0043 U	0.0051 U	0.0041 U	0.0041 U	NA	0.0045 U	0.0045 U	0.0044 U	0.0046 U	NA	0.0042 U	0.0044 U	0.0043 U	0.0048 U	0.0043 U	0.0047 U	NA	NA	0.0045 U	0.0047 U	0.0045 U	0.0047 U	0.012 U	0.0044 U	0.0045 U	0.0045 U	0.0046 U	0.0043 U	0.0046 U
Bromomethane	3.1	16	0.05	mg/kg	0.0039 U	0.0040 U	0.0048 U	0.0038 U	0.0039 U	NA	0.0042 U	0.0043 U	0.0041 U	0.0043 U	NA	0.0040 U	0.0041 U	0.0040 U	0.0045 U	0.0040 U	0.0044 U	NA	NA	0.0042 U	0.0044 U	0.0042 U	0.0044 U	0.012 U	0.0041 U	0.0043 U	0.0042 U	0.0044 U	0.004 U	0.0043 U
Carbon Tetrachloride	0.5	0.7	0.04	mg/kg	0.0033 U	0.0034 U	0.0041 U	0.0032 U	0.0033 U	NA	0.0036 U	0.0036 U	0.0035 U	0.0036 U	NA	0.0034 U	0.0034 U	0.0034 U	0.0038 U	0.0034 U	0.0037 U	NA	NA	0.0036 U	0.0038 U	0.0036 U	0.0037 U	0.0098 U	0.0035 U	0.0036 U	0.0036 U	0.0037 U	0.0034 U	0.0037 U
Chlorobenzene	120	650	1.3	mg/kg	0.0025 U	0.0026 U	0.0031 U	0.0025 U	0.0025 U	NA	0.0027 U	0.0028 U	0.0027 U	0.0028 U	NA	0.0026 U	0.0027 U	0.0026 U	0.0029 U	0.0026 U	0.0029 U	NA	NA	0.0028 U	0.0029 U	0.0027 U	0.0029 U	0.0075 U	0.0027 U	0.0028 U	0.0028 U	0.0028 U	0.0026 U	0.0028 U
Chloroethane	3.9	5.4	0.06	mg/kg	0.0021 U	0.0022 U	0.0027 U	0.0021 U	0.0021 U	NA	0.0023 U	0.0024 U	0.0023 U	0.0024 U	NA	0.0022 U	0.0023 U	0.0023 U	0.0025 U	0.0023 U	0.0024 U	NA	NA	0.0023 U	0.0025 U	0.0024 U	0.0025 U	0.0064 U	0.0023 U	0.0024 U	0.0024 U	0.0024 U	0.0022 U	0.0024 U
Chloroform	0.4	0.6	0.4	mg/kg	0.0032 U	0.0033 U	0.0040 U	0.0031 U	0.0032 U	NA	0.0035 U	0.0035 U	0.0034 U	0.0036 U	NA	0.0033 U	0.0034 U	0.0033 U	0.0037 U	0.0033 U	0.0036 U	NA	NA	0.0035 U	0.0037 U	0.0035 U	0.0036 U	0.0095 U	0.0034 U	0.0035 U	0.0035 U	0.0036 U	0.0033 U	0.0036 U
Chloromethane	4	5.7	0.01	mg/kg	0.0028 U	0.0029 U	0.0034 U	0.0027 U	0.0028 U	NA	0.0030 U	0.0030 U	0.0030 U	0.0031 U	NA	0.0028 U	0.0029 U	0.0029 U	0.0032 U	0.0029 U	0.0031 U	NA	NA	0.0030 U	0.0032 U	0.0030 U	0.0031 U	0.0083 U	0.0029 U	0.003 U	0.003 U	0.0031 U	0.0029 U	0.0031 U
Dibromochloromethane	1.5	2.3	0.003	mg/kg	0.0033 U	0.0035 U	0.0041 U	0.0033 U	0.0033 U	NA	0.0036 U	0.0037 U	0.0036 U	0.0037 U	NA	0.0034 U	0.0035 U	0.0035 U	0.0039 U	0.0034 U	0.0038 U	NA	NA	0.0036 U	0.0038 U	0.0036 U	0.0038 U	0.01 U	0.0035 U	0.0037 U	0.0036 U	0.0037 U	0.0035 U	0.0037 U
Dichlorodifluoromethane	77	410	44	mg/kg	0.0023 U	0.0024 U	0.0029 U	0.0023 U	0.0023 U	NA	0.0025 U	0.0026 U	0.0025 U	0.0026 U	NA	0.0024 U	0.0025 U	0.0024 U	0.0027 U	0.0024 U	0.0026 U	NA	NA	0.0026 U	0.0027 U	0.0025 U	0.0027 U	0.007 U	0.0025 U	0.0026 U	0.0026 U	0.0026 U	0.0024 U	0.0026 U
1,2-Dichlorobenzene	880	5,000	17	mg/kg	0.0011 U	0.0012 U	0.0014 U	0.0011 U	0.0011 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0013 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U	NA	NA	0.0012 U	0.0013 U	0.0012 U	0.0013 U	0.0034 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U
1,3-Dichlorobenzene	380	2,200	7	mg/kg	0.0025 U	0.0026 U	0.0031 U	0.0025 U	0.0025 U	NA	0.0027 U	0.0028 U	0.0027 U	0.0028 U	NA	0.0026 U	0.0027 U	0.0026 U	0.0029 U	0.0026 U	0.0028 U	NA	NA	0.0028 U	0.0029 U	0.0027 U	0.0029 U	0.0075 U	0.0026 U	0.0028 U	0.0027 U	0.0028 U	0.0026 U	0.0028 U
1,4-Dichlorobenzene	6.4	9.9	2.2	mg/kg	0.0024 U	0.0025 U	0.0030 U	0.0024 U	0.0024 U	NA	0.0026 U	0.0026 U	0.0026 U	0.0027 U	NA	0.0025 U	0.0025 U	0.0025 U	0.0028 U	0.0025 U	0.0027 U	NA	NA	0.0026 U	0.0027 U	0.0026 U	0.0027 U	0.0072 U	0.0025 U	0.0026 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
1,2-Dichloroethane	0.5	0.7	0.01	mg/kg	0.0013 U	0.0013 U	0.0016 U	0.0013 U	0.0013 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0014 U	NA	0.0013 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0015 U	NA	NA	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0038 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0014 U
1,1-Dichloroethane	390	2,100	0.4	mg/kg	0.0029 U	0.0031 U	0.0037 U	0.0029 U	0.0029 U	NA	0.0032 U	0.0033 U	0.0032 U	0.0033 U	NA	0.0030 U	0.0031 U	0.0031 U	0.0034 U	0.0030 U	0.0033 U	NA	NA	0.0032 U	0.0034 U	0.0032 U	0.0034 U	0.0088 U	0.0023 U	0.0024 U	0.0023 U	0.0024 U	0.0022 U	0.0024 U
1,2-Dichloropropane	0.6	0.9	0.03	mg/kg	0.0026 U	0.0027 U	0.0032 U	0.0025 U	0.0026 U	NA	0.0028 U	0.0028 U	0.0027 U	0.0029 U	NA	0.0026 U	0.0027 U	0.0027 U	0.0030 U	0.0026 U	0.0029 U	NA	NA	0.0028 U	0.0029 U	0.0028 U	0.0029 U	0.0077 U	0.0027 U	0.0028 U	0.0028 U	0.0029 U	0.0027 U	0.0029 U
trans-1,3-Dichloropropene	--	--	--	mg/kg	0.0035 U	0.0037 U	0.0044 U	0.0035 U	0.0035 U	NA	0.0039 U	0.0039 U	0.0038 U	0.0039 U	NA	0.0036 U	0.0038 U	0.0037 U	0.0041 U	0.0037 U	0.0040 U	NA	NA	0.0039 U	0.0041 U	0.0039 U	0.0040 U	0.011 U	0.0037 U	0.0039 U	0.0039 U	0.004 U	0.0037 U	0.004 U
cis-1,3-Dichloropropene	--	--	--	mg/kg	0.0012 U	0.0012 U	0.0014 U	0.0011 U	0.0012 U	NA	0.0013 U	0.0013 U	0.0012 U	0.0013 U	NA	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0012 U	0.0013 U	NA	NA	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0035 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0013 U
Methylene Chloride	17	26	0.02	mg/kg	0.021 U	0.022 U	0.027 U	0.021 U	0.021 U	NA	0.023 U	0.024 U	0.023 U	0.024 U	NA	0.022 U	0.023 U	0.022 U	0.025 U	0.022 U	0.024 U	NA	NA	0.023 U	0.025 U	0.023 U	0.024 U	0.064 U	0.023 U	0.024 U	0.023 U	0.024 U	0.022 U	0.024 U
1,1,2,2-Tetrachloroethane	0.7	1.2	0.001	mg/kg	0.0013 U	0.0014 U	0.0016 U	0.0013 U	0.0013 U	NA	0.0014 U	0.0015 U	0.0014 U	0.0015 U	NA	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	NA	NA	0.0015 U	0.0015 U	0.0014 U	0.0015 U	0.004 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U
1,1,2-Trichloroethane	1.4	2	0.03	mg/kg	0.0015 U	0.0015 U	0.0018 U	0.0014 U	0.0015 U	NA	0.0016 U	0.0016 U	0.0016 U	0.0016 U	NA	0.0015 U	0.0015 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	NA	NA	0.0016 U	0.0017 U	0.0016 U	0.0016 U	0.0044 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0015 U	0.0016 U
1,1,1-Trichloroethane	730	3,900	1.9	mg/kg	0.0020 U	0.0021 U	0.0025 U	0.0020 U	0.0020 U	NA	0.0022 U	0.0023 U	0.0022 U	0.0023 U	NA	0.0021 U	0.0022 U	0.0021 U	0.0024 U	0.0021 U	0.0023 U	NA	NA	0.0022 U	0.0023 U	0.0022 U	0.0023 U	0.0061 U	0.0022 U	0.0023 U	0.0022 U	0.0023 U	0.0021 U	0.0023 U
Trichlorofluoromethane	270	1,500	33	mg/kg	0.0027 U	0.0028 U	0.0034 U	0.0027 U	0.0027 U J	NA	0.0030 U J	0.0030 U J	0.0029 U J	0.0030 U	NA	0.0028 U	0.0029 U	0.0028 U	0.0032 U	0.0028 U	0.0031 U	NA	NA	0.0030 U	0.0031 U	0.0030 U	0.0031 U	0.0082 U	0.0029 U	0.003 U	0.003 U	0.0031 U	0.0028 U	0.0031 U
Acenaphthene	2,400	20,000	2.1	mg/kg	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0077 U	0.0015 U	0.0015 U	0.0015 U	0.0017 U	0.016 U	0.0015 U	0.0015 U	0.0015 U	0.0017 U	0.0015 U	0.0015 U	0.0073 U	0.0015 U	0.0015 U	0.0017 U	0.015 U	0.0015 U	0.0015 U	0.0022 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U
Acenaphthylene	1,800	20,000	27	mg/kg	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0078 U	0.0018 I	0.0029 I	0.0015 U	0.0018 U	0.016 U	0.0015 U	0.0019 I	0.0015 U	0.0017 U	0.0016 U	0.0015 U	0.0075 U	0.0015 U	0.0015 U	0.0017 U	0.015 U	0.0015 U	0.0015 U	0.0022 U	0.0021 I	0.0035 I	0.0015 U	0.0015 U	0.0015 U	0.0015 U
Anthracene	21,000	300,000	2,500	mg/kg	0.00064 U	0.00063 U	0.00063 U	0.00068 U	0.055	0.00096 I	0.0024 I	0.0013 I	0.00074 U	0.14	0.00063 U	0.0020 I	0.0012 I	0.00072 U	0.00067 I	0.00063 U	0.0080 I	0.00063 U	0.00062 U	0.0044 I	0.012 I	0.00063 U	0.00063 U	0.00093 U	0.00092 I	0.0014 I	0.00061 U	0.0011 I	0.00061 U	0.00062 U
Benzo(a)anthracene	#	#	0.8	mg/kg	0.0033 I	0.0039 I	0.0016 U	0.0017 U	0.76 J	0.0041 I	0.0092	0.01	0.0018 U	**1.4**	0.0021 I	0.014	0.0059 I	0.0018 U	0.0017 I	0.0015 U	0.027 I	0.0016 U	0.0015 U	0.026	0.063 I	0.0016 U	0.0015 U	0.0036 I	0.0031 I	0.0031 I	0.0015 U	0.0023 I	0.0015 U	0.0015 U
Benzo(a)pyrene	0.1	0.7	8	mg/kg	0.0056 I	0.0048 I	0.0017 U	0.0018 U	**0.62 J**	0.0063 I	0.01	0.012	0.0020 U	**1.2**	0.0028 I	0.011	0.0066 I	0.0019 U	0.0036 I	0.0017 U	0.13	0.0017 U	0.0017 U	0.074	0.065 I	0.0017 U	0.0017 U	0.0025 U	0.0033 I	0.0044 I	0.0016 U	0.0026 I	0.0016 U	0.0017 U
Benzo(a)pyrene equivalent	0.1	0.7	**	mg/kg	0.0	0.0	0.0	0.0	**1**	0.0	0.0	0.0	0.0	**1.8**	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benzo(b)fluoranthene	#	#	2.4	mg/kg	0.011	0.0088	0.0017 U	0.0018 U	1.6 J	0.0076	0.019	0.021	0.0020 U	**3.2**	0.0059 I	0.024	0.013	0.0019 U	0.0053 I	0.0024 I	0.23	0.0017 U	0.0016 U	0.11	0.11	0.0017 U	0.0016 U	0.026	0.0082	0.0097	0.0016 U	0.0047 I	0.0016 U	0.0016 U
Benzo(g,h,i)perylene	2,500	52,000	32,000	mg/kg	0.0069 I	0.0044 I	0.0017 U	0.0018 U	0.23 J	0.0048 I	0.011	0.011	0.0020 U	0.45	0.002 I	0.0062 I	0.0053 I	0.0019 U	0.0036 I	0.0017 U	0.059	0.0017 U	0.0017 U	0.071	0.024 I	0.0017 U	0.0017 U	0.011	0.0046 I	0.0075	0.0016 U	0.0022 I	0.0016 U	0.0017 U
Benzo(k)fluoranthene	#	#	24	mg/kg	0.0040 I	0.0034 I	0.0019 U	0.0020 U	0.51 J	0.0040 I	0.0054 I	0.0075	0.0022 U	1	0.0022 I	0.0098	0.0047 I	0.0022 U	0.0020 U	0.0018 U	0.088	0.0018 U	0.0019 U	0.032	0.046 I	0.0019 U	0.0019 U	0.0085 I	0.0035 I	0.0036 I	0.0019 U	0.0018 U	0.0018 U	0.0018 U
Chrysene	#	#	77	mg/kg	0.0067 I	0.0069	0.0016 U	0.0017 U	1.2 J	0.0058 I	0.013	0.015	0.0019 U	1.3	0.0031 I	0.021	0.01	0.0018 U	0.0029 I	0.0016 U	0.076	0.0016 U	0.0016 U	0.05	0.081	0.0016 U	0.0016 U	0.015	0.006 I	0.006 I	0.0016 U	0.0036 I	0.0016 U	0.0016 U
Dibenzo(a,h)anthracene	#	#	0.7	mg/kg	0.0017 U	0.0017 U	0.0017 U	0.0018 U	0.074 J	0.0017 U	0.0031 I	0.0029 I	0.0020 U	0.13	0.0017 U	0.0022 I	0.0017 U	0.0019 U	0.0017 U	0.0017 U	0.013 I	0.0017 U	0.0017 U	0.018	0.017 U	0.0017 U	0.0017 U	0.0028 I	0.0016 U	0.0017 I	0.0016 U	0.0016 U	0.0016 U	0.0017 U
Fluoranthene	3,200	59,000	1,200	mg/kg	0.0087	0.01	0.0049 U	0.0053 U	2.1 J	0.0057 I	0.019	0.025	0.0058 U	4.1	0.005 U	0.035	0.018	0.0057 U	0.0051 U	0.0049 U	0.074	0.0022 U	0.0022 U	0.064	0.27	0.0049 U	0.0049 U	0.019	0.0058 I	0.0063 I	0.0048 U	0.0052 I	0.0048 U	0.0049 U
Fluorene	2,600	33,000	160	mg/kg	0.0036 U	0.0035 U	0.0035 U	0.0038 U	0.018 U	0.0015 U	0.0036 U	0.0035 U	0.0042 U	0.038 U	0.0036 U	0.0036 U	0.0035 U	0.0041 U	0.0037 U	0.0035 U	0.018 U	0.0015 U	0.0015 U	0.0040 U	0.036 U	0.0035 U	0.0035 U	0.0052 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0035 U
Indeno(1,2,3-cd)pyrene	#	#	6.6	mg/kg	0.0065 I	0.0044 I	0.0016 U	0.0017 U	0.26 J	0.0048 I	0.0098	0.012	0.0018 U	0.39	0.0016 U	0.0087	0.0069	0.0018 U	0.0038 I	0.0015 I	0.046	0.0016 U	0.0015 U	0.068	0.019 I	0.0016 U	0.0015 U	0.011	0.0039 I	0.0052 I	0.0015 U	0.002 I	0.0015 U	0.0015 U
1-Methylnaphthalene	200	1,800	3.1	mg/kg	0.0018 U	0.0018 U	0.0018 U	0.0023 I	0.0093 U	0.0018 U	0.0018 U	0.0018 U	0.0021 U	0.019 U	0.0018 U	0.0018 U	0.0018 U	0.0020 U	0.0018 U	0.0018 U	0.0089 U	0.0018 U	0.0018 U	0.0020 U	0.018 U	0.0018 U	0.0018 U	0.0026 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0018 U
2-Methylnaphthalene	210	2,100	8.5	mg/kg	0.0032 U	0.0031 U	0.0031 U	0.0033 I	0.016 U	0.0014 U	0.0031 U	0.0031 U	0.0037 U	0.034 U	0.0031 U	0.0031 U	0.0031 U	0.0036 U	0.0032 U	0.0031 U	0.015 U	0.0014 U	0.0014 U	0.0035 U	0.032 U	0.0031 U	0.0031 U	0.0046 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.0031 U
Naphthalene	55	300	1.2	mg/kg	0.0033 U	0.0032 U	0.0032 U	0.0035 U	0.017 U	0.0032 U	0.0033 U	0.0032 U	0.0038 U	0.035 U	0.0033 U	0.0033 U	0.0042 I	0.0037 U	0.0034 U	0.0032 U	0.016 U	0.0033 U	0.0032 U	0.0036 U	0.033 U	0.0032 U	0.0032 U	0.0048 U	0.0032 U	0.0031 U	0.0032 U	0.0031 U	0.0031 U	0.0032 U
Phenanthrene	2,200	36,000	250	mg/kg	0.0048 U	0.0047 U	0.0047 U	0.0050 U	0.31 J	0.0047 U	0.011	0.0062 I	0.0055 U	0.75	0.0047 U	0.0051 I	0.0056 I	0.0054 U	0.0049 U	0.0047 U	0.023 U	0.0047 U	0.0046 U	0.024	0.050 I	0.0047 U	0.0047 U	0.0069 U	0.0046 U	0.0045 U	0.0046 U	0.0045 U	0.0045 U	0.0046 U
Pyrene	2,400	45,000	880	mg/kg	0.0072	0.0083	0.0016 U	0.0019 I	2.1 J	0.0052 I	0.015	0.02	0.0019 U	4.3	0.0038 I	0.034	0.018	0.0019 U	0.0026 I	0.0016 U	0.077	0.0016 U	0.0016 U	0.047	0.22	0.0016 U	0.0016 U	0.011	0.0049 I	0.005 I	0.0016 U	0.004 I	0.0016 U	0.0016 U

Footnotes:
FDEP SCTLs - Florida Department of Environmental Protection Soil Cleanup Target Levels per Chapter 62-777, Florida Administrative Code
mg/kg - milligrams per kilogram
ft BG - Feet below grade
J - Estimated value
U - Compound was analyzed for but not detected above the method detection limit
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
** - Leachability value may be determined using TCLP
# - Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent
NS - Not sampled
NA - Not analyzed

TABLE 5
GROUNDWATER ANALYTICAL DATA
Bacons Cleaners and Laundry Service
Haines City, Florida
FDEP Facility ID No. ERIC_5362

Location ID:			MW001	MW002	MW003	MW004
Screen Interval (ft bg):			40-55	37-52	37-52	35-50
Date Collected:			11/18/20	11/18/20	11/18/20	11/18/20
Sample Name:	FDEP GCTLs	Units	MW001 (11/18/20)	MW002 (11/18/20)	MW003 (11/18/20)	MW004 (11/18/20)
Tetrachloroethene	3	µg/L	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	3	µg/L	0.61 U	0.61 U	0.61 U	0.61 U
cis-1,2-Dichloroethene	70	µg/L	0.32 U	0.32 U	0.32 U	0.32 U
trans-1,2-Dichloroethene	100	µg/L	0.39 U	0.39 U	0.39 U	0.39 U
1,1-Dichloroethene	7	µg/L	0.26 U	0.26 U	0.26 U	0.26 U
Vinyl chloride	1	µg/L	0.26 U	0.26 U	0.26 U	0.26 U
Benzene	1	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	40	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
Ethylbenzene	30	µg/L	0.27 U	0.27 U	0.27 U	0.50 I
m/p-Xylene	--	µg/L	0.36 U	0.36 U	0.36 U	0.36 U
o-Xylene	--	µg/L	0.50 U	0.50 U	0.50 U	0.50 U
MTBE	20	µg/L	0.44 U	0.44 U	0.44 U	0.44 U
TRPHs	5,000	µg/L	1200	240 U	1600	240 U
Bromodichloromethane	0.6	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Bromoform	4.4	µg/L	1.1 U	1.1 U	1.1 U	1.1 U
Bromomethane	9.8	µg/L	2.5 U	2.5 U	2.5 U	2.5 U
Carbon Tetrachloride	3	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Chlorobenzene	100	µg/L	0.27 U	0.27 U	0.27 U	0.27 U
Chloroethane	12	µg/L	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	70	µg/L	0.29 U	0.29 U	0.94 I	0.42 I
Chloromethane	2.7	µg/L	0.76 U	0.76 U	0.76 U	0.76 U
Dibromochloromethane	0.4	µg/L	0.31 U	0.31 U	0.31 U	0.31 U
Dichlorodifluoromethane	1400	µg/L	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichlorobenzene	600	µg/L	0.24 U	0.24 U	0.24 U	0.24 U
1,3-Dichlorobenzene	210	µg/L	0.26 U	0.26 U	0.26 U	0.26 U
1,4-Dichlorobenzene	75	µg/L	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloroethane	3	µg/L	0.31 U J	0.31 U J	0.31 U J	0.31 U J
1,1-Dichloroethane	70	µg/L	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloropropane	5	µg/L	0.52 U	0.52 U	0.52 U	0.52 U
trans-1,3-Dichloropropene	--	µg/L	0.27 U	0.27 U	0.27 U	0.27 U
cis-1,3-Dichloropropene	--	µg/L	0.39 U	0.39 U	0.39 U	0.39 U
Methylene Chloride	5	µg/L	1.4 U	1.4 U	1.4 U	1.4 U
1,1,2,2-Tetrachloroethane	0.2	µg/L	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2-Trichloroethane	5	µg/L	0.29 U	0.29 U	0.29 U	0.29 U
1,1,1-Trichloroethane	200	µg/L	0.30 U	0.30 U	0.30 U	0.30 U
Trichlorofluoromethane	2,100	µg/L	0.49 U	0.49 U	0.49 U	0.49 U
Acenaphthene	20	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Acenaphthylene	210	µg/L	0.081 U	0.081 U	0.081 U	0.081 U
Anthracene	2,100	µg/L	0.090 U	0.090 U	0.090 U	0.090 U
Benzo(a)anthracene	0.05a	µg/L	0.050 U	0.050 U	0.050 U	0.050 U
Benzo(a)pyrene	0.2**	µg/L	0.073 U	0.073 U	0.073 U	0.073 U
Benzo(b)fluoranthene	0.05a	µg/L	0.050 U	0.050 U	0.050 U	0.050 U
Benzo(g,h,i)perylene	210	µg/L	0.070 U	0.070 U	0.070 U	0.070 U
Benzo(k)fluoranthene	0.5	µg/L	0.083 U	0.083 U	0.083 U	0.083 U
Chrysene	4.8	µg/L	0.068 U	0.068 U	0.068 U	0.068 U
Dibenzo(a,h)anthracene	0.005a	µg/L	0.077 U	0.077 U	0.077 U	0.077 U
Fluoranthene	280	µg/L	0.23 U	0.23 U	0.23 U	0.23 U
Fluorene	280	µg/L	0.25 U	0.25 U	0.25 U	0.25 U
Indeno(1,2,3-cd)pyrene	0.05a	µg/L	0.050 U	0.050 U	0.050 U	0.050 U
1-Methylnaphthalene	28	µg/L	0.64 U	1.1	0.64 U	0.64 U
2-Methylnaphthalene	28	µg/L	0.67 U	1.9	0.67 U	0.83
Naphthalene	14	µg/L	1.3 U	1.3 U	1.3 U	3.6 I
Phenanthrene	210	µg/L	0.86 U	0.86 U	0.86 U	0.86 U
Pyrene	210	µg/L	0.22 U	0.22 U	0.22 U	0.22 U

Footnotes:

FDEP GCTL - Florida Department of Environmental Protection Groundwater Cleanup Target Level per Chapter 62-777, Florida Administrative Code
FDEP NADC- Florida Department of Environmental Protection Natural Attenuation Default Concentration
ug/L - micrograms per liter
I - reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value
U -The compound was analyzed for but not detected.
SVOC - Semi-Volatile Organic Compound
VOC - Volatile Organic Compound
Analysis methods included EPA Method SW-846 8260B for VOCs
ft bg - feet below ground

Figures

0 2,000' 4,000'

GRAPHIC SCALE

LEGEND

- ▲ PUBLIC WATER SUPPLY (PWS) WELL
- ● PRIVATE DRINKING WATER WELL

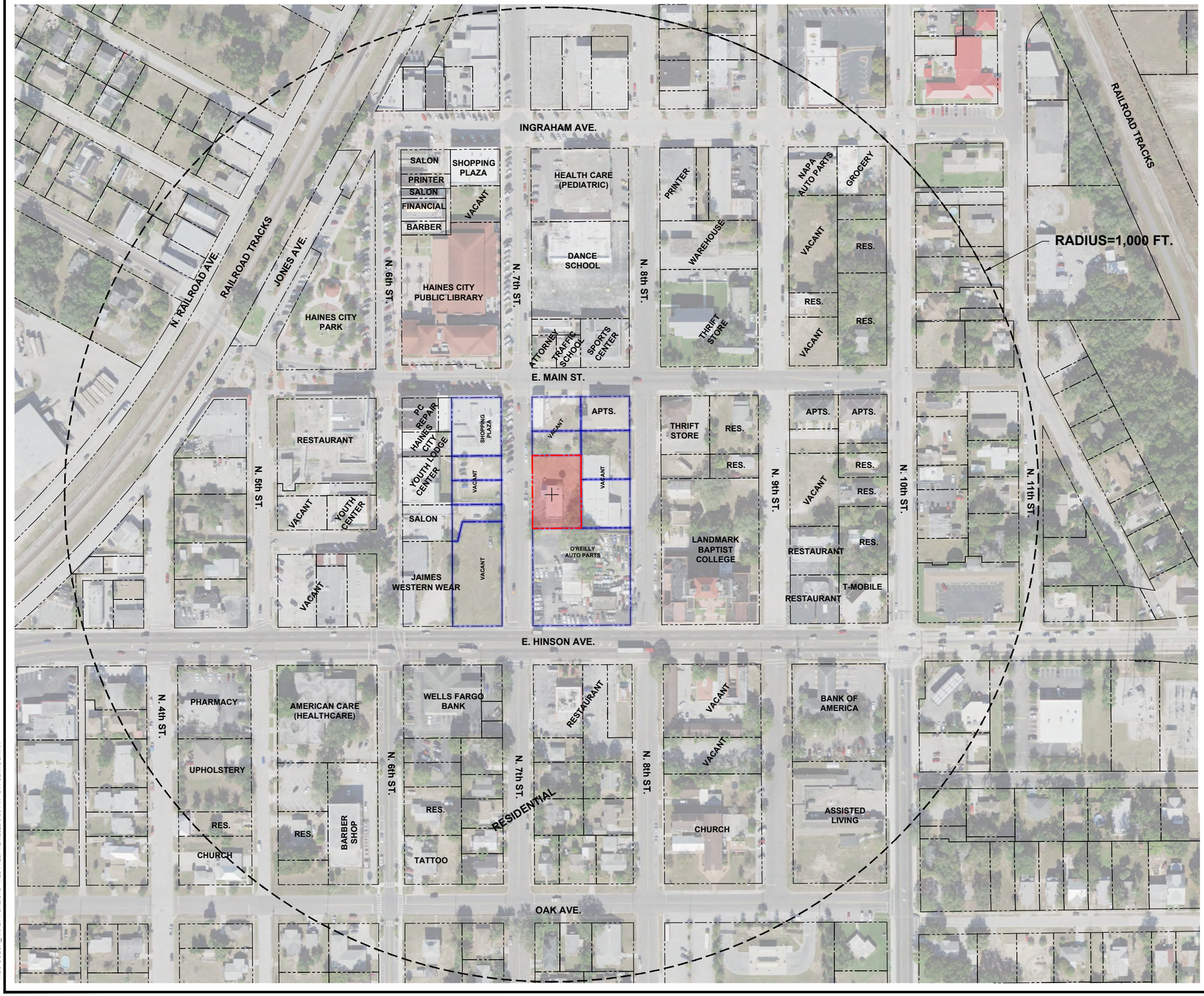
BASE MAP SOURCE: USGS 7.5 minute series (topographic)
Winter Haven, Florida quadrangle, 1983.

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

SITE LOCATION

ARCADIS

FIGURE
1



LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- ADJACENT PARCELS

0 200' 400'

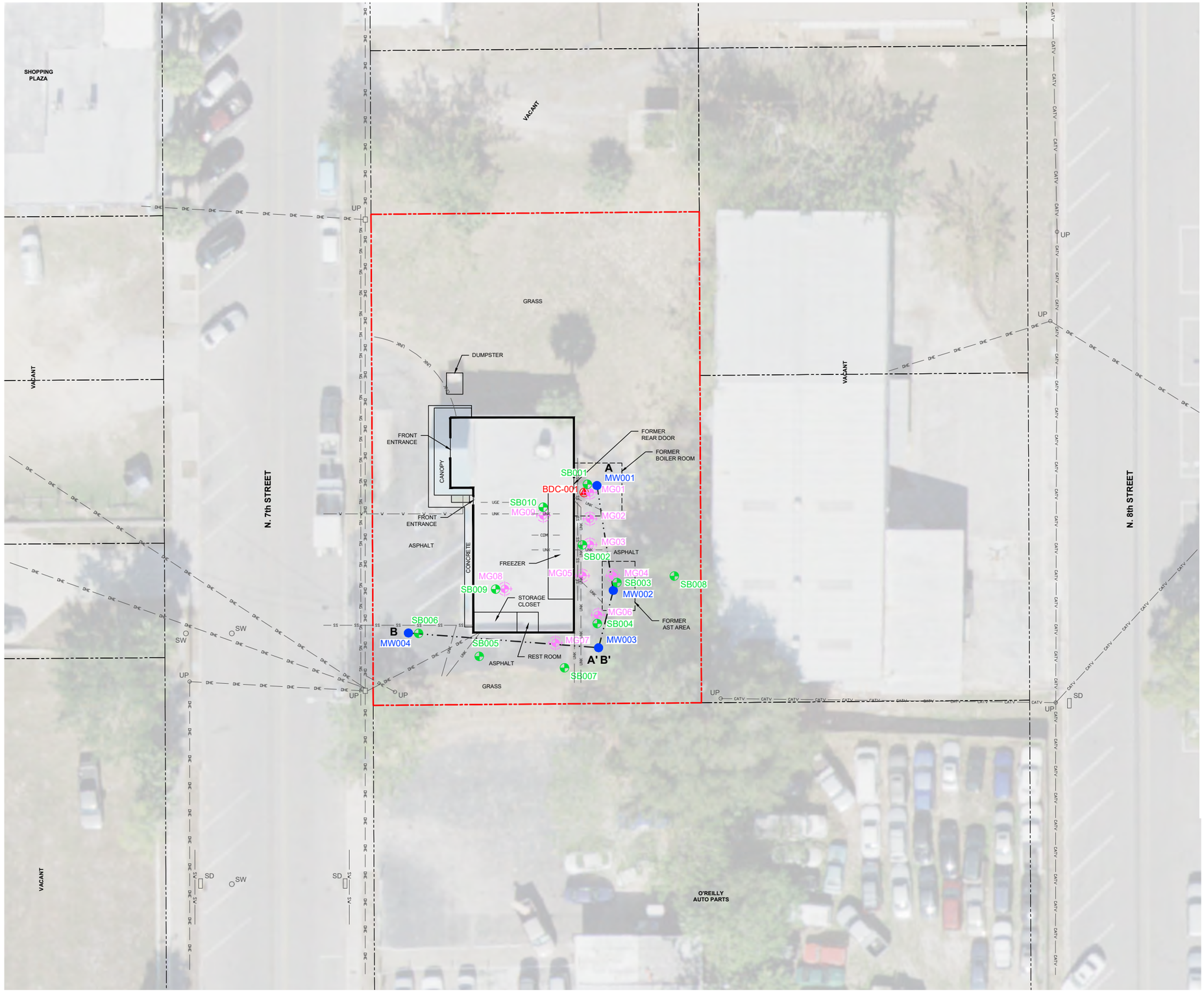
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

SITE VICINITY

ARCADIS

FIGURE
2



LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- UGE — UNDERGROUND ELECTRIC UTILITY
- DHE — OVERHEAD ELECTRIC UTILITY
- NG — NG — NATURAL GAS UTILITY
- W — WATER UTILITY
- SW — STORM WATER UTILITY
- SS — SANITARY SEWER UTILITY
- CATV — CABLE TV
- COM — COMMUNICATION UTILITY
- UNK — UNKNOWN UTILITY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION
- A — A' LINE OF CROSS SECTION

0 30' 60'

GRAPHIC SCALE

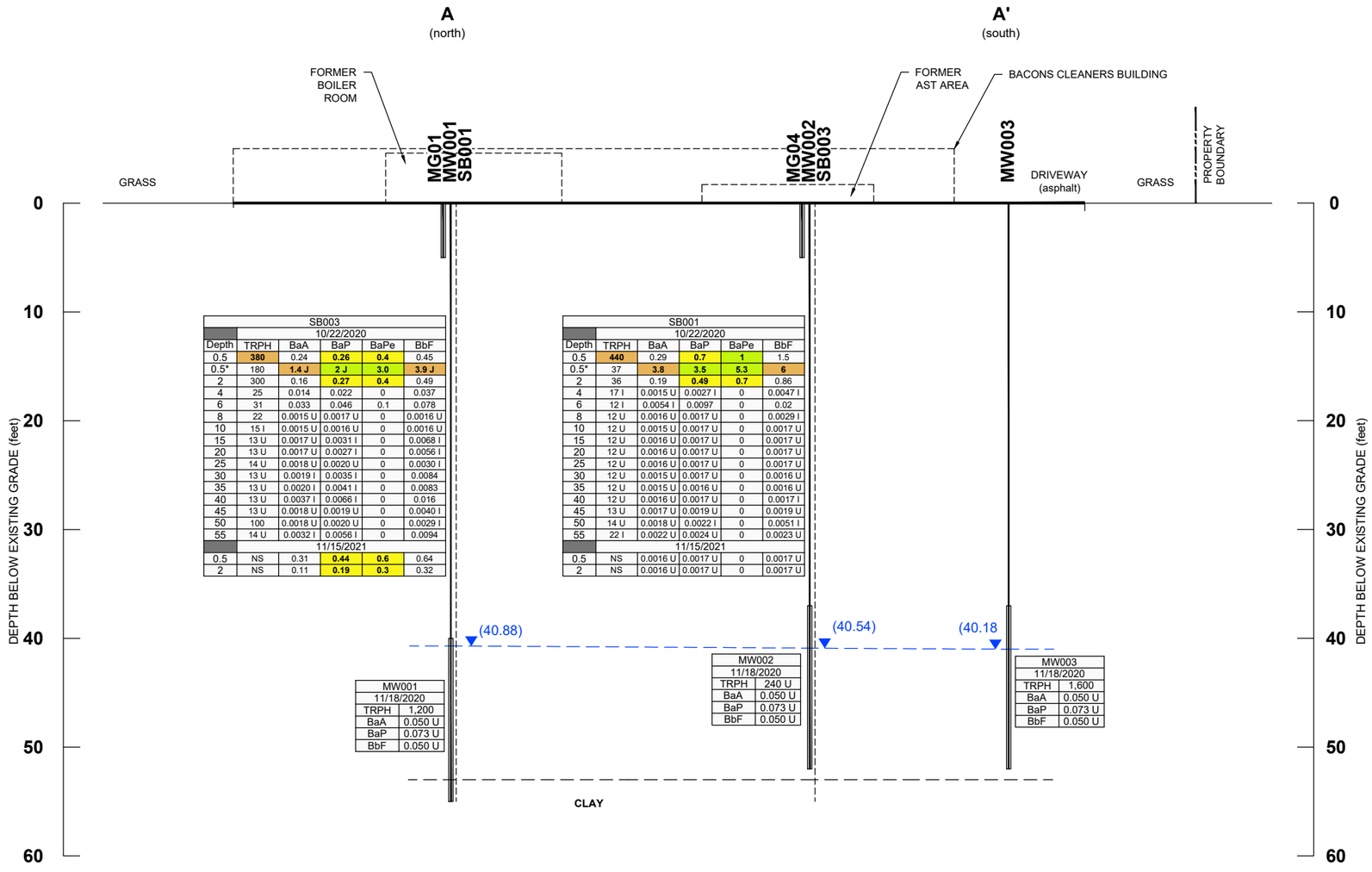
BACONS CLEANERS & LAUNDRY SERVICE (ERIC 5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

SITE LAYOUT

ARCADIS

FIGURE 3

CITY: BB_FL DIV/GROUP: EN DB: B.OLIVA LD: (Opt) PIC: W.VOGEL-SONG PM: B.BURKE TM: E.BROOKS LYR:(On+*;Off+*REF*
C:\Users\bolivab\OneDrive - ARCADIS\BB\360_OneDrive Sync Location\AUS-FDEP-DC-BACONS-HAINES CITY Florida\2022\01-In Progress\01-DWG\BACONS-DC SARA202112-SM.dwg LAYOUT: NFA-F3_SITE SAVED: 1/24/2022 2:57 PM ACADVER: 24.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ACS-COLOR_ANALYTICAL.CTB
PLOTTED: 1/24/2022 3:06 PM BY: OLIVA, BRIAN



SB003					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**380**	0.24	**0.26**	**0.4**	0.45
0.5*	180	**1.4 J**	**2 J**	**3.0**	**3.9 J**
2	300	0.16	**0.27**	**0.4**	0.49
4	25	0.014	0.022	0	0.037
6	31	0.033	0.046	0.1	0.078
8	22	0.0015 U	0.0017 U	0	0.0016 U
10	15 I	0.0015 U	0.0016 U	0	0.0016 U
15	13 U	0.0017 U	0.0031 I	0	0.0068 I
20	13 U	0.0017 U	0.0027 I	0	0.0056 I
25	14 U	0.0018 U	0.0020 U	0	0.0030 I
30	13 U	0.0019 I	0.0035 I	0	0.0084
35	13 U	0.0020 I	0.0041 I	0	0.0083
40	13 U	0.0037 I	0.0066 I	0	0.016
45	13 U	0.0018 U	0.0019 U	0	0.0040 I
50	100	0.0018 U	0.0020 U	0	0.0029 I
55	14 U	0.0032 I	0.0056 I	0	0.0094
	11/15/2021				
0.5	NS	0.31	**0.44**	**0.6**	0.64
2	NS	0.11	**0.19**	**0.3**	0.32

SB001					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**440**	0.29	**0.7**	**1**	1.5
0.5*	37	**3.8**	**3.5**	**5.3**	**6**
2	36	0.19	**0.49**	**0.7**	0.86
4	17 I	0.0015 U	0.0027 I	0	0.0047 I
6	12 I	0.0054 I	0.0097	0	0.02
8	12 U	0.0016 U	0.0017 U	0	0.0029 I
10	12 U	0.0015 U	0.0017 U	0	0.0017 U
15	12 U	0.0016 U	0.0017 U	0	0.0017 U
20	12 U	0.0016 U	0.0017 U	0	0.0017 U
25	12 U	0.0016 U	0.0017 U	0	0.0017 U
30	12 U	0.0015 U	0.0017 U	0	0.0016 U
35	12 U	0.0015 U	0.0016 U	0	0.0016 U
40	12 U	0.0016 U	0.0017 U	0	0.0017 I
45	13 U	0.0017 U	0.0019 U	0	0.0019 U
50	14 U	0.0018 U	0.0022 I	0	0.0051 I
55	22 I	0.0022 U	0.0024 U	0	0.0023 U
	11/15/2021				
0.5	NS	0.0016 U	0.0017 U	0	0.0017 U
2	NS	0.0016 U	0.0017 U	0	0.0017 U

MW001	
11/18/2020	
TRPH	1,200
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

MW002	
11/18/2020	
TRPH	240 U
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

MW003	
11/18/2020	
TRPH	1,600
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

LEGEND

MONITOR WELL AND SCREENED INTERVAL

MW003	
11/18/2020	
TRPH	1,600
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

SAMPLE I.D.
SAMPLE DATE
TRPH CONCENTRATION (ug/L)
BENZO(a)ANTHRACENE CONCENTRATION (ug/L)
BENZO(a)PYRENE CONCENTRATION (ug/L)
BENZO(b)FLUORANTHENE CONCENTRATION (ug/L)

(40.88) DEPTH TO WATER MEASURED ON 11/18/2020

NOTES
1. **Bold** indicates GCTL exceedance.
2. ***Bold italic*** indicates NADC exceedance.
3. FDEP GCTLs - Florida Department of Environmental Protection Groundwater Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
4. **Bold** indicates SCTL exceedance.
5. FDEP SCTLs - Florida Department of Environmental Protection Soil Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
6. "U" indicates compound was analyzed for but not detected.
7. "I" indicates result is between laboratory Practical Quantifiable Limit [PQL] and laboratory Method Detection Limit [MDL].
8. "J" indicates laboratory estimated value.
9. "NS" indicates not sampled.
10. " * " indicates confirmatory result collected on 2/23/2021.
11. TRPH=Total Recoverable Petroleum Hydrocarbons.
12. BaA=Benzo(a)Anthracene.
13. BaP=Benzo(a)Pyrene.
14. BaPe=Benzo(a)Pyrene equivalents
15. BbF=Benzo(b)Fluoranthene
16. Aqueous results reported in micrograms per liter (ug/L).
17. Solid results reported in milligrams per kilogram (mg/kg).
18. "**" Leachability value may be determined using TCLP.
19. "#" Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent

GCTL			
TRPH	BaA	BaP	BbF
5,000	0.05a	0.2**	0.05a

Soil Cleanup Target Level (SCTL) Shading Index
Direct Exposure Residential Soil Cleanup Target Level Exceedance
Direct Exposure Commercial Soil Cleanup Target Level Exceedance
Leachability Based on Groundwater Criteria Exceedance

SCTL					
	TRPH	BaA	BaP	BaPe	BbF
	460	#	0.1	0.1	#
	2,700	#	0.7	0.7	#
	340	0.8	8	**	2.4

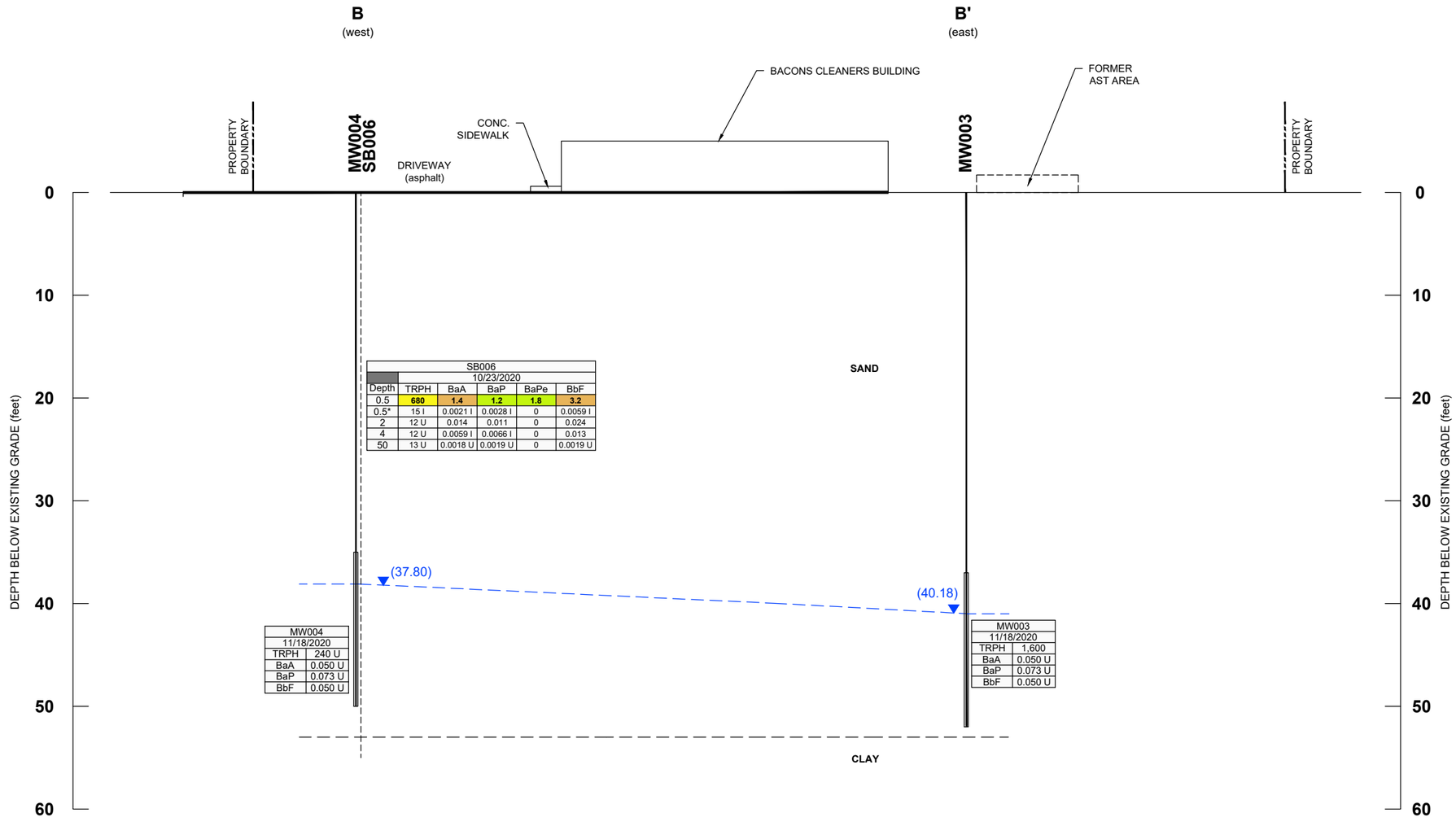
0 12' 24'
HORIZONTAL GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

CROSS SECTION A-A'
WITH TRPH/PAH IN SOIL/GROUNDWATER
ANALYTICAL RESULTS
OCTOBER/NOVEMBER 2020 - NOVEMBER 2021

ARCADIS

FIGURE
4



LEGEND

MONITOR WELL AND SCREENED INTERVAL

MW003	SAMPLE I.D.
11/18/2020	SAMPLE DATE
TRPH 1,600	TRPH CONCENTRATION (ug/L)
BaA 0.050 U	BENZO(a)ANTHRACENE CONCENTRATION (ug/L)
BaP 0.073 U	BENZO(a)PYRENE CONCENTRATION (ug/L)
BbF 0.050 U	BENZO(b)FLUORANTHENE CONCENTRATION (ug/L)

(40.18) DEPTH TO WATER MEASURED ON 11/18/2020.

NOTES
1. **Bold** indicates GCTL exceedance.
2. ***Bold italic*** indicates NADC exceedance.
3. FDEP GCTLs - Florida Department of Environmental Protection Groundwater Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
4. **Bold** indicates SCTL exceedance.
5. FDEP SCTLs - Florida Department of Environmental Protection Soil Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
6. "U" indicates compound was analyzed for but not detected.
7. "I" indicates result is between laboratory Practical Quantifiable Limit [PQL] and laboratory Method Detection Limit [MDL].
8. "J" indicates laboratory estimated value.
9. "NS" indicates not sampled.
10. " * " indicates confirmatory result collected on 2/23/2021.
11. TRPH=Total Recoverable Petroleum Hydrocarbons.
12. BaA=Benzo(a)Anthracene.
13. BaP=Benzo(a)Pyrene.
14. BaPe=Benzo(a)Pyrene equivalents
15. BbF=Benzo(b)Fluoranthene
16. Aqueous results reported in milligrams per liter (mg/L).
17. Solid results reported in milligrams per kilogram (mg/kg).
18. """ Leachability value may be determined using TCLP.
19. "#" Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent

GCTL			
TRPH	BaA	BaP	BbF
5,000	0.05a	0.2**	0.05a

Soil Cleanup Target Level (SCTL) Shading Index
Direct Exposure Residential Soil Cleanup Target Level Exceedance
Direct Exposure Commercial Soil Cleanup Target Level Exceedance
Leachability Based on Groundwater Criteria Exceedance

SCTL					
	TRPH	BaA	BaP	BaPe	BbF
	460	#	0.1	0.1	#
	2,700	#	0.7	0.7	#
	340	0.8	8	**	2.4

0 12' 24'
HORIZONTAL GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

CROSS SECTION B-B'
WITH TRPH/PAH IN SOIL/GROUNDWATER ANALYTICAL RESULTS
OCTOBER/NOVEMBER 2020 AND FEBRUARY 2021

ARCADIS

FIGURE
5

CITY: BB.FL DIV/GROUP: EN DB: B.OLIVA LD: PIC: W.VOGELSONG PM: B.BURKE TM: E.BROOKS LYR:(On);(Off);*REF*
C:\Users\boliv\OneDrive - ARCADIS\BIM360 - OneDrive Sync Location\AUS-FDEP-DC-BACONS-HAINES CITY Florida\2022\01-In Progress\01-DWG\30061946-CS.dwg LAYOUT: NFA-F5_CS BB SAVED: 1/24/2022 3:05 PM ACADVER: 24.1S (LMS TECH) PAGESETUP: ---- PLOTSTY:LETABLE ACS-COLOR_ANALYTICAL.CTB PLOTTED:
1/24/2022 3:05 PM BY: OLIVA, BRIAN

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION
- (54.96) GROUNDWATER ELEVATION (ft. relative to an arbitrary datum)
- 54.94 GROUNDWATER ELEVATION CONTOUR (ft. relative to an arbitrary datum)
- INDICATES PREDOMINANT DIRECTION OF GROUNDWATER FLOW

N

0 30' 60'

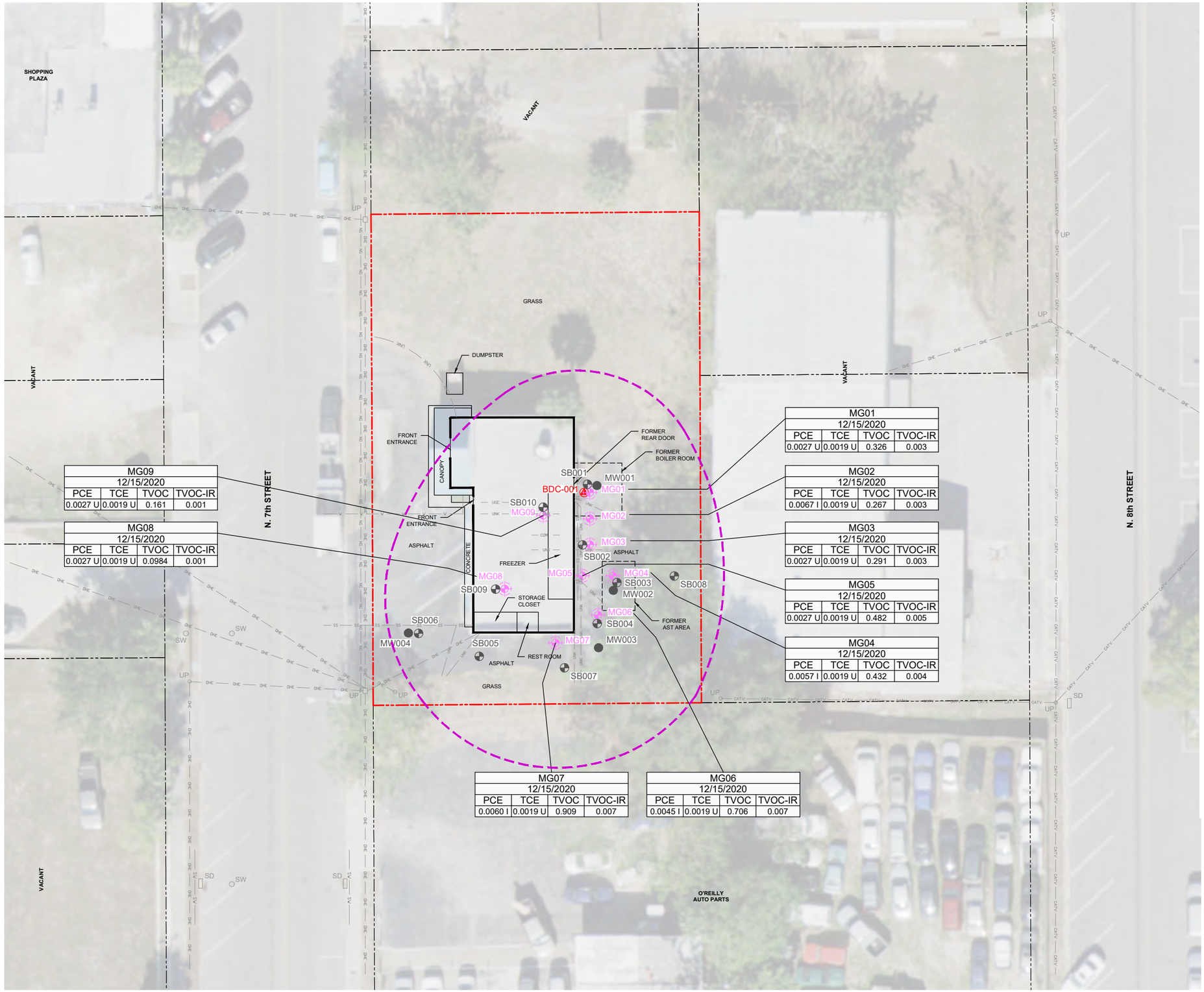
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

SHALLOW (WT-55 FT. BG) GROUNDWATER GRADIENT - NOVEMBER 18, 2020

ARCADIS

FIGURE 6



MG09			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.161	0.001

MG08			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.0984	0.001

MG01			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.326	0.003

MG02			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0067 I	0.0019 U	0.267	0.003

MG03			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.291	0.003

MG05			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.482	0.005

MG04			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0057 I	0.0019 U	0.432	0.004

MG07			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0060 I	0.0019 U	0.909	0.007

MG06			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0045 I	0.0019 U	0.706	0.007

N

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION

MG01			
12/15/2020			
PCE	TCE	TVOC	TVOC-IR
0.0027 U	0.0019 U	0.326	0.003

SAMPLE I.D.
SAMPLE DATE
ANALYTICAL RESULTS (mg/m^3) AND INFLUENT RATE (lbs./day)

MAGS INFLUENCE

NOTES
1. "I" indicates result is between laboratory Practical Quantifiable Limit [PQL] and laboratory Method Detection Limit [MDL].
2. "U" indicates compound was analyzed for but not detected.
3. PCE=Tetrachloroethene.
4. TCE=Trichloroethene.
5. TVOC=Total Volatile Organic Compound.
6. TVOC-IR=Total Volatile Organic Compound Influent Rate.

0 30' 60'
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

SOIL GAS ANALYTICAL RESULTS DECEMBER 2020

ARCADIS

FIGURE 7

SB001					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**440**	0.29	**0.7**	**1**	1.5
0.5*	37	**3.8**	**3.5**	**5.3**	**6**
2	36	0.19	**0.49**	**0.7**	0.86
4	17 I	0.0015 U	0.0027 I	0	0.0047 I
6	12 I	0.0054 I	0.0097	0	0.02
8	12 U	0.0016 U	0.0017 U	0	0.0029 I
10	12 U	0.0015 U	0.0017 U	0	0.0017 U
15	12 U	0.0016 U	0.0017 U	0	0.0017 U
20	12 U	0.0016 U	0.0017 U	0	0.0017 U
25	12 U	0.0016 U	0.0017 U	0	0.0017 U
30	12 U	0.0015 U	0.0017 U	0	0.0016 U
35	12 U	0.0015 U	0.0016 U	0	0.0016 U
40	12 U	0.0016 U	0.0017 U	0	0.0017 I
45	13 U	0.0017 U	0.0019 U	0	0.0019 U
50	14 U	0.0018 U	0.0022 I	0	0.0051 I
55	22 I	0.0022 U	0.0024 U	0	0.0023 U
	11/15/2021				
0.5	NS	0.0016 U	0.0017 U	0	0.0017 U
2	NS	0.0016 U	0.0017 U	0	0.0017 U

SB002					
	10/21/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**390**	0.039	0.11	**0.2**	0.28
0.5*	34	0.0068 I	0.013	0	0.03
2	32	0.0047 I	0.011	0	0.022
4	22	0.0017 I	0.0041 I	0	0.0069
45	110	0.0033 I	0.0079	0	0.019

SB008					
	10/23/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	54	0.063 I	0.065 I	0.1	0.11
2	18 I	0.0016 U	0.0017 U	0	0.0017 U
4	21	0.0015 U	0.0017 U	0	0.0016 U
50	18 U	0.0036 I	0.0025 U	0	0.026

SB003					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**380**	0.24	**0.26**	**0.4**	0.45
0.5*	180	**1.4 J**	**2 J**	**3.0**	**3.9 J**
2	300	0.16	**0.27**	**0.4**	0.49
4	25	0.014	0.022	0	0.037
6	31	0.033	0.046	0.1	0.078
8	22	0.0015 U	0.0017 U	0	0.0016 U
10	15 I	0.0015 U	0.0016 U	0	0.0016 U
15	13 U	0.0017 U	0.0031 I	0	0.0068 I
20	13 U	0.0017 U	0.0027 I	0	0.0056 I
25	14 U	0.0018 U	0.0020 U	0	0.0030 I
30	13 U	0.0019 I	0.0035 I	0	0.0084
35	13 U	0.0020 I	0.0041 I	0	0.0083
40	13 U	0.0037 I	0.0066 I	0	0.016
45	13 U	0.0018 U	0.0019 U	0	0.0040 I
50	100	0.0018 U	0.0020 U	0	0.0029 I
55	14 U	0.0032 I	0.0056 I	0	0.0094
	11/15/2021				
0.5	NS	0.31	**0.44**	**0.6**	0.64
2	NS	0.11	**0.19**	**0.3**	0.32

SB010					
	11/13/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	21	0.0023 I	0.0026 I	0	0.0047 I
2	20	0.0015 U	0.0016 U	0	0.0016 U
4	12 U	0.0015 U	0.0017 U	0	0.0016 U

SB009					
	11/13/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	57	0.0031 I	0.0033 I	0	0.0082
2	74	0.0031 I	0.0044 I	0	0.0097
4	17 I	0.0015 U	0.0016 U	0	0.0016 U

SB006					
	10/23/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	**680**	**1.4**	**1.2**	**1.8**	**3.2**
0.5*	15 I	0.0021 I	0.0028 I	0	0.0059 I
2	12 U	0.014	0.011	0	0.024
4	12 U	0.0059 I	0.0066 I	0	0.013
50	13 U	0.0018 U	0.0019 U	0	0.0019 U

SB005					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	59	0.76 J	**0.62 J**	**1**	1.6 J
2	25	0.0092	0.01	0	0.019
4	12 U	0.01	0.012	0	0.021
50	14 U	0.0018 U	0.0020 U	0	0.0020 U
	11/15/2021				
0.5	NS	0.0041 I	0.0063 I	0	0.0076

SB007					
	10/23/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	12 U	0.0017 I	0.0036 I	0	0.0053 I
2	12 U	0.0015 U	0.0017 U	0	0.0024 I
4	39	0.027 I	0.13	**0.2**	0.23
45	13 U	0.026	0.074	0.1	0.11
	11/15/2021				
4	NS	0.0016 U	0.0017 U	0	0.0017 U
6	NS	0.0015 U	0.0017 U	0	0.0016 U

SB004					
	10/21/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	76	0.0033 I	0.0056 I	0	0.011
2	12 U	0.0039 I	0.0048 I	0	0.0088
4	12 U	0.0016 U	0.0017 U	0	0.0017 U
45	43	0.0017 U	0.0018 U	0	0.0018 U

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION
- A A' LINE OF CROSS SECTION

SB010					
	10/22/2020				
Depth	TRPH	BaA	BaP	BaPe	BbF
0.5	21	0.0023 I	0.0026 I	NS	0.0047 I
2	20	0.0015 U	0.0016 U	NS	0.0016 U
4	12 U	0.0015 U	0.0017 U	NS	0.0016 U

NOTES
1. **Bold** indicates SCTL exceedance.
2. FDEP SCTLs - Florida Department of Environmental Protection Soil Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
3. "U" indicates compound was analyzed for but not detected.
4. "I" indicates result is between laboratory Practical Quantifiable Limit [PQL] and laboratory Method Detection Limit [MDL].
5. "J" indicates laboratory estimated value.
6. "NS" indicates not sampled.
7. " * " indicates confirmatory result collected on 2/23/2021.
8. TRPH=Total Recoverable Petroleum Hydrocarbons.
9. BaA=Benzo(a)Anthracene.
10. BaP=Benzo(a)Pyrene.
11. BaPe=Benzo(a)Pyrene equivalents
12. BbF=Benzo(b)Fluoranthene
13. All results reported in milligrams per kilogram (mg/kg).
14. "**" Leachability value may be determined using TCLP.
15. "#" Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent

Soil Cleanup Target Level (SCTL) Shading Index
Direct Exposure Residential Soil Cleanup Target Level Exceedance
Direct Exposure Commercial Soil Cleanup Target Level Exceedance
Leachability Based on Groundwater Criteria Exceedance

SCTL					
	TRPH	BaA	BaP	BaPe	BbF
	460	#	0.1	0.1	#
	2,700	#	0.7	0.7	#
	340	0.8	8	**	2.4

0 30' 60'

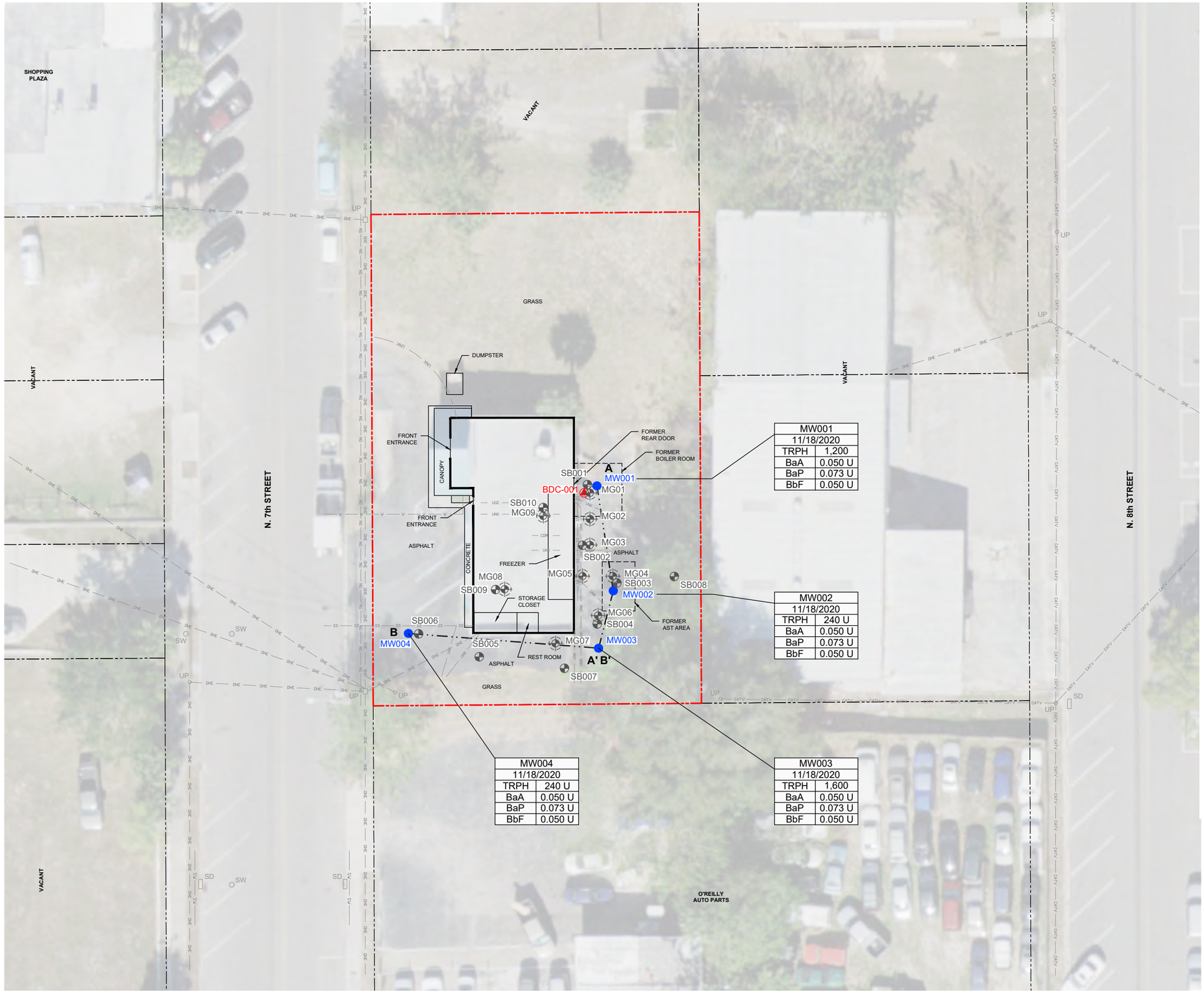
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

TRPH AND PAH CONCENTRATIONS IN SOIL

ARCADIS

FIGURE
8



MW001	
11/18/2020	
TRPH	1,200
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

MW002	
11/18/2020	
TRPH	240 U
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

MW003	
11/18/2020	
TRPH	1,600
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

MW004	
11/18/2020	
TRPH	240 U
BaA	0.050 U
BaP	0.073 U
BbF	0.050 U

LEGEND

- PARCEL BOUNDARY
- SUBJECT SITE PARCEL BOUNDARY
- SITE SCREENING SOIL SAMPLE BDC-001 COLLECTED FROM 0-0.5' IN JUNE 1996
- SOIL BORING LOCATION
- MAGS WELL LOCATION
- MONITOR WELL LOCATION
- A — A' LINE OF CROSS SECTION

MW001	SAMPLE I.D.
11/18/2020	SAMPLE DATE
TRPH 1,200	TRPH CONCENTRATION (ug/L)
BaA 0.050 U	BENZO(a)ANTHRACENE CONCENTRATION (ug/L)
BaP 0.073 U	BENZO(a)PYRENE CONCENTRATION (ug/L)
BbF 0.050 U	BENZO(b)FLUORANTHENE CONCENTRATION (ug/L)

NOTES
1. **Bold** indicates GCTL exceedance.
2. ***Bold italic*** indicates NADC exceedance.
2. FDEP GCTLs - Florida Department of Environmental Protection Groundwater Cleanup Target Levels per Chapter 62-777, Florida Administrative Code.
3. "U" indicates compound was analyzed for but not detected.
4. TRPH=Total Recoverable Petroleum Hydrocarbons.
5. All results reported in micrograms per liter (ug/L).

GCTL			
TRPH	BaA	BaP	BbF
5,000	0.05a	0.2**	0.05a

0 30' 60'
GRAPHIC SCALE

BACONS CLEANERS & LAUNDRY SERVICE (ERIC_5362)
21 N. 7th STREET, HAINES CITY, POLK COUNTY, FLORIDA
NO FURTHER ACTION PROPOSAL

TRPH AND PAH CONCENTRATIONS IN GROUNDWATER NOVEMBER 18, 2020

ARCADIS

FIGURE 9

CITY: BB_FL DIV/GROUP: EN DB: B.OLIVA LD: (Opt) PIC: W.VOGELSONG PM: B.BURKE TM: E.BROOKS LYR:(Opt)ON=*;OFF=*REF*
C:\Users\boliva\OneDrive - ARCADIS\BIM360 - OneDrive Sync Location\AUS-FDEP-DC-BACONS-HAINES CITY Florida\2022\01-In Progress\01-DWG\BACONS-DC SARA202112-SM.dwg LAYOUT: NFA-F9_SGWO 20201118 SAVED: 1/24/2022 2:57 PM ACADVER: 24.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ACS-COLOR_ANALYTICAL.CTB PLOTTED: 1/24/2022 3:06 PM BY: OLIVA, BRIAN

FLORIDA DEPARTMENT OF
Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

June 24, 2022

VIA EMAIL: hhjones@bellsouth.net

Harmon Hill Jones, Managing Member
Frontier Properties Florida, LLC
PO Box 1247
Franklin, Tennessee 37065

Subject: **Site Rehabilitation Completion Order (SRCO)**
Bacons Drive - In Cleaners
21 N 7th Street
Haines City, Polk County, 33844
ERIC_5362

Dear Mr. Jones:

The Florida Department of Environmental Protection (the "Department") has reviewed the Site Assessment Report, dated April 13, 2021 and the Confirmatory Soil Sampling Report dated January 24, 2022, for the former Bacons Drive-In Cleaners located at 21 N 7th Street, Haines City, Florida. Maps showing the location of Bacons Drive-In Cleaners and the former location of the "contaminated site" (i.e., contaminant plume) for which this Order is being issued are enclosed as Exhibits 1, 2, 3a, and 4a, incorporated by reference herein.

The contamination, which resulted from the operations of a drycleaning facility, was reported to the Department in an application to the Drycleaning Solvent Cleanup Program. The contamination detected during the Initial Site Screening consisted of mineral spirits. The Site Assessment Report is supported by earlier submittals, prepared pursuant to the requirements of Chapter 62-780, Florida Administrative Code (F.A.C.), which can be found in the Department's document repository at: http://depedms.dep.state.fl.us/Oculus/servlet/login.

Based on the documentation submitted in the Site Assessment Report and other submitted documents, the Department has reasonable assurance that the Drycleaning Solvent Cleanup Program has met the criteria in Chapter 62-780, F.A.C. The submittals indicate that soil and groundwater contaminant concentrations are below the applicable Soil Cleanup Target Levels and Maximum Concentration Limits or Groundwater Cleanup Target Levels as adopted in Chapter 62-777, F.A.C. (Effective date April 17,

2005.) Therefore, the Drycleaning Solvent Cleanup Program has satisfied the site rehabilitation requirements for the above-referenced contaminated site and is released from any further obligation to conduct site rehabilitation at the contaminated site, except as set forth below. See attached Exhibits 3b and 4b, incorporated by reference herein, which include information regarding the contaminants, affected media, and applicable cleanup target levels for the contaminated site that is the subject of this Order.

In accordance with section 376.30701(4), Florida Statutes (F.S.), upon completion of site rehabilitation, additional site rehabilitation is not required unless it is demonstrated that:

(a) Fraud was committed in demonstrating site conditions or completion of site rehabilitation;

(b) New information confirms the existence of an area of previously unknown contamination which exceeds the site-specific rehabilitation levels established in accordance with Section 376.30701(2), F.S., or which otherwise poses the threat of real and substantial harm to public health, safety, or the environment;

(c) A new discharge of pollutants or hazardous substances occurs at the site subsequent to the issuance of this Order. If such a discharge occurs, the Drycleaning Solvent Cleanup Program will not perform or fund any site rehabilitation. Instead, the cleanup of such a discharge will be the responsibility of the drycleaning facility owner/operator and/or the real property owner.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until a subsequent order of the Department. Because the administrative hearing process is designed to formulate final agency action, the subsequent order may modify or take a different position than this action.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a

qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of when and how the petitioner received notice of the agency decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@FloridaDEP.gov. Also, a copy of the petition shall be mailed to the addressee of this order at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the addressee of this order must be filed within **21** days of receipt of this written notice. Petitions filed by any persons other than the addressee of this order must be filed within **21** days of publication of the notice or within **21** days of receipt of the written notice, whichever occurs first.

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver may not apply to persons who have not received a clear point of entry.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an

administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@FloridaDEP.gov, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

Judicial Review

Once this decision becomes final, any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Questions

Any questions regarding the Department's review of the Site Rehabilitation Completion Report should be directed to Theresa Pepe at 2600 Blair Stone Road, Tallahassee, FL, 32399, by phone at (850) 245-8966, or email at Theresa.Pepe@FloridaDEP.gov. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for administrative hearing or request for an extension of time to file a petition for administrative hearing.

REMAINDER OF PAGE INTENTIONALLY BLANK

EXECUTION AND CLERKING
Executed in Tallahassee, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Digitally signed by Jennifer Farrell
Date: 2022.06.24 12:45:14 -04'00'

Jennifer A. Farrell, Program Administrator
Waste Cleanup Program
Division of Waste Management

CERTIFICATE OF SERVICE
The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

Frontier Properties Florida, LLC
Harmon Hill Jones
hhjones@bellsouth.net

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk **Date**

Enclosures: Exhibits 1, 2, 3a, 3b, 4a and 4b

ec: Carla Burrmann, Environmental Manager DEP SW District (Carla.Burrmann@FloridaDEP.gov)
Aaron Cohen, DSCP Manager, (Aaron.Cohen@FloridaDEP.gov)
Theresa Pepe, DEP Project Manager, (Theresa.Pepe@FloridaDEP.gov)

Map ID 46: Chevron-Taylor's U-Haul

Pollutant Storage System Specialty Contractors as defined in Section 489.113, Florida Statutes (Certified contractors as defined in Section 17-761.200, Florida Administrative Code) shall use this form to certify that the installation, replacement or removal of the storage tank system(s) located at the address listed below was performed in accordance with Department Reference Standards.

RECEIVED D.E.R. FEB -6 AM 11: STORAGE TANK REGULATION

GENERAL FACILITY INFORMATION

1. DER Facility Identification No.: 538623964

2. Facility Name: Taylor's Chevron Telephone: (813) 956-3951

3. Street Address (physical location): 714 Hinson Avenue
   Haines City, FL 33844

4. Owner Name: Cecil Baker Telephone: (813) 956-3951

5. Owner Address: P.O.Box 536, Lake Alfred, FL 33850

6. Number of Tanks: a. Installed at this time ____
   b. Removed or abandoned at this time 6

7. Tank(s) Manufactured by: Unknown

8. Date Work Initiated: 10/4/90 9. Date Work Completed: 10/5/90

UNDERGROUND POLLUTANT TANK INSTALLATION CHECKLIST

Please certify the completion of the following installation requirements by placing an (X) in the appropriate box.

1. The tanks and piping are corrosion resistant and approved for use by State and Federal Laws. [ ]

2. Excavation, backfill and compaction completed in accordance with NFPA (National Fire Protection Association) 30(87), API (American Petroleum Institute) 1615, PEI (Petroleum Equipment Institute) RP100-87 and the manufacturers' specifications. [ ]

3. Tanks and piping pretested and installed in accordance with NFPA 30(87), API 1615, PEI/RP100(87) and the manufacturers' specifications. [ ]

4. Steel tanks and piping are cathodically protected in accordance with NFPA 30(87), API 1632, UL (Underwriters Laboratory) 1746, STI (Steel Tank Institute) R892-89 and the manufacturer's specifications. [ ]

5. Tanks and piping tested for tightness after installation in accordance with NFPA 30(87) and PEI/RP100-87. [ ]

6. Monitoring well(s) or other leak detection devices installed and tested in accordance with Section 17-761.640, Florida Administrative Code (F.A.C.) [ ]

7. Spill and overfill protection devices installed in accordance with Section 17-761.500, F.A.C. [ ]

8. Secondary containment installed for tanks and piping as applicable in accordance with Section 17-761.500, F.A.C. [ ]

PLEASE NOTE: the numbers following the abbreviations (e.g. API 1615) are publication or specification numbers issued by these institutions.

1. Closure assessment performed in accordance with Section 17-761.800, F.A.C. [XX]

2. Underground tank removed and disposed of as specified in API 1604 in accordance with Section 17-761.800, F.A.C. [XX]

CERTIFICATION

I hereby certify and attest that I am familiar with the facility that is registered with the Florida Department of Environmental Regulation; that to the best of my knowledge and belief, the tank installation, replacement or removal at this facility was conducted in accordance with Chapter 489 and Section 376.303, Florida Statutes and Chapter 17-761, Florida Administrative Code (and its adopted reference sources from publications and standards of the National Fire Protection Association (NFPA); the American Petroleum Institute (API), the National Association of Corrosion Engineers (NACE), American Society for Testing and Materials (ASTM); Petroleum Equipment Institute (PEI); Steel Tank Institute (STI); Underwriters Laboratory (UL); and the tank and integral piping manufacturers' specifications; and that the operations on the checklist were performed accordingly.

Glen A. Wills	PCC 045194
(TYPE OR PRINT) Certified Pollutant Tank Contractor Name Pollutant Storage System Specialty Contractor License Number (PSSSC)	PSSSC Number
Certified Tank Contractor Signature	Date
Glen A. Wills	10/4/90
(TYPE OR PRINT) Field Supervisor Name	Date
Field Supervisor Signature	Date

The owner or operator of the facility must register the tanks with the Department at least 10 days before the installation. The installer must submit this form no more than 30 days after the completion of installation to the Department of Environmental Regulation at the address printed at the top of page one.

DER Form 17-761.900(5)
DER Draft 1/12/90

Map ID 47: Polk County Fertilizer

Geosyntec consultants

engineers | scientists | innovators

SITE INSPECTION REPORT

Polk County Fertilizer Plant

COMET Site ID No.: ERIC_13343

Prepared for

Florida Department of Environmental Protection
Division of Waste Management
Brownfields and CERCLA Site Screening Section
2600 Blair Stone Road
Tallahassee, Florida 32301

Prepared by

Geosyntec Consultants, Inc.
2039 Centre Pointe Blvd, Suite 103
Tallahassee, Florida 32308

Project: FR3842A

Revised January 04, 2021

Geosyntec consultants

Site Inspection Report

Former Polk County Fertilizer Plant

Prepared for

Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32301

Prepared by

Geosyntec Consultants, Inc.
2039 Centre Point Blvd, Suite 103
Tallahassee, Florida 32308

JOSEPH L. APPLEGATE LICENSED No. 1067 STATE OF FLORIDA PROFESSIONAL GEOLOGIST 12/23/20

Joe Applegate, P.G. (FL) P0001067
Sr. Principal Hydrogeologist

Brooks Baldwin, P.G. (FL)
Sr. Geologist

Project Number: FR3842A

December 23, 2020

Quinn Kelley Digitally signed by Quinn Kelley Date: 2021.01.05 08:36:38 -05'00'

TABLE OF CONTENTS

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LIST OF FIGURES

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ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
AST	above-ground storage tank
BaP	benzo(a)pyrene
bls	below land surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	constituent of concern
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
ft	feet
GCTL	Groundwater Cleanup Target Level
HRS	Hazard Ranking System
Kg	kilogram
MCL	Maximum Contaminant Level
Mg	milligram
MS	matrix spike
MSD	matrix spike duplicate
MW	monitoring well
NPL	National Priorities List
PCA	Preliminary Contamination Assessment
PCAR	Preliminary Contamination Assessment Report
PCFC	Polk County Fertilizer Company
PCFP	Polk County Fertilizer Plant
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
SARA	Superfund Amendments and Reauthorization Act
SCTL	Soil Cleanup Target Level
SVOC	semi-volatile organic compound
SI	Site Inspection

ACRONYMS AND ABBREVIATIONS (Continued)

U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

1. INTRODUCTION

The Florida Department of Environmental Protection (FDEP) tasked Geosyntec Consultants, Inc. (Geosyntec) to conduct a Site Inspection (SI) at the former Polk County Fertilizer Plant (PCFP; "the Site") under Contract No. HW550.

The purpose of this SI is to assess current site conditions including the nature of contamination, determine potential human and ecological exposure pathways, and determine the need for Federal response under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 42 United States Code (U.S.C.) 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986.

FDEP will use the data collected during this SI to evaluate the site under the Hazard Ranking System (HRS) as a separate document. The HRS is used by the United States Environmental Protection Agency's (USEPA's) Superfund program to assess the relative threat associated with actual or potential releases of hazardous substances. The HRS is the primary screening tool for determining whether a site is to be included on the National Priorities List (NPL).

Geosyntec conducted the SI proposal, assessment, and report preparation activities for the PCFP Site and consisted of the following:

- Reviewed and evaluated pertinent information regarding previous site history and site assessments of the PCFP Site.
- Proposed a scope of work that would guide the collection of sufficient environmental data to determine whether or not this site poses a potential threat to human health, sensitive environments, and fisheries that are threatened or potentially threatened by releases of hazardous materials from the Site.
- Assessed the site characteristics and characterize the potential contaminant sources.
- Identified the potential migration pathways under the USEPA's HRS for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organochlorine pesticides (full suite), Resource Conservation and Recovery Act (RCRA) metals, nitrate, and total phosphorus.
- Identified the number of environmental samples and sampling locations required to fill HRS data gaps and characterize the nature of the site-related constituents of concern (COCs).
- Collected soil and groundwater samples for laboratory analysis to determine if contamination is present at the PCFP Site. The SI field investigation also consisted of collecting soil and groundwater samples in background areas.
- Established site-specific background screening concentrations for each medium being investigated for the HRS evaluation process.
- Compared environmental sample analytical results to USEPA Superfund and State Waste Cleanup criteria to determine if further actions are warranted by the USEPA and/or FDEP. The criteria used to evaluate the COCs include:

- FDEP's Soil Cleanup Target Levels (SCTLs) and Groundwater Cleanup Target Level (GCTLs) per Chapter 62-777, Florida Administrative Code (FAC), FDEP's Primary and Secondary Drinking Water Standards as specified in Chapter 62-550 FAC.
- USEPA Federal Drinking Water Standards, USEPA Soil Regional Screening Levels (RSLs).
- Provided the FDEP and the USEPA with the necessary information to make decisions on any other actions warranted at this Site.

2. SITE BACKGROUND AND DESCRIPTION

The former PCFP is composed of three parcels. In historical documents, the Polk County Fertilizer Company (PCFC) is referenced to the street address 1010 Citrus Avenue, Haines City, Polk County, Florida. This address is related to the parcel north of Citrus Avenue, which was the location of the company's office building. The Site is in Section 21, Township 27, and Range 27 East. The geographic coordinates are 28°07'03.7" N latitude and 81°37'22.5" W longitude; the decimal degree coordinates are 28.117700 and -81.622928. A site location map is provided in **Figure 1**.

The two adjoining parcels to the south of Citrus Avenue housed the plant operations. The eastern parcel, which is approximately 4.89 acres, was the production facility, and the western parcel, which is approximately 2.31 acres, contained a spray field. The Site is in an area of mixed residential and industrial properties with railroad tracks to the east of the Site [1].

2.1 Operational History

In the 1920s, the Site was originally used as an ice factory. The PCFC began operations onsite in 1936, where fertilizer was manufactured from raw materials that were shipped to the site by truck and rail. The Site was used as a fertilizer mixing plant. Raw fertilizer materials were transported by truck and rail to the Site, separated, and stockpiled for mixing. According to historical permits, there were storage tanks onsite in two locations that contained petroleum products and pesticides dating back to 1984. On May 10, 1989, a trailer loaded with 20 tons of mixed fertilizer began to smolder onsite. The trailer was moved to the westernmost parcel, dumped, and extinguished by the Haines City Fire Department. The westernmost parcel was sold by the PCFC in August 1989.

On October 25, 2002, PCFC discontinued the manufacture and sale of fertilizer and farm chemicals on the easternmost parcel and sold its facilities to Greenleaf, LLC on February 28, 2003. The above-ground storage tanks (ASTs) were removed in April 2007, and the Polk County Health Department inspector documented evidence of staining around where the tanks were located. In 2019, the property was sold to the local government, Haines City. The city plans to redevelop the property into a recreational park.

2.2 Regulatory/Previous Assessment History

Water and Earth Sciences, Inc. conducted a Preliminary Contamination Assessment in August 1994 on behalf of PCFC, and soil and groundwater were analyzed for nitrate, sulfate, and various metals in response to the smoldering fertilizer dump in 1989. A monitoring well (MW), MW-1, was installed near the location of the fertilizer dump. The analytical results of soil samples reported no SCTL exceedances; however, elevated concentrations of nitrate and cadmium above FDEP GCTLs were detected in groundwater.

A 1996 Preliminary Contamination Assessment Report (PCAR) prepared by Andreyev Engineering documented nitrate levels above FDEP GCTLs. During Andreyev's assessment, three more MWs were installed. The report concluded that groundwater exceeding the GCTLs was likely migrating off-site [2]. Subsequently, based on FDEP District correspondence and a provided timeline, the Site went into a long-term groundwater monitoring program for nitrate

from August 1996 through January 2006. Quarterly groundwater monitoring from 2005 indicated that nitrate concentrations were below GCTLs and on February 2, 2006, the FDEP issued a No Further Action for the site. A well abandonment report was submitted in September 2007.

2.2.1 CERCLA Activity

On August 25, 2018, a Preliminary Screening Assessment (PSA) was submitted to USEPA for PCFP. Based on the findings of the PSA and review of USEPA CERCLA Superfund criteria, soil and groundwater migration was determined to be a pathway of concern for the Site, and no confirmatory and closure sampling had been completed for the ASTs removed in 2007. Therefore, a Preliminary Assessment/Site Inspection (PA/SI) was recommended at PCFP [1].

3. HYDROGEOLOGIC SETTING AND GROUNDWATER USE

3.1 Physiography and Surface Water

The climate in Polk County is humid subtropical. It is characterized by mild winters and long, warm, humid summers [3]. In addition to its low southern latitude, the Gulf of Mexico and the Atlantic Ocean have a moderating influence on the maximum and minimum temperatures in summer and winter, respectively. Colder temperatures during the winter are related to cold front advances from the north. During the summer, temperatures are moderated by shade provided by the formation of cumulus clouds and rain showers. Based on weather records from Haines City, the average monthly mean temperature ranges from 50.2 degrees Fahrenheit (˚F) in January to 94.2˚F in August. Rainfall is highly variable across the area, and the mean annual rainfall is 52 inches. Between 60 to 70% of the rainfall occurs during the rainy season from June to October. Thunderstorms occur about every other day during the summer, usually in the late afternoon. Thunderstorms contribute the majority of the rainfall in the summer with some heavy thunderstorms accounting for 2 to 3 inches of rainfall over a short time period. Tropical storms or depressions and hurricanes occasionally strike the Florida peninsula in September and October [4]. The 2-Year/24-hour rainfall for Polk County is 4.24 inches [5].

The former PCFP is in the northeastern portion of Polk County, which lies within the Polk Upland physiographic province [6]. The topography of the region is dominated by the Lake Wales Ridge, which consists of the fairly continuous ridge aligned north to south with elevations exceeding 300 feet (ft) above mean sea level; however, elevations at the site range from 158 to 173 ft above mean sea level [7]. Much of Polk County is dominated by karst terrain and karst aquifer features including sinkholes, sinkhole lakes and solution features (i.e. caverns, cavities, etc.). The sinkhole lakes are typically round, closed-in basins lakes. Karst features are an important factor in the HRS scoring and the presence of karst features typically increase HRS scoring values. An area of higher elevation exists in the eastern and central portion of the Site and forms downward slopes towards the north, south, and west. In the northern parcel where the plant office building was located, there is a bank north of Citrus Avenue that creates approximately a 10 ft difference in elevation. The Site is composed of re-graded soil in the easternmost parcel and grass in the western and northern parcels. All footprints of previous buildings and structures were removed in June 2020. There is no surface water on site, and the closest wetland is approximately 0.2 miles to the northwest [1].

3.2 Site-Specific Geology

The Southwest Florida Water Management District provided a lithologic well log for well number ROMP 74x, located approximately 4.5 miles from the site in Davenport, FL. Various drilling techniques were used to install ROMP 74x, and lithologic samples were taken from land surface to 1,560 ft below land surface (bls). The surficial deposits were encountered from 0 to 225 ft bls and described as medium to very coarse-grained quartz sand with some silt. The Hawthorn Group (Miocene Epoch) was observed from 225-245 ft bls and described as stiff, green clay interbedded with sand, silt, soft clayey limestone, and some hard limestone fragments. The Ocala Limestone, characterized by weathered, very soft, clayey, white limestone with some hard, fossiliferous lenses, extends from 245 to 445 ft bls. From 445 ft bls to 1,560 ft, the

lithology is described as dense dolomite with large fractures and solution features, which is classified as the Avon Park Limestone and Oldsmar Formation [8].

According to the PCAR by Andreyev Engineering, Inc. in 1996, the depths of the surficial deposits closer to the site are from 0-130 ft bls, and the Hawthorn Group is observed from 130-180 before transitioning to the Ocala Limestone.

Based on the lithology described during this SI, the specific geology can be characterized by a very fine to fine sand that is loose and poorly graded from land surface to approximately 44 ft bls where it changes to a medium grained, poorly graded sand to the total depth of borings (62 ft bls) for MW-6 and MW-7. Depth to water in the background monitoring well, MW-5, was approximately 45 ft bls while the depth to water in MW-6 and MW-7 was between 54 to 55 ft bls. Based on the water level measurements that were used to prepare the groundwater flow map (**Figure 7)**, the groundwater flow direction appears to be to the northeast. Previous assessment and groundwater monitoring events indicated that historical groundwater flow directions were to the southwest, which generally followed the topography which slopes from the northeast to the southwest.

3.3 Hydrogeology and Groundwater Usage

The site hydrogeology is divided into two aquifer systems separated by the clay and silt beds of the Hawthorn Formation. The shallow Surficial Aquifer system is an unconfined aquifer characterized by Holocene to Pliocene aged medium to very coarse-grained quartz with some silt. This aquifer is the focus of this study due to its greater potential for impacts. Groundwater elevations range from 34.5 ft to 55 ft bls onsite in the Surficial Aquifer. Due to the relatively impervious nature of the Hawthorn group in this area and previous groundwater flow analyses, there is no evidence of significant vertical connectivity between the Surficial Aquifer and the Upper Floridan Aquifer below. The groundwater flow direction of the Surficial Aquifer is to the north, south, and west, while the Upper Floridan flows to the east [2].

Many residences and businesses in the Haines City area rely on groundwater sources for drinking water. The majority of potable wells in the area are supplied by the Floridan aquifer; however, FDEP identified two private wells within 4 miles that are drilled into the Surficial Aquifer to 78 ft bls and 150 ft bls. **Table 2** summarizes the potable wells within a 4-mile radius of the Site and based on this SWAPP data, there are approximately 1,015 public and private wells that serve a total population of approximately 49,797 within a 4-mile radius.

4. FIELD INVESTIGATION METHODOLOGY AND FINDINGS

The SI focused on the five Areas of Concern (AOCs): Background, Former AST Area East, Former AST Area West, Former Burn Area, and the Former East Retention Pond. Surface soil, subsurface soil, and groundwater samples were collected for laboratory analysis [9].

4.1 Site Reconnaissance

On May 6, 2020, Geosyntec conducted a site reconnaissance to walk over the AOCs and surrounding areas and identified potential source areas, spoke with a Haines City employee, and determined accessibility for proposed sampling locations.

During this time, the Site was under active demolition to remove the concrete foundations of the former plant. In the location of the former plant, there were piles of concrete that were being crushed for removal off-site. Later, the Site was re-graded to a relatively smooth surface with the existing soil onsite. All previous landmarks on Site to reference the AOCs were removed, but coordinates from the site plan, presented in **Figure 2**, allowed Geosyntec to locate the AOCs.

4.2 Sampling Locations and Rationale

To assess the possible presence and nature of the previously identified COCs at the Site, in accordance with the SI Quality Assurance Project Plan (QAPP), surface and subsurface soil and groundwater samples were collected in July 2020 for laboratory analysis. Temporary monitoring wells were installed to collect the groundwater samples. Environmental samples were collected from areas at the Site that carried the highest probability for contaminants to be present based on historical activities, document review, and site reconnaissance.

Soil sampling location PCF001 and temporary monitoring well location MW005, in the northeastern corner of the Site, were selected as the background locations in the parcel where the plant office building was located. Even though this location was expected to have clean analytical results, this area was named AOC 1-Background. In order to determine if observed release criteria are met under the HRS rule, one of the following two situations must be true: 1) if the background concentration of an analyte is greater or equal to its detection limit (aka: method reporting limit [MRL]), the release or source analyte concentration must be at least three times greater than the background level to qualify as an observed release; or 2) if the background level is below its detection limit (usually with a U qualifier), the minimum requirement for an observed release is that the analyte's source concentration is greater than or equal to the background detection limit (please refer to Federal Register, 12-14-90, No. 241, Table 2-3 in Section 2-3 of 40 CFR, Chapter 1, Part 300, Appendix A, HRS). However, an observed release of an analyte does not necessarily mean that there has been an exceedance of Florida GCTLs, Florida SCTLs, USEPA RSLs, or Federal MCLs.

Due to the report from a Polk County inspector documenting staining around the former ASTs, PCF002, PCF003, and temporary monitoring well MW006 were located in AOC 2-Former AST Area East; and PCF004, PCF005, and temporary monitoring well MW007 were located in AOC 3-Former AST Area West.

Sampling locations PCF006 and PCF007 were placed in the western parcel, in the vicinity of the isolated smoldering fertilizer spill in 1989 considered AOC 4-Former Burn Area.

Even though no surface water is present on site, historical documents identify a retention pond south of the eastern AST area. Due to the potential impact from runoff during plant operations, soil samples were taken at PCF008 in AOC 5- Former East Retention Pond.

The soil and groundwater samples collected at the five AOCs associated with the former PCFP were analyzed for VOCs, SVOCs, RCRA metals, nitrate, total phosphorus, and organochlorine pesticides (pesticides). **Table 3** summarizes the analyses performed on each sample.

Chemtech Consulting Group, Inc. in Mountainside, New Jersey conducted the laboratory analyses of soil and groundwater samples for VOCs through EPA's Contract Laboratory Program (CLP). The USEPA Region 4 Analytical Support Branch Laboratory in Athens, Georgia conducted laboratory analyses of soil and groundwater samples for SVOCs, pesticides, RCRA metals, nitrate, and total phosphorus. Laboratory analytical data sheets are provided in **Appendix A**.

Geosyntec used the Scribe sample management program in accordance with the USEPA Region 4 Field Branch Quality System and Engineering Procedures. Each environmental sample was collected, packaged, preserved, and transported in accordance with standard Comprehensive Quality Assurance Plan (CompQAP) protocol. Additionally, a standard chain-of-custody sheet for all the samples was maintained, and field notes are provided in **Appendix B**.

Geosyntec collected Global Positioning System (GPS) coordinates of each sample location, which are presented in **Table 4**.

4.3 Soil Investigation

To evaluate the potential sources of contamination, eight soil borings were advanced at the Site to collect soil samples for fixed-based laboratory analysis (**Figures 4** and **5**). The SI field work was conducted between July 28 and 30, 2020. Soil samples (including surface soil, subsurface soil, and one duplicate) were collected for analysis at the sampling locations. The surface and subsurface samples collected from the former PCFP were collected from 0 to 2 feet bls and 2 to 4 feet bls, respectively. The soil sampling activities were conducted in accordance with USEPA Region 4 and FDEP Standard Operating Procedures (SOPs).

The designated background surface soil (PCF001-SF) and subsurface soil samples (PCF001-SB) were collected in the northeastern corner of the Site. These samples were used to determine background screening concentrations for COCs for comparison purposes. A soil matrix spike (MS)/matrix spike duplicate (MSD) was also collected from soil sample PCF001-SB.

4.3.1 Soil Sample Analytical Results

The following subsections briefly summarize the analytical findings for surface and subsurface soil samples. Please refer to the appropriate tables and figures for the reported concentrations.

4.3.1.1 Surface Soil Results

Tables 5 through **9** summarize the July 2020 analytical results for surface soil samples for VOCs, SVOCs, RCRA metals, nitrate, total phosphorus, and pesticides at the Site. **Figures 4**

shows soil sample locations and analytical results for the five AOCs. Benzo(a)pyrene (BaP) Conversion Tables are included in **Appendix C**.

The designated background surface soil sample (PCF001-SF) did not contain any nitrate or VOC target analytes at concentrations above their SCTLs and method reporting limits (MRLs; **Tables 5 and 8**). PCF001-SF contained a benzo(a)pyrene (BaP) toxic equivalency of 0.2 milligram/kilogram (mg/kg), exceeding its SCTL for direct exposure (0.1 mg/kg) in a residential setting, as well as 250 mg/kg of total phosphorus. The background sample (PCF001-SF) also contained benzo(b)fluoranthene, benzo(g,h,i)perylene, fluoranthene, phenanthrene, pyrene, arsenic, barium, cadmium, chromium, lead, 4,4-DDE, alpha-chlordane, endosulfan sulfate, gamma-chlordane, and heptachlor epoxide at concentrations above their MRLs, but did not exceed their SCTLs or RSLs (**Table 6, 7**, and **8**). The background surface soil sample is considered to be representative for the COCs at the Site.

Volatile Organic Compounds

VOCs were not detected at concentrations above their respective MRLs in any of the surface soil samples collected at all AOCs.

Semi-Volatile Organic Compounds

At AOC 1-Background and AOC 2-Former AST Area East, the BaP toxic equivalency was interpreted as an exceedance of its SCTL for direct exposure (0.1 milligrams per kilogram [mg/kg]) in a residential setting in surface soil samples PCF001-SF (0.2 mg/kg) and PCF002-SF (0.2 mg/kg). PCF003-SF (1.0 mg/kg) exceeded the industrial direct exposure SCTL (0.7 mg/kg).

Benzo(a)pyrene was detected in surface soil samples PCF001-SF (96 micrograms per kilogram [µg/kg]), PCF002-SF (160 J,QI-1 µg/kg), and PCF008-SF (62 J,Q-2 µg/kg) at concentrations above its residential RSL of 20 µg/kg. PCF003-SF (650 J, QI-1 µg/kg) exceeded the industrial RSL of 290 µg/kg for BaP. Dibenzo(a,h)anthracene was detected in surface samples PCF001-SF (30 J,Q-2 µg/kg), PCF002-SF (38 J,Q-2,QI-1 µg/kg), and PCF003-SF (140 J,QI-1 µg/kg) above its residential RSL of 20 µg/kg.

Benzo(a)anthracene (730 µg/kg) and indeno(1,2,3-cd)pyrene (300 J,QI-1 µg/kg) were detected in the surface sample PCF003-SF at concentrations above their residential RSL of 160 µg/kg. Benzo(b)fluoranthene was detected in PCF002-SF (190 J,QI-1 µg/kg) and PCF003 (680 J,QI-1 µg/kg) at concentrations above its residential RSL of 160 µg/kg.

The carbazole concentration in PCF003-SF (220 J,QC-1 µg/kg) exceeded the FDEP SCTL leachability value of 200 µg/kg.

Inorganic Analytes

The arsenic concentrations in PCF002-SF (1.8 mg/kg), PCF003-SF (1.2 mg/kg), PCF004-SF (0.69 mg/kg), and PCF005-SF (1.1 mg/kg) exceeded the residential RSL of 0.68 (mg/kg) but were below the R-SCTL of 2.1 mg/kg. Nitrate concentrations ranged from non-detect to 1.7 mg/kg, which are all below the FDEP R-SCTL of 140,000 mg/kg. Total phosphorous ranged from 74 to 870 mg/kg and no screening values are established for this compound.

Organochlorine Pesticides
Dieldrin was detected in PCF002-SF (7.6 µg/kg), PCF003-SF (18 µg/kg), PCF005-SF (6.5 µg/kg), and PCF008-SF (5.0 µg/kg) at concentrations above its SCTL leachability value of 2 µg/kg.

4.3.1.2 Subsurface Soil Results

Tables 10 through **14** summarize the July 2020 analytical results for subsurface soil samples for VOCs, SVOCs, RCRA metals, nitrate, total phosphorus, and pesticides at the Site. **Figure 5** shows subsurface soil sample locations and analytical results for the five AOCs.

The designated background subsurface soil sample PCF001-SB did not contain any targeted VOCs, SVOCs, or nitrate at concentrations above their MRLs (**Tables 10, 11,** and **13)**. PCF001-SB contained arsenic, barium, chromium, lead, alpha-chlordane, endosulfan sulfate, and gamma-chlordane at concentrations above their MRLs, but did not exceed their SCTLs or RSLs (**Table 12** and **14**). The background subsurface soil sample PCF001-SB is considered to be representative for the COCs at the former PCFP.

Volatile Organic Compounds
VOCs were not detected at concentrations above their respective MRLs in any of the surface soil samples collected at the former PCFP.

Semi-Volatile Organic Compounds
The BaP toxic equivalency in sample PCF008-SB (0.2 mg/kg) was interpreted as an exceedance of its residential direct exposure SCTL (0.1 mg/kg) but remained below the industrial direct exposure SCTL. The concentrations in PCF008-SB for benzo(a)pyrene (100 µg/kg) and dibenzo(a,h)anthracene (38 J,Q-2 µg/kg) exceeded their residential RSL of 20 µg/kg.

Inorganic Analytes
No inorganic analytes were detected at concentrations that exceeded their SCTL or RSL criteria at the former PCFP.

Organochlorine Pesticides
No organochlorine pesticides were detected at concentrations that exceeded their SCTL or RSL criteria.

4.4 Groundwater Investigation

To evaluate the groundwater migration pathway, three temporary monitoring wells were installed at locations selected to provide points for groundwater sampling at the former PCFP. Three temporary monitoring wells (MW005, MW006, and MW007) were installed at the Site. Monitoring well MW005 was installed as a background well at the northeastern corner of the property. MW006 and MW007 were installed in the Former AST Area East and Former AST Area West, respectively.

The purpose of the temporary monitoring wells was to intersect the water table. Each temporary monitoring well was constructed with 10 feet of 0.010-inch slotted casing. MW005 was screened from 42 to 52 ft bls and MW006 and MW007 were screened from 52 to 62 ft bls. Groundwater samples for each monitoring well were analyzed for VOCs, SVOCs, RCRA metals, nitrate, total phosphorus, and pesticides. PCF001-GW was collected from MW005, PCF002-

GW was collected from MW006, and PCF003-GW and PCF003-GW-DUP were collected from MW007. Groundwater sampling was conducted in accordance with USEPA Region 4 and FDEP SOPs.

Prior to the groundwater sampling event, depth to water was measured in the newly installed wells at the Site. The top-of-casing elevations for the temporary wells were surveyed relative to an arbitrary datum. **Table 15** summarizes the temporary monitoring well construction details and the depth-to-water measurements.

Field parameters were measured at each well location prior to collecting the groundwater sample, and the final field parameter readings are detailed in **Table 16**.

Sample Tracking Reports (Chain-of-Custody) from Scribe, CLP Number Assignments, Lab Assignments and Work Order Sheets are included in **Appendix B**. Groundwater Sample Logs are included in **Appendix D**.

Additionally, the Florida Department of Health (FDOH) collected samples for VOCs, SVOCs, total metals, and pesticides from eight drinking water wells within a 1-mile radius of the former PCFP. FDEP supplied Geosyntec with FDOH's analytical results from June 2020. These results are included in **Appendix E.**

4.4.1 Groundwater Sample Analytical Results

The following sections briefly summarize the analytical findings for the temporary well groundwater samples and FDOH drinking water wells. **Tables 17** through **21** summarize the July 2020 analytical results for the groundwater samples for VOCs, SVOCs, RCRA metals, nitrate, total phosphorus, and pesticides. **Figure 6** shows groundwater sample locations and analytical results at the Site.

The designated background groundwater samples (PCF001-GW) did not contain any SVOCs, and pesticides at concentrations above their respective MRLs. The designated background groundwater sample (PCF001-GW) contained chloroform (0.31 J,CLP01 micrograms per liter [µg/L]), arsenic (1.1 µg/L), nitrate (3.3 T-1 mg/L), and total phosphorus (0.48 T-1 mg/L) at concentrations above their respective MRLs, but there were no exceedances of the state GCTLs or the federal maximum contaminant levels (MCLs). This background groundwater sample is considered to be representative. The detection of chloroform in PCF001-GW may be a laboratory contaminant but is below the FDEP GCTL (70 µg/L).

The groundwater sample collected from this location was used to characterize the background groundwater characteristics of the COCs for comparison purposes.

4.4.1.1 Volatile Organic Compounds

No VOCs were detected at concentrations above their respective MRLs in the groundwater samples collected from the three AOCs.

No VOCs were detected at concentrations above their respective MRLs in the groundwater samples collected by FDOH, except in well AAG8121. Chloroform was detected at 0.44 µg/L in AAG8121, but this concentration is below the state GCTLs and the federal MCLs.

4.4.1.2 Semi-Volatile Organic Compounds

No SVOCs were detected at concentrations above their respective MRLs in the groundwater samples collected from the three AOCs. It should be noted that multiple analytes observed minimum detection limits that were significantly higher than their respective state GCTLs. Future assessments of this site should include SVOC sampling with detection limits that are below GCTLs.

No SVOCs were detected at concentrations above their respective MRLs in the groundwater samples collected by FDOH.

4.4.1.3 Inorganics

Arsenic was detected in PCF001-GW (1.1 µg/L) and PCF003-GW (1.0 µg/L), but these concentrations are below the FDEP GCTL and federal MCL (10 µg/L). Barium was detected in PCF002-GW (6.3 µg/L) and PCF003-GW (5.0 µg/L), but these concentrations are below the FDEP GCTL and federal MCL (2000 µg/L). The groundwater sample PCF003-GW contained chromium at a concentration of 8.5 µg/L, but this concentration is also below the FDEP GCTL and federal MCL of 100 µg/L. Nitrate was detected above the GCTL (10 mg/L) in PCF003-GW.

Analysis of the FDOH samples shows that in at least one well sampled, arsenic, barium, beryllium, cadmium, nickel, and selenium were detected. There were no exceedances of FDEP GCTLs or federal MCLs in the FDOH analyses.

4.4.1.4 Organochlorine Pesticides

No pesticides were detected at concentrations above the MRLs in the groundwater samples collected from the three AOCs. However, it should be noted that multiple analytes observed minimum detection limits that were significantly higher than their respective state GCTLs. Future assessments of this site should include organochlorine pesticide sampling with detection limits that are below GCTLs.

In well AAR3320 in the FDOH data, chlordane (0.011 µg/L) was detected, but it was below its FDEP GCTL and MCL. Dieldrin (0.00043 µg/L) was also detected in AAR3320 and exceeded the FDEP GCTL of 0.0002 µg/L.

4.5 Site Quality Assurance/Quality Control Protocol

All quality assurance/quality control (QA/QC) protocols, including equipment decontamination, equipment rinsate samples, trip blank samples for soil and groundwater, and temperature blanks were conducted as described in the Work Plan. Additionally, duplicate samples and MS/MSD samples were collected as required. Each sample was collected, labeled, packaged, preserved, and transported in accordance with standard CompQAP protocol. A Traffic Report listing each of the samples was maintained and is presented in **Appendix B**.

During transportation, some groundwater sample bottles (PCF003-GW) broke during shipping. Analysis of SVOCs and pesticides were not taken for PCF003-GW. However, a duplicate sample was collected from this well (PCF003-GW-DUP), and SVOCs and pesticides were analyzed.

4.6 Investigation-Derived Wastes

The wastes derived from the sampling effort (soil, sediment, purge water, and decontamination fluids) were disposed of in accordance with FDEP and USEPA guidelines. It was anticipated that hazardous materials would not be encountered at this Site; therefore, per the direction of FDEP, the investigation-derived wastes were spread onto the ground or back into the boring and/or in the immediate area of sample collection. All soil remaining from soil borings after the samples were collected was placed back into the boring from which it originated. Groundwater was discharged onto the ground next to the well from which it was collected.

4.7 Quality Analysis/Quality Control Results

The laboratory data package was evaluated by the USEPA Region 4 Science and Environmental Support Division. The complete laboratory results and data review comments are presented in **Appendix A**.

Result of the review indicated that all data packages met acceptable contractual and technical performance with qualifications. The laboratory satisfied all technical analysis and extraction holding time requirements. A Stage 4 validation consisting of an electronic/manual review (S4VEM) was performed by USEPA on the organic and inorganic samples submitted for this case. The data package presents acceptable technical performance with qualifications.

Data quality factors that did not adversely influence the analytical results are discussed in the Report Narrative of the laboratory analytical report in **Appendix A**.

5. PATHWAY EVALUATION

The Site is bordered to the north, west, and south by light residential properties and by light industrial properties to the west.

5.1 Soil Exposure

A summary of the soil exposure pathways from the investigated AOCs is presented in the following paragraphs.

In surface soil, PCF003 exceeded the three times (3X) background reference values for polynuclear aromatic compounds (PAHs), indicating PCF003 could be a potential observed release location, but the concentration of PAHs in subsurface soil at the same location was below the detection limits. 4,4-DDE and 4,4-DDE were above 3X background reference values at PCF002 and PCF003. Dieldrin exceeded 3X background at PCF003, PCF003, PCF005, and PCF008. For RCRA metals, the only compounds that exceeded 3X background was cadmium in PCF002, PCF003, and PCF005. Nitrate exceeded its 3X background reference value in PCF002 and PCF005. Phosphorous exceeded its 3X background reference value in PCF002, PCF003, and PCF005.

For subsurface soil, barium and lead exceeded the 3X background reference values in PCF003 and PCF008. Chromium exceeded the 3X background reference value in PCF008. Chlordane exceeded the 3X background reference value at PCF008.

The former PCFP has been re-graded and is intended to be redeveloped into a recreational area for the community. In order for recreational development to occur at the Site, further re-grading will be needed. No residential population, day-care centers, schools or terrestrial sensitive environments are present onsite. Based on this knowledge and the analytical results, the soil exposure at the Site does not appear to be a pathway of concern.

5.2 Groundwater Migration

Groundwater concentrations exceeded the 3X background reference value for barium in PCF002, as well as nitrate and chromium in PCF003. Seven out of the eight private wells that were sampled by FDOH had barium concentrations that exceeded background, however, without further assessment, the source of the concentrations detected in the private wells is undetermined.

There are approximately 1,015 public and private wells that serve a total population of approximately 49,797 within a 4-mile radius of the Site (Table 2). The majority of potable wells in the area are supplied by the Floridan aquifer, however, FDEP identified two private wells within 4 miles that are drilled into the Surficial Aquifer. Given that there are concentrations of contaminants that exceed background levels as well as the high number of potential targets, the groundwater migration pathway remains a pathway of concern at this time

5.3 Surface Water Pathway

The surface water migration route was not evaluated at the Site. Surface water samples were not collected during the SI activities. The closest body of water is Lake Boomerang, located

approximately 0.3 miles from the Site. The surface water migration pathway is not a concern at this Site.

5.4 Air Migration

The air migration route was not evaluated at the Site. Air samples were not collected during the SI activities. The air migration pathway is not a concern at this Site.

6. CONCLUSIONS AND RECOMMENDATIONS

The former PCFP may be redeveloped into a recreational facility for Haines City and the area in the vicinity of the Site is classified as light residential and industrial. The 2020 SI data demonstrate that soil underlying the former PCFP show SCTL or RSL exceedances for BaP equivalents, arsenic and dieldrin. While multiple soil contaminants exceeded background levels, with the lack of targets present and the planned regrading of the site, the direct exposure pathway is not a concern.

Although nitrate slightly exceeded the FDEP GCTL in one monitoring well, based on historical groundwater results collected from representative monitoring wells during an approximate 10-year groundwater monitoring period, concentrations of nitrate in groundwater decreased to below regulatory criteria and FDEP issued a No Further Action for this compound in 2006. The FDOH private well sampling data results indicate detections of inorganic and pesticide constituents, with one GCTL exceedance of dieldrin in one private well sample. However, further assessment would be needed to identify the source of these detections in private wells. Due to the high number of potential drinking water targets and the concentrations of contaminants in the groundwater, the groundwater migration pathway remains a pathway of concern at this time.

The surface water and air migration pathways were not evaluated during this assessment and are not considered pathways of concern.

This assessment has identified elevated levels of contaminants in both soil and groundwater exceeding state and/or federal criteria. Further assessment of the site would be necessary to define the extent of contamination in both soil and groundwater, as well as the source of contamination detected in offsite private wells. FDEP's Southwest District has historically managed this site under an industrial wastewater permit and is familiar with the previous exceedances of nitrate in the groundwater. It is recommended that further assessment be conducted to address the observed soil and groundwater exceedances under management of FDEP's Southwest District. Although the groundwater migration pathway is still a concern, Geosyntec, in consultation with the FDEP CERCLA Site Screening Section, is recommending that the site be transferred to FDEP's Southwest District for management, with No Further Remedial Action Planned (NFRAP) under CERCLA at this time.

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7. REFERENCES

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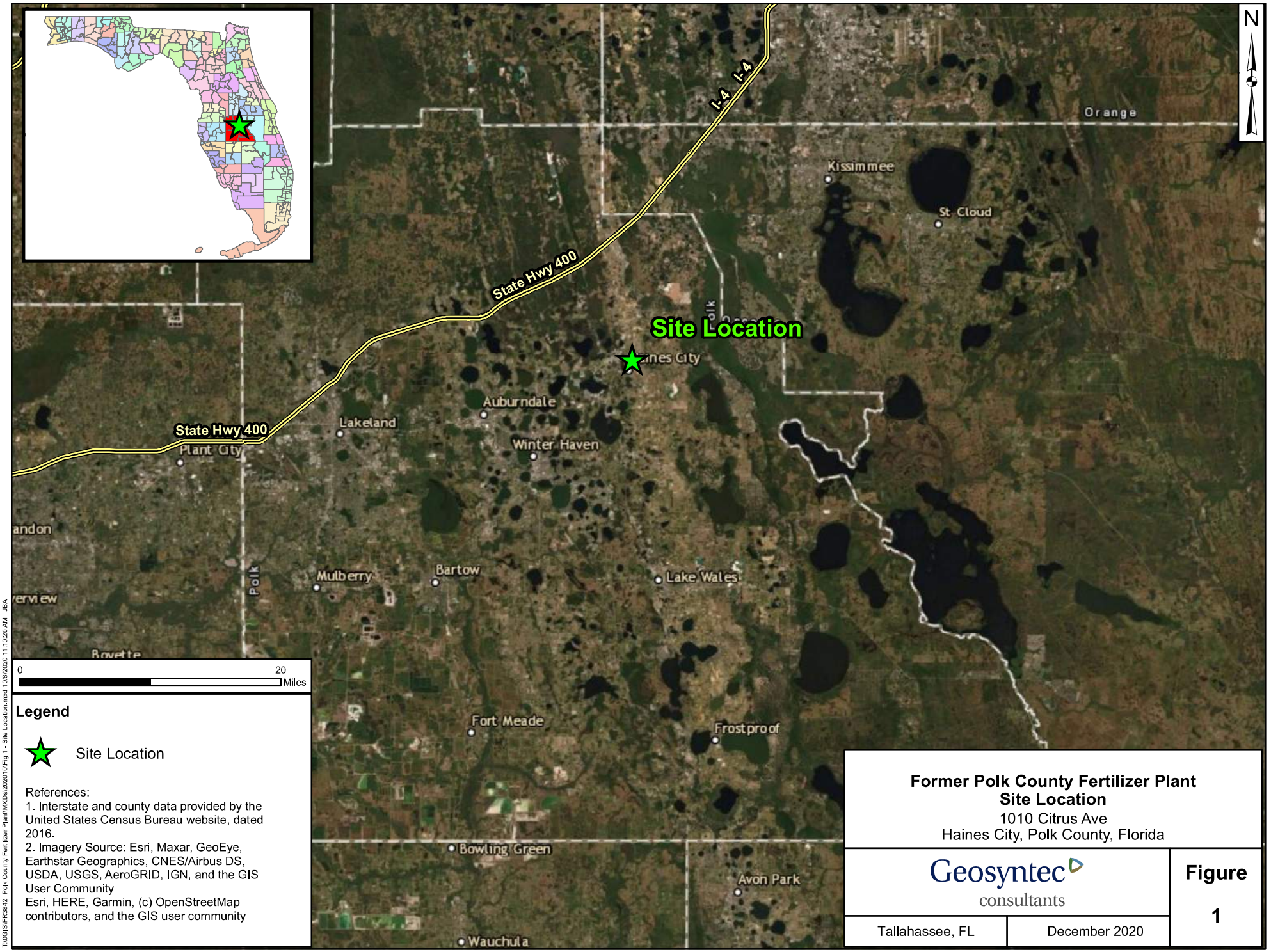
FIGURES



Legend

Site Location

References:
1. Interstate and county data provided by the United States Census Bureau website, dated 2016.
2. Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

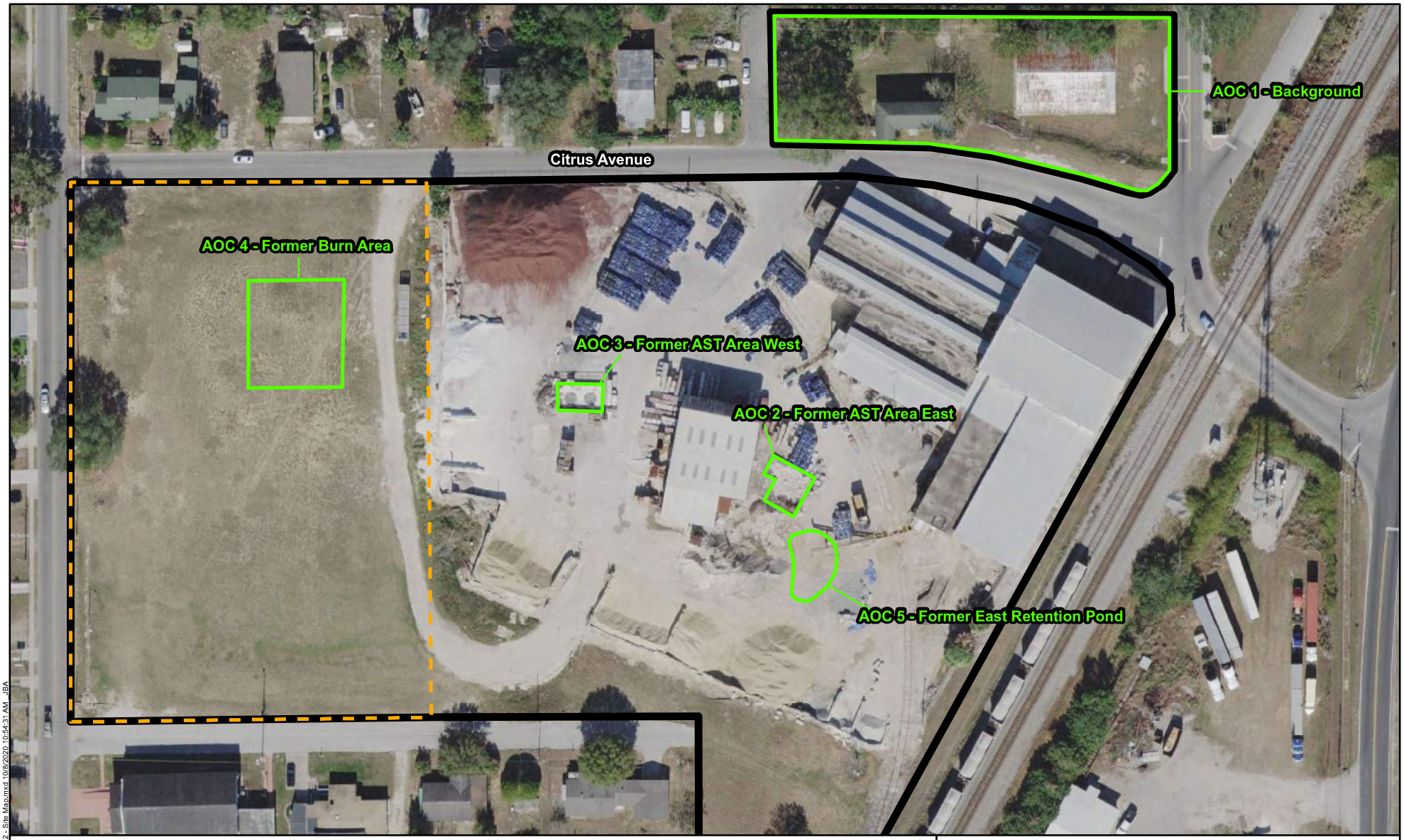
Former Polk County Fertilizer Plant
Site Location
1010 Citrus Ave
Haines City, Polk County, Florida

Geosyntec consultants

Tallahassee, FL | December 2020

Figure 1

T:\GIS\SF\R3842_Polk County Fertilizer Plant\MXDs\20201\Fig 1 - Site Location.mxd 10/8/2020 11:10:20 AM JBA



Legend

- Area of Concern
- Approximate Site Boundary
- Church Property Boundary

REFERENCE:
1. AERIAL PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION WEBSITE, DATED 2017.
2. PROPERTY BOUNDARIES APPROXIMATED FROM POLK COUNTY PROPERTY APPRAISER WEBSITE.
3. SITE FEATURES ARE APPROXIMATE BASED ON PCAR BY ANDREYEV ENGINEERING, DATED 1996.

N

0 100 Feet

Former Polk County Fertilizer Plant
Site Map

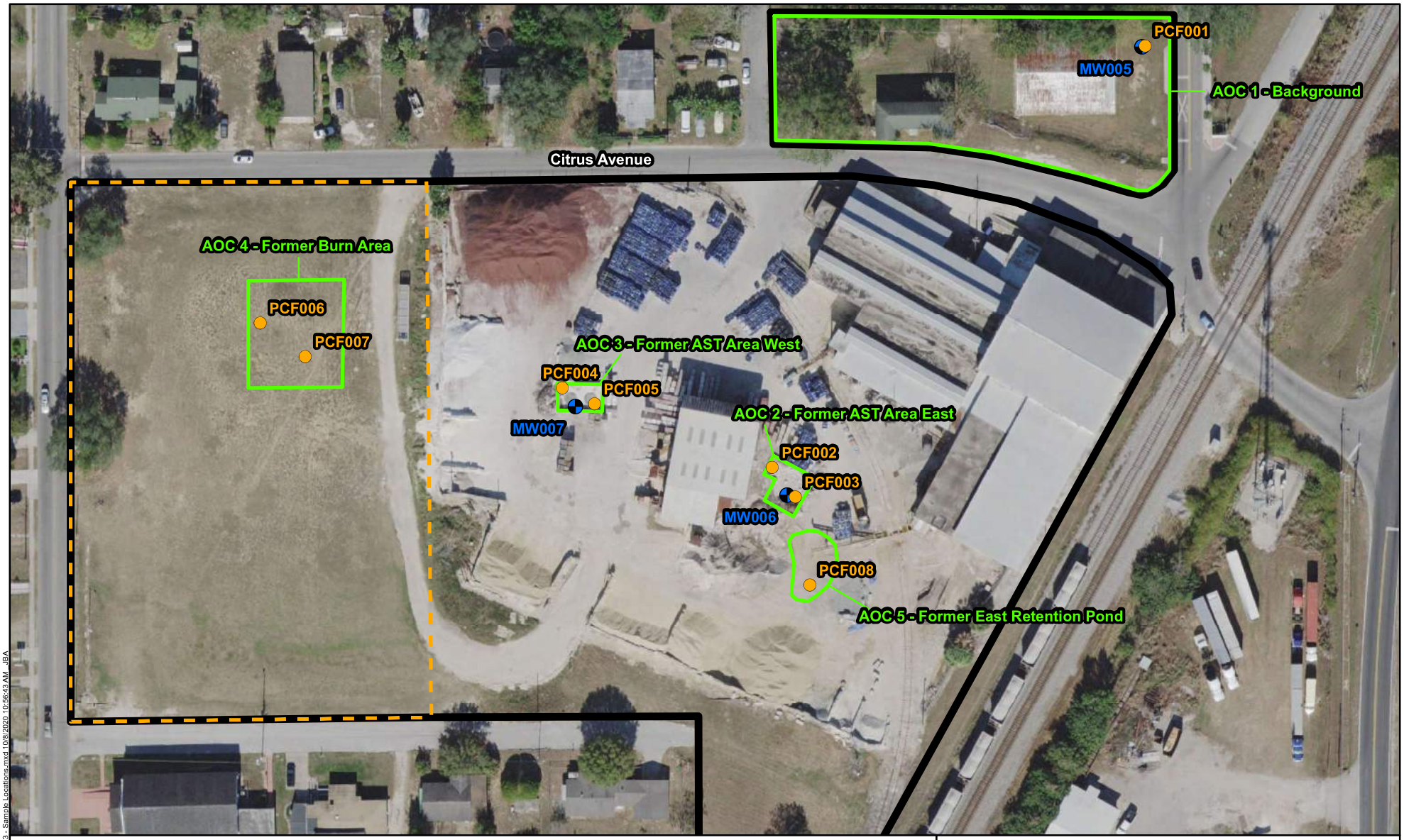
1010 Citrus Ave
Haines City, Polk County, Florida

Geosyntec consultants

Tallahassee, FL | December 2020

Figure 2

T:\GIS\FER3842_Polk County Fertilizer Plant\MXD\20201010\Fig 2 - Site Map.mxd 10/8/2020 10:54:31 AM JBA



Legend

- Soil Sampling Location
- Temporary Well Location
- Area of Concern
- Approximate Site Boundary
- Church Property Boundary

REFERENCE
1. AERIAL PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION WEBSITE, DATED 2017.
2. PROPERTY BOUNDARIES APPROXIMATED FROM POLK COUNTY PROPERTY APPRAISER WEBSITE.
3. SITE FEATURES ARE APPROXIMATE BASED ON PCAR BY ANDREYEV ENGINEERING, DATED 1996.

N

0 100 Feet

Former Polk County Fertilizer Plant
Sampling Locations

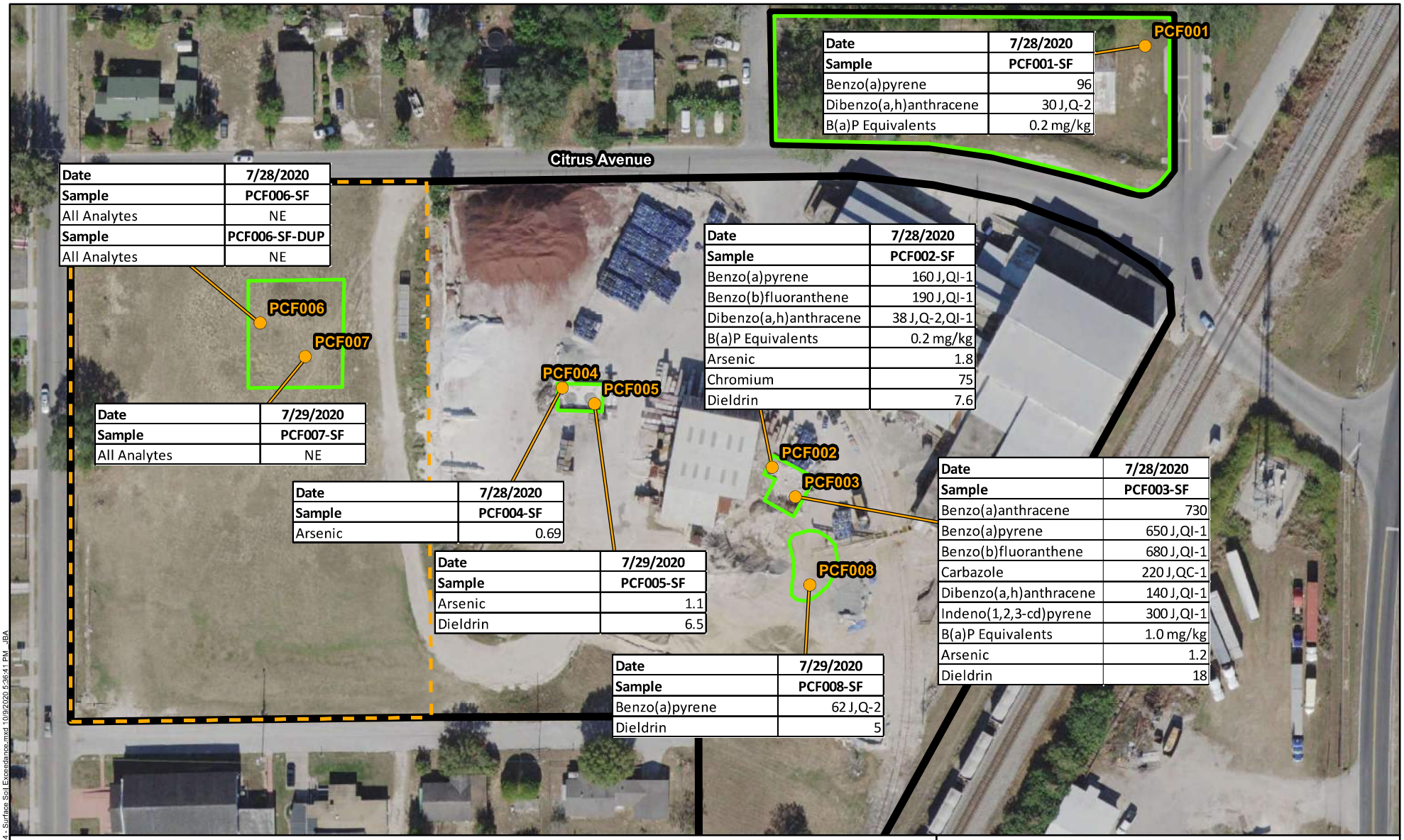
1010 Citrus Ave
Haines City, Polk County, Florida

Geosyntec consultants

Tallahassee, FL | December 2020

Figure 3

T:\GIS\SFR3842_Polk County Fertilizer Plant\MXDs\20201015\Fig 3 - Sample Locations.mxd 10/8/2020, 10:56:43 AM, JBA



Legend

- Soil Sampling Locations
- Area of Concern
- Approximate Site Boundary
- Church Property Boundary

REFERENCE
1. AERIAL PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION WEBSITE, DATED 2017.
2. PROPERTY BOUNDARIES APPROXIMATED FROM POLK COUNTY PROPERTY APPRAISER WEBSITE.
3. SITE FEATURES ARE APPROXIMATE BASED ON PCAR BY ANDREYEV ENGINEERING, DATED 1996.
4. REPORTED CONCENTRATIONS EXCEED SOIL CLEANUP TARGET LEVELS (SCTLS) AND/OR USEPA REGIONAL SCREENING LEVEL (RSL). REFER TO SOIL RESULTS TABLES FOR DETAILS.
5. NE = NO EXCEEDANCE OF SCTL OR RSL.
6. ALL RESULTS ARE SHOWN IN MICROGRAMS/KILOGRAM EXCEPT B(A)P EQUIVALENTS, WHICH ARE SHOWN IN MILLIGRAMS/KILOGRAM.

N

0 100 Feet

Former Polk County Fertilizer Plant
Surface Soil Exceedances (0 - 2 ft)

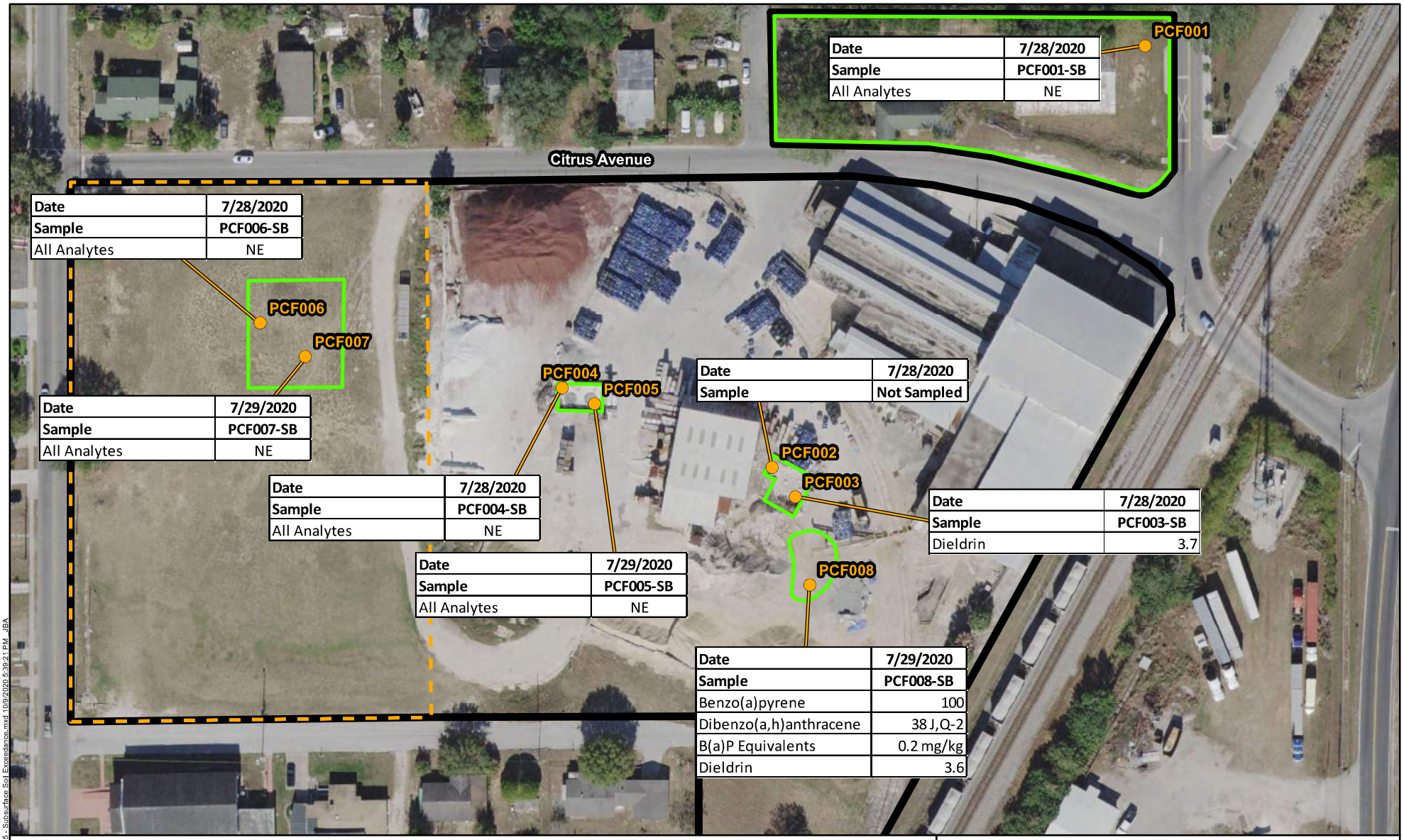
1010 Citrus Ave
Haines City, Polk County, Florida

Geosyntec consultants

Tallahassee, FL | December 2020

Figure 4

T:\GIS\FR3842_Polk County Fertilizer Plant\MXD\a20201010Fig4 - Surface Soil Exceedance.mxd 10/9/2020 5:36:41 PM JBA



Legend

- Soil Sampling Locations
- Area of Concern
- Approximate Site Boundary
- Church Property Boundary

REFERENCE:
1. AERIAL PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION WEBSITE, DATED 2017.
2. PROPERTY BOUNDARIES APPROXIMATED FROM POLK COUNTY PROPERTY APPRAISER WEBSITE.
3. SITE FEATURES ARE APPROXIMATE BASED ON PCAR BY ANDREYEV ENGINEERING, DATED 1996.
4. REPORTED CONCENTRATIONS EXCEED SOIL CLEANUP TARGET LEVELS (SCTLS) AND/OR USEPA REGIONAL SCREENING LEVELS (RSLS). REFER TO SOIL RESULTS TABLES FOR DETAILS.
5. NE = NO EXCEEDANCE OF SCTL OR RSL.
6. ALL RESULTS ARE SHOWN IN MICROGRAMS/KILOGRAM EXCEPT B(A)P EQUIVALENTS, WHICH ARE SHOWN IN MILLIGRAMS/KILOGRAM.

N

0 100 Feet

Former Polk County Fertilizer Plant
Subsurface Soil Exceedances (2 - 4 ft)

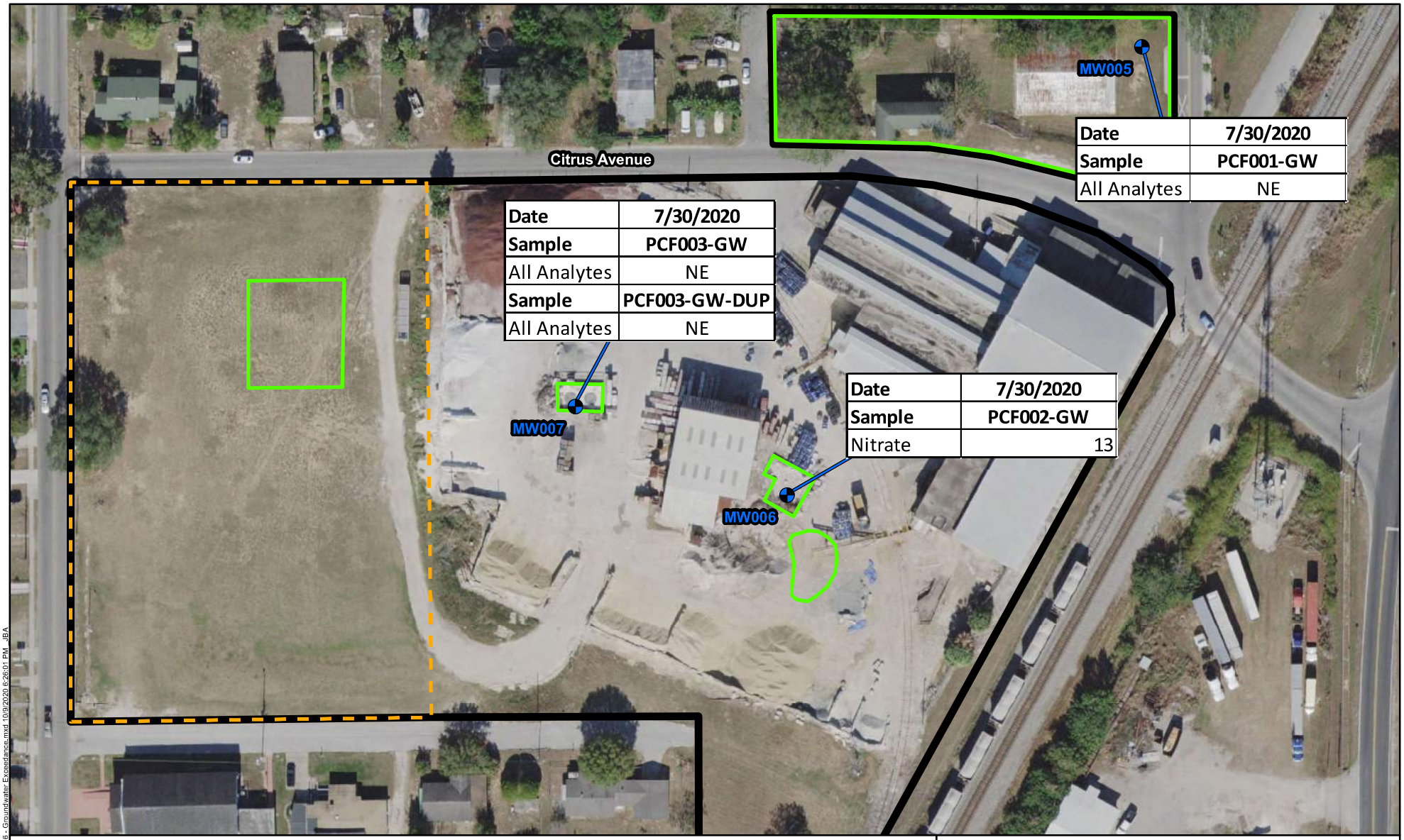
1010 Citrus Ave
Haines City, Polk County, Florida

Geosyntec consultants

Tallahassee, FL | December 2020

Figure 5

T:\GIS\SFR3842_Polk County Fertilizer Plant\MXD\a\20201015\Fig 5 - Subsurface Soil Exceedance.mxd 10/9/2020 5:39:21 PM JBA



Legend

- Temporary Monitoring Well Locations
- Area of Concern
- Approximate Site Boundary
- Church Property Boundary

REFERENCE
1. AERIAL PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION WEBSITE, DATED 2017.
2. PROPERTY BOUNDARIES APPROXIMATED FROM POLK COUNTY PROPERTY APPRAISER WEBSITE.
3. SITE FEATURES ARE APPROXIMATE BASED ON PCAR BY ANDREYEV ENGINEERING, DATED 1996.
4. REPORTED CONCENTRATIONS EXCEED GROUNDWATER CLEANUP TARGET LEVELS (GCTLS). REFER TO GROUNDWATER RESULTS TABLES FOR DETAILS.
5. NE = NO EXCEEDANCE OF GCTL OR MCL.
6. ALL RESULTS ARE SHOWN IN MILLIGRAMS/LITER.

N

0 100 Feet

Former Polk County Fertilizer Plant
Groundwater Exceedances

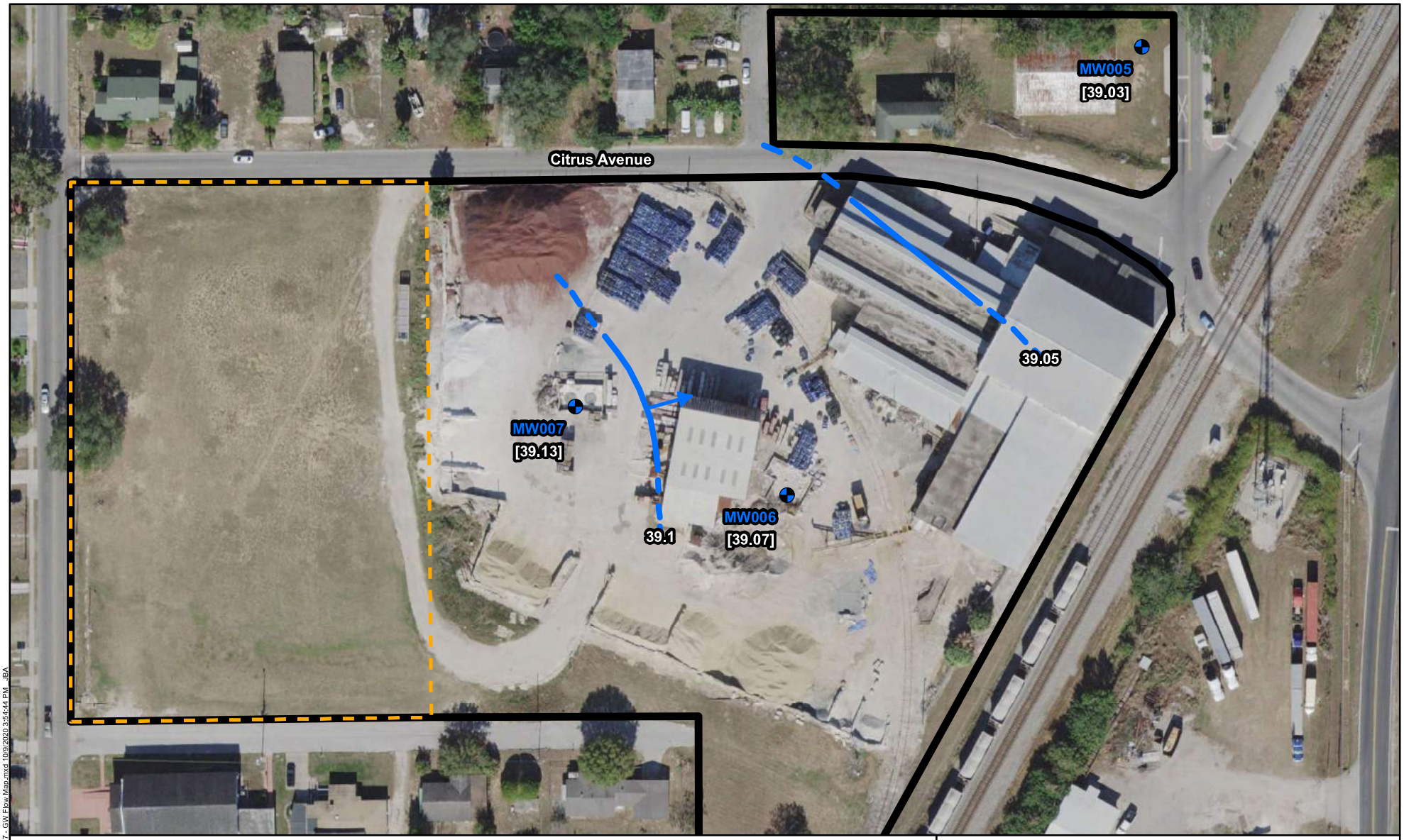
1010 Citrus Ave
Haines City, Polk County, Florida

Geosyntec consultants

Tallahassee, FL | December 2020

Figure 6

T:\GIS\FER3842_Polk County Fertilizer Plant\MXDs\20201010\Fig 6 - Groundwater Exceedance.mxd 10/9/2020 6:26:01 PM JBA



Legend

- Monitoring Well Locations
- Groundwater Contours
- [39.04] Groundwater Elevation
- Approximate Site Boundary
- Church Property Boundary

REFERENCE
1. AERIAL PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION WEBSITE, DATED 2017.
2. PROPERTY BOUNDARIES APPROXIMATED FROM POLK COUNTY PROPERTY APPRAISER WEBSITE.
3. SITE FEATURES ARE APPROXIMATE BASED ON PCAR BY ANDREYEV ENGINEERING, DATED 1996.
4. GROUNDWATER ELEVATIONS WERE BASED ON AN ARBITRARY DATUM (100 ft) AND WERE COLLECTED ON 7-30-2020.

N

0 100 Feet

Former Polk County Fertilizer Plant
Groundwater Flow Map

1010 Citrus Ave
Haines City, Polk County, Florida

Geosyntec consultants

Tallahassee, FL | December 2020

Figure 7

T:\GIS\SFR3842_Polk County Fertilizer Plant\MXD\p2020101\Fig 7 - GW Flow Map.mxd 10/9/2020 3:54:44 PM JBA

Site Assessment Status Report

Former Polk County Fertilizer Plant
1010 Citrus Avenue
Haines City, Polk County, Florida
FDEP Site ERIC_13343 and BF532202001

34 E Pine Street
Orlando, FL 32806

Corporate Headquarters
6575 West Loop South, Suite 300
Bellaire, TX 77401
Main: 713.520.5400

January 4, 2023

Mr. Bob Sellers
Environmental Specialist III
Department of Environmental Protection
Florida - Southwest District
13051 North Telecom Parkway, Suite 101
Temple Terrace, FL 33637

Re: Site Assessment Status Report
Former Polk County Fertilizer Plant
1010 Citrus Avenue
Haines City, Polk County, Florida
FDEP Site ERIC_13343 and BF532202001
RES Project No. 1-2390-001

Dear Mr. Sellers:

On behalf of the City of Haines City (City), RES Florida Consulting, LLC dba E Sciences (RES) is pleased to present the Florida Department of Environmental Protection (FDEP) with this Site Assessment Status Report that documents the most recent activities conducted at the Former Polk County Fertilizer Plant, herein referred to as the Site. A location map and aerial photograph are provided as **Figures 1** and **2**, respectively.

Background Information

On August 23, 2022, on behalf of the City, RES submitted a Limited Site Assessment Addendum Report (LSAAR) for the Site to the FDEP. The report documented exceedances of the groundwater cleanup target level (GCTL) found in Chapter 62-777, Florida Administrative Code (F.A.C.) for dieldrin in three of the on-site wells. These exceedances all carried a laboratory generated "I" designation, indicating that the concentrations were estimated values that fell between the method detection limit (MDL) and the practical quantitation limit (PQL) for the laboratory utilized, Eurofins Testing Southeast (Eurofins). RES proposed that these estimated concentrations be considered below the GCTL for dieldrin. Based on this consideration, RES concluded that there were no on-site groundwater impacts and that the on-site dieldrin soil contamination could be delineated to the residential direct exposure soil cleanup target level (RSCTL), rather than the lower leachability based on groundwater criteria SCTL. Soil sampling has been conducted in several iterations in accordance with the Work Plan that was submitted to the FDEP on April 14, 2021. Soil impacts have been horizontally and vertically delineated to the RSCTL, except as noted in the FDEP comments below.

As documented in a letter dated October 7, 2022, the FDEP reviewed the LSAAR and had the following comments:

1. *Additional horizontal soil delineation is needed for dieldrin to the Residential Soil Cleanup Target Level (RSCTL) in AOC 2 Former AST Area East at the 0-0.5 ft bls sampling interval at the following locations:*
    a. *SB-2-W3 and SB-2-W4: northeast, north, and northwest*
    b. *SB-3-W6 and SB-3-W5: southeast, south, southwest, and west*
    c. *SB-3-S5: east and west*
2. *Additional delineation is needed west of SB-4S at 2 ft bls for dieldrin at the AOC 3 Former AST Area West.*
3. *Vertical delineation for dieldrin to the RSCL is needed at SB-3W and SB-3-W2.*
4. *In order to demonstrate that soil is not leaching into the groundwater, a minimum of one year of groundwater sampling is needed. Since the last monitoring wells installed were analyzed one time, an additional three quarters of groundwater sampling from all available monitoring wells is needed.*
5. *Alternatively, direct leachability testing using Synthetic Precipitation Leaching Procedure (SPLP) can be used to determine the site-specific leachability cleanup target level.*

6. *Please update Tables 2 and 3 to show that the monitoring wells have been surveyed to NAVD or NGVD and have the elevations updated accordingly.*

The letter is provided as **Attachment A**. The following sections document the field activities that were conducted in November 2022 to address the FDEP comments.

Soil Sampling

As a response to comments 1, 2, and 3, RES conducted additional soil sampling at the Site on November 16, 2022 and December 13, 2022. Soil samples were collected to delineate the impacted areas to the RSCTL, as requested by the FDEP. Soil sampling activities were performed in general accordance with Chapter 62-160 FAC, FDEP SOPs. Soil samples were collected with a hand auger and placed in laboratory provided jars, preserved on ice and transferred to Eurofins under proper chain of custody for dieldrin analysis via EPA Method 8081. Sample locations were marked in the field with a sub meter global positioning system (GPS) unit.

Horizontal delineation to the RSCTL was completed at the:

- 0-0.5 feet below land surface (bls) interval to the northeast, north, and northwest of SB-2-W3 and SB-2-W4.
- 0-0.5 feet bls interval to the southeast, south, southwest, and west of SB-3-W5 and SB-3-W6.
- 0-0.5 feet bls interval to the east and west of SB-3-S5, and
- 2-foot bls interval to the west of SB-4S.

Vertical delineation to the RSCTL was completed at the

- 4- foot bls interval at SB-3W and SB-3W2.

Horizontal delineation samples were collected at 10 and 20 feet in the stated directions from the sample requiring additional delineation. The 20-foot samples were initially held at the laboratory pending the results of the 10-foot samples. **Table 1** summarized the soil analytical results and **Figure 3A-3C** depicts the analytical results for dieldrin. Complete analytical results are provided in **Appendix B**.

Groundwater Sampling

As a response to comments 4, 5, and 6, on November 15 and 16 2022, RES mobilized to the Site to complete groundwater sampling in monitoring wells MW-5R, MW-6R, MW-7R, MW-8, MW-9, MW-10, MW-11, and MW-12D. Prior to sampling, depth to water (DTW) measurements were collected from all monitoring wells. Based on the DTW measurements, the groundwater flow direction at the Site was found to be generally to the southeast which is consistent with historical trends. Groundwater elevations are recorded in North American Vertical Datum 1988 (NAVD 1988) (**Table 2)**. Interpretations of groundwater flow direction based on the DTW measurements collected on November 15, 2022, are provided on **Figure 4**.

Groundwater sampling activities were performed in general accordance with the FAC Chapter 62-160 and FDEP SOPs. The groundwater samples were placed in laboratory-supplied containers, packed on wetted ice and transported to Eurofins under proper chain of custody for laboratory analysis. The groundwater samples were analyzed for dieldrin via EPA Method 8081. The groundwater sampling and equipment calibration logs are provided in **Attachment C**.

During this sampling event, dieldrin concentrations were detected above the GCTL of 0.002 micrograms/liter (µg/l) in monitoring wells MW-7R (0.0063 I µg/l), MW-8 (0.013 µg/l), MW-9 (0.0055 I µg/l) and MW-11 (0.0072 I µg/l) (**Table 3 and Figure 5**). Please note that the concentrations in monitoring wells MW-7R, MW-9 and MW-11 include an "I" designation indicating that the stated concentration is an estimated value that falls between the MDL and the PQL for dieldrin, and it has been proposed that these concentrations could be considered to be below the GCTL for dieldrin. No "I" designation was identified in well MW-8, an upgradient well at the northern boundary of the Site. This sampling effort is proposed as the second of the four required quarterly sampling events. Complete analytical results are provided in **Appendix D**.

Conclusions and Recommendations

Based on the analytical results, vertical and horizontal delineation of soils to the RSCTL for the dieldrin is completed at the Site. After FDEP approval of the site assessment for soil and consultation with the City, RES will prepare a plan to address soil that exceeds the RSCTL. In addition, two quarters of groundwater monitoring have been completed. One well, MW-8, contained a dieldrin concentration that exceeded the GCTL, and did not require an "I" designation from the laboratory. MW-8 is the upgradient well at the northern boundary of the Site, thus the dieldrin concentration noted may be related to off-

site conditions. The remaining wells sampled were below the GCTL or included "I "designations. The next sampling event is scheduled for February 2023.

Please feel free to contact me if you have any questions or concerns.

Sincerely,

Flormari Backburn P.E.
Senior Engineer

Scott G. Evanson, P.G.
Senior Geologist

Figures; Figure 1-Location Map
Figure 2 Aerial Photograph
Figures 3A-3C Soil Analytical Maps
Figure 4 Groundwater Flow Direction Map – November 15, 2022
Figure 5 Groundwater Analytical Map

Table
Table 1 Soil Analytical Summary Results
Table 2 Groundwater Elevations
Table 3 Groundwater Analytical Summary Results

Attachments

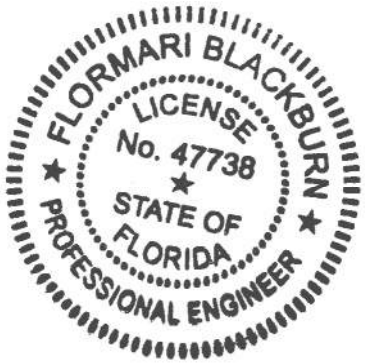
Attachment A FDEP's LSAAR review letter dated October 7, 2022
Attachment B Soil Analytical Results
Attachment C Groundwater Sampling and Equipment Calibration Logs
Attachment D Groundwater Analytical Results.

Professional Certification

I, Flormari Blackburn, certify that I currently hold an active license in the State of Florida and am competent through education or experience to provide the engineering services contained in this report. I certify that applicable portions of this technical document and associated work comply with applicable rules and standard professional practices and that the work was conducted under my responsible charge. RES Florida Consulting, LLC dba E Sciences, 34 East Pine Street, Orlando, Florida 32801 holds an active certificate of authorization (#EB-8691) to provide engineering services in the State of Florida.

This item has been digitally signed and sealed by Flormari Blackburn, P.E. on the date adjacent to the seal.

Printed copies of this document are not considered signed and the signature must be verified on any electronic copies.

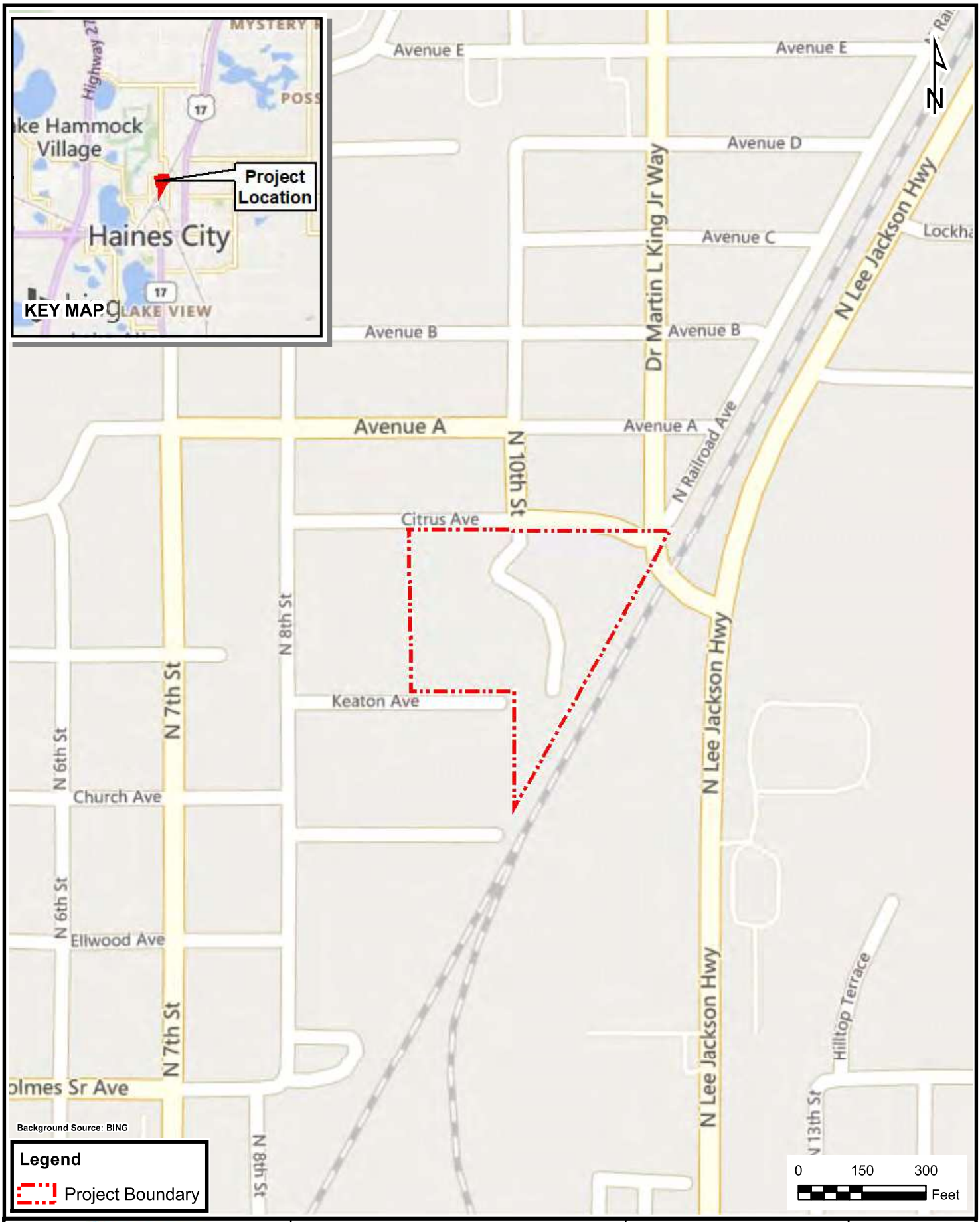


Flormari Blackburn, P.E.
License Number 47738
Date: January 4, 2023

Flormari Blackburn, P.E.

Digitally signed by Flormari Blackburn, P.E.
Date: 2023.01.04 11:58:22 -05'00'

Figures



G:\Projects\1-2390-001\GIS\Revised 12-22\1. Site Location Map.mxd By: LG

res
Restoring a resilient earth for a modern world

PROJECT NUMBER: 1-2390-001

Former Polk County Fertilizer Plant

Haines City, Polk County, FL

Site Location Map

SCALE: 1 "=300 '

DATE: 1/4/2023

FIGURE

1

res

Restoring a resilient earth for a modern world

PROJECT NUMBER:
1-2390-001

Former Polk County Fertilizer Plant

Haines City, Polk County, FL

2020 Aerial Photograph

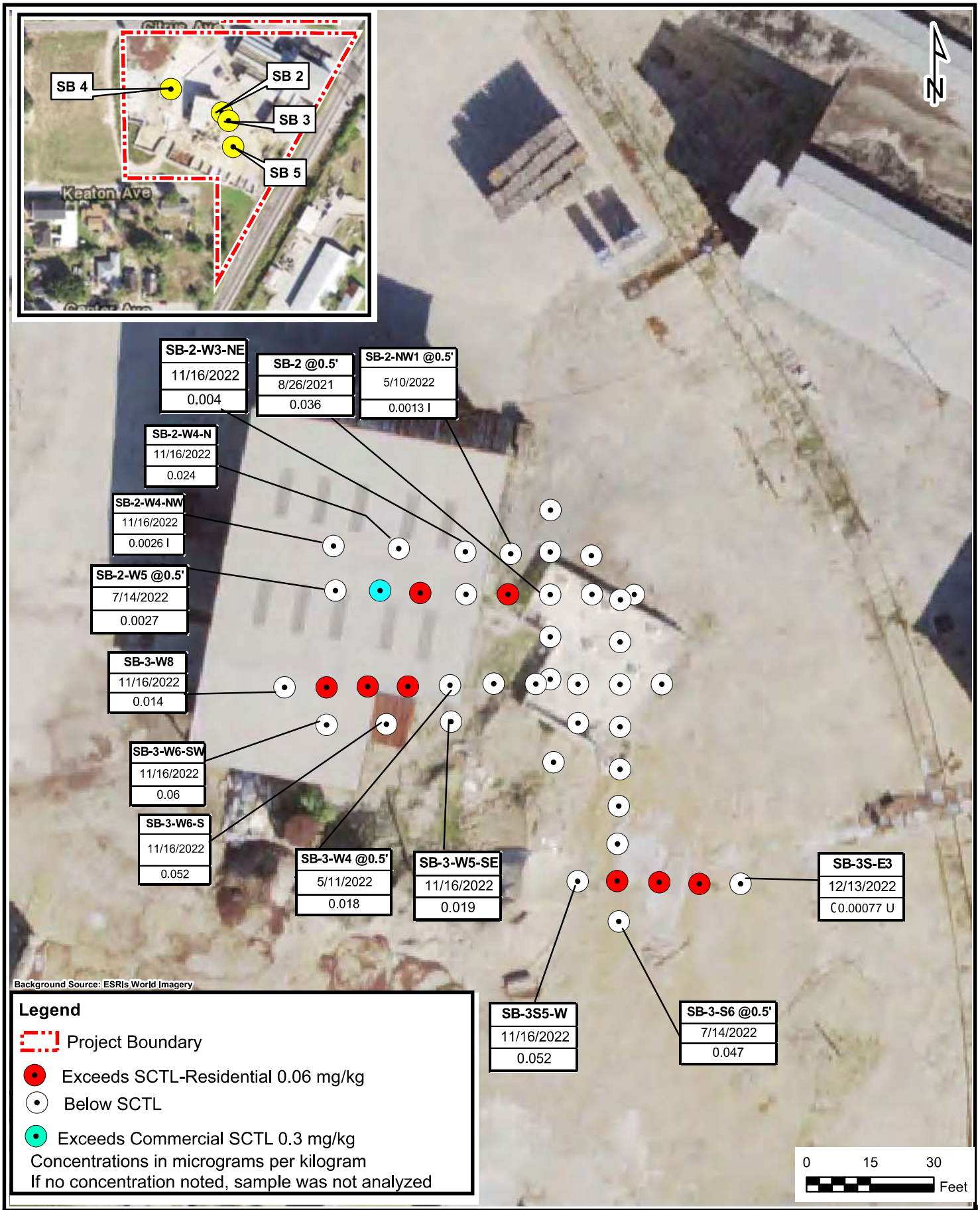
SCALE: 1 "=150 '

DATE: 1/4/2023

FIGURE

2

G:\Projects\1-2390-001\GIS\Revised 12-22\2. Aerial Photograph.mxd By: LG



G:\Projects\1-2390-001\GIS\Revised 12-22\3A. Dieldrin Soil Sampling Locations.mxd By: LG

E Sciences, Incorporated
FL Engineering Lic. #8691
34 East Pine Street
Orlando, FL 32801
www.esciencesinc.com
Phone: 407-481-9006
Fax: 407-481-9627

PROJECT NUMBER:
1-2390-001

Former Polk County Fertilizer Plant

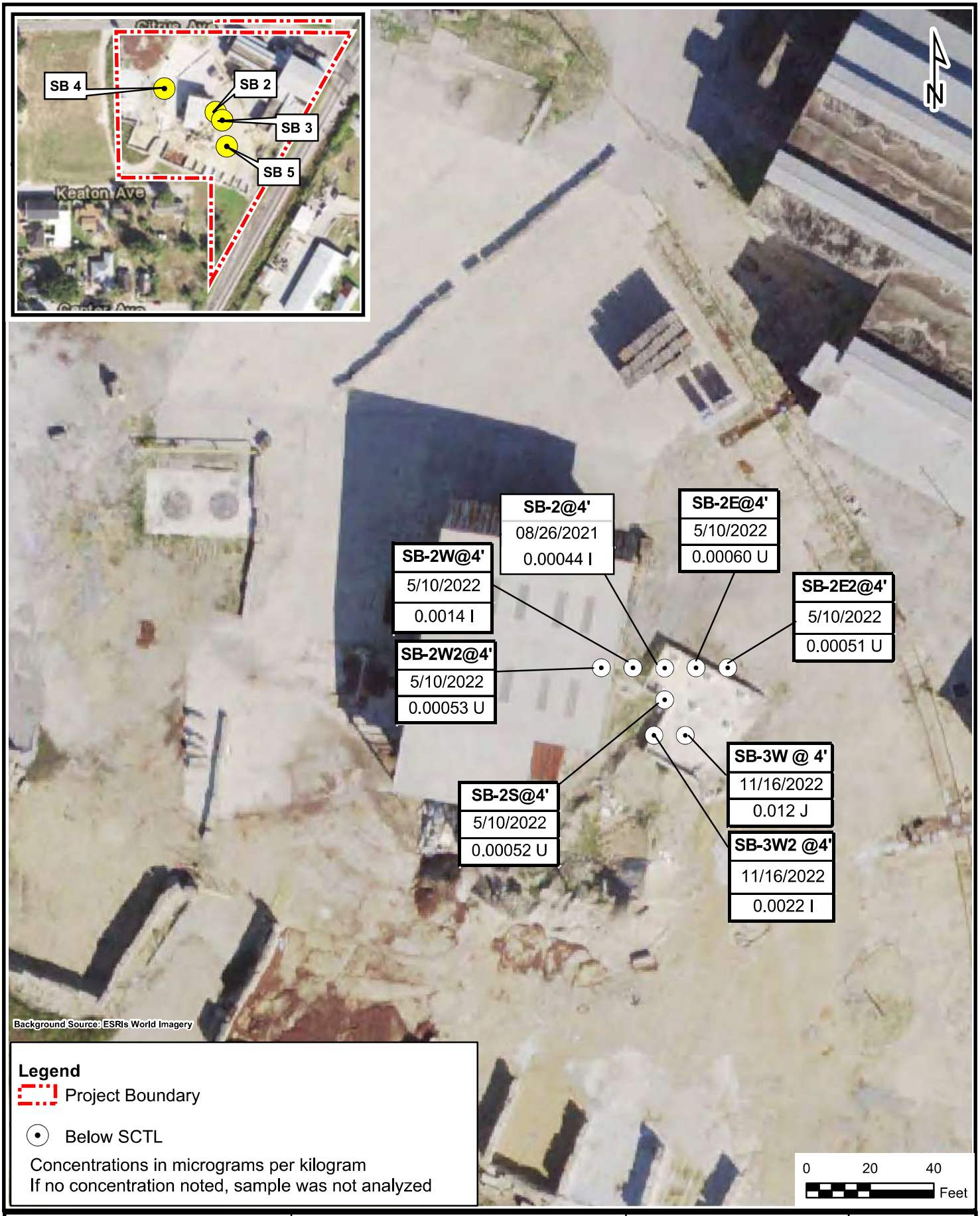
Haines City, Polk County, FL

Dieldrin Soil Sampling Locations at 0.5 feet bls - AOC 2 Former AST Area East

SCALE: 1 "=30 '

DATE: 12/22/2022

FIGURE
3A



G:\Projects\1-2390-001\GIS\Revised 12-22\3B. Dieldrin Soil Sampling Locations at 4 feet bls - AOC 2 Former AST Area East.mxd By: LG

E Sciences, Incorporated
FL Engineering Lic. #8691
34 East Pine Street
Orlando, FL 32801
www.esciencesinc.com
Phone: 407-481-9006
Fax: 407-481-9627

PROJECT NUMBER: 1-2390-001

Former Polk County Fertilizer Plant

Haines City, Polk County, FL

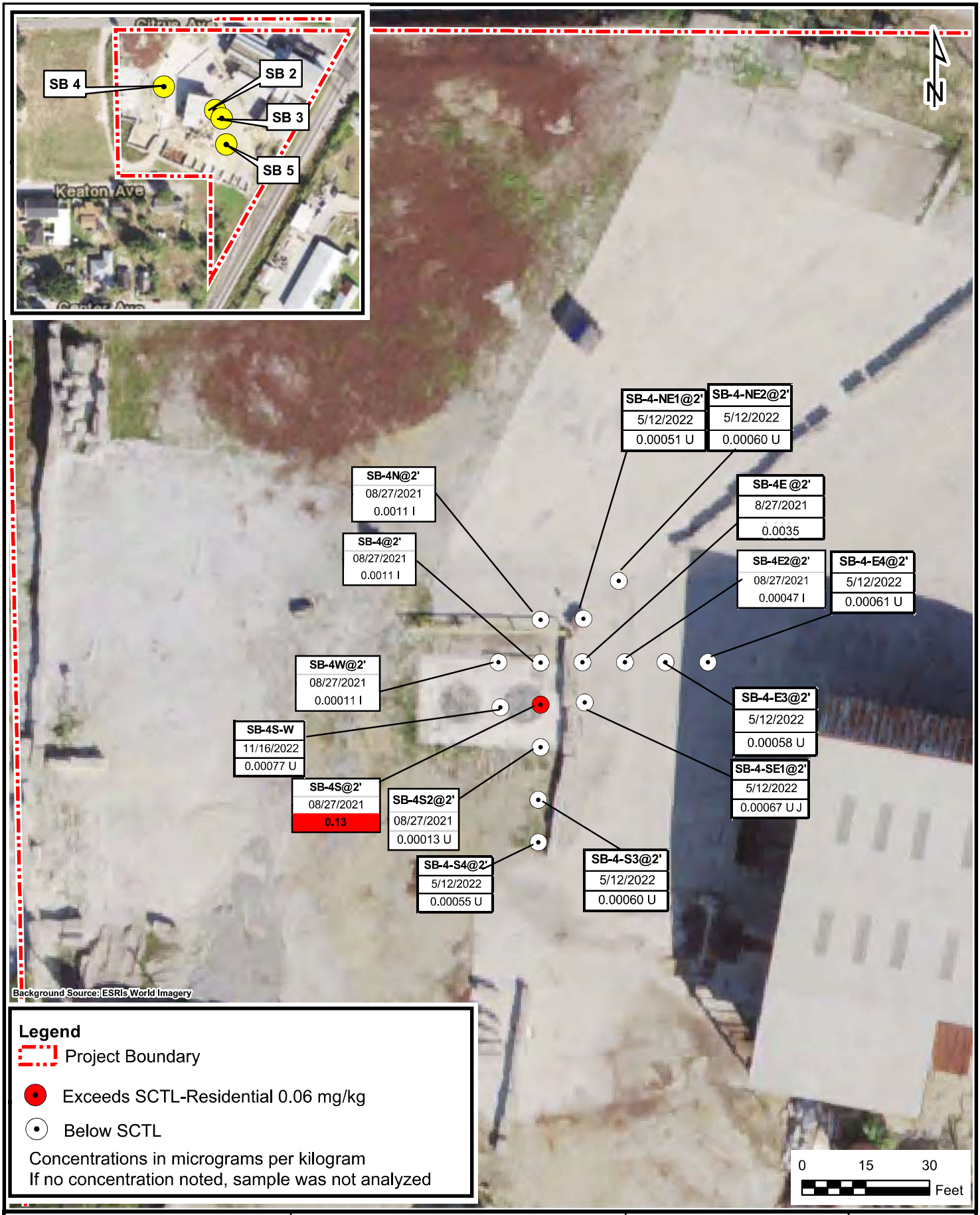
Dieldrin Soil Sampling Locations at 4 feet bls - AOC 2 Former AST Area East

SCALE: 1 "=40 '

DATE: 12/22/2022

FIGURE

3B



G:\Projects\1-2390-001\GIS\Revised 12-22\3C. Dieldrin Soil Sampling Locations at 2 feet bls - AOC3 Former AST Area West.mxd By: LG

E Sciences, Incorporated
FL Engineering Lic. #8691
34 East Pine Street
Orlando, FL 32801
www.esciencesinc.com
Phone: 407-481-9006
Fax: 407-481-9627

PROJECT NUMBER: 1-2390-001

Former Polk County Fertilizer Plant

Haines City, Polk County, FL

Dieldrin Soil Sampling Locations at 2 feet bls - AOC3 Former AST Area West

SCALE: 1 "=30 '

DATE: 12/22/2022

FIGURE

3C

G:\Projects\1-2390-001\GIS\Revised 12-22\4. Groundwater Flow Direction Map.mxd By: LG

res | Sciences

PROJECT NUMBER: 1-2390-001

Former Polk County Fertilizer Plant

Haines City, Polk County, FL

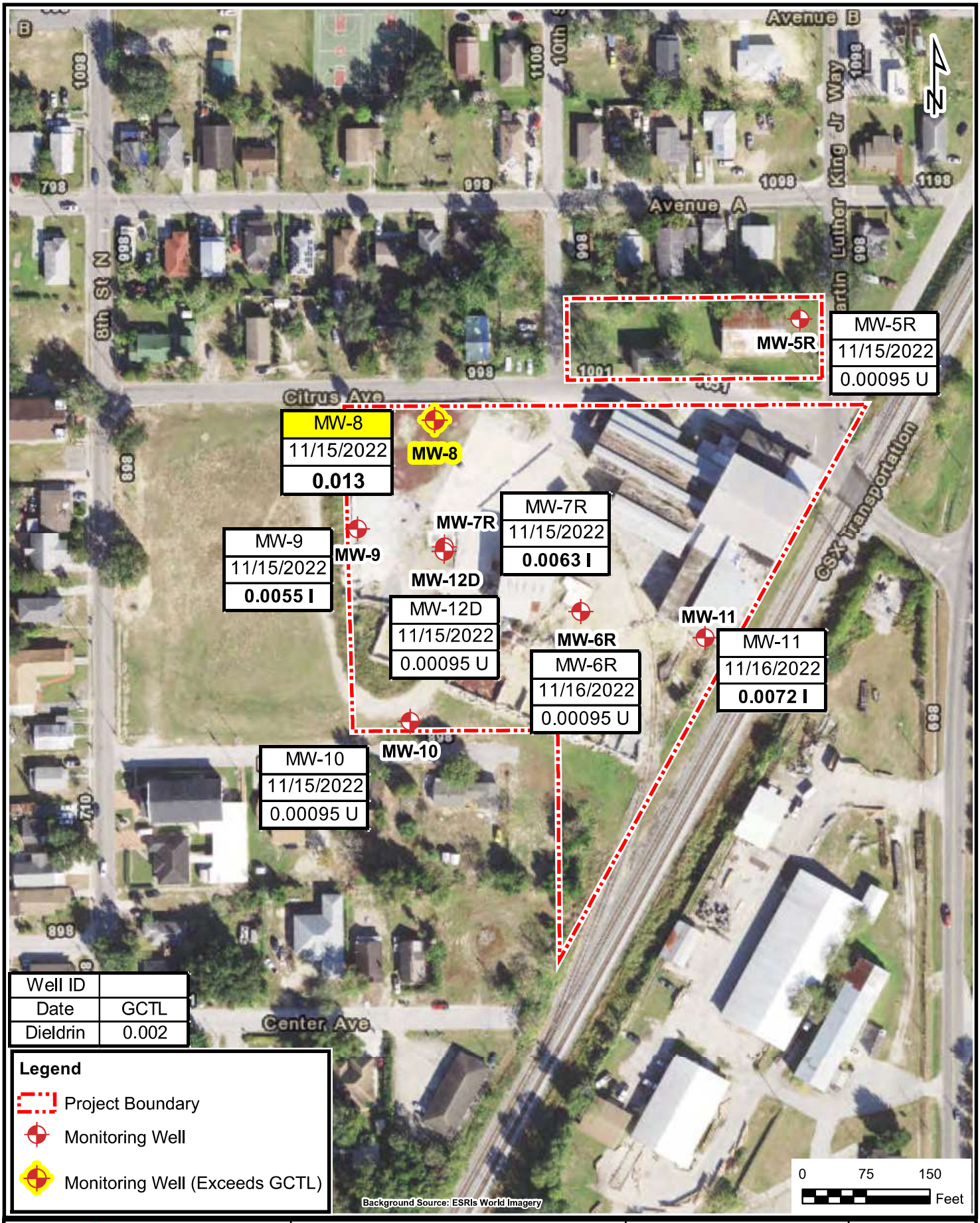
Groundwater Flow Direction Map November, 2022

SCALE: 1 "=150 '

DATE: 12/22/2022

FIGURE

4



G:\Projects\1-2390-001\GIS\Revised 12-22\5. Groundwater Analytical Map.mxd By: LG

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PROJECT NUMBER:
1-2390-001

Former Polk County Fertilizer Plant

Haines City, Polk County, FL

Groundwater Analytical Map

SCALE: 1 "=150 '

DATE: 1/4/2023

FIGURE
5

FLORIDA DEPARTMENT OF Environmental Protection

Southwest District Office
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

February 17, 2023

Via email: jkeene@hainescity.com

Mr. James Keene
Public Infrastructure Director
City of Haines City
620 E. Main Street
Hines City, FL 33844-4222

Re: Site Assessment Status Report (SASR), dated January 4, 2023
Former Polk County Fertilizer
1010 Citrus Avenue (Parcel ID# 27-27-21-749500-041701)
Haines City, Polk County, Florida
FDEP Site# ERIC_13343

Dear Mr. Keene:

The Florida Department of Environmental Protection (Department) has reviewed the above SASR, submitted by E Sciences, Inc. (E Sciences). The report was concurrently reviewed by the District and Business Support Program (DBSP). Please see the attached comments provided by DBSP.

A Site Assessment Status Report (SASR) addressing the items outlined in the DBSP review should be prepared and submitted to the Department within 90-days receipt of this letter, or not later than May 30, 2023. As a reminder for future submittals, if you are unable to submit the document by the specified date, please request a time extension in accordance with Rule 62-780.790, Florida Administrative Code, including a detailed explanation for the requirement for the time extension. The request is to be received by the Department at least 20 days prior to the submittal due date.

If you have any questions, please contact me by email at Robert.Sellers@FloridaDEP.gov or by phone at (813) 470-5761. In an effort to reduce costs and waste, the Department is requesting one signed and sealed electronic copy for all future submittals. Please reference FDEP Site# ERIC_13343 on all your correspondence.

Sincerely,

Robert Sellers

Robert Sellers
Permitting and Waste Cleanup
Florida Department of Environmental Protection

Attachment: DBSP review memo

cc: Bob Sellers, ES III, FDEP, Robert.Sellers@FloridaDEP.gov
Kelly Crain, Manager-FDEP, Kelly.Crain@Floridadep.gov
Deric Feacher, City Manager, Haines City, dfeacher@hainescity.com
Terrell Griffin, Parks & Recreation Director, Haines City, tgriffin@hainescity.com

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

Memorandum

TO: Robert Sellers, Environmental Specialist III
Permitting and Waste Cleanup Program
FDEP Southwest District

THROUGH: Brian Dougherty, Program Manager
District & Business Support Program, DWM

Digitally signed by Brian Dougherty
Date: 2023.02.01 10:08:37 -05'00'

FROM: Michael J. Bland, Professional Geologist II
District & Business Support Program, DWM

Digitally signed by Michael Bland
Date: 2023.02.01 07:03:43 -05'00'

SUBJECT: Polk County Fertilizer
1010 Citrus Avenue, Haines City, Polk County
Site Assessment Status Report, dated January 4, 2023
FDEP Site ID#: ERIC_13343

DATE: February 1, 2023

I have completed the review of the Site Assessment Status Report (SASR), dated January 4, 2023, prepared and submitted by RES Florida Consulting, LLC dba E Sciences (E Sciences), and the Department's file, for the above referenced site. The following comments are provided to assist Southwest District staff with their review of this submittal and should not be inferred to be an approval of the subject document:

Soil samples SB-1W@4', SB-2E@4', SB-2E2@4', SB-2W@4', SB-2W2@4', SB-2S@4', SB-2-W3@0.5', SB-2-W3@2', SB-2-W4@0.5', SB-2-E3@2', SB-2-NW1@0.5', SB-2-NE1@0.5', SB-2-NE1@2', SB-3E@4', SB-3E2@4', SB-3-E3@2', SB-3S@4', SB-3-SE1@2', SB-3-W3@0.5', SB-3-W3@2', SB-3-W4@0.5', SB-3-W4@2', SB-3-SW1@0.5', SB-3-SW1@2', SB-3-SW2@0.5', SB-3-S3@0.5', SB-3-S3@2', SB-3-S4@0.5', SB-3-S4@2', SB-4S@4', SB-4E@4', SB-4-E3@0.5', SB-4-E3@2', SB-4-E4@0.5', SB-4-E4@2', SB-4-NE1@0.5', SB-4-NE1@2', SB-4-NE2@0.5', SB-4-NE2@2', SB-4-N3@0.5', SB-4-SE1@0.5', SB-4-SE1@2', SB-4-SE2@0.5', SB-4-S3@0.5', SB-4-S3@2', SB-4-S4@0.5', SB-4-S4@2', SB-4-SW1@0.5', SB-5S@4', SB-5S2@4', SB-5-S3@2', SB-5-SW1@2', SB-5-SE1@2' were collected May 10-12, 2022 and analyzed for polycyclic aromatic hydrocarbons (PAHs) and dieldrin.

Dieldrin [0.14 milligrams per kilogram (mg/kg)] was detected above the Department's Residential Direct Exposure Soil Cleanup Target Level (SCTL) in SB-2-W3@0.5'.

Dieldrin (0.39J mg/kg) was detected above the Department's Residential Direct Exposure SCTL in SB-2-W4@0.5'.

Dieldrin (0.0027 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-2-NE1@0.5'.

Dieldrin (0.03 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-W3@0.5'.

Dieldrin (0.0057 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-W3@2'.

Dieldrin (0.018 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-W4@0.5'.

Dieldrin (0.0036 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-SW1@0.5'.

Dieldrin (0.05 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-S3@0.5.

Dieldrin (0.028 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-S4@0.5'.

Dieldrin (0.0062 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-S4@2'.

Dieldrin (0.0046 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-4-E3@0.5'.

Dieldrin (0.0047 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-4-NE1@0.5'.

Dieldrin (0.0043 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-4-NE2@0.5'.

Dieldrin (0.011 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-4-SE1@0.5'.

Dieldrin (0.008 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-4-SE2@0.5'.

Dieldrin (0.0083 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-4-S3@0.5'.

Dieldrin (0.05 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-4-S4@0.5'.

Dieldrin (0.0069J mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-5-SW1@2'.

Soil samples SB-2-W5@0.5', SB-3-W5@0.5', SB-3-W6@0.5', SB-3-S5@0.5', SB-3-S6@0.5' were collected on July 14, 2022 and analyzed for dieldrin.

Dieldrin (0.0027 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-2-W5@0.5'.

Dieldrin (0.28 mg/kg) was detected above the Department's Residential Direct Exposure SCTL in SB-3-W5@0.5'.

Dieldrin (0.16 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-W5@0.5'.

Dieldrin (0.31 mg/kg) was detected above the Department's Residential Direct Exposure SCTL in SB-3-S5@0.5'.

Dieldrin (0.047 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-S6@0.5'.

Soil samples SB-2-4S-W, SB-2-W3-NE, SB-2-W4-N, SB-2-W4-NW, SB-3W@4', SB-3W2@4', SB-3S5-W, SB-3S5-E, SB-3S5-E1, SB-3-W7, SB-3-W6-SW, SB-3-W6-S, SB-3-W5-SE, and SB-4S-W were collected on November 16, 2022 and analyzed for dieldrin.

` Dieldrin (0.004 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-2-W3-NE.

Dieldrin (0.024 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-2-W4-N.

Dieldrin (0.0026I mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-2-W4-NW.

Dieldrin (0.012J mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3W4@4'.

Dieldrin (0.052 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3S5-W.

Dieldrin (0.16 mg/kg) was detected above the Department's Residential Direct Exposure SCTL in SB-3S5-E.

Dieldrin (0.093 mg/kg) was detected above the Department's Residential Direct Exposure SCTL in SB-3S5-E1.

Dieldrin (0.088 mg/kg) was detected above the Department's Residential Direct Exposure SCTL in SB-3-W7.

Dieldrin (0.064 mg/kg) was detected above the Department's Residential Direct Exposure SCTL in SB-3-W6-SW.

Dieldrin (0.052 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-W6-S.

Dieldrin (0.019 mg/kg) was detected above the Department's Leachability Based on Groundwater Criteria SCTL in SB-3-W5-SE.

Soil sample SB-3S5-E3 was collected on December 13, 2022 and analyzed for dieldrin. No contamination above the Department's SCTL was detected.

Monitoring wells MW-5R, MW-6R, MW-7R, MW-8, MW-9, MW-10, MW-11, and MW-12D were sampled November 15-16, 2022 and the samples analyzed for dieldrin.

> Dieldrin [0.0063I micrograms per liter (µg/l)] was detected above the Department's Groundwater Cleanup Target Level (GCTL) in the sample collected from MW-7R.
>
> Dieldrin (0.013 µg/l) was detected above the Department's GCTL in the sample collected from MW-8.
>
> Dieldrin (0.0055I µg/l) was detected above the Department's GCTL in the sample collected from MW-9.
>
> Dieldrin (0.0072I µg/l) was detected above the Department's GCTL in the sample collected from MW-11.

Based on my review of the SASR and the Department's file, I have the following comments:

1. As it appears that dieldrin is leaching into the groundwater from the contaminated soil, the extent of soil contamination that exceeds the Department's Leachability Based on Groundwater Criteria SCTL needs to be delineated and addressed along with the soil contamination that exceeds the Department's Residential Direct Exposure SCTL.

2. I agree with E Sciences that groundwater monitoring should continue for at least two more quarters. I also recommend that in addition to dieldrin, samples collected from MW-6R, MW-7R, and MW-11 should also be analyzed for nitrate and nitrite.

If you have any questions, please contact me at (850) 245-8912 or at mike.bland@floridadep.gov.

Map ID 49: Growers Fertilizer Inc.

See Tanks Enforcement File

Department of Environmental Regulation

Discharge Notification Form

Form 17-1.218(3)

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

1. Results of tank testing which reveal a discharge within 3 working days of testing.
2. Discharges exceeding 100 gallons on pervious surfaces as described in Section 17-61.05(4)(b) within 3 working days of discovery.
3. Positive response of a detection device, monitoring well test of sample or laboratory report within 3 working days of discovery.

Mail to the DER District Office in your district.

PLEASE PRINT OR TYPE
Put "X" where answer is unknown.

1. Facility Number: _____ 2. Tank Number: 5386 24 425 3. Date: June 19, 1989

4. Facility Name: Growers Fertilizer Corporation
   Facility Operator: Ray Pinner - General Manager
   Facility Address: 312 North Buena Vista Drive; Lake Alfred, FL 33850
   Telephone Number: (813) 956-1101 County: Polk
   Mailing Address: Post Office Box 1407; Lake Alfred, FL 33850

5. Date of test or discovery: June 15, 1989 month/day/year

6. Method of initial discovery. (circle one only)
   - A. Automatic detector in ground, monitoring well, or containment.
   - B. NFPA 329 test (underground tanks only).
   - (C.) Manual test of monitoring well(s).
   - D. Emptying and inspection.
   - E. Inventory control.
   - F. Odor or visible signs at facility or in vicinity.
   - G. Other: _____ (explain)

7. Estimated number of gallons lost: Unknown

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

9. If a tank is leaking, circle the choices which describe the type.
   - A. Aboveground
   - B. Factory welded
   - C. Field erected
   - (D.) Underground
   - (E.) Bare or asphalt-coated steel
   - F. Fiberglass-clad steel
   - G. Fiberglass
   - H. Sacrificial anode type
   - I. Impressed current type
   - J. Double walled
   - M. Other or Unknown _____ (explain)

10. Type of pollutant discharged. (circle one)
    - A. Leaded Gasoline.
    - B. Unleaded gasoline.
    - C. Gasohol or alcohol-enriched gasoline.
    - E. Aviation fuel.
    - Y. Other _____
    - (Z. Unknown) Diesel, leaded and unleaded tanks all in the same area (explain)

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

    (A. Unknown)

    Piping
    - B. Split
    - C. Loose connection
    - D. Other _____

    Tank
    - G. Split
    - H. Corrosion
    - I. Puncture
    - J. Installation failure
    - P. Other _____

12. TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL INFORMATION SUBMITTED ON THIS FORM IS TRUE, ACCURATE, AND COMPLETE.

Water + Earth Sciences, Inc.
Name of Owner, Operator or Authorized Representative

Robert A. Kuhner / President
Signature of Owner, Operator, or Authorized Representative

KEEP A COPY OF THIS FORM FOR YOUR RECORDS.

Florida Department of Environmental Protection
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

November 9, 2011

CERTIFIED MAIL #7010 1870 0000 1330 2409
RETURN RECEIPT REQUESTED

Mr. Richard G. O'Steen
Registered Agent
Growers Fertilizer Corporation
312 N. Buena Vista Drive
Lake Alfred, Florida 33850

Subject: Site Rehabilitation Completion Order
Growers Fertilizer Co Op
312 N Buena Vista Drive
Lake Alfred, Polk County
FDEP Facility ID# 538624425
Discharge Date: June 15, 1989 (PLRIP)
Discharge Score: 60

Dear Mr. O'Steen:

The Polk County Health Department Petroleum Cleanup Program (PCHDPCP), on behalf of the Florida Department of Environmental Protection (Department), has reviewed the Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) dated September 27, 2010 (received September 29, 2010), and the Monitoring Well Abandonment Report dated May 6, 2011 (received May 9, 2011), along with Addenda received through June 9, 2011, prepared and submitted by Integrated Environmental Solutions Inc for the petroleum product discharge referenced above. Documentation submitted with the SRCR/NFAP confirms that criteria set forth in Subsection 62-770.680(1), Florida Administrative Code (F.A.C.), have been met. Please refer to the attached maps of the source property and analytical summary tables. The SRCR/NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the facility for petroleum product contamination associated with the discharge referenced above, except as set forth below.

In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the facility, the Department may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the SRCR/NFAP or otherwise allowed by Chapter 62-770, F.A.C.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below.

Persons affected by this Order have the following options:

(A) If you choose to accept the Department's decision regarding the SRCR/NFAP you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order.

(B) If you choose to challenge the decision, you may do the following:

(1) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or

(2) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to Subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if

different from Growers Fertilizer Corporation, shall mail a copy of the request to Growers Fertilizer Corporation at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Growers Fertilizer Corporation, shall mail a copy of the petition to Growers Fertilizer Corporation at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

(a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;

(b) A statement of when and how each petitioner received notice of the Department's action or proposed action;

(c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;

(d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;

(e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding the PCHDPCP's review of your SRCR/NFAP should be directed to David B. Arnold at (863) 413-3325. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 538624425. Please use this identification on all future correspondence with the Department or the PCHDPCP.

Sincerely,

Robert C. Brown, P.E.
Chief, Bureau of Petroleum Storage Systems

RCB/dba

Attachments

ec: Laurel Culbreth, FDEP Southwest District Office - Laurel.Culbreth@dep.state.fl.us
David B. Arnold, PCHDPCP - david_arnold@doh.state.fl.us
Richard A. Spaulding, PCHDPCP - richard_spaulding@doh.state.fl.us
Thomas Spohn, PCHDPCP - Thomas_spohn@doh.state.fl.us
David Arnold, Southwest Florida Water Management District - davidn.arnold@watermatters.org
Steffan Koratich, P.E., Integrated Environmental Solutions, Inc, steffan.koratich@ies-inc.com
FDEP File

cc: Brent Sutton, Growers Fertilizer Corporation, P.O. Box 1407, Lake Alfred, Florida 33850-1407
Larry Sparrow, P.O. Box 1407, Lake Alfred, Florida 33850

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk (or Deputy Clerk) — Date: 11-14-11

P.E. CERTIFICATION

Site Rehabilitation Completion Report/No Further Action Proposal dated September 27, 2010 (received September 27, 2010, and Monitoring Well Abandonment Report dated May 6, 2011 (received May 9, 2011) and Addenda received through June 9, 2011) for Growers Fertilizer CoOp, located at 312 N Buena Vista Drive, Lake Alfred, Polk County, FDEP Facility ID# 538624425 prepared and submitted by Integrated Environmental Solutions, Inc.

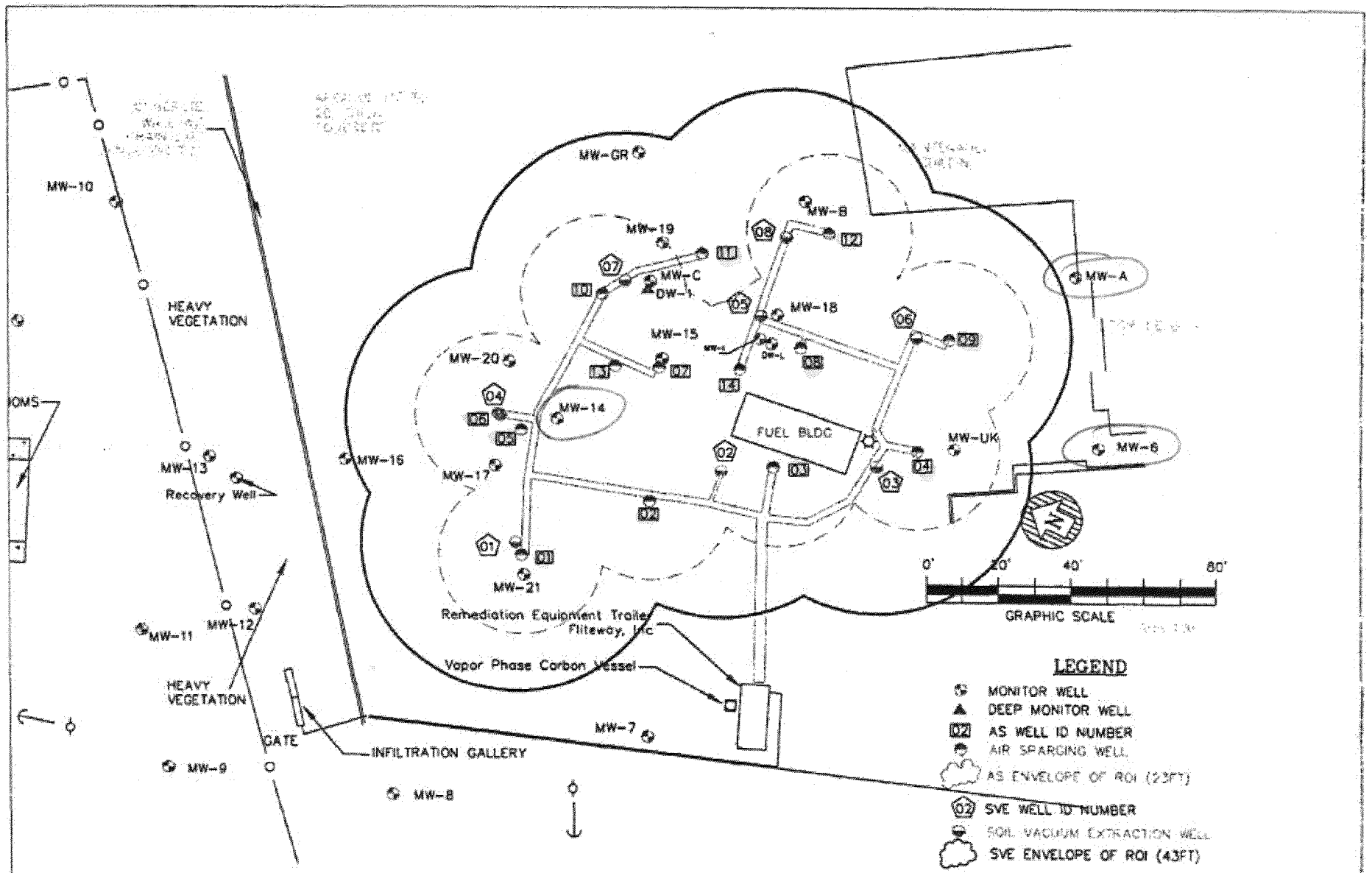
I hereby certify that in my professional judgment, the components of this Site Rehabilitation Completion Report/No Further Action Proposal prepared for the June 15, 1989 petroleum product discharge discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-770, Florida Administrative Code (F.A.C.), and that the conclusions in this report on the effectiveness of the remedial action which has been conducted (confirmed by subsequent Post Active Remediation Monitoring) provide reasonable assurances that the site rehabilitation objectives stated in Chapter 62-770, F.A.C., have been met.

___ I personally completed this review.

_X_ This review was conducted by David B. Arnold working under my direct supervision.

Richard A. Spaulding, P.E.
Professional Engineer # 58180
Polk County Health Department

6/14/11
Date



GROWER'S FERTILIZER CO OP

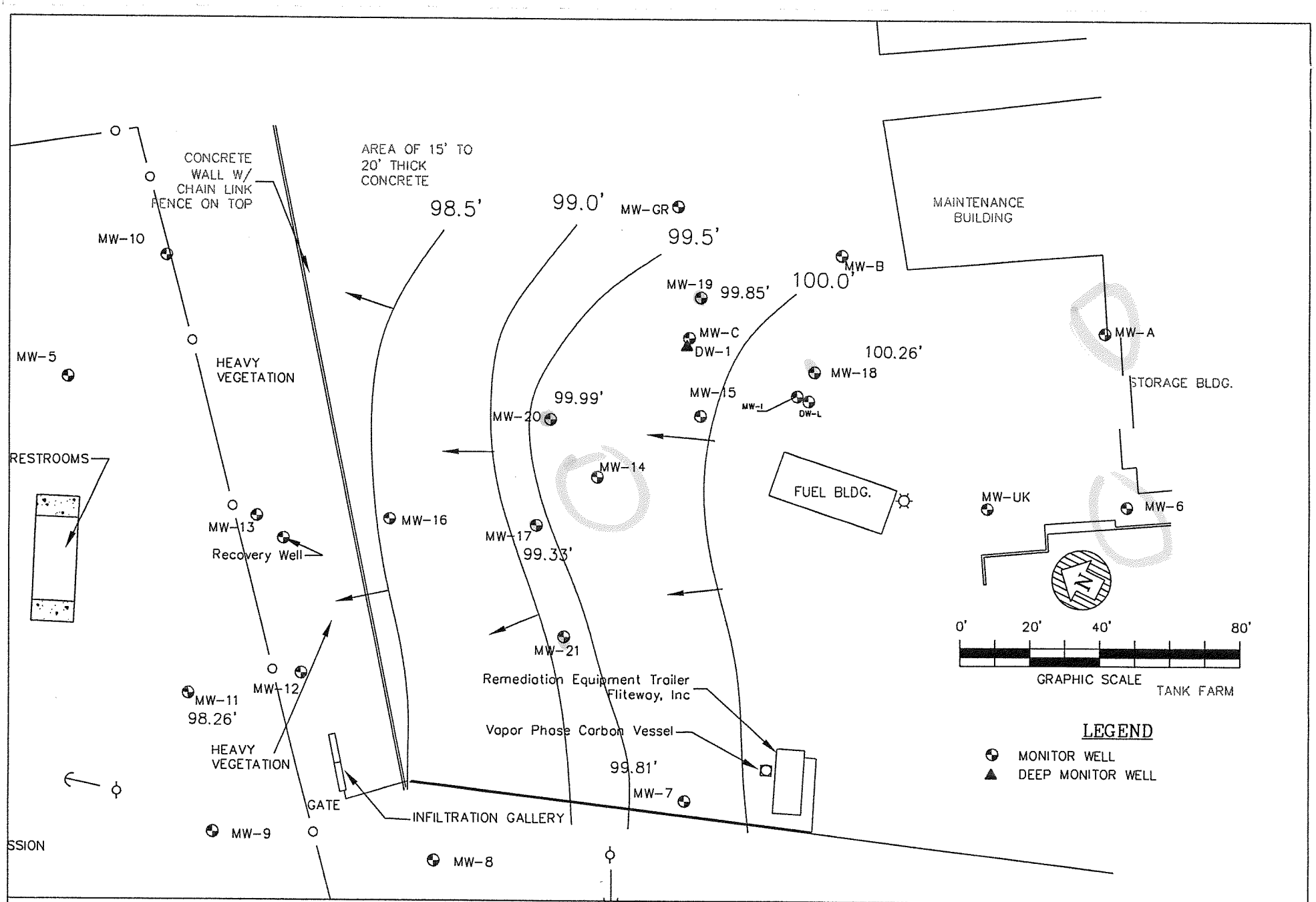
312 BUENA VISTA DRIVE, LAKE ALFRED, FLORIDA

OVERLAY of AS and SVE WELLS RADIUS-OF-INFLUENCE

INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.

DRAFTED: 11-01-00	FACILITY ID: 53-8624425
REVISED: 01-23-09	PROJECT No. FGFERT 0104

FIGURE 7



GROWER'S FERTILIZER CO OP

312 BUENA VISTA ORIVE, LAKE ALFRED, FLORIOA

IES INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.

ORAFTEO: 11-01-00	FACILITY IO: 53-8624425
REVISEO: 09-27-10	PROJECT No. FGFERT 0104

GROUNDWATER CONTOUR MAP
SEPTEMBER 2010

FIGURE 5

Map ID 51: Eagle Towing

Florida Department of Environmental Protection
Division of Waste Management
Bureau of Petroleum Storage Systems
Petroleum Cleanup

Deliverable WO#2003-53-0990

RECEIVED JUN 02 2003 By

TEMPLATE SITE ASSESSMENT REPORT

DATE: May 21, 2003

Site FDEP Facility ID #:	538623501	Score:	75
Site Name:	Eagle Towing		
Address:	60 Watts Dairy Rd.		
City:	Haines City		
County:	Polk		
Consultant Company:	Edwards & Belyea Env., Inc.		
Address:	P.O. Box 18403		
City, State, Zip:	Tampa, FL 33679-8403		
Consultant Rep.:	Frank Cowan		
Phone #:	813-639-9888		
Responsible Party Name:	Peterbilt of Central Florida		
Address:	12475 W. Colonial Dr.		
City, State, Zip:	Winter Garden, FL 34787-4128		
Responsible Party Rep.:	Carl Crouse		
Phone #:	407-877-3636		

Program

[X] Preapproval

COPY

WO#: 2003-53-0990-0

[ ] State Cleanup

6/4/03 GLS APPROVED

TA#:

[ ] Bid Project

Contract #:

Site #:

[ ] Non-Program / Voluntary Cleanup

Cluster Site?	yes	no
	[ ]	[ ]

If yes, indicate facility ID #s & Site Names

	Facility ID #	Site Name
1)		
2)		
3)		
4)		
5)		

CERTIFICATION:

A Qualified Registered Professional Engineer or Registered Professional Geologist Certification

I hereby certify that I have supervised the field work (as summarized in the "Recent Site Assessment Activities" section) and preparation of this report, in accordance with Florida Rules and Regulations. As a registered professional geologist and/or professional engineer, as authorized by Chapters 492 or 471, Florida Statutes, I certify that I am a qualified groundwater professional, with knowledge and experience in groundwater contamination assessment and cleanup. To the best of my knowledge, the information and laboratory data summarized in the "Recent Site Assessment Activities" section (including the applicable attachments) are true, accurate, complete, and in accordance with applicable State Rules and Regulations. ***Include a hard (paper) copy of this cover page, signed and sealed, when submitting the report electronically.***

Consultant Name: Robert Sheridan, P.G.

PE or PG License #: 1965

Signature:

Date: 5/30/03 FLORIDA Stamp or Seal

TEMPLATE SITE ASSESSMENT REPORT

Site Name:	Eagle Towing
Facility ID #:	538623501
Date:	May 21, 2003

TABLE OF CONTENTS

SECTIONS INCLUDED IN REPORT:

TEMPLATE SITE ASSESSMENT REPORT

Site Name:	Eagle Towing
Facility ID #:	538623501
Date:	May 21, 2003

LIST of ATTACHMENTS

(Format and calculation examples provided in FDEP SOP Manual and in October 1998 Assessment Report Preparation guidance)

TABLES

ATTACHED		*TABLES #*	*APPENDIX #*
Assessment Tables			
X	SOIL SCREENING RESULTS	1	A
X	SOIL ANALYTICAL RESULTS	2	A
X	GROUNDWATER ANALYTICAL RESULTS *(monitoring wells)*	3	A
	GROUNDWATER ANALYTICAL RESULTS *(direct push)*		
X	GROUNDWATER ELEVATION DATA	4	A
X	MONITORING WELL CONSTRUCTION DATA	4	A
	SUPPLY WELL CONSTRUCTION DATA *(includes well owner name and address information)*		F
	OTHER:		
	OTHER:		
Remediation Tables (if applicable)			
	FREE PRODUCT RECOVERY TABLE		
	VES SYSTEM ANALYTICAL & PERFORMANCE SUMMARY		
	GROUNDWATER INFLUENT/EFFLUENT SUMMARY		
	SYSTEM PERFORMANCE SUMMARY		
	AIR SPARGING DATA		
	VES WELL DATA		
	REMEDIAL SYSTEM SUMMARY		
	OTHER:		

FIGURES

ATTACHED Assessment Figures		*FIGURE #*	*APPENDIX #*
X	SITE PLAN - *including current and/or former tank locations, piping/utilities, and extent of soil excavations (if applicable)*	2	A
X	SITE VICINITY AREA USE MAP - *including all potential off-site sources of contamination and water wells located within 500 feet*	3	A
____	POTABLE WELL LOCATION MAP - *A USGS quadrangle map illustrating all municipal/public and private supply wells located within 1/2 and 1/4 mile, respectively (respective radii illustrated)*	____	F
X	SOIL SAMPLING LOCATIONS - *including data collected during monitoring well installation*	4a	A
X	SOIL SCREENING DATA PLOTTED - *including data collected from monitoring well installations.* ***This map can include recommended soil boring locations***	4b	A
X	GROUNDWATER SAMPLING LOCATIONS - *including all monitoring well and direct push sampling locations*	5	A
X	GROUNDWATER CONTAMINANT CONCENTRATIONS - *Benzene, BTEX, MTBE & total Naphthalene concentrations plotted at each sampling point.* ***This map can include recommended well locations***	5	A
X	GROUNDWATER ELEVATION CONTOUR MAP(S) - *with flow interpretation for each impacted zone.* ***Note, previous flow interpretations should be submitted when they are not consistent with the current flow interpretation(s)***	6 thru ____	A
X	GROUNDWATER PLUME INTERPRETATION(S) - *with contaminant isoconcentration contours plotted for each significant contaminant of concern (or total VOAs)*	6 thru ____	A
____	ESTIMATED FREE PRODUCT PLUME AREA - *including thickness measured*	____	____
____	GEOLOGIC/HYDROLOGIC CROSS-SECTION - *including lithologic, well screen and depth to water fluctuation information*	____	____
____	PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS *(if not illustrated in another figure)*	____	____
____	OTHER: ____	____	____

FIGURES (continued)

ATTACHED	*FIGURE #*	*APPENDIX #*
Remediation Figures		
____ REMEDIAL SYSTEM SITE LAYOUT - *showing remedial system layout and locations of major system components (e.g., monitoring and recovery wells, system housing, effluent discharge, etc.)*	____	____
____ REMEDIATION SYSTEM SCHEMATIC - *showing treatment influent/effluent discharge, etc.*	____	____
____ OTHER: ____	____	____

MISC. ATTACHMENTS

ATTACHED	*APPENDIX #*
X LABORATORY ANALYTICAL REPORTS - *including COCs [form 62-770.900(2) is required for all sampling]*	B
X FIELD SAMPLING SHEETS - *form 62-770.900(3) is required for all groundwater sampling*	C
X WELL COMPLETION REPORTS AND BORING LOGS	C
____ CONTAMINATED SOIL AND/OR GW VOLUME AND CONTAMINANT MASS CALCULATIONS	____
____ COPIES OF OFF-SITE ACCESS AGREEMENTS	____
X COPY OF HEALTH AND SAFETY PLAN	D
X COPY OF APPLICABLE WORK ORDER *(or task assignment)*	G
X COPY OF APPLICABLE COST AUTHORIZATION FORMS *(verbal authorization forms)*	G
____ COPY OF DISPOSAL MANIFESTS - *to document IDW soil and/or groundwater disposal*	____
____ AQUIFER TEST CALCULATIONS	____
____ CHRONOLOGY OF FIELD WORK PERFORMED - *a list of what was performed and when performed*	____
____ COPY OF PREVIOUS REMEDIAL ACTION PLAN APPROVAL ORDER	____

MISC. ATTACHMENTS (continued)

ATTACHED		*APPENDIX #*
____	COPY OF PREVIOUS SITE (OR CONTAMINATION) ASSESSMENT REPORT APPROVAL LETTER	____
____	PROPOSAL FOR NEXT WORK ORDER OR TASK ASSIGNMENT	____
____	COPY OF ALL SUBCONTRACTOR OR MATERIALS INVOICES NEEDED FOR INVOICING	____
____	DRAFT CHANGE ORDER TEMPLATE NEEDED FOR INVOICING	____
____	OTHER: _____	____
____	OTHER: _____	____
X	ORIGINAL SIGNED AND SEALED PROFESSIONAL LAND SURVEY	
X	ELECTRONIC COPY OF PROFESSIONAL LAND SURVEY	
X	ELECTRONIC COPY OF TEMPLATE SITE ASSESSMENT REPORT	

SECTION I - Facility & Discharge Information/Initial Abatement

Site Name

☐ *Cluster Site*

Part _____ Facility FDEP# _____ Site Name: _____

I-A) Site Description

*Please provide a brief description of the site. What type of business or businesses (if any) are currently operating at the present/former facility? Describe where all former and current fuel tanks, lines and dispensers were/are located (indicating how this information was obtained). Describe any access constraints (utility conduits, canopies, land cover, etc.) which also might influence the placement of monitoring wells and/or the installation of soil borings. Indicate whether there are any owner issues or traffic concerns which might effect when the work can be performed? **Please indicate when the requested information is best illustrated on the site map.***

The site is currently a truck repair and sales center located on 3½ acres. The buildings are located on the south part of the property. The former tank field is located inside the two story metal frame warehouse building. Although the tanks were inside the building, there were no access constraints to install the soil borings or monitor wells. There is no available information regarding the location of the dispensers or fill ports.

Site map (Figure 2) illustrating all current & former tanks, lines and dispensers (including utilities, canopies, etc.) is included in Appendix A

Site Name: Eagle Towing

Facility ID #: 538623501

Date: May 21, 2003

I-B) Petroleum System/Tank History

List current and former UST's and/or AST's operated at site. Systems (PAST AND PRESENT) must be illustrated on Site Plan. This information should be a summary of the Department's STCM database, all tank closure reports (if applicable) and site owner & operator information.

ID#	AST or UST	Size (gallons)	Installation Date	Contents (unleaded gasoline/ diesel/etc.)	Status (active, removed or abandoned [in place])	Date Removed or Abandoned (if applicable)
1	UST	4000	Unknown	Unk/Not reported	Removed	6/92
2	UST	4000	Unknown	Unk/Not reported	Removed	6/92
3	UST	4000	Unknown	Unk/Not reported	Removed	6/92
4	UST	3000	Unknown	Unk/Not reported	Removed	6/92

-If above information is different then the Department's STCM database, please indicate source of updated information:

	YES	NO
Active Site? If yes, please indicate method, date and extent of latest tank and line tightness test (include copy of tightness test results). If tank tightness test results are not available, please explain why they are not necessary or indicate when next tightness test will be performed.		X

Copy of tightness test results included in Appendix _____

I-B) Petroleum System/Tank History (continued)

	YES	NO
Petroleum System Closure? *If yes, briefly describe type of petroleum system (AST, UST, distribution lines, etc.) and closure activities conducted.* ***Description not needed if copy of system tank closure report included.***	X	

Note: Section I-C should be used to document soil, groundwater or product removal performed during closures.

The four USTs were removed on 6/29/92. All soil OVAs were 0 ppm, until one of the tanks was punctured during the removal activities. After the tank was punctured, product flowed into the open tank pit.

A file review was performed at the Polk County Storage Tank Compliance Department. No information was discovered regarding the discharge and any source removal activities performed by the contractor. A closure report was not performed. This information was gathered from the Polk County Storage Tanks Department.

☐ Description of system closure activities included in attached tank closure report.

Copy of tank or system closure report (if applicable) included in Appendix _____

I-C) Release Information

	Discovery Date(s)	Program Type(s): *ATRP, EDI, PCPP, PLRIP or Non-program* *(please indicate if a non-program discharge has been combined with an eligible discharge)*
1st	6/29/92	ATRP
2nd		
3rd		
4th		
5th		
6th		

-Source description and release history that includes date(s) of release(s), cause(s) of release(s), where they occurred, type(s) of product released and volume(s) of release(s) [please explain how estimates were derived].

The discharge occurred during the tank closure. One of the four tanks was punctured and product flowed into the open tank pit. There is no available information regarding the type of product or the volume released.

- Suspected type(s) of product released:

☐ Leaded Gasoline ☐ Diesel/Kerosene ☐ Unleaded Gasoline
☐ Used Oil ☒ Unknown ☐ Other: _____

I-D) Initial Abatement/Source Removal

(Soil/Groundwater/Free Product removal during tank closures):

	YES	NO	N/A
Was soil contamination detected during petroleum system closure? If yes, please briefly describe extent of petroleum impacts and method(s) used to identify soil contamination.	X		

Soil contamination was detected after the tank was punctured. There was no available information regarding the extent of the contamination or the method used to identify soil contamination.

Site map (Figure _____) illustrating soil sampling locations is included in Appendix _____

Tabular summary of soil sampling results (Table _____) is included in Appendix _____

	YES	NO	N/A
Was contaminated soil removed? If yes, please describe the horizontal and vertical extents of the soil removal and indicate where contaminated soil might still exist.			X

There is no available information regarding the disposition of any contaminated soil.

Approximate depth to water at time of excavation (if known) _____ *feet bls*

Approximate amount removed _____ *tons* ☐ *yds*^{3} ☐ *Date:* _____

Disposal method: _____

I-D) Initial Abatement/Source Removal (continued)

	YES	NO	N/A
Was groundwater contamination detected during petroleum system closure? *If yes, please indicate whether wells were installed (including their construction details if possible) and indicate the maximum levels for petroleum contaminants of concern that were detected.*			X

There is no available information regarding groundwater testing during the closure.

Site map (Figure _____) illustrating groundwater sampling locations is included in Appendix _____

	YES	NO	N/A
Was contaminated water removed? *If yes, please identify removal location(s) and describe method of removal.*			X

Approximate volume removed: _____ *gallons* *Date(s):* _____

Disposal method: _____

I-D) Initial Abatement/Source Removal (continued)

	YES	NO	N/A
Was free product detected during petroleum system closure? If yes, please describe location(s) where product was observed and thickness observed.	X		

Free product was in the open tank field due to the ruptured tank.

Site map (Figure ____) illustrating locations where free product was observed is included in Appendix ____
Tabular summary of product thickness (Table ____) is included in Appendix ____

	YES	NO	N/A
Was free product removed? If yes, please identify removal location(s) and describe method of removal.			X

There is no available information regarding the removal of the free product.

Volume removed: Unknown *gallons* *Date(s):* Unknown
Disposal method: Unknown

SECTION II - Background Site Assessment Information

II-A) Risk & Receptor Evaluation

	YES	NO	Unknown
Are large (>100,000 gallons per day) public supply potable wells located within 1/2 mile? *If yes, please indicate distance(s) and direction(s) from site, if they are located downgradient and if the well(s) are screened deeper than contamination. If unknown, please explain.*	X		

One public supply well was identified using the Department of Health SUPER Act Survey and an area use survey. The well is located within ¼ mile of the facility to the west. The well is located upgradient of the facility.

Potable well survey map (Figure _____) is included in Appendix F
Potable well construction summary (Table _____) is included in Appendix F

	YES	NO	Unknown
Are water wells, including irrigation, industrial and all potable wells (<100,000 gallons per day), located within1/4 mile? *If yes, please identify the type(s) of wells, their distances and directions from the site, if they are located downgradient and if the well(s) are screened deeper than the contamination. If unknown, please explain.*	X		

Four water wells were identified within ¼ mile of the facility. Three of the wells are directly south of the facility and one well is to the northeast of the facility.

Water well survey map (Figure _____) is included in Appendix F
Water well construction summary (Table _____) is included in Appendix F

II-A) Risk & Receptor Evaluation (continued)

	YES	NO
Was an area use survey performed? If yes, please identify all water wells within the survey area (as identified in the database searches and walk through survey), all surface waters, any basements or other subsurface structures and any other receptors which might be impacted. Please indicate predominant property use in area and if there are any potential off-site contamination sources located within at least a one block radius of the contaminant plume.	X	

The area surrounding the facility is primarily light industrial and agricultural. Approximately ¼ mile north-northeast of the facility is Lake Caroline and approximately ¾ mile to the south-southwest is Lake Henry.

Area use survey map (Figure 3) is included in Appendix A

	YES	NO	Unknown
Are there any potable wells that have been impacted by contamination? If yes, please describe what was done to provide users of the contaminated potable well(s) an alternative drinking water supply. If unknown, please explain.			X

EBE was not authorized to test any potable wells within the vicinity of the facility. There was no data listed in the FDEP files indicating any impacted wells in the area.

II-A) Risk & Receptor Evaluation (continued)

	YES	NO	Unknown
Are there any surface water bodies which have been impacted by the contamination? If yes, please describe what (if anything) has been done to abate or prevent contamination impacting surface water. If unknown, please explain.		X	

	YES	NO
Are the Chapter 62-777, F.A.C., default Cleanup Target Levels for soil and groundwater the cleanup goals for this site? If no, please indicate if the cleanup goals of a pre-1999 version of Chapter 62-770, F.A.C. apply to this site (providing the reason why) or if alternative cleanup target levels have been or might be established for this site (outlining all engineering and/or institutional controls which already exist or will need to be implemented in the future).	X	

II-B) Previous Site Assessment

Information not described in Section I ("release information" or "initial abatement/source removal")

	YES	NO
Was site assessment work performed? *If yes, please indicate who performed it (with reason performed) and dates performed (see table below)*		X

List of all reports where site assessment information was originally submitted to the FDEP (oldest to most recent):

Date of report	Title of report	Company that prepared report

	YES	NO
Was soil assessment performed? *If yes, please briefly describe work performed and discuss results.* ***A description of the sampling results can be omitted if the data are included with current tabular summaries and soil plume maps (if applicable).***		X

☐ Results included in current soil OVA screening and soil analytical summary tables.

Site map (Figure _____) illustrating sampling locations is included in Appendix _____
Tabular summary of soil sampling results (Table _____) is included in Appendix _____

II-B) Previous Site Assessment (continued)

	YES	NO
Have monitoring wells been installed? *If yes, briefly identify where the wells were installed and describe their construction. Please indicate if the wells are still on-site.* ***The well descriptions and can be omitted if the information is included in a current tabular summaries.***		X

Site map (Figure _____) illustrating well locations is included in Appendix _____
Tabular summary of well construction details (Table _____) is included in Appendix _____

	YES	NO
Has direct push (geoprobe) groundwater grab-sampling been performed? *If yes, briefly identify the locations and depths where the samples were collected..* ***A description of the sample locations and results can be omitted if the information is included in current site maps and tabular summaries***		X

Site map (Figure _____) illustrating the groundwater sampling results is included in Appendix _____
Tabular summary of groundwater sampling results (Table _____) is included in Appendix _____

II-B) Previous Site Assessment (continued)

	YES	NO
Was groundwater sampling performed? *If yes, briefly describe what sampling was performed and summarize results.* ***A description of the sampling results can be omitted if the data are included with the current tabular summaries and groundwater plume maps (if applicable).***		X

☐ Results included in current groundwater analytical summary table.

Site map (Figure _____) illustrating sampling locations is included in Appendix _____
Tabular summary of groundwater results (Table _____) is included in Appendix _____

	YES	NO
Has free product been observed in wells or excavations (not including tank and/or system closures)? *If yes, please describe.* ***A description of the thickness measured can be omitted if the previous data are included with the current tabular summaries and illustrated on current free product plume maps (if applicable).***		X

Site map (Figure _____) illustrating locations where free product was observed is included in Appendix _____
Tabular summary of free product thickness (Table _____) is included in Appendix _____

II-B) Previous Site Assessment (continued)

Has the previous site assessment been approved by the FDEP (was a CAR or SAR approval letter issued?)

YES [ ] NO [X]

Date site assessment (or contamination assessment) was approved: _____

II-C) Previous Remediation

Has a Remedial Action Plan been prepared? *If yes, please briefly describe the remedial strategy.* ***The description of the remedial strategy can be omitted if the RAP was implemented (this item will be addressed in the active remediation section that follows).***

YES [ ] NO [X]

Date of RAP: _____ Prepared by: _____

[ ] Remedial Action Plan approved by FDEP. Date of RAP approval order _____

Was soil excavation (not associated with a system closure) performed? *If yes, please briefly describe work performed and discuss results.*

YES [ ] NO [X]

The description of the source removal can be omitted if already discussed in the initial abatement section.

Approximate depth to water at time of excavation (if known) _____ *feet*

Site map (Figure_____) illustrating sampling locations and extent of excavation(s) is included in Appendix _____

Tabular summary of soil sampling results (Table_____) is included in Appendix _____

II-C) Previous Remediation (continued)

Has active remediation been performed? *If yes, please indicate dates performed (each applicable technology), evaluate previous system effectiveness and indicate if any previous equipment is still available for cleanup.*	YES	NO
		X

Applicable RA summary tables are included in Appendix _____

Identify type(s) of active remediation previously performed:

- ☐ Air Sparging & Vapor Extraction
- ☐ Groundwater Recovery (pump & treat)
- ☐ Multiphase Extraction (w/dual phase)
- ☐ Limited scope well over-development
- ☐ Excavation
- ☐ Enhanced Bio-Remediation (ORC, etc.)
- ☐ Free Product Recovery
- ☐ Other: _____

SECTION III - Recent Site Assessment Activities

III-A) Soil Investigation

Was soil (vadose zone and smear zone) investigated? *If yes, please provide a brief discussion of soil sampling methodology, including the method(s) used to collect the laboratory samples. If no, please explain.*	YES	NO
	X	

On December 12, 2002, EBE personnel installed nine soil borings (B-1 through B-9) at the site. A licensed professional driller (Aquifer Drilling & Testing, Inc.) installed the borings using direct push technology under the supervision of an EBE geologist. The soil boring locations are shown on Figure 4. The depth to water was approximately 4-5 ft-bls. Soil samples were collected at two-foot intervals from land surface to 9 ft-bls into the water table. Soil samples for B-1 were collected at two-foot intervals from land surface to 16 ft-bls into the water table. On February 11, 2003, EBE personnel oversaw the installation of four monitoring wells. The wells were installed by a licensed professional driller (Aquifer Drilling & Testing, Inc.). Soil samples were collected to the total depth of the wells (17 ft-bls).

All collected soil samples were screened for the presence of petroleum hydrocarbons using a Foxboro 128™ organic vapor analyzer equipped with a flame ionization detector (OVA/FID) in accordance with Chapter 62-770 of the Florida Administrative Code (F.A.C.). The headspace analyses were performed with and without a charcoal filter to determine methane and total hydrocarbon concentrations, respectively. Petroleum hydrocarbons were detected in the soil above the water table. The maximum OVA response above the water table was 60 ppm @ boring B-1 at 2 ft-bls. The maximum OVA/FID response in the water table was 550 ppm at location MW-3 at 8 ft-bls.

The soil sample collected for laboratory analysis was collected from B-3 at 4 ft-bls, B-6 at 3 ft-bls, and B-7 at 3 ft-bls.

Date of last soil screening event (OVA data) with or without laboratory sampling: 2/11/03

Site map (Figure 4) illustrating sampling locations is included in Appendix A

Tabular summary of soil screening results (Table 1) is included in Appendix A

Tabular summary of laboratory soil sampling results (Table 2) is included in Appendix A

Soil sampling logs (for laboratory samples) are included in Appendix _____

Soil samples (previous sampling events included) have been collected and analyzed for:

Required for all suspected GAG & KAG contaminated sites.

[X] BTEX/MTBE (*low//high*) [X] PAHs [X] TRPHs

Required for all sites where Used Oil contamination is suspected.

[ ] Priority Pollutant Volatile Organics & Extractable Organics [ ] As, Cd, Cr, Pb [ ] TRPHs

III-A) Soil Investigation (continued)

	YES	NO	N/A
Was soil Investigative Derived Waste (IDW) generated?		X	

If yes, please describe method used for identifying soil needing disposal:

Volume of contaminated soil disposed of: _____ ☐ *drums* ☐ *cu. yds.*

Disposal method: _____

[soil results]

	YES	NO	N/A
Was soil contamination above applicable Cleanup Target Levels identified above the water table?		X	

If yes, identify where concentrations above CTLs were detected, depths encountered and corresponding OVA readings. If no, please indicate whether laboratory results agree with OVA readings (if they do not agree, please discuss significance of OVA screening data and/or reliability of laboratory results). If "N/A", please explain.

Approximate volume of vadose zone soil contamination: _____ *cu. yds.*

Site map (Figure _____) illustrating extent of soil contamination is included in Appendix _____

Soil concentration summary (Table 2) is included in Appendix A

Soil sampling logs (for laboratory samples) are included in Appendix _____

III-A) Soil Investigation (continued)

	YES	NO	N/A
Was vadose zone soil contamination delineated? If no, please describe where additional borings should be located (indicating proposed depths of investigations). If "N/A", please explain.	X		

Site map (Figure _____) illustrating proposed sampling locations is included in Appendix _____

	YES	NO	N/A
Has a smear zone been identified? Definition: The "smear zone" is the soil contamination located within the zone of water table fluctuation (it has been described as a "secondary source" of contamination). *If yes, please discuss the horizontal and vertical contaminant mass distribution in the smear zone. If no, please describe what additional information is needed (soil borings, well data, etc.). If "N/A", please explain.*		X	

Although EBE detected an OVA response of 200 ppm from one sample collected from B-4 at 6 ft-bls. The sample did not contain a petroleum odor and is suspected to be natural organics in the soil.

Site map (Figure _____) illustrating proposed sampling locations is included in Appendix _____

III-B) Groundwater Investigation

[monitoring wells/direct push]

	YES	NO
*Were monitoring wells installed (or abandoned)? If yes, briefly identify which wells were installed/abandoned and describe their construction. **The well locations and construction details can be omitted if the information is included in current site maps and tabular summaries.***	X	

Four monitoring wells (MW-1R, MW-2, MW-3, and MW-4) were installed on February 11, 2003. The well locations are depicted in Figure 2, Appendix A, and the construction details are listed in Table 4, Appendix A.

Monitoring Well MW-1 was discovered on December 5, 2002. EBE personnel gauged the well for total depth (5.00 ft-bls) and depth to water (4.40 ft-bls). EBE recommends abandoning this well immediately.

Site map (Figure 2) illustrating the well locations is included in Appendix A
Tabular summary of well construction details (Table 4) is included in Appendix A
Monitoring well completion reports are included in Appendix C

	YES	NO
*Was direct push (geoprobe) groundwater grab-sampling performed? If yes, briefly identify the locations and depths where the samples were collected.. **A description of the sample locations and results can be omitted if the information is included in current site maps and tabular summaries***		X

Site map (Figure _____) illustrating the groundwater sampling results is included in Appendix _____
Tabular summary of groundwater sampling results (Table _____) is included in Appendix _____

III-B) Groundwater Investigation (continued)

[groundwater sampling]

	YES	NO
*Was groundwater sampling performed? If yes, please provide a brief discussion of groundwater purging and sampling methodology and identify the wells that were sampled. If no, please explain. **A description of the sampling results can be omitted if the information is illustrated in current contaminant plume maps and tabular summaries***	X	

On February 18, 2003 EBE personnel mobilized to the site to collect groundwater samples from the newly installed monitoring wells (MW-1R, MW-2, MW-3, and MW-4). The samples were collected in accordance with DEP SOP 001-01, dated January 1, 2002. The groundwater samples collected from MW-2, 3, and 4 were analyzed using EPA Methods 8260 (BTEX/MTBE), 8310, and FL-PRO.

The groundwater sample collected from monitoring well MW-1R was analyzed using EPA method 8260 (full scan), 8310, and FL-PRO. No analytes of interest exceeded the Groundwater Cleanup Target Levels listed in Chapter 62-777, F.A.C.

If groundwater sampling not performed, indicate date of last sampling event (if applicable): _____

Indicate wells sampled on that date (if applicable): _____

Site map (Figure 3) illustrating the groundwater sampling results is included in Appendix A

Tabular summary of groundwater sampling results (Table 3) is included in Appendix A

Groundwater field sampling logs are included in Appendix C

Groundwater samples (previous sampling events included) have been collected and analyzed for:

Required for all suspected GAG/KAG sites.

[X] BTEX/MTBE [X] PAHs [X] TRPHs

Required for all contaminated GAG/KAG sites.

[ ] EDB [ ] Lead (Pb) [ ] VOHs

Required for all suspected used oil (or unknown fuel type) contaminated sites.

[ ] Priority Pollutant Volatile Organics & Extractable Organics [ ] As, Cd, Cr, Pb [ ] TRPHs

III-B) Groundwater Investigation (continued)

	YES	NO	N/A
Was groundwater IDW generated? If yes, please explain why disposal on-site was not possible.		X	

Volume of contaminated groundwater disposed of: _____ ☐ *drums* ☐ *gallons*

[groundwater results]

	YES	NO	N/A
Was groundwater contamination identified above the applicable Cleanup Target Levels? If yes, indicate locations where highest concentrations detected with depths encountered. If "N/A", please explain.		X	

Approximate volume of contaminated groundwater: _____ *gallons*

Plume maps [Figure(s) _____] illustrating extent of groundwater contamination is/are included in Appendix _____

III-B) Groundwater Investigation (continued)

	YES	NO	N/A
Has horizontal delineation been completed in the surficial aquifer? If no, please describe where additional sampling is required (indicating wells and needed analyses) and/or additional monitoring wells should be installed (indicating proposed screened intervals for each). If "N/A", please explain.	X		

Site map (Figure _____) illustrating proposed monitoring well locations is included in Appendix _____

	YES	NO	N/A
Has vertical delineation been completed in the plume area? If no, please describe where additional sampling is required (indicating needed analyses) and/or identify locations where vertical extent well(s) should be installed (indicating proposed screened intervals, single or double cased and length of surface casings). If "N/A", please explain.			X

A vertical extent well was not installed because contaminants were not detected in the shallow wells.

Site map (Figure _____) illustrating proposed vertical extent well locations is included in Appendix _____

III-B) Groundwater Investigation (continued)

	YES	NO	Unknown
Is the lower aquifer(s) contaminated? If yes, please describe location and estimated depth of contamination. If unknown, please explain.			X

There are no vertical extent wells at the site therefore it is not known if the lower aquifers are contaminated.

Cross-section (Figure _____) illustrating vertical extent of contamination is included in Appendix _____

	YES	NO
Were natural attenuation parameter data collected? If yes, please specify which parameters were collected (and where collected) and provide interpretation of results.		X

Site map (Figure _____) illustrating natural attenuation parameter data is included in Appendix _____

Tabular summary of parameter sampling results (Table _____) is included in Appendix _____

III-B) Groundwater Investigation (continued)

[impacted receptors]

	YES	NO	Unknown
Have any supply wells or surface waters been impacted? *If yes, please indicate concentration(s) of water sample(s) taken and the wells/surface water body/bodies impacted. If unknown, please explain.*			X

EBE was not authorized to collect samples from supply wells or surface waters.

	YES	NO	Unknown
Is surface water and/or sediment sampling required? *If yes, please indicate where samples should be collected, and the proposed analyses.* *[Note: surface water sampling results should be summarized with the groundwater analytical results and sediment sampling results should be summarized with the soil analytical results.] If unknown, please explain.*			X

It is unknown if surface water and/or sediments have been impacted by contamination from the Eagle Towing Facility, however since impacts were not detected on site it is unlikely that impacts have traveled off-site.

Site map (Figure _____) illustrating sampling locations is included in Appendix _____

	YES	NO	Unknown
Are there any potable wells that need to be sampled? *If yes, please indicate wells to be sampled, and the proposed analyses. If unknown, please explain.*		X	

Site map (Figure _____) illustrating potable well locations is included in Appendix _____

III-C) Free Product Investigation

Is free product present? *If yes, please indicate where product has been observed and its thickness, describe the product (color, odor, etc.) and estimate the type and age of the product.*

YES	NO
	X

Site map (Figure _____) illustrating free product thickness at well locations is included in Appendix _____
Tabular summary of free product thickness (Table _____) is included in Appendix _____

Has the extent of free product been delineated? *If no, please describe where additional wells or piezometers should be located.*

YES	NO	N/A
		X

Site map (Figure _____) illustrating locations of proposed piezometers or wells is included in Appendix _____

Is free product recovery ongoing? *If yes, please indicate the method and frequency of removal and summarize recovery efforts to date.*

YES	NO	N/A
		X

Tabular summary of product recovery amounts (Table _____) is included in Appendix _____

If free product recovery is not ongoing, are free product recovery efforts recommended? *If yes, please indicate the proposed method and frequency of removal. If no, please explain why product removal is not recommended.*

YES	NO	N/A
		X

Site map (Figure _____) illustrating locations of proposed additional piezometers and/or wells for free product recovery is included in Appendix _____

III-D) Comments

Any issues or concerns not addressed in previous questions which might help better describe the degree and extent of the contamination at this site.

The data collected during the soil boring program and monitoring well installation program suggest that no significant petroleum impacts remain on site. EBE detected several elevated OVA responses from the soil, however no significant petroleum odors were detected from the sample, and laboratory analysis indicates that both the soil and groundwater are below respective cleanup target levels.

SECTION IV - Impacted Media

IV-A) Lithologic Summary

The impacted aquifer(s) can be best characterized by the following description (predominantly):
Select One

[X] Sands [SW, SP, SM]	[ ] Sandy Clay, Clayey Sand or Silty Clays [SC, ML, CL]	[ ] Clays [CH]
[ ] Intermingled Sands and Clays	[ ] Intermingled Sands, Clays and Limestone	[ ] Limestone [LS]

Please describe a typical soil column and all defined aquifers (perched/upper/lower). This should include a brief description of the site lithology (using the Unified Soil Classification System), and all other geologic and/or hydrogeologic characteristics of the area which might influence migration or transport of the contamination.

Based on EBE's assessment activities the lithology from the surface to a depth of 16 ft-bls is a silty, fine to medium-grained sand, brown, to orange and white in color.

Lithologic cross-section (Figure _____) is included in Appendix _____

Is the lithologic information obtained to date sufficient to characterize the impacted media? *If no, please explain [indicating area(s) where additional lithologic data are needed].* ***A map illustrating where the additional borings/wells need to be located can be omitted if those locations have been identified in the soil and/or groundwater sections.***

YES	NO
[X]	[ ]

Site map illustrating proposed lithologic boring locations (Figure _____) is included in Appendix _____

IV-B) Hydrologic Summary

Have all the monitoring well tops-of-casings been surveyed? YES [X] NO [ ]
If no, please describe why this information has not been obtained. [Note, the TOC survey does not have to be performed by a Professional Land Surveyor. However, if the monitoring wells are installed prior to the survey, then the TOCs should be included in the Professional Land Survey.]

Was a professional land survey performed? YES [X] NO [ ]
If yes, please indicate date of survey, whether it was saved on disk (indicating type of program), and who performed it. Also indicate which monitoring wells (if any) were included in the survey. [Note: the site map must be based on the professional land survey.]

The professional land survey was performed by Ridge Surveying on May 9, 2003. An electronic copy of the survey is included with the TSAR.

Is original signed and sealed professional land survey included? yes [X] no [ ]

Is copy of electronic version of land survey (labeled with ID #, site name & report date) included? yes [X] no [ ]

Have depth to groundwater and groundwater flow direction in the upper zone aquifer been determined? YES [ ] NO [X]
If yes, please indicate average depth to water and fluctuation range (low/high stand) in all impacted areas of the site. If no, please explain.

The groundwater contour cannot be accurately calculated based on the available data. EBE does not recommend pursuing this matter due to the negligible petroleum impacts discovered in the soil and groundwater.

There is insufficient data to determine the historical fluctuation range of the depth to water.

Site map(s) [Figure(s) 6] illustrating upper zone water table elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix A

Tabular summary of all groundwater elevation data (Table 4) is included in Appendix A

IV-B) Hydrologic Summary (continued)

	YES	NO
Have depth to groundwater and groundwater flow direction(s) in lower and/or intermediate aquifer(s) been determined?		X

If yes, please indicate average depth to water and fluctuation range in vertical extent wells (low/high stand). If no, please explain.

There are no vertical extent monitoring wells at the site therefore the groundwater flow direction in the lower and/or intermediate aquifers cannot be determined.

Site map [Figure(s)_____] illustrating lower/intermediate zone water table elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix _____

	YES	NO
Are perched aquifer conditions suspected? If yes, please indicate estimated depth and thickness of perched zone and whether perched zone extends across entire site.		X

Site map (Figure _____) illustrating estimated lateral extent of perched zone (when it does not extend across entire site), water level elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix _____

	YES	NO	Unknown
Is the site tidally influenced? If yes, please indicate tidal fluctuation range and whether groundwater flow direction might change during tidal cycle. If unknown, please indicate whether this issue is important at this site (outlining data collection plan if needed).		X	

Site map(s) [Figure(s)_____] illustrating changes in flow direction is/are included in Appendix _____

IV-B) Hydrologic Summary (continued)

	YES	NO	Unknown
Is groundwater flow in the impacted aquifers being influenced by pumping from nearby water supply wells?			X

If yes, please explain how this was determined and indicate which water well(s) are influencing groundwater flow. If unknown, please indicate whether this issue is important at this site (outlining data collection plan if needed).

Site map(s) [Figure(s) _____] illustrating changes in flow direction due to pumping from nearly water supply wells is/are included in Appendix _____

	YES	NO	N/A
Has the average hydraulic gradient (ft/ft) been determined?		X	

If yes, please indicate range of values (if applicable) and whether gradient is uniform across the site. Is there evidence of a vertical gradient? If "N/A", please explain.

A hydraulic gradient cannot be calculated because the groundwater flow direction cannot be calculated.

Hydraulic gradient data and calculations included in Appendix G

	YES	NO
Have any aquifer tests been performed at the subject site?		X

If yes, please describe test method (slug test, pumping test, etc.), which wells were used, date performed and summarize test results [transmissivity, hydraulic conductivity, rate of groundwater flow, pumping rates (gpm), etc.]

Aquifer test data and calculations included in Appendix _____

TEMPLATE SITE ASSESSMENT REPORT

Site Name: Eagle Towing

Facility ID #: 538623501

Date: May 21, 2003

SECTION V - Post Assessment Summary & Recommendations

Filled out AFTER site assessment has been completed

V-A) Site Assessment Summary

SOIL INVESTIGATION DATA

Is there vadose zone soil contamination? Yes [ ] No [X]

Soil Screening Results — Were SPLP or TCLP extractions & analyses performed? Yes [ ] No [X]

[X] FID [ ] PID [ ] Other _____ Highest OVA concentration (ppm) >450

Sample #: MW-3 Depth (ft): 8 Date Sampled 2/11/03

Above SCTLs	Contaminants of Concern	Conc. (mg/kg) or if SPLP (ug/l)	Sample #	Depth (ft)	Date Sampled	Leachability SCTL (mg/kg)	Exposure SCTL (mg/kg)
[ ]	Benzene					0.007	1.1
[ ]	Ethylbenzene					0.6	1,100
[ ]	Toluene					0.5	380
[ ]	Total Xylenes					0.2	5,900
[ ]	MTBE					0.2	3,200
[ ]	TRPH					340	340
[ ]	Naphthalene					1.7	40
[ ]	Other [_____]						
[ ]	Other [_____]						

GROUNDWATER INVESTIGATION DATA

Is there groundwater contamination? Yes [ ] No [X]

Maximum Contaminant Levels (latest sampling data prior to RA implementation):

Above CTLs	Contaminants of Concern	Conc.(ug/l)	Well #	Date Sampled	GCTL (ug/L)
[ ]	Benzene				1
[ ]	Toluene				30
[ ]	Ethylbenzene				40
[ ]	Total Xylenes				20
	Total VOAs (BTEX)				n/a
[ ]	MTBE				50
[ ]	EDB				0.02
[ ]	TRPHs				5000
[ ]	Lead (total)	10	MW-1R	2/18/03	15
[ ]	Naphthalene				20
	Total Naphthalenes				n/a
	Other PAHs				n/a
[ ]	Other [_____]				
[ ]	Other [_____]				

Free product present? Yes [ ] No [X] Where? _____ Maximum thickness (ft) _____

Estimated depth of contamination (ft) _____ Lower aquifer(s) contaminated? Yes [ ] No [ ]

GROUNDWATER ELEVATION DATA

Depth to groundwater in upper zone water-table wells (ft): 2.77 to 3.72 Average (ft): 3.31

Depth to groundwater in lower zone vertical extent wells (ft): NA to _____ Average (ft): _____

Observed maximum range of upper zone fluctuation (ft): NA Tidally influenced? Yes [ ] No [X]

V-A) Site Assessment Summary (continued)

	YES	NO
Are all the documents submitted to date adequate to meet the site assessment requirements of Rule 62-770.600, Florida Administrative Code (F.A.C.)?	X	

V-B) Recommendations

	YES	NO
Is No Further Action (NFA) without conditions recommended? If yes, please provide reasons NFA is appropriate.	X	

All soil and groundwater collected for laboratory analysis yielded results below state Target Levels.

	YES	NO
Is No Further Action (NFA) with conditions recommended? If yes, please provide reasons conditional NFA is appropriate and describe the conditions [the needed institutional or engineering controls] *pursuant to Rule 62-770.680(2), F.A.C.*		X

V-B) Recommendations (continued)

	YES	NO
Is Remediation by Natural Attenuation (RNA) recommended for any portion of the groundwater plume? *If yes, please provide reasons RNA is appropriate and outline proposed monitoring plan. Is/are the temporary point(s) of compliance [the downgradient well(s)] off-site?*		X

Monitoring Wells: _____
Contaminants: _____ Frequency: _____ Duration: _____

	YES	NO
Is Source Removal (soil or free product) recommended? *If yes, please outline proposed method and extent of source removal (is dewatering needed?)*		X

Site map (Figure _____) illustrating proposed extent of excavation is included in Appendix _____

V-B) Recommendations (continued)

	YES	NO
Is a Limited Scope Remedial Action Plan (LSRAP) needed?		X

If yes, please provide reasons for performing limited remediation and briefly outline plan for remediation.

Site map (Figure_____) illustrating locations of any proposed recovery wells (if applicable) is included in Appendix _____

If RAP already approved for site...

	YES	NO
Is a Remedial Action Modification Plan (RAMP) needed?		X

If yes, please provide reasons for continuing approved RA at the site and indicate proposed modifications.

V-B) Recommendations (continued)

Is a Remedial Action Plan (RAP) needed? *If yes, please provide reasons for performing in-situ remediation at the site and indicate which remediation technology or combination of technologies is recommended or should be evaluated (with reasons for recommendation).*

YES	NO
	X

Is a Pilot Test recommended? *If yes, please indicate recommended remedial technology and outline specifics of proposed pilot test. Details include area of site where test is planned, recovery/air sparging well construction details, which wells will be used to evaluate test, proposed recovery and/or pumping and/or blowing rates and plan for IDW disposal (if applicable).*

YES	NO
	X

The FDEP should be consulted before preparing a pilot test outline.

Site map (Figure_____) illustrating pilot test layout is included in Appendix _____

V-C) Comments

Any issues or concerns not addressed in previous questions which might influence remediation decisions at this site.

SECTION VI - Program Issues
(for state funded cleanup sites)

List of all consultant company personnel (not subcontractor employees) that participated in the field work or helped to prepare the report:

Name	Duties	Dates On-Site (if applicable)		
F. Cowan	Direct Push Sampling	12/12/02	thru	12/12/02
M. DelMasto	Direct Push Sampling	12/12/02	thru	12/12/02
M. DelMasto	Well Install, GW sampling, report prep	2/11/03	thru	2/18/03
S. Greer	Well Install, GW sampling	2/11/03	thru	2/18/03
F. Cowan	Report prep		thru	
R. Sheridan, P.G.	PG Review		thru	
			thru	
			thru	
			thru	

VI-A) Work Plan and Cost Summary

Briefly summarize initial work plan.

EEVENT 1: prepare a HASP, conduct file review and area use survey, perform up to 2 days of geoprobe, install three piezometers, and collect soil samples.

EVENT 2: Install 4 well to 25 ft-bls, collect groundwater samples.

Copy of original work order or task assignment is included in appendix _____

Was any extra work authorized? *If yes, please summarize extra work planned for site.*

YES ☐ NO ☐

Copies of all authorization forms are included in Appendix _____

VI-A) Work Plan and Cost Summary (continued)

Was any planned work not performed? *If yes, please describe work not performed with reasons why not performed.*

YES [X] NO [ ]

One soil boring was scheduled to be installed to 20 ft-bls, however the site lithology was so tight the rig could not penetrate beyond 16 ft-bls. The third event was not performed.

Are there any changes in cost from original work order or task assignment? *If yes, please describe the changes and cost adjustments that will be required for invoicing.*

YES [X] NO [ ]

A VCO was approved to cover the costs associated with the PLS.

Copies of all needed subcontractor and/or materials invoices and draft change order cost template included in Appendix _____

VI-B) Next Proposal

Is detailed cost proposal for next scope of work included?
If no, please explain why proposal not provided:

YES [ ] NO [X]

Proposal included in Appendix _____

TECHNICAL REPORT COVERSHEET