

# **PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT**

**WEST MAIN STREET PROPERTY  
102/120 WEST MAIN STREET  
LAKE BUTLER, FLORIDA**

**USEPA COOPERATIVE AGREEMENT NO. BF-02D29322-0  
ACRES NO. 250833**

**PPM PROJECT NO. 20165101-TASK 25**

**July 15, 2025**



**PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT**

**AT**

**WEST MAIN STREET PROPERTY  
102/120 WEST MAIN STREET  
LAKE BUTLER, FLORIDA 32054  
ACRES NO. 250833**



**PREPARED FOR:**

**UNION COUNTY  
15 NE 1<sup>ST</sup> STREET  
LAKE BUTLER, FLORIDA 32045**

**USEPA COOPERATIVE AGREEMENT NO. BF-02D29322-0  
PPM PROJECT NO. 20165101-TASK 25**

**JULY 15, 2025**

**PREPARED BY:**

*Kang Wu*

**KANG WU, E.I.T.  
STAFF ENGINEER**

**REVIEWED BY:**

*Brian A. Richards*

**BRIAN RICHARDS, P.G.  
DISTRICT MANAGER**

**PPM CONSULTANTS, INC.  
750 NORTHLAKE BLVD, SUITE 1012  
ATLAMONTE SPRINGS, FLORIDA 32701  
(407) 240-1127**

# TABLE OF CONTENTS

	<u>PAGE</u>
<b>STATEMENT OF PROFESSIONAL REVIEW .....</b>	<b>III</b>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 Recognized Environmental Conditions .....	1
1.2 Scope of Work.....	2
<b>2.0 SITE DESCRIPTION / HISTORY .....</b>	<b>2</b>
<b>3.0 FIELD METHODOLOGY .....</b>	<b>4</b>
3.1 Monitoring Well Development .....	4
3.2 Monitoring Well Survey .....	4
3.3 Groundwater Sampling .....	5
<b>4.0 ASSESSMENT RESULTS .....</b>	<b>5</b>
4.1 Groundwater Depth to Water .....	5
4.2 Groundwater Samples.....	5
<b>5.0 SUMMARY .....</b>	<b>6</b>
<b>6.0 CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>6</b>

## **TABLE OF CONTENTS (Continued)**

### **FIGURES**

Figure 1	Site Location Map
Figure 2	Site / Area Map
Figure 3	Groundwater Flow Map

### **TABLES**

Table 1	Groundwater Depth to Water
Table 2	Groundwater Analytical Summary

### **APPENDICES**

Appendix A	Field Documentation
Appendix B	Laboratory Analytical Reports
Appendix C	Historical Documents

**STATEMENT OF PROFESSIONAL REVIEW**

**PROFESSIONAL GEOLOGIST LICENSED IN THE STATE OF FLORIDA**

I hereby certify that the Phase II Environmental Site Assessment, dated July 14, 2025, for Union County Florida EPA Cooperative Agreement No. BF-02D29322-0 for West Main Street Property located at the 102/120 West Main Street, Lake Butler, Union County, Florida, 32054, USEPA ACRES ID 250833 was prepared under my direct supervision and is in conformance with good professional practices pursuant to Chapter 492 of the Florida Statutes.



*Brian A. Richards*

---

**Brian A. Richards**  
**Professional Geologist**  
**State of Florida**  
**License No. PG1119**

PPM Consultants, Inc., 750 S. Northlake Boulevard, Suite 1012,  
Altamonte Springs, Florida 32701

## 1.0 INTRODUCTION

PPM Consultants, Inc. (PPM) was retained by Union County, Florida to conduct a Phase II Environmental Site Assessment (ESA) on the West Main Street Property located at the 102/120 West Main Street in Lake Butler, Florida. The work was conducted under the United States Environmental Protection Agency's (USEPA) Cooperative Agreement No. BF-02D29322-0.

The purpose of the assessment was to evaluate whether soil and groundwater at the site contain regulated constituents of concern (COC). The chemicals of potential concern are associated with gasoline contamination in the groundwater resulting from gasoline leaks on the subject property or adjoining properties as described in PPM's December 12, 2023, Phase I ESA.

This report describes field methodology, presents analytical results, and provides conclusions from the subsurface investigation of the site. The **Site Location Map** is provided as **Figure 1**, in **Figures**. A **Site / Area Map** is provided as **Figure 2**. Groundwater flow direction map is provided as **Figure 3**. **Field Documentations** are included in **Appendix A**. **Laboratory Analytical Reports** are included in **Appendix B**. **Historical Documents** are included in **Appendix C**.

### 1.1 RECOGNIZED ENVIRONMENTAL CONDITIONS

PPM identified the following recognized environmental condition (REC) during the Phase I ESA completed on December 12, 2023.

- **Groundwater contamination area in the surrounding area.** Three leaking underground storage (LUST) facilities (Shadd's Facility/Shell, Handi-Way Food Store/Union Beverage, and Cargo Station/Hungry Howie's) are located between 150 and 280 feet northwest of the subject property. Leaked gasoline from these facilities created a comingled plume of petroleum contamination in groundwater in the surrounding area. Two other LUST facilities (Shell and Biellings Tire) formerly located approximately 145 and 310 feet to the north of the subject property, respectively, were also found to be additional contributing sources to the groundwater contamination. The media of concern is groundwater and soil vapor. The groundwater contamination in the surrounding area is considered to represent a REC.

## 1.2 SCOPE OF WORK

Based on the findings of the Phase I ESA, PPM developed a Site-Specific Quality Assurance Project Plan (SSQAPP) that was presented to Union County and the USEPA on October 15, 2024. PPM conducted the Phase II ESA fieldwork on May 14 and May 21, 2025, to evaluate groundwater conditions at the site. Existing monitoring wells (MW-34S through MW-37S, MW-A, MW-B and MW-C) were developed on May 14, 2025, and purged and sampled on May 21, 2025.

The following scope of work was completed for the Phase II ESA of the subject property:

- Preparation of a Health and Safety Plan (HASP).
- Collection of groundwater samples from the seven (7) monitoring wells for laboratory analysis of volatile organic compounds (VOC) per USEPA Method 8260B, semi-volatile organic compounds (SVOC) per USEPA Method 8270E (GC/MS), polycyclic aromatic hydrocarbons (PAH) by USEPA Method 8270E SIM, Total Recoverable Petroleum Hydrocarbons (TRPH) per the Florida Petroleum Residual Organic (FLPRO) Method and Lead per USEPA Method 6010.
- Preparation of this report presenting the scope of work, site background, investigative methodology, findings, and conclusions from the Phase II ESA field activities.

## 2.0 SITE DESCRIPTION / HISTORY

The West Main Street Property is located at 102/120 West Main Street in Lake Butler, Florida. The subject property covers approximately 0.241 acres of land.

Historical fire insurance maps indicate the subject property was developed with a dilapidated structure in 1913 and a post office in 1920. The post office remained on the subject property until at least 1949. Historical and regulatory records indicate the subject property was occupied by a retail petroleum station from 1957 to 1989 and later occupied by an automobile repair facility until 2022. The subject property has consisted of vacant land since early 2023.

The site is located at 30° 01' 22" North latitude and 82° 20' 21" West longitude. The site location is depicted in **Figure 1, Site Location Map**. Site and area features are shown in **Figure 2, Site / Area Map**.

Properties surrounding the subject property consist of government or commercial properties. The site is bordered to the north by West Main Street, followed by Union County Sheriff's Office; to the northeast by West Main Street followed by the Union County Courthouse Complex; to the east by Union 76/Johns Property; to the southeast by SW 1st Avenue, followed by a residence; to the south by Windstream (internet provider); to the southwest by a retail/office structure with Pet Grooming and Hair Styling businesses; to the west by B Squared Baked Goods and More; and to the northwest by West Main Street, followed by Union County Supervisor of Elections.

PPM also reviewed the following historical documents regarding the Lake Butler Contamination Cluster, which are provided in **Appendix C**:

- *Contamination Assessment Report (CAR) Response to Comments, prepared by Asea Brown Boveri (ABB) for FDEP, dated March 4, 1993.*
- *Memo-Request to transfer site management of two Consent Orders To State Cleanup, prepared by FDEP for FDEP, dated April 19, 2010.*
- *Remedial Action Plan (RAP) Modification , prepared by WSP USA Environmental & Infrastructure, Inc (WSP) for FDEP, dated March 12, 2024.*

The Lake Butler Contamination Cluster consisted of 5 gasoline fueling facilities: Union 76/Sam John (Facility ID: 63/8519168), Union County Property (Facility ID: 83/8517417), Coastal Mart 405 (Facility ID: 63/8517149), Welch's (Facility ID: 63/8734032) and Shadd's Property (Facility ID: 63/9807182). Welch's was located on the subject property, and no discharge listings were identified for the facility. The remaining 4 facilities are located in the vicinity surrounding the subject property.

Because of the proximity of the 5 facilities, comingled groundwater contamination plumes, and financial reasons, the Lake Butler Contamination Cluster was treated as one site under the FDEP Petroleum Restoration Program (PRP) program. According to Figure 13 in the *CAR Response to Comments* and Figures 4A through 4D in the *Memo-Request to transfer site management of two Consent Orders To State Cleanup*, the plume extended beneath the subject property as of January 1993, but by April 2010, the subject property no longer showed any contamination. Therefore, FDEP decided to separate the Lake Butler Contamination Cluster into three cleanup areas in April 2010.

Figure 7 of the *Remedial Action Plan (RAP) Modification*, dated March 12, 2024 for Union 76/Sam John, indicated 0.4 feet of free product was presented in MW-71S which is located directly east of, and adjacent to, the subject site. The piping and piping trench for the former cluster site remediation system runs along SW 1<sup>st</sup> avenue within a few feet of the monitoring wells MW-A and MW-B which now contain 0.92 feet of free product and 0.33 feet of free product, respectively.

### 3.0 FIELD METHODOLOGY

On May 14, 2025, PPM mobilized to the site and developed the seven (7) monitoring wells (MW-34S through MW-37S, MW-A, MW-B and MW-C) and on May 21, 2025, PPM mobilized to the site and purged and sampled the five (5) monitoring wells (MW-34S through MW-37S, and MW-C). What appeared to be a brownish-colored weathered free phase fuel was identified in monitoring wells MW-A and MW-B on May 21, 2025, therefore, monitoring wells MW-A and MW-B were not sampled for dissolved constituents. The location of the existing monitoring wells are depicted in **Figure 2, Site / Area Map**.

#### 3.1 MONITORING WELL DEVELOPMENT

Seven (7) monitoring wells (MW-34S through MW-37S, MW-A, MW-B and MW-C) were developed by using a submersible pump and/or peristaltic pump on May 14, 2025 until the discharge was relatively clear of suspended sediment. Brownish free product was identified in the monitoring wells MW-A and MW-B. The well development forms are included in **Appendix A**.

#### 3.2 MONITORING WELL SURVEY

Following the well development, PPM personnel used the Trimble Spectra Precision LL100N Laser to survey relative top of casing (TOC) elevations and a Garmin hand-held GPS unit to survey the coordinates of the existing monitoring wells. The water level measurements and the TOC elevation data were used to determine the groundwater flow direction. On May 21, 2024 groundwater flow was generally towards north. The groundwater flow direction map is provided as **Figure 3**.

### 3.3 GROUNDWATER SAMPLING

Groundwater samples were collected from the five (5) monitoring wells (MW-34S through MW-37S and MW-C) on May 21, 2025 and analyzed for VOC per USEPA Method 8260B, SVOC per USEPA Method 8270E (GC/MS), PAH by USEPA Method 8270E SIM, TRPH per the FLPRO Method and Lead per USEPA Method 6010. Please note that brownish free product was identified in the monitoring wells MW-A and MW-B on May 21, 2025, therefore, the monitoring wells MW-A and MW-B were not sampled.

Sample collection techniques were implemented in general accordance with the Florida Department of Environmental Protection (FDEP)-Standard Operating Procedure (SOP)-001/01 and Chapter 62-780 Florida Administrative Code (FAC), Contaminated Site Cleanup Criteria. Groundwater was sampled using a peristaltic pump. New tubing was used at each well. Disposable nitrile gloves were worn during the sampling process and changed prior to each sample acquisition. Prior to groundwater sampling, groundwater was purged until pH, temperature, conductivity, dissolved oxygen, and turbidity parameters stabilized. One (1) duplicate, one (1) field blank, one (1) rinse blank and two (2) trip blanks were collected as QA/QC samples on May 21, 2025 and analyzed for VOC per USEPA Method 8260B.

The groundwater samples were submitted under chain-of-custody documentation to Eurofins Altamonte Springs, Florida for the analyses listed in the table above. Field notes, sampling and calibration logs are included in **Appendix A**.

## 4.0 ASSESSMENT RESULTS

### 4.1 GROUNDWATER DEPTH TO WATER

On May 21, 2025, prior to groundwater sampling, depth to water measurements were collected from the seven (7) monitoring wells. Depth to water measurements ranged from 7.02 feet below TOC in MW-C to 12.33 below TOC from MW-34S. 0.92 feet free product identified in the MW-A and 0.33 free product identified in the MW-B. Depth to water measurements are included in **Table 1, Groundwater Depth to Water**.

### 4.2 GROUNDWATER SAMPLES

Results of laboratory analysis of groundwater samples from the five (5) monitoring wells and QA/QC samples did not indicate any exceedances greater than FDEP Chapter 62-777

FAC Groundwater Cleanup Target Levels (GCTL) and Natural Attenuation Default Concentrations (NADC).

The Groundwater Analytical Summary is provided as **Table 2**. Laboratory analytical reports are included in **Appendix B**.

## 5.0 SUMMARY

- Based on groundwater level measurements and TOC elevation data obtained by PPM personnel on May 14, 2025, the groundwater flow appears to be generally towards north.
- Results of laboratory analysis of groundwater samples collected from the five (5) monitoring wells and QA/QC samples did not indicate any exceedances of chemicals of concern greater than GCTLs and NADCs. On May 21, 2025, depth to groundwater in five (5) monitoring wells (MW-34S through MW-37S and MW-C) ranged from 7.02 to 12.33 feet BTOC. MW-A contained 0.92 feet of free phase product and MW-B contained 0.33 feet of free phase product
- The piping and piping trench for the former cluster site remediation system runs along SW 1st avenue within a few feet of the monitoring wells MW-A and MW-B which now contain 0.92 feet of free product and 0.33 feet of free product.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

In regard to the Phase I ESA REC, groundwater analytical results from monitoring wells (MW-34S through MW-37S and MW-C) indicated no exceedances of GCTLs and NADCs, but a brownish-colored, weathered, free-phase product was identified in monitoring wells MW-A and MW-B.

The Lake Butler Contamination Cluster included five facilities, with Welch's located on the subject property and the remaining four nearby. While no discharges were reported for Welch's, the proximity of the facilities and overlapping groundwater contaminate plumes led the FDEP to manage these five site collectively under the PRP until April 2010. Historical data indicated that contamination had reached the subject property by 1993, but large plume had broken into manageable sections by April 2010, prompting FDEP to divide the cluster into three separate cleanup areas. These areas did not include the Welch's site,

and remedial work was not continued at the subject site. The subject property operated six USTs (one kerosene, four gasoline, and one waste oil) installed in 1957; the gasoline tanks were removed in 1989, and the kerosene and waste oil tanks were removed in 1998.

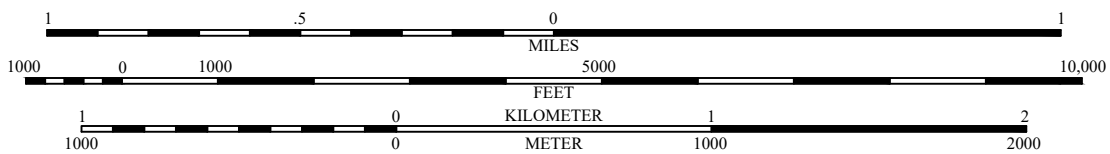
A brownish-colored, weathered free phase product was observed in monitoring wells MW-A and MW-B on the subject property in May 2025, suggesting possible migration from a nearby source. A review of the *2023 RAP Modification* for the adjacent property Union 76/Sam John facility revealed 0.4 feet of free product in MW-71S, located about 60 feet east of MW-A, which had 0.92 feet of free product. This suggests the free product on the subject property may have originated from the Union 76/Sam John site.


PPM recommends that Union County notify the City of Lake Butler and the FDEP Site Manager (Gene Honeycutt, [ghoneycutt@alachuacounty.us](mailto:ghoneycutt@alachuacounty.us)) of the free product presence on the subject property which might be due to potential groundwater contamination encroachment from the Union 76/Sam John facility located at 80 West Main Street, Lake Butler, Florida and sampling the free product in monitoring wells MW-A and MW-B to characterize its composition.

## **FIGURES**



SCALE: 1 : 24,000



 <b>PPM CONSULTANTS, INC.</b> www.ppmco.com	
DRAWN BY: <b>DML</b>	DRAWN DATE: <b>06/13/25</b>
PROJECT NUMBER: <b>20165101</b>	PHASE: <b>TASK 25</b>


**UNION COUNTY, FLORIDA**  
**WEST MAIN STREET PROPERTY**  
 102 / 120 WEST MAIN STREET  
 LAKE BUTLER, FLORIDA

**SITE LOCATION MAP**

FIGURE NUMBER

**1**

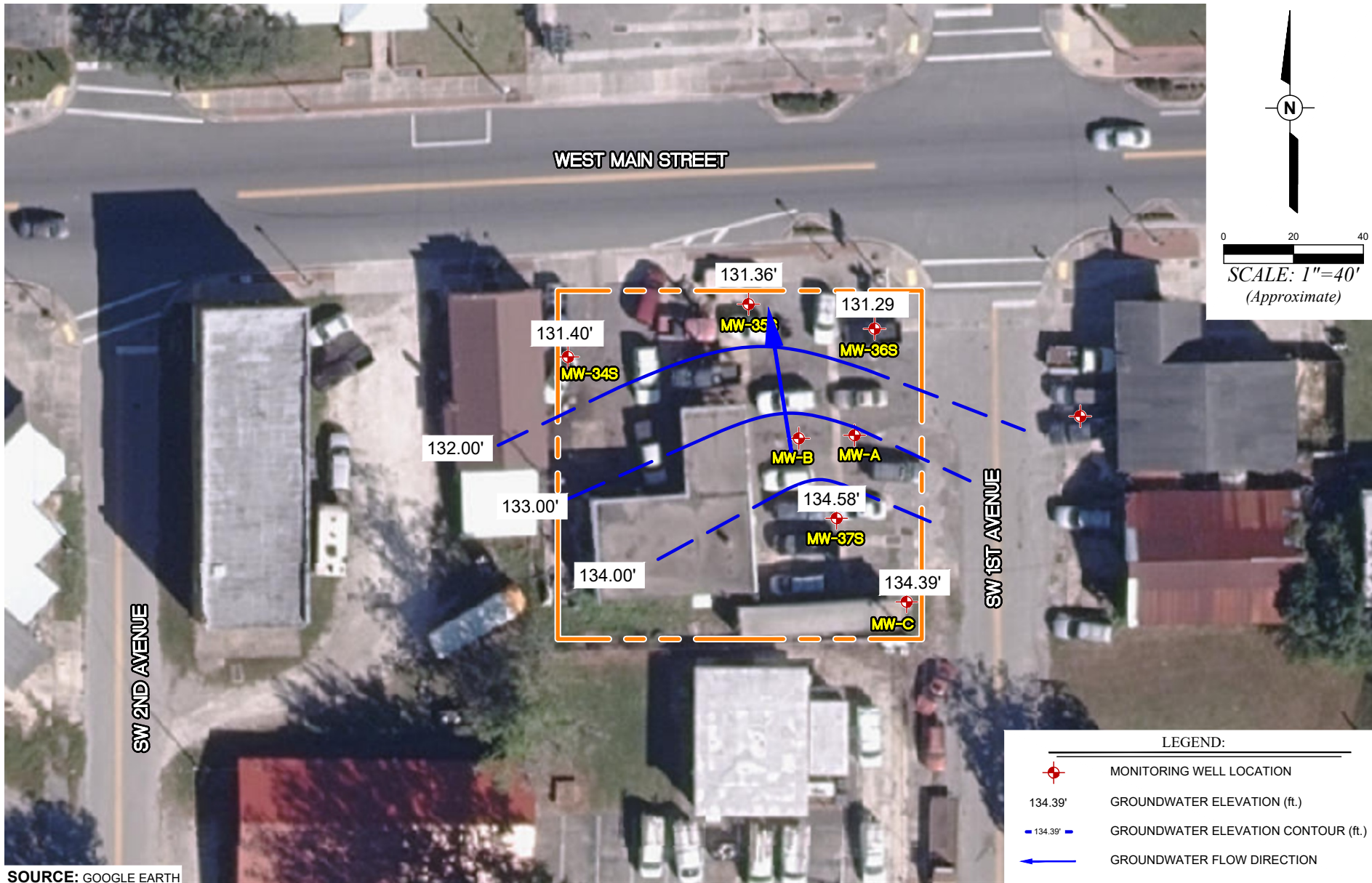


 <b>PPM CONSULTANTS, INC.</b> www.ppmco.com	
DRAWN BY: <b>DML</b>	DRAWN DATE: <b>06/13/25</b>
PROJECT NUMBER: <b>20165101</b>	PHASE: <b>TASK 25</b>


**UNION COUNTY**  
**WEST MAIN STREET PARCEL**  
 102/120 WEST MAIN STREET  
 LAKE BUTLER, FLORIDA

**SITE / AREA MAP**

FIGURE NUMBER  
**2**



SOURCE: GOOGLE EARTH

 <b>PPM CONSULTANTS, INC.</b> www.ppmco.com	
DRAWN BY: <b>DML</b>	DRAWN DATE: <b>06/13/25</b>
PROJECT NUMBER: <b>20165101</b>	PHASE: <b>TASK 25</b>

**UNION COUNTY**  
**WEST MAIN STREET PARCEL**  
 102/120 WEST MAIN STREET  
 LAKE BUTLER, FLORIDA

**GROUNDWATER FLOW MAP**

FIGURE  
 NUMBER  
**3**

## **TABLES**

**TABLE 1  
GROUNDWATER ELEVATIONS  
WEST MAIN STREET PROPERTY  
102/120 WEST MAIN STREET, LAKE BUTLER, FLORIDA 32054**

WELL NUMBER	MW-34S		MW-35S		MW-36S		MW-37S		MW-A			MW-B			MW-C	
INSTALLATION DATE	Unknow		Unknow		Unknow		Unknow		Unknow			Unknow			Unknow	
WELL DIAMETER (inches)	2		2		2		2		2			2			2	
WELL DEPTH (FT BGS)	14		19		19		19		18			12			20	
SCREEN INTERVAL (FT BTOC)	4-14		9-19		9-19		9-19		8-18			2-12			10-20	
TOP OF CASING ELEVATION (FT AMSL)	143.73		143.22		142.53		142.85		142.49			143.22			141.41	
DATE	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTW	ELEV	DTP	DTW	ELEV	DTP	DTW	ELEV	DTW	ELEV
05/21/25	12.33	131.40	11.86	131.36	11.24	131.29	8.27	134.58	11.01	11.91	NA	11.89	12.06	NA	7.02	134.39

**Notes:**  
 FT BGS = Feet Below Ground Surface  
 DTW = Depth to water  
 DTP = Depth to product  
 FT BTOC = Feet Below Top of Casing  
 ELEV = Elevation  
 FT AMSL = Feet Above Mean Sea Level  
 -- = No Data

**TABLE 2  
GROUNDWATER ANALYTICAL SUMMARY  
WEST MAIN STREET PROPERTY  
102/120 WEST MAIN STREET, LAKE BUTLER, FLORIDA 32054**

Sample ID				MW-34S	MW-35S	MW-36S	MW-37S	MW-C	DUP-1 (MW-C)	Field Blank	Rinsate Blank	Trip Blank 1	Trip Blank 2
Sample Date				5/21/2025	5/21/2025	5/21/2025	5/21/2025	5/21/2025	5/21/2025	5/21/2025	5/21/2025	5/21/2025	5/21/2025
Analyte	Units	GCTL in Table I of Chapter 62-777, F.A.C	NADC in Table V of Chapter 62-777, F.A.C										
<b>VOCs by EPA Method 8260</b>													
1,1,1,2-Tetrachloroethane	ug/L	1.3	130	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
1,1,1-Trichloroethane	ug/L	200	2000	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
1,1,2,2-Tetrachloroethane	ug/L	0.2	20	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1,2-Trichloroethane	ug/L	5	500	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
1,1-Dichloroethane	ug/L	70	700	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,1-Dichloropropene	ug/L	7	70	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
1,2-Dichloroethane	ug/L	NA	NA	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
1,2,3-Trichloropropane	ug/L	0.02	2	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
1,2,4-Trimethylbenzene	ug/L	10	100	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Ethylene Dibromide	ug/L	0.02	2	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
1,2-Dichloropropane	ug/L	3	300	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
1,2-Dichloropropane	ug/L	5	500	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
1,3,5-Trimethylbenzene	ug/L	10	100	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
1,3-Dichloropropane	ug/L	NA	NA	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,3-Dichlorobenzene	ug/L	210	2100	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
1,4-Dichlorobenzene	ug/L	75	7500	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
2,2-Dichloropropane	ug/L	NA	NA	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
2-Butanone (MEK)	ug/L	4200	42000	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
2-Chlorotoluene	ug/L	140	1400	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
2-Hexanone	ug/L	280	2800	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
4-Chlorotoluene	ug/L	140	1400	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
4-Methyl-2-pentanone (MIBK)	ug/L	560	5600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	ug/L	6300	63000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Benzene	ug/L	1	100	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
Bromobenzene	ug/L	NA	NA	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Chlorobromomethane	ug/L	91	910	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
Dichlorobromomethane	ug/L	0.6	60	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Bromoform	ug/L	4.4	440	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Bromomethane	ug/L	9.8	98	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
Carbon disulfide	ug/L	700	7000	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Carbon tetrachloride	ug/L	3	300	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
Chlorobenzene	ug/L	100	1000	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Chloroethane	ug/L	12	1200	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
Chloroform	ug/L	70	700	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
Chloromethane	ug/L	2.7	270	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
cis-1,2-Dichloroethene	ug/L	70	700	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
cis-1,3-Dichloropropene	ug/L	NA	NA	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Chlorodibromomethane	ug/L	0.4	40	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
Dibromomethane	ug/L	70	700	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Dichlorodifluoromethane	ug/L	1400	14000	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
Ethylbenzene	ug/L	30	300	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
Isopropylbenzene	ug/L	0.8	8	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
m-Xylene & p-Xylene	ug/L	NA	NA	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
Methylene Chloride	ug/L	5	270	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Methyl tert-butyl ether	ug/L	20	200	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
n-Butylbenzene	ug/L	NA	NA	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
n-Propylbenzene	ug/L	NA	NA	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
o-Xylene	ug/L	NA	NA	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
sec-Butylbenzene	ug/L	NA	2800	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Styrene	ug/L	100	1000	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
tert-Butylbenzene	ug/L	NA	NA	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
Tetrachloroethene	ug/L	3	300	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
Toluene	ug/L	40	400	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
trans-1,2-Dichloroethene	ug/L	100	1000	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
trans-1,3-Dichloropropene	ug/L	NA	NA	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Trichloroethene	ug/L	3	300	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U
Trichlorofluoromethane	ug/L	2100	21000	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Vinyl chloride	ug/L	1	100	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Xylenes, Total	ug/L	20	200	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
<b>SVOCs by EPA Method 8270</b>													
1,2,4-Trichlorobenzene	ug/L	70	700	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	NS	NS	NS	NS
1-Methylnaphthalene	ug/L	28	280	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	NS	NS	NS	NS
1,2-Dichlorobenzene	ug/L	600	6000	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	NS	NS	NS	NS
2-Methylnaphthalene	ug/L	28	280	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	NS	NS	NS	NS
1,3-Dichlorobenzene	ug/L	210	2100	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	NS	NS	NS	NS
Acephenanthrene	ug/L	20	200	0.028 U	0.028 U	0.028 U	0.028 U	0.028 U	0.028 U	NS	NS	NS	NS
1,4-Dichlorobenzene	ug/L	75	7500	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	NS	NS	NS	NS
Acephenanthylene	ug/L	210	2100	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	NS	NS	NS	NS
Anthracene	ug/L	2100	21000	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NS	NS	NS	NS
2,4,5-Trichlorophenol	ug/L	1	10	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	NS	NS	NS	NS
Benzo(a)anthracene	ug/L	0.05	5	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	NS	NS	NS	NS
2,4,6-Trichlorophenol	ug/L	3.2	320	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	NS	NS	NS	NS
Benzo(a)pyrene	ug/L	0.2	20	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	NS	NS	NS	NS
2,4-Dichlorophenol	ug/L	0.3	3	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	NS	NS	NS	NS
Benzo(b)fluoranthene	ug/L	0.05	5	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	NS	NS	NS	NS
2,4-Dimethylphenol	ug/L	140	1400	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	NS	NS	NS	NS
Benzo(g,h,i)perylene	ug/L	210	2100	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	NS	NS	NS	NS
2,4-Dinitrophenol	ug/L	14	140	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U	NS	NS	NS	NS
Benzo(k)fluoranthene	ug/L	0.5	50	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	NS	NS	NS	NS
2,4-Dinitrotoluene	ug/L	0.05											

## **APPENDICES**

**APPENDIX A – FIELD DOCUMENTATION**

## NEW WELL CONSTRUCTION LOG

This document is subject to change. Please select the appropriate option for each section that pertains to the well construction. For a description of the Florida Department of Environmental Protection Locational Data Stand please refer to the *Locational Data Standard* Microsoft Word document located at: [www.dep.state.fl.us/waste/categories/pcp/pg\\_documents.htm](http://www.dep.state.fl.us/waste/categories/pcp/pg_documents.htm). Petroleum Restoration Program requires a minimum of Rank 3 accuracy or better for the well location data.

WELL CONSTRUCTION DATA					
Well Number: <i>MW-C</i>	Site Name: <i>102 W Main Street</i>	FDEP Facility I.D. Number: <i>8734032</i>	Well Install Date: <del>_____</del>		
Well Location and Type (check appropriate boxes): <input checked="" type="radio"/> On-Site <input type="checkbox"/> Right-of-Way <input type="radio"/> Off-Site Private Property <input type="radio"/> Above Grade (AG) <input type="radio"/> Flush-to-Grade		Well Purpose: <input type="radio"/> Perched Monitoring <input checked="" type="radio"/> Shallow (Water-Table) Monitoring <input type="radio"/> Intermediate or Deep Monitoring <input type="radio"/> Remediation or Other (describe)		Well Install Method: <del>_____</del>	
If AG, list feet of riser above land surface: _____		Surface Casing Install Method: <del>_____</del>			
Borehole Depth (feet): _____	Well Depth (feet): _____	Borehole Diameter (inches): _____	Manhole Diameter (inches): _____	Well Pad Size: _____ feet by _____ feet	
Riser Diameter and Material: inches: _____	Riser/Screen Connections: <input type="radio"/> Flush-Threaded _____ <input type="radio"/> Other (describe) _____	Riser Length: _____ feet from _____ feet to _____ feet			
Screen Diameter and Material: inches: _____	Screen Slot Size: _____	Screen Length: _____ feet from _____ feet to _____ feet			
1 <sup>st</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input checked="" type="radio"/> Temporary	1 <sup>st</sup> Surface Casing I.D. (inches): _____	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet			
2 <sup>nd</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input type="radio"/> Temporary	2 <sup>nd</sup> Surface Casing I.D. (inches): _____	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet			
3 <sup>rd</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input type="radio"/> Temporary	3 <sup>rd</sup> Surface Casing I.D. (inches): _____	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet			
Filter Pack Material and Size: _____	Prepacked Filter Around Screen (check one): <input type="radio"/> Yes <input type="radio"/> No	Filter Pack Length: _____ feet from _____ feet to _____ feet			
Filter Pack Seal Material and Size: _____		Filter Pack Seal Length: _____ feet from _____ feet to _____ feet			
Surface Seal Material: _____	Status Code: _____	Surface Seal Length: _____ feet from _____ feet to _____ feet			

WELL DEVELOPMENT DATA			
Well Development Date: <i>5-14-25</i>	Well Development Method (check one): <input type="radio"/> Surge/Pump <input checked="" type="radio"/> Pump <input type="radio"/> Compressed Air <input type="radio"/> Other (describe) _____		
Development Pump Type (check): <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe) _____	Depth to Groundwater (before developing in feet) (BLS): <i>6.98'</i>		
Pumping Rate (gallons per minute): <i>0.73</i>	Maximum Drawdown of Groundwater During Development (feet): <i>—</i>	Well Purged Dry (check one): <input type="radio"/> Yes <input checked="" type="radio"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <i>22</i>	Development Duration (minutes): <i>30</i>	Development Water Drummed (check one): <input type="radio"/> Yes <input checked="" type="radio"/> No
Water Appearance (color and odor) At Start of Development: <i>Dark Brown &amp; Medium Odor</i>		Water Appearance (color and odor) At End of Development: <i>Clear &amp; Low Odor</i>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

## NEW WELL CONSTRUCTION LOG

This document is subject to change. Please select the appropriate option for each section that pertains to the well construction. For a description of the Florida Department of Environmental Protection Locational Data Standard please refer to the *Locational Data Standard* Microsoft Word document located at: [www.dep.state.fl.us/waste/categories/pcp/pg\\_documents.htm](http://www.dep.state.fl.us/waste/categories/pcp/pg_documents.htm). Petroleum Restoration Program requires a minimum of Rank 3 accuracy or better for the well location data.

WELL CONSTRUCTION DATA					
Well Number: <b>MW-375</b>		Site Name: <b>102 W Main Street</b>		FDEP Facility I.D. Number: <b>8734032</b>	
Well Location and Type (check appropriate boxes): <input checked="" type="radio"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		<del>Well Install Method: Surface Casing Install Method:</del>	
If AG, list feet of riser above land surface:					
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: _____ feet by _____ feet	
Riser Diameter and Material: inches: _____		Riser/Screen Connections: <input type="checkbox"/> Flush-Threaded _____ <input type="checkbox"/> Other (describe) _____	Riser Length: _____ feet from _____ feet to _____ feet		
Screen Diameter and Material: inches: _____		Screen Slot Size: _____	Screen Length: _____ feet from _____ feet to _____ feet		
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches):	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches):	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
Filter Pack Material and Size: _____		Prepacked Filter Around Screen (check one): <input type="radio"/> Yes <input type="radio"/> No	Filter Pack Length: _____ feet from _____ feet to _____ feet		
Filter Pack Seal Material and Size: _____		Filter Pack Seal Length: _____ feet from _____ feet to _____ feet			
Surface Seal Material: _____		Status Code:	Surface Seal Length: _____ feet from _____ feet to _____ feet		

WELL DEVELOPMENT DATA			
Well Development Date: <b>5-14-25</b>		Well Development Method (check one): <input type="checkbox"/> Surge/Pump <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet) (BLS): <b>8.18'</b>	
Pumping Rate (gallons per minute): <b>0.80</b>		Maximum Drawdown of Groundwater During Development (feet): <b>—</b>	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <b>24</b>	Development Duration (minutes): <b>30</b>	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <b>Dark Brown &amp; Medium Odor</b>		Water Appearance (color and odor) At End of Development: <b>Clear &amp; Medium Odor</b>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

## NEW WELL CONSTRUCTION LOG

This document is subject to change. Please select the appropriate option for each section that pertains to the well construction. For a description of the Florida Department of Environmental Protection Locational Data Standard please refer to the *Locational Data Standard* Microsoft Word document located at: [www.dep.state.fl.us/waste/categories/pcp/pg\\_documents.htm](http://www.dep.state.fl.us/waste/categories/pcp/pg_documents.htm). Petroleum Restoration Program requires a minimum of Rank 3 accuracy or better for the well location data.

WELL CONSTRUCTION DATA					
Well Number: <u>MW-B</u>	Site Name: <u>102 W Main Street</u>	FDEP Facility I.D. Number: <u>8734032</u>	Well Install Date: <del>_____</del>		
Well Location and Type (check appropriate boxes): <input checked="" type="radio"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input checked="" type="checkbox"/> Intermediate or Deep Monitoring <input checked="" type="checkbox"/> Remediation or Other (describe)		Well Install Method: <del>_____</del>	
If AG, list feet of riser above land surface: _____		Surface Casing Install Method: <del>_____</del>			
Borehole Depth (feet): _____	Well Depth (feet): _____	Borehole Diameter (inches): _____	Manhole Diameter (inches): _____	Well Pad Size: _____ feet by _____ feet	
Riser Diameter and Material: inches: _____		Riser/Screen Connections: <input type="checkbox"/> Flush-Threaded _____ <input type="checkbox"/> Other (describe) _____	Riser Length: _____ feet from _____ feet to _____ feet		
Screen Diameter and Material: inches: _____		Screen Slot Size: _____	Screen Length: _____ feet from _____ feet to _____ feet		
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches): _____	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches): _____	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches): _____	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
Filter Pack Material and Size: _____		Prepacked Filter Around Screen (check one): <input type="checkbox"/> Yes <input type="checkbox"/> No	Filter Pack Length: _____ feet from _____ feet to _____ feet		
Filter Pack Seal Material and Size: _____		Filter Pack Seal Length: _____ feet from _____ feet to _____ feet			
Surface Seal Material: _____		Status Code: _____	Surface Seal Length: _____ feet from _____ feet to _____ feet		

WELL DEVELOPMENT DATA			
Well Development Date: <u>5-14-25</u>		Well Development Method (check one): <input type="checkbox"/> Surge/Pump <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe) _____	
Development Pump Type (check): <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe) _____		Depth to Groundwater (before developing in feet) (BLS): <u>11.57'</u>	
Pumping Rate (gallons per minute): <u>0.68</u>	Maximum Drawdown of Groundwater During Development (feet): _____	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <u>34</u>	Development Duration (minutes): <u>50</u>	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <u>Dark Brown &amp; High Odor</u>		Water Appearance (color and odor) At End of Development: <u>Clear &amp; High Odor</u>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS
<p><u>Free product was present at beginning of development. About 500mL was removed and groundwater turned clear</u></p>

## NEW WELL CONSTRUCTION LOG

This document is subject to change. Please select the appropriate option for each section that pertains to the well construction. For a description of the Florida Department of Environmental Protection Locational Data Standard please refer to the *Locational Data Standard* Microsoft Word document located at: [www.dep.state.fl.us/waste\\_categories/pcp/pg\\_documents.htm](http://www.dep.state.fl.us/waste_categories/pcp/pg_documents.htm). Petroleum Restoration Program requires a minimum of Rank 3 accuracy or better for the well location data.

WELL CONSTRUCTION DATA					
Well Number: <u>MW-A</u>	Site Name: <u>102 W Main Street</u>	FDEP Facility I.D. Number: <u>8734032</u>	Well Install Date: <del>                    </del>		
Well Location and Type (check appropriate boxes): <input checked="" type="radio"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="radio"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: <del>                    </del>	
If AG, list feet of riser above land surface: <del>                    </del>		Surface Casing Install Method: <del>                    </del>			
Borehole Depth (feet): <del>                    </del>	Well Depth (feet): <del>                    </del>	Borehole Diameter (inches): <del>                    </del>	Manhole Diameter (inches): <del>                    </del>	Well Pad Size: <del>                    </del> feet by <del>                    </del> feet	
Riser Diameter and Material: inches: <del>                    </del> <del>                    </del>	Riser/Screen Connections: <input type="radio"/> Flush-Threaded <del>                    </del> <input type="radio"/> Other (describe) <del>                    </del>	Riser Length: <del>                    </del> feet from <del>                    </del> feet to <del>                    </del> feet			
Screen Diameter and Material: inches: <del>                    </del> <del>                    </del>	Screen Slot Size: <del>                    </del>		Screen Length: <del>                    </del> feet from <del>                    </del> feet to <del>                    </del> feet		
1 <sup>st</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input checked="" type="radio"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches): <del>                    </del>	1 <sup>st</sup> Surface Casing Length: <del>                    </del> feet from <u>0</u> feet to <del>                    </del> feet		
2 <sup>nd</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input type="radio"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches): <del>                    </del>	2 <sup>nd</sup> Surface Casing Length: <del>                    </del> feet from <u>0</u> feet to <del>                    </del> feet		
3 <sup>rd</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input checked="" type="radio"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches): <del>                    </del>	3 <sup>rd</sup> Surface Casing Length: <del>                    </del> feet from <u>0</u> feet to <del>                    </del> feet		
Filter Pack Material and Size: <del>                    </del>		Prepacked Filter Around Screen (check one): <input type="radio"/> Yes <input type="radio"/> No		Filter Pack Length: <del>                    </del> feet from <del>                    </del> feet to <del>                    </del> feet	
Filter Pack Seal Material and Size: <del>                    </del>		Filter Pack Seal Length: <del>                    </del> feet from <del>                    </del> feet to <del>                    </del> feet			
Surface Seal Material: <del>                    </del>		Status Code: <del>                    </del>		Surface Seal Length: <del>                    </del> feet from <del>                    </del> feet to <del>                    </del> feet	

WELL DEVELOPMENT DATA			
Well Development Date: <u>5-14-25</u>		Well Development Method (check one): <input type="radio"/> Surge/Pump <input checked="" type="checkbox"/> Pump <input type="radio"/> Compressed Air <input type="radio"/> Other (describe)	
Development Pump Type (check): <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet) (BLS): <u>10.71'</u>	
Pumping Rate (gallons per minute): <u>10.83</u> <sup>JK</sup> <u>5-14-25</u> <u>25</u>	Maximum Drawdown of Groundwater During Development (feet): <u>                    </u>		Well Purged Dry (check one): <input type="radio"/> Yes <input checked="" type="checkbox"/> No
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <u>25</u>	Development Duration (minutes): <u>30</u>	Development Water Drummed (check one): <input type="radio"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <u>Dark Brown &amp; High Odor</u>		Water Appearance (color and odor) At End of Development: <u>Clear &amp; High Odor</u>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

## NEW WELL CONSTRUCTION LOG

This document is subject to change. Please select the appropriate option for each section that pertains to the well construction. For a description of the Florida Department of Environmental Protection Locational Data Standard please refer to the *Locational Data Standard* Microsoft Word document located at: [www.dep.state.fl.us/waste\\_categories/pcp/pg\\_documents.htm](http://www.dep.state.fl.us/waste_categories/pcp/pg_documents.htm). Petroleum Restoration Program requires a minimum of Rank 3 accuracy or better for the well location data.

WELL CONSTRUCTION DATA					
Well Number: <b>MW-365</b>		Site Name: <b>102 W Main Street</b>		FDEP Facility I.D. Number: <b>8734032</b>	
Well Location and Type (check appropriate boxes): <input checked="" type="radio"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		<del>Well Install Method: Surface Casing Install Method:</del>	
If AG, list feet of riser above land surface:					
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: _____ feet by _____ feet	
Riser Diameter and Material: inches: _____		Riser/Screen Connections: <input checked="" type="radio"/> Flush-Threaded _____ <input type="radio"/> Other (describe) _____	Riser Length: _____ feet from _____ feet to _____ feet		
Screen Diameter and Material: inches: _____		Screen Slot Size: _____	Screen Length: _____ feet from _____ feet to _____ feet		
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches):	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches):	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
Filter Pack Material and Size: _____		Prepacked Filter Around Screen (check one): <input type="radio"/> Yes <input type="radio"/> No	Filter Pack Length: _____ feet from _____ feet to _____ feet		
Filter Pack Seal Material and Size: _____		Filter Pack Seal Length: _____ feet from _____ feet to _____ feet			
Surface Seal Material: _____		Status Code:	Surface Seal Length: _____ feet from _____ feet to _____ feet		

WELL DEVELOPMENT DATA			
Well Development Date: <b>5-14-25</b>		Well Development Method (check one): <input type="checkbox"/> Surge/Pump <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input checked="" type="checkbox"/> Other (describe)	
Development Pump Type (check): <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet) (BLS): <b>10.93</b>	
Pumping Rate (gallons per minute): <b>1.00</b>	Maximum Drawdown of Groundwater During Development (feet): <b>—</b>	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <b>30</b>	Development Duration (minutes): <b>30</b>	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <b>Brown &amp; White Color &amp; Medium Odor</b>		Water Appearance (color and odor) At End of Development: <b>Clear &amp; Medium Odor</b>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

## NEW WELL CONSTRUCTION LOG

This document is subject to change. Please select the appropriate option for each section that pertains to the well construction. For a description of the Florida Department of Environmental Protection Locational Data Standard please refer to the *Locational Data Standard* Microsoft Word document located at: [www.dep.state.fl.us/waste\\_categories/pcp\\_pg\\_documents.htm](http://www.dep.state.fl.us/waste_categories/pcp_pg_documents.htm). Petroleum Restoration Program requires a minimum of Rank 3 accuracy or better for the well location data.

WELL CONSTRUCTION DATA					
Well Number: <b>MW-355</b>		Site Name: <b>102 W Main Street</b>		FDEP Facility I.D. Number: <b>8734032</b>	
Well Location and Type (check appropriate boxes): <input checked="" type="radio"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade			Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Date: <div style="text-align: center; border: 1px solid black; width: 100px; height: 100px; margin: 0 auto;">X</div>
If AG, list feet of riser above land surface:			Surface Casing Install Method: <div style="text-align: center; border: 1px solid black; width: 100px; height: 100px; margin: 0 auto;">X</div>		
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: _____ feet by _____ feet	
Riser Diameter and Material: inches: <input type="text"/> <input type="text"/>		Riser/Screen Connections: <input checked="" type="radio"/> Flush-Threaded <input type="text"/> <input type="radio"/> Other (describe) <input type="text"/>	Riser Length: _____ feet from _____ feet to _____ feet		
Screen Diameter and Material: inches: <input type="text"/> <input type="text"/>		Screen Slot Size: <input type="text"/>	Screen Length: _____ feet from _____ feet to _____ feet		
1 <sup>st</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input checked="" type="radio"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches):	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
2 <sup>nd</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input type="radio"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches):	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
3 <sup>rd</sup> Surface Casing Material: also check: <input type="radio"/> Permanent <input type="radio"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
Filter Pack Material and Size: <input type="text"/>		Prepacked Filter Around Screen (check one): <input type="radio"/> Yes <input type="radio"/> No	Filter Pack Length: _____ feet from _____ feet to _____ feet		
Filter Pack Seal Material and Size: <input type="text"/>		Filter Pack Seal Length: _____ feet from _____ feet to _____ feet			
Surface Seal Material: <input type="text"/>		Status Code:	Surface Seal Length: _____ feet from _____ feet to _____ feet		

WELL DEVELOPMENT DATA			
Well Development Date: <b>5-14-25</b>		Well Development Method (check one): <input type="radio"/> Surge/Pump <input checked="" type="checkbox"/> Pump <input type="radio"/> Compressed Air <input type="radio"/> Other (describe)	
Development Pump Type (check): <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet) (BLS): <b>11.87</b>	
Pumping Rate (gallons per minute): <b>1.07</b>	Maximum Drawdown of Groundwater During Development (feet): <b>—</b>	Well Purged Dry (check one): <input type="radio"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <b>32</b>	Development Duration (minutes): <b>30</b>	Development Water Drummed (check one): <b>5-14-25</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <b>Dark Brown &amp; Medium Odor</b>		Water Appearance (color and odor) At End of Development: <b>Clear &amp; Low Odor</b>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

## NEW WELL CONSTRUCTION LOG

This document is subject to change. Please select the appropriate option for each section that pertains to the well construction. For a description of the Florida Department of Environmental Protection Locational Data Standard please refer to the *Locational Data Standard* Microsoft Word document located at: [www.dep.state.fl.us/waste\\_categories/pcp/pg\\_documents.htm](http://www.dep.state.fl.us/waste_categories/pcp/pg_documents.htm). Petroleum Restoration Program requires a minimum of Rank 3 accuracy or better for the well location data.

WELL CONSTRUCTION DATA					
Well Number: <i>MW-345</i>		Site Name: <i>102 W Main Street</i>		FDEP Facility I.D. Number: <i>8734032</i>	
Well Location and Type (check appropriate boxes): <input checked="" type="radio"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input checked="" type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method:   Surface Casing Install Method:	
If AG, list feet of riser above land surface:					
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: _____ feet by _____ feet	
Riser Diameter and Material: inches: _____		Riser/Screen Connections: <input type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe) _____	Riser Length: _____ feet from _____ feet to _____ feet		
Screen Diameter and Material: inches: _____		Screen Slot Size: _____	Screen Length: _____ feet from _____ feet to _____ feet		
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches):	1 <sup>st</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches):	2 <sup>nd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches):	3 <sup>rd</sup> Surface Casing Length: _____ feet from <u>0</u> feet to _____ feet		
Filter Pack Material and Size: _____		Prepacked Filter Around Screen (check one): <input type="checkbox"/> Yes <input type="checkbox"/> No	Filter Pack Length: _____ feet from _____ feet to _____ feet		
Filter Pack Seal Material and Size: _____				Filter Pack Seal Length: _____ feet from _____ feet to _____ feet	
Surface Seal Material: _____		Status Code:	Surface Seal Length: _____ feet from _____ feet to _____ feet		

WELL DEVELOPMENT DATA			
Well Development Date: <i>5-14-25</i>		Well Development Method (check one): <input type="checkbox"/> Surge/Pump <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input checked="" type="checkbox"/> Other (describe)	
Development Pump Type (check): <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet) (BLS): <i>12.16</i>	
Pumping Rate (gallons per minute): <i>1.03</i>	Maximum Drawdown of Groundwater During Development (feet): _____	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <i>31</i>	Development Duration (minutes): <i>30</i>	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <i>Dark Brown &amp; Medium Odor</i>		Water Appearance (color and odor) At End of Development: <i>Clear &amp; Low Odor</i>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

102 W Main Street

# TOC Survey

5-14-25

Baselines: MW-375 = 142.85'  
MW-355 = 143.22'

Well #	TOC (ft)	Baseline (MW-375) +/- Change (ft)	Elevation (ft)
MW-C [?]	7.21'	-1.44' ✓	141.41'
MW-375	5.77'	—	142.85'
MW-B [?]	5.40'	+0.37' ✓	143.22'
MW-A [?]	6.13'	-0.36' ✓	142.49'
MW-365	6.09'	-0.32' ✓	142.53'
MW-355	5.40'	+0.37' ✓	143.22'
MW-345	4.89'	+0.88' ✓	143.73'

**FIELD INSTRUMENT CALIBRATION RECORDS - CALIBRATION LOG - PRP**

Project Site/FacID: \_\_\_\_\_

**Boldly "X" this box if there is qualified data on this page.**

Calibrated by (Print)/Affiliation: \_\_\_\_\_

**Temperature (Quarterly)**      Date of Last Temp Verification: \_\_\_\_\_      See log book: \_\_\_\_\_

<b>DISSOLVED OXYGEN (DO) (REFERENCE: DEP SOP FT 1500)</b>											<b>Acceptance Criteria +/-0.3 mg DO/L</b>	
Meter/Instrument Name and Unique ID: _____												
CAL	ICV	CCV	Initials	Date	Time	Standard (DO %)	Temp °C	DO Saturation mg/L (100%)**	Response DO (%)	Response mg DO/L	Deviation mg DO/L	Pass or Fail
CAL	ICV	CCV	_____	_____	_____	100%	_____	_____	_____	_____	_____	P F
CAL	ICV	CCV	_____	_____	_____	100%	_____	_____	_____	_____	_____	P F
CAL	ICV	CCV	_____	_____	_____	100%	_____	_____	_____	_____	_____	P F
CAL	ICV	CCV	_____	_____	_____	100%	_____	_____	_____	_____	_____	P F
CAL	ICV	CCV	_____	_____	_____	100%	_____	_____	_____	_____	_____	P F
CAL	ICV	CCV	_____	_____	_____	100%	_____	_____	_____	_____	_____	P F

\*\* See Table FS 2200-2 and/or Table FT 1500-1 for Dissolved Oxygen 100% Saturation (mg/L) corresponding to Temperature.

<b>SPECIFIC CONDUCTANCE (REFERENCE: DEP SOP FT 1200)</b>											<b>Acceptance Criteria +/-5% the standard</b>	
Meter/Instrument Name and Unique ID: _____												
CAL	ICV	CCV	Initials	Date	Time	Standard (µmho/cm)	Exp. Date	Lot #	Response (µmho/cm)	Deviation (%)	Pass or Fail	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	

<b>OXIDATION-REDUCTION POTENTIAL (ORP)</b>											<b>Acceptance Criteria +/-10 mV</b>	
<b>REFERENCE: EPA Region 4, Operating Procedure, Field Measurement of Oxidation-Reduction Potential (ORP)</b>												
Meter/Instrument Name and Unique ID: _____												
CAL	ICV	CCV	Initials	Date	Time	Standard (mV)	Exp. Date	Lot #	Response (mV)	Deviation (mV)	Pass or Fail	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	
CAL	ICV	CCV	_____	_____	_____	_____	_____	_____	_____	_____	P F	

Perform ICVs and CCVs only in "READ/RUN" mode.

CAL - Calibration; ICV - Initial Calibration Verification; and, CCV - Continuing Calibration Verification.

Deviation (%) = 100-{(Response/Standard)\*100}




**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: 102 West Main Street	SITE LOCATION: 102 W. Main Street, Lake Butler, FL
WELL NO: MW-34S	SAMPLE ID: MW-34S
DATE: 05/21/2025	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/16</b>	WELL SCREEN INTERVAL DEPTH: <b>4</b> feet to <b>14</b> feet	STATIC DEPTH TO WATER (feet): <b>12.33</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>							
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>14</b> feet - <b>12.33</b> feet ) X <b>0.16</b> gallons/foot = <b>0.267</b> gallons											
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.25</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.25</b>	PURGING INITIATED AT: <b>1030</b>	PURGING ENDED AT: <b>1048</b>	TOTAL VOLUME PURGED (gallons): <b>0.65</b>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <input checked="" type="checkbox"/> mmhos/cm or <input type="checkbox"/> mS/cm	DISSOLVED OXYGEN (circle units) <input checked="" type="checkbox"/> mg/L or <input type="checkbox"/> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1042	0.35	0.35	0.050	12.98	4.39	26.6	141.4	5.24	2.05	Clear	None
1045	0.15	0.50	0.050	12.98	4.39	26.5	145.3	5.31	1.97	Clear	None
1048	0.15	0.65	0.050	12.98	4.40	26.5	145.9	5.35	1.88	Clear	None
<b>WELL CAPACITY</b> (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 <b>TUBING INSIDE DIA. CAPACITY</b> (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
<b>PURGING EQUIPMENT CODES:</b> B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Elgin Owens / PPM</b>				SAMPLER(S) SIGNATURE(S): 				SAMPLING INITIATED AT: <b>1050</b>		SAMPLING ENDED AT: <b>1102</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>13.25</b>				TUBING MATERIAL CODE: <b>HDPE</b>		FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		FILTER SIZE: _____ mm			
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y <input checked="" type="checkbox"/> N				TUBING <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (replaced)		DUPLICATE: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
MW-34	2	AG	500 mL	Ice	N/A	N/A	8270E		APP	187.26	
MW-34	3	CG	40mL	HCL,I	N/A	N/A	SVOCs		APP	187.26	
MW-34	1	PE	250mL	Nitric Acid	N/A	N/A	Lead		APP	187.26	
MW-34	2	AG	60mL	HCL,I	N/A	N/A	TRPH		APP	187.26	
MW-34	2	AG	60mL	Ice	N/A	N/A	PAH		APP	187.26	
REMARKS:											
<b>MATERIAL CODES:</b> AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
<b>SAMPLING EQUIPMENT CODES:</b> APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: 102 West Main Street	SITE LOCATION: 102 W. Main Street, Lake Butler, FL
WELL NO: MW-35S	SAMPLE ID: MW-35S
DATE: 05/21/2025	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/16</b>	WELL SCREEN INTERVAL DEPTH: 9 feet to 19 feet	STATIC DEPTH TO WATER (feet): <b>11.86</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>19</b> feet - <b>11.86</b> feet ) X <b>0.16</b> gallons/foot = <b>1.142</b> gallons				
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.00</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.00</b>	PURGING INITIATED AT: <b>1125</b>	PURGING ENDED AT: <b>1154</b>	TOTAL VOLUME PURGED (gallons): <b>1.45</b>
---	---	-----------------------------------	-------------------------------	--

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <input type="checkbox"/> mmhos/cm or <input checked="" type="checkbox"/> mS/cm	DISSOLVED OXYGEN (circle units) <input checked="" type="checkbox"/> mg/L or <input type="checkbox"/> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1148	1.15	1.15	0.050	12.33	5.22	27.1	192	2.88	1.11	Clear	None
1151	0.15	1.30	0.050	12.33	5.22	27.1	190.7	2.85	0.82	Clear	None
1154	0.15	1.45	0.050	12.33	5.23	27.1	191.2	2.87	0.61	Clear	None

**WELL CAPACITY** (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
**TUBING INSIDE DIA. CAPACITY** (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
**PURGING EQUIPMENT CODES:** B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Elgin Owens / PPM</b>	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: <b>1156</b>	SAMPLING ENDED AT: <b>1206</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>13.00</b>	TUBING MATERIAL CODE: <b>HDPE</b>	FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	FILTER SIZE: _____ mm
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y N <input checked="" type="checkbox"/>	TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>	DUPLICATE: <input type="checkbox"/> Y N <input checked="" type="checkbox"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-35	2	AG	500mL	Ice	N/A	N/A	8270E	APP	187.26
MW-35	3	CG	40mL	HCL, I	N/A	N/A	SVOCs	APP	187.26
MW-35	1	PE	250mL	Nitric Acid	N/A	N/A	Lead	APP	187.26
MW-35	2	AG	60mL	HCL, I	N/A	N/A	TRPH	APP	187.26
MW-35	2	AG	60mL	Ice	N/A	N/A	PAHs	APP	187.26

REMARKS:

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

**SAMPLING EQUIPMENT CODES:** APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)


## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: 102 West Main Street	SITE LOCATION: 102 W. Main Street, Lake Butler, FL
WELL NO: MW-36S	SAMPLE ID: MW-36S
DATE: 05/21/2025	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 9 feet to 19 feet	STATIC DEPTH TO WATER (feet): 11.24	PURGE PUMP TYPE OR BAILER: PP							
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 19 feet - 11.24 feet ) X 0.16 gallons/foot = 1.242 gallons											
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + ( gallons/foot X feet ) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12.25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12.25	PURGING INITIATED AT: 1223	PURGING ENDED AT: 1254	TOTAL VOLUME PURGED (gallons): 1.55							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <input type="checkbox"/> mmhos/cm or <input checked="" type="checkbox"/> mS/cm	DISSOLVED OXYGEN (circle units) <input checked="" type="checkbox"/> mg/L or <input type="checkbox"/> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1248	1.25	1.25	0.050	11.46	5.78	27.7	174.2	3.30	0.74	Clear	None
1251	0.15	1.40	0.050	11.46	5.78	27.7	171	3.29	0.60	Clear	None
1254	0.15	1.55	0.050	11.46	5.78	27.8	170.2	3.25	0.51	Clear	None
<b>WELL CAPACITY</b> (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 <b>TUBING INSIDE DIA. CAPACITY</b> (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 <b>PURGING EQUIPMENT CODES:</b> B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Elgin Owens / PPM				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1256		SAMPLING ENDED AT: 1308	
PUMP OR TUBING DEPTH IN WELL (feet): 12.25				TUBING MATERIAL CODE: HDPE		FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		FILTER SIZE: _____ mm		
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y N <input checked="" type="checkbox"/>				TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>		DUPLICATE: <input type="checkbox"/> Y N <input checked="" type="checkbox"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
MW-36	2	AG	500mL	Ice	N/A	N/A	8270E	APP	187.26	
MW-36	3	CG	40mL	HCL,I	N/A	N/A	SVOCs	APP	187.26	
MW-36	1	PE	250mL	Nitric Acid	N/A	N/A	Lead	APP	187.26	
MW-36	2	AG	60mL	Ice	N/A	N/A	PAHs	APP	187.26	
MW-36	2	AG	60mL	HCL,I	N/A	N/A	TRPH	APP	187.26	
FB	3	CG	40mL	HCL,I	N/A	N/A		APP	187.26	
REMARKS: Field blank =FB										
<b>MATERIAL CODES:</b> AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
<b>SAMPLING EQUIPMENT CODES:</b> APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: 102 West Main Street	SITE LOCATION: 102 W. Main Street, Lake Butler, FL
WELL NO: MW-37S	SAMPLE ID: MW-37S
DATE: 05/21/2025	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/16</b>	WELL SCREEN INTERVAL DEPTH: 4 feet to 14 feet	STATIC DEPTH TO WATER (feet): <b>8.27</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>14</b> feet - <b>8.27</b> feet ) X <b>0.16</b> gallons/foot = <b>0.917</b> gallons				
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>9.50</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>9.50</b>	PURGING INITIATED AT: <b>1329</b>	PURGING ENDED AT: <b>1354</b>	TOTAL VOLUME PURGED (gallons): <b>1.25</b>
--	--	-----------------------------------	-------------------------------	--

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <input type="checkbox"/> mmhos/cm or <input checked="" type="checkbox"/> mS/cm	DISSOLVED OXYGEN (circle units) <input checked="" type="checkbox"/> mg/L or <input type="checkbox"/> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1348	0.95	0.95	0.050	8.96	7.02	28.0	862	0.32	1.57	Clear	None
1351	0.15	1.10	0.050	8.96	7.01	27.9	854	0.30	1.33	Clear	None
1354	0.15	1.25	0.050	8.96	7.01	27.9	853	0.30	1.25	Clear	None

**WELL CAPACITY** (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
**TUBING INSIDE DIA. CAPACITY** (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
**PURGING EQUIPMENT CODES:** B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Elgin Owens / PPM</b>	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: <b>1356</b>	SAMPLING ENDED AT: <b>1408</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>9.50</b>	TUBING MATERIAL CODE: <b>HDPE</b>	FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	FILTER SIZE: _____ mm
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>	DUPLICATE: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-37	2	AG	500mL	Ice	N/A	N/A	8270E	APP	187.26
MW-37	3	CG	40mL	HCL,I	N/A	N/A	SVOCs	APP	187.26
MW-37	1	PE	250mL	Nitric Acid	N/A	N/A	Lead	APP	187.26
MW-37	2	AG	60mL	Ice	N/A	N/A	PAHs	APP	187.26
MW-37	2	AG	60mL	HCL,I	N/A	N/A	TRPH	APP	187.26
RB	3	CG	40mL	HCL,I	N/A	N/A		APP	187.26

REMARKS: **RB= Rinsate Blank**

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

**SAMPLING EQUIPMENT CODES:** APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: 102 West Main Street	SITE LOCATION: 102 W. Main Street, Lake Butler, FL
WELL NO: MW-C	SAMPLE ID: MW-C
DATE: 05/21/2025	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/16</b>	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): <b>7.02</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>20</b> feet - <b>7.02</b> feet ) X <b>0.16</b> gallons/foot = <b>2.077</b> gallons				
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>8.00</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>8.00</b>	PURGING INITIATED AT: <b>1440</b>	PURGING ENDED AT: <b>1528</b>	TOTAL VOLUME PURGED (gallons): <b>2.40</b>
--	--	-----------------------------------	-------------------------------	--

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <input type="checkbox"/> mmhos/cm or <input checked="" type="checkbox"/> mS/cm	DISSOLVED OXYGEN (circle units) <input checked="" type="checkbox"/> mg/L or <input type="checkbox"/> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1522	2.10	2.10	0.050	8.11	6.23	25.4	272	1.47	0.99	Clear	None
1525	0.15	2.25	0.050	8.11	6.24	25.4	270.6	1.42	0.76	Clear	None
1528	0.15	2.40	0.050	8.11	6.24	25.4	269.8	1.40	0.54	Clear	None

**WELL CAPACITY** (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
**TUBING INSIDE DIA. CAPACITY** (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
**PURGING EQUIPMENT CODES:** B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Elgin Owens / PPM</b>	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: <b>1530</b>	SAMPLING ENDED AT: <b>1542</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>8.00</b>	TUBING MATERIAL CODE: <b>HDPE</b>	FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	FILTER SIZE: _____ mm
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y N <input checked="" type="checkbox"/>	TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>	DUPLICATE: <input type="checkbox"/> Y N <input checked="" type="checkbox"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-C	2	AG	500mL	Ice	N/A	N/A	8270E	APP	187.26
MW-C	3	CG	40mL	HCL,I	N/A	N/A	SVOCs	APP	187.26
MW-C	1	PE	250mL	Nitric Acid	N/A	N/A	Lead	APP	187.26
MW-C	2	AG	60mL	Ice	N/A	N/A	PAH	APP	187.26
MW-C	2	AG	60mL	HCL,I	N/A	N/A	TRPH	APP	187.26
NB	3	CG	40mL	HCL,I	N/A	N/A		APP	187.26

REMARKS: **NB= Normal Blank**

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

**SAMPLING EQUIPMENT CODES:** APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

**APPENDIX B – LABORATORY ANALYTICAL REPORTS**

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Kang Wu  
PPM Consultants, Inc.  
750 South Northlake Boulevard  
Suite 1012  
Altamonte Springs, Florida 32701

Generated 6/4/2025 1:54:01 PM

**JOB DESCRIPTION**

102 W Main St

**JOB NUMBER**

670-63094-1

# Eurofins Orlando

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

## Authorization



Generated  
6/4/2025 1:54:01 PM

Authorized for release by  
Luis Betancourt, Project Manager I  
[Luis.Betancourt@et.eurofinsus.com](mailto:Luis.Betancourt@et.eurofinsus.com)  
(321)282-6293



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	7
Surrogate Summary . . . . .	33
QC Sample Results . . . . .	35
QC Association Summary . . . . .	46
Lab Chronicle . . . . .	48
Certification Summary . . . . .	51
Method Summary . . . . .	52
Sample Summary . . . . .	53
Chain of Custody . . . . .	54
Receipt Checklists . . . . .	55

# Definitions/Glossary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
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.

### GC/MS Semi VOA

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.

### GC Semi VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

### Metals

Qualifier	Qualifier Description
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.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: PPM Consultants, Inc.  
Project: 102 W Main St

Job ID: 670-63094-1

**Job ID: 670-63094-1**

**Eurofins Orlando**

## Job Narrative 670-63094-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Receipt

The samples were received on 5/22/2025 1:53 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 1.5°C.

### GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 670-156478 recovered outside acceptance criteria, low biased, for Acetone. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### GC/MS Semi VOA

Method 8270E: The continuing calibration verification (CCV) associated with batch 670-155479 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate and bis (2-chloroisopropyl) ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCVIS 670-155479/3).

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 670-154748 and analytical batch 670-155479 recovered outside control limits for the following analytes: bis (2-chloroisopropyl) ether. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### Metals

Method 6020B - Total Recoverable: The continuing calibration verification (CCV) associated with batch 670-154808 recovered above the upper control limit for lead. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:670-63094- 1- 3(CCIS 670-155153/205).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Orlando

# Detection Summary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Client Sample ID: MW-34S

Lab Sample ID: 670-63094-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.85	I	2.0	0.65	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	0.76	I	2.0	0.64	ug/L	1		8260D	Total/NA
Di-n-octyl phthalate	3.7	I	5.0	2.9	ug/L	1		8270E	Total/NA
Naphthalene	0.11	I	0.18	0.027	ug/L	1		8270E	Total/NA

## Client Sample ID: MW-35S

Lab Sample ID: 670-63094-2

No Detections.

## Client Sample ID: MW-36S

Lab Sample ID: 670-63094-3

No Detections.

## Client Sample ID: MW-37S

Lab Sample ID: 670-63094-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.68	I	2.0	0.65	ug/L	1		8260D	Total/NA
Naphthalene	0.045	I	0.18	0.027	ug/L	1		8270E	Total/NA
Lead	0.0026		0.0020	0.00024	mg/L	1		6020B	Total Recoverable

## Client Sample ID: MW-C

Lab Sample ID: 670-63094-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.045	I	0.18	0.027	ug/L	1		8270E	Total/NA
Lead	0.0013	I	0.0020	0.00024	mg/L	1		6020B	Total Recoverable

## Client Sample ID: Field Blank

Lab Sample ID: 670-63094-6

No Detections.

## Client Sample ID: Rinsate Blank

Lab Sample ID: 670-63094-7

No Detections.

## Client Sample ID: Trip Blank 1

Lab Sample ID: 670-63094-8

No Detections.

## Client Sample ID: DUP-1

Lab Sample ID: 670-63094-9

No Detections.

## Client Sample ID: Trip Blank 2

Lab Sample ID: 670-63094-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-34S**

**Lab Sample ID: 670-63094-1**

Date Collected: 05/21/25 10:50

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 19:16	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 19:16	1
1,1,2,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 19:16	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 19:16	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 19:16	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 19:16	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 19:16	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 19:16	1
<b>1,2,4-Trimethylbenzene</b>	<b>0.85</b>	<b>I</b>	2.0	0.65	ug/L			06/03/25 19:16	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 19:16	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 19:16	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 19:16	1
<b>1,3,5-Trimethylbenzene</b>	<b>0.76</b>	<b>I</b>	2.0	0.64	ug/L			06/03/25 19:16	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 19:16	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 19:16	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 19:16	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 19:16	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 19:16	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 19:16	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 19:16	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 19:16	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 19:16	1
Acetone	20	U	50	20	ug/L			06/03/25 19:16	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 19:16	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 19:16	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 19:16	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 19:16	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 19:16	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 19:16	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 19:16	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 19:16	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 19:16	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 19:16	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 19:16	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 19:16	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 19:16	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 19:16	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 19:16	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 19:16	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 19:16	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 19:16	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 19:16	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 19:16	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 19:16	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 19:16	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 19:16	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 19:16	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 19:16	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 19:16	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-34S**

**Lab Sample ID: 670-63094-1**

Date Collected: 05/21/25 10:50

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 19:16	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 19:16	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 19:16	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 19:16	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 19:16	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 19:16	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 19:16	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 19:16	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 19:16	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	84		40 - 146		06/03/25 19:16	1
4-Bromofluorobenzene (Surr)	102		41 - 142		06/03/25 19:16	1
Dibromofluoromethane (Surr)	84		53 - 146		06/03/25 19:16	1

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
1,2-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 00:48	1
1,3-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 00:48	1
1,4-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 00:48	1
1-Methylnaphthalene	2.4	U	10	2.4	ug/L		05/23/25 07:17	05/29/25 00:48	1
2,4,5-Trichlorophenol	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 00:48	1
2,4,6-Trichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
2,4-Dichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
2,4-Dimethylphenol	4.9	U	10	4.9	ug/L		05/23/25 07:17	05/29/25 00:48	1
2,4-Dinitrophenol	5.9	U	10	5.9	ug/L		05/23/25 07:17	05/29/25 00:48	1
2,4-Dinitrotoluene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
2,6-Dinitrotoluene	2.8	U	10	2.8	ug/L		05/23/25 07:17	05/29/25 00:48	1
2-Chloronaphthalene	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 00:48	1
2-Chlorophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
4,6-Dinitro-2-methylphenol	4.1	U	10	4.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
2-Methylnaphthalene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 00:48	1
2-Methylphenol	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
2-Nitrophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
3 & 4 Methylphenol	2.3	U	10	2.3	ug/L		05/23/25 07:17	05/29/25 00:48	1
3,3'-Dichlorobenzidine	3.6	U	10	3.6	ug/L		05/23/25 07:17	05/29/25 00:48	1
4-Bromophenyl phenyl ether	3.3	U	10	3.3	ug/L		05/23/25 07:17	05/29/25 00:48	1
4-Chloro-3-methylphenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
4-Chlorophenyl phenyl ether	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
4-Nitrophenol	6.5	U	10	6.5	ug/L		05/23/25 07:17	05/29/25 00:48	1
Acenaphthene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 00:48	1
Acenaphthylene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
Anthracene	1.6	U	5.0	1.6	ug/L		05/23/25 07:17	05/29/25 00:48	1
Benzidine	6.4	U	10	6.4	ug/L		05/23/25 07:17	05/29/25 00:48	1
Benzo[a]anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 00:48	1
Benzo[a]pyrene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 00:48	1
Benzo[b]fluoranthene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
Benzo[g,h,i]perylene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-34S**

**Lab Sample ID: 670-63094-1**

Date Collected: 05/21/25 10:50

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
Bis(2-chloroethoxy)methane	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
Bis(2-chloroethyl)ether	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
bis (2-chloroisopropyl) ether	4.2	U J3	5.0	4.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
Bis(2-ethylhexyl) phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 00:48	1
Butyl benzyl phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 00:48	1
Chrysene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 00:48	1
Dibenz(a,h)anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 00:48	1
Diethyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
Dimethyl phthalate	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
Di-n-butyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
<b>Di-n-octyl phthalate</b>	<b>3.7</b>	<b>I</b>	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 00:48	1
Fluoranthene	1.9	U	5.0	1.9	ug/L		05/23/25 07:17	05/29/25 00:48	1
Fluorene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 00:48	1
Hexachlorobenzene	1.7	U	10	1.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
Hexachlorobutadiene	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 00:48	1
Hexachlorocyclopentadiene	8.2	U	10	8.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
Hexachloroethane	3.1	U	10	3.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
Indeno[1,2,3-cd]pyrene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 00:48	1
Isophorone	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
Naphthalene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 00:48	1
Nitrobenzene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 00:48	1
N-Nitrosodimethylamine	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 00:48	1
N-Nitrosodi-n-propylamine	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
Pentachlorophenol	5.5	U	10	5.5	ug/L		05/23/25 07:17	05/29/25 00:48	1
Phenanthrene	1.7	U	5.0	1.7	ug/L		05/23/25 07:17	05/29/25 00:48	1
Phenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1
Pyrene	1.6	U	10	1.6	ug/L		05/23/25 07:17	05/29/25 00:48	1
Pyridine	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 00:48	1
Diphenylamine	2.8	U	5.0	2.8	ug/L		05/23/25 07:17	05/29/25 00:48	1
N-Nitrosodiphenylamine	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 00:48	1
1,2-Diphenylhydrazine (as Azobenzene)	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	60		24 - 137	05/23/25 07:17	05/29/25 00:48	1
2-Fluorobiphenyl	64		32 - 136	05/23/25 07:17	05/29/25 00:48	1
p-Terphenyl-d14 (Surr)	95		52 - 150	05/23/25 07:17	05/29/25 00:48	1
Phenol-d5 (Surr)	32		10 - 140	05/23/25 07:17	05/29/25 00:48	1
2-Fluorophenol (Surr)	49		11 - 140	05/23/25 07:17	05/29/25 00:48	1
2,4,6-Tribromophenol (Surr)	91		33 - 145	05/23/25 07:17	05/29/25 00:48	1

**Method: SW846 8270E - Semivolatile Organic Compounds (GC-MS/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 13:22	1
2-Methylnaphthalene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 13:22	1
Acenaphthene	0.028	U	0.18	0.028	ug/L		05/23/25 08:06	05/24/25 13:22	1
Acenaphthylene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 13:22	1
Anthracene	0.050	U	0.18	0.050	ug/L		05/23/25 08:06	05/24/25 13:22	1
Benzo[a]anthracene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:22	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-34S**

**Lab Sample ID: 670-63094-1**

Date Collected: 05/21/25 10:50

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8270E - Semivolatile Organic Compounds (GC-MS/MS) (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.057	U	0.18	0.057	ug/L		05/23/25 08:06	05/24/25 13:22	1
Benzo[b]fluoranthene	0.040	U	0.10	0.040	ug/L		05/23/25 08:06	05/24/25 13:22	1
Benzo[g,h,i]perylene	0.066	U	0.18	0.066	ug/L		05/23/25 08:06	05/24/25 13:22	1
Benzo[k]fluoranthene	0.046	U	0.18	0.046	ug/L		05/23/25 08:06	05/24/25 13:22	1
Chrysene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:22	1
Dibenz(a,h)anthracene	0.053	U	0.18	0.053	ug/L		05/23/25 08:06	05/24/25 13:22	1
Fluoranthene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 13:22	1
Fluorene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:22	1
Indeno[1,2,3-cd]pyrene	0.055	U	0.18	0.055	ug/L		05/23/25 08:06	05/24/25 13:22	1
<b>Naphthalene</b>	<b>0.11</b>	<b>I</b>	0.18	0.027	ug/L		05/23/25 08:06	05/24/25 13:22	1
Phenanthrene	0.035	U	0.18	0.035	ug/L		05/23/25 08:06	05/24/25 13:22	1
Pyrene	0.052	U	0.18	0.052	ug/L		05/23/25 08:06	05/24/25 13:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	81		43 - 130				05/23/25 08:06	05/24/25 13:22	1
Nitrobenzene-d5 (Surr)	88		37 - 133				05/23/25 08:06	05/24/25 13:22	1
p-Terphenyl-d14 (Surr)	80		47 - 130				05/23/25 08:06	05/24/25 13:22	1

**Method: FL-DEP FL-PRO - Florida - Petroleum Range Organics (GC)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.34	U	1.0	0.34	mg/L		05/23/25 05:16	05/23/25 20:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	120		66 - 139				05/23/25 05:16	05/23/25 20:50	1
C35 (Surr)	111		40 - 129				05/23/25 05:16	05/23/25 20:50	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00024	U	0.0020	0.00024	mg/L		05/23/25 09:26	05/23/25 20:34	1

**Client Sample ID: MW-35S**

**Lab Sample ID: 670-63094-2**

Date Collected: 05/21/25 11:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 19:34	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 19:34	1
1,1,1,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 19:34	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 19:34	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 19:34	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 19:34	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 19:34	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 19:34	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 19:34	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 19:34	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 19:34	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 19:34	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 19:34	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 19:34	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-35S**

**Lab Sample ID: 670-63094-2**

Date Collected: 05/21/25 11:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 19:34	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 19:34	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 19:34	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 19:34	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 19:34	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 19:34	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 19:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 19:34	1
Acetone	20	U	50	20	ug/L			06/03/25 19:34	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 19:34	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 19:34	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 19:34	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 19:34	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 19:34	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 19:34	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 19:34	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 19:34	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 19:34	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 19:34	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 19:34	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 19:34	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 19:34	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 19:34	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 19:34	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 19:34	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 19:34	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 19:34	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 19:34	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 19:34	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 19:34	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 19:34	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 19:34	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 19:34	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 19:34	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 19:34	1
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 19:34	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 19:34	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 19:34	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 19:34	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 19:34	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 19:34	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 19:34	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 19:34	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 19:34	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 19:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	84		40 - 146		06/03/25 19:34	1
4-Bromofluorobenzene (Surr)	100		41 - 142		06/03/25 19:34	1
Dibromofluoromethane (Surr)	86		53 - 146		06/03/25 19:34	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-35S**

**Lab Sample ID: 670-63094-2**

Date Collected: 05/21/25 11:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
1,2-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:08	1
1,3-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:08	1
1,4-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:08	1
1-Methylnaphthalene	2.4	U	10	2.4	ug/L		05/23/25 07:17	05/29/25 01:08	1
2,4,5-Trichlorophenol	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:08	1
2,4,6-Trichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
2,4-Dichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
2,4-Dimethylphenol	4.9	U	10	4.9	ug/L		05/23/25 07:17	05/29/25 01:08	1
2,4-Dinitrophenol	5.9	U	10	5.9	ug/L		05/23/25 07:17	05/29/25 01:08	1
2,4-Dinitrotoluene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
2,6-Dinitrotoluene	2.8	U	10	2.8	ug/L		05/23/25 07:17	05/29/25 01:08	1
2-Chloronaphthalene	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:08	1
2-Chlorophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
4,6-Dinitro-2-methylphenol	4.1	U	10	4.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
2-Methylnaphthalene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:08	1
2-Methylphenol	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
2-Nitrophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
3 & 4 Methylphenol	2.3	U	10	2.3	ug/L		05/23/25 07:17	05/29/25 01:08	1
3,3'-Dichlorobenzidine	3.6	U	10	3.6	ug/L		05/23/25 07:17	05/29/25 01:08	1
4-Bromophenyl phenyl ether	3.3	U	10	3.3	ug/L		05/23/25 07:17	05/29/25 01:08	1
4-Chloro-3-methylphenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
4-Chlorophenyl phenyl ether	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
4-Nitrophenol	6.5	U	10	6.5	ug/L		05/23/25 07:17	05/29/25 01:08	1
Acenaphthene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 01:08	1
Acenaphthylene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:08	1
Anthracene	1.6	U	5.0	1.6	ug/L		05/23/25 07:17	05/29/25 01:08	1
Benzidine	6.4	U	10	6.4	ug/L		05/23/25 07:17	05/29/25 01:08	1
Benzo[a]anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:08	1
Benzo[a]pyrene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:08	1
Benzo[b]fluoranthene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:08	1
Benzo[g,h,i]perylene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
Benzo[k]fluoranthene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
Bis(2-chloroethoxy)methane	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
Bis(2-chloroethyl)ether	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:08	1
bis (2-chloroisopropyl) ether	4.2	U J3	5.0	4.2	ug/L		05/23/25 07:17	05/29/25 01:08	1
Bis(2-ethylhexyl) phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:08	1
Butyl benzyl phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:08	1
Chrysene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:08	1
Dibenz(a,h)anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:08	1
Diethyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:08	1
Dimethyl phthalate	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
Di-n-butyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:08	1
Di-n-octyl phthalate	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 01:08	1
Fluoranthene	1.9	U	5.0	1.9	ug/L		05/23/25 07:17	05/29/25 01:08	1
Fluorene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:08	1
Hexachlorobenzene	1.7	U	10	1.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
Hexachlorobutadiene	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 01:08	1
Hexachlorocyclopentadiene	8.2	U	10	8.2	ug/L		05/23/25 07:17	05/29/25 01:08	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-35S**

**Lab Sample ID: 670-63094-2**

Date Collected: 05/21/25 11:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	3.1	U	10	3.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
Indeno[1,2,3-cd]pyrene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 01:08	1
Isophorone	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:08	1
Naphthalene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:08	1
Nitrobenzene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:08	1
N-Nitrosodimethylamine	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 01:08	1
N-Nitrosodi-n-propylamine	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
Pentachlorophenol	5.5	U	10	5.5	ug/L		05/23/25 07:17	05/29/25 01:08	1
Phenanthrene	1.7	U	5.0	1.7	ug/L		05/23/25 07:17	05/29/25 01:08	1
Phenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
Pyrene	1.6	U	10	1.6	ug/L		05/23/25 07:17	05/29/25 01:08	1
Pyridine	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 01:08	1
Diphenylamine	2.8	U	5.0	2.8	ug/L		05/23/25 07:17	05/29/25 01:08	1
N-Nitrosodiphenylamine	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:08	1
1,2-Diphenylhydrazine (as Azobenzene)	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	50		24 - 137				05/23/25 07:17	05/29/25 01:08	1
2-Fluorobiphenyl	53		32 - 136				05/23/25 07:17	05/29/25 01:08	1
p-Terphenyl-d14 (Surr)	86		52 - 150				05/23/25 07:17	05/29/25 01:08	1
Phenol-d5 (Surr)	26		10 - 140				05/23/25 07:17	05/29/25 01:08	1
2-Fluorophenol (Surr)	39		11 - 140				05/23/25 07:17	05/29/25 01:08	1
2,4,6-Tribromophenol (Surr)	70		33 - 145				05/23/25 07:17	05/29/25 01:08	1

**Method: SW846 8270E - Semivolatile Organic Compounds (GC-MS/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 13:40	1
2-Methylnaphthalene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 13:40	1
Acenaphthene	0.028	U	0.18	0.028	ug/L		05/23/25 08:06	05/24/25 13:40	1
Acenaphthylene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 13:40	1
Anthracene	0.050	U	0.18	0.050	ug/L		05/23/25 08:06	05/24/25 13:40	1
Benzo[a]anthracene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:40	1
Benzo[a]pyrene	0.057	U	0.18	0.057	ug/L		05/23/25 08:06	05/24/25 13:40	1
Benzo[b]fluoranthene	0.040	U	0.10	0.040	ug/L		05/23/25 08:06	05/24/25 13:40	1
Benzo[g,h,i]perylene	0.066	U	0.18	0.066	ug/L		05/23/25 08:06	05/24/25 13:40	1
Benzo[k]fluoranthene	0.046	U	0.18	0.046	ug/L		05/23/25 08:06	05/24/25 13:40	1
Chrysene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:40	1
Dibenz(a,h)anthracene	0.053	U	0.18	0.053	ug/L		05/23/25 08:06	05/24/25 13:40	1
Fluoranthene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 13:40	1
Fluorene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:40	1
Indeno[1,2,3-cd]pyrene	0.055	U	0.18	0.055	ug/L		05/23/25 08:06	05/24/25 13:40	1
Naphthalene	0.027	U	0.18	0.027	ug/L		05/23/25 08:06	05/24/25 13:40	1
Phenanthrene	0.035	U	0.18	0.035	ug/L		05/23/25 08:06	05/24/25 13:40	1
Pyrene	0.052	U	0.18	0.052	ug/L		05/23/25 08:06	05/24/25 13:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	86		43 - 130				05/23/25 08:06	05/24/25 13:40	1
Nitrobenzene-d5 (Surr)	90		37 - 133				05/23/25 08:06	05/24/25 13:40	1
p-Terphenyl-d14 (Surr)	83		47 - 130				05/23/25 08:06	05/24/25 13:40	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-35S**

**Lab Sample ID: 670-63094-2**

Date Collected: 05/21/25 11:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: FL-DEP FL-PRO - Florida - Petroleum Range Organics (GC)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.34	U	1.0	0.34	mg/L		05/23/25 05:16	05/23/25 21:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o</i> -terphenyl (Surr)	112		66 - 139				05/23/25 05:16	05/23/25 21:10	1
C35 (Surr)	110		40 - 129				05/23/25 05:16	05/23/25 21:10	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00024	U	0.0020	0.00024	mg/L		05/23/25 09:26	05/23/25 20:39	1

**Client Sample ID: MW-36S**

**Lab Sample ID: 670-63094-3**

Date Collected: 05/21/25 12:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 19:51	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 19:51	1
1,1,1,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 19:51	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 19:51	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 19:51	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 19:51	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 19:51	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 19:51	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 19:51	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 19:51	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 19:51	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 19:51	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 19:51	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 19:51	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 19:51	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 19:51	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 19:51	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 19:51	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 19:51	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 19:51	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 19:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 19:51	1
Acetone	20	U	50	20	ug/L			06/03/25 19:51	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 19:51	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 19:51	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 19:51	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 19:51	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 19:51	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 19:51	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 19:51	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 19:51	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 19:51	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 19:51	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 19:51	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-36S**

**Lab Sample ID: 670-63094-3**

Date Collected: 05/21/25 12:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 19:51	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 19:51	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 19:51	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 19:51	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 19:51	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 19:51	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 19:51	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 19:51	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 19:51	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 19:51	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 19:51	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 19:51	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 19:51	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 19:51	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 19:51	1
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 19:51	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 19:51	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 19:51	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 19:51	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 19:51	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 19:51	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 19:51	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 19:51	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 19:51	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 19:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	83		40 - 146		06/03/25 19:51	1
4-Bromofluorobenzene (Surr)	100		41 - 142		06/03/25 19:51	1
Dibromofluoromethane (Surr)	86		53 - 146		06/03/25 19:51	1

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:29	1
1,2-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:29	1
1,3-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:29	1
1,4-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:29	1
1-Methylnaphthalene	2.4	U	10	2.4	ug/L		05/23/25 07:17	05/29/25 01:29	1
2,4,5-Trichlorophenol	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:29	1
2,4,6-Trichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:29	1
2,4-Dichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:29	1
2,4-Dimethylphenol	4.9	U	10	4.9	ug/L		05/23/25 07:17	05/29/25 01:29	1
2,4-Dinitrophenol	5.9	U	10	5.9	ug/L		05/23/25 07:17	05/29/25 01:29	1
2,4-Dinitrotoluene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
2,6-Dinitrotoluene	2.8	U	10	2.8	ug/L		05/23/25 07:17	05/29/25 01:29	1
2-Chloronaphthalene	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:29	1
2-Chlorophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
4,6-Dinitro-2-methylphenol	4.1	U	10	4.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
2-Methylnaphthalene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:29	1
2-Methylphenol	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 01:29	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-36S**

**Lab Sample ID: 670-63094-3**

Date Collected: 05/21/25 12:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
3 & 4 Methylphenol	2.3	U	10	2.3	ug/L		05/23/25 07:17	05/29/25 01:29	1
3,3'-Dichlorobenzidine	3.6	U	10	3.6	ug/L		05/23/25 07:17	05/29/25 01:29	1
4-Bromophenyl phenyl ether	3.3	U	10	3.3	ug/L		05/23/25 07:17	05/29/25 01:29	1
4-Chloro-3-methylphenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:29	1
4-Chlorophenyl phenyl ether	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:29	1
4-Nitrophenol	6.5	U	10	6.5	ug/L		05/23/25 07:17	05/29/25 01:29	1
Acenaphthene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 01:29	1
Acenaphthylene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
Anthracene	1.6	U	5.0	1.6	ug/L		05/23/25 07:17	05/29/25 01:29	1
Benzidine	6.4	U	10	6.4	ug/L		05/23/25 07:17	05/29/25 01:29	1
Benzo[a]anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:29	1
Benzo[a]pyrene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:29	1
Benzo[b]fluoranthene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
Benzo[g,h,i]perylene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
Benzo[k]fluoranthene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
Bis(2-chloroethoxy)methane	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
Bis(2-chloroethyl)ether	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
bis (2-chloroisopropyl) ether	4.2	U J3	5.0	4.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
Bis(2-ethylhexyl) phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:29	1
Butyl benzyl phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:29	1
Chrysene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:29	1
Dibenz(a,h)anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:29	1
Diethyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
Dimethyl phthalate	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
Di-n-butyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
Di-n-octyl phthalate	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 01:29	1
Fluoranthene	1.9	U	5.0	1.9	ug/L		05/23/25 07:17	05/29/25 01:29	1
Fluorene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:29	1
Hexachlorobenzene	1.7	U	10	1.7	ug/L		05/23/25 07:17	05/29/25 01:29	1
Hexachlorobutadiene	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 01:29	1
Hexachlorocyclopentadiene	8.2	U	10	8.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
Hexachloroethane	3.1	U	10	3.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
Indeno[1,2,3-cd]pyrene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 01:29	1
Isophorone	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
Naphthalene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:29	1
Nitrobenzene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:29	1
N-Nitrosodimethylamine	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 01:29	1
N-Nitrosodi-n-propylamine	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 01:29	1
Pentachlorophenol	5.5	U	10	5.5	ug/L		05/23/25 07:17	05/29/25 01:29	1
Phenanthrene	1.7	U	5.0	1.7	ug/L		05/23/25 07:17	05/29/25 01:29	1
Phenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1
Pyrene	1.6	U	10	1.6	ug/L		05/23/25 07:17	05/29/25 01:29	1
Pyridine	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 01:29	1
Diphenylamine	2.8	U	5.0	2.8	ug/L		05/23/25 07:17	05/29/25 01:29	1
N-Nitrosodiphenylamine	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:29	1
1,2-Diphenylhydrazine (as Azobenzene)	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:29	1

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-36S**

**Lab Sample ID: 670-63094-3**

Date Collected: 05/21/25 12:56

Matrix: Water

Date Received: 05/22/25 13:53

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	56		24 - 137	05/23/25 07:17	05/29/25 01:29	1
2-Fluorobiphenyl	62		32 - 136	05/23/25 07:17	05/29/25 01:29	1
p-Terphenyl-d14 (Surr)	93		52 - 150	05/23/25 07:17	05/29/25 01:29	1
Phenol-d5 (Surr)	28		10 - 140	05/23/25 07:17	05/29/25 01:29	1
2-Fluorophenol (Surr)	44		11 - 140	05/23/25 07:17	05/29/25 01:29	1
2,4,6-Tribromophenol (Surr)	75		33 - 145	05/23/25 07:17	05/29/25 01:29	1

**Method: SW846 8270E - Semivolatile Organic Compounds (GC-MS/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 13:58	1
2-Methylnaphthalene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 13:58	1
Acenaphthene	0.028	U	0.18	0.028	ug/L		05/23/25 08:06	05/24/25 13:58	1
Acenaphthylene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 13:58	1
Anthracene	0.050	U	0.18	0.050	ug/L		05/23/25 08:06	05/24/25 13:58	1
Benzo[a]anthracene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:58	1
Benzo[a]pyrene	0.057	U	0.18	0.057	ug/L		05/23/25 08:06	05/24/25 13:58	1
Benzo[b]fluoranthene	0.040	U	0.10	0.040	ug/L		05/23/25 08:06	05/24/25 13:58	1
Benzo[g,h,i]perylene	0.066	U	0.18	0.066	ug/L		05/23/25 08:06	05/24/25 13:58	1
Benzo[k]fluoranthene	0.046	U	0.18	0.046	ug/L		05/23/25 08:06	05/24/25 13:58	1
Chrysene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:58	1
Dibenz[a,h]anthracene	0.053	U	0.18	0.053	ug/L		05/23/25 08:06	05/24/25 13:58	1
Fluoranthene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 13:58	1
Fluorene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 13:58	1
Indeno[1,2,3-cd]pyrene	0.055	U	0.18	0.055	ug/L		05/23/25 08:06	05/24/25 13:58	1
Naphthalene	0.027	U	0.18	0.027	ug/L		05/23/25 08:06	05/24/25 13:58	1
Phenanthrene	0.035	U	0.18	0.035	ug/L		05/23/25 08:06	05/24/25 13:58	1
Pyrene	0.052	U	0.18	0.052	ug/L		05/23/25 08:06	05/24/25 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	92		43 - 130	05/23/25 08:06	05/24/25 13:58	1
Nitrobenzene-d5 (Surr)	95		37 - 133	05/23/25 08:06	05/24/25 13:58	1
p-Terphenyl-d14 (Surr)	86		47 - 130	05/23/25 08:06	05/24/25 13:58	1

**Method: FL-DEP FL-PRO - Florida - Petroleum Range Organics (GC)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.34	U	1.0	0.34	mg/L		05/23/25 05:16	05/23/25 21:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	112		66 - 139	05/23/25 05:16	05/23/25 21:29	1
C35 (Surr)	107		40 - 129	05/23/25 05:16	05/23/25 21:29	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00024	U	0.0020	0.00024	mg/L		05/23/25 09:26	05/23/25 20:42	1

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-37S**

**Lab Sample ID: 670-63094-4**

Date Collected: 05/21/25 13:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 20:09	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 20:09	1
1,1,2,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 20:09	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 20:09	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 20:09	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 20:09	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 20:09	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 20:09	1
<b>1,2,4-Trimethylbenzene</b>	<b>0.68</b>	<b>I</b>	2.0	0.65	ug/L			06/03/25 20:09	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 20:09	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 20:09	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 20:09	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 20:09	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 20:09	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 20:09	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 20:09	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 20:09	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 20:09	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 20:09	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 20:09	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 20:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 20:09	1
Acetone	20	U	50	20	ug/L			06/03/25 20:09	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 20:09	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 20:09	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 20:09	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 20:09	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 20:09	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 20:09	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 20:09	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 20:09	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 20:09	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 20:09	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 20:09	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 20:09	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 20:09	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 20:09	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 20:09	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 20:09	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 20:09	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 20:09	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 20:09	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 20:09	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 20:09	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 20:09	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 20:09	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 20:09	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 20:09	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 20:09	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-37S**

**Lab Sample ID: 670-63094-4**

Date Collected: 05/21/25 13:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 20:09	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 20:09	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 20:09	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 20:09	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 20:09	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 20:09	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 20:09	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 20:09	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 20:09	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 20:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	82		40 - 146		06/03/25 20:09	1
4-Bromofluorobenzene (Surr)	99		41 - 142		06/03/25 20:09	1
Dibromofluoromethane (Surr)	84		53 - 146		06/03/25 20:09	1

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
1,2-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:50	1
1,3-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:50	1
1,4-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:50	1
1-Methylnaphthalene	2.4	U	10	2.4	ug/L		05/23/25 07:17	05/29/25 01:50	1
2,4,5-Trichlorophenol	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 01:50	1
2,4,6-Trichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
2,4-Dichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
2,4-Dimethylphenol	4.9	U	10	4.9	ug/L		05/23/25 07:17	05/29/25 01:50	1
2,4-Dinitrophenol	5.9	U	10	5.9	ug/L		05/23/25 07:17	05/29/25 01:50	1
2,4-Dinitrotoluene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
2,6-Dinitrotoluene	2.8	U	10	2.8	ug/L		05/23/25 07:17	05/29/25 01:50	1
2-Chloronaphthalene	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:50	1
2-Chlorophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
4,6-Dinitro-2-methylphenol	4.1	U	10	4.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
2-Methylnaphthalene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:50	1
2-Methylphenol	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
2-Nitrophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
3 & 4 Methylphenol	2.3	U	10	2.3	ug/L		05/23/25 07:17	05/29/25 01:50	1
3,3'-Dichlorobenzidine	3.6	U	10	3.6	ug/L		05/23/25 07:17	05/29/25 01:50	1
4-Bromophenyl phenyl ether	3.3	U	10	3.3	ug/L		05/23/25 07:17	05/29/25 01:50	1
4-Chloro-3-methylphenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
4-Chlorophenyl phenyl ether	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
4-Nitrophenol	6.5	U	10	6.5	ug/L		05/23/25 07:17	05/29/25 01:50	1
Acenaphthene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 01:50	1
Acenaphthylene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
Anthracene	1.6	U	5.0	1.6	ug/L		05/23/25 07:17	05/29/25 01:50	1
Benzidine	6.4	U	10	6.4	ug/L		05/23/25 07:17	05/29/25 01:50	1
Benzo[a]anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:50	1
Benzo[a]pyrene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:50	1
Benzo[b]fluoranthene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
Benzo[g,h,i]perylene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-37S**

**Lab Sample ID: 670-63094-4**

Date Collected: 05/21/25 13:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
Bis(2-chloroethoxy)methane	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
Bis(2-chloroethyl)ether	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
bis (2-chloroisopropyl) ether	4.2	U J3	5.0	4.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
Bis(2-ethylhexyl) phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:50	1
Butyl benzyl phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:50	1
Chrysene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:50	1
Dibenz(a,h)anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:50	1
Diethyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
Dimethyl phthalate	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
Di-n-butyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
Di-n-octyl phthalate	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 01:50	1
Fluoranthene	1.9	U	5.0	1.9	ug/L		05/23/25 07:17	05/29/25 01:50	1
Fluorene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 01:50	1
Hexachlorobenzene	1.7	U	10	1.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
Hexachlorobutadiene	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 01:50	1
Hexachlorocyclopentadiene	8.2	U	10	8.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
Hexachloroethane	3.1	U	10	3.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
Indeno[1,2,3-cd]pyrene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 01:50	1
Isophorone	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
Naphthalene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 01:50	1
Nitrobenzene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 01:50	1
N-Nitrosodimethylamine	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 01:50	1
N-Nitrosodi-n-propylamine	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
Pentachlorophenol	5.5	U	10	5.5	ug/L		05/23/25 07:17	05/29/25 01:50	1
Phenanthrene	1.7	U	5.0	1.7	ug/L		05/23/25 07:17	05/29/25 01:50	1
Phenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1
Pyrene	1.6	U	10	1.6	ug/L		05/23/25 07:17	05/29/25 01:50	1
Pyridine	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 01:50	1
Diphenylamine	2.8	U	5.0	2.8	ug/L		05/23/25 07:17	05/29/25 01:50	1
N-Nitrosodiphenylamine	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 01:50	1
1,2-Diphenylhydrazine (as Azobenzene)	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 01:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	51		24 - 137	05/23/25 07:17	05/29/25 01:50	1
2-Fluorobiphenyl	65		32 - 136	05/23/25 07:17	05/29/25 01:50	1
p-Terphenyl-d14 (Surr)	78		52 - 150	05/23/25 07:17	05/29/25 01:50	1
Phenol-d5 (Surr)	47		10 - 140	05/23/25 07:17	05/29/25 01:50	1
2-Fluorophenol (Surr)	57		11 - 140	05/23/25 07:17	05/29/25 01:50	1
2,4,6-Tribromophenol (Surr)	89		33 - 145	05/23/25 07:17	05/29/25 01:50	1

**Method: SW846 8270E - Semivolatile Organic Compounds (GC-MS/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 14:15	1
2-Methylnaphthalene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 14:15	1
Acenaphthene	0.028	U	0.18	0.028	ug/L		05/23/25 08:06	05/24/25 14:15	1
Acenaphthylene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 14:15	1
Anthracene	0.050	U	0.18	0.050	ug/L		05/23/25 08:06	05/24/25 14:15	1
Benzo[a]anthracene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 14:15	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-37S**

**Lab Sample ID: 670-63094-4**

Date Collected: 05/21/25 13:56

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8270E - Semivolatile Organic Compounds (GC-MS/MS) (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.057	U	0.18	0.057	ug/L		05/23/25 08:06	05/24/25 14:15	1
Benzo[b]fluoranthene	0.040	U	0.10	0.040	ug/L		05/23/25 08:06	05/24/25 14:15	1
Benzo[g,h,i]perylene	0.066	U	0.18	0.066	ug/L		05/23/25 08:06	05/24/25 14:15	1
Benzo[k]fluoranthene	0.046	U	0.18	0.046	ug/L		05/23/25 08:06	05/24/25 14:15	1
Chrysene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 14:15	1
Dibenz(a,h)anthracene	0.053	U	0.18	0.053	ug/L		05/23/25 08:06	05/24/25 14:15	1
Fluoranthene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 14:15	1
Fluorene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 14:15	1
Indeno[1,2,3-cd]pyrene	0.055	U	0.18	0.055	ug/L		05/23/25 08:06	05/24/25 14:15	1
<b>Naphthalene</b>	<b>0.045</b>	<b>I</b>	0.18	0.027	ug/L		05/23/25 08:06	05/24/25 14:15	1
Phenanthrene	0.035	U	0.18	0.035	ug/L		05/23/25 08:06	05/24/25 14:15	1
Pyrene	0.052	U	0.18	0.052	ug/L		05/23/25 08:06	05/24/25 14:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	89		43 - 130				05/23/25 08:06	05/24/25 14:15	1
Nitrobenzene-d5 (Surr)	99		37 - 133				05/23/25 08:06	05/24/25 14:15	1
p-Terphenyl-d14 (Surr)	89		47 - 130				05/23/25 08:06	05/24/25 14:15	1

**Method: FL-DEP FL-PRO - Florida - Petroleum Range Organics (GC)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.34	U	1.0	0.34	mg/L		05/23/25 05:16	05/23/25 21:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-terphenyl (Surr)	110		66 - 139				05/23/25 05:16	05/23/25 21:48	1
C35 (Surr)	112		40 - 129				05/23/25 05:16	05/23/25 21:48	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0026		0.0020	0.00024	mg/L		05/23/25 09:26	05/27/25 12:07	1

**Client Sample ID: MW-C**

**Lab Sample ID: 670-63094-5**

Date Collected: 05/21/25 15:30

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 20:27	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 20:27	1
1,1,2,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 20:27	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 20:27	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 20:27	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 20:27	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 20:27	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 20:27	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 20:27	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 20:27	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 20:27	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 20:27	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 20:27	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 20:27	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-C**

**Lab Sample ID: 670-63094-5**

Date Collected: 05/21/25 15:30

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 20:27	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 20:27	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 20:27	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 20:27	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 20:27	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 20:27	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 20:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 20:27	1
Acetone	20	U	50	20	ug/L			06/03/25 20:27	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 20:27	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 20:27	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 20:27	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 20:27	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 20:27	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 20:27	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 20:27	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 20:27	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 20:27	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 20:27	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 20:27	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 20:27	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 20:27	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 20:27	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 20:27	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 20:27	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 20:27	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 20:27	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 20:27	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 20:27	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 20:27	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 20:27	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 20:27	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 20:27	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 20:27	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 20:27	1
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 20:27	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 20:27	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 20:27	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 20:27	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 20:27	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 20:27	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 20:27	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 20:27	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 20:27	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 20:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	83		40 - 146		06/03/25 20:27	1
4-Bromofluorobenzene (Surr)	100		41 - 142		06/03/25 20:27	1
Dibromofluoromethane (Surr)	86		53 - 146		06/03/25 20:27	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-C**

**Lab Sample ID: 670-63094-5**

**Date Collected: 05/21/25 15:30**

**Matrix: Water**

**Date Received: 05/22/25 13:53**

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
1,2-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 02:10	1
1,3-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 02:10	1
1,4-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 02:10	1
1-Methylnaphthalene	2.4	U	10	2.4	ug/L		05/23/25 07:17	05/29/25 02:10	1
2,4,5-Trichlorophenol	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/29/25 02:10	1
2,4,6-Trichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
2,4-Dichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
2,4-Dimethylphenol	4.9	U	10	4.9	ug/L		05/23/25 07:17	05/29/25 02:10	1
2,4-Dinitrophenol	5.9	U	10	5.9	ug/L		05/23/25 07:17	05/29/25 02:10	1
2,4-Dinitrotoluene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
2,6-Dinitrotoluene	2.8	U	10	2.8	ug/L		05/23/25 07:17	05/29/25 02:10	1
2-Chloronaphthalene	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 02:10	1
2-Chlorophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
4,6-Dinitro-2-methylphenol	4.1	U	10	4.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
2-Methylnaphthalene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 02:10	1
2-Methylphenol	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
2-Nitrophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
3 & 4 Methylphenol	2.3	U	10	2.3	ug/L		05/23/25 07:17	05/29/25 02:10	1
3,3'-Dichlorobenzidine	3.6	U	10	3.6	ug/L		05/23/25 07:17	05/29/25 02:10	1
4-Bromophenyl phenyl ether	3.3	U	10	3.3	ug/L		05/23/25 07:17	05/29/25 02:10	1
4-Chloro-3-methylphenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
4-Chlorophenyl phenyl ether	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
4-Nitrophenol	6.5	U	10	6.5	ug/L		05/23/25 07:17	05/29/25 02:10	1
Acenaphthene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 02:10	1
Acenaphthylene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 02:10	1
Anthracene	1.6	U	5.0	1.6	ug/L		05/23/25 07:17	05/29/25 02:10	1
Benzidine	6.4	U	10	6.4	ug/L		05/23/25 07:17	05/29/25 02:10	1
Benzo[a]anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 02:10	1
Benzo[a]pyrene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 02:10	1
Benzo[b]fluoranthene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 02:10	1
Benzo[g,h,i]perylene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
Benzo[k]fluoranthene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
Bis(2-chloroethoxy)methane	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
Bis(2-chloroethyl)ether	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 02:10	1
bis (2-chloroisopropyl) ether	4.2	U J3	5.0	4.2	ug/L		05/23/25 07:17	05/29/25 02:10	1
Bis(2-ethylhexyl) phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 02:10	1
Butyl benzyl phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 02:10	1
Chrysene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 02:10	1
Dibenz(a,h)anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 02:10	1
Diethyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 02:10	1
Dimethyl phthalate	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
Di-n-butyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 02:10	1
Di-n-octyl phthalate	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 02:10	1
Fluoranthene	1.9	U	5.0	1.9	ug/L		05/23/25 07:17	05/29/25 02:10	1
Fluorene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/29/25 02:10	1
Hexachlorobenzene	1.7	U	10	1.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
Hexachlorobutadiene	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 02:10	1
Hexachlorocyclopentadiene	8.2	U	10	8.2	ug/L		05/23/25 07:17	05/29/25 02:10	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-C**

**Lab Sample ID: 670-63094-5**

Date Collected: 05/21/25 15:30

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	3.1	U	10	3.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
Indeno[1,2,3-cd]pyrene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/29/25 02:10	1
Isophorone	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 02:10	1
Naphthalene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/29/25 02:10	1
Nitrobenzene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/29/25 02:10	1
N-Nitrosodimethylamine	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/29/25 02:10	1
N-Nitrosodi-n-propylamine	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
Pentachlorophenol	5.5	U	10	5.5	ug/L		05/23/25 07:17	05/29/25 02:10	1
Phenanthrene	1.7	U	5.0	1.7	ug/L		05/23/25 07:17	05/29/25 02:10	1
Phenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
Pyrene	1.6	U	10	1.6	ug/L		05/23/25 07:17	05/29/25 02:10	1
Pyridine	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/29/25 02:10	1
Diphenylamine	2.8	U	5.0	2.8	ug/L		05/23/25 07:17	05/29/25 02:10	1
N-Nitrosodiphenylamine	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/29/25 02:10	1
1,2-Diphenylhydrazine (as Azobenzene)	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/29/25 02:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	60		24 - 137				05/23/25 07:17	05/29/25 02:10	1
2-Fluorobiphenyl	71		32 - 136				05/23/25 07:17	05/29/25 02:10	1
p-Terphenyl-d14 (Surr)	84		52 - 150				05/23/25 07:17	05/29/25 02:10	1
Phenol-d5 (Surr)	32		10 - 140				05/23/25 07:17	05/29/25 02:10	1
2-Fluorophenol (Surr)	49		11 - 140				05/23/25 07:17	05/29/25 02:10	1
2,4,6-Tribromophenol (Surr)	95		33 - 145				05/23/25 07:17	05/29/25 02:10	1

**Method: SW846 8270E - Semivolatile Organic Compounds (GC-MS/MS)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 14:33	1
2-Methylnaphthalene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 14:33	1
Acenaphthene	0.028	U	0.18	0.028	ug/L		05/23/25 08:06	05/24/25 14:33	1
Acenaphthylene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 14:33	1
Anthracene	0.050	U	0.18	0.050	ug/L		05/23/25 08:06	05/24/25 14:33	1
Benzo[a]anthracene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 14:33	1
Benzo[a]pyrene	0.057	U	0.18	0.057	ug/L		05/23/25 08:06	05/24/25 14:33	1
Benzo[b]fluoranthene	0.040	U	0.10	0.040	ug/L		05/23/25 08:06	05/24/25 14:33	1
Benzo[g,h,i]perylene	0.066	U	0.18	0.066	ug/L		05/23/25 08:06	05/24/25 14:33	1
Benzo[k]fluoranthene	0.046	U	0.18	0.046	ug/L		05/23/25 08:06	05/24/25 14:33	1
Chrysene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 14:33	1
Dibenz(a,h)anthracene	0.053	U	0.18	0.053	ug/L		05/23/25 08:06	05/24/25 14:33	1
Fluoranthene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 14:33	1
Fluorene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 14:33	1
Indeno[1,2,3-cd]pyrene	0.055	U	0.18	0.055	ug/L		05/23/25 08:06	05/24/25 14:33	1
Naphthalene	0.045	I	0.18	0.027	ug/L		05/23/25 08:06	05/24/25 14:33	1
Phenanthrene	0.035	U	0.18	0.035	ug/L		05/23/25 08:06	05/24/25 14:33	1
Pyrene	0.052	U	0.18	0.052	ug/L		05/23/25 08:06	05/24/25 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	84		43 - 130				05/23/25 08:06	05/24/25 14:33	1
Nitrobenzene-d5 (Surr)	97		37 - 133				05/23/25 08:06	05/24/25 14:33	1
p-Terphenyl-d14 (Surr)	85		47 - 130				05/23/25 08:06	05/24/25 14:33	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-C**

**Lab Sample ID: 670-63094-5**

Date Collected: 05/21/25 15:30

Matrix: Water

Date Received: 05/22/25 13:53

**Method: FL-DEP FL-PRO - Florida - Petroleum Range Organics (GC)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	0.34	U	1.0	0.34	mg/L		05/23/25 05:16	05/23/25 22:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o</i> -terphenyl (Surr)	113		66 - 139				05/23/25 05:16	05/23/25 22:08	1
C35 (Surr)	108		40 - 129				05/23/25 05:16	05/23/25 22:08	1

**Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0013	I	0.0020	0.00024	mg/L		05/23/25 09:26	05/27/25 12:09	1

**Client Sample ID: Field Blank**

**Lab Sample ID: 670-63094-6**

Date Collected: 05/21/25 13:14

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 18:23	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 18:23	1
1,1,1,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 18:23	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 18:23	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 18:23	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 18:23	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 18:23	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 18:23	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 18:23	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 18:23	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 18:23	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 18:23	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 18:23	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 18:23	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 18:23	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 18:23	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 18:23	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 18:23	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 18:23	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 18:23	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 18:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 18:23	1
Acetone	20	U	50	20	ug/L			06/03/25 18:23	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 18:23	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 18:23	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 18:23	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 18:23	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 18:23	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 18:23	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 18:23	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 18:23	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 18:23	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 18:23	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 18:23	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: Field Blank**

**Lab Sample ID: 670-63094-6**

Date Collected: 05/21/25 13:14

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 18:23	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 18:23	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 18:23	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 18:23	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 18:23	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 18:23	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 18:23	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 18:23	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 18:23	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 18:23	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 18:23	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 18:23	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 18:23	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 18:23	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 18:23	1
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 18:23	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 18:23	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 18:23	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 18:23	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 18:23	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 18:23	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 18:23	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 18:23	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 18:23	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 18:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	85		40 - 146					06/03/25 18:23	1
4-Bromofluorobenzene (Surr)	99		41 - 142					06/03/25 18:23	1
Dibromofluoromethane (Surr)	88		53 - 146					06/03/25 18:23	1

**Client Sample ID: Rinsate Blank**

**Lab Sample ID: 670-63094-7**

Date Collected: 05/21/25 14:25

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 18:41	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 18:41	1
1,1,2,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 18:41	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 18:41	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 18:41	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 18:41	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 18:41	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 18:41	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 18:41	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 18:41	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 18:41	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 18:41	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 18:41	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: Rinsate Blank**

**Lab Sample ID: 670-63094-7**

Date Collected: 05/21/25 14:25

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 18:41	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 18:41	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 18:41	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 18:41	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 18:41	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 18:41	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 18:41	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 18:41	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 18:41	1
Acetone	20	U	50	20	ug/L			06/03/25 18:41	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 18:41	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 18:41	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 18:41	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 18:41	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 18:41	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 18:41	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 18:41	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 18:41	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 18:41	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 18:41	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 18:41	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 18:41	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 18:41	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 18:41	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 18:41	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 18:41	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 18:41	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 18:41	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 18:41	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 18:41	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 18:41	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 18:41	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 18:41	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 18:41	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 18:41	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 18:41	1
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 18:41	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 18:41	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 18:41	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 18:41	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 18:41	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 18:41	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 18:41	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 18:41	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 18:41	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	85		40 - 146		06/03/25 18:41	1
4-Bromofluorobenzene (Surr)	98		41 - 142		06/03/25 18:41	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: Rinsate Blank**

**Lab Sample ID: 670-63094-7**

Date Collected: 05/21/25 14:25

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	86		53 - 146		06/03/25 18:41	1

**Client Sample ID: Trip Blank 1**

**Lab Sample ID: 670-63094-8**

Date Collected: 05/21/25 00:00

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 17:48	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 17:48	1
1,1,2,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 17:48	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 17:48	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 17:48	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 17:48	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 17:48	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 17:48	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 17:48	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 17:48	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 17:48	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 17:48	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 17:48	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 17:48	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 17:48	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 17:48	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 17:48	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 17:48	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 17:48	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 17:48	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 17:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 17:48	1
Acetone	20	U	50	20	ug/L			06/03/25 17:48	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 17:48	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 17:48	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 17:48	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 17:48	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 17:48	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 17:48	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 17:48	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 17:48	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 17:48	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 17:48	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 17:48	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 17:48	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 17:48	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 17:48	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 17:48	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 17:48	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 17:48	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 17:48	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: Trip Blank 1**

**Lab Sample ID: 670-63094-8**

Date Collected: 05/21/25 00:00

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 17:48	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 17:48	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 17:48	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 17:48	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 17:48	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 17:48	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 17:48	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 17:48	1
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 17:48	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 17:48	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 17:48	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 17:48	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 17:48	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 17:48	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 17:48	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 17:48	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 17:48	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 17:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	87		40 - 146					06/03/25 17:48	1
4-Bromofluorobenzene (Surr)	102		41 - 142					06/03/25 17:48	1
Dibromofluoromethane (Surr)	89		53 - 146					06/03/25 17:48	1

**Client Sample ID: DUP-1**

**Lab Sample ID: 670-63094-9**

Date Collected: 05/21/25 15:45

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 20:44	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 20:44	1
1,1,2,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 20:44	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 20:44	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 20:44	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 20:44	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 20:44	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 20:44	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 20:44	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 20:44	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 20:44	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 20:44	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 20:44	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 20:44	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 20:44	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 20:44	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 20:44	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 20:44	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 20:44	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 20:44	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: DUP-1**

**Lab Sample ID: 670-63094-9**

Date Collected: 05/21/25 15:45

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 20:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 20:44	1
Acetone	20	U	50	20	ug/L			06/03/25 20:44	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 20:44	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 20:44	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 20:44	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 20:44	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 20:44	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 20:44	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 20:44	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 20:44	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 20:44	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 20:44	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 20:44	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 20:44	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 20:44	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 20:44	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 20:44	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 20:44	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 20:44	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 20:44	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 20:44	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 20:44	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 20:44	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 20:44	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 20:44	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 20:44	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 20:44	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 20:44	1
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 20:44	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 20:44	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 20:44	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 20:44	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 20:44	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 20:44	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 20:44	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 20:44	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 20:44	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	81		40 - 146		06/03/25 20:44	1
4-Bromofluorobenzene (Surr)	101		41 - 142		06/03/25 20:44	1
Dibromofluoromethane (Surr)	85		53 - 146		06/03/25 20:44	1

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: Trip Blank 2**

**Lab Sample ID: 670-63094-10**

Date Collected: 05/21/25 00:00

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 18:06	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 18:06	1
1,1,2,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 18:06	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 18:06	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 18:06	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 18:06	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 18:06	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 18:06	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 18:06	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 18:06	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 18:06	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 18:06	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 18:06	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 18:06	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 18:06	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 18:06	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 18:06	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 18:06	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 18:06	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 18:06	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 18:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 18:06	1
Acetone	20	U	50	20	ug/L			06/03/25 18:06	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 18:06	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 18:06	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 18:06	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 18:06	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 18:06	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 18:06	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 18:06	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 18:06	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 18:06	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 18:06	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 18:06	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 18:06	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 18:06	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 18:06	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 18:06	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 18:06	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 18:06	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 18:06	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 18:06	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 18:06	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 18:06	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 18:06	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 18:06	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 18:06	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 18:06	1
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 18:06	1

Eurofins Orlando

# Client Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: Trip Blank 2**

**Lab Sample ID: 670-63094-10**

Date Collected: 05/21/25 00:00

Matrix: Water

Date Received: 05/22/25 13:53

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 18:06	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 18:06	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 18:06	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 18:06	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 18:06	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 18:06	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 18:06	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 18:06	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 18:06	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	85		40 - 146		06/03/25 18:06	1
4-Bromofluorobenzene (Surr)	104		41 - 142		06/03/25 18:06	1
Dibromofluoromethane (Surr)	85		53 - 146		06/03/25 18:06	1

# Surrogate Summary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (40-146)	BFB (41-142)	DBFM (53-146)
670-63094-1	MW-34S	84	102	84
670-63094-2	MW-35S	84	100	86
670-63094-3	MW-36S	83	100	86
670-63094-4	MW-37S	82	99	84
670-63094-5	MW-C	83	100	86
670-63094-6	Field Blank	85	99	88
670-63094-7	Rinsate Blank	85	98	86
670-63094-8	Trip Blank 1	87	102	89
670-63094-9	DUP-1	81	101	85
670-63094-10	Trip Blank 2	85	104	85
LCS 670-156478/4	Lab Control Sample	98	98	94
MB 670-156478/7	Method Blank	96	98	91

**Surrogate Legend**  
TOL = Toluene-d8 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)  
DBFM = Dibromofluoromethane (Surr)

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (24-137)	FBP (32-136)	TPHd14 (52-150)	PHL (10-140)	2FP (11-140)	TBP (33-145)
670-63094-1	MW-34S	60	64	95	32	49	91
670-63094-2	MW-35S	50	53	86	26	39	70
670-63094-3	MW-36S	56	62	93	28	44	75
670-63094-4	MW-37S	51	65	78	47	57	89
670-63094-5	MW-C	60	71	84	32	49	95
LCS 670-154748/2-A	Lab Control Sample	71	73	92	36	52	105
LCS 670-154748/3-A	Lab Control Sample Dup	77	78	97	42	60	112
MB 670-154748/1-A	Method Blank	82	84	96	41	65	97

**Surrogate Legend**  
NBZ = Nitrobenzene-d5 (Surr)  
FBP = 2-Fluorobiphenyl  
TPHd14 = p-Terphenyl-d14 (Surr)  
PHL = Phenol-d5 (Surr)  
2FP = 2-Fluorophenol (Surr)  
TBP = 2,4,6-Tribromophenol (Surr)

## Method: 8270E - Semivolatile Organic Compounds (GC-MS/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (43-130)	NBZ (37-133)	TPHd14 (47-130)
670-63094-1	MW-34S	81	88	80
670-63094-2	MW-35S	86	90	83
670-63094-3	MW-36S	92	95	86
670-63094-4	MW-37S	89	99	89

Eurofins Orlando

## Surrogate Summary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

### Method: 8270E - Semivolatile Organic Compounds (GC-MS/MS) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (43-130)	NBZ (37-133)	TPHd14 (47-130)
670-63094-5	MW-C	84	97	85
LCS 670-154755/2-A	Lab Control Sample	88	88	83
LCSD 670-154755/3-A	Lab Control Sample Dup	88	89	82
MB 670-154755/1-A	Method Blank	89	92	85

**Surrogate Legend**

FBP = 2-Fluorobiphenyl  
NBZ = Nitrobenzene-d5 (Surr)  
TPHd14 = p-Terphenyl-d14 (Surr)

### Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		OTP (66-139)	C-35 (40-129)
670-63094-1	MW-34S	120	111
670-63094-2	MW-35S	112	110
670-63094-3	MW-36S	112	107
670-63094-4	MW-37S	110	112
670-63094-5	MW-C	113	108
LCS 670-154736/2-A	Lab Control Sample	101	107
LCSD 670-154736/3-A	Lab Control Sample Dup	104	113
MB 670-154736/1-A	Method Blank	116	121

**Surrogate Legend**

OTP = o- terphenyl (Surr)  
C-35 = C35 (Surr)

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 670-156478/7

Matrix: Water

Analysis Batch: 156478

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	0.61	U	1.0	0.61	ug/L			06/03/25 14:14	1
1,1,1-Trichloroethane	0.73	U	1.0	0.73	ug/L			06/03/25 14:14	1
1,1,2,2-Tetrachloroethane	0.54	U	1.0	0.54	ug/L			06/03/25 14:14	1
1,1,2-Trichloroethane	0.71	U	2.0	0.71	ug/L			06/03/25 14:14	1
1,1-Dichloroethane	0.62	U	1.0	0.62	ug/L			06/03/25 14:14	1
1,1-Dichloroethene	0.75	U	1.0	0.75	ug/L			06/03/25 14:14	1
1,1-Dichloropropene	0.72	U	1.0	0.72	ug/L			06/03/25 14:14	1
1,2,3-Trichloropropane	0.64	U	2.0	0.64	ug/L			06/03/25 14:14	1
1,2,4-Trimethylbenzene	0.65	U	2.0	0.65	ug/L			06/03/25 14:14	1
Ethylene Dibromide	0.65	U	12	0.65	ug/L			06/03/25 14:14	1
1,2-Dichloroethane	0.63	U	1.0	0.63	ug/L			06/03/25 14:14	1
1,2-Dichloropropane	0.75	U	1.0	0.75	ug/L			06/03/25 14:14	1
1,3,5-Trimethylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 14:14	1
1,3-Dichloropropane	0.60	U	1.0	0.60	ug/L			06/03/25 14:14	1
1,3-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/03/25 14:14	1
1,4-Dichlorobenzene	0.71	U	1.0	0.71	ug/L			06/03/25 14:14	1
2,2-Dichloropropane	0.66	U	5.0	0.66	ug/L			06/03/25 14:14	1
2-Butanone (MEK)	4.5	U	10	4.5	ug/L			06/03/25 14:14	1
2-Chlorotoluene	0.68	U	1.0	0.68	ug/L			06/03/25 14:14	1
2-Hexanone	5.2	U	20	5.2	ug/L			06/03/25 14:14	1
4-Chlorotoluene	0.65	U	2.0	0.65	ug/L			06/03/25 14:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	20	5.0	ug/L			06/03/25 14:14	1
Acetone	20	U	50	20	ug/L			06/03/25 14:14	1
Benzene	0.71	U	1.0	0.71	ug/L			06/03/25 14:14	1
Bromobenzene	0.68	U	1.0	0.68	ug/L			06/03/25 14:14	1
Chlorobromomethane	0.72	U	2.0	0.72	ug/L			06/03/25 14:14	1
Dichlorobromomethane	0.52	U	1.0	0.52	ug/L			06/03/25 14:14	1
Bromoform	0.65	U	1.0	0.65	ug/L			06/03/25 14:14	1
Bromomethane	0.95	U	2.0	0.95	ug/L			06/03/25 14:14	1
Carbon disulfide	0.91	U	5.0	0.91	ug/L			06/03/25 14:14	1
Carbon tetrachloride	0.77	U	1.0	0.77	ug/L			06/03/25 14:14	1
Chlorobenzene	0.69	U	1.0	0.69	ug/L			06/03/25 14:14	1
Chloroethane	0.98	U	2.0	0.98	ug/L			06/03/25 14:14	1
Chloroform	0.80	U	5.0	0.80	ug/L			06/03/25 14:14	1
Chloromethane	0.82	U	2.0	0.82	ug/L			06/03/25 14:14	1
cis-1,2-Dichloroethene	0.53	U	1.0	0.53	ug/L			06/03/25 14:14	1
cis-1,3-Dichloropropene	0.59	U	1.0	0.59	ug/L			06/03/25 14:14	1
Chlorodibromomethane	0.50	U	1.0	0.50	ug/L			06/03/25 14:14	1
Dibromomethane	0.73	U	1.0	0.73	ug/L			06/03/25 14:14	1
Dichlorodifluoromethane	0.61	U	1.0	0.61	ug/L			06/03/25 14:14	1
Ethylbenzene	0.66	U	1.0	0.66	ug/L			06/03/25 14:14	1
Isopropylbenzene	0.67	U	1.0	0.67	ug/L			06/03/25 14:14	1
m-Xylene & p-Xylene	0.75	U	2.0	0.75	ug/L			06/03/25 14:14	1
Methylene Chloride	3.5	U	10	3.5	ug/L			06/03/25 14:14	1
Methyl tert-butyl ether	0.60	U	2.0	0.60	ug/L			06/03/25 14:14	1
n-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/03/25 14:14	1
N-Propylbenzene	0.65	U	1.0	0.65	ug/L			06/03/25 14:14	1
o-Xylene	0.66	U	1.0	0.66	ug/L			06/03/25 14:14	1

Eurofins Orlando

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 670-156478/7

Matrix: Water

Analysis Batch: 156478

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
sec-Butylbenzene	0.67	U	2.0	0.67	ug/L			06/03/25 14:14	1
Styrene	0.61	U	1.0	0.61	ug/L			06/03/25 14:14	1
tert-Butylbenzene	0.64	U	2.0	0.64	ug/L			06/03/25 14:14	1
Tetrachloroethene	0.76	U	1.0	0.76	ug/L			06/03/25 14:14	1
Toluene	0.70	U	1.0	0.70	ug/L			06/03/25 14:14	1
trans-1,2-Dichloroethene	0.73	U	1.0	0.73	ug/L			06/03/25 14:14	1
trans-1,3-Dichloropropene	0.73	U	1.0	0.73	ug/L			06/03/25 14:14	1
Trichloroethene	0.74	U	1.0	0.74	ug/L			06/03/25 14:14	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			06/03/25 14:14	1
Vinyl chloride	0.51	U	1.0	0.51	ug/L			06/03/25 14:14	1
Xylenes, Total	0.75	U	2.0	0.75	ug/L			06/03/25 14:14	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	96		40 - 146		06/03/25 14:14	1
4-Bromofluorobenzene (Surr)	98		41 - 142		06/03/25 14:14	1
Dibromofluoromethane (Surr)	91		53 - 146		06/03/25 14:14	1

Lab Sample ID: LCS 670-156478/4

Matrix: Water

Analysis Batch: 156478

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	5.00	4.33		ug/L		87	54 - 141
1,1,1-Trichloroethane	5.00	4.02		ug/L		80	57 - 148
1,1,1,2-Tetrachloroethane	5.00	4.25		ug/L		85	60 - 139
1,1,2-Trichloroethane	5.00	4.08		ug/L		82	57 - 141
1,1-Dichloroethane	5.00	4.26		ug/L		85	57 - 142
1,1-Dichloroethene	5.00	4.44		ug/L		89	47 - 139
1,1-Dichloropropene	5.00	3.91		ug/L		78	56 - 137
1,2,3-Trichloropropane	5.00	4.10		ug/L		82	57 - 141
1,2,4-Trimethylbenzene	5.00	4.39		ug/L		88	59 - 142
Ethylene Dibromide	5.00	3.83	I	ug/L		77	57 - 140
1,2-Dichloroethane	5.00	3.99		ug/L		80	50 - 156
1,2-Dichloropropane	5.00	4.09		ug/L		82	61 - 133
1,3,5-Trimethylbenzene	5.00	4.41		ug/L		88	61 - 137
1,3-Dichloropropane	5.00	3.77		ug/L		75	50 - 148
1,3-Dichlorobenzene	5.00	4.61		ug/L		92	66 - 129
1,4-Dichlorobenzene	5.00	4.68		ug/L		94	65 - 133
2,2-Dichloropropane	5.00	4.03	I	ug/L		81	54 - 146
2-Butanone (MEK)	50.0	34.4		ug/L		69	10 - 180
2-Chlorotoluene	5.00	4.47		ug/L		89	64 - 133
2-Hexanone	50.0	35.9		ug/L		72	12 - 180
4-Chlorotoluene	5.00	4.41		ug/L		88	62 - 138
4-Methyl-2-pentanone (MIBK)	50.0	33.8		ug/L		68	19 - 180
Acetone	50.0	36.2	I	ug/L		72	10 - 180
Benzene	5.00	4.28		ug/L		86	56 - 136
Bromobenzene	5.00	4.35		ug/L		87	59 - 147
Chlorobromomethane	5.00	3.81		ug/L		76	54 - 141

Eurofins Orlando

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 670-156478/4

Matrix: Water

Analysis Batch: 156478

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Dichlorobromomethane	5.00	4.04		ug/L		81	58 - 135
Bromoform	5.00	3.73		ug/L		75	46 - 148
Bromomethane	5.00	5.53		ug/L		111	10 - 173
Carbon disulfide	5.00	4.36	I	ug/L		87	43 - 153
Carbon tetrachloride	5.00	3.81		ug/L		76	54 - 156
Chlorobenzene	5.00	4.34		ug/L		87	51 - 139
Chloroethane	5.00	5.44		ug/L		109	27 - 180
Chloroform	5.00	4.05	I	ug/L		81	58 - 139
Chloromethane	5.00	4.72		ug/L		94	33 - 154
cis-1,2-Dichloroethene	5.00	4.10		ug/L		82	56 - 128
cis-1,3-Dichloropropene	5.00	3.77		ug/L		75	64 - 128
Chlorodibromomethane	5.00	4.00		ug/L		80	50 - 140
Dibromomethane	5.00	3.97		ug/L		79	59 - 143
Dichlorodifluoromethane	5.00	3.64		ug/L		73	10 - 180
Ethylbenzene	5.00	4.42		ug/L		88	63 - 133
Isopropylbenzene	5.00	4.49		ug/L		90	60 - 132
m-Xylene & p-Xylene	5.00	4.31		ug/L		86	64 - 133
Methylene Chloride	5.00	4.24	I	ug/L		85	43 - 142
Methyl tert-butyl ether	5.00	3.92		ug/L		78	51 - 145
n-Butylbenzene	5.00	4.65		ug/L		93	59 - 148
N-Propylbenzene	5.00	4.25		ug/L		85	63 - 135
o-Xylene	5.00	4.35		ug/L		87	61 - 129
sec-Butylbenzene	5.00	4.62		ug/L		92	63 - 137
Styrene	5.00	4.48		ug/L		90	59 - 136
tert-Butylbenzene	5.00	4.52		ug/L		90	61 - 136
Tetrachloroethene	5.00	4.08		ug/L		82	60 - 147
Toluene	5.00	4.18		ug/L		84	64 - 131
trans-1,2-Dichloroethene	5.00	4.23		ug/L		85	54 - 134
trans-1,3-Dichloropropene	5.00	3.99		ug/L		80	65 - 149
Trichloroethene	5.00	4.00		ug/L		80	62 - 135
Trichlorofluoromethane	5.00	4.22		ug/L		84	56 - 155
Vinyl chloride	5.00	4.38		ug/L		88	20 - 167
Xylenes, Total	10.0	8.66		ug/L		87	50 - 150

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	98		40 - 146
4-Bromofluorobenzene (Surr)	98		41 - 142
Dibromofluoromethane (Surr)	94		53 - 146

## Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 670-154748/1-A

Matrix: Water

Analysis Batch: 155479

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154748

Analyte	MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
1,2-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/28/25 18:39	1
1,3-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/28/25 18:39	1

Eurofins Orlando

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 670-154748/1-A**

**Matrix: Water**

**Analysis Batch: 155479**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 154748**

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dichlorobenzene	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/28/25 18:39	1
1-Methylnaphthalene	2.4	U	10	2.4	ug/L		05/23/25 07:17	05/28/25 18:39	1
2,4,5-Trichlorophenol	2.6	U	10	2.6	ug/L		05/23/25 07:17	05/28/25 18:39	1
2,4,6-Trichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
2,4-Dichlorophenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
2,4-Dimethylphenol	4.9	U	10	4.9	ug/L		05/23/25 07:17	05/28/25 18:39	1
2,4-Dinitrophenol	5.9	U	10	5.9	ug/L		05/23/25 07:17	05/28/25 18:39	1
2,4-Dinitrotoluene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
2,6-Dinitrotoluene	2.8	U	10	2.8	ug/L		05/23/25 07:17	05/28/25 18:39	1
2-Chloronaphthalene	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/28/25 18:39	1
2-Chlorophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
4,6-Dinitro-2-methylphenol	4.1	U	10	4.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
2-Methylnaphthalene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/28/25 18:39	1
2-Methylphenol	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
2-Nitrophenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
3 & 4 Methylphenol	2.3	U	10	2.3	ug/L		05/23/25 07:17	05/28/25 18:39	1
3,3'-Dichlorobenzidine	3.6	U	10	3.6	ug/L		05/23/25 07:17	05/28/25 18:39	1
4-Bromophenyl phenyl ether	3.3	U	10	3.3	ug/L		05/23/25 07:17	05/28/25 18:39	1
4-Chloro-3-methylphenol	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
4-Chlorophenyl phenyl ether	2.7	U	10	2.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
4-Nitrophenol	6.5	U	10	6.5	ug/L		05/23/25 07:17	05/28/25 18:39	1
Acenaphthene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/28/25 18:39	1
Acenaphthylene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/28/25 18:39	1
Anthracene	1.6	U	5.0	1.6	ug/L		05/23/25 07:17	05/28/25 18:39	1
Benzidine	6.4	U	10	6.4	ug/L		05/23/25 07:17	05/28/25 18:39	1
Benzo[a]anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/28/25 18:39	1
Benzo[a]pyrene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/28/25 18:39	1
Benzo[b]fluoranthene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/28/25 18:39	1
Benzo[g,h,i]perylene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
Benzo[k]fluoranthene	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
Bis(2-chloroethoxy)methane	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
Bis(2-chloroethyl)ether	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/28/25 18:39	1
bis (2-chloroisopropyl) ether	4.2	U	5.0	4.2	ug/L		05/23/25 07:17	05/28/25 18:39	1
Bis(2-ethylhexyl) phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/28/25 18:39	1
Butyl benzyl phthalate	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/28/25 18:39	1
Chrysene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/28/25 18:39	1
Dibenz(a,h)anthracene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/28/25 18:39	1
Diethyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/28/25 18:39	1
Dimethyl phthalate	2.1	U	5.0	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
Di-n-butyl phthalate	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/28/25 18:39	1
Di-n-octyl phthalate	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/28/25 18:39	1
Fluoranthene	1.9	U	5.0	1.9	ug/L		05/23/25 07:17	05/28/25 18:39	1
Fluorene	2.0	U	5.0	2.0	ug/L		05/23/25 07:17	05/28/25 18:39	1
Hexachlorobenzene	1.7	U	10	1.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
Hexachlorobutadiene	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/28/25 18:39	1
Hexachlorocyclopentadiene	8.2	U	10	8.2	ug/L		05/23/25 07:17	05/28/25 18:39	1
Hexachloroethane	3.1	U	10	3.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
Indeno[1,2,3-cd]pyrene	2.3	U	5.0	2.3	ug/L		05/23/25 07:17	05/28/25 18:39	1
Isophorone	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/28/25 18:39	1

Eurofins Orlando

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 670-154748/1-A

Matrix: Water

Analysis Batch: 155479

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154748

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	2.2	U	5.0	2.2	ug/L		05/23/25 07:17	05/28/25 18:39	1
Nitrobenzene	2.5	U	5.0	2.5	ug/L		05/23/25 07:17	05/28/25 18:39	1
N-Nitrosodimethylamine	2.9	U	5.0	2.9	ug/L		05/23/25 07:17	05/28/25 18:39	1
N-Nitrosodi-n-propylamine	2.7	U	5.0	2.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
Pentachlorophenol	5.5	U	10	5.5	ug/L		05/23/25 07:17	05/28/25 18:39	1
Phenanthrene	1.7	U	5.0	1.7	ug/L		05/23/25 07:17	05/28/25 18:39	1
Phenol	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1
Pyrene	1.6	U	10	1.6	ug/L		05/23/25 07:17	05/28/25 18:39	1
Pyridine	3.0	U	10	3.0	ug/L		05/23/25 07:17	05/28/25 18:39	1
Diphenylamine	2.8	U	5.0	2.8	ug/L		05/23/25 07:17	05/28/25 18:39	1
N-Nitrosodiphenylamine	2.4	U	5.0	2.4	ug/L		05/23/25 07:17	05/28/25 18:39	1
1,2-Diphenylhydrazine (as Azobenzene)	2.1	U	10	2.1	ug/L		05/23/25 07:17	05/28/25 18:39	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Nitrobenzene-d5 (Surr)	82		24 - 137	05/23/25 07:17	05/28/25 18:39	1
2-Fluorobiphenyl	84		32 - 136	05/23/25 07:17	05/28/25 18:39	1
p-Terphenyl-d14 (Surr)	96		52 - 150	05/23/25 07:17	05/28/25 18:39	1
Phenol-d5 (Surr)	41		10 - 140	05/23/25 07:17	05/28/25 18:39	1
2-Fluorophenol (Surr)	65		11 - 140	05/23/25 07:17	05/28/25 18:39	1
2,4,6-Tribromophenol (Surr)	97		33 - 145	05/23/25 07:17	05/28/25 18:39	1

Lab Sample ID: LCS 670-154748/2-A

Matrix: Water

Analysis Batch: 155479

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154748

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	80.0	54.5		ug/L		68	10 - 130
1,3-Dichlorobenzene	80.0	53.3		ug/L		67	10 - 138
1,4-Dichlorobenzene	80.0	54.1		ug/L		68	10 - 131
1-Methylnaphthalene	80.0	56.2		ug/L		70	10 - 134
2,4,5-Trichlorophenol	80.0	61.0		ug/L		76	35 - 130
2,4,6-Trichlorophenol	80.0	58.4		ug/L		73	32 - 127
2,4-Dichlorophenol	80.0	57.1		ug/L		71	20 - 132
2,4-Dimethylphenol	80.0	57.6		ug/L		72	20 - 132
2,4-Dinitrophenol	80.0	51.4		ug/L		64	5 - 156
2,4-Dinitrotoluene	80.0	79.7		ug/L		100	52 - 158
2,6-Dinitrotoluene	80.0	76.2		ug/L		95	47 - 134
2-Chloronaphthalene	80.0	56.1		ug/L		70	11 - 136
2-Chlorophenol	80.0	55.7		ug/L		70	17 - 130
4,6-Dinitro-2-methylphenol	80.0	66.3		ug/L		83	5 - 151
2-Methylnaphthalene	80.0	55.6		ug/L		69	10 - 137
2-Methylphenol	80.0	53.6		ug/L		67	19 - 106
2-Nitrophenol	80.0	60.6		ug/L		76	16 - 116
3 & 4 Methylphenol	80.0	51.1		ug/L		64	10 - 111
3,3'-Dichlorobenzidine	80.0	90.4		ug/L		113	5 - 180
4-Bromophenyl phenyl ether	80.0	66.8		ug/L		83	35 - 134
4-Chloro-3-methylphenol	80.0	62.7		ug/L		78	35 - 131

Eurofins Orlando

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 670-154748/2-A

Matrix: Water

Analysis Batch: 155479

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154748

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chlorophenyl phenyl ether	80.0	63.5		ug/L		79	28 - 132
4-Nitrophenol	80.0	45.7		ug/L		57	10 - 134
Acenaphthene	80.0	63.3		ug/L		79	22 - 130
Acenaphthylene	80.0	66.9		ug/L		84	24 - 133
Anthracene	80.0	78.3		ug/L		98	50 - 143
Benzidine	80.0	80.7		ug/L		101	5 - 180
Benzo[a]anthracene	80.0	77.2		ug/L		96	52 - 148
Benzo[a]pyrene	80.0	75.8		ug/L		95	54 - 151
Benzo[b]fluoranthene	80.0	75.3		ug/L		94	53 - 153
Benzo[g,h,i]perylene	80.0	78.7		ug/L		98	31 - 147
Benzo[k]fluoranthene	80.0	78.8		ug/L		98	54 - 169
Bis(2-chloroethoxy)methane	80.0	57.4		ug/L		72	23 - 126
Bis(2-chloroethyl)ether	80.0	54.9		ug/L		69	10 - 150
bis (2-chloroisopropyl) ether	80.0	94.2		ug/L		118	10 - 130
Bis(2-ethylhexyl) phthalate	80.0	94.2		ug/L		118	52 - 165
Butyl benzyl phthalate	80.0	92.3		ug/L		115	41 - 175
Chrysene	80.0	73.6		ug/L		92	52 - 149
Dibenz(a,h)anthracene	80.0	79.4		ug/L		99	32 - 144
Diethyl phthalate	80.0	74.3		ug/L		93	34 - 168
Dimethyl phthalate	80.0	70.3		ug/L		88	45 - 136
Di-n-butyl phthalate	80.0	83.8		ug/L		105	40 - 169
Di-n-octyl phthalate	80.0	83.4		ug/L		104	38 - 172
Fluoranthene	80.0	75.0		ug/L		94	51 - 155
Fluorene	80.0	69.4		ug/L		87	29 - 160
Hexachlorobenzene	80.0	71.5		ug/L		89	45 - 128
Hexachlorobutadiene	80.0	44.4		ug/L		55	10 - 110
Hexachlorocyclopentadiene	80.0	57.2		ug/L		71	10 - 134
Hexachloroethane	80.0	50.8		ug/L		64	10 - 135
Indeno[1,2,3-cd]pyrene	80.0	78.9		ug/L		99	34 - 133
Isophorone	80.0	59.1		ug/L		74	24 - 131
Naphthalene	80.0	54.8		ug/L		68	10 - 138
Nitrobenzene	80.0	55.7		ug/L		70	26 - 130
N-Nitrosodimethylamine	80.0	35.2		ug/L		44	10 - 130
N-Nitrosodi-n-propylamine	80.0	60.3		ug/L		75	26 - 135
Pentachlorophenol	80.0	68.3		ug/L		85	5 - 139
Phenanthrene	80.0	74.0		ug/L		92	49 - 141
Phenol	80.0	31.8		ug/L		40	10 - 136
Pyrene	80.0	75.2		ug/L		94	53 - 148
Pyridine	80.0	33.3		ug/L		42	10 - 130
Diphenylamine	80.0	76.4		ug/L		96	39 - 136
N-Nitrosodiphenylamine	80.0	76.3		ug/L		95	39 - 136
1,2-Diphenylhydrazine (as Azobenzene)	80.0	73.2		ug/L		92	10 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	71		24 - 137
2-Fluorobiphenyl	73		32 - 136
p-Terphenyl-d14 (Surr)	92		52 - 150

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 670-154748/2-A

Matrix: Water

Analysis Batch: 155479

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154748

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Phenol-d5 (Surr)	36		10 - 140
2-Fluorophenol (Surr)	52		11 - 140
2,4,6-Tribromophenol (Surr)	105		33 - 145

Lab Sample ID: LCSD 670-154748/3-A

Matrix: Water

Analysis Batch: 155479

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154748

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits	RPD	Limit	
1,2,4-Trichlorobenzene	80.0	59.2		ug/L		74	10 - 132	12	30	
1,2-Dichlorobenzene	80.0	62.1		ug/L		78	10 - 130	13	30	
1,3-Dichlorobenzene	80.0	59.5		ug/L		74	10 - 138	11	30	
1,4-Dichlorobenzene	80.0	61.3		ug/L		77	10 - 131	12	30	
1-Methylnaphthalene	80.0	62.5		ug/L		78	10 - 134	11	30	
2,4,5-Trichlorophenol	80.0	66.9		ug/L		84	35 - 130	9	30	
2,4,6-Trichlorophenol	80.0	65.5		ug/L		82	32 - 127	11	30	
2,4-Dichlorophenol	80.0	64.6		ug/L		81	20 - 132	12	30	
2,4-Dimethylphenol	80.0	64.7		ug/L		81	20 - 132	12	30	
2,4-Dinitrophenol	80.0	58.1		ug/L		73	5 - 156	12	40	
2,4-Dinitrotoluene	80.0	85.4		ug/L		107	52 - 158	7	30	
2,6-Dinitrotoluene	80.0	82.5		ug/L		103	47 - 134	8	30	
2-Chloronaphthalene	80.0	63.2		ug/L		79	11 - 136	12	30	
2-Chlorophenol	80.0	63.6		ug/L		80	17 - 130	13	30	
4,6-Dinitro-2-methylphenol	80.0	73.1		ug/L		91	5 - 151	10	30	
2-Methylnaphthalene	80.0	62.9		ug/L		79	10 - 137	12	30	
2-Methylphenol	80.0	61.1		ug/L		76	19 - 106	13	30	
2-Nitrophenol	80.0	67.9		ug/L		85	16 - 116	11	30	
3 & 4 Methylphenol	80.0	59.1		ug/L		74	10 - 111	15	30	
3,3'-Dichlorobenzidine	80.0	99.2		ug/L		124	5 - 180	9	30	
4-Bromophenyl phenyl ether	80.0	73.0		ug/L		91	35 - 134	9	30	
4-Chloro-3-methylphenol	80.0	70.0		ug/L		87	35 - 131	11	30	
4-Chlorophenyl phenyl ether	80.0	70.1		ug/L		88	28 - 132	10	30	
4-Nitrophenol	80.0	53.8		ug/L		67	10 - 134	16	30	
Acenaphthene	80.0	69.6		ug/L		87	22 - 130	9	30	
Acenaphthylene	80.0	74.0		ug/L		92	24 - 133	10	30	
Anthracene	80.0	84.4		ug/L		106	50 - 143	8	30	
Benzidine	80.0	95.1		ug/L		119	5 - 180	16	30	
Benzo[a]anthracene	80.0	85.7		ug/L		107	52 - 148	10	30	
Benzo[a]pyrene	80.0	85.6		ug/L		107	54 - 151	12	30	
Benzo[b]fluoranthene	80.0	91.2		ug/L		114	53 - 153	19	30	
Benzo[g,h,i]perylene	80.0	88.7		ug/L		111	31 - 147	12	30	
Benzo[k]fluoranthene	80.0	81.4		ug/L		102	54 - 169	3	30	
Bis(2-chloroethoxy)methane	80.0	65.4		ug/L		82	23 - 126	13	30	
Bis(2-chloroethyl)ether	80.0	61.1		ug/L		76	10 - 150	11	30	
bis (2-chloroisopropyl) ether	80.0	106	J3	ug/L		133	10 - 130	12	30	
Bis(2-ethylhexyl) phthalate	80.0	105		ug/L		132	52 - 165	11	30	
Butyl benzyl phthalate	80.0	104		ug/L		130	41 - 175	12	30	
Chrysene	80.0	85.3		ug/L		107	52 - 149	15	30	

Eurofins Orlando

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 670-154748/3-A

Matrix: Water

Analysis Batch: 155479

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154748

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Dibenz(a,h)anthracene	80.0	89.5		ug/L		112	32 - 144	12	30	
Diethyl phthalate	80.0	79.1		ug/L		99	34 - 168	6	30	
Dimethyl phthalate	80.0	78.0		ug/L		98	45 - 136	10	30	
Di-n-butyl phthalate	80.0	92.0		ug/L		115	40 - 169	9	30	
Di-n-octyl phthalate	80.0	92.9		ug/L		116	38 - 172	11	30	
Fluoranthene	80.0	82.6		ug/L		103	51 - 155	10	30	
Fluorene	80.0	75.5		ug/L		94	29 - 160	8	30	
Hexachlorobenzene	80.0	78.4		ug/L		98	45 - 128	9	30	
Hexachlorobutadiene	80.0	52.1		ug/L		65	10 - 110	16	30	
Hexachlorocyclopentadiene	80.0	63.9		ug/L		80	10 - 134	11	30	
Hexachloroethane	80.0	56.5		ug/L		71	10 - 135	11	30	
Indeno[1,2,3-cd]pyrene	80.0	88.8		ug/L		111	34 - 133	12	30	
Isophorone	80.0	65.7		ug/L		82	24 - 131	11	30	
Naphthalene	80.0	61.9		ug/L		77	10 - 138	12	30	
Nitrobenzene	80.0	63.0		ug/L		79	26 - 130	12	30	
N-Nitrosodimethylamine	80.0	40.2		ug/L		50	10 - 130	13	30	
N-Nitrosodi-n-propylamine	80.0	67.7		ug/L		85	26 - 135	12	30	
Pentachlorophenol	80.0	73.2		ug/L		92	5 - 139	7	30	
Phenanthrene	80.0	80.3		ug/L		100	49 - 141	8	30	
Phenol	80.0	38.1		ug/L		48	10 - 136	18	30	
Pyrene	80.0	83.7		ug/L		105	53 - 148	11	30	
Pyridine	80.0	37.9		ug/L		47	10 - 130	13	30	
Diphenylamine	80.0	82.6		ug/L		103	39 - 136	8	30	
N-Nitrosodiphenylamine	80.0	82.4		ug/L		103	39 - 136	8	30	
1,2-Diphenylhydrazine (as Azobenzene)	80.0	79.9		ug/L		100	10 - 130	9	30	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	77		24 - 137
2-Fluorobiphenyl	78		32 - 136
p-Terphenyl-d14 (Surr)	97		52 - 150
Phenol-d5 (Surr)	42		10 - 140
2-Fluorophenol (Surr)	60		11 - 140
2,4,6-Tribromophenol (Surr)	112		33 - 145

## Method: 8270E - Semivolatile Organic Compounds (GC-MS/MS)

Lab Sample ID: MB 670-154755/1-A

Matrix: Water

Analysis Batch: 154976

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154755

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1-Methylnaphthalene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 09:32	1
2-Methylnaphthalene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 09:32	1
Acenaphthene	0.028	U	0.18	0.028	ug/L		05/23/25 08:06	05/24/25 09:32	1
Acenaphthylene	0.032	U	0.18	0.032	ug/L		05/23/25 08:06	05/24/25 09:32	1
Anthracene	0.050	U	0.18	0.050	ug/L		05/23/25 08:06	05/24/25 09:32	1
Benzo[a]anthracene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 09:32	1
Benzo[a]pyrene	0.057	U	0.18	0.057	ug/L		05/23/25 08:06	05/24/25 09:32	1

Eurofins Orlando

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8270E - Semivolatile Organic Compounds (GC-MS/MS) (Continued)

Lab Sample ID: MB 670-154755/1-A

Matrix: Water

Analysis Batch: 154976

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154755

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzo[b]fluoranthene	0.040	U	0.10	0.040	ug/L		05/23/25 08:06	05/24/25 09:32	1
Benzo[g,h,i]perylene	0.066	U	0.18	0.066	ug/L		05/23/25 08:06	05/24/25 09:32	1
Benzo[k]fluoranthene	0.046	U	0.18	0.046	ug/L		05/23/25 08:06	05/24/25 09:32	1
Chrysene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 09:32	1
Dibenz(a,h)anthracene	0.053	U	0.18	0.053	ug/L		05/23/25 08:06	05/24/25 09:32	1
Fluoranthene	0.039	U	0.18	0.039	ug/L		05/23/25 08:06	05/24/25 09:32	1
Fluorene	0.041	U	0.18	0.041	ug/L		05/23/25 08:06	05/24/25 09:32	1
Indeno[1,2,3-cd]pyrene	0.055	U	0.18	0.055	ug/L		05/23/25 08:06	05/24/25 09:32	1
Naphthalene	0.027	U	0.18	0.027	ug/L		05/23/25 08:06	05/24/25 09:32	1
Phenanthrene	0.035	U	0.18	0.035	ug/L		05/23/25 08:06	05/24/25 09:32	1
Pyrene	0.052	U	0.18	0.052	ug/L		05/23/25 08:06	05/24/25 09:32	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl	89		43 - 130	05/23/25 08:06	05/24/25 09:32	1
Nitrobenzene-d5 (Surr)	92		37 - 133	05/23/25 08:06	05/24/25 09:32	1
p-Terphenyl-d14 (Surr)	85		47 - 130	05/23/25 08:06	05/24/25 09:32	1

Lab Sample ID: LCS 670-154755/2-A

Matrix: Water

Analysis Batch: 154976

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154755

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	6.67	5.07		ug/L		76	45 - 148
2-Methylnaphthalene	6.67	4.33		ug/L		65	35 - 146
Acenaphthene	6.67	5.15		ug/L		77	45 - 166
Acenaphthylene	6.67	5.84		ug/L		88	40 - 161
Anthracene	6.67	5.57		ug/L		84	43 - 150
Benzo[a]anthracene	6.67	6.78		ug/L		102	36 - 133
Benzo[a]pyrene	6.67	6.71		ug/L		101	38 - 152
Benzo[b]fluoranthene	6.67	5.99		ug/L		90	45 - 140
Benzo[g,h,i]perylene	6.67	6.43		ug/L		96	38 - 165
Benzo[k]fluoranthene	6.67	6.65		ug/L		100	43 - 146
Chrysene	6.67	6.88		ug/L		103	41 - 150
Dibenz(a,h)anthracene	6.67	6.66		ug/L		100	52 - 162
Fluoranthene	6.67	5.78		ug/L		87	43 - 130
Fluorene	6.67	5.71		ug/L		86	60 - 150
Indeno[1,2,3-cd]pyrene	6.67	6.50		ug/L		98	46 - 151
Naphthalene	6.67	4.91		ug/L		74	44 - 156
Phenanthrene	6.67	6.29		ug/L		94	60 - 160
Pyrene	6.67	5.65		ug/L		85	55 - 171

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	88		43 - 130
Nitrobenzene-d5 (Surr)	88		37 - 133
p-Terphenyl-d14 (Surr)	83		47 - 130

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: 8270E - Semivolatile Organic Compounds (GC-MS/MS) (Continued)

Lab Sample ID: LCSD 670-154755/3-A

Matrix: Water

Analysis Batch: 154976

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154755

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
1-Methylnaphthalene	6.67	5.19		ug/L		78	45 - 148	2	30	
2-Methylnaphthalene	6.67	4.38		ug/L		66	35 - 146	1	30	
Acenaphthene	6.67	5.14		ug/L		77	45 - 166	0	30	
Acenaphthylene	6.67	5.81		ug/L		87	40 - 161	1	30	
Anthracene	6.67	5.48		ug/L		82	43 - 150	2	30	
Benzo[a]anthracene	6.67	6.64		ug/L		100	36 - 133	2	30	
Benzo[a]pyrene	6.67	6.65		ug/L		100	38 - 152	1	30	
Benzo[b]fluoranthene	6.67	6.28		ug/L		94	45 - 140	5	30	
Benzo[g,h,i]perylene	6.67	6.29		ug/L		94	38 - 165	2	30	
Benzo[k]fluoranthene	6.67	6.62		ug/L		99	43 - 146	0	30	
Chrysene	6.67	6.83		ug/L		102	41 - 150	1	30	
Dibenz(a,h)anthracene	6.67	6.56		ug/L		98	52 - 162	1	30	
Fluoranthene	6.67	5.65		ug/L		85	43 - 130	2	30	
Fluorene	6.67	5.70		ug/L		85	60 - 150	0	30	
Indeno[1,2,3-cd]pyrene	6.67	6.09		ug/L		91	46 - 151	6	30	
Naphthalene	6.67	5.03		ug/L		76	44 - 156	3	30	
Phenanthrene	6.67	6.19		ug/L		93	60 - 160	2	30	
Pyrene	6.67	5.61		ug/L		84	55 - 171	1	30	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	88		43 - 130
Nitrobenzene-d5 (Surr)	89		37 - 133
p-Terphenyl-d14 (Surr)	82		47 - 130

## Method: FL-PRO - Florida - Petroleum Range Organics (GC)

Lab Sample ID: MB 670-154736/1-A

Matrix: Water

Analysis Batch: 154825

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154736

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
o-terphenyl (Surr)	116		66 - 139	05/23/25 05:16	05/23/25 16:00	1
C35 (Surr)	121		40 - 129	05/23/25 05:16	05/23/25 16:00	1

Lab Sample ID: LCS 670-154736/2-A

Matrix: Water

Analysis Batch: 154825

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	RPD
Total Petroleum Hydrocarbons (C8-C40)	15.5	15.5		mg/L		100	55 - 130	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
o-terphenyl (Surr)	101		66 - 139

Euofins Orlando

# QC Sample Results

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Method: FL-PRO - Florida - Petroleum Range Organics (GC) (Continued)

Lab Sample ID: LCS 670-154736/2-A

Matrix: Water

Analysis Batch: 154825

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154736

Surrogate	LCS		Limits
	%Recovery	Qualifier	
C35 (Surr)	107		40 - 129

Lab Sample ID: LCSD 670-154736/3-A

Matrix: Water

Analysis Batch: 154825

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154736

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Total Petroleum Hydrocarbons (C8-C40)	15.5	15.3		mg/L		99	55 - 130	1	40	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
o-terphenyl (Surr)	104		66 - 139
C35 (Surr)	113		40 - 129

# QC Association Summary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## GC/MS VOA

### Analysis Batch: 156478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total/NA	Water	8260D	
670-63094-2	MW-35S	Total/NA	Water	8260D	
670-63094-3	MW-36S	Total/NA	Water	8260D	
670-63094-4	MW-37S	Total/NA	Water	8260D	
670-63094-5	MW-C	Total/NA	Water	8260D	
670-63094-6	Field Blank	Total/NA	Water	8260D	
670-63094-7	Rinsate Blank	Total/NA	Water	8260D	
670-63094-8	Trip Blank 1	Total/NA	Water	8260D	
670-63094-9	DUP-1	Total/NA	Water	8260D	
670-63094-10	Trip Blank 2	Total/NA	Water	8260D	
MB 670-156478/7	Method Blank	Total/NA	Water	8260D	
LCS 670-156478/4	Lab Control Sample	Total/NA	Water	8260D	

## GC/MS Semi VOA

### Prep Batch: 154748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total/NA	Water	3510C	
670-63094-2	MW-35S	Total/NA	Water	3510C	
670-63094-3	MW-36S	Total/NA	Water	3510C	
670-63094-4	MW-37S	Total/NA	Water	3510C	
670-63094-5	MW-C	Total/NA	Water	3510C	
MB 670-154748/1-A	Method Blank	Total/NA	Water	3510C	
LCS 670-154748/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 670-154748/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Prep Batch: 154755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total/NA	Water	3511	
670-63094-2	MW-35S	Total/NA	Water	3511	
670-63094-3	MW-36S	Total/NA	Water	3511	
670-63094-4	MW-37S	Total/NA	Water	3511	
670-63094-5	MW-C	Total/NA	Water	3511	
MB 670-154755/1-A	Method Blank	Total/NA	Water	3511	
LCS 670-154755/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 670-154755/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

### Analysis Batch: 154976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total/NA	Water	8270E	154755
670-63094-2	MW-35S	Total/NA	Water	8270E	154755
670-63094-3	MW-36S	Total/NA	Water	8270E	154755
670-63094-4	MW-37S	Total/NA	Water	8270E	154755
670-63094-5	MW-C	Total/NA	Water	8270E	154755
MB 670-154755/1-A	Method Blank	Total/NA	Water	8270E	154755
LCS 670-154755/2-A	Lab Control Sample	Total/NA	Water	8270E	154755
LCSD 670-154755/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	154755

### Analysis Batch: 155479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total/NA	Water	8270E	154748

Eurofins Orlando

# QC Association Summary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 155479 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-2	MW-35S	Total/NA	Water	8270E	154748
670-63094-3	MW-36S	Total/NA	Water	8270E	154748
670-63094-4	MW-37S	Total/NA	Water	8270E	154748
670-63094-5	MW-C	Total/NA	Water	8270E	154748
MB 670-154748/1-A	Method Blank	Total/NA	Water	8270E	154748
LCS 670-154748/2-A	Lab Control Sample	Total/NA	Water	8270E	154748
LCSD 670-154748/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	154748

## GC Semi VOA

### Prep Batch: 154736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total/NA	Water	3511	
670-63094-2	MW-35S	Total/NA	Water	3511	
670-63094-3	MW-36S	Total/NA	Water	3511	
670-63094-4	MW-37S	Total/NA	Water	3511	
670-63094-5	MW-C	Total/NA	Water	3511	
MB 670-154736/1-A	Method Blank	Total/NA	Water	3511	
LCS 670-154736/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 670-154736/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

### Analysis Batch: 154825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total/NA	Water	FL-PRO	154736
670-63094-2	MW-35S	Total/NA	Water	FL-PRO	154736
670-63094-3	MW-36S	Total/NA	Water	FL-PRO	154736
670-63094-4	MW-37S	Total/NA	Water	FL-PRO	154736
670-63094-5	MW-C	Total/NA	Water	FL-PRO	154736
MB 670-154736/1-A	Method Blank	Total/NA	Water	FL-PRO	154736
LCS 670-154736/2-A	Lab Control Sample	Total/NA	Water	FL-PRO	154736
LCSD 670-154736/3-A	Lab Control Sample Dup	Total/NA	Water	FL-PRO	154736

## Metals

### Prep Batch: 154808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total Recoverable	Water	3005A	
670-63094-2	MW-35S	Total Recoverable	Water	3005A	
670-63094-3	MW-36S	Total Recoverable	Water	3005A	
670-63094-4	MW-37S	Total Recoverable	Water	3005A	
670-63094-5	MW-C	Total Recoverable	Water	3005A	

### Analysis Batch: 155153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-1	MW-34S	Total Recoverable	Water	6020B	154808
670-63094-2	MW-35S	Total Recoverable	Water	6020B	154808
670-63094-3	MW-36S	Total Recoverable	Water	6020B	154808

### Analysis Batch: 155216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
670-63094-4	MW-37S	Total Recoverable	Water	6020B	154808
670-63094-5	MW-C	Total Recoverable	Water	6020B	154808

Eurofins Orlando

# Lab Chronicle

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Client Sample ID: MW-34S

Lab Sample ID: 670-63094-1

Date Collected: 05/21/25 10:50

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 19:16
Total/NA	Prep	3510C			154748	YM	EET ORL	05/23/25 07:17
Total/NA	Analysis	8270E		1	155479	K1P	EET ORL	05/29/25 00:48
Total/NA	Prep	3511			154755	SI	EET ORL	05/23/25 08:06
Total/NA	Analysis	8270E		1	154976	JI	EET ORL	05/24/25 13:22
Total/NA	Prep	3511			154736	YM	EET ORL	05/23/25 05:16
Total/NA	Analysis	FL-PRO		1	154825	JR	EET ORL	05/23/25 20:50
Total Recoverable	Prep	3005A			154808	JR	EET ORL	05/23/25 09:26
Total Recoverable	Analysis	6020B		1	155153	JA	EET ORL	05/23/25 20:34

## Client Sample ID: MW-35S

Lab Sample ID: 670-63094-2

Date Collected: 05/21/25 11:56

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 19:34
Total/NA	Prep	3510C			154748	YM	EET ORL	05/23/25 07:17
Total/NA	Analysis	8270E		1	155479	K1P	EET ORL	05/29/25 01:08
Total/NA	Prep	3511			154755	SI	EET ORL	05/23/25 08:06
Total/NA	Analysis	8270E		1	154976	JI	EET ORL	05/24/25 13:40
Total/NA	Prep	3511			154736	YM	EET ORL	05/23/25 05:16
Total/NA	Analysis	FL-PRO		1	154825	JR	EET ORL	05/23/25 21:10
Total Recoverable	Prep	3005A			154808	JR	EET ORL	05/23/25 09:26
Total Recoverable	Analysis	6020B		1	155153	JA	EET ORL	05/23/25 20:39

## Client Sample ID: MW-36S

Lab Sample ID: 670-63094-3

Date Collected: 05/21/25 12:56

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 19:51
Total/NA	Prep	3510C			154748	YM	EET ORL	05/23/25 07:17
Total/NA	Analysis	8270E		1	155479	K1P	EET ORL	05/29/25 01:29
Total/NA	Prep	3511			154755	SI	EET ORL	05/23/25 08:06
Total/NA	Analysis	8270E		1	154976	JI	EET ORL	05/24/25 13:58
Total/NA	Prep	3511			154736	YM	EET ORL	05/23/25 05:16
Total/NA	Analysis	FL-PRO		1	154825	JR	EET ORL	05/23/25 21:29
Total Recoverable	Prep	3005A			154808	JR	EET ORL	05/23/25 09:26
Total Recoverable	Analysis	6020B		1	155153	JA	EET ORL	05/23/25 20:42

# Lab Chronicle

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: MW-37S**

**Lab Sample ID: 670-63094-4**

Date Collected: 05/21/25 13:56

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 20:09
Total/NA	Prep	3510C			154748	YM	EET ORL	05/23/25 07:17
Total/NA	Analysis	8270E		1	155479	K1P	EET ORL	05/29/25 01:50
Total/NA	Prep	3511			154755	SI	EET ORL	05/23/25 08:06
Total/NA	Analysis	8270E		1	154976	JI	EET ORL	05/24/25 14:15
Total/NA	Prep	3511			154736	YM	EET ORL	05/23/25 05:16
Total/NA	Analysis	FL-PRO		1	154825	JR	EET ORL	05/23/25 21:48
Total Recoverable	Prep	3005A			154808	JR	EET ORL	05/23/25 09:26
Total Recoverable	Analysis	6020B		1	155216	JA	EET ORL	05/27/25 12:07

**Client Sample ID: MW-C**

**Lab Sample ID: 670-63094-5**

Date Collected: 05/21/25 15:30

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 20:27
Total/NA	Prep	3510C			154748	YM	EET ORL	05/23/25 07:17
Total/NA	Analysis	8270E		1	155479	K1P	EET ORL	05/29/25 02:10
Total/NA	Prep	3511			154755	SI	EET ORL	05/23/25 08:06
Total/NA	Analysis	8270E		1	154976	JI	EET ORL	05/24/25 14:33
Total/NA	Prep	3511			154736	YM	EET ORL	05/23/25 05:16
Total/NA	Analysis	FL-PRO		1	154825	JR	EET ORL	05/23/25 22:08
Total Recoverable	Prep	3005A			154808	JR	EET ORL	05/23/25 09:26
Total Recoverable	Analysis	6020B		1	155216	JA	EET ORL	05/27/25 12:09

**Client Sample ID: Field Blank**

**Lab Sample ID: 670-63094-6**

Date Collected: 05/21/25 13:14

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 18:23

**Client Sample ID: Rinsate Blank**

**Lab Sample ID: 670-63094-7**

Date Collected: 05/21/25 14:25

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 18:41

**Client Sample ID: Trip Blank 1**

**Lab Sample ID: 670-63094-8**

Date Collected: 05/21/25 00:00

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 17:48

# Lab Chronicle

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

**Client Sample ID: DUP-1**

**Lab Sample ID: 670-63094-9**

Date Collected: 05/21/25 15:45

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 20:44

**Client Sample ID: Trip Blank 2**

**Lab Sample ID: 670-63094-10**

Date Collected: 05/21/25 00:00

Matrix: Water

Date Received: 05/22/25 13:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	156478	P1C	EET ORL	06/03/25 18:06

**Laboratory References:**

EET ORL = Eurofins Orlando, 481 Newburyport Avenue, Altamonte Springs, FL 32701, TEL (407)339-5984

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Accreditation/Certification Summary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

## Laboratory: Eurofins Orlando

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E83018	06-30-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270E	3510C	Water	Diphenylamine

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Method Summary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET ORL
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET ORL
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET ORL
FL-PRO	Florida - Petroleum Range Organics (GC)	FL-DEP	EET ORL
6020B	Metals (ICP/MS)	SW846	EET ORL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET ORL
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET ORL
3511	Microextraction of Organic Compounds	SW846	EET ORL
5030C	Purge and Trap	SW846	EET ORL

**Protocol References:**

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

EET ORL = Eurofins Orlando, 481 Newburyport Avenue, Altamonte Springs, FL 32701, TEL (407)339-5984

# Sample Summary

Client: PPM Consultants, Inc.  
Project/Site: 102 W Main St

Job ID: 670-63094-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
670-63094-1	MW-34S	Water	05/21/25 10:50	05/22/25 13:53
670-63094-2	MW-35S	Water	05/21/25 11:56	05/22/25 13:53
670-63094-3	MW-36S	Water	05/21/25 12:56	05/22/25 13:53
670-63094-4	MW-37S	Water	05/21/25 13:56	05/22/25 13:53
670-63094-5	MW-C	Water	05/21/25 15:30	05/22/25 13:53
670-63094-6	Field Blank	Water	05/21/25 13:14	05/22/25 13:53
670-63094-7	Rinsate Blank	Water	05/21/25 14:25	05/22/25 13:53
670-63094-8	Trip Blank 1	Water	05/21/25 00:00	05/22/25 13:53
670-63094-9	DUP-1	Water	05/21/25 15:45	05/22/25 13:53
670-63094-10	Trip Blank 2	Water	05/21/25 00:00	05/22/25 13:53

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**Eurofins Orlando**

481 Newburyport Avenue  
 Altamonte Springs, FL 32701  
 Phone: 407-339-5984 Fax: 407-260-6110

**Chain of Custody Record**



<b>Client Information</b>		Sampler: <i>Elgin Owens</i>		Lab PM: Weinberg, Amy		Carrier Tracking No(s):		COC No: 670-29073-12456.1																																														
Client Contact: Kang Wu		Phone: <i>407-240-1127</i>		E-Mail: amy.weinberg@et.eurofinsus.com		State of Origin: <i>FL</i>		Page: Page 1 of 1																																														
Company: PPM Consultants, Inc.		PWSID:		<b>Analysis Requested</b>						Job #: <i>20145701 - Phase II</i>																																												
Address: 750 South Northlake Boulevard Suite 1012		Due Date Requested:		<table border="1"> <tr> <td rowspan="5">Field Filtered Sample (Yes or No)</td> <td rowspan="5">Perform MS/MSD (Yes or No)</td> <td colspan="2">8260D - TCL List</td> <td colspan="2">8270E - Semi-volatiles Standard list</td> <td colspan="2">8270E_SIM - Polycyclic Aromatic Hydrocarbons</td> <td colspan="2">FL_PRO - Total Petroleum Hydrocarbons</td> <td rowspan="5">Total Number of containers</td> </tr> <tr> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - TCL List		8270E - Semi-volatiles Standard list		8270E_SIM - Polycyclic Aromatic Hydrocarbons		FL_PRO - Total Petroleum Hydrocarbons		Total Number of containers																																	Preservation Codes: A - HCL N - None D - HNO3	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - TCL List										8270E - Semi-volatiles Standard list		8270E_SIM - Polycyclic Aromatic Hydrocarbons		FL_PRO - Total Petroleum Hydrocarbons		Total Number of containers																																				
City: Altamonte Springs		TAT Requested (days):		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Other:																																																
State, Zip: FL, 32701		PO #:		Purchase Order Requested																																																		
Phone:		WO #:																																																				
Email: Kang.wu@ppmco.com		Project #:		67006975																																																		
Project Name: 102 W Main St		SSOW#:																																																				
Site: <i>102 West main street</i>																																																						
<b>Sample Identification</b>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Special Instructions/Note:																																												
						Preservation Code:		X X																																														
<i>MW-345</i>		<i>5.21.25</i>		<i>1050</i>		<i>G W</i>																																																
<i>MW-355</i>		<i>5.21.25</i>		<i>1156</i>		<i>G W</i>																																																
<i>MW-365</i>		<i>5.21.25</i>		<i>1256</i>		<i>G W</i>																																																
<i>MW-375</i>		<i>5.21.25</i>		<i>1356</i>		<i>G W</i>																																																
<i>MW-C</i>		<i>5.21.25</i>		<i>1530</i>		<i>G W</i>																																																
<i>Field Blank</i>		<i>5.21.25</i>		<i>1314</i>		<i>G W</i>		<i>X</i>																																														
<i>Rinsate Blank</i>		<i>5.21.25</i>		<i>1425</i>		<i>G W</i>		<i>X</i>																																														
<i>Trip Blank</i>								<i>X</i>																																														
<i>Normal (MW-C Duplicate)</i>		<i>5.21.25</i>		<i>1545</i>		<i>G W</i>		<i>X</i>																																														
<i>Trip Blank</i>								<i>X</i>																																														
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>																																																		
Deliverable Requested: I, II, III, IV, Other (specify)										<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																												
Empty Kit Relinquished by: <i>J.J.</i>		Date: <i>5/7/2025</i>		Time: <i>14:41</i>		Method of Shipment: <i>CPU</i>																																																
Relinquished by: <i>Elgin Owens</i>		Date/Time: <i>5.22.25/1353</i>		Company: <i>PPM</i>		Received by: <i>OG</i>		Date/Time: <i>5/22/25 1353</i>		Company:																																												
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:																																												
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:																																												
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <i>1.7/1.5 1.3/1.1</i>																																																		



## Login Sample Receipt Checklist

Client: PPM Consultants, Inc.

Job Number: 670-63094-1

**Login Number: 63094**

**List Source: Eurofins Orlando**

**List Number: 1**

**Creator: Gemeinhardt, Alexandria**

Question	Answer	Comment
The cooler or samples do not appear to have been compromised or tampered with	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking. Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace larger than 1/4" in one or more vials, one vial with acppt. headspace

**APPENDIX C – HISTORICAL DOCUMENTS**



March 4, 1993

Mr. Joel Johnson  
Florida Department of Environmental Regulation  
Petroleum Cleanup Section  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Dear Joel:

**SUBJECT: Lake Butler Contamination Assessment Report (CAR), Response to Comments**

In your letter of February 22, 1993, additional information was requested from ABB Environmental Services Inc. (ABB-ES) to complete the CAR for the Lake Butler sites. Your request and the information you requested are provided below.

1. An estimate of the volume of free product and excessively contaminated soil present at the sites.

Product and excessively contaminated soil area and thickness estimates are provided in the two attachments.

2. A drawing(s) depicting the extent of free product and excessively contaminated soil.

Along with the estimate calculations are site maps depicting the areas of free product and soil contamination on the various properties.

3. Clarification as to whether monitoring wells 15s, 16s, and 22s provide horizontal delineation of the surficial aquifer, or if they reflect perched water conditions.

Groundwater elevations measured in these three wells under more normal rainfall conditions seem to indicate that they do correlate somewhat with the other wells of corresponding depths. However, a significant layer of gray clay exists at shallow depth beneath shallow wells 15s, 16s and 22s, and also 12s, that was not encountered anywhere else onsite, and this clay definitely causes a mounding effect in the lowland area. Since there is no unsaturated zone beneath the clay, the condition could not be described as perched water.

As to whether contaminants are migrating laterally beneath the clay (and above the intermediate aquifer confining unit), we can say that in at least one area they are. At well cluster 22, the intermediate depth well (22i) was found to be more contaminated than the shallow well (22s). As discussed in the CAR, well 22i was screened in a transition area between the surficial and intermediate aquifers where there was no distinct confining unit. At the locations of wells 15s and 16s, no deeper borings or wells were installed, so it is not known whether contaminants migrate beneath the gray clay. Since it has been conceded that more control on the extent of contamination in the downgradient area is necessary, we

MAR 5 1993

ABB Environmental Services Inc.

2590 Executive Center Circle East  
Berkeley Building  
Tallahassee, Florida 32301

Telephone (904) 656-1293  
Fax (904) 656-3386



Joel Johnson  
March 4, 1993  
page 2

would recommend the installation of an additional boring and well in the area of 15s and 16s to assess the vertical extent of contamination.

4. Clarification as to the extent of perched water present, and whether or not it needs to be addressed as either groundwater or soil contamination.

Because of the interlayering of sand, clayey sand, and clay layers at shallow depths across the site, it is safe to assume that perched water exists in many areas throughout the site during wet-weather periods. The incidence and duration of perched water cannot be predicted from the information we now have, and to be able to do so would require a long-term, area-intensive study. We believe that the remediation of contaminated intermittent perched-water zones would be best achieved by a combination of groundwater recovery and soil vapor extraction, where the surficial aquifer groundwater recovery system would also be open to accept intruding perched water (with recovery wells being screened over a suitably long interval) and where vapor extraction of overlying soils would influence the perched water zones when they were dry or dewatered.

5. Please explain the significance of the two contour lines depicted on figure 14. It is unclear what they represent.

Both Figures 13 and 14 in the CAR present summaries of the distribution of petroleum contaminants in the well samples. As indicated on the figures, the dotted lines represent the estimated constituent boundaries, not contour lines. In Figure 14, the closely-hatched dotted line represents the estimated boundary of methyl tert-butyl ether (MTBE) contamination in the intermediate aquifer, and the more widely-hatched line represents the the estimated extent of volatile organic aromatics (VOAs) in the aquifer. In reviewing Figures 13 and 14 to prepare this response, several drafting errors were noted. The errors were corrected and the revised figures are attached.

As you requested, ABB-ES is preparing a workplan to address the requirements of items 6 through 9 in your letter. We are also taking liberty to include an additional well and boring in the area of shallow wells 15s and 16s. Cost information and justification for development of the Remedial Action Plan (RAP) will also be included in the workplan. Please call if you have other questions.

Sincerely,

ABB Environmental Services Inc.

A handwritten signature in black ink, appearing to read "Richard W. Hicks".

Richard W. Hicks, P.G.  
Technical Director

cc: Hamp Pridgen  
project file

## **APPENDIX A**

**Free Petroleum Product Area and Volume Estimates  
Lake Butler Sites Contamination Assessment**

PROJECT  
 Product Thickness Estimation  
 Lake Butler Sites

COMP. BY  
 Richards  
 CHK. BY  
 JW

JOB NO.  
 6335-XX  
 DATE  
 4/25/93

General Assumptions: (1) Porosity of material = 0.25  
 (2) Actual product thickness is about 1/5 of  
 apparent product thickness in 2" wells

Note: Product thickness measurements on attached figures were  
 not obtained on same date but measurements reflect time  
 periods when well screen intervals corresponded with product

Product Location	(A)	(B)	(C)	(D)
	Estimated Area (ft <sup>2</sup> )	Average of Measured Product Thicknesses Extrapolated over Area (ft)	Estimated Volume of Product ft <sup>3</sup>	gal
Coastal	3,600	0.45	81	606
Ad M Beverage	1,600	0.79	63	473
Shadd (1)	1,500	1.19	89	666
Shadd (2)	3,700	1.04	302	2,259
Johns'	5,700	1.00	456	3,410

Notes: 1 Estimate does not include total volume of product already removed.

Equations: 
$$\frac{A \times B \times 0.25}{5} = C,$$

$$C \times 7.48 = D$$

feet) was measured in well MW-8, which is installed through the former pump island on the Shadd site. The first set of product measurements (Table 6) is most representative of the actual thickness of product at the site, because in all subsequent measurement episodes the water table had risen to the point that the screens of all of the wells no longer intersected the product layer.

Table 6  
Occurrence and Apparent Thickness  
of Undissolved Petroleum Product

Contamination Assessment Report  
Lake Butler Petroleum Sites  
Union County, Florida

Well No.	Apparent product thickness (feet)							Potential source
	7/16/90	2/6/91	7/24/91	7/30/91	6/17/92	7/7/92	11/2/92	
<b>Western Area Wells</b>								
C-N	0.04	NM	NM	NM	NM	NM	NM	Coastal tanks compliance well (shallow).
C-SW	0.71	NM	NM	NM	NM	NM	NM	Coastal tanks compliance well (shallow).
C-NE	> 1.0	NM	NM	NM	NM	NM	NM	Coastal tanks compliance well (shallow).
C-NW	1.0	NM	NM	NM	NM	NM	NM	Coastal tanks compliance well (shallow).
MW-5S	NM	2.37	0.33	NM	0.30	0.30	1.28	Former tank location, Shadd
MW-6S	NM	2.28	0.01	0.01	5.31	5.30	4.58	Former tank location, Shadd
MW-8S	NM	4.26	8.26	8.19	7.22	7.22	8.62	Former pump island, Shadd
MW-10S	NM	1.58	0.01	0.01	1.55	1.55	NM	Possible former tank location, former Handway store, or migration from Shadd site.
<b>Eastern Area Wells</b>								
MW-19S	NM	1.06	3.28	3.23	2.75	2.45	NM	Next to recovery pit, Johns'
MW-23S	NM	0.90	2.49	2.79	2.62	2.61	4.10	Adjacent to Coastal tanks
MW-26S	NM	6.34	6.99	7.35	2.54	4.85	2.22	Adjacent to Johns' old tank and pump island.
MW-27I	NM	Trace	0.20	0.13	0.17	0.15	0.26	Adjacent to Johns' tanks
MW-29S	NM	1.45	2.11	0.14	NM	0.18	2.37	Next to recovery pit, Johns' (shallow).
Recovery sump, John's	NM	2.85	NM	NM	NM	NM	NM	In recovery pit, John's

Note: NM = not measured.

7/25/90

Johns

C-SW

2.56

C-NW

0.87

RW-N

5.31

RW-S

2.43

42

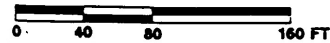
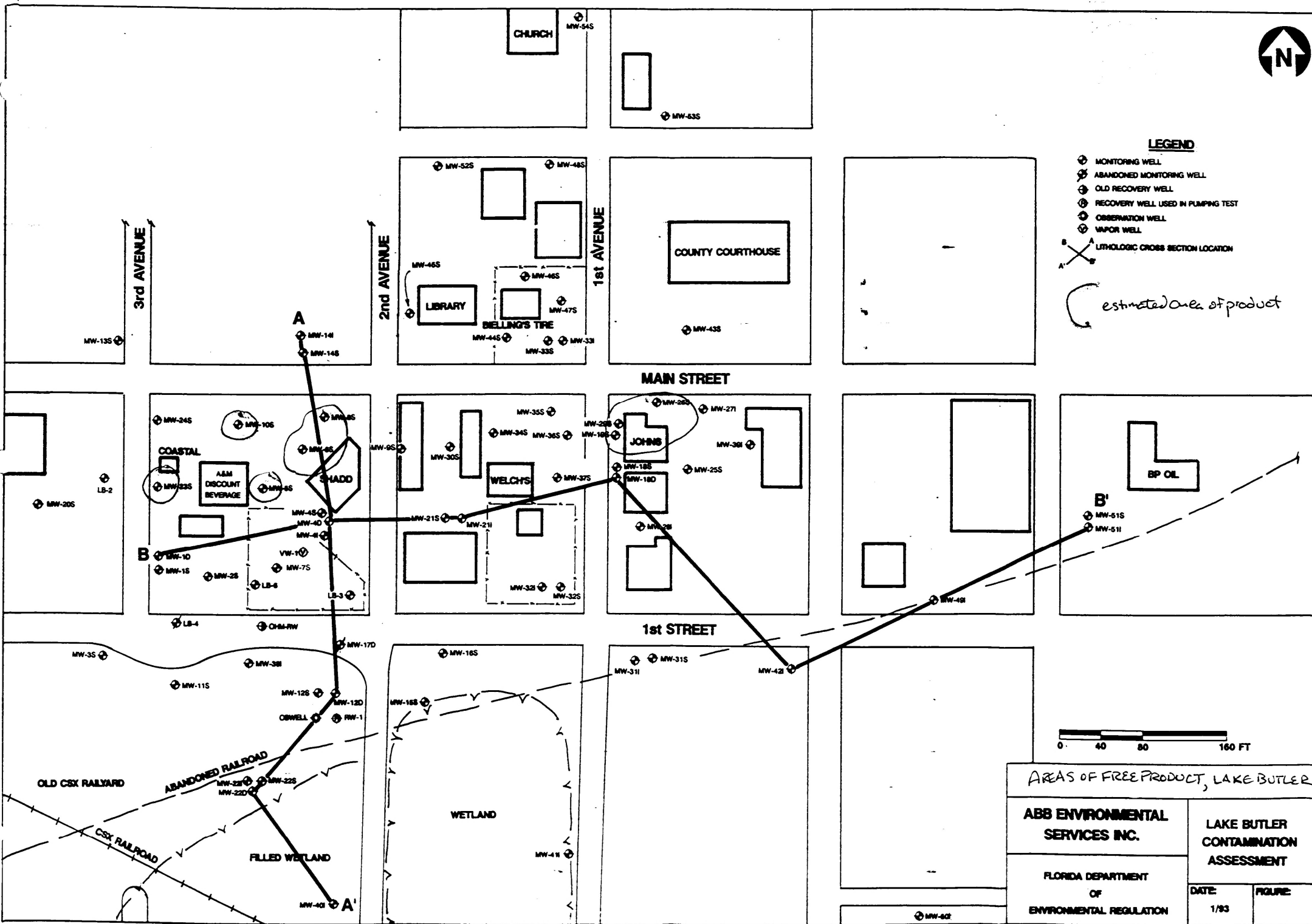
(note: these were not included in CAR due to an omission)



**LEGEND**

- ⊕ MONITORING WELL
- ⊕ ABANDONED MONITORING WELL
- ⊕ OLD RECOVERY WELL
- ⊕ RECOVERY WELL USED IN PUMPING TEST
- ⊕ OBSERVATION WELL
- ⊕ VAPOR WELL
- X LITHOLOGIC CROSS SECTION LOCATION

*(estimated) area of product*



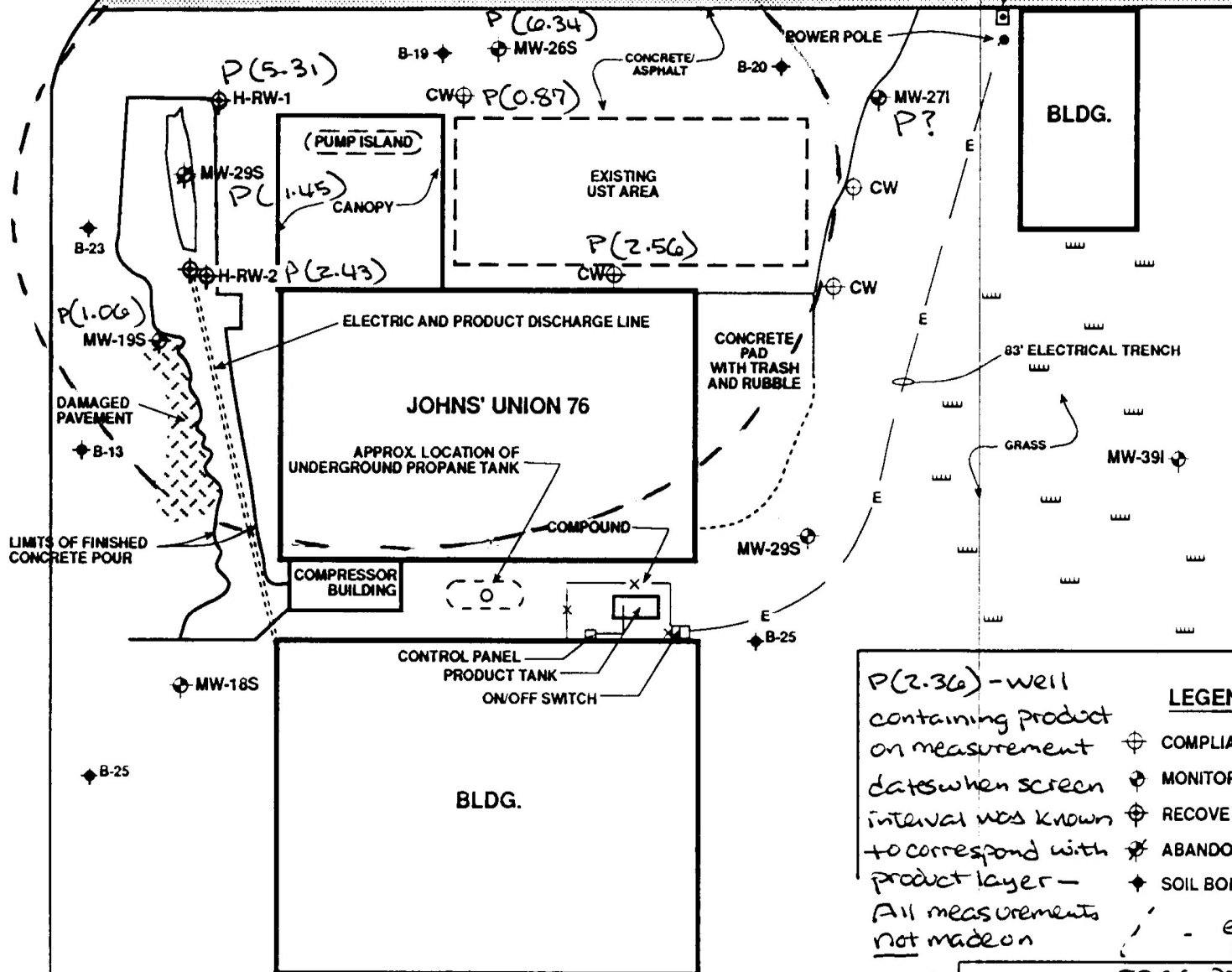
AREAS OF FREE PRODUCT, LAKE BUTLER	
ABB ENVIRONMENTAL SERVICES INC.	
LAKE BUTLER CONTAMINATION ASSESSMENT	
FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION	
DATE:	FIGURE:
1/93	

# MAIN STREET

UNION 76 SIGN



S.W. 1st STREET



P(2.36) - well containing product on measurement date when screen interval was known to correspond with product layer - All measurements not made on same day.

### LEGEND

- ⊕ COMPLIANCE WELL LOCATION
- ⊕ MONITORING WELL LOCATION
- ⊕ RECOVERY WELL LOCATION
- ⊕ ABANDONED WELL LOCATION
- ◆ SOIL BORING LOCATION
- - - - - estimated boundary of free product

## FREE PRODUCT AT JOHNS' UNION 76 SITE MAP

ABB ENVIRONMENTAL SERVICES INC.

LAKE BUTLER CONTAMINATION ASSESSMENT



# MAIN STREET

FORMER PUMP ISLAND

3 EXISTING USTS (GASOLINE)

LB-2

3rd AVENUE

MW-23S  
P (0.90)

B-18

A&M DISCOUNT BEVERAGE

LAUNDRY

FORMER AST AREA (DIESEL)

UNPAVED

FENCE

# 1st STREET

OLD CSX RAIL YARD

ASPHALT

UNPAVED

FORMER UST AREA (GASOLINE)

P (2.37)

B-11

MW-7S

LB-6

OHM-MW

OHM-RW

B-3

MW-38I

B-4

ASPHALT

UNPAVED

SHADD BLDG.

CANOPY

MW-4S

MW-4D

B-6

MW-4I

UNPAVED

B-10

LB-3

2nd AVENUE

MW-9S

B-12

B-5

## LEGEND

- ⊕ COMPLIANCE WELL LOCATION
- ⊕ MONITORING WELL LOCATION
- ⊕ RECOVERY WELL LOCATION
- ⊕ ABANDONED WELL LOCATION
- ◆ SOIL BORING LOCATION

P(1.58) - well containing product on measurement date when screen interval was known to correspond with product layer

estimated boundary of product

FREE PRODUCT AT WESTERN AREA SITES

ABB ENVIRONMENTAL SERVICES INC.

FLORIDA DEPARTMENT

LAKE BUTLER CONTAMINATION ASSESSMENT

## **APPENDIX B**

**Contaminated Soil Area and Volume Estimates  
Lake Butler Sites Contamination Assessment**

PROJECT Contaminated Soil Estimates Lake Butler Sites	COMP. BY Ritch	JOB NO. 6335-XX
	CHK. BY TW	DATE 3/1/93

Location	(Ft <sup>2</sup> ) Estimated Area of Contaminated Soil (>500ppm)	(Ft) Estimated Thickness (>500ppm)	Estimated Volume (>500ppm) in Ft <sup>3</sup>
Western Site Area	6,100	6	36,600
Johns	2,200 <sup>1</sup>	2	4,400
Bielling's Tire	200	6 <sup>2</sup>	1,200
Welch's	none present		
BP Station	not determined		

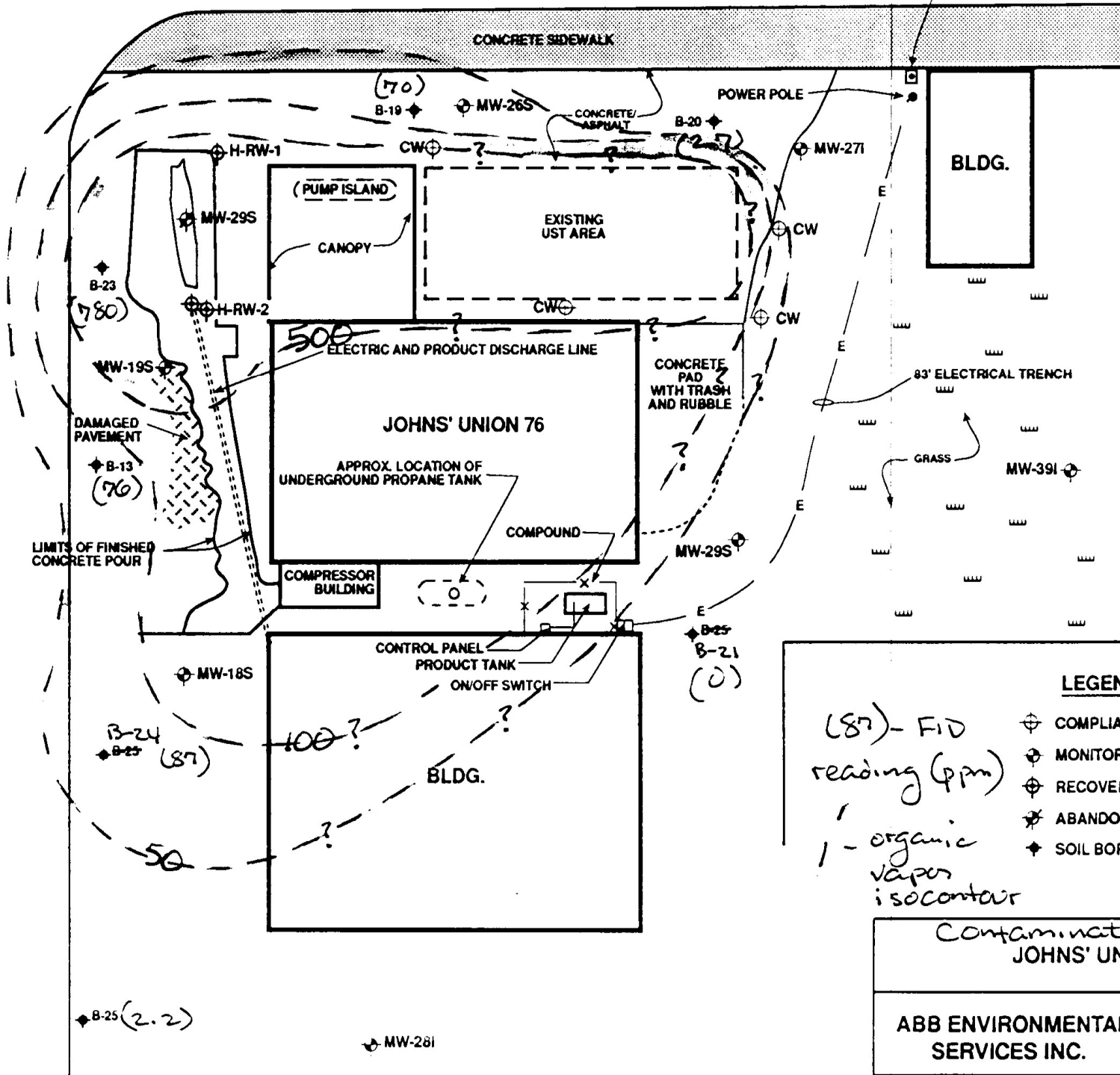
- NOTES:
- Area of contam. soil based on boring data & known area of free petroleum product
  - Thickness estimated based on odor & depth to g.w.; FID broke down after 4 Ft sample (was >1,000 ppm)

MAIN STREET

UNION 76 SIGN



S.W. 1st STREET



**LEGEND**

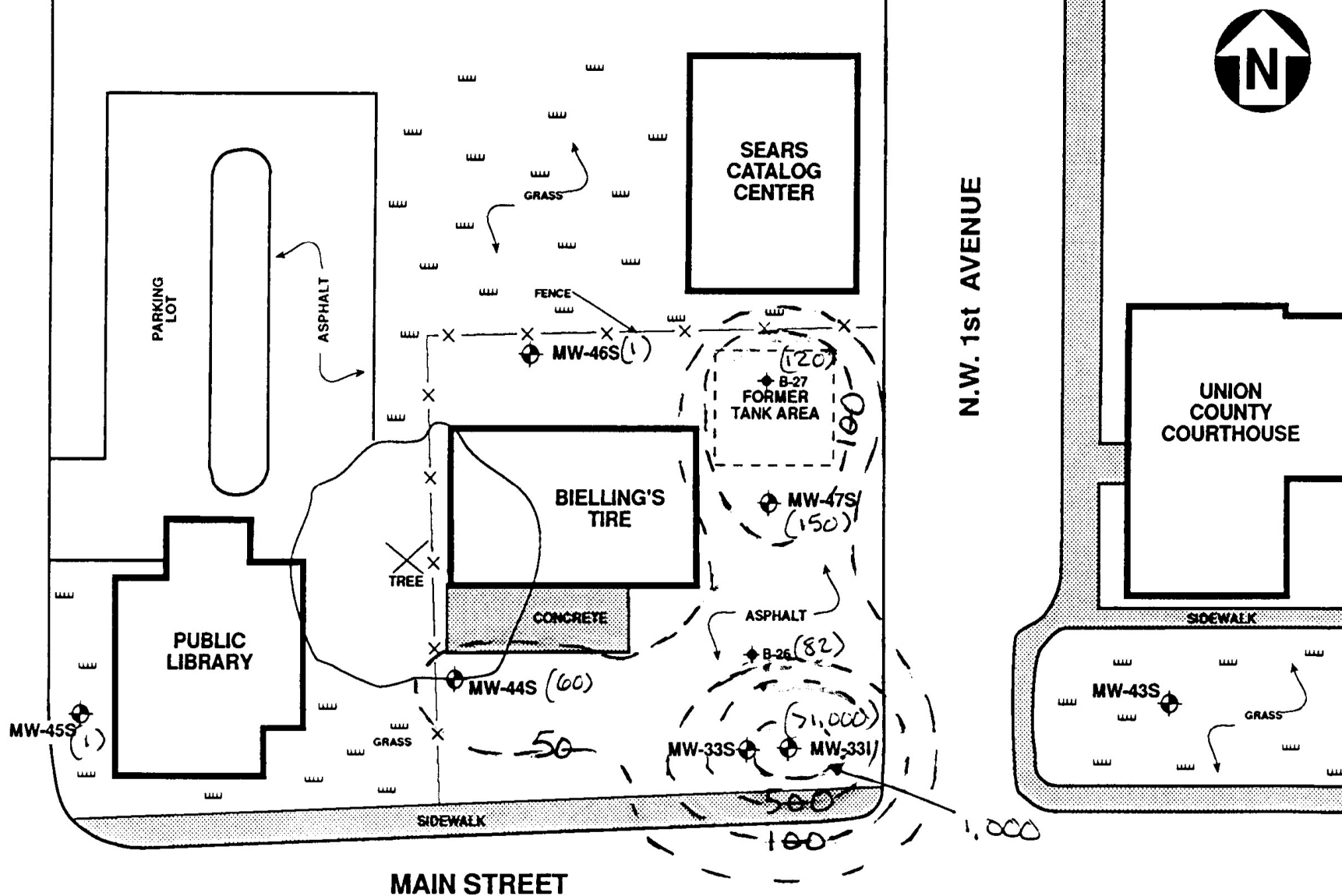
- (87) - FID reading (ppm)
- 1 - organic vapor isocontour
- ⊕ COMPLIANCE WELL LOCATION
- ⊙ MONITORING WELL LOCATION
- ⊗ RECOVERY WELL LOCATION
- ⊘ ABANDONED WELL LOCATION
- ◆ SOIL BORING LOCATION

Contaminated Soil at JOHN'S UNION 76 SITE

ABB ENVIRONMENTAL SERVICES INC.

LAKE BUTLER CONTAMINATION ASSESSMENT

FLORIDA DEPARTMENT



**LEGEND**

- ⊕ MONITORING WELL LOCATION
- ◆ SOIL BORING LOCATION

(60) - FID reading (ppm)  
 ( ) - organic vapor isocontour;

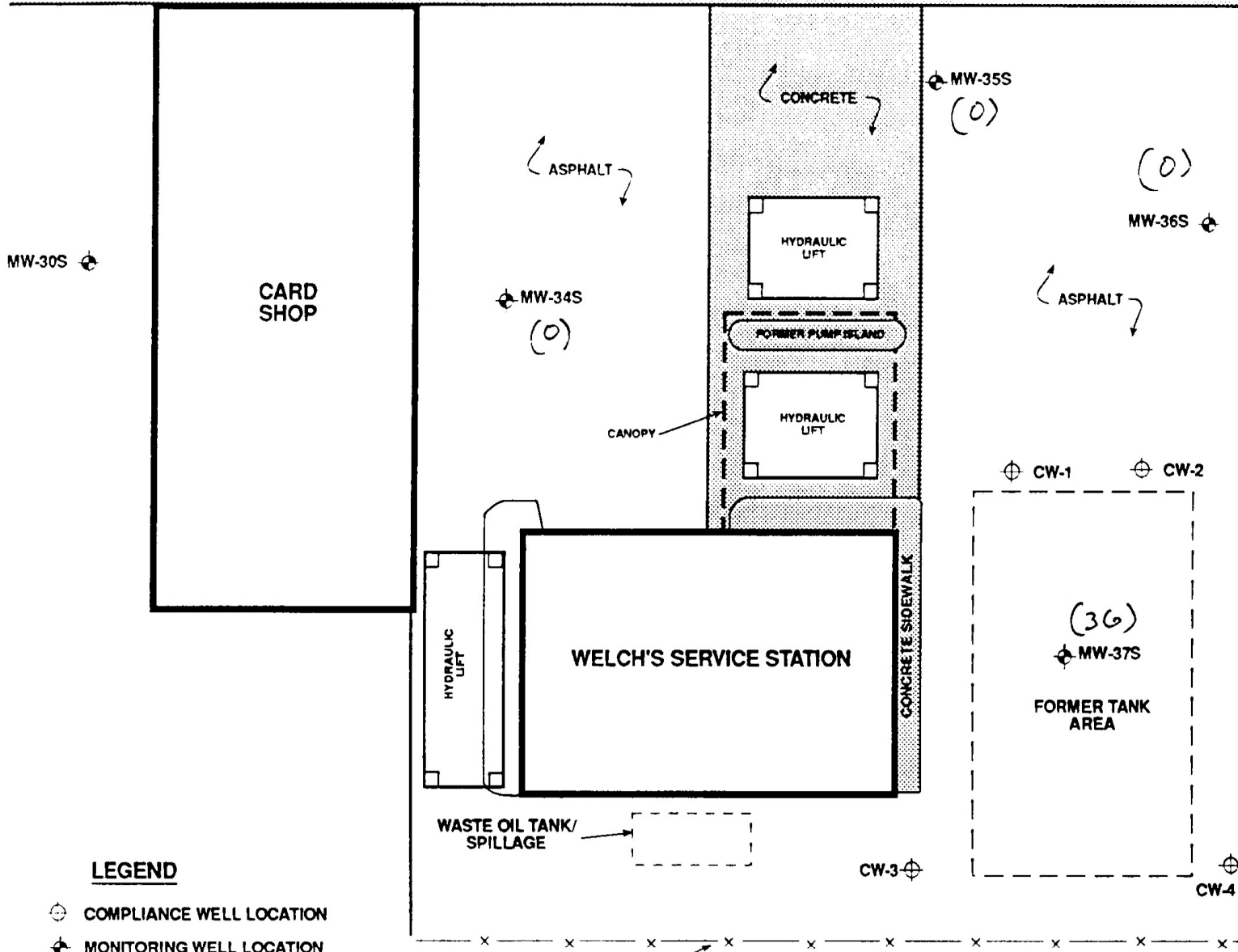
SCALE



Contaminated Soil at BIELLING'S TIRE SITE		
ABB ENVIRONMENTAL SERVICES INC.		LAKE BUTLER CONTAMINATION ASSESSMENT
FLORIDA DEPARTMENT OF	DATE:	FIGURE:



CONCRETE SIDEWALK



S.W. 1st AVENUE

**LEGEND**

- ⊕ COMPLIANCE WELL LOCATION
- ⊕ MONITORING WELL LOCATION

(36) - FID reading (ppm)

SCALE



Contaminated Soil at WELCH'S SITE

ABB ENVIRONMENTAL SERVICES INC.

LAKE BUTLER CONTAMINATION ASSESSMENT

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

DATE:

FIGURE:

Table 9  
Flame Ionization Detector (FID) Field Screening Data

Contamination Assessment Report  
Lake Butler Petroleum Sites  
Union County, Florida

Maximum FID measurements on nonsaturated soils			
Boring or well No.	Total VOC concentration (ppm)	Contribution of methane (ppm)	Depth interval (feet)
B-1	88	0	6 to 8
B-2	90	0	9 to 11
B-3	0.4	0	11 to 13
B-4	32	0	9 to 13
B-5	0	--	--
B-6	> 1,000	0	6 to 12
B-7	> 1,000	NM	11 to 13
B-8	> 1,000	NM	10 to 14
B-9	> 1,000	NM	10 to 18
B-10	> 1,000	NM	10 to 14
B-11	> 1,000	NM	4 to 10
B-12	9	NM	4 to 6
B-13	76	NM	12 to 14
B-14	650	NM	12 to 14
B-15	> 1,000	NM	12 to 16 <sup>1</sup>
B-16	> 1,000	NM	12 to 16 <sup>1</sup>
B-17	> 1,000	NM	10 to 14 <sup>1</sup>
B-18	> 1,000	NM	10 to 14 <sup>1</sup> 370 → 8110
B-19	70	NM	3 to 5
B-20	2.7	NM	4 to 6
B-21	0	NM	--
B-22	580	NM	4 to 6
B-23	780	NM	8 to 10
B-24	87	NM	6 to 8
B-25	2.2	NM	6 to 8
B-26	82	0	5
B-27	120	80	5
B-28	16	NM	10 to 12
MW-1D	> 1,000	NM	9 to 16

See notes at end of table.

Table 9 (Continued)  
Flame Ionization Detector (FID) Field Screening Data

Contamination Assessment Report  
Lake Butler Petroleum Sites  
Union County, Florida

Boring or well No.	Maximum FID measurements on nonsaturated soils		
	Total VOC concentration (ppm)	Contribution of methane (ppm)	Depth interval (feet)
MW-9S	24	NM	14 to 16
MW-11S	0	NM	5 to 12
MW-12S	3.2	NM	15 to 17
MW-13S	0.2	NM	5 to 12
MW-14S	0.6	NM	5 to 7
MW-24S	2.2	0	20-22
MW-30S	0	NM	0 to 16
MW-33I	>1,000	260	4
MW-34S	0	NM	2 to 4
MW-35S	0	NM	2 to 4
MW-36S	0	NM	2 to 4
MW-37S	36	0	4
MW-44S	60	0	10 to 12
MW-45S	1	NM	15 to 17
MW-46S	1	NM	10 to 12
MW-47S	150	0	5
MW-48S	0	NM	4 to 17
MW-49I	1.4	NM	15 to 17
MW-51I	300	<sup>2</sup> 250	5 to 7
MW-52S	0	NM	5 to 12

<sup>1</sup>Interval observed to be below the water table under average rainfall conditions.

<sup>2</sup>Strong petroleum odor suggests breakthrough of carbon filter, methane concentrations probably lower.

Notes: VOC = volatile organic compounds.  
ppm = parts per million.  
ND = not detected.  
NM = not measured, either because the total reading was low or there was a strong petroleum odor.

MW-23S                      480                      0.8                      10-12







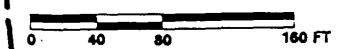
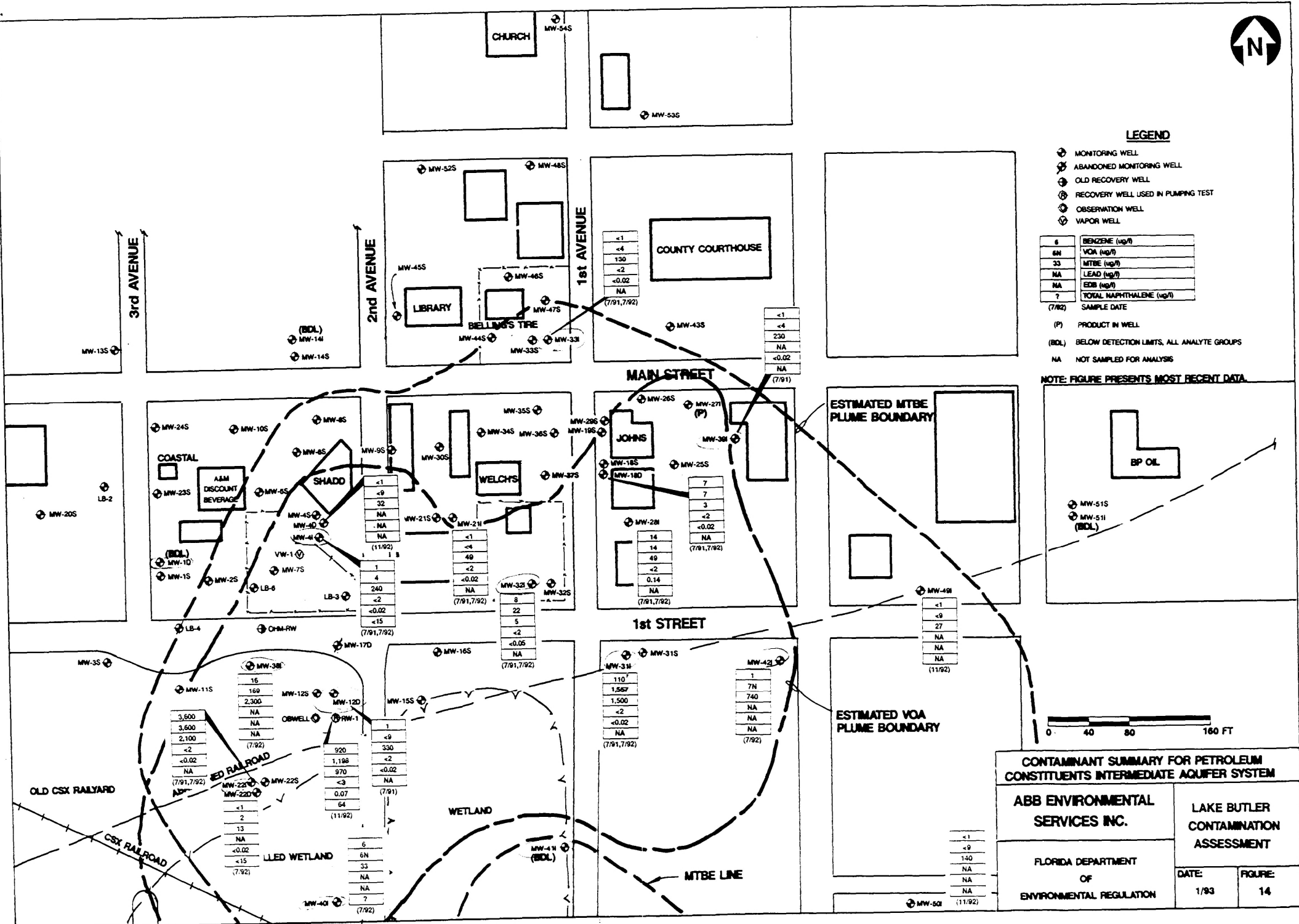
**LEGEND**

- ⊕ MONITORING WELL
- ⊗ ABANDONED MONITORING WELL
- ⊙ OLD RECOVERY WELL
- ⊕ RECOVERY WELL USED IN PUMPING TEST
- ⊕ OBSERVATION WELL
- ⊕ VAPOR WELL

6	BENZENE (ug/l)
6N	VOA (ug/l)
33	MTBE (ug/l)
NA	LEAD (ug/l)
NA	EDB (ug/l)
7	TOTAL NAPHTHALENE (ug/l)
(7/92)	SAMPLE DATE

- (P) PRODUCT IN WELL
- (BDL) BELOW DETECTION LIMITS, ALL ANALYTE GROUPS
- NA NOT SAMPLED FOR ANALYSIS

NOTE: FIGURE PRESENTS MOST RECENT DATA



CONTAMINANT SUMMARY FOR PETROLEUM CONSTITUENTS INTERMEDIATE AQUIFER SYSTEM			
ABB ENVIRONMENTAL SERVICES INC.		LAKE BUTLER CONTAMINATION ASSESSMENT	
FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION		DATE:	FIGURE:
		1/93	14

<1
<9
140
NA
NA
NA
(11/92)

<1
<4
230
NA
<0.02
NA
(7/91)

7
7
3
<2
<0.02
NA
(7/91,7/92)

110
1,567
1,500
<2
<0.02
NA
(7/91,7/92)

<1
<9
32
NA
NA
NA
(11/92)

<1
<4
49
49
<2
<0.02
NA
(7/91,7/92)

8
22
5
<2
<0.05
NA
(7/91,7/92)

3,600
3,600
2,100
<2
<0.02
NA
(7/91,7/92)

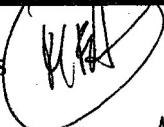
920
1,198
970
<3
0.07
64
(7/91)

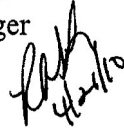
<1
2
13
NA
<0.02
<15
(7/92)


6
6N
33
NA
NA
7
(7/92)

# Memorandum

# Florida Department of Environmental Protection

To: Mike Ashley, Chief  
Bureau of Petroleum Storage Systems 

Through: Rebecca Lockenbach, Environmental Manager  
Petroleum Cleanup Section 6  
Bureau of Petroleum Storage Systems 

From: Natalie M. Monteiro, Professional Engineer  
Petroleum Cleanup Section 6  
Bureau of Petroleum Storage Systems 

Date: April 19, 2010

Subject: Request to transfer site management of two Consent Order sites to State Cleanup  
638517149 – Coastal Mart 405 (12/28/83, score 56, consent order)  
639807182 - Shadd's (9/30/87, score 56, consent order)

The purpose of this memorandum is to request permission to transfer two consent order sites to State Cleanup for site management for the remainder of the sites' cleanup. The two sites are Shadd's Property, Facility ID 639807182, and Coastal Mart 405, Facility ID 638517149. These sites had been part of what had been referred to as the "Lake Butler Cluster" which consisted of five facilities including the two consent order sites.

The sites were treated as a group and assigned to one State Cleanup contractor, E.C. Jordan, beginning in the early 1990s, for technical as well as financial reasons and one remedial system was installed to treat the sites (an area of approximately 3 city blocks). The cleanup was later managed under the Preapproval Program by ABB (and then subsequently MACTEC, followed by Fortis Environmental) and work orders assigned under the EDI-eligible Union 76/Sam Johns, Facility ID 639519168. Due to the fact that the different sites' groundwater plumes are no longer comingled, the sites' cleanups have progressed at different rates, and the sites are currently at different stages of cleanup, it was recently decided to separate the sites into individual site cleanups. The two Preapproval eligible sites have MACTEC as the designated contractor and it is requested that the two consent order sites be sent to State Cleanup for site management. A letter, dated February 1, 2010, sent to the consultants and owners, further explains the reasons for the sites' separate cleanups (it is attached). NOTE: E.C. Jordan, ABB, and MACTEC are all different names for the same core company that through various business practices changed its' name over the course of the project.

If you have any questions, please contact Natalie M. Monteiro at 877-1133, ext 3717, or via email at [nmonteiro@ene.com](mailto:nmonteiro@ene.com).



# Florida Department of Environmental Protection

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

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

February 1, 2010

**CERTIFIED MAIL #7006 0100 0003 1085 8393**  
**RETURN RECEIPT REQUESTED**

Jack Davis  
MACTEC Engineering and Consulting, Inc.  
2533 Greer Road, Suite 6  
Tallahassee, Florida 32308

Subject: Status of the Lake Butler Cluster  
Lake Butler Cluster, Lake Butler, Union County  
638519168 - Union 76/Sam Johns (Discharge 10/23/86, score 56, EDI)  
638517147 - Union County Property (fka Biellings Tire) (8/1/91, score 52, ATRP)  
638517149 - Coastal Mart 405 (12/28/83, score 37, consent order)  
638734032 - Welches (no discharge listed)  
639807182 - Shadd's Property (9/30/87, scoring requested Nov 2009, consent order)

Dear Mr. Davis:

The purpose of this letter is to detail the Department's reasons for separating the Lake Butler Cluster into three cleanup areas. The Lake Butler Cluster has included the five facilities listed above. Beginning in June 1990, the assessment of the "Lake Butler Sites" was completed by one contractor via the State Cleanup Program. The Lake Butler Sites included Union 76/Sam Johns, Union County Property, and the Shadd's Property/Coastal Mart 405 area. Upon completion of the assessment, the contractor was tasked to prepare a Remedial Action Plan to cleanup the contamination found at the Lake Butler Sites. It was decided to combine the sites together as one "Cluster" site and install one remedial system to clean up the soil and groundwater contamination. This decision was made for technical as well as financial reasons: the sites were located close to each other, the groundwater contamination plumes were comingled, and one system could be installed to treat multiple sites.

The remedial system was installed in 1995 and had subsequent modifications in 2003 and 2006. The system has been effective at reducing the contamination at the Union 76/Sam Johns and Union County Property sites to near or below Natural Attenuation Default Concentration (NADC) levels. The pump and treat system has also been effective at controlling the migration of the contamination at the Shadd's Property/Coastal Mart 405 sites and reducing the overall concentrations of contaminants of concern.

At this time, it has become apparent that the original reasons for grouping the sites together as a Cluster are no longer compelling and it is time to separate the various cleanups back into three individual cleanup groups: 1) Union 76/Sam Johns; 2) Union County Property (fka Biellings Tire); and 3) the Shadd's Property/Coastal Mart 405 sites. There are multiple converging reasons for this decision as listed below:

1. The recent groundwater concentrations and plume contours shows that there is no longer one contiguous plume. The area in and around the Welch's property roughly separates the contamination in the Shadd's Property area from the contamination at Union 76/Sam Johns and Union County Property. See the attached maps.

*"More Protection, Less Process"*  
[www.dep.state.fl.us](http://www.dep.state.fl.us)

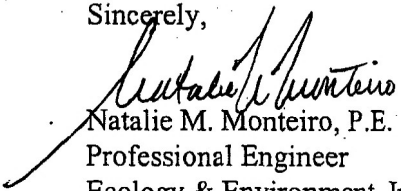
2. The current pump and treat and soil vapor extraction system has been effective at reducing the overall contamination at the Union 76/Sam Johns and Union County Property sites; however it has become apparent that the current system, while controlling the plume's migration at the Shadd/Coastal Mart 405 property, will not be sufficient to remediate the contamination that remains at those sites.
3. Due to the large difference in the magnitude of concentrations between Shadd's Property/Coastal Mart 405 area and the Union 76/Sam Johns and Union County Property, the next phase of remediation for these areas will likely use different technologies to complete cleanup.
  - Currently, the two program-eligible sites, Union 76/Sam Johns and Union County Property, have groundwater concentrations near or below NADC levels and appear ready for polishing and/or Natural Attenuation Monitoring; whereas the concentrations in the Shadd's Property/Coastal Mart 405 area are still in the magnitude range of 10,000 ug/L Total BTEX and will require more aggressive remediation strategies.
  - It is likely that the various discharges will be cleaned up in different timeframes.
  - It should be noted that the Consent Order for the Shadd's Property/Coastal Mart 405 site does not require the Department to clean up the discharges to Cleanup Target Levels.

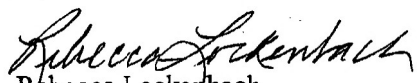
Therefore, going forward there will be three cleanup areas:

- The EDI-eligible property of Union 76/Sam Johns which has a Contractor Designation Form (CDF) naming Mactec as the consultant;
- The ATRP-eligible property of Union County (fka Biellings Tire) which has a CDF naming Fortis Environmental as the consultant; and
- The combined consent-order properties of Shadd's Property/Coastal Mart 405. Shadd's Property is currently undergoing evaluation to obtain a priority score. The future remedial activities at these sites will be determined after the Shadd's Property receives a priority score.

If you have any questions, please contact me at 850-877-1133, Ext. 3717, through Mail Station 4590 at the letterhead address or by E-mail at [nmonteiro@ene.com](mailto:nmonteiro@ene.com).

Sincerely,

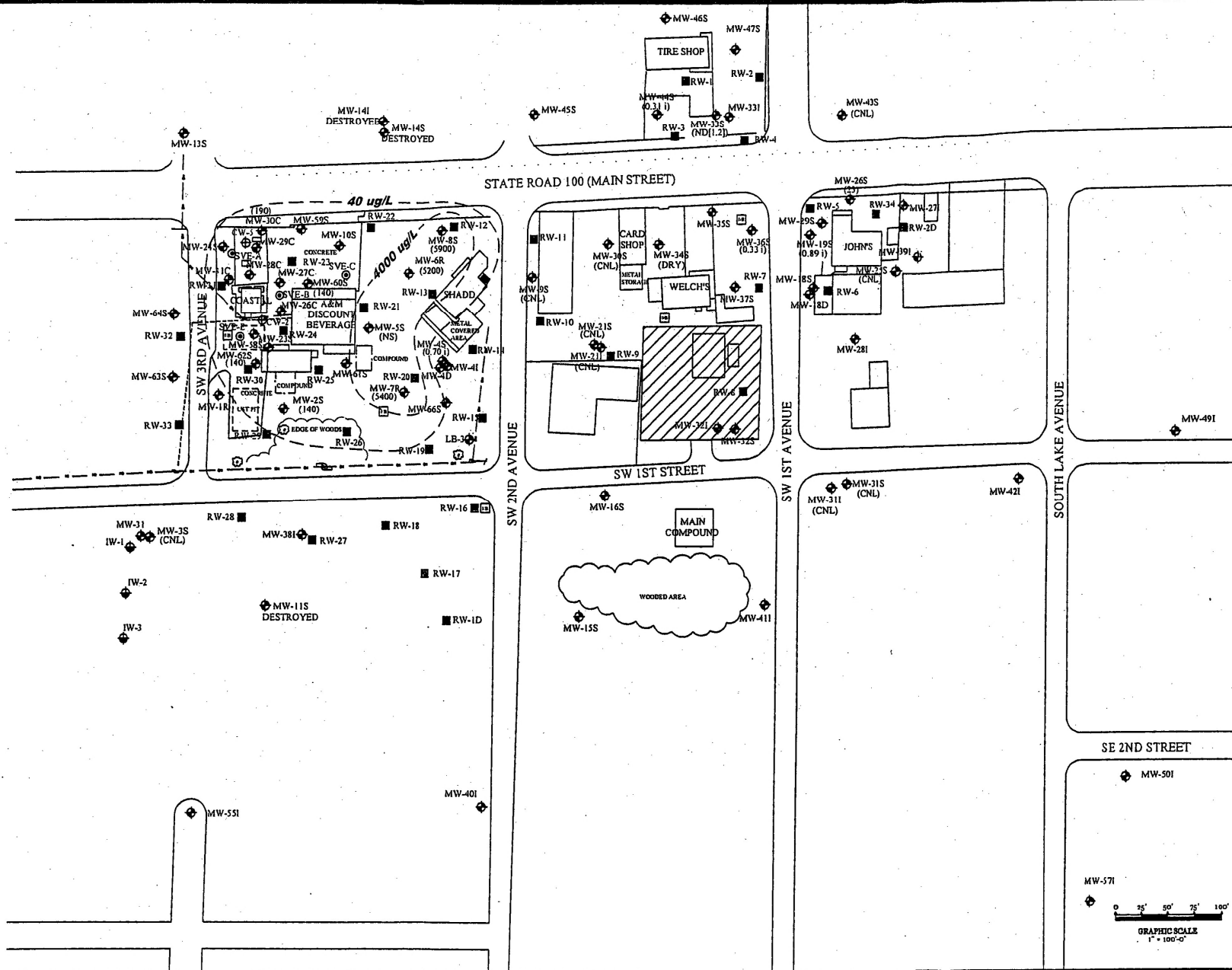
  
Natalie M. Monteiro, P.E.  
Professional Engineer  
Ecology & Environment, Inc.  
Petroleum Cleanup Section 6  
Bureau of Petroleum Storage Systems

  
Rebecca Lockenbach  
FDEP Section Leader  
Petroleum Cleanup Section 6  
Bureau of Petroleum Storage Systems

#### Attachments

cc: Mr. Sam Johns, 6963 Southeast County Road 237, Lake Butler, FL 32054, Union 76 - Johns  
Mr. John Shadd, P.O. Box 506, Lake Butler, FL 32054, Shadd Property  
Mrs. Harriett Maines, P.O. Box 162, Lake Butler, FL 32054-1107, Shell-Weich's  
Mr. Wayne Smith, Union County Board of Commissioners, 15 NE First Street, Lake Butler, Florida 32054, Union County Property (aka Biellings Tire)  
Mr. Russell Hammond, Sunoco Inc., Inwood Terminal, 70 East Avenue, Lawrence, NY 11559, Sunoco 0878-2492  
Mr. Brian Kellmann, Coastal Mart, Inc., 2 North Nevada, Colorado Springs, CO 80903, Coastal 405  
File





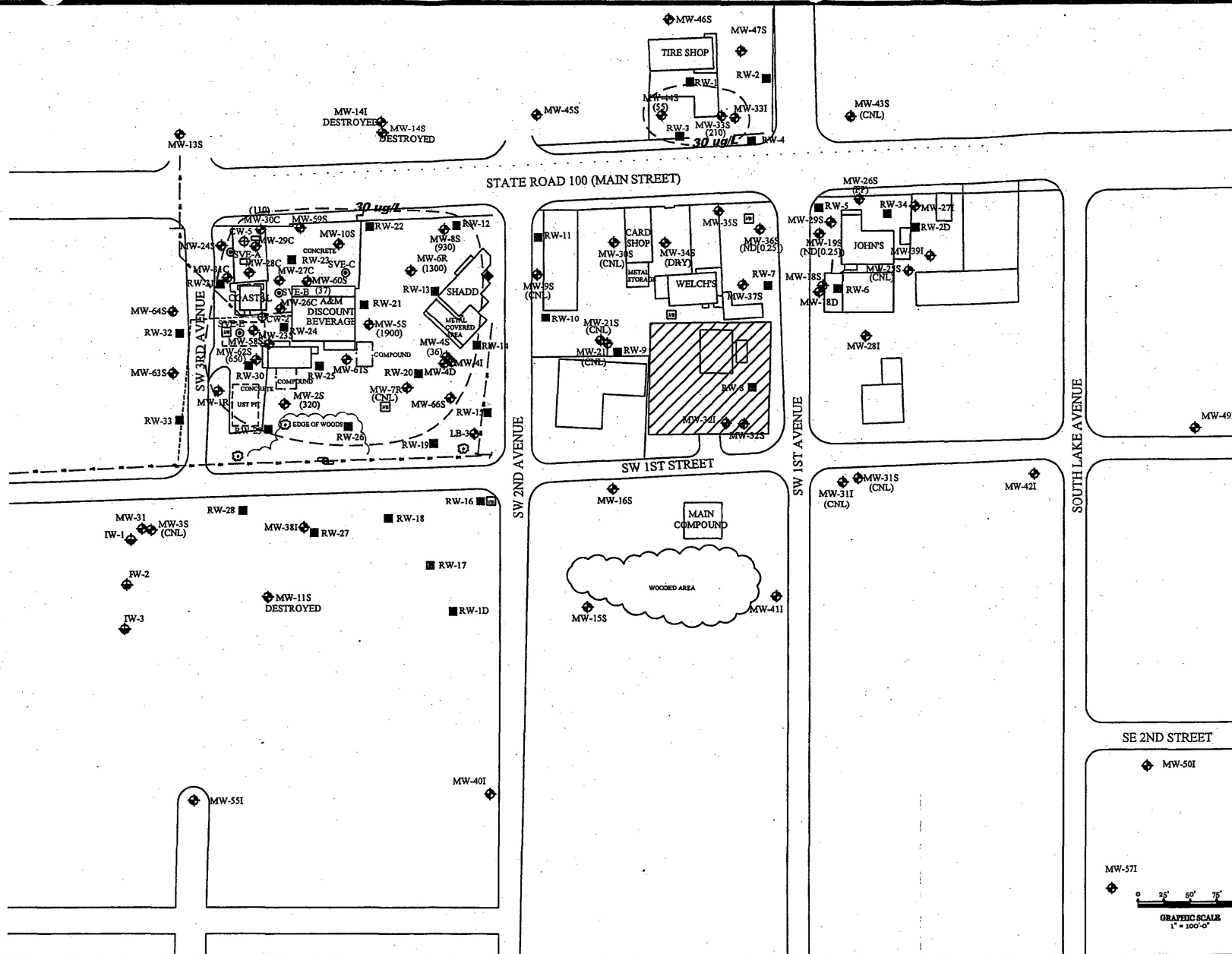
**FORTIS**  
Environmental Group, LLC

P.O. Box 12998      Office (850)385-5872  
Tallahassee, FL 32317      Fax (850)385-5874

UNION 76-JOHN'S-LAKE BUTLER CLUSTER  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FL  
FACILITY ID#: 63 8519168

TOLUENE CONTOUR MAP  
(40 ug/L, 4000ug/L)  
SEPTEMBER 2009

FIGURE  
**4B**  
PROJECT  
14804.05



**LEGEND**

○ OVERHEAD UTILITIES  
 ○ UNDERGROUND UTILITIES  
 ○ UTILITY POLE  
 ● MONITORING WELL (MW)  
 ● DESTROYED MONITORING WELL  
 ● INTERMEDIATE WELL (IW)  
 ● RECOVERY WELL (RW)  
 ● COMPLIANCE WELL (CW)  
 ● EXTRACTION WELL (SVE)

**FORTIS**  
 Environmental Group, LLC

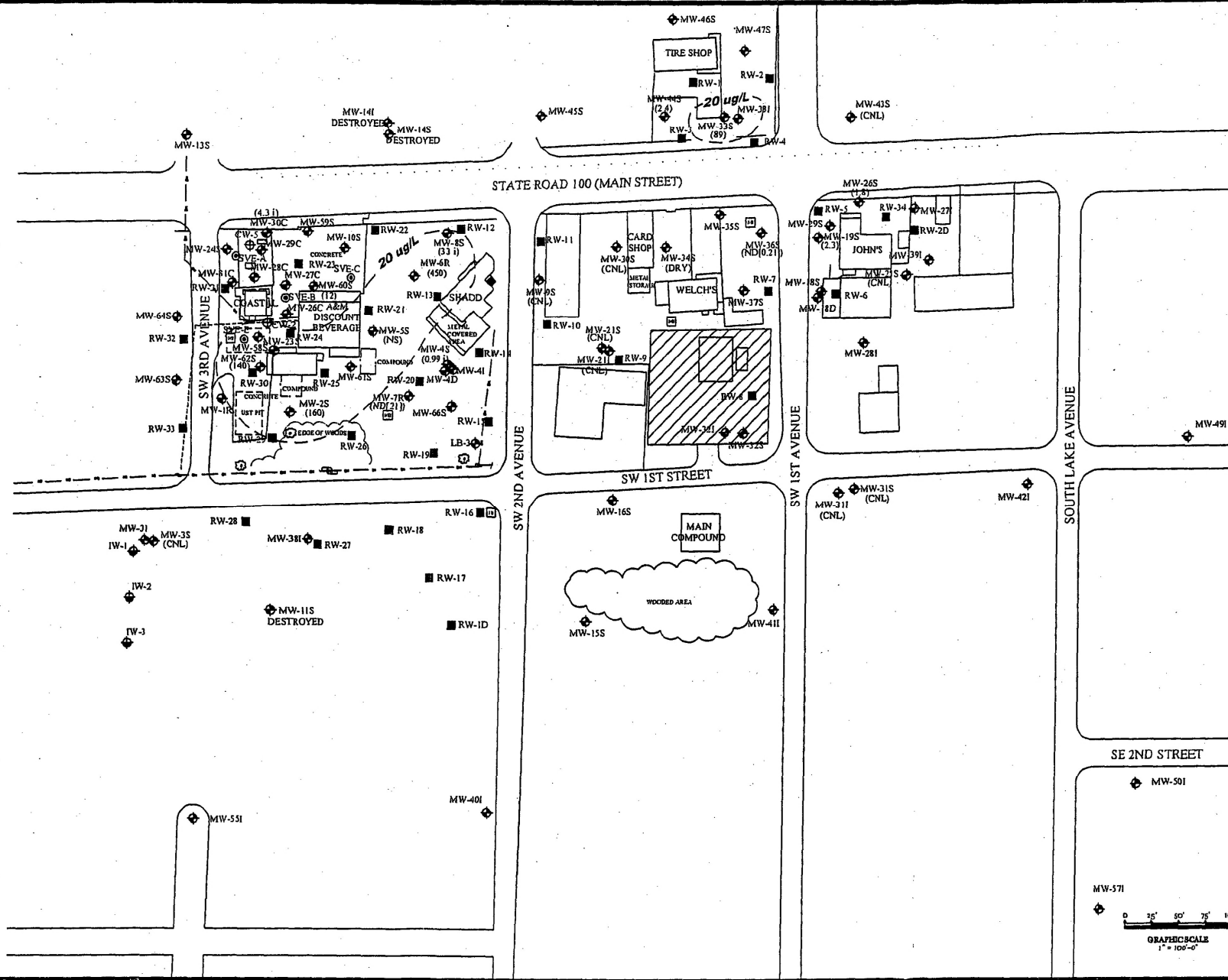
P.O. Box 12998      Office (850)385-5872  
 Tallahassee, FL 32317      Fax (850)385-5874

UNION 76-JOHNS-LAKE BUTLER CLUSTER  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FL  
 FACILITY ID#: 63 8519168

ETHYLBENZENE CONTOUR MAP  
 (30 ug/L)  
 FEBRUARY 2010

FIGURE  
**4C**  
 PROJECT  
 14804.05





**LEGEND**

- FENCE
- OVERHEAD UTILITIES
- UNDERGROUND UTILITIES
- UTILITY POLE
- MONITORING WELL (MW)
- DESTROYED MONITORING WELL
- INTERMEDIATE WELL (IW)
- RECOVERY WELL (RW)
- COMPLIANCE WELL (CW)
- EXTRACTION WELL (SVE)

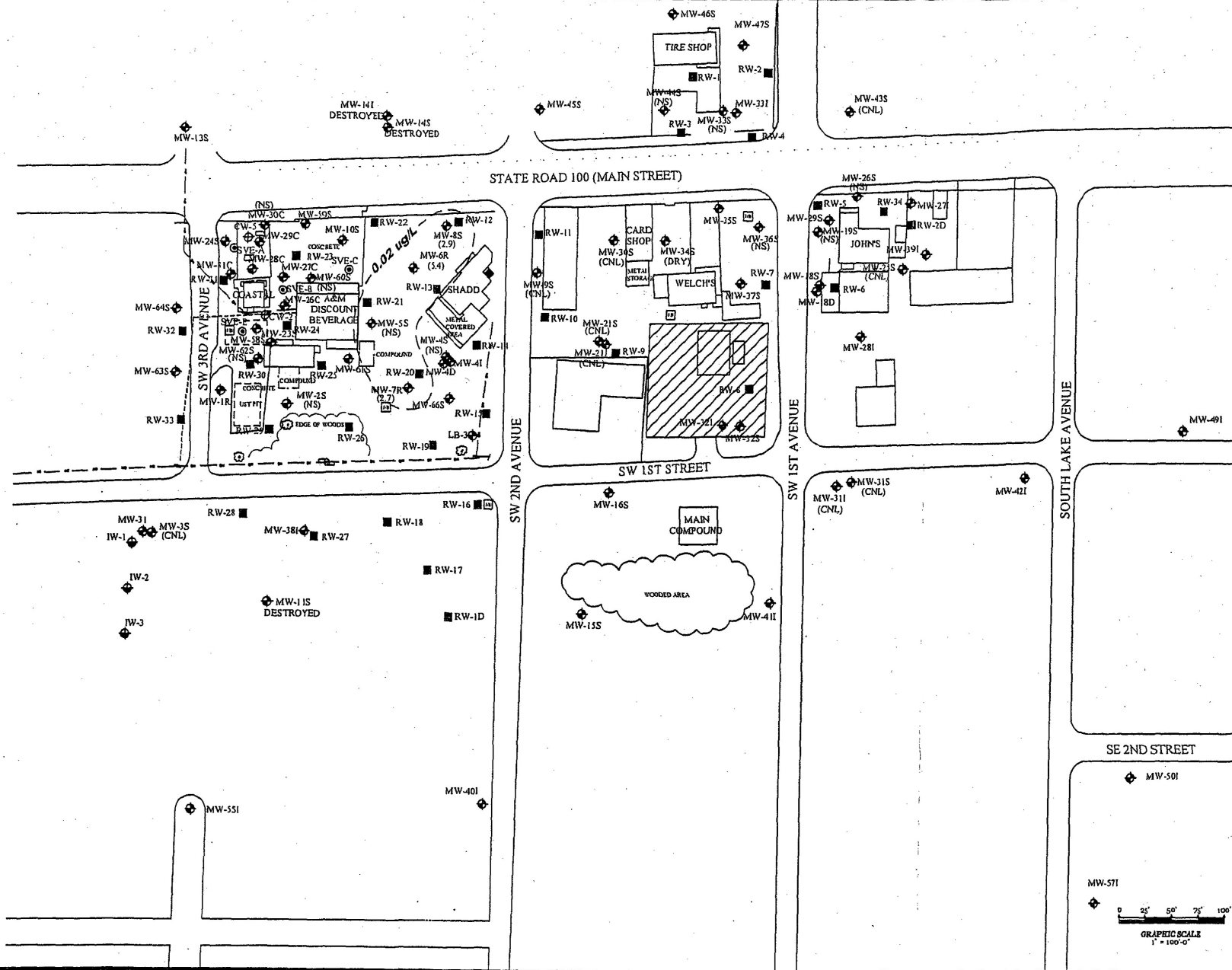
**FORTIS**  
Environmental Group, LLC

P.O. Box 12998      Office (850)385-5872  
Tallahassee, FL 32317      Fax (850)385-5874

UNION 76-JOHN'S-LAKE BUTLER CLUSTER  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FL  
FACILITY ID#: 63 8519168

MTBE CONTOUR MAP  
(20 ug/L)  
SEPTEMBER 2009

FIGURE  
**4E**  
PROJECT  
14804.05



**LEGEND**

- FENCE
- OVERHEAD UTILITIES
- UNDERGROUND UTILITIES
- UTILITY POLE
- MONITORING WELL (MW)
- DESTROYED MONITORING WELL
- INTERMEDIATE WELL (IW)
- RECOVERY WELL (RW)
- COMPLIANCE WELL (CW)
- EXTRACTION WELL (SVE)

MW-501

MW-571

GRAPHIC SCALE  
1" = 100'-0"

# FORTIS

Environmental Group, LLC

P.O. Box 12998      Office (850)385-5872  
Tallahassee, FL 32317      Fax (850)385-5874

UNION 76-JOHNS-LAKE BUTLER CLUSTER  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FL  
FACILITY ID#: 63 8519168

EDB CONTOUR MAP  
(0.02 ug/L)  
SEPTEMBER 2009

FIGURE  
**4F**  
PROJECT  
14804.05



## **REMEDIAL ACTION PLAN MODIFICATION**

### **UNION 76 – JOHNS PROPERTY 80 WEST MAIN ST, LAKE BUTLER, UNION COUNTY, FLORIDA**

FDEP FAC ID Number: 63/8519168  
Contract Number: GC-788  
Purchase Order Number: C106B2

**March 12, 2024**

**Prepared for:**  
**Florida Department of Environmental Protection**  
**Petroleum Restoration Program**  
2600 Blair Stone Road  
Tallahassee, Florida 32301

**Prepared by:**  
**WSP USA Environment & Infrastructure Inc.**  
325 John Knox Road, Suite 140  
Tallahassee, Florida 32303

## TABLE OF CONTENTS

<b>Section</b>	<b>Title</b>	<b>Page No.</b>
1.0	INTRODUCTION .....	1
1.1	1.1 Purpose .....	1
1.2	1.2 Scope .....	1
2.0	SITE BACKGROUND .....	2
2.1	2.1 Site Description .....	2
2.2	2.2 Previous Investigations and Remediation .....	2
2.3	2.3 Geology / Lithology .....	5
2.4	2.4 Hydrogeology .....	6
2.5	2.5 Extent of Soil Contamination .....	6
2.6	2.6 Extent of Groundwater Contamination .....	7
3.0	RECOMMENDED REMEDIAL ACTIVITIES .....	7
3.1	PRE-CONSTRUCTION ACTIVITIES .....	8
3.1.1	3.1.1 Site Health and Safety Plan .....	8
3.1.2	3.1.2 Utility and Permit Clearance .....	8
3.1.3	3.1.3 Site Access and Traffic Control .....	9
3.1.4	3.1.4 Site Security .....	9
3.1.5	3.1.5 Compliance .....	9
3.2	MPE SYSTEM DESIGN .....	9
3.2.1	3.2.1 MPE Recovery wells .....	9
3.2.2	3.2.2 MPE Treatment System .....	10
3.2.3	3.2.3 Logic Control Panel .....	11
3.2.4	3.2.4 UL Certification .....	12
3.3	CONSTRUCTION DETAILS .....	12
3.3.1	3.3.1 Effluent Discharge Line Connection to Injection Wells .....	12
3.3.2	3.3.2 Equipment Compound .....	13
3.3.3	3.3.3 Off-gas Treatment (Carbon) .....	13
3.3.4	3.3.4 Effluent Discharge (Carbon treatment prior to injection into RW-1 through RW-4) .....	13
3.3.5	3.3.5 Construction and Startup Plan .....	14
4.0	MONITORING AND REPORTING .....	15
4.1	4.1 System Monitoring .....	15
4.2	4.2 Groundwater Monitoring .....	16
4.3	4.3 Reporting .....	16
5.0	SCHEDULE .....	17
6.0	COST ESTIMATE .....	17

### REFERENCES

### FIGURES

### TABLES

### APPENDICES

- Appendix A: Historical Figures and Construction Drawings
- Appendix B: Historical Engineering Design Calculations
- Appendix C: Historical RAI System Tables
- Appendix D: Example Equipment Specifications
- Appendix E: FDEP Milestone Table and Graphs
- Appendix F: Proposed Construction Schedule of Pay Items Invoice Rate Sheet
- Appendix G: Schedule of Pay Items Invoice Rate Sheet

## LIST OF FIGURES

<b>Figure</b>	<b>Title</b>
1	Site Vicinity Map
2	Site Map with Sample Locations
3A	Organic Vapor Analyzer (OVA) Screening Results - Vadose Zone 0 to 5 feet below land surface (bls)
3B	Organic Vapor Analyzer (OVA) Screening Results - Saturated Zone 5 to 25 feet below land surface
4A	Soil Analytical Data – Vadose Zone 0 to 5 feet below land surface
4B	Soil Analytical Data – Saturated Zone 5 to 25 feet below land surface
5	Groundwater Flow and Offsite Depth to Water Map, November 22, 2023 (Shallow Zone)
6	Groundwater Analytical Data
7	Existing and Proposed Multi-Phase Extraction Well Locations with Radius of Influence
8	Existing and Proposed Multi-Phase Extraction Well Construction Detail
9	Updated Trench Layout and Detail
10	Multi-Phase Extraction System Process and Instrumentation Diagram

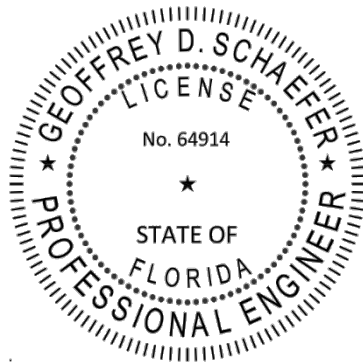
## LIST OF TABLES

<b>Table</b>	<b>Title</b>
I	Soil Cleanup Target Levels
II	Groundwater Cleanup Target Levels
1	Soil Screening Summary
2	Soil Analytical Summary
3	Groundwater Elevation Summary
4	Groundwater Analytical Summary

## PROFESSIONAL REVIEW CERTIFICATION

The work described in this Remedial Action Plan Modification for the Union 76 - Johns Property site located in Lake Butler, Union County, Florida, was prepared in accordance with commonly accepted procedures consistent with the applied standards of practice under the direction of the undersigned professional engineer. The professional opinions rendered are based on the investigation and associated information detailed in the text and appended to this report or referenced in public literature. If conditions are determined to exist that differ from those described, the undersigned should be notified to evaluate the effects, if any, of additional information on the report findings. This document was prepared based on the results of previous soil and groundwater sampling activities and remedial design conducted to address soil and dissolved phase groundwater contamination at the Union County Property site (Facility Identification Number: 63/8519168) in Lake Butler, Union 76 - Johns, Florida. This document was prepared in accordance with FDEP directives and protocol and should not be construed to apply to any other site.

WSP USA Environment & Infrastructure Inc., (**Certificate of Authorization Number: 5392**) is authorized under the provisions of Section 471.023 Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.



This document has been electronically signed and sealed by Geoff Schaefer, P.E., on **March 12, 2024** using a SHA-1 authentication code. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

## **1.0 INTRODUCTION**

### **1.1 Purpose**

This Remedial Action Plan Modification (RAP Mod) was prepared by WSP USA Environment & Infrastructure Inc., (WSP) for the Union 76 – Johns site located at 80 West Main Street in Lake Butler, Union County, Florida for the Florida Department of Environmental Protection (FDEP) Facility Identification Number: 63/8519168. This RAP Mod was tasked by the Petroleum Restoration Program on December 6, 2022 (Purchase Order #C106B2), under contract GC788, based upon the recommendations in the Free Product Report that was submitted on June 29, 2022. The site location is shown on Figures 1 and 2.

The purpose of this RAP Mod is to outline a plan to treat the petroleum contaminated soils in the vadose and smear zones that were identified during the investigation phase of the site assessment activities. Design parameters were based on the success of the episodic MPE events that were conducted at the sites and will consist of installation of a permanent system using the previously installed MPE well network. The objective of this RAP Mod is to provide the required remedial equipment to connect to the existing infrastructure to removal free product, reduce site baseline groundwater contaminant concentrations to groundwater cleanup target levels (GCTLs), as defined in Chapter 62-777, Florida Administrative Code (FAC). Once the contaminant concentrations at the site are reduced to below GCTL concentrations, the active cleanup effort shall be deemed complete. It is estimated that it would take 3 years to reach the above-mentioned cleanup levels (free product and GCTLs of the baseline concentrations). If groundwater contamination is still present after three years and the decision is to continue under active remediation, FDEP and WSP shall establish new milestones for the achievement of GCTLs if needed. Additionally, once GCTL's have been achieved site soil contaminant concentrations will be reevaluated to determine if the site qualifies for Risk Management Option (RMO) Level I or Level II. The SCTLs and GCTLs are provided in Tables 1 and 2, respectively.

### **1.2 Scope**

This RAP Mod presents the rationale for the remediation strategies to be implemented at the Union 76-Johns Property site. Implementation of this RAP Mod will include the following tasks:

- Trenching and plumbing of the effluent discharge water line to existing onsite remediation wells for injection of treated recovered groundwater.
- Installation of a rental remediation system.
- Connect to the existing stub-up piping.
- Perform system startup.
- Perform 1 year of system Operation and Maintenance (O&M).

## **2.0 SITE BACKGROUND**

### **2.1 Site Description**

The Union 76 – Johns Property site is located on the south side of US Highway 100 between SW 1<sup>st</sup> Avenue and S Lake Avenue in Lake Butler, Union County, Florida. The site is currently an active auto & tire service shop known as Welch’s Service.

### **2.2 Previous Investigations and Remediation**

Sources of a documented petroleum contamination problem have been known to exist in the “downtown” Lake Butler area since late 1983 (Figure 1). After notification of petroleum fumes emanating from the city sanitary sewer system, the Union County Fire Marshall identified a combustion hazard at the Lake Butler Elementary School. A source of significant petroleum contamination was identified at an abandoned Shell Oil Company service station site on a property owned by Mr. Shadd. Free-phase petroleum product was discovered on site.

Another alleged source of petroleum contamination existed on the adjacent property (the former Cargo convenience store (Coastal). An assessment concluded in 1985 that both sites contained sources of petroleum contamination. Several years later another source of contamination was identified at the Johns’ Union 76 property, including free-phase product. E.C. Jordan Company was tasked by the FDEP Petroleum Cleanup Section to conduct assessment activities in this area in 1990. As work transpired in the assessment, the contaminated areas were found to be larger and to be impacted by additional sources.

The Johns’ Union 76 property is located on a small corner lot on the southeast corner of the intersection of SW 1<sup>st</sup> Avenue and Main Street. The facility included a canopy covered pump island that was immediately next to two underground storage tank (USTs), the facility always sold gasoline. A substantial portion of the property is paved with either concrete or asphalt. The only confirmed source of contamination at Johns Union 76 site was the UST located beneath the canopy and adjacent to the pump island. When the old tank was removed and product was found in the pit, FDEP (then FDER) initiated an emergency action and installation of a product recovery system. Data on the effectiveness of this system is not available. However, in July 1991, a free product recovery pit was installed located on the west side of the station building to replace the previous product recovery system. The product recovery system installed by AMEC included a gravel-filled pit and culvert pipe sump that contained a submersible pump. Underground piping extended from the sump to a product tank located behind the station on the southeast corner. Over an 18-month period, over 3,000 gallons of product were recovered.

AMEC was tasked by FDEP Petroleum Cleanup Section to conduct assessment activities in this area in 1990. As work transpired in the assessment, the contaminated areas were found to be larger and to be impacted by additional sources. Welch’s and Biellings Tire were found to be contributing sources and a former UST on the A&M Beverage Store site was also suspected as a source.

AMEC completed a remedial action plan for the sites referred to as the “Lake Butler Cluster Sites” in 1993. A pump and treat system combined with vapor extraction was recommended. This system

was installed and started up in January 1995. AMEC operated the remediation system until 2005 at which time Fortis Environmental took charge of the operation and maintenance of the system through to February 2010. System modifications have been implemented during the period of time from the initial system installation until the present including free product removal and additional air sparging capacity.

During the first quarter of 2010, AMEC conducted a supplemental site assessment at the John's Union 76 property. Soils were screened using an OVA across the property and groundwater samples were collected for laboratory analysis. The supplemental site assessment report was submitted on March 8, 2010, summarizing the findings of the assessment. The soil and groundwater data collected demonstrated that vadose zone and smear zone soil contamination, as well as groundwater contamination in the shallow and intermediate zones remains above cleanup target levels at the Johns' Union 76 site in Lake Butler.

Although soil contamination was documented on the accessible portion of the property, a large data gap still existed due to the two structures located on the property. A scope of services for the additional assessment activities was developed to characterize current conditions adjacent to and under the structures. AMEC talked to Mr. Johns and the current tenant regarding conducting borings inside of the structures. Due to the large volume of inventory stored in the warehouse building and the business use of the garage, careful planning and coordination as well as specialized drilling equipment were necessary for the successful completion of this project.

In March 2013, AMEC demonstrated that vadose zone and smear zone soil contamination, as well as groundwater contamination in the shallow and intermediate zones remained above cleanup target levels at the Union 76 – Johns site in Lake Butler. As with other nearby facilities assessed in Lake Butler, the highest concentrations of petroleum contaminants are associated with a discontinuous clay layer encountered on site at a depth of approximately 15 feet bls. Free product was observed in the newly installed well (MW-72S) located in front of the service bay doors as well as in monitoring well MW-71S located on the west side of the building. An obstruction was encountered 3.5 feet below land surface at the boring located under the front canopy of the building. The boring location was moved several feet and the boring attempted again. An obstruction was again located under the front canopy of the building encountered at 3.5 feet bls. The obstruction made metallic sound when hit and was assumed to be an underground storage tank. The property owner insists that the UST was removed, and the obstruction was debris used to backfill the hole. No further attempts were made to bore in the area under the canopy.

In November 2014, AMEC Foster Wheeler submitted a Limited Scope Remedial Action Plan (LSRAP) focused on the source area excavation of accessible grossly contaminated soils. Estimated costs for various source removal scenarios including excavating to SCTLs while keeping the building and canopy to excavating only to the 50,000 ppm OVA contour line while keeping the building and canopy ranged from \$1,084,000 to \$253,000. Due to program directives regarding removal of structures during site remediation and projected costs to implement a partial source removal the LSRAP was not implemented.

AMEC Foster Wheeler contracted Preferred Drilling to install multi-phase extraction (MPE) wells and contracted LMS Inc, to complete the system installation construction activities under the supervision of AMEC Foster Wheeler.

On June 15 to June 16, 2017 AMEC Foster Wheeler and Preferred Drilling met onsite to install six MPE wells (MPE-1, MPE-2, MPE-3, MPE-4, MPE-5, and MPE-6) to 25 feet below land surface (bls). Each MPE well is constructed of 4-inch nominal diameter, Schedule 40 polyvinyl chloride (PVC) pipe with a 20-foot 0.020-inch slotted screen. The locations of the MPE wells are indicated on Figure 2.

On August 10 to August 24, 2017 AMEC Foster Wheeler and LMS met onsite to conduct system trenching and piping activities. LMS used machinery (skid steer loader, mini excavator, work truck and trailer) and hand-tools to excavate through the soil to dig a 2-foot wide trench to approximately 24-inches bls and install PVC piping to all MPE wells. Once all PVC piping was connected to the MPE wells and stubbed up near the compound location, native soil was reused to backfill the trenches and concrete was then placed in one 6-inch pour as the surface completion.

Startup, testing, and sampling of the 1<sup>st</sup> weekly MPE event at the Union 76 John's site was initially conducted on October 16, 2017, but the clay anthracite vessel burst, and the test was stopped after two hours. The clay anthracite vessel was replaced on October 20, 2017 with a new one by LMS and the MPE event was conducted in full on October 23, 2017 through October 28, 2017 and ran a total of 113 hours.

The 2<sup>nd</sup> weekly MPE event was conducted during November 2017 and ran for a total of 105.0 hours and the 3<sup>rd</sup> weekly MPE event was conducted during December 2017 and ran for 79.4 hours, the site did not reach the goal of 100 hours due to a high-level alarm after the technician left on the last day of the weekly event.

The 4<sup>th</sup> weekly MPE event was conducted during January 2018 and operated for a total of 100.3 hours. The 5<sup>th</sup> weekly MPE event was conducted during February 2018 and operated for 89 hours. On the last day of the February weekly event, the system had operated for 45.9 hours to reach the goal of 100 hours run time for the week, the system was left on to continue to operate over the weekend, but the system was not able to reach the 100-hour goal because the system had to be demobilized and started up on another site for a weekly event. The 6<sup>th</sup> weekly MPE event was conducted during March 2018 and operated for a total of 140.7 hours. At the end of the day on March 16, 2018, the system had operated for 95.7 hours to reach the goal of 100 hours run time for the week, the system was left on to continue to operate over the weekend and was shut down remotely.

The 7<sup>th</sup> weekly MPE event was conducted during November 2019 and operated for a total of 102.9 hours. The 8<sup>th</sup> weekly MPE event was conducted during December 2019 and operated for 78 hours. On the last day of the weekly event, the system had run for 63.9 hours to reach the goal of 100 hours run time for the week, the system was left on to continue to operate over the weekend, but the system was not able to reach the 100-hour goal because the system had to be demobilized to another site for start-up activities. The 9<sup>th</sup> weekly MPE event was conducted during January 2020 and operated for a total of 109.2 hours. On the last day of the weekly event, the system had operated

for 80.8 hours to reach the goal of 100 hours run time for the week, the system was left on to continue to operate over the weekend and was shut down remotely.

The 10<sup>th</sup> weekly MPE event was conducted during June 2020 and operated for a total of 143.4 hours. The 11<sup>th</sup> weekly MPE event was conducted during July 2020 and operated for 106 hours. The 12<sup>th</sup> weekly MPE event was conducted during August 2020 and operated for a total of 103.3 hours.

Monthly free product recovery events were completed from February through June 2022. During each monthly event, free product was measured in MW-71S and MW-72S, then bailed to remove free product and allowed time to recharge and depth to water (DTW) and depth to product (DTP) were measured until minimal product was measured in each well. Approximately 13.0 gallons of free product and petroleum contact water were removed from the wells during these events.

On November 7 to November 8, 2023, four soil borings were completed to 18 feet bls and two soil samples were taken (MW-75S and MW-76S). Based on soil analytical results, the soil samples collected contained petroleum-related contaminants of concern at concentrations below the SCTLs. Following the completion of the soil borings, four monitoring wells (MW-74S, MW-75S, MW-76S, MW-77S) were installed within the building on site to assess the presence or absence of free product.

On November 22, 2023, groundwater samples were collected from five monitoring wells, MW-19S, MW-25S, MW-74S, MW-75S, and MW-76S. Based on the groundwater analytical results, three monitoring wells contained petroleum related compounds above GCTLs and free product was encountered in another three wells.

### **2.3 Geology / Lithology**

The lithology at the site consists of fine-grained sandy clay from land surface to 6 feet bls. A clay layer is encountered consistently from 6 to 10 feet bls and transitions to sand and sandy clay to 12 feet bls.

A typical soil column is described below:

- Land surface to 6 feet bls — Sandy Clay (SM), fine grained, brown, tan and grey.
- 6 feet to 10 feet bls — Clay (CL), very fine grained, white, red, tan and grey.
- 10 feet to 12 feet bls — Sand (SW) and Sandy Clay (SM), very fine grained, grey.

The historical lithology at the site generally consists of fine-grained sands and clayey sands that are layered within shallow sandy clay and clayey sand sequences. A layer of clay is typically encountered at depths from 12.5 to 15 feet bls that appears to be continuous across the north area of the site, along Main Street. However, the clay layer does not appear to be continuous moving further south along SW 1st Avenue and under the footprints of the onsite buildings. Soil investigations reported in the Contamination Assessment Report (ABB Environmental Services, January 1993) indicate that the overlying clays provide for a semi-permeable, semi-confining unit. It was determined that this clay layer places hydrostatic pressure on surficial wells that are screened below it. As a result, the depth to water in the surficial wells may be elevated above the static water table. Fine-grained sands, and clayey sands were typically encountered in the saturated zones below the clay layer.

## 2.4 Hydrogeology

On November 22, 2023, depth-to-water measurements were collected from nine monitoring wells including MW-19S, MW-25S, MW-26S, MW-71S, and MW-72S as well as the newly installed wells MW-74S, MW-75S, MW-76S, and MW-77S. The water table in the shallow monitoring wells was encountered at a depth ranging from 8.97 feet below top of casing (btoc) (MW-25S) to 11.64 feet btoc (MW-75S). The average depth to water was 10.58 feet btoc. Based on the groundwater elevation data, the groundwater flow at the site was generally to the southwest with southerly and easterly trends. Figure 5 depicts the water table contour map for November 22, 2023, and the groundwater elevation data are summarized in Table 3.

## 2.5 Extent of Soil Contamination

An area of soil contamination was identified during initial site assessment activities performed by ABB. The source was subsequently identified to be in the vicinity of the former UST pit and extending to cover most of the property, approximately 10,142 square feet (ft<sup>2</sup>).

In March 2013, AMEC performed site assessment activities at the site. A total of thirty-four soil borings were advanced to a depth of 25 feet bls to delineate the soil contamination at the Union 76 – Johns site. Continuous soil samples were collected from each boring and headspace readings were collected in the field using an OVA. Based on the analytical results of the twenty-four soil samples that were collected from the Union 76 – Johns site, several contaminants of concern (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalenes, 1-methyl-naphthalene, and 2-methylnaphthalene) were present at concentrations above their respective SCTLs for leachability to groundwater in ten of the soil samples. Two of the soil samples had benzene exceedances of the SCTL for direct exposure (industrial and residential).

In November 2023, WSP performed site assessment activities at the site to assess the presence or absence of soil contamination underneath the building. A total of four soil borings were advanced to a depth of 18 feet bls. Based on the analytical results of the two samples that were collected from the site (MW-75S and MW-76S), petroleum related contaminants of concern were found at concentrations below the SCTLs.

For the purpose of this RAP Mod, the vadose zone is defined by the soils from the surface to 5 feet bls and the smear/saturated zone is defined by the soils from 5 feet bls to 25 feet bls. The vertical extent of contamination is estimated to be approximately 20 feet bls.

During the soil assessment activities performed in March 2013 and November 2023, soil contamination above the SCTLs leachability to groundwater criteria has been documented in laboratory analytical samples collected from both the vadose and smear zones. The extent of soil contamination was based on analytical data and observed OVA data for each soil boring. The OVA data has been divided into the following intervals (0 to 5 feet bls [vadose zone] and 5 to 25 feet bls [saturated]). Figures 3A and 3B present the estimated extent of soil contamination based on soil OVA data above approximately 100 ppm). Soil analytical data is provided on Figures 4A and 4B and in Table 2.

Based on the estimated areas from Figure 3A and 3B, approximately 287 pounds of petroleum contaminants are present in 9,090 tons of contaminated soil (vadose and smear zones) at the site. Soil contaminant mass calculations are provided in Appendix B.

## **2.6 Extent of Groundwater Contamination**

WSP conducted groundwater sampling activities on November 22, 2023. Groundwater samples were collected from monitoring wells MW-19S, MW-25S, MW-74S, MW-75S, and MW-76S using low-flow sampling protocol according to FDEP standard operating procedures (SOPs). The groundwater logs, calibration logs, and laboratory data packages were provided in the Interim Assessment Report on December 14, 2023.

Laboratory analytical results from the November 2023 sampling event reported petroleum-related constituents of concern at concentrations above their respective GCTLs as defined in Chapter 62-777, FAC, in the groundwater samples collected from the following monitoring wells:

- MW-25S: benzene (3.9 µg/L)
- MW-75S: total xylenes (95 µg/L)
- MW-77S: ethylbenzene (71 µg/L), total xylenes (410 µg/L), naphthalene (19 µg/L)

Additionally, free product was encountered in the three monitoring wells that recorded the following thickness:

- MW-71S: 0.37 feet
- MW-72S: 0.11 feet
- MW-76S: 0.03 feet

Based on groundwater contaminant concentrations, free product and petroleum related contaminants of concern are present at concentrations above their respective GCTLs. The groundwater analytical data is presented in Table 4 and on Figure 6.

## **3.0 RECOMMENDED REMEDIAL ACTIVITIES**

Per the LSRAP submitted in March 2016, it was agreed upon with FDEP that episodic events with a MPE remediation system was the most effective remedial strategy based on the cost comparison to other remedial strategies, accessibility to the contaminated soil and relatively low groundwater concentrations.

As discussed in Section 2.2 Previous Investigations and Remediation, a LSRAP was completed to install MPE recovery wells to influence the area of known soil and groundwater contamination at the site. Once the construction was complete, 12 episodic events were conducted at the site between October 2017 and August 2020. Based on the field and analytical data collected, the episodic events were successful in influencing the vadose and smear zone with a Radius of Influence of at least 28 feet. A reduction in contaminant concentrations of all wells sampled was observed during monthly sampling events when the episodic events were being completed compared to the baseline sampling event in October 2017. Free product recovery events were

conducted monthly from February to June 2022 for MW-71S and MW-72S where free product was measured then bailed to remove free product and allowed time to recharge and depth to water (DTW) and depth to product (DTP) were measured until minimal product was measured in each well.

Upon returning to the Union 76 – Johns site in November 2023 and conducting site assessments activities inside the building, petroleum related contaminant concentrations were observed above GCTLs in MW-75S and MW-77S and free product was encountered in MW-76S. Additionally, MW-25S contained contaminants of concern above their GCTLs, and free product was still present in MW-71S and MW-72S.

The observation of contamination underneath the building, along with the increase in concentration in MW-25S and continuous presence of free product in MW-71S and MW-72S indicates a need for further remediation action on-site. Based on the decrease in contaminant concentrations for the duration of the episodic events, the MPE system was successful at influencing the trapped soil contamination in the smear zone.

### **3.1 PRE-CONSTRUCTION ACTIVITIES**

The property owners will be notified of remedial activities prior to implementation. The presence of any existing subsurface utilities and related structures at the site will be identified prior to commencing with remediation activities. Access to the property will be necessary for implementation of the activities proposed in the RAP Mod. Sufficient space is available for conducting the remediation activities. The necessary permits for implementation of this RAP Mod will be determined before commencing with construction activities.

#### **3.1.1 Site Health and Safety Plan**

A site-specific Health and Safety Plan (HASP) will be prepared for this site in accordance with WSP corporate requirements to address issues regarding the health and safety of workers at the site and work related to air monitoring to determine the level of respiratory protection, explosive vapors, and work related to the use of heavy equipment used during the construction activities. This plan presents the health exposure and emergency information that is necessary for all field team members. A copy of the HASP will accompany the field crew to the site.

#### **3.1.2 Utility and Permit Clearance**

Prior to beginning compound construction, all utilities that lie within or in close proximity to the areas to be excavated will be delineated using the Florida One Call system and City of Lake Butler Utility personnel. All utilities will be marked with paint and/or survey flags as “no dig” areas or areas to be excavated using hand tools. If any buried utilities or related structures are encountered during excavation, they will be flagged and properly supported, braced, or adjustments to the proposed compound area will be made. The FDEP site manager will be notified of changes from the field.

### **3.1.3 Site Access and Traffic Control**

The Union 76 – Johns site will be active during the construction and MPE O&M activities. Traffic around the site is heavy at times. WSP will coordinate closely with the tenant during the construction activities and monthly MPE O&M events. A Maintenance of Traffic (MOT) plan will be developed if required to perform construction activities.

### **3.1.4 Site Security**

The remediation equipment will be enclosed in a locked and gated fenced compound. The remedial equipment compound will be locked and secured when WSP is not onsite.

### **3.1.5 Compliance**

All underground work will comply with rules set forth in Sections 553 and 556, F.S. All construction work will be performed in accordance with health and safety procedures and requirements specified by the OSHA, Title 29, CFR. Hazardous materials and waste handling, storage, transporting, and disposal will be performed in accordance with Chapter 62-730, FAC. Warning signs in accordance with 62-730, FAC will be placed on the system trailer.

All onsite personnel will be briefed on the site-specific HASP and will comply with applicable procedures. During construction activities, all personnel will utilize appropriate personal protective equipment (PPE); level D will be required.

## **3.2 MPE SYSTEM DESIGN**

High vacuum MPE, also known as vacuum-enhanced extraction and dual-phase extraction, is a treatment technology that uses a high vacuum system to simultaneously remove contaminated groundwater and desorbed vapors. Wells used for MPE events are installed such that the screened interval is in the zone of contaminated soil, groundwater, and free product. Each MPE well is equipped with a single drop tube (extraction tube or stinger), which is connected to a standard high-vacuum pump. The pump relies on high-velocity airflow to lift suspended liquid droplets upward by frictional drag to the land surface. Once aboveground, water, product, and vapors are separated and treated.

### **3.2.1 MPE Recovery wells**

WSP proposes to operate the six existing 4-inch diameter MPE wells (MPE-1 through MPE-6) that are installed on the Union – 76 Johns site near contaminated monitoring wells MW-25S, MW-71S, MW-72S, MW-75S, MW-76S and MW-77S.

The MPE wells are piped through trenches and stubbed up at the equipment compound location as shown on Figure 9. A design radius of influence of 28 feet (determined from episodic events) with an assumed air flow of 20 standard cubic feet per minute (SCFM) per MPE well (total of 100 SCFM) is anticipated based on the calculations and the results of previous operation at the site. Flow rates could vary based on the water table elevation and amount of exposed screen for each MPE well. The MPE wells with estimated ROIs are shown on Figure 7.

MPE recovery wells design and construction meet the requirements of Chapters 62-531 and 62-532, FAC and meet the Suwannee River Water Management District design and permit requirements. A Florida licensed well drilling contractor installed the MPE wells in accordance with Chapter 62-531, FAC.

The MPE wells are installed to a depth of 25 feet bls. Locations of the MPE wells are shown on Figure 7. The MPE wells are constructed of 4-inch, nominal diameter, Schedule 40 polyvinyl chloride (Sch PVC) pipe with a 20-foot, 0.020-inch slotted screen. A 1-inch, Sch 80 PVC drop tube (extraction tube), 10 feet in length is installed in each well and connected to a 1-inch diameter incompressible flex hose. The 1-inch diameter incompressible tube is 20 feet in length and connects the drop tube to the 2-inch diameter, Sch 40 PVC pipe running to the vacuum pump located in the equipment trailer. An airtight locking cap on the wellhead will allow for adjustment of the drop tube. The MPE wells were installed using hollow stem augers. Figure 8 illustrates, in detail, the installed MPE well construction.

Prior to performing system startup, each MPE well will be inspected to determine the condition of the 1-inch diameter, Sch 80 PVC drop tube, 1-inch incompressible flex hose and the airtight locking cap on the well head. If it is determined that any of the MPE well parts need to be replaced, a field change order will be completed, and the contingent funding will be used to offset the cost of the parts.

### **3.2.2 MPE Treatment System**

The MPE system will be connected to the existing MPE wells to conduct the active remediation. While conducting the remediation, lithology and depth to water will determine the necessary vacuum to achieve initial vacuum influence and groundwater recovery (anticipated to be 10 to 15 inches of mercury [in-Hg]). This vacuum will be increased to determine the vacuum needed to achieve the maximum radius of influence up to the maximum attainable vacuum with the supplied equipment. An initial vacuum of 10 in-Hg will be applied to the MPE wells and monitored until equilibrium conditions are achieved, the MPE drop tube will be set at the groundwater surface and lowered gradually to create a cone of depression and expose the smear zone to air flow and vacuum influence. The drop tubes will be lowered until the groundwater extraction rate comes into equilibrium with the groundwater recharge rate. Monitoring wells located near the influenced area will be used to collect vacuum and depth-to-water measurements to estimate the radius of influence throughout the system operation. Construction Drawings from the previously approved LSRAP (2016) are provided in Appendix A. A conceptual Process and Instrumentation Diagram (P&ID) is shown on Figure 10.

The system will operate 24 hours a day for up to 3 years. Based on the annual groundwater sampling data, WSP will discuss with FDEP if additional O&M is required.

The MPE vacuum equipment shall be able to provide a vacuum of 18 in-Hg, measured at the system blower, at a flow rate of 100 scfm (250 actual cubic feet per minute[acfm]). The system will operate at approximately 25% of the lower explosive level (LEL).

The supplied MPE equipment shall include at a minimum:

- A knockout tank to separate liquids and vapors in the extraction air flow stream.
- A liquid transfer pump with a flow totalizer to transfer captured groundwater from the knockout tank to the bag filters then to the storage tank without shutting down the system.
- A storage tank with a minimum volume of 300 gallons to store extracted groundwater to ensure that the injection wells are not overloaded.
- A liquid transfer pump with a flow totalizer to transfer captured groundwater from the storage tank to the high pressure activated carbon canisters then to the injection wells without shutting down the system.
- A particulate filter, air flow meters (influent, effluent, and dilution air), vacuum gauges, influent air temperature gauge, flow and vacuum control valves.
- Sample ports to collect system influent and effluent air and water samples.
- A method of precisely controlling the flow of air from the test well, or shutting off the airflow entirely, must be provided.
- Hoses to reach from the provided equipment to the 2-inch diameter MPE stub-ups and provide the equipment to attach the vacuum hoses to the test well heads.
- If needed, compression or otherwise sealable well cap fittings equipped with an on/off valve and a gauge to measure vacuum and pressure radius of influence determination.
- Vapor phase carbon treatment.
- A means to measure and sample the total contamination in the influent and effluent air streams will be included.
- All system electrical components will meet the requirements of Series 500 Articles and Class 1, Division 2 Standards of the National Electrical Code.

The supplied groundwater treatment equipment shall include at a minimum:

- Bag filtration.
- A settlement/equalization tank.
- Carbon Filtration Systems (or equivalent) high pressure canister filled with organoclay to treat any emulsified free product in the effluent discharge prior to injection into onsite remediation wells (RW-5, RW-6, RW-34).
- Carbtrol (or equivalent) high pressure canister filled with activated carbon to treat the effluent discharge prior to injection into onsite remediation wells (RW-5, RW-6, RW-34).

### **3.2.3 Logic Control Panel**

A weather-tight logic control panel is mounted to the trailer to diagnose any conditions that cause the MPE system to shut down. The control logic will initiate shut down of the MPE system in the event of any of the following:

1. Temperatures, pressures, or vacuums exceeding those set by the manufacturer for the blower motor.
2. High-high liquid level in either the separator tanks or the storage tank.
3. High alarm for the moisture separator cannot be cleared in 10 minutes.
4. Shut down of the MPE system

The logic control panel will have the ability to restart the system when the aforementioned conditions are rectified, however this capability will only be implemented following the evaluation of water-lock in the drop tubes. The panel will be equipped with run totalizing meters in hours for the transfer and blower motors. The control panel will be equipped with power surge and lightning protection for both the electrical controls and telemetry.

A telemetry system is recommended to allow continuous in-office monitoring and data logging of the systems operation. This system will minimize the down time should the system become inoperative because the system can be monitored from the office, which will allow for quick response times. Should telemetry indicate that the system is not operating effectively, a technician will be sent to the site to verify and/or repair the problem.

### **3.2.4 UL Certification**

- 1) System enclosure and equipment packages are to be from an NRTL certified organization at vendor factory.
- 2) Certification to be to NEC Class I, Div. II standards.
- 3) Subcontractor must provide certification.
- 4) Field certification is NOT acceptable.

## **3.3 CONSTRUCTION DETAILS**

### **3.3.1 Effluent Discharge Line Connection to Injection Wells**

All MPE wells were piped and installed in trenches in August 2017.

The underground piping is stubbed up at the compound location and will be tested prior to starting up the system. An approximately sized, approximately 24 inches deep trench will be installed from RW-34 to the system compound. A small section of the trench, shown on Figure 9, will need to be removed to locate the existing 1-inch diameter effluent discharge line to then connect to the existing 2-inch vapor lines that connect to RW-5, RW-6 and RW-34.

An additional small section of the existing trenching will need to be removed and ball valves will be utilized so that the existing trench line stays connected, although they will be closed to ensure that all the treated recovered effluent discharge water stays on the site and is injected into RW-5, RW-6 and RW-34. It is estimated that the 1-inch diameter discharge line is buried approximately 24 inches deep and runs east to west. According to the previous construction drawings, the existing 2-inch diameter vapor lines that are piped to RW-5, RW-6 and RW-34 are expected to also be approximately 24 inches deep and run north to south, crossing over each other at the area

shown on Figure 9. Following pipe connection, trenches will be backfilled with either clean, Type A-3 sand fill or clean native material (if acceptable). Backfill and compaction will extend to within 6 inches of the existing site grade surface. Trenches will be completed with like surfaces (concrete). Proposed trenching and trench cross-sections are illustrated on Figure 9.

All required trenching and underground work will comply with the Trench Safety Act, Sections 553.60-553.64, Florida Statutes (F.S.) and the underground Facility Damage and Prevention and Safety Act, Sections 556.101-556.111, F.S.

### **3.3.2 Equipment Compound**

The rental remediation system can be installed in the area of the existing remedial stub-ups and power pole. The previous equipment compound still exists onsite. The equipment compound is approximately 15 feet x 20 feet and has a permanent 6-foot-high fence with a locking gate to access the remediation equipment. The existing power pole will be used to provide electricity to the system once the utility account is reactivated. The equipment compound area location is presented on Figure 2.

### **3.3.3 Off-gas Treatment (Carbon)**

The anticipated volatile organic compounds (VOC) concentrations in the extracted soil vapor are not expected to be high enough to warrant the use of a thermal oxidizer; instead, vapor phase granulated activated carbon (GAC) will be used for treatment of the extracted vapors prior to discharge to the atmosphere. The estimated effluent vapor concentration is expected to be below the regulatory limit of 13.7 lbs/day after treatment. One Carbtrol G-1S carbon canister with 200 lbs. of GAC or approved equivalent, will be installed for vapor treatment. Based on carbon usage rate, the 200 lb canister of GAC should provide adequate treatment for 116 months which is greater than the minimum required off-gas treatment duration (30 days) as per Chapter 62-770, FAC. If effluent concentrations are higher than the individual discharge limit after 30 days, the carbon vessel will be changed out until the data suggests that treatment is no longer necessary. Calculations and equipment information are provided in Appendices D and E, respectively.

A sample port will be located at the effluent of the carbon vessel to monitor air emissions and flow rates. Vapors will then vent to the atmosphere after passing through a 15-foot high, 2-inch ID SCH 80 PVC stack.

### **3.3.4 Effluent Discharge (Carbon treatment prior to injection into RW-5, RW-6 and RW-34)**

Several options were reviewed to obtain the most cost-effective, technically feasible, and implementable effluent discharge method for this site. These options include utilization of the existing remediation recovery wells onsite as injection wells, sanitary sewer discharge and storm water discharge. Stormwater discharge was rejected because no surface water bodies could be located close to the site to pipe the effluent. Also, the cost associated with NPDES sampling and compliance is prohibitive when other options are available. Sanitary sewer discharge was not selected based on cost and permitting to connect to the sanitary sewer. Use of the existing

remediation wells RW-5, RW-6 and RW-34 (screened 4-25 feet bls) as injection wells is the most cost effective and implementable option. Investigation derived waste (IDW) generated during the MPE events will be collected in the MPE system knock-out tank and then pretreated with bag filters and liquid phase carbon. The effluent discharge line will be connected to the 2-inch diameter vapor line for RW-5, RW-6 and RW-34 from the existing system piping for the Lake Butler Cluster site pump and treat remedial system. The recovered treated groundwater will then be pumped into the vapor piping in onsite recovery wells RW-5, RW-6 and RW-34 and disposed of by injecting into the existing onsite recovery wells which are set to a depth of 25 feet bls, and screen from 4-25 feet bls.

The estimated recovered groundwater influent concentrations are expected to be below GCTLs as this was the case during the previous episodic events, although WSP recommends pretreating the recovered groundwater with bag filters followed by a high pressure activated carbon canister for polishing the groundwater to prevent contaminated groundwater from being injected into the onsite remediation wells. One Carbtrol HP-90 carbon canister with 90 lbs. of GAC or approved equivalent, will be installed on the effluent discharge of the remediation system prior to being injected into the onsite remediation wells. A sample port will be located at the effluent of the carbon vessel to collect an effluent groundwater sample. Historical remedial system trench drawings are provided in Appendix A and Example Equipment Specification information is provided in Appendix D.

### **3.3.5 Construction and Startup Plan**

Site construction activities include the excavation of a small section of the existing trench to connect the effluent discharge line to the onsite recovery wells existing piping and installation of the rental MPE system. Construction activities will commence upon approval of the remedial action implementation cost proposal by FDEP.

The system will be delivered to the site for connection to the existing wells and existing power supply. All permits required for construction activities will be obtained before construction activities commence.

As part of the system startup, troubleshooting and adjustments will be made during the first month. The MPE wells will be adjusted after startup based on site conditions to focus on areas of groundwater and soil contamination. All vacuum/pressure gauges, meters, and alarms will be checked. Sufficient time will be allowed for the system to achieve equilibrium before collecting the system air samples. Vacuum levels will be measured in all wells and system airflow rate readings will be obtained from the influent and effluent ports.

## **7.5 Compliance**

All underground work will comply with rules set forth in Sections 553 and 556, F.S. All electrical and plumbing work, underground utility construction, and pollutant storage and removal will be performed in accordance with Sections 489 and 553 F.S. All construction work will be performed in accordance with health and safety procedures and requirements specified by the Occupational Safety and Health Administration (OSHA), Title 29, Code of Federal Regulations (CFR). Hazardous materials and waste handling, storage, transporting, and disposal will be performed in accordance

with Chapter 62-730, FAC. Warning signs in accordance with 62-730, FAC will be placed on the system trailer.

Following approval of this RAP Mod, WSP will solicit bids from qualified contractors for well installation, remedial system construction, and system installation per the technical specifications and drawings provided in Appendix B and D.

All onsite personnel will be briefed on the site-specific Health and Safety plan and will comply with applicable procedures. During construction activities, all personnel will utilize appropriate personal protective equipment (PPE); Level D will be required. Site property owners will be notified of remedial activities prior to implementation.

## **4.0 MONITORING AND REPORTING**

### **4.1 System Monitoring**

The monitoring program is designed to evaluate the performance, progress, and effectiveness of the system installed, and to identify possible methods of improving system performance. Also, regular O&M will be performed to maintain product warranties. Monitoring will also be conducted to ensure effluent standards are met. The monitoring program will be in accordance with the procedures set forth in Chapter 62-780, FAC, for monitoring remedial action systems.

As required by Chapter 62-780, the system air influent and the system air effluent will be sampled daily during the first three days of the system startup; weekly for the first month; and monthly until treatment is no longer required, at which point quarterly sampling will be conducted to ensure regulatory compliance. One groundwater sample is recommended to be collected from the effluent port of the liquid phase carbon vessels during each monthly O&M to ensure that the recovered groundwater being injected into the onsite remediation wells is below GCTLs. The sample will be analyzed for VOCs and polycyclic aromatic hydrocarbons (PAHs) using United States Environmental Protection Agency (USEPA) Methods 8260 and 8270, and Total Recoverable Petroleum Hydrocarbons (TRPHs) using the Florida Petroleum Residual Organics (Florida-PRO) method. If at any time the concentrations in the effluent sample exceed GCTLs, it is recommended that the liquid phase carbon should be replaced.

Monitoring wells listed in Section 4.2 will be sampled quarterly to provide data for tracking the progress of the remedial program. The samples will be analyzed for VOCs and PAHs using USEPA Methods 8260 and 8270, and TRPH using the FL-PRO Method. The field parameters (depth-to-water and vacuum) will be collected weekly from select site monitoring wells for the first month, and monthly thereafter. If operational parameters remain unchanged, the monitoring may be modified or discontinued upon FDEP approval.

Quarterly reports including figures depicting water table elevation contours and the extent of groundwater contamination will be submitted. Quarterly reports will also include evaluation of contamination reduction and milestone progress, system performance, summary of maintenance performed, and repairs made, manufacturer's response time, and manufacturer warranty performance. Also, as part of the monthly monitoring readings from hour meters, flow meters, pressure gauges, and vacuum gauges will be recorded.

## 4.2 Groundwater Monitoring

Baseline and routine quarterly groundwater sampling of selected monitoring wells is required to document site cleanup progress. Monitoring wells MW-71S, MW-76S, and MW-77S will be sampled on a quarterly basis following system startup. Additionally monitoring wells MW-25S, MW-71S, MW-72S, MW-73S, MW-74S, and MW-75S are recommended to be sampling during the baseline sampling event and on an annual basis thereafter. All groundwater samples will be collected using FDEP SOPs for groundwater sampling. Prior to sampling, the monitoring wells will be purged using low flow purging techniques with a peristaltic pump and new HDPE tubing. Field parameters (including temperature, pH, specific conductance, turbidity, dissolved oxygen, and oxygen reduction potential) will be measured following removal of each well volume. A minimum of three well volumes will be purged from the monitoring well. If the field parameters have stabilized (i.e., two consecutive measurements are within 5%) and the water turbidity is less than 20 nephelometric turbidity units (NTU) after three well volumes, the groundwater sample will be collected. If turbidity below 20 NTUs cannot be attained, the well will be purged until the turbidity measurements become stable, or until five well volumes have been purged, at which time the groundwater samples will be collected. In addition, field observations, such as color, odor and sheen will be documented. Samples collected will be analyzed for BTEX and MTBE using USEPA Method 8260, PAHs using USEPA Method 8270 and TRPH using the FL-PRO Method. The FDEP Milestone Table and Graphs are provided in Appendix E.

<b>Groundwater and Air Sampling Frequencies and Analytical Methods</b>		
<b>Monitoring Frequency</b>	<b>Sample Location</b>	<b>USEPA Method</b>
MPE System Startup (daily for the first three days and last day of 1 <sup>st</sup> week of startup)	MPE Systems* (influent/effluent):	EPA18, OVA, vacuum, flow rate
	Post Liquid Phase Carbon (effluent)	8260, 8270, and FL-PRO
Weekly (first month)	MPE Systems* (influent/effluent):	EPA18, OVA, vacuum, flow rate
	Post Liquid Phase Carbon (effluent)	8260, 8270, and FL-PRO
Monthly	MPE Systems* (influent/effluent):	EPA18, OVA, vacuum, flow rate
	Post Liquid Phase Carbon (effluent)	8260, 8270, and FL-PRO
Quarterly	MW-71S, MW-76S, and MW-77S	8260, 8270, and FL-PRO
Baseline/Annually	MW-25S, MW-71S, MW-72S, MW-73S, MW-74S, and MW-75S	8260, 8270, and FL-PRO

\*All system equipment readings will be read and optimized.

## 4.3 Reporting

WSP will prepare and submit a Startup Report to FDEP following the baseline sampling, completion of the construction and system connection, and system startup event. The report will document all activities associated with the construction and startup of the new rental MPE system. Following the completion of each quarter of O&M events, WSP will conduct the quarterly groundwater monitoring

event and submit a quarterly O&M report to FDEP. During active remediation, WSP will submit quarterly and annual reports to the FDEP. These reports will summarize the system operation and groundwater sampling results and will include water table elevation contour maps and a discussion of the remedial system progress during the previous quarter and recommendations on modifications and optimization as needed.

## **5.0 SCHEDULE**

Upon approval of the RAP Mod, construction drawings and specification report, WSP will request FDEP to prepare a new Purchase Order and Scope of Work to implement the remedial action remediation at the site. Once the new Purchase Order and Scope of Work is offered and accepted, WSP will solicit bids from qualified subcontractors and implement the RAP Mod.

## **6.0 COST ESTIMATE**

The following breakdown presents the estimated costs for implementation of the RAP Mod at the subject site with 1 year of O&M and quarterly groundwater sampling. Costs per task have been calculated utilizing WSP's approved Schedule of Pay Items (SPI) rates. A Schedule of Pay Items Rate Sheet listing the expected construction costs is provided in Appendix F.

Task 1	Site Health & Safety Plan	
Task 2	Baseline Sampling, Construction and Startup of MPE Rental System	\$42,093.42
Task 3	Quarter 1 O&M MPE System and Quarterly Sampling	\$39,292.14
Task 4	Quarter 2 O&M MPE System and Quarterly Sampling	\$36,674.94
Task 5	Quarter 3 O&M MPE System and Quarterly Sampling	\$33,863.34
Task 6	Quarter 4 O&M MPE System and Annual Sampling	\$38,018.82
	Total	\$189,942.66

## **REFERENCES**

WSP USA Environment & Infrastructure Inc., Union 76 – Johns, Interim Assessment Report, December 14, 2023.

Wood Environment & Infrastructure Solutions, Inc., Union 76 – Johns, Free Product Recovery Report, June 29, 2022.

Wood Environment & Infrastructure Solutions, Inc., Union 76 – Johns, Free Product Recovery Report, April 29, 2022.

Wood Environment & Infrastructure Solutions, Inc., Union 76 – Johns, Remedial Action General Report, October 30, 2020.

Wood Environment & Infrastructure Solutions, Inc., Union 76 – Johns, Supplemental Site Assessment Report, March 29, 2029.

Amec Foster Wheeler Environment & Infrastructure, Inc., Union 76 – Johns, Limited Scope Remedial Action Plan, March, 2016.

## FIGURES

- 1 Site Vicinity Map
- 2 Site Map with Sample Locations
- 3A Organic Vapor Analyzer (OVA) Screening Results - Vadose Zone 0 to 5 feet below land surface (bls)
- 3B Organic Vapor Analyzer (OVA) Screening Results - Saturated Zone 5 to 25 feet below land surface
- 4A Soil Analytical Data – Vadose Zone 0 to 5 feet below land surface
- 4B Soil Analytical Data – Saturated Zone 5 to 25 feet below land surface
- 5 Groundwater Flow and Offsite Depth to Water Map, November 22, 2023 (Shallow Zone)
- 6 Groundwater Analytical Data
- 7 Existing and Proposed Multi-Phase Extraction Well Locations with Radius of Influence
- 8 Existing and Proposed Multi-Phase Extraction Well Construction Detail
- 9 Updated Trench Layout and Detail
- 10 Multi-Phase Extraction System Process and Instrumentation Diagram

## **TABLES**

I	Soil Cleanup Target Levels
II	Groundwater Cleanup Target Levels
1	Soil Screening Summary
2	Soil Analytical Summary
3	Groundwater Elevation Summary
4	Groundwater Analytical Summary

<b>Table I Soil Cleanup Target Levels</b>			
Chemicals of Concern	Soil Cleanup Target Levels (mg/kg)		
	Industrial	Residential	Leaching
Benzene	1.7	1.2	0.007
Toluene	60,000	7,500	0.5
Ethylbenzene	9,200	1,500	0.6
Xylenes	700	130	0.2
MTBE	24,000	4,400	0.09
Naphthalene	300	55	1.2
1-Methyl Naphthalene	1800	200	3.1
2-Methyl Naphthalene	2100	210	8.5
TRPH	2700	460	340

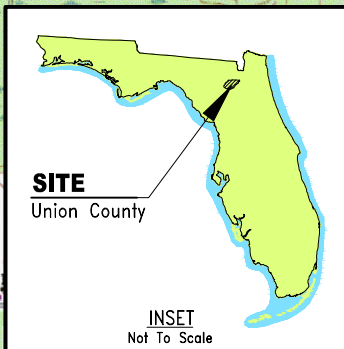
SCTL - Soil Cleanup Target Levels for Chapter 62-777 Florida Administrative Code.

<b>Table II Groundwater Cleanup Target Levels</b>				
Contaminants of Concern	Current Highest Concentrations (µg/l) (April 2022)	Groundwater Criteria <sup>1</sup> (µg/l)	Natural Attenuation Default Concentration Standards	
			Source (Maximum Concentrations) µg/l	Perimeter (Groundwater Criteria <sup>1</sup> ) µg/l
Benzene	<b>9.9</b>	1	100	1
Ethylbenzene	<b>260</b>	30	300	30
Toluene	20	40	400	40
Xylenes, total	<b>27</b>	20	200	20
Methyl tert-butyl ether	12	20	200	20
TRPHs	4,000	5,000	50,000	5,000
Naphthalene	<b>620</b>	14	140	14
1-Methylnaphthalene	<b>82</b>	28	280	28
2-Methylnaphthalene	<b>120</b>	28	280	28

Notes: µg/l = micrograms per liter.  
MDL = method detection limit.  
PQL = practical quantitation limit.  
FAC = Florida Administrative Code.  
As provided in Chapters 62-520 or 62-550, FAC.

## FIGURES

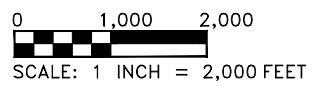
- 1 Site Vicinity Map
- 2 Site Map with Sample Locations
- 3A Organic Vapor Analyzer (OVA) Screening Results - Vadose Zone 0 to 5 feet below land surface (bls)
- 3B Organic Vapor Analyzer (OVA) Screening Results - Saturated Zone 5 to 25 feet below land surface
- 4A Soil Analytical Data – Vadose Zone 0 to 5 feet below land surface
- 4B Soil Analytical Data – Saturated Zone 5 to 25 feet below land surface
- 5 Groundwater Flow and Offsite Depth to Water Map, November 22, 2023 (Shallow Zone)
- 6 Groundwater Analytical Data
- 7 Existing and Proposed Multi-Phase Extraction Well Locations with Radius of Influence
- 8 Existing and Proposed Multi-Phase Extraction Well Construction Detail
- 9 Updated Trench Layout and Detail
- 10 Multi-Phase Extraction System Process and Instrumentation Diagram



Facility ID#: 63/8519168

Approximate site location  
 Section 30, Township 5 South, Range 20 East  
 Latitude: 30° 1' 22.91" North  
 Longitude: 82° 20' 19.35" West

**SOURCE:**  
 USGS Quadrangle - LAKE BUTLER 1993  
 Maps and data Copyright 2003 Maptech  
 PLOTTED: March 11, 2024 - 10:41 AM, BY: Burton, George



**SITE VICINITY MAP**

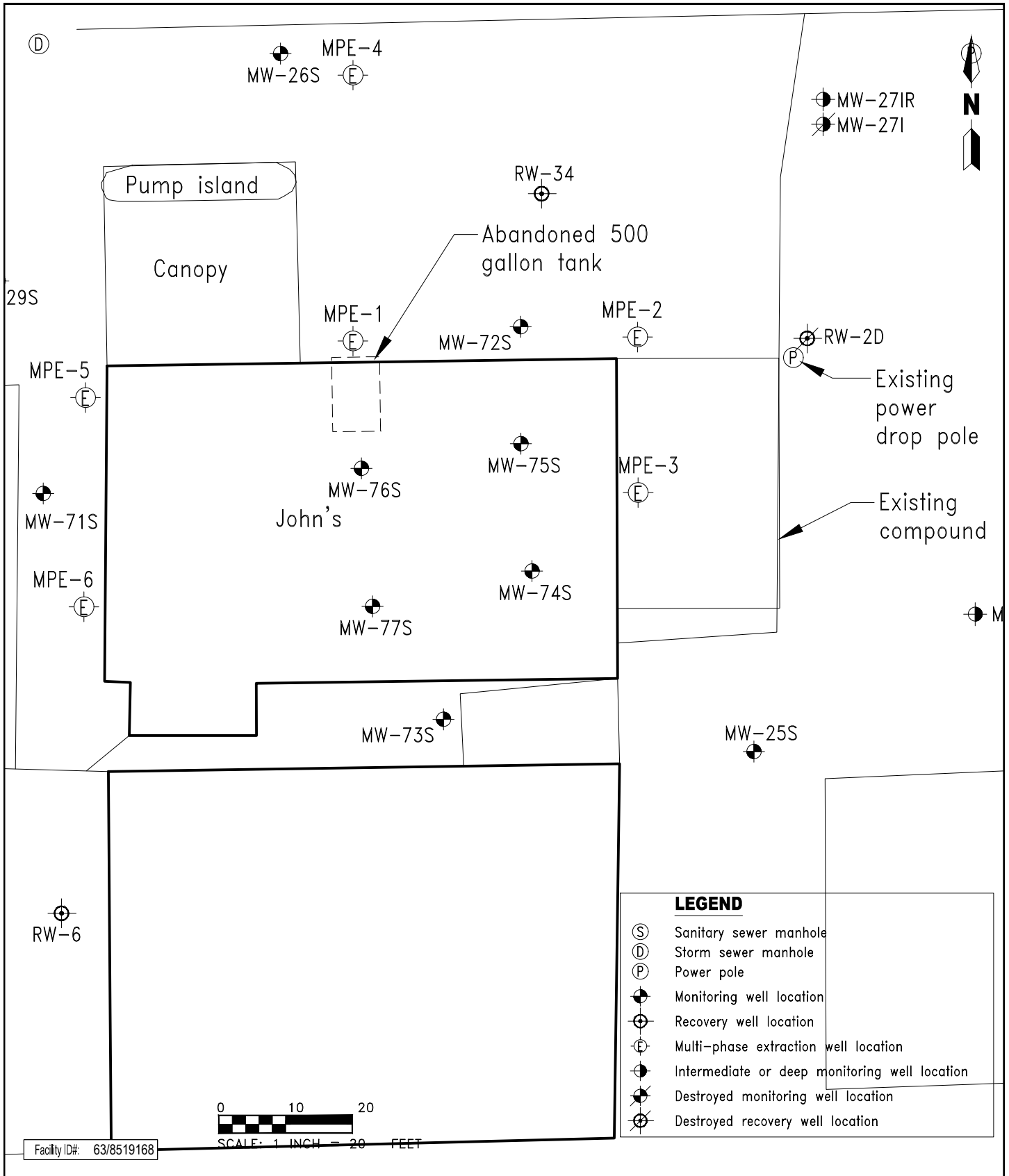
NO.	DATE	REVISIONS
0	Mar-24	Initial Submittal
	DESIGNED	DRAWN
	AH	GB
	CHECKED	DATE

WSP USA Environment & Infrastructure, Inc.  
 Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
 REMEDIAL ACTION PLAN MODIFICATION  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:  
**1**



Facility ID#: 63/8519168

SCALE: 1 INCH = 20 FEET

**SITE MAP WITH SAMPLE LOCATIONS**

PLOTTED: March 12, 2024 - 11:51 AM, BY: Burton, George

NO.	DATE	REVISIONS	
0	Mar-24	Initial Submittal	
DESIGNED	DRAWN	CHECKED	DATE
AH	GB		



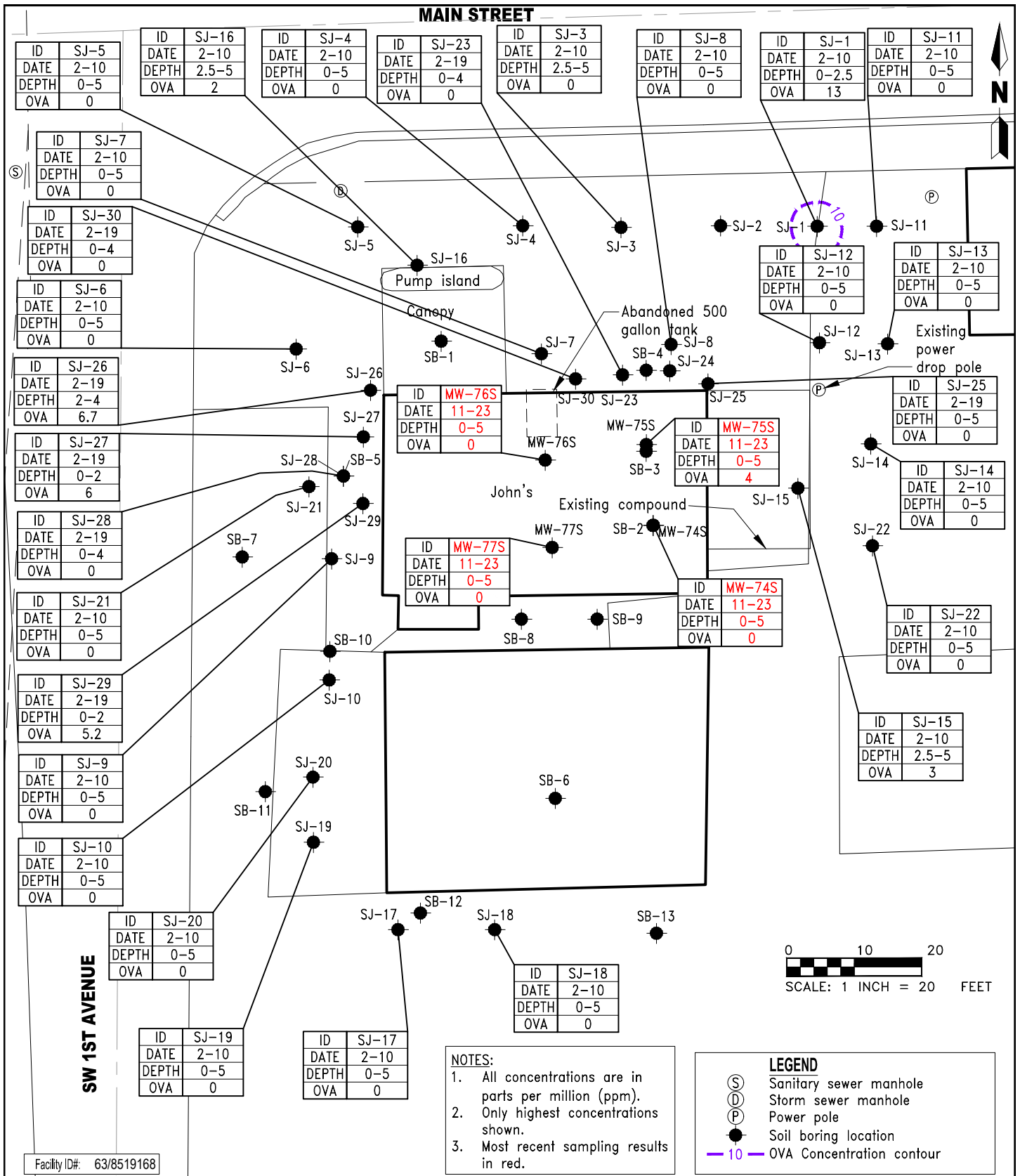
**WSP USA Environment & Infrastructure, Inc.**  
Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
REMEDIAL ACTION PLAN MODIFICATION  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:  
**2**

P:\CAD\Preapproval\LkButler\UNION 76 - SAM JOHN'S\RAPMOD\2024-03\FIG-2.dwg



**NOTES:**

1. All concentrations are in parts per million (ppm).
2. Only highest concentrations shown.
3. Most recent sampling results in red.

**LEGEND**

- (S) Sanitary sewer manhole
- (D) Storm sewer manhole
- (P) Power pole
- Soil boring location
- 10 — OVA Concentration contour

Facility ID#: 63/8519168

PLOTTED: March 12, 2024 - 12:58 PM, BY: Burton, George

**ORGANIC VAPOR ANALYZER (OVA) SCREENING RESULTS  
VADOSE ZONE 0 TO 5 FEET, BELOW LAND SURFACE (BLS)**

NO.	DATE	REVISIONS
0	Mar-24	Initial Submittal
	DESIGNED	DRAWN
	AH	GB
	CHECKED	DATE



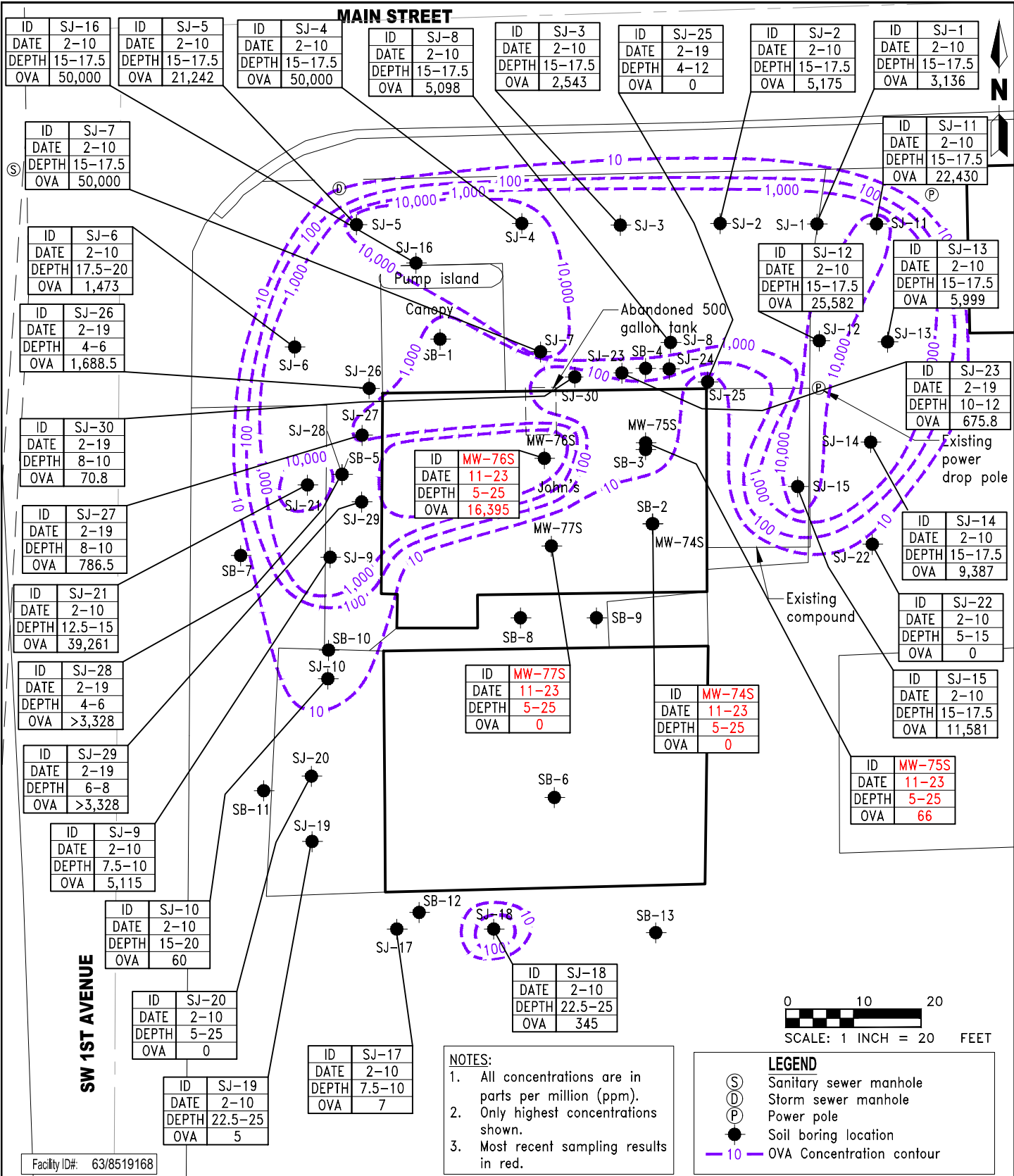
WSP USA Environment & Infrastructure, Inc.  
Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
REMEDIAL ACTION PLAN MODIFICATION  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**


FIGURE:  
**3A**

P:\CAD\Preapproval\kButler\UNION 76 - SAM JOHN'S\RAPMOD\2024-03\FIG-3A.dwg



PLOTTED: March 12, 2024 - 1:02 PM, BY: Burton, George

NO.				DATE				REVISIONS			
0				Mar-24				Initial Submittal			
DESIGNED		DRAWN		CHECKED		DATE					
AH		GB									



**WSP**

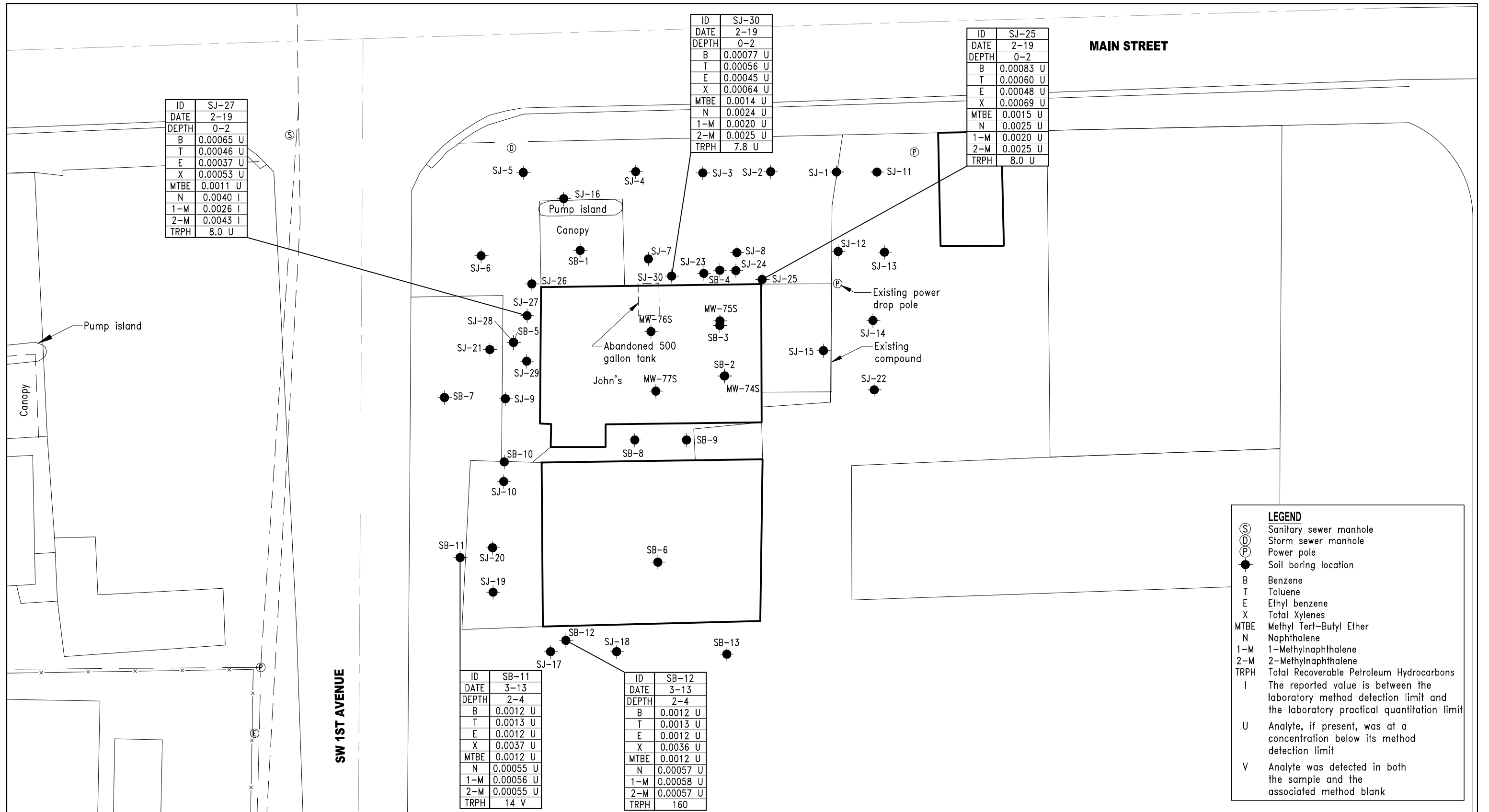
WSP USA Environment & Infrastructure, Inc.  
Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
 REMEDIAL ACTION PLAN MODIFICATION  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:

# 3B

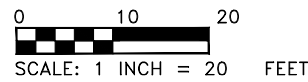


**LEGEND**

- Ⓢ Sanitary sewer manhole
- Ⓣ Storm sewer manhole
- Ⓟ Power pole
- Soil boring location
- B Benzene
- T Toluene
- E Ethyl benzene
- X Total Xylenes
- MTBE Methyl Tert-Butyl Ether
- N Naphthalene
- 1-M 1-Methylnaphthalene
- 2-M 2-Methylnaphthalene
- TRPH Total Recoverable Petroleum Hydrocarbons
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
- U Analyte, if present, was at a concentration below its method detection limit
- V Analyte was detected in both the sample and the associated method blank

- NOTES:**
- All concentrations are in milligrams per kilogram.
  - Bold concentrations exceed Soil Cleanup Target Levels (SCTLs).
  - Most recent sampling results in red.

Facility ID#: 63/8519168



**SOIL ANALYTICAL DATA  
VADOSE ZONE - 0 TO 5 FEET, BELOW LAND SURFACE (BLS)**

NO.	DATE	REVISIONS
0	Mar-24	Initial Submittal

DESIGNED	DRAWN	CHECKED	DATE
AH	GB		

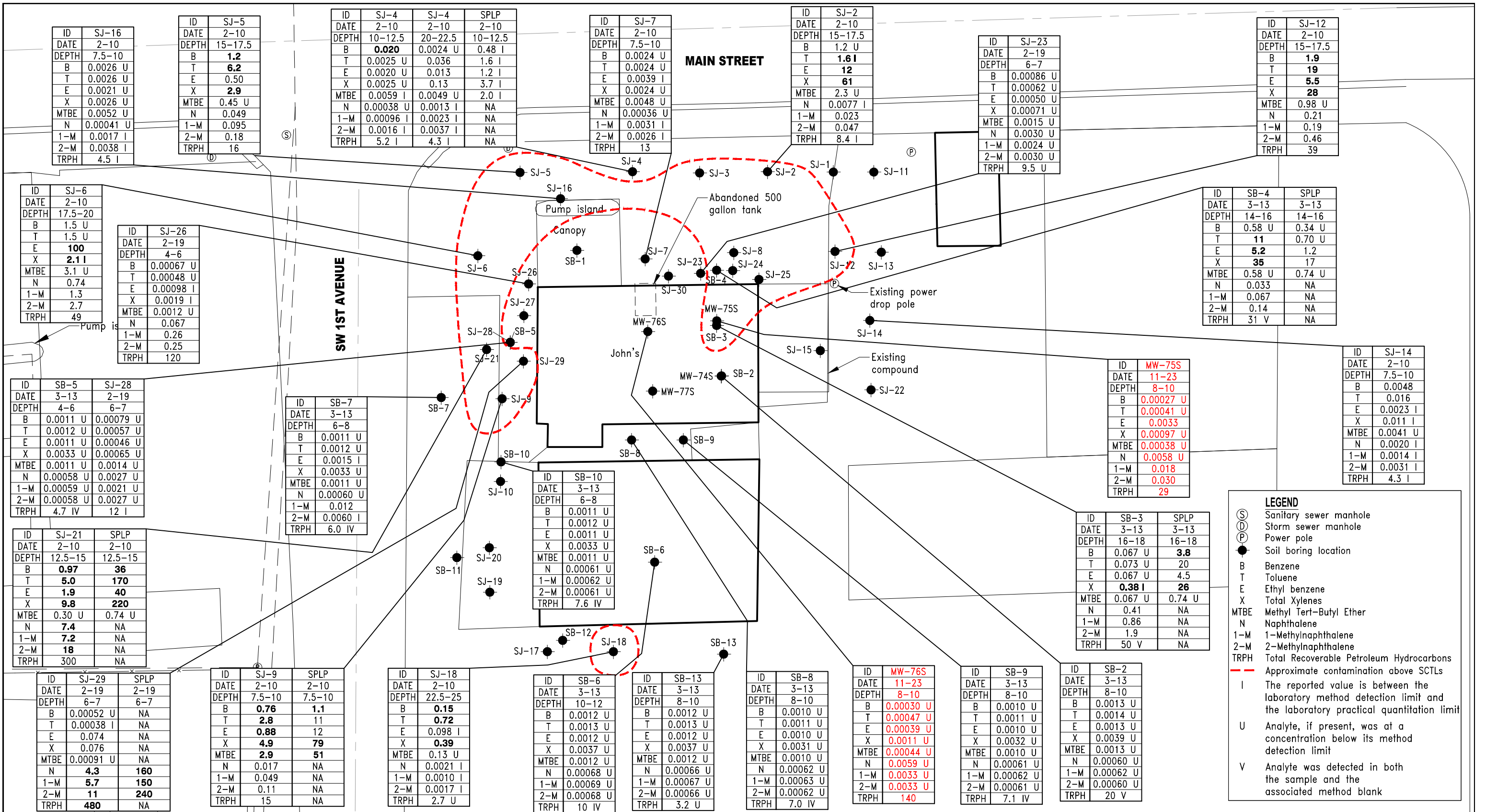
PLOTTED: March 12, 2024 - 12:04 PM, BY: Burton, George

WSP USA Environment & Infrastructure, Inc.  
Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
REMEDIAL ACTION PLAN MODIFICATION  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:  
**4A**



ID	SJ-16
DATE	2-10
DEPTH	7.5-10
B	0.0026 U
T	0.0026 U
E	0.0021 U
X	0.0026 U
MTBE	0.0052 U
N	0.0004 U
1-M	0.0017 I
2-M	0.0038 I
TRPH	4.5 I

ID	SJ-5
DATE	2-10
DEPTH	15-17.5
B	1.2
T	6.2
E	0.50
X	2.9
MTBE	0.45 U
N	0.049
1-M	0.095
2-M	0.18
TRPH	16

ID	SJ-4
DATE	2-10
DEPTH	10-12.5
B	0.020
T	0.0025 U
E	0.0020 U
X	0.0025 U
MTBE	0.0059 I
N	0.00038 U
1-M	0.00096 I
2-M	0.0016 I
TRPH	5.2 I

ID	SJ-7
DATE	2-10
DEPTH	7.5-10
B	0.0024 U
T	0.0024 U
E	0.0039 I
X	0.0024 U
MTBE	0.0048 U
N	0.00036 U
1-M	0.0031 I
2-M	0.0026 I
TRPH	13

ID	SJ-2
DATE	2-10
DEPTH	15-17.5
B	1.2 U
T	1.6 I
E	12
X	61
MTBE	2.3 U
N	0.0077 I
1-M	0.023
2-M	0.047
TRPH	8.4 I

ID	SJ-23
DATE	2-19
DEPTH	6-7
B	0.00086 U
T	0.00062 U
E	0.00050 U
X	0.00071 U
MTBE	0.0015 U
N	0.0030 U
1-M	0.0024 U
2-M	0.0030 U
TRPH	9.5 U

ID	SJ-12
DATE	2-10
DEPTH	15-17.5
B	1.9
T	19
E	5.5
X	28
MTBE	0.98 U
N	0.21
1-M	0.19
2-M	0.46
TRPH	39

ID	SB-4
DATE	3-13
DEPTH	14-16
B	0.58 U
T	11
E	5.2
X	35
MTBE	0.58 U
N	0.033
1-M	0.067
2-M	0.14
TRPH	31 V

ID	SJ-6
DATE	2-10
DEPTH	17.5-20
B	1.5 U
T	1.5 U
E	100
X	2.11
MTBE	3.1 U
N	0.74
1-M	1.3
2-M	2.7
TRPH	49

ID	SJ-26
DATE	2-19
DEPTH	4-6
B	0.00067 U
T	0.00048 U
E	0.00098 I
X	0.0019 I
MTBE	0.0012 U
N	0.067
1-M	0.26
2-M	0.25
TRPH	120

ID	SB-5
DATE	3-13
DEPTH	4-6
B	0.0011 U
T	0.0012 U
E	0.0011 U
X	0.0033 U
MTBE	0.0011 U
N	0.00058 U
1-M	0.00059 U
2-M	0.00058 U
TRPH	4.7 IV

ID	SB-7
DATE	3-13
DEPTH	6-8
B	0.0011 U
T	0.0012 U
E	0.0015 I
X	0.0033 U
MTBE	0.0011 U
N	0.00060 U
1-M	0.012
2-M	0.0060 I
TRPH	6.0 IV

ID	SB-10
DATE	3-13
DEPTH	6-8
B	0.0011 U
T	0.0012 U
E	0.0011 U
X	0.0033 U
MTBE	0.0011 U
N	0.00061 U
1-M	0.00062 U
2-M	0.00061 U
TRPH	7.6 IV

ID	MW-75S
DATE	11-23
DEPTH	8-10
B	0.00027 U
T	0.00041 U
E	0.0033
X	0.00097 U
MTBE	0.00038 U
N	0.0058 U
1-M	0.018
2-M	0.030
TRPH	29

ID	SJ-14
DATE	2-10
DEPTH	7.5-10
B	0.0048
T	0.016
E	0.0023 I
X	0.011 I
MTBE	0.0041 U
N	0.0020 U
1-M	0.0014 I
2-M	0.0031 I
TRPH	4.3 I

ID	SJ-21
DATE	2-10
DEPTH	12.5-15
B	0.97
T	5.0
E	1.9
X	9.8
MTBE	0.30 U
N	7.4
1-M	7.2
2-M	18
TRPH	300

ID	SJ-9
DATE	2-10
DEPTH	7.5-10
B	0.76
T	2.8
E	0.88
X	4.9
MTBE	2.9
N	0.017
1-M	0.049
2-M	0.11
TRPH	15

ID	SJ-18
DATE	2-10
DEPTH	22.5-25
B	0.15
T	0.72
E	0.098 I
X	0.39
MTBE	0.13 U
N	0.0021 I
1-M	0.0010 I
2-M	0.0017 I
TRPH	2.7 U

ID	SB-6
DATE	3-13
DEPTH	10-12
B	0.0012 U
T	0.0013 U
E	0.0012 U
X	0.0037 U
MTBE	0.0012 U
N	0.00068 U
1-M	0.00069 U
2-M	0.00068 U
TRPH	10 IV

ID	SB-13
DATE	3-13
DEPTH	8-10
B	0.0012 U
T	0.0013 U
E	0.0012 U
X	0.0037 U
MTBE	0.0012 U
N	0.00066 U
1-M	0.00067 U
2-M	0.00066 U
TRPH	3.2 U

ID	SB-8
DATE	3-13
DEPTH	8-10
B	0.0010 U
T	0.0011 U
E	0.0010 U
X	0.0031 U
MTBE	0.0010 U
N	0.00062 U
1-M	0.00063 U
2-M	0.00062 U
TRPH	7.0 IV

ID	MW-76S
DATE	11-23
DEPTH	8-10
B	0.00030 U
T	0.00047 U
E	0.00039 U
X	0.0011 U
MTBE	0.00044 U
N	0.0059 U
1-M	0.0033 U
2-M	0.0033 U
TRPH	140

ID	SB-9
DATE	3-13
DEPTH	8-10
B	0.0010 U
T	0.0011 U
E	0.0010 U
X	0.0032 U
MTBE	0.0010 U
N	0.00061 U
1-M	0.00062 U
2-M	0.00061 U
TRPH	7.1 IV

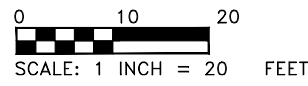
ID	SB-2
DATE	3-13
DEPTH	8-10
B	0.0013 U
T	0.0014 U
E	0.0013 U
X	0.0039 U
MTBE	0.0013 U
N	0.00060 U
1-M	0.00062 U
2-M	0.00060 U
TRPH	20 V

**LEGEND**

- Ⓢ Sanitary sewer manhole
- Ⓣ Storm sewer manhole
- Ⓟ Power pole
- Soil boring location
- B Benzene
- T Toluene
- E Ethyl benzene
- X Total Xylenes
- MTBE Methyl Tert-Butyl Ether
- N Naphthalene
- 1-M 1-Methylnaphthalene
- 2-M 2-Methylnaphthalene
- TRPH Total Recoverable Petroleum Hydrocarbons
- - - Approximate contamination above SCTLs
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
- U Analyte, if present, was at a concentration below its method detection limit
- V Analyte was detected in both the sample and the associated method blank

**NOTES:**

- All concentrations are in milligrams per kilogram except Synthetic Precipitate Leaching Procedure (SPLP) concentrations which are in micrograms per liter.
- Bold concentrations exceed Soil Cleanup Target Levels (SCTLs).
- Most recent sampling results in red.



**SOIL ANALYTICAL DATA SATURATED ZONE - 5 TO 25 FEET, BELOW LAND SURFACE (BLS)**

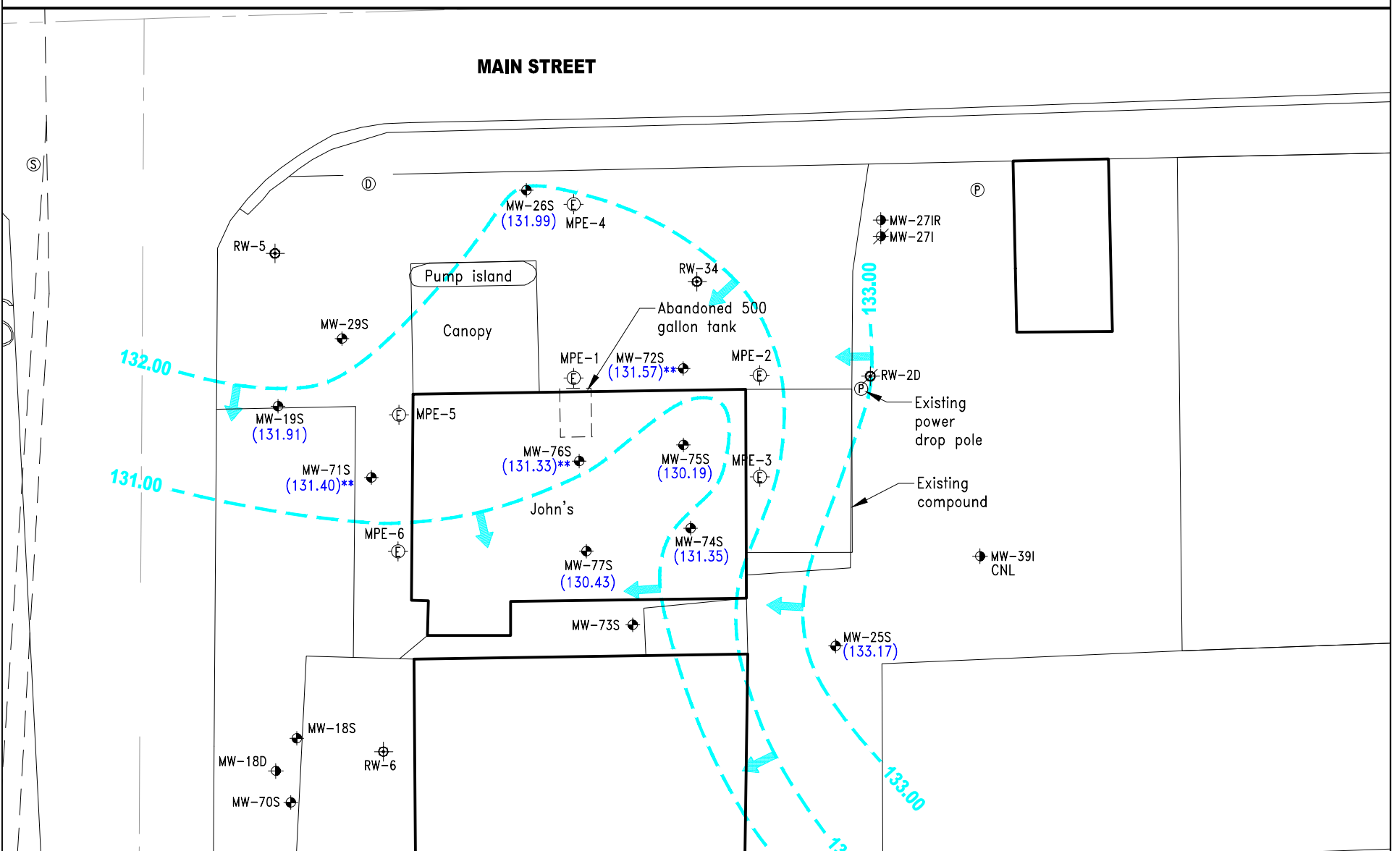
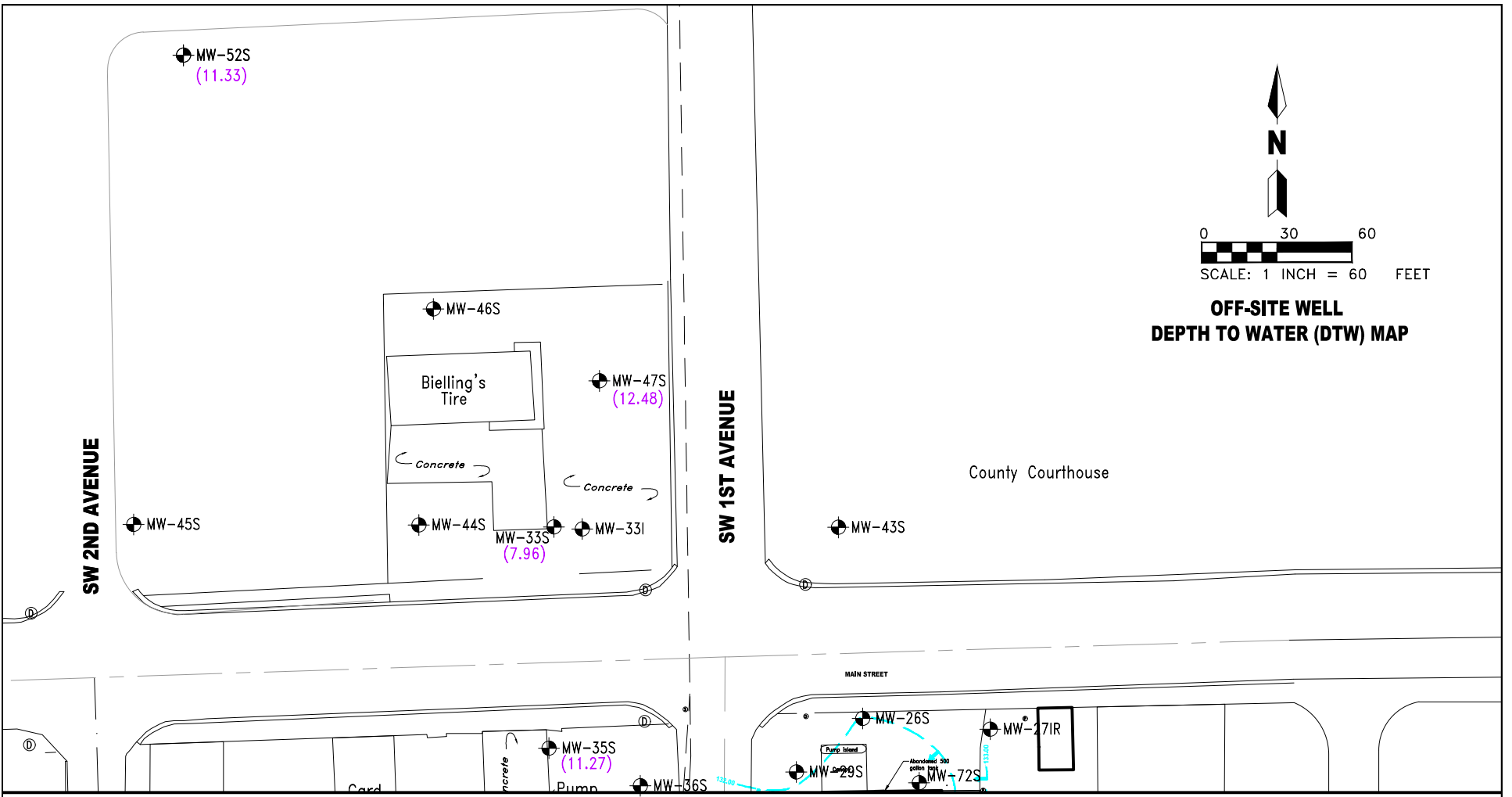
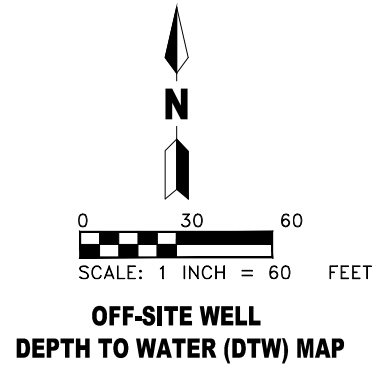
NO.	DATE	REVISIONS
0	Mar-24	Initial Submittal
DESIGNED	AH	DRAWN GB
CHECKED		DATE

WSP USA Environment & Infrastructure, Inc.  
Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
REMEDIAL ACTION PLAN MODIFICATION  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FLORIDA

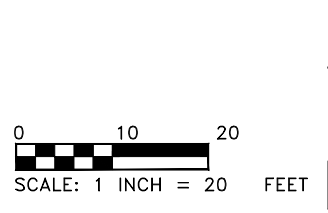
**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:  
**4B**



**LEGEND**

- (S) Sanitary sewer manhole
- (D) Storm sewer manhole
- (P) Power pole
- Monitoring well location
- Recovery well location
- Multi-phase extraction well location
- Intermediate or deep monitoring well location
- Destroyed monitoring well location
- Destroyed recovery well location
- \* Intermediate and deep wells, not used in contouring
- \*\* Monitoring wells with free product present, not used in contouring
- (11.27) Depth to water
- (126.15) Groundwater elevation
- 133.00 Groundwater elevation contour
- ← Groundwater flow direction
- CNL Could not locate



**GROUNDWATER FLOW AND OFF-SITE DEPTH TO WATER (DTW) MAP  
NOVEMBER 22, 2023 (SHALLOW ZONE)**

NO.	DATE	REVISIONS
0	Mar-24	Initial Submittal

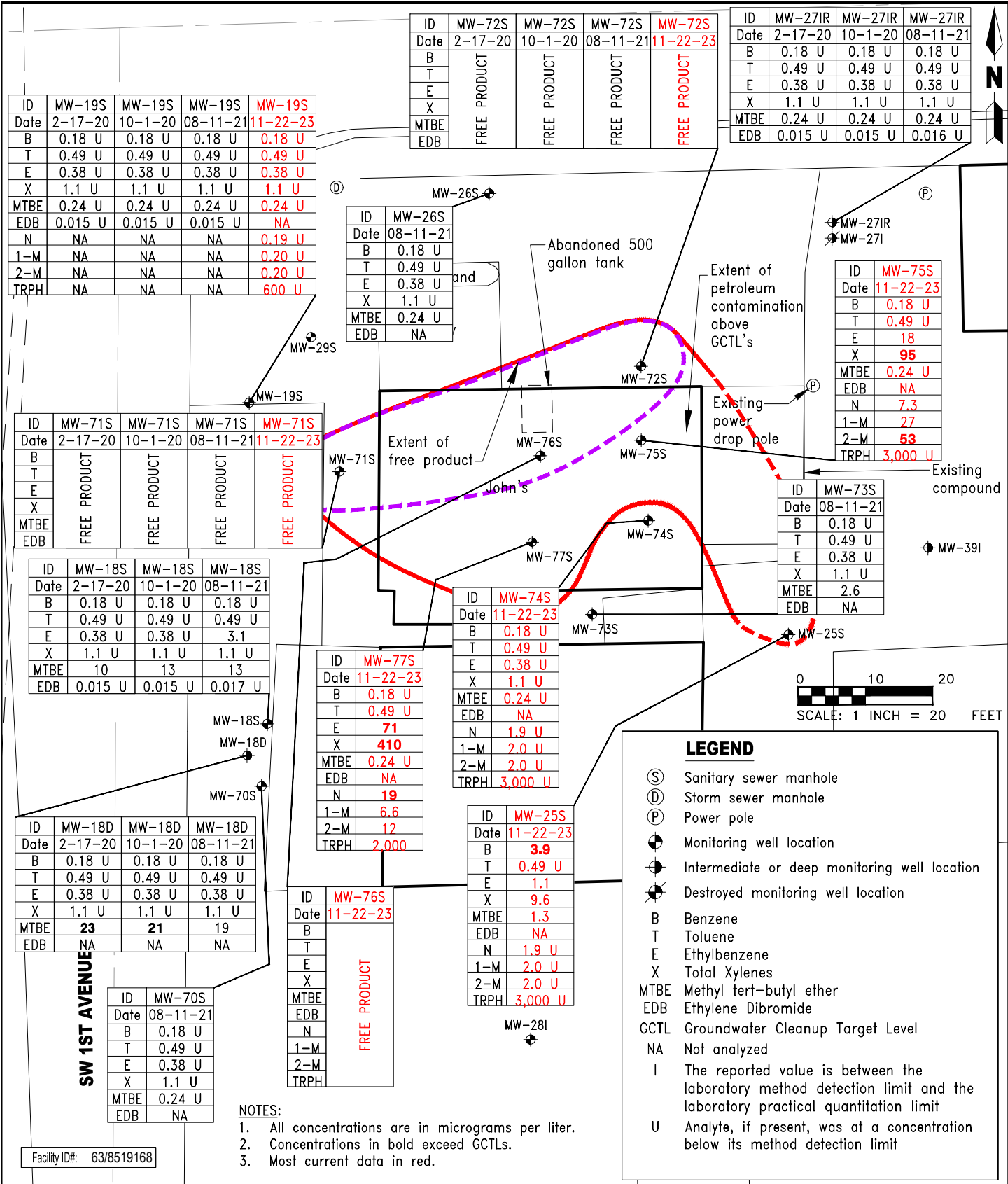
DESIGNED	DRAWN	CHECKED	DATE
AH	GB		



**UNION 76 - SAM JOHN'S  
REMEDIAL ACTION PLAN MODIFICATION  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FLORIDA**

**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

FIGURE:  
**5**



ID	MW-19S	MW-19S	MW-19S	MW-19S
Date	2-17-20	10-1-20	08-11-21	11-22-23
B	0.18 U	0.18 U	0.18 U	0.18 U
T	0.49 U	0.49 U	0.49 U	0.49 U
E	0.38 U	0.38 U	0.38 U	0.38 U
X	1.1 U	1.1 U	1.1 U	1.1 U
MTBE	0.24 U	0.24 U	0.24 U	0.24 U
EDB	0.015 U	0.015 U	0.015 U	NA
N	NA	NA	NA	0.19 U
1-M	NA	NA	NA	0.20 U
2-M	NA	NA	NA	0.20 U
TRPH	NA	NA	NA	600 U

ID	MW-72S	MW-72S	MW-72S	MW-72S
Date	2-17-20	10-1-20	08-11-21	11-22-23
B	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
T	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
E	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
X	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
MTBE	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
EDB	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT

ID	MW-271R	MW-271R	MW-271R
Date	2-17-20	10-1-20	08-11-21
B	0.18 U	0.18 U	0.18 U
T	0.49 U	0.49 U	0.49 U
E	0.38 U	0.38 U	0.38 U
X	1.1 U	1.1 U	1.1 U
MTBE	0.24 U	0.24 U	0.24 U
EDB	0.015 U	0.015 U	0.016 U

ID	MW-26S
Date	08-11-21
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
EDB	NA

ID	MW-75S
Date	11-22-23
B	0.18 U
T	0.49 U
E	18
X	95
MTBE	0.24 U
EDB	NA
N	7.3
1-M	27
2-M	53
TRPH	3,000 U

ID	MW-71S	MW-71S	MW-71S	MW-71S
Date	2-17-20	10-1-20	08-11-21	11-22-23
B	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
T	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
E	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
X	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
MTBE	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT
EDB	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT	FREE PRODUCT

ID	MW-18S	MW-18S	MW-18S
Date	2-17-20	10-1-20	08-11-21
B	0.18 U	0.18 U	0.18 U
T	0.49 U	0.49 U	0.49 U
E	0.38 U	0.38 U	3.1
X	1.1 U	1.1 U	1.1 U
MTBE	10	13	13
EDB	0.015 U	0.015 U	0.017 U

ID	MW-77S
Date	11-22-23
B	0.18 U
T	0.49 U
E	71
X	410
MTBE	0.24 U
EDB	NA
N	19
1-M	6.6
2-M	12
TRPH	2,000

ID	MW-74S
Date	11-22-23
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
EDB	NA
N	1.9 U
1-M	2.0 U
2-M	2.0 U
TRPH	3,000 U

ID	MW-73S
Date	08-11-21
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	2.6
EDB	NA

ID	MW-18D	MW-18D	MW-18D
Date	2-17-20	10-1-20	08-11-21
B	0.18 U	0.18 U	0.18 U
T	0.49 U	0.49 U	0.49 U
E	0.38 U	0.38 U	0.38 U
X	1.1 U	1.1 U	1.1 U
MTBE	23	21	19
EDB	NA	NA	NA

ID	MW-76S
Date	11-22-23
B	FREE PRODUCT
T	FREE PRODUCT
E	FREE PRODUCT
X	FREE PRODUCT
MTBE	FREE PRODUCT
EDB	FREE PRODUCT
N	FREE PRODUCT
1-M	FREE PRODUCT
2-M	FREE PRODUCT
TRPH	FREE PRODUCT

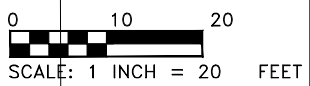
ID	MW-25S
Date	11-22-23
B	3.9
T	0.49 U
E	1.1
X	9.6
MTBE	1.3
EDB	NA
N	1.9 U
1-M	2.0 U
2-M	2.0 U
TRPH	3,000 U

ID	MW-70S
Date	08-11-21
B	0.18 U
T	0.49 U
E	0.38 U
X	1.1 U
MTBE	0.24 U
EDB	NA

- NOTES:
- All concentrations are in micrograms per liter.
  - Concentrations in bold exceed GCTLs.
  - Most current data in red.

**LEGEND**

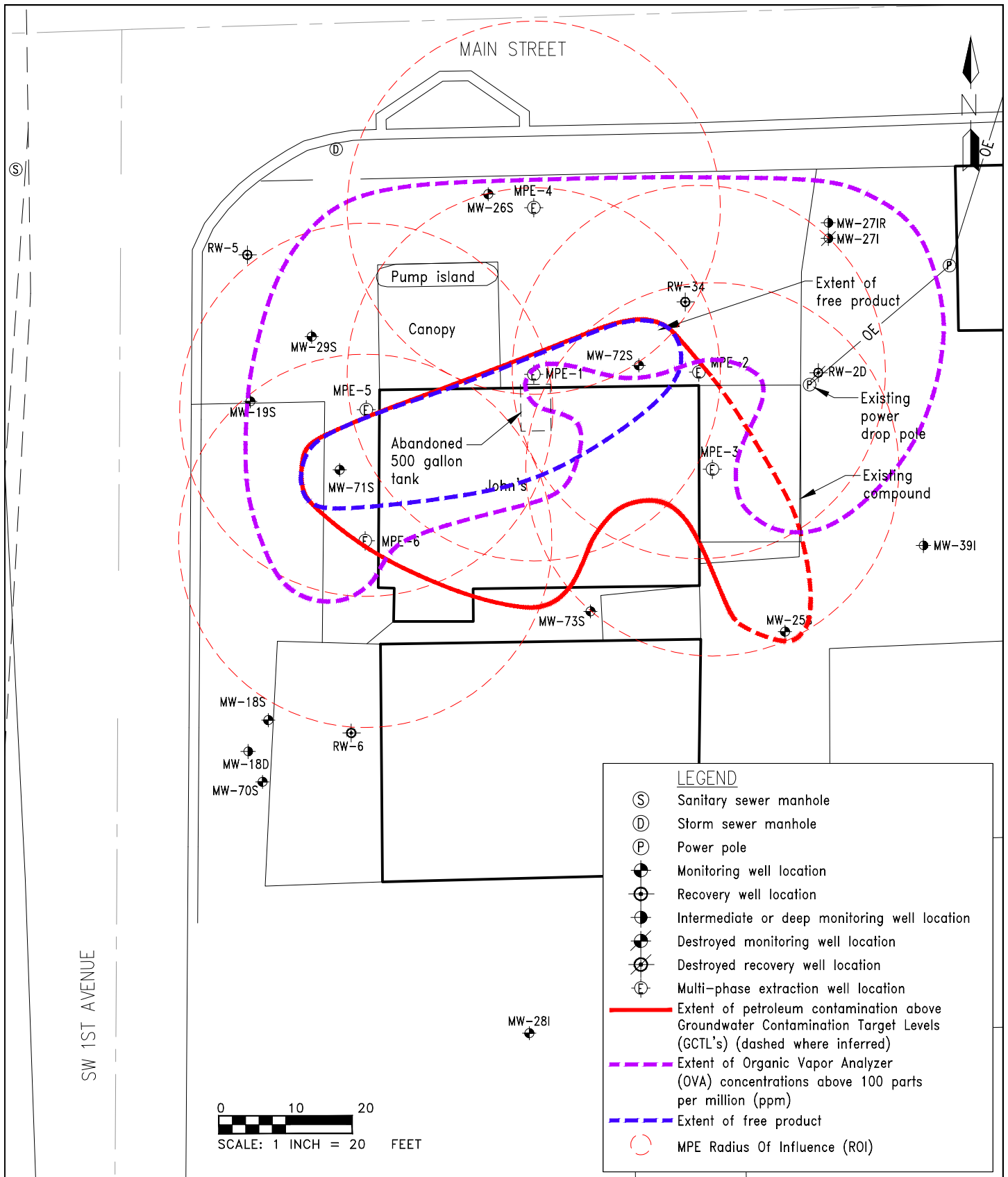
- Ⓢ Sanitary sewer manhole
- Ⓣ Storm sewer manhole
- Ⓟ Power pole
- Ⓜ Monitoring well location
- Ⓜ Intermediate or deep monitoring well location
- Ⓜ Destroyed monitoring well location
- B Benzene
- T Toluene
- E Ethylbenzene
- X Total Xylenes
- MTBE Methyl tert-butyl ether
- EDB Ethylene Dibromide
- GCTL Groundwater Cleanup Target Level
- NA Not analyzed
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
- U Analyte, if present, was at a concentration below its method detection limit



Facility ID#: 63/8519168

**GROUNDWATER ANALYTICAL DATA**

PLOTTED: March 12, 2024 - 1:11 PM, BY: Burton, George					<b>UNION 76 - SAM JOHN'S</b> REMEDIAL ACTION PLAN MODIFICATION 80 WEST MAIN STREET LAKE BUTLER, UNION COUNTY, FLORIDA	FIGURE:  <span style="font-size: 2em; font-weight: bold;">6</span>
NO.	DATE	REVISIONS				
0	Mar-24	Initial Submittal				
DESIGNED	DRAWN	CHECKED	DATE	WSP USA Environment & Infrastructure, Inc. Tallahassee, Florida		
AH	GB					
P:\CAD\Preapproval\LkButler\UNION 76 - SAM JOHN'S\RAPMOD\2024-03\FIG-6.dwg				<b>FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION</b>		



**EXISTING MULTI-PHASE EXTRACTION WELL LOCATIONS WITH EXPECTED MINIMUM RADII OF INFLUENCE**

PLOTTED: March 12, 2024 - 1:25 PM, BY: Burton, George

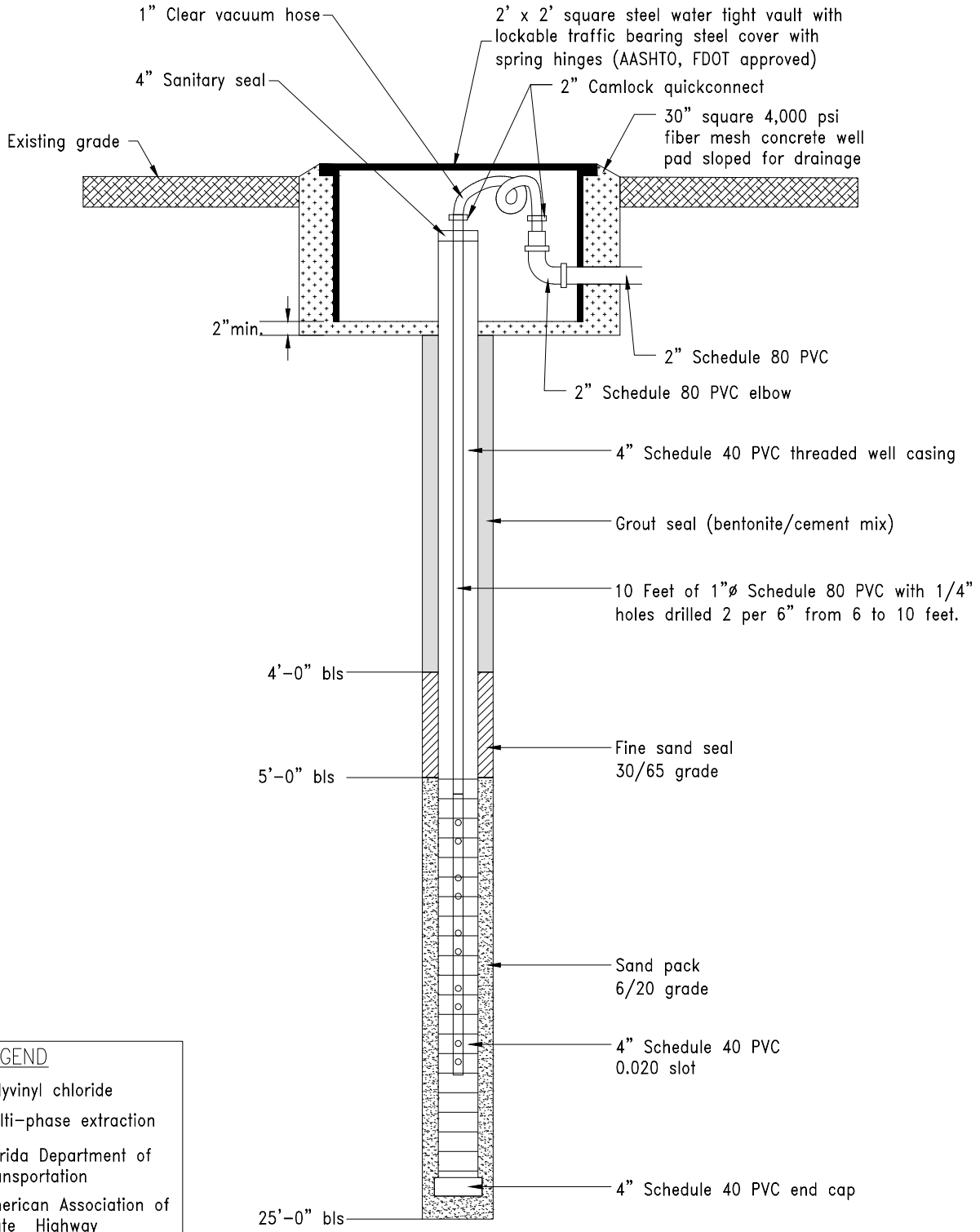
NO.	DATE	REVISIONS	
0	Mar24	Initial Submittal	
DESIGNED	DRAWN	CHECKED	DATE
AH	GB		

  
**WSP USA Environment & Infrastructure, Inc.**  
 Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
 REMEDIAL ACTION PLAN MODIFICATION  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FLORIDA  
**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:  
**7**

P:\CAD\Preapproval\LkButler\UNION 76 - SAM JOHN'S\RAPMOD\2024-03\Fig-7.mwg



LEGEND	
PVC	Polyvinyl chloride
MPE	Multi-phase extraction
FDOT	Florida Department of Transportation
AASHTO	American Association of State Highway Transportation Officials
bls	Below land surface

NOT TO SCALE

**EXISTING MULTI-PHASE EXTRACTION WELL CONSTRUCTION DETAIL**

NO.	DATE	REVISIONS	
0	Mar-24	Initial Submittal	
DESIGNED	DRAWN	CHECKED	DATE
AH	GB		



**WSP USA Environment & Infrastructure, Inc.**  
Tallahassee, Florida

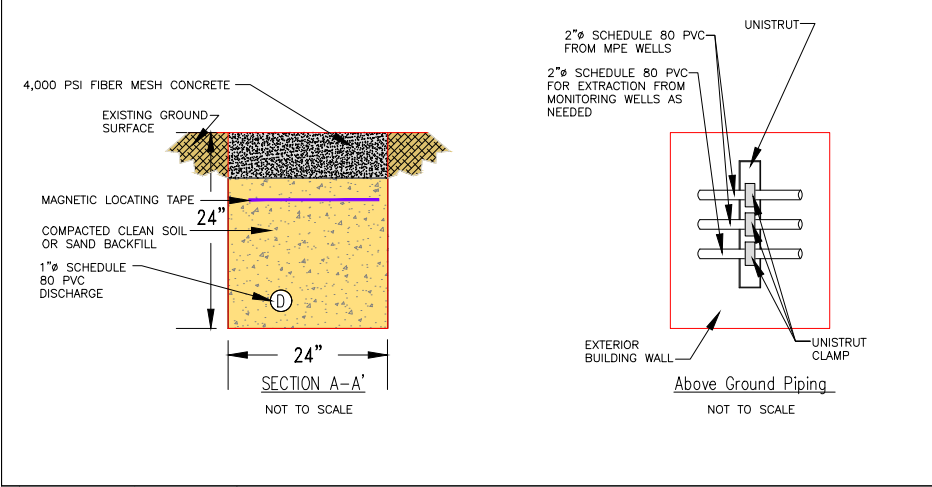
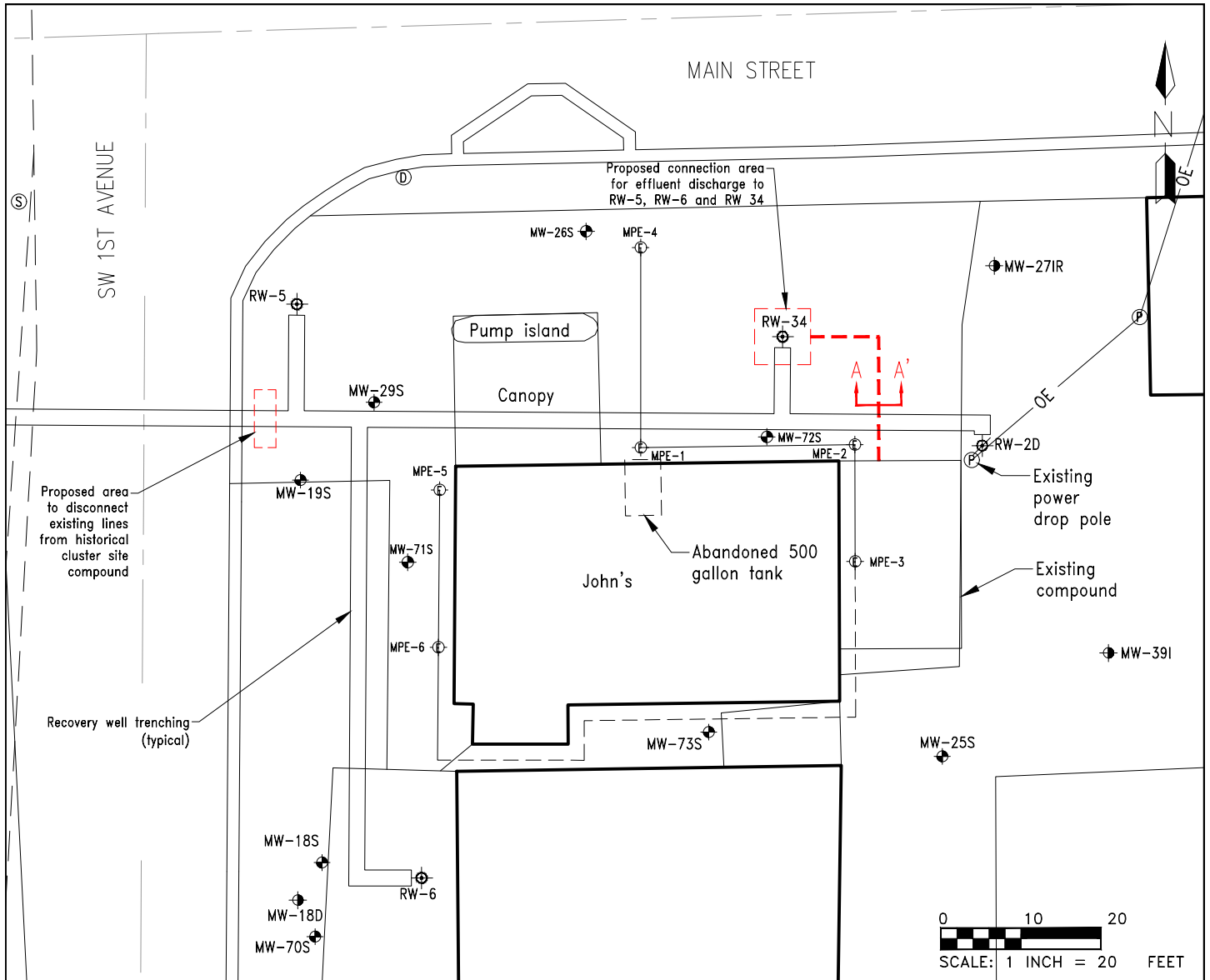
**UNION 76 - SAM JOHN'S**  
REMEDIAL ACTION PLAN MODIFICATION  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:

**8**

P:\CAD\Preapproval\LkButler\UNION 76 - SAM JOHN'S\RAPMOD\2024-03\Fig-8.dwg



**LEGEND**

- Ⓢ Sanitary sewer manhole
- Ⓣ Storm sewer manhole
- Ⓟ Power pole
- ⊕ Monitoring well
- ⊕ Recovery well
- ⊕ Intermediate or deep monitoring well
- ⊕ Destroyed monitoring well
- ⊕ Destroyed recovery well
- ⊕ Replaced shallow monitoring well
- ⊕ Replaced intermediate monitoring well
- ⊕ Multi-phase extraction well
- Below ground trench and piping
- - - Above ground piping
- - - Proposed discharge pipe trench

**UPDATED TRENCH LAYOUT AND DETAIL**

PLOTTED: March 12, 2024 - 1:33 PM, BY: Burton, George

NO.	DATE	REVISIONS
0	Mar-24	Initial Submittal
	DESIGNED	DRAWN
	CHECKED	DATE
	AH	GB

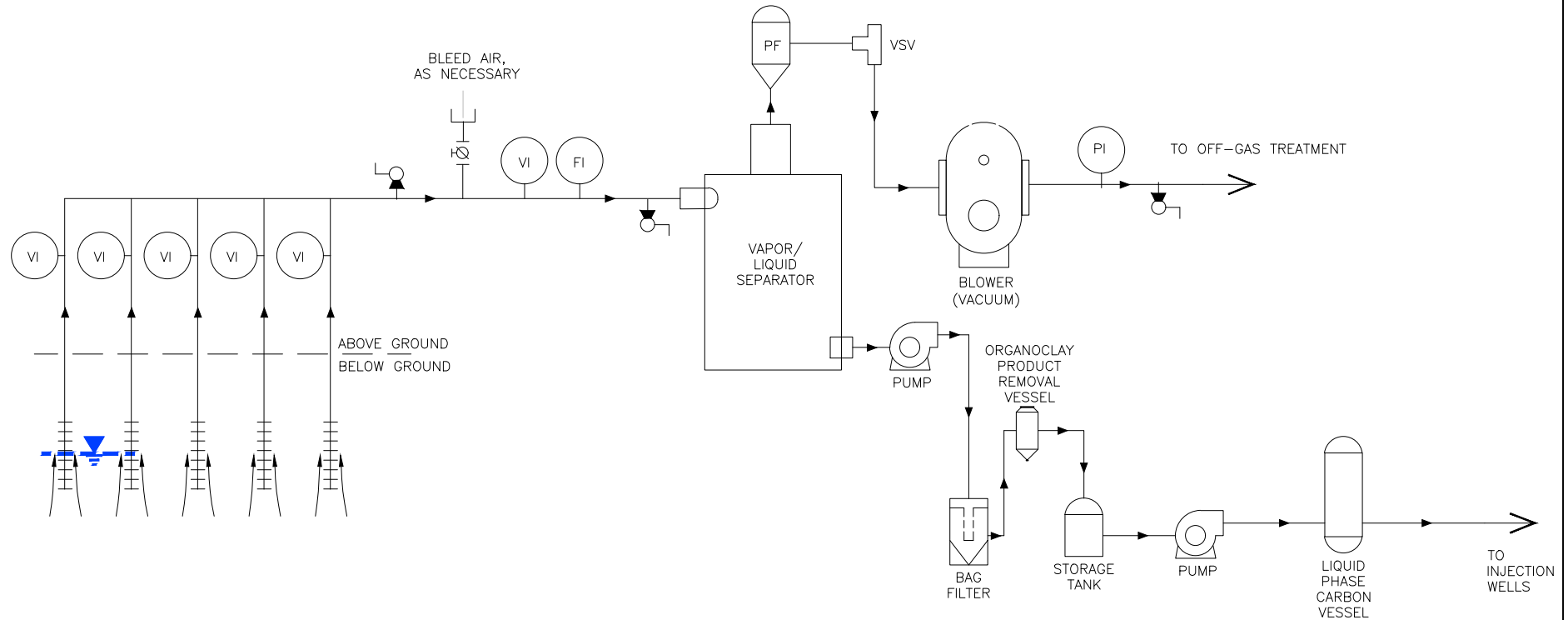
**WSP**  
 WSP USA Environment & Infrastructure, Inc.  
 Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
 REMEDIAL ACTION PLAN MODIFICATION  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:  
**9**

P:\CAD\Preapproval\LakeButler\UNION 76 - SAM JOHN'S\RAPMOD\2024-03\Fig-9.dwg



GENERIC VACUUM EXTRACTION SCHEMATIC  
(NOT TO SCALE)

LEGEND

- PIPING
- POTENTIOMETRIC WATER ELEVATION
- ▶ FLOW DIRECTION
- FLOW CONTROL VALVE
- SAMPLE PORT (TYPICAL)
- LOCALLY MOUNTED INSTRUMENT
- FI FLOW INDICATOR
- PF PARTICULATE FILTER
- PI PRESSURE INDICATOR
- TI TEMPERATURE INDICATOR
- VI VACUUM INDICATOR
- VSV VACUUM SWITCH VALVE

**MULTI-PHASE EXTRACTION SYSTEM  
PROCESS AND INSTRUMENTATION DIAGRAM**

NO.	DATE	REVISIONS
0	Mar-24	Initial Submittal

DESIGNED	DRAWN	CHECKED	DATE
AH	GB		



WSP USA Environment & Infrastructure, Inc.  
Tallahassee, Florida

**UNION 76 - SAM JOHN'S**  
REMEDIAL ACTION PLAN MODIFICATION  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

FIGURE:

**10**

## **TABLES**

I	Soil Cleanup Target Levels
II	Groundwater Cleanup Target Levels
1	Soil Screening Summary
2	Soil Analytical Summary
3	Groundwater Elevation Summary
4	Groundwater Analytical Summary

<b>Table I Soil Cleanup Target Levels</b>			
Chemicals of Concern	Soil Cleanup Target Levels (mg/kg)		
	Industrial	Residential	Leaching
Benzene	1.7	1.2	0.007
Toluene	60,000	7,500	0.5
Ethylbenzene	9,200	1,500	0.6
Xylenes	700	130	0.2
MTBE	24,000	4,400	0.09
Naphthalene	300	55	1.2
1-Methyl Naphthalene	1800	200	3.1
2-Methyl Naphthalene	2100	210	8.5
TRPH	2700	460	340

SCTL - Soil Cleanup Target Levels for Chapter 62-777 Florida Administrative Code.

<b>Table II Groundwater Cleanup Target Levels</b>				
Contaminants of Concern	Current Highest Concentrations (µg/l) (April 2022)	Groundwater Criteria <sup>1</sup> (µg/l)	Natural Attenuation Default Concentration Standards	
			Source (Maximum Concentrations) µg/l	Perimeter (Groundwater Criteria <sup>1</sup> ) µg/l
Benzene	<b>9.9</b>	1	100	1
Ethylbenzene	<b>260</b>	30	300	30
Toluene	20	40	400	40
Xylenes, total	<b>27</b>	20	200	20
Methyl tert-butyl ether	12	20	200	20
TRPHs	4,000	5,000	50,000	5,000
Naphthalene	<b>620</b>	14	140	14
1-Methylnaphthalene	<b>82</b>	28	280	28
2-Methylnaphthalene	<b>120</b>	28	280	28

Notes: µg/l = micrograms per liter.  
MDL = method detection limit.  
PQL = practical quantitation limit.  
FAC = Florida Administrative Code.  
As provided in Chapters 62-520 or 62-550, FAC.

## TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	DEPTH TO WATER (FBS)	SAMPLE INTERVAL (FBS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
SJ-1	2/8/2010	NA	0-2.5	13	0	13	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	0	0	0	
			15-17.5	3,136	0	3,136	
			17.5-20	141	0	141	
SJ-2	2/8/2010	NA	0-2.5	-	-	-	
			2.5-5	-	-	-	
			5-7.5	-	-	-	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	20	0	20	
			15-17.5	5,175	0	5,175	Collect SJ-2 @ 15-17.5'
			17.5-20	50	0	50	
			20-22.5	15	0	15	
22.5-25	5	0	5				
SJ-3	2/8/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	15	0	15	
			7.5-10	3	0	3	
			10-12.5	0	0	0	
			12.5-15	0	0	0	
			15-17.5	2,543	0	2,543	
			17.5-20	120	0	120	
			20-22.5	50	0	50	
22.5-25	20	0	20				
SJ-4	2/8/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	20	0	20	Collect SJ-4 @ 10-12.5'
			12.5-15	30	0	30	
			15-17.5	50,000	0	50,000	
			17.5-20	3,244	0	3,244	
			20-22.5	150	0	150	Collect SJ-4 @ 20-22.5'
22.5-25	50	0	50				

**TABLE 1: SOIL SCREENING SUMMARY**

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	DEPTH TO WATER (FBS)	SAMPLE INTERVAL (FBS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
SJ-5	2/8/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	85	0	85	
			15-17.5	21,442	200	21,242	Collect SJ-5 @ 15-17.5'
			17.5-20	15	0	15	
			20-22.5	0	0	0	
			22.5-25	0	0	0	
SJ-6	2/8/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	20	0	20	
			12.5-15	20	0	20	
			15-17.5	747	100	647	
			17.5-20	1,873	400	1,473	Collect SJ-6 @ 17.5-20'
			20-22.5	265	0	265	
			22.5-25	25	0	25	
SJ-7	2/8/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	88	0	88	
			7.5-10	108	0	108	Collect SJ-7 @ 7.5-10'
			10-12.5	101	0	101	
			12.5-15	1,623	0	1,623	
			15-17.5	50,000	0	50,000	
			17.5-20	575	0	575	
			20-22.5	175	0	175	
			22.5-25	148	0	148	
SJ-8	2/8/2010	NA	0-2.5	-	-	-	
			2.5-5	-	-	-	
			5-7.5	190	0	190	
			7.5-10	78	0	78	
			10-12.5	53	0	53	
			12.5-15	49	0	49	
			15-17.5	5,098	0	5,098	
			17.5-20	544	0	544	
			20-22.5	55	0	55	
			22.5-25	42	0	42	

## TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	DEPTH TO WATER (FBS)	SAMPLE INTERVAL (FBS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
SJ-9	2/8/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	292	0	292	
			7.5-10	5,115	0	5,115	Collect SJ-9 @ 7.5-10'
			10-12.5	131	0	131	
			12.5-15	127	0	127	
			15-17.5	138	0	138	
			17.5-20	60	0	60	
			20-22.5	90	0	90	
			22.5-25	40	0	40	
SJ-10	2/8/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	5	0	5	
			15-17.5	60	0	60	
			17.5-20	60	0	60	
			20-22.5	34	0	34	
			22.5-25	5	0	5	
SJ-11	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	12	0	12	
			15-17.5	22,473	43	22,430	
			17.5-20	80	0	80	
			20-22.5	5	0	5	
			22.5-25	5	0	5	
SJ-12	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	10	0	10	
			15-17.5	25,682	100	25,582	Collect SJ-12 @ 15-17.5'
			17.5-20	550	0	550	
			20-22.5	14	0	14	
			22.5-25	9	0	9	

## TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	DEPTH TO WATER (FBS)	SAMPLE INTERVAL (FBS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
SJ-13	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	12	0	12	
			15-17.5	5,999	0	5,999	
			17.5-20	132	0	132	
			20-22.5	105	0	105	
			22.5-25	150	0	150	
SJ-14	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	115	0	115	
			7.5-10	130	0	130	Collect SJ-14 @ 7.5-10'
			10-12.5	15	0	15	
			12.5-15	7	0	7	
			15-17.5	9,387	0	9,387	
			17.5-20	442	0	442	
			20-22.5	15	0	15	
			22.5-25	13	0	13	
SJ-15	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	3	0	3	
			5-7.5	22	0	22	
			7.5-10	18	0	18	
			10-12.5	10	0	10	
			12.5-15	34	0	34	
			15-17.5	11,581	0	11,581	
			17.5-20	123	0	123	
			20-22.5	45	0	45	
			22.5-25	30	0	30	
SJ-16	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	2	0	2	
			5-7.5	55	0	55	
			7.5-10	70	0	70	Collect SJ-16 @ 7.5-10'
			10-12.5	0	0	0	
			12.5-15	32	0	32	
			15-17.5	50,000	0	50,000	
			17.5-20	1,980	0	1,980	
			20-22.5	20	0	20	
			22.5-25	20	0	20	

**TABLE 1: SOIL SCREENING SUMMARY**

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	DEPTH TO WATER (FBS)	SAMPLE INTERVAL (FBS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
SJ-17	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	5	0	5	
			7.5-10	7	0	7	
			10-12.5	0	0	0	
			12.5-15	0	0	0	
			15-17.5	0	0	0	
			17.5-20	0	0	0	
			20-22.5	0	0	0	
			22.5-25	0	0	0	
SJ-18	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	0	0	0	
			15-17.5	0	0	0	
			17.5-20	0	0	0	
			20-22.5	273	0	273	
			22.5-25	345	0	345	Collect SJ-18 @ 22.5-25'
SJ-19	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	0	0	0	
			15-17.5	0	0	0	
			17.5-20	0	0	0	
			20-22.5	0	0	0	
			22.5-25	5	0	5	
SJ-20	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	0	0	0	
			15-17.5	0	0	0	
			17.5-20	0	0	0	
			20-22.5	0	0	0	
			22.5-25	0	0	0	

**TABLE 1: SOIL SCREENING SUMMARY**

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	DEPTH TO WATER (FBS)	SAMPLE INTERVAL (FBS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
SJ-21	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	322	0	322	
			7.5-10	640	0	640	
			10-12.5	132	0	132	
			12.5-15	39,273	12	39,261	Collect SJ-21 @ 12.5-15'
			15-17.5	854	4	850	
			17.5-20	199	0	199	
			20-22.5	91	0	91	
			22.5-25	30	0	30	
SJ-22	2/9/2010	NA	0-2.5	0	0	0	
			2.5-5	0	0	0	
			5-7.5	0	0	0	
			7.5-10	0	0	0	
			10-12.5	0	0	0	
			12.5-15	0	0	0	
SJ-23	2/12/2019	11	0-2	0	-	0	
			2-4	0	-	0	
			4-6	128.3	65.1	63.2	
			6-8	143	42.6	100.4	Collect SJ-23 @ 6-7'
			8-10	119.1	36.9	82.2	
			10-12	692	16.2	675.8	
SJ-25	2/12/2019	3	0-2	0	-	0	Collect SJ-25 @ 0-2'
			2-4	0	-	0	
			4-6	0	-	0	
			6-8	0	-	0	
			8-10	0	-	0	
			10-12	0	-	0	
SJ-26	2/12/2019	10	0-2	0	-	0	
			2-4	6.7	-	6.7	
			4-6	1,701	12.5	1,688.5	Collect SJ-26 @ 4-6'
			6-8	1,362	7.9	1,354.1	
			8-10	161.8	20.9	140.9	
			10-12	899.1	30.7	868.4	
SJ-27	2/12/2019	10	0-2	6	-	6	Collect SJ-27 @ 0-2'
			2-4	0	-	0	
			4-6	0	-	0	
			6-8	27.2	17.3	9.9	
			8-10	810.3	23.8	786.5	
			10-12	42	17.2	24.8	

## TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	DEPTH TO WATER (FBS)	SAMPLE INTERVAL (FBS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
SJ-28	2/12/2019	4	0-2	0	-	0	Collect SJ-28 @ 6-7'
			2-4	0	-	0	
			4-6	>3,328	272.1	>3,328	
			6-8	2,406	101.9	2,304.1	
			8-10	1,029	58.1	970.9	
			10-12	561.4	12	549.4	
SJ-29	2/12/2019	6	0-2	5.2	-	5.2	Collect SJ-29 @ 6-7'
			2-4	0.3	-	0.3	
			4-6	25.9	15.6	10.3	
			6-8	>3,328	192.2	>3,328	
			8-10	1,707	76	1,631	
			10-12	1,472	122.3	1,349.7	
SJ-30	2/12/2019	10	0-2	0	-	0	Collect SJ-30 @ 0-2'
			2-4	0	-	0	
			4-6	0	-	0	
			6-8	0	-	0	
			8-10	77.7	6.9	70.8	
			10-12	21.8	1.4	20.4	
MW-74S	11/7/2023	8	0-2	0	-	0	
			2-4	0	-	0	
			4-6	0	-	0	
			6-8	0	-	0	
			8-10	0	-	0	
			10-12	0	-	0	
			12-14	0	-	0	
			16-18	0	-	0	
MW-75S	11/7/2023	10	0-2	0	-	0	Collect MW-75S @ 8-10'
			2-4	0	-	0	
			4-6	6	2	4	
			6-8	37	11	26	
			8-10	75	10	65	
			10-12	41	12	29	
			12-14	53	9	42	
			16-18	25	5	20	
MW-76S	11/8/2023	10	0-2	0	-	0	Collect MW-76S @ 8-10'
			2-4	0	-	0	
			4-6	0	-	0	
			6-8	191	7	184	
			8-10	2,279	44	2,235	
			10-12	5,990	111	5,879	
			12-14	7,697	304	7,393	
			14-16	16,700	305	16,395	
16-18	13,800	285	13,515				

## TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	DEPTH TO WATER (FBS)	SAMPLE INTERVAL (FBS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
MW-77S	11/8/2023	10	0-2	0	-	0	
			2-4	0	-	0	
			4-6	0	-	0	
			6-8	0	-	0	
			8-10	0	-	0	
			10-12	0	-	0	
			12-14	0	-	0	
			14-16	0	-	0	
			16-18	0	-	0	

Notes: OVA = Organic Vapor Analyzer  
 fbs = Depths in feet below land surface  
 ppm = Parts per million

**TABLE 2: SOIL ANALYTICAL SUMMARY**

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

Sample			OVA	Laboratory Analysis													
Location	Sample Interval	Date	OVA	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	Naphthalene	1-Methyl naphthale	2-Methyl naphthale	Benzo [a] anthracene	Fluoran thene	Fluorene	Phenan threne	Pyrene	TRPH
FDEP Leachability SCTL (mg/Kg)				0.007	0.5	0.6	0.2	0.09	1.2	3.1	8.5	0.8	1200	160	250	880	340
SJ-2	15-17.5	2/8/2010	5,175	1.2 U	<b>1.6 I</b>	<b>12</b>	<b>61</b>	2.3 U	0.0077 I	0.023	0.047	0.00036 U	0.00036 U	0.00028 U	0.0015 I	0.00039 U	8.4 I
SJ-4	10-12.5	2/8/2010	20	<b>0.020</b>	0.0025 U	0.0020 U	0.0025 U	0.0059 I	0.00038 U	0.00096 I	0.0016 I	0.00036 U	0.00036 U	0.00029 U	0.00051 U	0.00040 U	5.2 I
	20-22.5	2/8/2010	150	0.0024 U	0.036	0.013	0.13	0.0049 U	0.0013 I	0.0023 I	0.0037 I	0.00035 U	0.00035 U	0.00028 U	0.00048 U	0.00038 U	4.3 I
SJ-5	15-17.5	2/8/2010	21,242	<b>1.2</b>	<b>6.2</b>	0.50	<b>2.9</b>	0.45 U	0.049	0.095	0.18	0.00066 I	0.0014 I	0.0028 I	0.0055 I	0.0016 I	16
SJ-6	17.5-20	2/8/2010	1,473	1.5 U	1.5 U	<b>100</b>	<b>2.1 I</b>	3.1 U	0.74	1.3	2.7	0.0035 U	0.0035 U	0.019 I	0.027 I	0.0039 U	49
SJ-7	7.5-10	2/8/2010	108	0.0024 U	0.0024 U	0.0039 I	0.0024 U	0.0048 U	0.00036 U	0.0031 I	0.0026 I	0.00035 U	0.0011 I	0.00028 U	0.0029 I	0.0012 I	13
SJ-9	7.5-10	2/8/2010	5,115	<b>0.76</b>	<b>2.8</b>	<b>0.88</b>	<b>4.9</b>	<b>2.9</b>	0.017	0.049	0.11	0.00035 U	0.0013 I	0.0020 I	0.0047 I	0.0015 I	15
SJ-12	15-17.5	2/9/2010	25,582	<b>1.9</b>	<b>19</b>	<b>5.5</b>	<b>28</b>	0.98 U	0.21	0.19	0.46	0.00082 I	0.0016 I	0.0033 I	0.0069 I	0.0022 I	39
SJ-14	7.5-10	2/9/2010	130	0.0048	0.016	0.0023 I	0.011 I	0.0041 U	0.0020 I	0.0014 I	0.0031 I	0.00034 U	0.00034 U	0.00028 U	0.00048 U	0.00038 U	4.3 I
SJ-16	7.5-10	2/9/2010	70	0.0026 U	0.0026 U	0.0021 U	0.0026 U	0.0052 U	0.00041 U	0.0017 I	0.0038 I	0.00039 U	0.00039 U	0.00031 U	0.00088 I	0.00043 U	4.5 I
SJ-18	22.5-25	2/9/2010	345	<b>0.15</b>	<b>0.72</b>	0.098 I	<b>0.39</b>	0.13 U	0.0021 I	0.0010 I	0.0017 I	0.00035 U	0.00035 U	0.00028 U	0.00049 U	0.00038 U	2.7 U
SJ-21	12.5-15	2/9/2010	39,251	<b>0.97</b>	<b>5.0</b>	<b>1.9</b>	<b>9.8</b>	0.30 U	<b>7.4</b>	<b>7.2</b>	<b>18</b>	0.0086 U	0.018 I	0.079 I	0.11 I	0.030 I	300
SB-2	8-10	3/11/2013	0	0.0013 U	0.0014 U	0.0013 U	0.0039 U	0.0013 U	0.00060 U	0.00062 U	0.00060 U	0.00072 U	0.00070 U	0.00060 U	0.00051 U	0.00060 U	20 V
SB-3	16-18	3/11/2013	>50,000	0.067 U	0.073 U	0.067 U	<b>0.38 I</b>	0.067 U	0.41	0.86	1.9	0.0034 U	0.0062 I	0.019 I	0.031 I	0.012 I	50 V
SB-4	14-16	3/11/2013	47,550	0.58 U	<b>11</b>	<b>5.2</b>	<b>35</b>	0.58 U	0.033	0.067	0.14	0.0024 I	0.0051 I	0.0075 I	0.018	0.0050 I	31 V
SB-5	4-6	3/11/2013	7,662	0.0011 U	0.0012 U	0.0011 U	0.0033 U	0.0011 U	0.00058 U	0.00059 U	0.00058 U	0.00069 U	0.00067 U	0.00058 U	0.00049 U	0.00058 U	4.7 IV
SB-6	10-12	3/11/2013	0	0.0012 U	0.0013 U	0.0012 U	0.0037 U	0.0012 U	0.00068 U	0.00069 U	0.00068 U	0.00081 U	0.00078 U	0.00068 U	0.00058 U	0.00068 U	10 IV
SB-7	6-8	3/12/2013	1,158	0.0011 U	0.0012 U	0.0015 I	0.0033 U	0.0011 U	0.00060 U	0.012	0.0060 I	0.00072 U	0.00070 U	0.00060 U	0.00051 U	0.00060 U	6.0 IV
SB-8	8-10	3/12/2013	9	0.0010 U	0.0011 U	0.0010 U	0.0031 U	0.0010 U	0.00062 U	0.00063 U	0.00062 U	0.00073 U	0.00071 U	0.00062 U	0.00052 U	0.00062 U	7.0 IV
SB-9	8-10	3/12/2013	0	0.0010 U	0.0011 U	0.0010 U	0.0032 U	0.0010 U	0.00061 U	0.00062 U	0.00061 U	0.00073 U	0.00071 U	0.00061 U	0.00052 U	0.00061 U	7.1 IV
SB-10	6-8	3/12/2013	67	0.0011 U	0.0012 U	0.0011 U	0.0033 U	0.0011 U	0.00061 U	0.00062 U	0.00061 U	0.00073 U	0.00070 U	0.00061 U	0.00052 U	0.00061 U	7.6 IV
SB-11	2-4	3/13/2013	0	0.0012 U	0.0013 U	0.0012 U	0.0037 U	0.0012 U	0.00055 U	0.00056 U	0.00055 U	0.00065 U	0.00063 U	0.00055 U	0.00046 U	0.00055 U	14 V
SB-12	2-4	3/13/2013	0	0.0012 U	0.0013 U	0.0012 U	0.0036 U	0.0012 U	0.00057 U	0.00058 U	0.00057 U	0.0019 I	0.00065 U	0.00057 U	0.00048 U	0.0032 I	160
SB-13	8-10	3/13/2013	0	0.0012 U	0.0013 U	0.0012 U	0.0037 U	0.0012 U	0.00066 U	0.00067 U	0.00066 U	0.00079 U	0.00076 U	0.00066 U	0.00056 U	0.00066 U	3.2 U
SJ-23	6-7	2/12/2019	100.4	0.00086 U	0.00062 U	0.00050 U	0.00071 U	0.0015 U	0.0030 U	0.0024 U	0.0030 U	0.0047 U	0.0039 U	0.0030 U	0.0033 U	0.0045 U	9.5 U
SJ-25	0-2	2/12/2019	0	0.00083 U	0.00060 U	0.00048 U	0.00069 U	0.0015 U	0.0025 U	0.0020 U	0.0025 U	0.0039 U	0.0032 U	0.0025 U	0.0027 U	0.0038 U	8.0 U
SJ-26	4-6	2/12/2019	1,688.5	0.00067 U	0.00048 U	0.00098 I	0.0019 I	0.0012 U	0.067	0.26	0.25	0.0042 U	0.0034 U	0.011	0.014	0.0052 I	120
SJ-27	0-2	2/12/2019	6	0.00065 U	0.00046 U	0.00037 U	0.00053 U	0.0011 U	0.0040 I	0.0026 I	0.0043 I	0.0039 U	0.0032 U	0.0025 U	0.0027 U	0.0038 U	8.0 U
SJ-28	6-7	2/12/2019	2,304.1	0.00079 U	0.00057 U	0.00046 U	0.00065 U	0.0014 U	0.0027 U	0.0021 U	0.0027 U	0.0042 U	0.0035 U	0.0027 U	0.0029 U	0.0040 U	12 I
SJ-29	6-7	2/12/2019	>3,328	0.00052 U	0.00038 I	0.074	0.0076	0.00091 U	<b>4.3</b>	<b>5.7</b>	<b>11</b>	0.0073 I	0.011	0.066	0.088	0.019	<b>480</b>
SJ-30	0-2	2/12/2019	0	0.00077 U	0.00056 U	0.00045 U	0.00064 U	0.0014 U	0.0024 U	0.0020 U	0.0025 U	0.0039 U	0.0032 U	0.0024 U	0.0027 U	0.0037 U	7.8 U
MW-75S	8-10	11/8/2023	65	0.00030 U	0.00047 U	0.00039 U	0.0011 U	0.00044 U	0.0059 U	0.0033 U	0.0033 U	0.0026 U	0.0023 U	0.0029 U	0.0023 U	0.0021 U	140
MW-76S	8-10	11/8/2023	2,235	0.00027 U	0.00041 U	0.0033	0.00097 U	0.00038 U	0.0058 U	0.018	0.030	0.0025 U	0.0022 U	0.0028 U	0.0023 U	0.0021 U	29

Analytical Results reported in milligrams per kilograms

OVA Results reported in parts per million

Sample Interval = feet below land surface

SCTL's = Soil Cleanup Target Levels from Chapter 62-777, F.A.C.

**Bold indicates reported concentration exceeded SCTLs based on leachability**

U = Indicates the compound was analyzed for but not detected.

I = Indicates the reported value is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit (PQL).

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

**TABLE 3: GROUNDWATER ELEVATION SUMMARY**

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

WELL NO.	MW-18S			MW-18D			MW-19S			MW-25S			MW-26S			MW-27I			
DIAMETER	2			2			2			2			2			2			
WELL DEPTH	40.00			75.00			19.00			18.00			18.00			40.00			
SCREEN INTERVAL	30-40			70-75			9-19			8-18			8-18			30-40			
TOC ELEVATION	140.35			140.60			141.90			142.14			142.51			143.13			
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	
1/21/2010	130.04	10.31		124.28	16.32		130.15	11.75		131.32	10.82		131.56	10.95				CNL	
3/26/2013	132.60	7.75		126.15	14.45		133.42	8.48		134.12	8.02		133.56	8.95				CNL	
9/3/2014	134.55	5.80					135.40	6.50		136.22	5.92		135.01	7.50		129.03			14.10
7/28/2015		NM			NM		134.15	7.75		134.92	7.22		134.16	8.35					NM
9/25/2017	135.59	4.76		Access Blocked			136.22	5.68		Access Blocked			135.87	6.64					NM
10/16/2017	133.95	6.40					134.92	6.98			NM		135.00	7.51					NM
3/26/2018	133.46	6.89			NM			NM		136.03	6.11		133.81	8.70					NM
2/13/2019	134.97	5.38			NM		135.38	6.52		Access Blocked			135.35	7.16					NM
2/17/2020	131.47	8.88		125.60	15.00		131.67	10.23		Access Blocked			131.86	10.65		127.49			15.64
10/1/2020	134.26	6.09		127.79	12.81		134.59	7.31		Access Blocked			134.63	7.88		130.27			12.86
8/11/2021	135.60	4.75		130.26	10.34		135.84	6.06			CNL		135.96	6.55		133.11			10.02
2/8/2022		NM			NM		132.87	9.03			NM		132.87	9.64					NM
4/18/2022		NM			NM		134.57	7.33			NM		134.77	7.74					NM
5/16/2022		NM			NM		134.02	7.88			NM		134.20	8.31					NM
6/15/2022		NM			NM		133.52	8.38			NM		133.35	9.16					NM
11/22/2023		NM			NM		131.91	9.99		133.17	8.97		131.99	10.52					NM

WELL NO.	MW-28I			MW-29S			MW-39I			MW-70S			MW-71S			MW-72S			
DIAMETER	2			2			2			2			2			2			
WELL DEPTH	40.00			15.00			40.00			16.00			18.00			18.00			
SCREEN INTERVAL	30-40			5-15			30-40			4-16			8-18			8-18			
TOC ELEVATION	140.54			142.01			142.63			140.43			141.98			142.70			
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	
1/21/2010	124.22	16.32			CNL			CNL			NI			NI				NI	
3/26/2013	126.09	14.45			CNL		126.06	16.57		134.90	5.53		132.68	9.30		132.59	10.11		0.03
9/3/2014	129.12	11.42			CNL			NM			NM		134.32	7.66	0.50	132.05	10.65		2.50
10/15/2014		NM			CNL			NM			NM		134.03	7.95	0.54	131.52	11.18		3.77
11/11/2014		NM			CNL			NM			NM		132.58	9.40	0.55	129.36	13.34		4.69
7/28/2015		NM			CNL			NM		136.13	4.30		133.65	8.33	0.08	Access Blocked			
9/25/2017	130.00	10.54			CNL			NM			NM		135.67	6.31	0.04	135.80	6.90		0.10
10/16/2017		NM			CNL			NM			NM		134.78	7.20	0.02	133.45	9.25		1.71
3/26/2018		NM			CNL			NM			NM		133.51	8.47	0.05	133.49	9.21		0.08
2/13/2019		NM			CNL			NM		135.98	4.45		134.86	7.12	0.27	134.96	7.74		0.10
2/17/2020		NM			CNL			CNL		134.38	6.05		131.03	10.95	0.68	130.91	11.79		0.80
10/1/2020		NM			CNL			CNL		136.18	4.25		133.94	8.04	0.49	134.00	8.70		0.43
8/11/2021		NM			CNL			CNL		136.32	4.11		134.86	7.12	0.06	135.74	6.96		0.82
2/8/2022		NM			CNL			CNL			NM		132.15	9.83	0.64	132.17	10.53		0.62
3/9/2022		NM			CNL			CNL			NM		132.26	9.72	0.26	131.78	10.92		0.71
4/18/2022		NM		134.90	7.11			CNL			NM		134.38	7.60	0.02	134.38	8.32		sheen
5/16/2022		NM		134.23	7.78			CNL			NM		133.67	8.31	0.06	133.70	9.00		0.01
6/15/2022		NM		133.62	8.39			CNL			NM		133.17	8.81	0.02	133.16	9.54		0.04
11/22/2023		NM			NM			CNL			NM		131.40	10.58	10.21	131.57	11.13		11.02

WELL NO.	MW-73S			MW-74S			MW-75S			MW-76S			MW-77S		
DIAMETER	2			2			2			2			2		
WELL DEPTH	18.00			17.50			17.50			17.50			17.50		
SCREEN INTERVAL	8-18			7.5-17.5			7.5-17.5			7.5-17.5			7.5-17.5		
TOC ELEVATION	141.83			142.75			142.80			142.64			142.82		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
3/26/2013	132.57	9.26													
9/3/2014	134.52	7.31													
7/28/2015	133.57	8.26													
9/25/2017	135.58	6.25													
10/16/2017	134.70	7.13													
2/13/2019	134.96	6.87													
2/17/2020	131.43	10.40													
10/1/2020	135.06	6.77													
8/11/2021	135.41	6.42													
2/8/2022	132.57	9.26													
4/18/2022	134.34	7.49													
5/16/2022	133.65	8.18													
6/15/2022	132.96	8.87													
11/22/2023		NM		131.35	10.48		130.19	11.64		131.33	10.50	10.47	130.43	11.40	

Notes: All Measurements = Feet  
 NM = Not Measured  
 CNL = Cannot Locate  
 No Data = Blank  
 FP = Free Product Well  
 MW = Monitoring Well  
 DTW = Depth to Water  
 NI = Not Installed

**TABLE 4: GROUNDWATER ANALYTICAL SUMMARY**

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

Sample Location	Date	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	EDB	Total Lead	TRPH	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene
GCTL (ug/L)		1	40	30	20	20	0.02	15	5000	14	28	28
MW-18S	3/17/03	130	6.4	19	5.6	200	<0.02	NA	NA	27	6	1
	6/2/03	110	12	30	<20	100	<0.02	NA	NA	94	9.9	14
	11/14/03	250	15	190	75	<50	0.07	NA	NA	80	12	20
	6/29/04	1300	1500	450	4500	130	NA	NA	NA	NA	NA	NA
	10/6/04	100	41	25	450	150	0.2	NA	NA	81	28	50
	9/22/05	340	2.4	88	<20	36	NA	NA	620	NA	NA	NA
	1/21/10	30	0.38 l	0.65 l	0.70 l	100	NA	NA	NA	NA	NA	NA
	3/26/13	14	0.77 l	4.8	1.9 l	33	NA	NA	NA	NA	NA	NA
	9/3/14	7.0	0.90 l	4.9	2.8 l	21	NA	NA	NA	NA	NA	NA
	9/25/17	5.8	0.49 U	0.38 U	1.1 U	34	NA	NA	NA	NA	NA	NA
	12/22/17	0.18 U	0.49 U	1.8	2.2	15	NA	NA	600 U	0.37	0.20 U	0.20 U
	3/26/18	3.3	0.45 U	0.26 U	0.56 U	14	NA	NA	620 U	1.3	0.53	0.20 U
	2/17/20	0.18 U	0.49 U	0.38 U	1.1 U	10	0.015 U	NA	NA	NA	NA	NA
	10/1/20	0.18 U	0.49 U	0.38 U	1.1 U	13	0.015 U	NA	NA	NA	NA	NA
8/11/21	0.18 U	0.49 U	3.1	1.1 U	13	0.017 U	NA	NA	NA	NA	NA	
MW-18D	1/21/10	0.28 U	0.25 l	0.25 U	0.68 U	42	NA	NA	NA	NA	NA	NA
	3/26/13	0.13 U	0.14 U	0.16 U	0.44 U	46	NA	NA	NA	NA	NA	NA
	2/17/20	0.18 U	0.49 U	0.38 U	1.1 U	23	NA	NA	NA	NA	NA	NA
	10/1/20	0.18 U	0.49 U	0.38 U	1.1 U	21	NA	NA	NA	NA	NA	NA
	8/11/21	0.18 U	0.49 U	0.38 U	1.1 U	19	NA	NA	NA	NA	NA	NA
MW-19S	11/14/03	2,100	1,800	350	4,500	730	6	NA	NA	270	75	150
	6/29/04	1,300	1,500	450	4,600	130	NA	NA	NA	NA	NA	NA
	10/6/04	100	41	25	450	150	0.2	NA	NA	81	28	50
	6/6/06	270	36	<1.0	150	140	NA	NA	2,400	NA	NA	NA
	12/1/06	480	250	620	1,000	32 l	NA	NA	4,700	91	15	26
	4/4/07	945	2,130 V	352	1,830	98.0 l	NA	NA	10,800	NA	NA	NA
	6/20/07	752	4,210	936	4,440	<3.1	NA	NA	10,500	NA	NA	NA
	9/11/07	1,160	4,500	521	2,520	<39	NA	NA	13,200	NA	NA	NA
	12/11/07	2,290	3,180	488	2,170	<16	NA	NA	6,730	NA	NA	NA
	3/13/08	3.16	1.33	0.850 i	9.23	2.72 i	NA	NA	0.00 i	NA	NA	NA
	6/30/08	31.1	18.4	3.15	22.3	4.74 i	NA	NA	2,980	NA	NA	NA
	9/24/08	31.4	1.75	0.540 i	2.34 i	5.42	NA	NA	473 i	NA	NA	NA
	1/6/09	1.19	ND[0.470]	ND[0.520]	1.19 i	0.490 i	NA	NA	NA	NA	NA	NA
	1/21/10	170	60	43	160	11	NA	NA	NA	NA	NA	NA
	3/26/13	160	120	74	180	3.9	NA	NA	NA	NA	NA	NA
	9/3/14	29	2.2	23	8.9	2.3	NA	NA	270 l	3.3	0.54	0.81
	7/28/15	3.0	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	NA	NA	NA	NA
9/25/17	27	7.8	33	21	1.0	NA	NA	NA	NA	NA	NA	
2/13/19	3.7	0.45 U	2.0	0.56 U	0.41 U	NA	NA	NA	1.3	0.22 U	0.21 U	
2/17/20	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.015 U	NA	NA	NA	NA	NA	
10/1/20	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.015 U	NA	NA	NA	NA	NA	
8/11/21	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.015 U	NA	NA	NA	NA	NA	
11/22/23	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	600 U	0.19 U	0.20 U	0.20 U	
MW-25 S	1/24/02	<1	<1	<1	<2	<10	NA	NA	NA	NA	NA	NA
	3/17/03	1.4	<1	<1	<2	<1	NA	NA	NA	<0.2	<0.2	<0.2
	6/2/03	2.4	<1	<1	<2	<10	<0.02	NA	NA	<0.2	<0.2	<0.2
	11/14/03	4.6	<1	<1	<2	12	<0.02	NA	NA	NA	NA	NA
	10/6/04	<1	<1	<1	<2	<1	NA	NA	NA	NA	NA	NA
	1/21/10	0.73 l	0.24 U	0.25 U	0.68 U	1.8	NA	NA	NA	NA	NA	NA
	3/26/13	0.64 l	0.14 U	0.16 U	0.44 U	0.62 l	NA	NA	NA	NA	NA	NA
	9/3/14	2.2	0.23 U	0.24 U	0.53 U	0.96 l	NA	NA	NA	NA	NA	NA
	7/28/15	1.4	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	NA	NA	NA	NA
	12/22/17	3.3	0.49 U	0.38 U	1.1 U	0.69 l	NA	NA	600 U	0.19 U	0.20 U	0.20 U
	3/26/18	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	NA	NA	610 U	0.19 U	0.20 U	0.20 U
	11/22/23	3.9	0.49 U	1.1	9.6	1.3	NA	NA	3,000 U	1.9 U	2.0 U	2.0 U

**TABLE 4: GROUNDWATER ANALYTICAL SUMMARY**

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

Sample Location	Date	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	EDB	Total Lead	TRPH	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene
GCTL (ug/L)		1	40	30	20	20	0.02	15	5000	14	28	28
<b>MW-26 S</b>	6/20/07	<b>Free Product</b>										
	9/11/07	6.00	7.59	2.48	16.0	1.49 I	NA	NA	6,800	NA	NA	NA
	12/11/07	9.98	19.1	4.33	24.1	1.12 I	NA	NA	392 I	NA	NA	NA
	3/13/08	14.40	6.32	1.64	28.3	3.74 I	NA	NA	225 I	0.0894 I	ND[0.032]	ND[0.098]
	6/30/08	8.64	1.44	0.610 I	2.45 I	1.09 I	NA	NA	491 I	NA	NA	NA
	9/24/08	ND[0.17]	ND[0.21]	ND[0.17]	ND[0.55]	0.590 I	NA	NA	182 I	NA	NA	NA
	1/6/09	12.80	ND[0.470]	ND[0.520]	ND[0.980]	0.960 I	NA	NA	NA	NA	NA	NA
	1/21/10	28 U	98 I	210	1300	21 U	NA	NA	NA	NA	NA	NA
	3/26/13	5.7	0.14 U	0.16 U	0.88 I	0.63 I	NA	NA	NA	NA	NA	NA
	9/3/14	4.0	0.44 I	0.24 U	2.1 I	1.2	NA	NA	180 I	0.35	0.11 I	0.20
	7/28/15	4.5	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	NA	NA	NA	NA
	9/25/17	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	NA	NA	NA	NA
	12/22/17	0.18 U	0.49 U	0.38 U	1.1 U	0.38 I	NA	NA	600 U	0.19 U	0.20 U	0.20 U
	3/26/18	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	NA	NA	620 U	0.20 U	0.21 U	0.20 U
	2/13/19	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	NA	NA	NA	0.21 U	0.22 U	0.21 U
	8/11/21	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	NA	NA	NA	NA
<b>MW-28I</b>	11/14/03	1.8	1.2	71	<2	<10	NA	NA	NA	NA	NA	NA
	2/18/04	4.1	9.8	53	7.5	4.2	NA	NA	NA	NA	NA	NA
	10/6/04	480	4.5	110	44	63	NA	NA	NA	NA	NA	NA
	9/22/05	43	2.6	330	<20	6	NA	NA	NA	NA	NA	NA
	1/21/10	220	2.8 I	5.4 I	38	7.7 I	NA	NA	NA	NA	NA	NA
	9/3/14	0.21 U	0.23 U	0.24 U	0.53 U	2.0	NA	NA	0.14	0.18 I	0.047 U	170 I
	9/25/17	0.18 U	0.49 U	0.38 U	1.1 U	2.0	NA	NA	NA	NA	NA	NA
<b>MW-27IR</b>	8/26/10	0.68 I	4.4	3.6	12	0.21 U	NA	NA	NA	NA	NA	NA
	9/3/14	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	160 I	0.054 U	0.049 U	0.046 U
	2/17/20	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.015 U	NA	NA	NA	NA	NA
	10/1/20	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.015 U	NA	NA	NA	NA	NA
	8/11/21	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.016 U	NA	NA	NA	NA	NA
<b>MW-39I</b>	3/26/13	0.13 U	0.14 U	0.16 U	0.44 U	1.5	NA	NA	NA	NA	NA	NA
<b>MW-70S</b>	3/26/13	0.13 U	0.18 I	0.16 U	0.44 U	0.13 U	NA	NA	120 IV	0.040 U	0.040 U	0.031 U
	7/28/15	0.36 U	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	NA	NA	NA	NA
	2/13/19	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	NA	NA	NA	0.19 U	0.20 U	0.20 U
	8/11/21	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	NA	NA	NA	NA
<b>MW-71S</b>	3/26/13	2,700	11,000	2,200	12,000	3,400	NA	NA	25,000	720	94	190
	9/3/14	<b>FREE PRODUCT</b>										
	7/28/15	<b>FREE PRODUCT</b>										
	9/25/17	<b>FREE PRODUCT</b>										
	3/26/18	<b>FREE PRODUCT</b>										
	2/13/19	<b>FREE PRODUCT</b>										
	2/17/20	<b>FREE PRODUCT</b>										
	8/11/21	<b>FREE PRODUCT</b>										
	11/22/23	<b>FREE PRODUCT</b>										
<b>MW-72S</b>	9/3/14	<b>FREE PRODUCT</b>										
	7/28/15	<b>FREE PRODUCT</b>										
	9/25/17	<b>FREE PRODUCT</b>										
	12/22/17	<b>FREE PRODUCT</b>										
	3/26/18	<b>FREE PRODUCT</b>										
	2/13/19	<b>FREE PRODUCT</b>										
	2/17/20	<b>FREE PRODUCT</b>										
	8/11/21	<b>FREE PRODUCT</b>										
	11/22/23	<b>FREE PRODUCT</b>										
<b>MW-73S</b>	3/26/13	2.3	9.8	3.7	13	0.59 I	NA	NA	220 IV	0.57	0.10 I	0.16 I
	9/3/14	5.7	0.23 U	0.24 U	0.53 U	3.5	NA	NA	NA	NA	NA	NA
	7/28/15	0.36 U	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	NA	NA	NA	NA
	9/25/17	0.18 U	0.49 U	0.38 U	1.1 U	3.0	NA	NA	NA	NA	NA	NA
	2/13/19	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	NA	NA	NA	0.21 U	0.22 U	0.21 U
	8/11/21	0.18 U	0.49 U	0.38 U	1.1 U	2.6	NA	NA	NA	NA	NA	NA

**TABLE 4: GROUNDWATER ANALYTICAL SUMMARY**

Facility Name: Union 76 - Sam Johns

Facility ID#: 63/8519168

Sample Location	Date	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	EDB	Total Lead	TRPH	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene
<b>GCTL (ug/L)</b>		<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>20</b>	<b>0.02</b>	<b>15</b>	<b>5000</b>	<b>14</b>	<b>28</b>	<b>28</b>
MW-74S	11/22/23	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	NA	NA	3,000 U	1.9 U	2.0 U	2.0 U
MW-75S	11/22/23	0.18 U	0.49 U	18	<b>95</b>	0.24 U	NA	NA	3,000 U	7.3	27	<b>53</b>
MW-76S	11/22/23	<b>FREE PRODUCT</b>										
MW-77S	11/22/23	0.18 U	0.49 U	<b>71</b>	<b>410</b>	0.24 U	NA	NA	2,000	<b>19</b>	6.6	12
<b>SPLP</b>												
SJ-4 (10-12.5 ft)	2/8/10	0.48 I	1.6 I	1.2 I	3.7 I	2.0 I	NA	NA	NA	NA	NA	NA
SJ-9 (7.5-10 ft)	2/8/10	<b>1.1</b>	11	12	<b>79</b>	<b>51</b>	NA	NA	NA	NA	NA	NA
SJ-21 (12.5-15 ft)	2/9/10	<b>36</b>	<b>170</b>	<b>40</b>	<b>220</b>	0.74 U	NA	NA	NA	NA	NA	NA
SB-3 (16-18 ft)	3/11/13	<b>3.8</b>	20	4.5	<b>26</b>	0.74 U	NA	NA	NA	NA	NA	NA
SB-4 (14-16 ft)	3/11/13	0.34 U	0.70 U	1.2	17	0.74 U	NA	NA	NA	NA	NA	NA
SJ-29 (6-7 ft)	2/12/19	NA	NA	NA	NA	NA	NA	NA	NA	<b>160</b>	<b>150</b>	<b>240</b>

Analytical results reported in micrograms per liter

**Bold indicates reported concentration exceeded GCTLs**

U = Indicates that the compound was analyzed for but not detected at the quantitation limit. The value associated with the qualifier is the method detection limit

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

NA = Not Analyzed

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

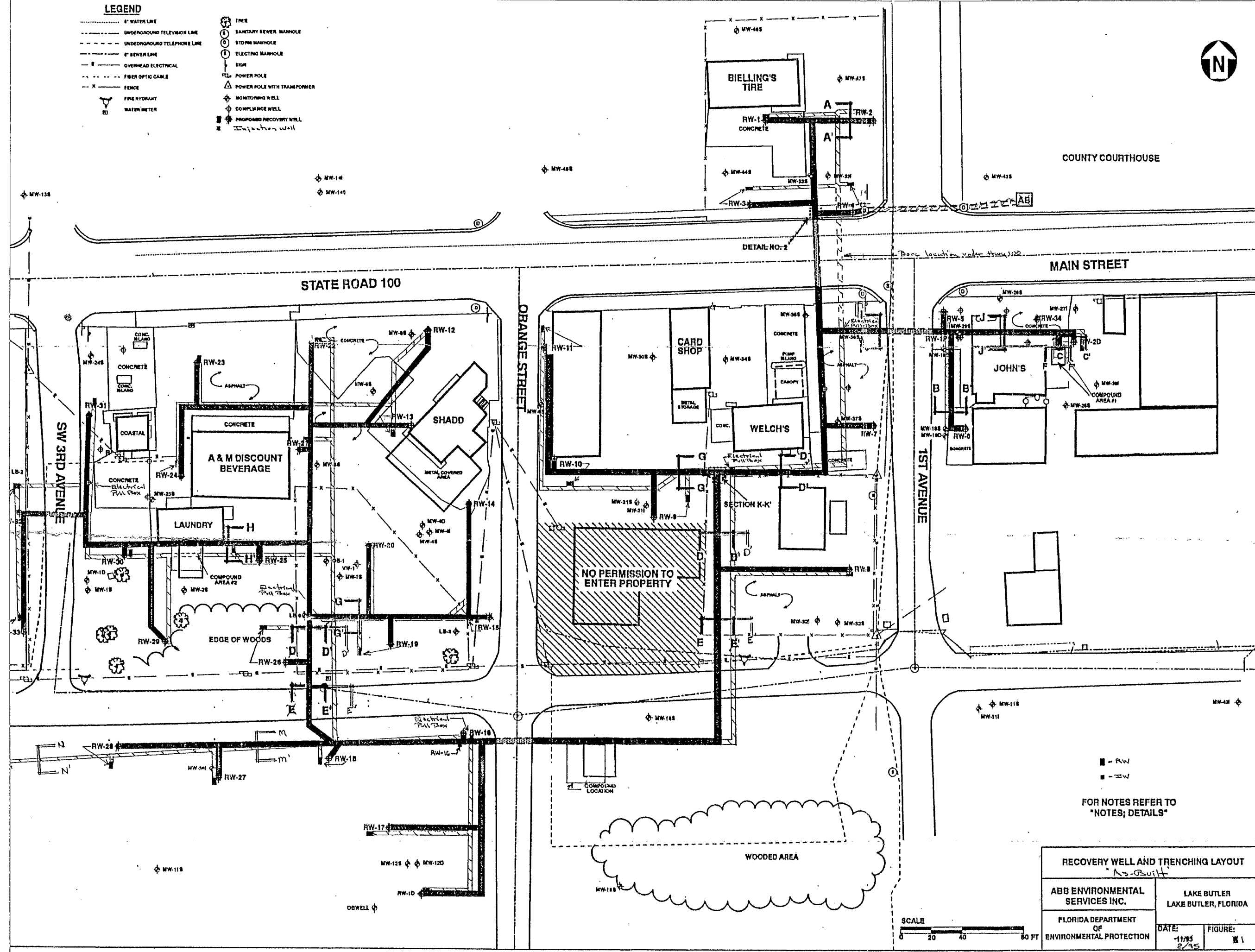
GCTLs = Groundwater Cleanup Target Levels from Chapter 62-777, F.A.C.

SPLP = Synthetic Precipitation Leaching Procedure

**APPENDIX A**  
**Historical Figures and Construction Drawings**

**LEGEND**

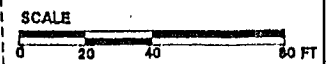
- 1" WATER LINE
- UNDERGROUND TELEVISION LINE
- UNDERGROUND TELEPHONE LINE
- 8" SEWER LINE
- OVERHEAD ELECTRICAL
- FIBER OPTIC CABLE
- FENCE
- FIRE HYDRANT
- WATER METER
- TREE
- SANITARY SEWER MANHOLE
- STORM MANHOLE
- ELECTRIC MANHOLE
- SIGN
- POWER POLE
- POWER POLE WITH TRANSFORMER
- MONITORING WELL
- COMPLIANCE WELL
- PROPOSED RECOVERY WELL
- Injection Well



FOR NOTES REFER TO "NOTES; DETAILS"

- RW  
 - MW

<b>RECOVERY WELL AND TRENCHING LAYOUT</b> <i>As-Built</i>	
ABB ENVIRONMENTAL SERVICES INC. LAKE BUTLER, FLORIDA	LAKE BUTLER LAKE BUTLER, FLORIDA
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	DATE: 11/95 FIGURE: 1



2' x 2' x 16" STEEL VAULT W/ LOCKABLE TRAFFIC BEARING 2 PIECE STEEL COVER (AASHTO / FDOT APPROVED)

3' x 3' x 3' STEEL VAULT W/ LOCKABLE TRAFFIC BEARING 2 PIECE STEEL COVER (AASHTO / FDOT APPROVED)

10" SCH. 40 PVC SLIP CAP W/ PORT FOR ELECTRIC CABLE, SUPPORT FOR PUMPS (VACUUM TIGHT)

JUNCTION BOX W/ RECEPTACLE

EXISTING GROUND OR PAVEMENT SURFACE

VACUUM GAUGE 0-60 INCHES OF WATER

1" DIA. FLEXIBLE RUBBER, PRODUCT RESISTANT HOSE

10" SCH. 40 PVC TEE

1/2" DIA. PRODUCT RECOVERY HOSE

0' - 6" MIN.

8" DIA. SCH. 40 PVC RISER

RECOVERY WELL

D

AA E G F O

V

H

K

Z

H

S

Q

H

BOLT (SEE NOTE)

H

1" QUICK DISCONNECT COUPLING

2" MIN.

2" vapor

1/2" liquid

1" product & florent

# GROUNDWATER / VAPOR / PRODUCT RECOVERY WELL VAULT DETAIL

RW-5, 6, 12, 13, 21, 22, 23, 24 AND 34

NOT TO SCALE

- Notes:
- 1-3'x3' Steel Vault replaces 2 smaller vaults
  - Well seal replaces PVC tee.
  - See photograph for vault components
  - Vapor pipe enters riser through tee below well seal.

LAKE BUTLER SITE  
LAKE BUTLER, FLORIDA

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

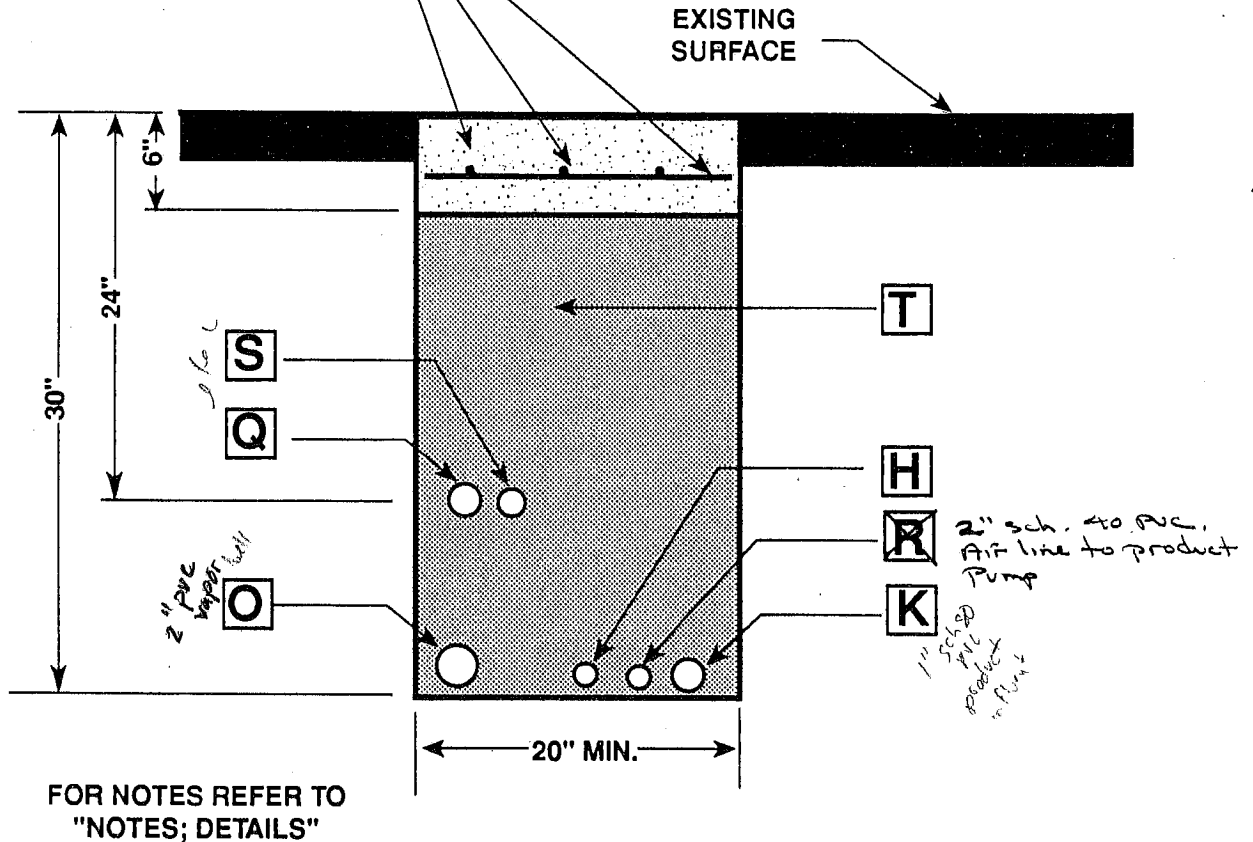
FOR NOTES REFER TO "NOTES; DETAILS"

NOTE: MATCH EXISTING SURFACE.

IF CONCRETE OR ASPHALT

SEE NOTES **V** & **W**.

IF UNPAVED SEE NOTES **U**, **X** & **Y**.



## SECTION B-B'

NOT TO SCALE

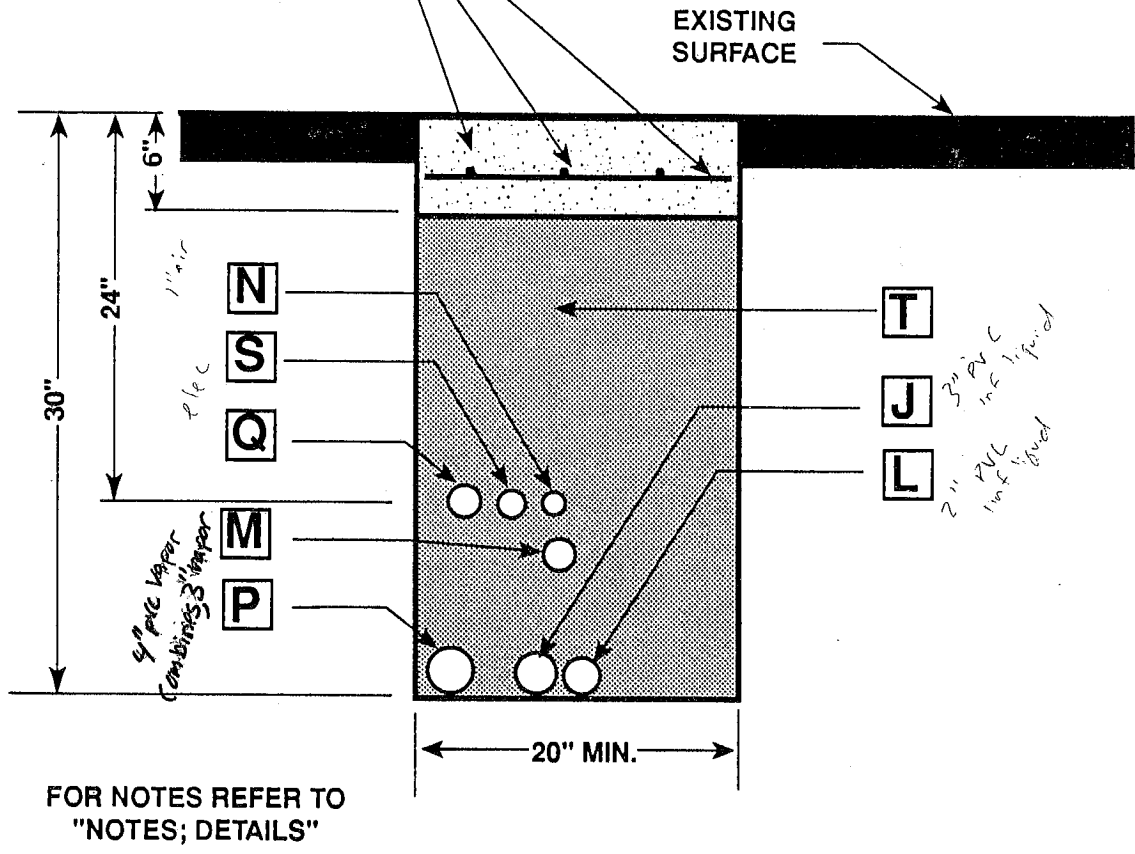
FOR RECOVERY WELLS RW-5, 6, 12, 13, 21, 22, 23, 24, AND 34.

### NOTES:

- COMPRESSED AIR LINES, WELL SENSORS AND POWER LINES TO SUB PANELS
- WATER AND VAPOR LINES TO MAIN COMPOUND AREA
- PRODUCT LINES TO APPROPRIATE COMPOUND AREAS
- 12-VOLT UDC TO MAIN COMPOUND AREA

LAKE BUTLER SITE  
LAKE BUTLER, FLORIDA  
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTE: MATCH EXISTING SURFACE.  
 IF CONCRETE OR ASPHALT  
 SEE NOTES **V** & **W**.  
 IF UNPAVED SEE NOTES **U**, **X** & **Y**.



## SECTION D-D'

NOT TO SCALE

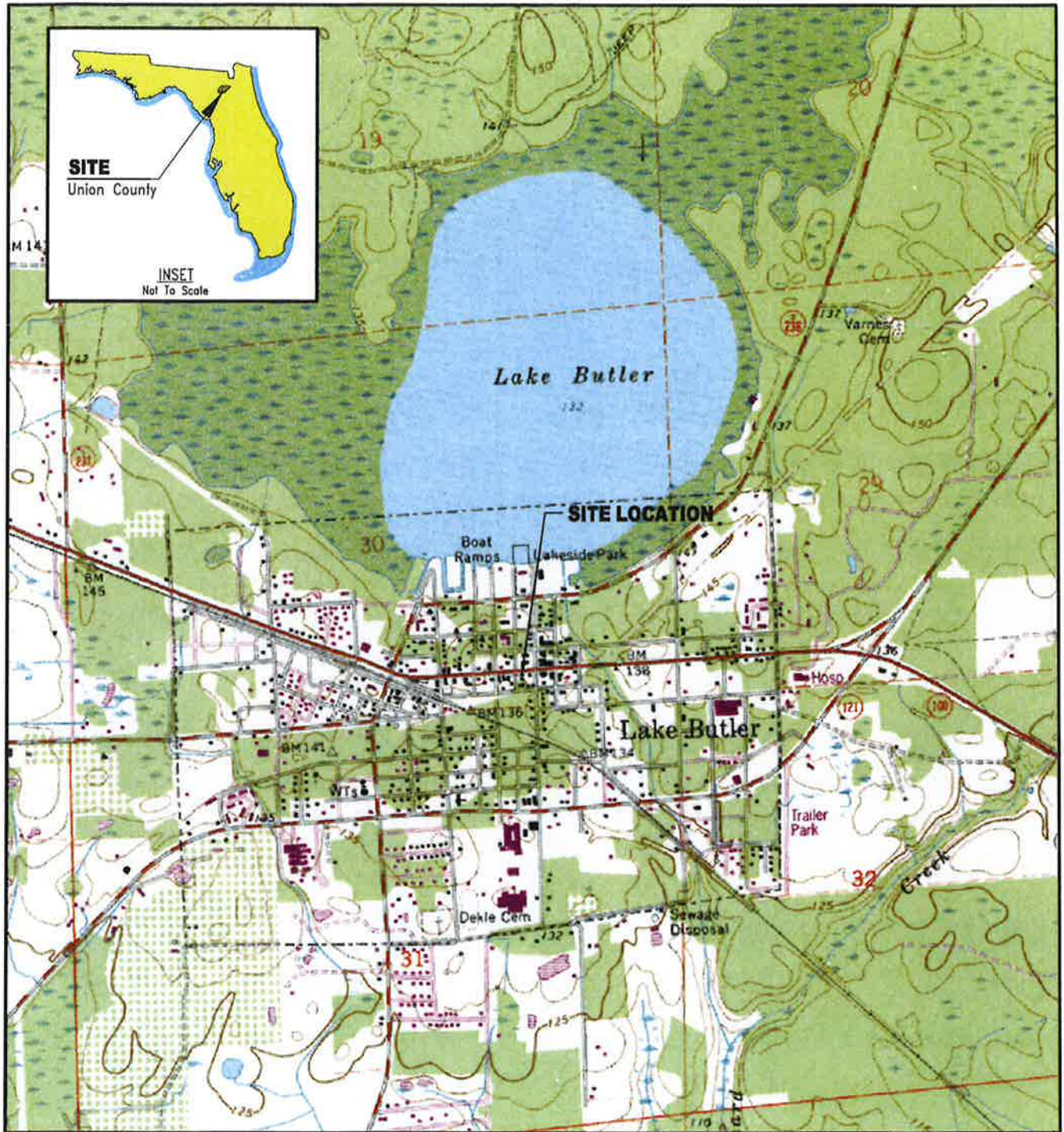
**NOTES:**

- COMPRESSED AIR LINES, WELL SENSORS AND POWER LINES TO SUB PANELS
- WATER AND VAPOR LINES TO MAIN COMPOUND AREA
- PRODUCT LINES TO APPROPRIATE COMPOUND AREAS
- 12-VOLT UDC TO MAIN COMPOUND AREA

LAKE BUTLER SITE  
 LAKE BUTLER, FLORIDA  
 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

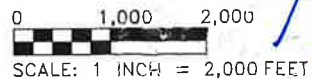
## NOTES: DETAILS

- A** CONCRETE SLAB: 4" THICKNESS, 3000 PSI, TYPE 1 CEMENT, STANDARD MIX DESIGN. EXACT DIMENSIONS DEPENDENT ON EQUIPMENT SIZE AND LAYOUT, NOT TO EXCEED 19' X 22'; REINFORCEMENT; ~~6X6-10/10~~ <sup>Fibermesh</sup> WELDED WIRE FABRIC. PLACEMENT 2" ABOVE BOTTOM OF SLAB.
- B** <sup>Five</sup> FOUR COMPOUND LIGHTS: 200 WATT W / PHOTO-ELECTRIC SENSOR, MOUNTED ON 4" X 4" X 10' WOOD POST. SEE ELECTRICAL DETAIL. ~~TWO~~ <sup>Three</sup> IN MAIN COMPOUND, 1 EACH IN SUBCOMPOUNDS. LOCATIONS FIELD DETERMINED <sup>Two in main compound to be 4' dual fluorescent fixtures mounted under the roof</sup>
- C** VAPOR EXTRACTION ASSEMBLY: SEE SPECIFICATIONS.
- D** ~~ACTUAL DIMENSIONS TO BE FIELD DETERMINED.~~
- E** BALL VALVE: SCH. 40 PVC. SIZED APPROPRIATLY FOR LIQUIDS AND VAPOR INFLUENT, LIQUIDS EFFLUENT.
- F** CHECK VALVE: SCH.40 PVC. SIZED ACCORDING TO LOCATION.
- G** SAMPLE PORT: 1/4" SCH. 40 PVC BALL VALVE, 1/4" SCH. 40 PVC BARB, 12" - 3/8" DIA. O.D. CLEAR FLEXIBLE TUBING.
- H** 1/2" DIA. SCH. 40 PVC PIPE & FITTINGS: LIQUIDS INFLUENT.
- I** 1" DIA. SCH. 40 PVC PIPE & FITTINGS: LIQUIDS INFLUENT.
- J** 3" DIA. SCH. 40 PVC PIPE & FITTINGS: TOTAL LIQUIDS; INFLUENT ~~AND EFFLUENT.~~
- K** 1" DIA. SCH. 80 PVC PIPE: PRODUCT INFLUENT.
- L** 2" DIA. SCH. 40 PVC PIPE: LIQUIDS INFLUENT.
- M** 1" DIA. SCH. 40 PVC PIPE : FUTURE AIR LINES (TO TERMINATE OUTSIDE RECOVERY WELL VAULTS).
- N** PVC ELECTRICAL CONDUIT: HOUSES ELECTRICAL CONTROL WIRES FROM MAIN COMPOUND TO SUBCOMPOUNDS.
- O** 2" DIA SCH. 40 PVC PIPE & FITTINGS: VAPOR INFLUENT, SINGLE WELL.
- P** 4" DIA SCH. 40 PVC PIPE & FITTINGS: VAPOR INFLUENT, COMBINES 3" DIA. VAPOR PIPES.
- Q** PVC ELECTRICAL CONDUIT: HOUSES POWER SUPPLY TO ELECTRIC GROUNDWATER PUMP. (SIZED APPROPRIATLY FOR LOCATION IN TRENCH). THE NUMBER OF CONDUITS UTILIZED IS CONTRACTOR'S RESPONSIBILITY.
- R** ~~PVC ELECTRICAL CONDUIT: HOUSES 12-VOLT POWER SUPPLY TO PRODUCT PUMP. (SIZED APPROPRIATLY FOR LOCATION IN TRENCH)~~
- S** ELECTRICAL: LOW VOLTAGE WIRING FOR WATER LEVEL SENSORS IN RECOVERY WELLS. (SIZED APPROPRIATLY FOR LOCATION IN TRENCH). NUMBER OF CONDUITS AS NEEDED FOR RECOVERY WELLS. CONTRACTOR MAY PROVIDE DIRECT BURIAL CABLE AS AN ALTERNATE.
- T** AASHTO A-3 MATERIAL: COMPACT 12" LOOSE LIFT ABOVE INFLUENT LINE. COMPACT REMAINING SOILS IN 6" LOOSE LIFTS. COMPACTION TO MEET 100% OF THE STANDARD PROCTOR ASTM - D 698.
- U** AASHTO A-3 MATERIAL: PLACED AND COMPACTED TO PREVENT EROSION AND SETTLEMENT.
- V** CONCRETE, VAULTS, & PAVEMENT: 3000 PSI, TYPE I CEMENT, STANDARD MIX DESIGN.
- W** REINFORCEMENT: ~~6 X 6, 10 / 10 WELDED WIRE FABRIC.~~ <sup>Fibermesh</sup>
- X** MAGNETIC DETECTION TAPE: FOR WATER AND ELECTRIC. BURIAL DEPTH 6", PLACED OVER APPROPRIATE LINES IN ALL NON-PAVED TRENCH LOCATIONS.
- Y** MULCH & SEED: SEED TO BE MIXTURE OF EXISTING GRASS AND WINTER RYE. MULCH TO BE HAY OR GROUND WOOD CHIPS.
- Z** TOTALIZING AND INSTANTANEOUS FLOW METER: 0-10 gpm for 1/2" LINES, 0-40 gpm for 1" LINES, 0-60 gpm for 2" LINES, 0-120 gpm for 3" LINES.
- AA** 3/8" NPT PORT WITH PLUG FOR HOST VACCUM GAUGE.
- AB** DELETED
- AC** 0-250 cfm DIRECT READING MAGNEHELIC (PITOT TUBE). <sup>Part only</sup>
- AD** ~~10" DIA. SCH. 40 PVC OR APPROVED FIBERGLASS PIPE: FROM ARI STRIPPER NO. 1 TO THERMAL OXIDIZER.~~



Approximate site location  
 Section 30, Township 5 South, Range 20 East  
 Latitude: 30° 1' 22.91" North  
 Longitude: 82° 20' 19.35" West

**SOURCE:**  
 USGS Quadrangle - LAKE BUTLER 1993  
 Maps and data Copyright 2003 Maptech



PLOTTED: November 9, 2017 - 11:49 AM, BY: Burton, George A

*Handwritten signature and date: 1/11/18*

*AS-BUILT*

**SITE VICINTIY MAP**

NO.	DATE	REVISIONS	
0	Aug-16	Initial Submittal	
DESIGNED	DRAWN	CHECKED	DATE
GS	NT		

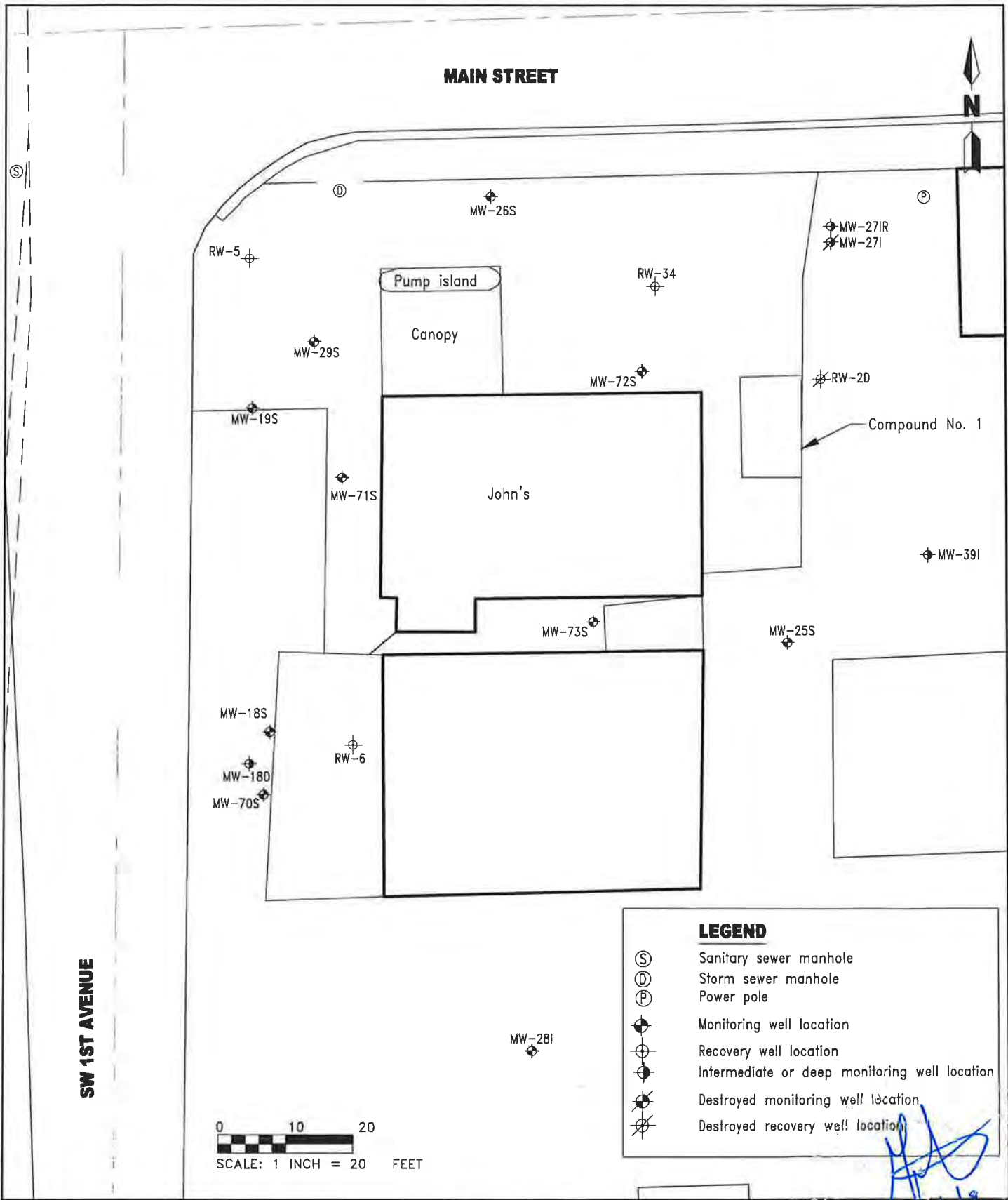
amec foster wheeler   
 Environment & Infrastructure, Inc.  
 Tallahassee, Florida 850-656-1293

**UNION 76 - SAM JOHN'S**  
 CONSTRUCTION DRAWINGS  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:


**1**



**AS BUILT SITE PLAN**

PLOTTED: November 9, 2017 - 11:52 AM, BY: Burton, George A

NO.	DATE	REVISIONS	
0	Aug-16	Initial Submittal	
DESIGNED	DRAWN	CHECKED	DATE
GS	NT		

amec foster wheeler 

Environment & Infrastructure, Inc.  
Tallahassee, Florida 850-656-1293

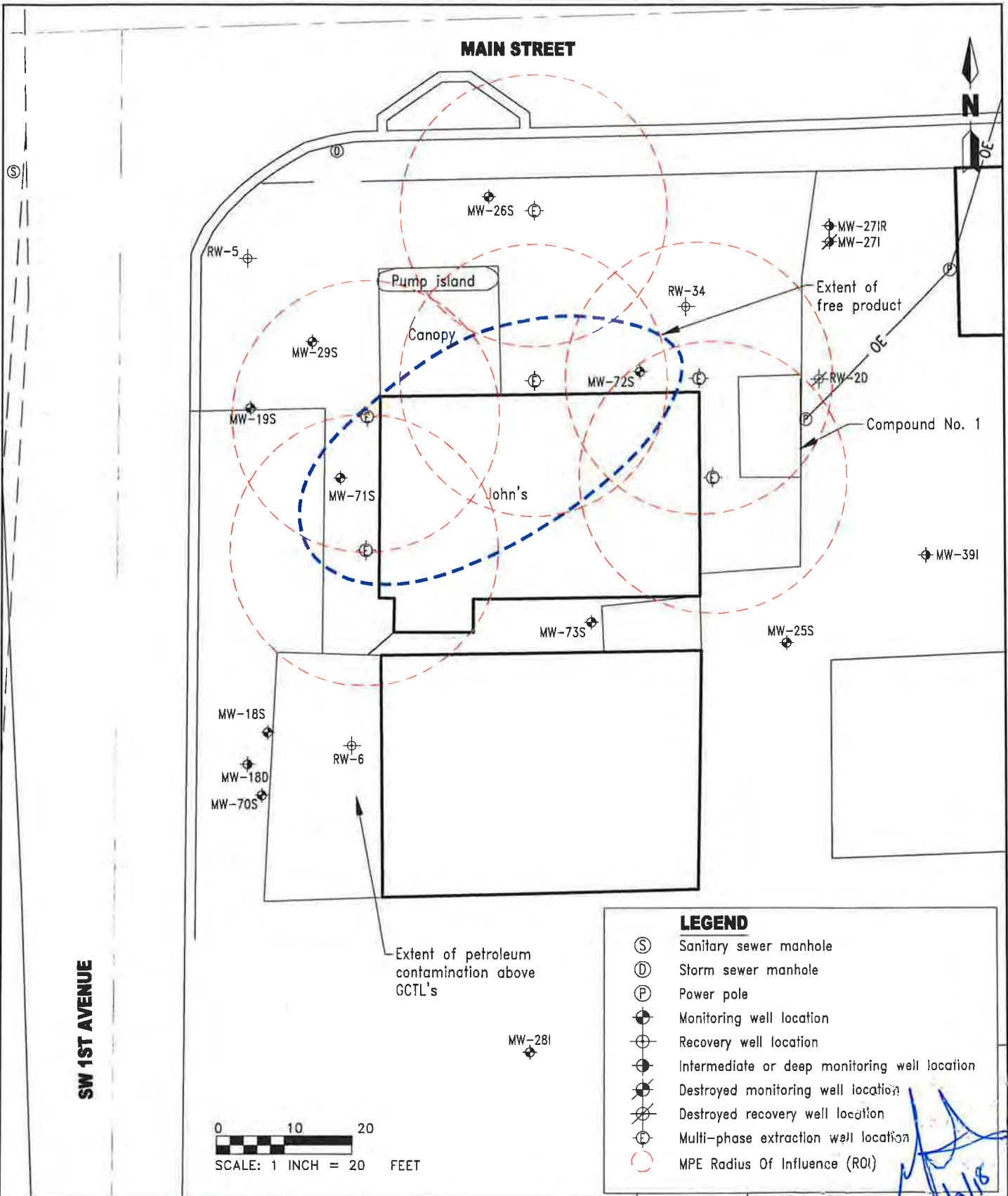
**UNION 76 - SAM JOHN'S**  
CONSTRUCTION DRAWINGS  
80 WEST MAIN STREET  
LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:

**2**

P:\CAD\Preapproval\LakeButler\UNION 76 - SAM JOHN'S\LSRAP\2016-08\Fig-2.dwg



**LEGEND**

- ⊙ Sanitary sewer manhole
- ⊕ Storm sewer manhole
- ⊖ Power pole
- ⊙ Monitoring well location
- ⊕ Recovery well location
- ⊖ Intermediate or deep monitoring well location
- ⊙ Destroyed monitoring well location
- ⊕ Destroyed recovery well location
- ⊖ Multi-phase extraction well location
- MPE Radius Of Influence (ROI)

**AS-BUILT PROPOSED MULTI-PHASE EXTRACTION WELL LOCATIONS WITH EXPECTED MINIMUM RADII OF INFLUENCE**

PLOTTED: November 9, 2017 - 11:53 AM, BY: Burton, George A

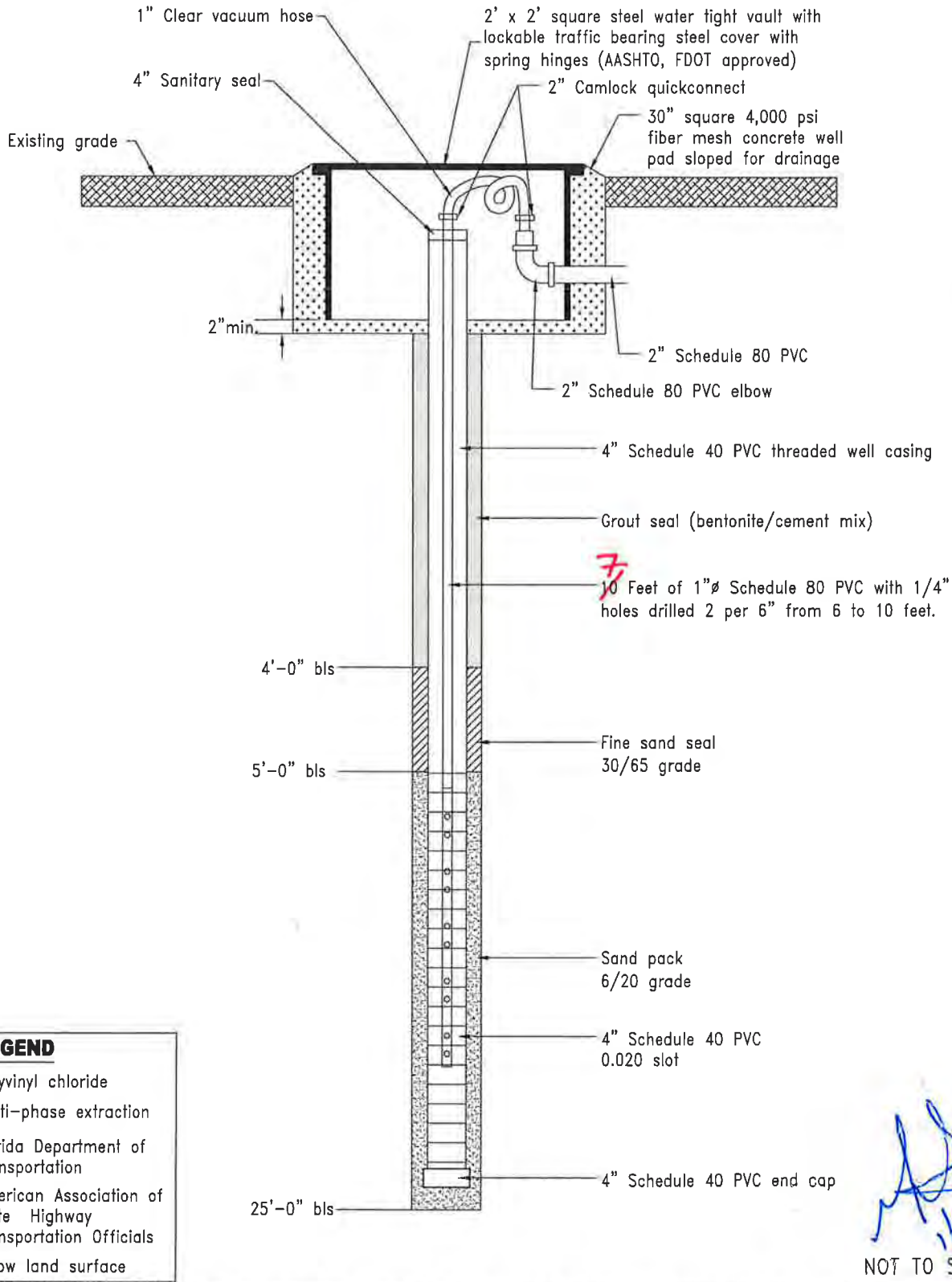
NO.	DATE	REVISIONS
0	Aug-16	Initial Submittal
DESIGNED	DRAWN	CHECKED
GS	NT	

P:\CAD\Preapproval\LkButler\UNION 76 - SAM JOHN'S\LSRAP\2016-08\Fig-3.dwg

amec foster wheeler   
 Environment & Infrastructure, Inc.  
 Tallahassee, Florida 850-656-1293

**UNION 76 - SAM JOHN'S**  
 CONSTRUCTION DRAWINGS  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FLORIDA  
**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:  
**3**



*AS*  
1/1/18  
NOT TO SCALE

LEGEND	
PVC	Polyvinyl chloride
MPE	Multi-phase extraction
FDOT	Florida Department of Transportation
AASHTO	American Association of State Highway Transportation Officials
bls	Below land surface

PLOTTED: November 9, 2017 - 11:54 AM, BY: Burton, George A

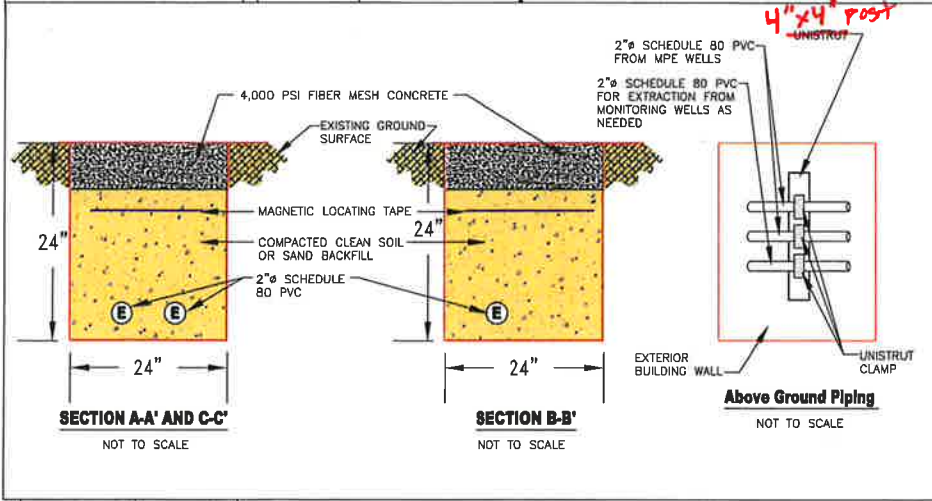
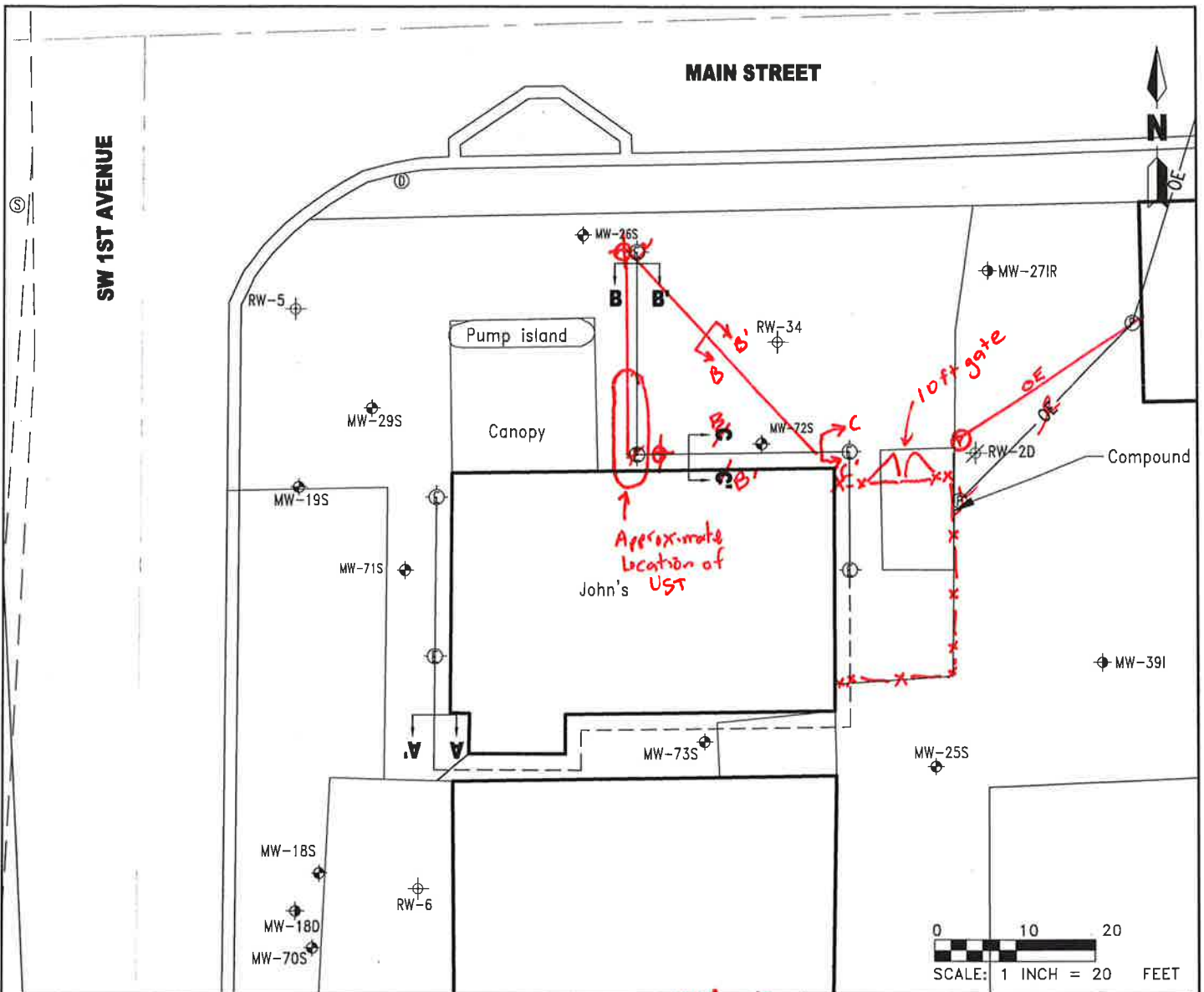
**AS-BUILT TYPICAL MULTI-PHASE EXTRACTION WELL CONSTRUCTION DETAIL**

NO.	DATE	REVISIONS
0	Aug-16	Initial Submittal
DESIGNED	DRAWN	CHECKED
GS	NT	

amec foster wheeler   
 Environment & Infrastructure, Inc.  
 Tallahassee, Florida 850-656-1293

**UNION 76 - SAM JOHN'S**  
 CONSTRUCTION DRAWINGS  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FLORIDA  
**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:  
**4**



**LEGEND**

- Ⓢ Sanitary sewer manhole
- Ⓧ Storm sewer manhole
- Ⓟ Power pole
- ⊕ Monitoring well
- ⊕ Recovery well
- ⊕ Intermediate or deep monitoring well
- ⊕ Destroyed monitoring well
- ⊕ Destroyed recovery well
- ⊕ Replaced shallow monitoring well
- ⊕ Replaced intermediate monitoring well
- ⊕ Multi-phase extraction well
- Below ground trench and piping
- - - Above ground piping

*AS-BUILT*

**TRENCH LAYOUT AND DETAIL**

PLOTTED: January 9, 2018 - 1:42 PM, BY: Burton, George A

NO.	DATE	REVISIONS
0	Aug-16	Initial Submittal
DESIGNED	DRAWN	CHECKED
GS	NT	

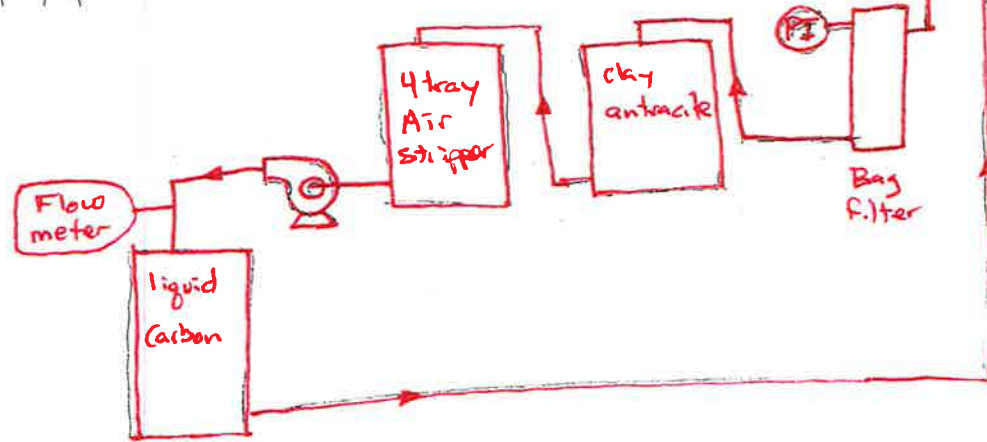
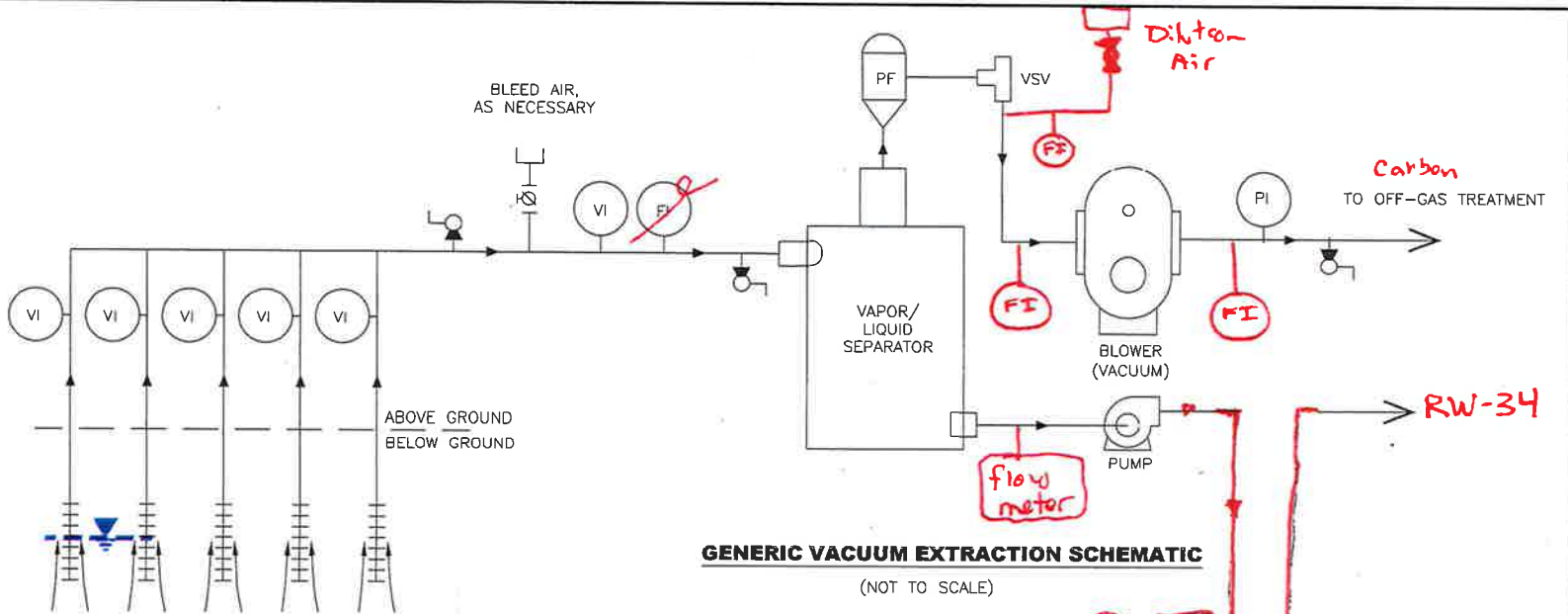
amec foster wheeler   
 Environment & Infrastructure, Inc.  
 Tallahassee, Florida 850-656-1293

**UNION 76 - SAM JOHN'S**  
 CONSTRUCTION DRAWINGS  
 80 WEST MAIN STREET  
 LAKE BUTLER, UNION COUNTY, FLORIDA

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

FIGURE:

**5**



AS-BUILT

*[Handwritten signature]*  
1/9/18

LEGEND	
	PIPING
	POTENTIOMETRIC WATER ELEVATION
	FLOW DIRECTION
	FLOW CONTROL VALVE
	SAMPLE PORT (TYPICAL)
	LOCALLY MOUNTED INSTRUMENT
FI	FLOW INDICATOR
PF	PARTICULATE FILTER
PI	PRESSURE INDICATOR
TI	TEMPERATURE INDICATOR
VI	VACUUM INDICATOR
VSV	VACUUM SWITCH VALVE

NO. DATE REVISIONS			DESIGNED DRAWN CHECKED DATE		<b>amec foster wheeler</b> Environment & Infrastructure, Inc. Tallahassee, Florida 850-656-1293	<b>UNION COUNTY PROPERTY</b> CONSTRUCTION DRAWINGS LAKE BUTLER UNION COUNTY, FLORIDA	FIGURE: <b>6</b>
1	Jan-17	Added groundwater treatment line	JD	GB			
0	Dec-16	Initial Submittal					

**APPENDIX B**  
**Historical Engineering Design Calculations**

# DESIGN MEMORANDUM

Client: FDEP

Sheet 1 of 1

Project: LSRAP

Date: 2/23/16

Data For: UNION 76 - JOHNS

Work Order: \_\_\_\_\_

Prepared By: GDS Checked By: \_\_\_\_\_

File No: \_\_\_\_\_



Note: This form must be used for project calculations and original filed in project files

## ESTIMATED VOLUME OF FREE PRODUCT

- AVERAGE FP THICKNESS OBSERVED IN ALL WELLS AT ALL TIMES = 1.82 FEET (21.84 INCHES)
- EST CAPILLARY RISE = 2.75 INCHES (PRACTICAL DESIGN CALCULATIONS FOR GROUNDWATER AND SOIL REMEDIATION, JEFF KVO)

$$\text{- ACTUAL THICKNESS: } t_g = t(1 - S_g) - h_a$$

$$t_g = 21.84(1 - 0.8) - 2.75 \text{ in}$$

$$t_g = 1.62 \text{ INCHES}$$

$t_g$  (in) = product thickness  
 $t$  (in) = observed thickness  
 $S_g$  (NM) = specific gravity  
 $h_a$  (in) = capillary rise

$$\text{- PRODUCT VOLUME: } = t_g (\text{AREA})$$

$$= (1.62 \text{ inches}) (1 \text{ ft} / 12 \text{ in}) (1,800 \text{ ft}^2) (0.30) = 72.9 \text{ ft}^3 \\ = 545.36 \text{ gallons}$$

## Contaminant Mass Calculations

**SITE LOCATION:** Union 76 - Sam John's Property - Lake Butler  
**COMP. BY:** GDS  
**CHECKED BY:**  
**JOB NUMBER:**  
**DATE:**

\*References: Das, Braja M., *Principles of Geotechnical Engineering*, PWS Publishing Company, 1998

### Mass of Contaminants in Groundwater

#### Properties:

**Soil Type =** Clay, Silty Sand, Clayey Sand Site Assessment  
**Void Ratio ( e):** 0.4 Das - 1998, pg.47  
**Porosity (n) = e/(e+1) =** 0.29 (typical aquifer porosities range from 0.2 to 0.4)

#### Conversions:

1 yd <sup>3</sup> =	27	ft <sup>3</sup>
1 yd <sup>3</sup> =	1.4	tons (conversion per FDEP Guidance Documents)
1 ft <sup>3</sup> =	47	kg (conversion per FDEP Guidance Documents using 1.4 tons per cubic yard)
1 kg =	2.2	lbs
2000 lbs =	1	ton
1 ft <sup>3</sup> =	7.48	gallons
1 gallon =	3.79	L

#### Groundwater:

The extent of groundwater contamination for approximation purposes is taken from Figure 11 of this RAP. The areal extent of the contamination for all parameters will be based on the benzene plume.

<b>Thickness of affected shallow aquifer =</b>	20	ft (from site assessment)		
<b>Thickness of affected Intermediate aquifer =</b>	25	ft (from site assessment)		
<b>Area of incremental shallow benzene contaminant plume:</b>	10,781	ft <sup>2</sup> (from AUTOCAD) *delineation still ongoing		
<b>Area of incremental intermediate benzene contaminant plume:</b>	10,541	ft <sup>2</sup> (from AUTOCAD) *delineation still ongoing		
<b>Volume of incremental shallow benzene contaminant plume:</b>	215,620	ft <sup>3</sup> (area*thickness)	460,811	gallons (Volume*(7.48 gal/ft <sup>3</sup> )*porosity)
<b>Volume of incremental intermediate benzene contaminant plume:</b>	263,525	ft <sup>3</sup> (area*thickness)	563,191	gallons (Volume*(7.48 gal/ft <sup>3</sup> )*porosity)

**Contaminant Mass Calculations**

**SITE LOCATION:** Union 76 - Sam John's Property - Lake Butler  
**COMP. BY:** GDS  
**CHECKED BY:**  
**JOB NUMBER:**  
**DATE:**

\*References: Das, Braja M., *Principles of Geotechnical Engineering*, PWS Publishing Company, 1998

**Mass of Contaminants in Groundwater**

The monitoring wells exceeding the GCTL's on site will be used to calculate the contaminant mass in the groundwater.

From Figures 9 and 10								
Contour Interval	Monitoirng Well	Benzene (µg/l)	Toulene (µg/l)	Ethyl Benzene (µg/l)	Total Xylenes (µg/l)	MTBE (ug/l)	Total Napthalenes	TRPH
Shallow	MW-18S	14.0	0.77	4.8	2	33		
	MW-19S	160	120	74	180	4		
	MW-25 S	1	0.1	0	0	0.6		
	MW-26 S	5.70	0.14	0.16	0.88	0.6		
	MW-70S	0	0	0	0	0.1	0.1	120
	MW-71S	2,700	11,000	2,200	12,000	3,400	1,004	25,000.0
	MW-73S	2.3	10	4	13	0.6	0.8	220.0
Intermediate	MW-18D	0.3	0	0	1	42		
	MW-28I	220	3	5	38	7.7		
	MW-27IR	0.7	4.4	4	12	0		
	MW-39I	0	0	0	0	2		
	<b>Average shallow conc.</b>	<b>412</b>	<b>1,590</b>	<b>326</b>	<b>1,742</b>	<b>491</b>	<b>335</b>	<b>8,447</b>
<b>Average inetrmeidate conc.</b>	<b>55.3</b>	<b>1.9</b>	<b>2.4</b>	<b>12.8</b>	<b>12.9</b>	<b>NA</b>	<b>NA</b>	

Average Contaminant Concentration in Shallow Contaminant Contour = 13,343 µg/L  
 verage Contaminant Concentration in Intermediate Contaminant Contour = 85 µg/L

Mass of petrolemn contaminants in groundwater = 6,710,187,557 µg of petroleum contaminants  
 mass = concn(ug/L) \*(3.79 L/gal)\* volume of impacted groundwater \* porosity 6,710.19 grams of petroleum contaminants  
 6.71 kg of petroleum contaminants  
 14.83 lbs of petroleum contaminants

The above calculated masses are an ESTIMATE based on actual analytical data collected in the field.

**SITE LOCATION:** Union 76 - Sam John's Property - Lake Butler  
**COMP. BY:** GDS  
**CHECKED BY:**  
**JOB NUMBER:** 6090130013  
**DATE:** 8/29/2013

\*References: Das, Braja M., *Principles of Geotechnical Engineering*, PWS Publishing Company, 1998

**Mass of Contaminant in Vadose Zone Soils**

**Properties:**

**Soil Type =** Clay, Silty Sand, Clayey Sand Site Assessment  
**Void Ratio (e):** 0.4 Das - 1998, pg.47  
**Porosity (n) = e/(e+1) =** 0.29 (typical aquifer porosities range from 0.2 to 0.4)

**Conversions:**

1 yd <sup>3</sup> =	27	ft <sup>3</sup>
1 yd <sup>3</sup> =	1.4	tons (conversion per FDEP Guidance Documents)
1 ft <sup>3</sup> =	47	kg (conversion per FDEP Guidance Documents using 1.4 tons per cubic yard)
1 kg =	2.2	lbs
2000 lbs =	1	ton
1 ft <sup>3</sup> =	7.48	gallons
1 gallon =	3.79	L

**Soil:**

The extent of soil contamination for approximation purposes is taken from Figures 6 and 7 of this RAP.

The areal extent of soil contamination is estimated with the use of AUTOCAD (Computer Software).

		Soil Plume Area	Soil Plume Volume
Soil Plume Contour Interval =	0-15 ft-bls	5,406 ft <sup>2</sup>	81,090 ft <sup>3</sup>
	15-25 ft-bls	9,421 ft <sup>2</sup>	94,210 ft <sup>3</sup>

Depth to water ≈ 11 feet \*maximum DTW for shallow water table

Vertical Extent of soil contamination (vadose and smear zones) is 0-22 feet bls.

Volume of contaminated soil = 175,300 ft<sup>3</sup>  
 6,493 yd<sup>3</sup>  
 9,090 tons

**Mass of Contaminant in Vadose Zone Soils**

The sum of the Averages of the contaminants of concern above SCTLs in all soil samples will be used to calculate the contaminat mass in soil.

From Table 5 Soil Boring	Benzene(mg/kg)	Toulene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Total Napthalenes (mg/kg)	TRPH (mg.kg)
SJ-2	1.200	1.6	12	61	2.3	0.078	8.4
SJ-4	0.020	0.003	0.002	0.0025	0.006	0.003	5.2
SJ-4	0.0	0.036	0.013	0.13	0.005	0.007	4.3
SJ-5	1.200	6.2	0.500	2.9	0.45	0.324	16
SJ-6	1.500	1.5	100	2.1	3.1	4.74	49
SJ-7	0.002	0.002	0.004	0.0024	0.005	0.006	13
SJ-9	0.8	2.8	0.88	4.9	2.9	0.176	15
SJ-12	1.900	19	5.5	28	0.98	0.86	39
SJ-14	0.005	0.016	0.002	0.011	0.004	0.007	4.3
SJ-16	0.003	0.003	0.002	0.0026	0.005	0.006	4.5
SJ-18	0.2	0.720	0.098	0.39	0.13	0.005	2.7
SJ-21	0.970	5	1.9	9.8	0.3	32.6	300
SB-2	0.001	0.001	0.001	0.0039	0.001	0.002	20
SB-3	0.067	0.073	0.067	0.38	0.067	3.17	50
SB-4	0.6	11	5.2	35	0.58	0.24	31
SB-5	0.001	0.001	0.001	0.0033	0.001	0.002	4.7
SB-6	0.001	0.001	0.001	0.0037	0.001	0.002	10
SB-7	0.001	0.001	0.002	0.0033	0.001	0.019	6
SB-8	0.001	0.001	0.001	0.0031	0.001	0.002	7
SB-9	0.001	0.001	0.001	0.0032	0.001	0.002	7.1
SB-10	0.001	0.001	0.001	0.0033	0.001	0.002	7.6
SB-11	0.001	0.001	0.001	0.0037	0.001	0.002	14
SB-12	0.001	0.001	0.001	0.0036	0.001	0.002	160
SB-13	0.001	0.001	0.001	0.0037	0.001	0.002	3.2
<b>Average</b>	<b>0.35</b>	<b>2.00</b>	<b>5.26</b>	<b>6.03</b>	<b>0.45</b>	<b>1.8</b>	<b>32.6</b>

Contaminant Concentration in vadose zone soils = 15.84 mg/kg

mass = concn(mg/kg) \* volume of impacted soil (ft3) \* (47kg/ft3)\*(1g/1000mg)  
 mass = 130,545 g of petroleum contaminants  
 131 kg of petroleum contaminants  
 287 lbs of petroleum contaminants  
 0.14 tons of petroleum contaminants

Estimated amount of contaminat in vadose/smear zone soils= 287 lbs of petroleum contaminants

The above calculated mass is an ESTIMATE based on actual analytical and OVA data collecetd in the field.

**MULTIPHASE EXTRACTION SYSTEM DESIGN**

**SITE LOCATION:** Union 76 - Johns  
**COMP. BY:** Geoff Schaefer  
**CHECKED BY:**  
**JOB NUMBER:** 6090150030  
**DATE:** 2/23/2016

**Calculate: Air flow generated**

**REQUIRED:**

DESIGN A DUAL PHASE WELL  
 FROM P.C. JOHNSON ET AL, "A PRACTICAL APPROACH TO THE DESIGN,  
 OPERATION, AND MONITORING OF IN-SITU SOIL-VENTING SYSTEMS",  
 GROUNDWATER MONITORING REVIEW, SPRING 1990.

$$Q/H = \frac{(P) (P_w) (k) [1 - (P_{atm}/P_w)^2]}{(u) (ln) (R_w/R_i)}$$

**WHERE:**

Q/H = flow rate per unit thickness of well screen	(cm <sup>2</sup> /s)
u = viscosity of air,	0.00018 g/cm-s
P <sub>w</sub> = absolute pressure at extraction well, (estimated)	5.76E+05 g/cm-s <sup>2</sup>
P <sub>atm</sub> = Absolute ambient pressure,	1.01E+06 g/cm-s <sup>2</sup>
R <sub>w</sub> = Radius of soil vapor extraction well,	10.16 cm
R <sub>i</sub> = Radius of influence of extraction well, (estimated)	609.6 cm
	20 ft
k = Soil permeability to air flow	3.3E-05 cm <sup>2</sup>

Screen Interval = 5 to 25 feet bls  
 Depth to Water = 15 feet bls

Exposed Screen length, H = 10 ft, = 304.8 cm

**Design Value** Q well= 50.00 acfm/MPE well (Estimated)  
 24.93 scfm/MPE well

With Factor of Safety = 25%, Q system = 62.50 acfm  
 37.43 scfm/MPE well  
**Number of Wells = 5**  
**Total Design Flow= 312.5 acfm**

**MULTIPHASE EXTRACTION SYSTEM DESIGN**

**SITE LOCATION:** Union 76 - Johns  
**COMP. BY:** Geoff Schaefer  
**CHECKED BY:**  
**JOB NUMBER:** 6090150030  
**DATE:** 2/23/2016

Calculate: Pressure losses

Vacuum pressure at each well = 434275.184 g/cm-s2  
(Patm-Pw) 0.42997543 atm  
(estimated) 175.0 inches of water

Pipe diameter = 2 inches (main line)

Friction losses: Assume length of pipe equal to 30 feet

NO. 90s = 8 Equivalent Length = 20 feet  
No. ball valves = 1 Equivalent Length = 1.38 feet

Total Length pressure loss calculation = 51.38 FT

From attached nomograph loss per foot of pipe = 0.04 in H<sub>2</sub>O/foot

Therefore pressure loss = 2.1 in. of H<sub>2</sub>O

Assume loss at well = 4 in. of H<sub>2</sub>O  
Assume loss at phase seperator = 10 in. of H<sub>2</sub>O  
Assume loss at vacuum pump entrance = 4 in. of H<sub>2</sub>O  
number of MPE wells = 1

Therefore vacuum pump must pull a vacuum = 195 in. of H<sub>2</sub>O  
with 25% safety factor 244 in. of H<sub>2</sub>O  
= 20.3 ft of H<sub>2</sub>O  
= 17.9 in of Hg

At a flow of Q= 312.5 acfm  
155.83 scfm

For Design (25% safety factor Included)= 312.5 acfm  
17.9 in of Hg

\* Design values are based on the SVE pilot test data

Select : Blower capable of 62.5 acfm @ 15 in. of Hg

## TRANSFER PUMP DESIGN CALCULATIONS

SITE LOCATION: Union 76 - Johns  
 COMP. BY: Geoff Schaefer  
 CHECKED BY:  
 JOB NUMBER: 6090150030  
 DATE: 2/23/2016

Calculate head loss (h<sub>s</sub>) on discharge side:

assume: Height of phase separator = 5 feet  
 Static Suction Head in feet of water = S = 1.5 feet

Calculate minor losses (h<sub>l</sub>):

Pipe diameter = 1 inch = 0.083 feet  
 Flow (Q) = 18.75 gpm = 0.040 ft<sup>3</sup>/sec

$$h_l = \frac{Kv^2}{2g}$$

where: v = velocity through pipe = Q/A = 7.368 ft/sec  
 assuming difference between nominal diameter and inner diameter is negligible  
 g = gravity = 32.2 ft/s<sup>2</sup>

Item	Qty.	K	Qty * K
90s	5	0.9	4.5
Globe valve	1	10	10
Flow meter	1	10	10
Outlet Losses	1	1	1
<b>Total :</b>			<b>25.5</b>

Note: K values from FDEP RAP guidance document

therefore: h<sub>l</sub> = 21.50 feet

Calculate friction losses in pipe:

use Darcy-Weisbach formula:

$$h_f = \frac{f(L * v^2)}{(D * 2g)}$$

where: f = friction factor (from Moody diagram)  
 v = velocity through pipe (ft/sec) = 7.368 ft/sec  
 L = length of pipe (ft) = 20 feet  
 D = pipe diameter (ft) = 2 inch = 0.167 feet

to determine f:

Reference: Lindeburg, M.R., *Civil Engineering Reference Manual, 4th Edition*, Professional Publications, Belmont, California, 1986.

relative roughness of pipe materials and friction factors for complete turbulence:  
 for PVC use E = 0.000005  
 E/D (relative roughness) = 0.00003 for 2-inch diameter pipe



**APPENDIX C**  
**Historical RAI System Tables**



### TABLE 4: MPE SYSTEM ANALYTICAL SUMMARY

Facility Name: Union 76 Johns

Facility ID#: 63/8519168

If Non-Detect Use ND (RL)  
 Not Sampled = NS  
 Analytical Results = ppb

Sample Location	Sample Date	Hour Meter	Total Gallons Pumped	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	1-M Naphthalene	2-M Naphthalene	Naphthalene	TRPH	Total Lead
Influent	10/23/2017	708	337	9.0	67	22	130	25	6.1	9.9	42	2800	4.8 I
	10/27/2017	794	18,873	4.8	20	8.6	69	1.9	11	21	37	2000	3.2 U
	11/13/2017	917	35,680	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.20 U	0.20 U	0.26	1000	0.0032 U
	12/11/2017	1,131	55,839	5.9	21	22	170	12	30	56	76	1600	0.0032 U
	1/15/2018	1,341	98,482	5.0	28	12	82	12	11	19	34	850	0.0032 U
	2/12/2018	1,560	120,690	4.8	22	12	82	11	9.0	16	26	1200	0.0032 U
	3/12/2018	1,773	160,610	4.6	27	12	76	22	19	33	76	1400	0.0032 U
	11/18/2019	2,239	NA	0.18 U	0.49 U	0.38 U	9.9	0.24 U	1.9	2.8	11	1300	NM
	12/13/2019	2,304	NA	1.7	9.4	7.1	38	2.2	4.7	7.6	21	650 I	NM
	1/17/2020	2,499	NA	1.1	4.5	3.0	16	7.2	2.7	4.3	13	NM	NM
	6/12/2020	2,706	NA	0.64 I	2.6	0.38 U	1.1 U	6.0	0.38	0.64	2.5	1100	NM
	7/17/2020	2,970	NA	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.20 U	0.20 U	0.19 U	600 U	NM
	8/28/2020	3,367	NA	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.20 U	0.20 U	1.7	600 U	NM
Effluent	10/23/2017	708	204	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.37	0.59	2.5	690	3.2 U
	10/27/2017	794	19,824	0.16 U	0.23 U	0.24 U	0.92 I	0.17 U	0.20 U	0.20 U	0.19 U	600 U	3.2 U
	11/13/2017	917	38,206	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.44	0.61	0.49	1700	0.0032 U
	12/11/2017	1,131	59,894	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.19 U	0.19 U	0.18 U	580 U	0.0032 U
	1/15/2018	1,341	101,232	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.39	0.37	1.3	600 U	0.0032 U
	2/12/2018	1,560	122,297	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.18 U	0.18 I	0.32	800	0.0032 U
	3/12/2018	1,773	160,006	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.20 U	0.20 U	0.19 U	600 U	0.0061 I
	11/18/2019	2,239	169,822	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.20 U	0.20 U	0.19 U	780	NM
	12/13/2019	2,304	179,680	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.20 U	0.20 U	0.23 U	600 U	NM
	1/17/2020	2,499	193,224	0.18 U	0.49 U	0.38 U	1.1 U	8.3	0.20 U	0.20 U	0.19 U	NM	NM
	6/12/2020	2,706	197,684	0.18 U	0.49 U	0.38 U	1.1 U	2.5	0.19 U	0.19 U	0.18 U	1100	NM
	7/17/2020	2,970	198,112	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.20 U	0.20 U	0.19 U	710	NM
	8/28/2020	3,367	198,149	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	0.20 U	0.20 U	0.19 U	600 U	NM
<b>GCTL L(ug/L)</b>				<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>20</b>	<b>28</b>	<b>28</b>	<b>14</b>	<b>5000</b>	<b>15</b>

**TABLE 5: MPE SYSTEM VAPOR ANALYTICAL SUMMARY**

**Facility Name:** Union 76 Johns

**Facility ID#:** 63/8519168

If Non-Detect Use MDL "U"

Not Sampled = NS

Analytical Results = mg/m<sup>3</sup>

Sample Location	Sample Date	Hour Meter	System Vacuum (in of Hg)	Flow Rate (scfm)	OVA (ppm)	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	TPH	Emission Rate (lb/day)	Total Mass Recovered (lbs)
Influent	10/23/2017	708	9	190	93	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.01	0.01
	10/27/2017	794	9	240	NS	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.01	0.01
	11/13/2017	917	10	150	NS	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.00	0.02
	12/11/2017	1,131	9	210	64	0.045 U	0.028 U	0.027 U	0.28	0.38	0.33 U	0.01	0.02
	1/15/2018	1,341	10	185	55	0.045 U	0.71	0.15	1.2	2.11	2.1 I	0.03	0.06
	2/12/2018	1,560	11.25	160	40	0.045 U	0.028 U	0.027 U	0.24 I	0.34	0.33 U	0.00	0.06
	3/12/2018	1,773	10	160	39	0.045 U	0.52	0.027 U	0.14 I	0.73	0.66 I	0.01	0.07
	11/18/2019	2,239	8.9	160	385	0.10 U	0.10 U	0.17 I	0.67 I	1.04	0.84 I	0.01	0.08
	12/13/2019	2,303	6.0	168	65	0.65 I	0.10 U	0.92 I	3.5	5.17	5.0 I	0.08	0.16
	1/17/2020	2,499	6.2	95	52	0.60 I	2.0	0.69 I	2.8 I	6.09	6.2 I	0.05	0.21
Effluent	10/23/2017	708	9	190	38	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.01	0.01
	10/27/2017	794	9	240	NS	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.01	0.01
	11/13/2017	917	10	175	NS	0.045 U	0.054 I	0.027 U	0.20 I	0.33	0.33 U	0.01	0.02
	12/11/2017	1,131	9	160	17	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.00	0.02
	1/15/2018	1,341	10	120	27	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.00	0.03
	2/12/2018	1,560	11.25	220	30	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.01	0.03
	3/12/2018	1,773	10	170	42	0.045 U	0.028 U	0.027 U	0.11 U	0.21	0.33 U	0.01	0.04
	11/18/2019	2,239	8.9	60	21	0.10 U	0.10 U	0.13 I	0.52 I	0.85	0.75 U	0.00	0.04
	12/13/2019	2,303	6.0	60	6	0.10 U	0.10 U	0.10 U	0.24 I	0.54	0.75 U	0.00	0.05
	1/17/2020	2,499	6.2	74	22	0.10 U	0.42 I	0.10 I	0.46 I	1.08	1.2 I	0.01	0.05
	6/12/2020	2,706	2.5	87	4	0.10 U	0.73 I	0.10 U	0.16 U	1.09	0.75 U	0.01	0.06
	7/17/2020	2,970	3.0	87	38	0.10 U	0.52 I	0.10 U	0.16 U	0.88	0.75 U	0.01	0.07
	8/28/2020	3,367	2.5	87	9	1.3 U	3.3	1.0 U	9.6	15.20	13 I	0.10	0.17

**TABLE 6: MPESYSTEM INFLUENCE MONITORING PARAMETERS**

DTW = Feet      Vac = in of H<sub>2</sub>O

DTP = Feet      FID = ppm

EOD = End of Day    EOE = End of Event

Facility Name:                      Union 76 Johns  
 Facility ID#:                        63/8519168

WELL NO.	MW-18S				MW-19S				MW-26S			
WELL DEPTH	40				19				18			
SCREEN INT.	30-40				9-19				8-18			
DATE	Vac	FID	DTW	DTP	Vac	FID	DTW	DTP	Vac	FID	DTW	DTP
10/23/17 - Baseline	0.00	1.5	6.13	-	0.00	1	7.37	-	0.00	4	8.07	-
10/23/17	-0.24	0	7.38	-	-0.36	2	8.31	-	-0.25	3	9.70	-
10/24/17	0.00	30	6.47	-	0.00	185	7.68	-	0.00	3	8.52	-
10/25/17	0.00	24	6.51	-	0.00	89	7.67	-	0.00	15	8.59	-
10/26/17	0.00	168	6.56	-	-0.47	562	7.65	-	-0.49	192	8.65	-
10/27/17 - EOE	-0.30	NS	7.55	-	-0.51	NS	8.04	-	-0.45	NS	9.82	-
11/13/17 - Baseline	0.00	0	7.90	-	0.00	0	8.00	-	0.00	0	9.42	-
11/13/17 - EOD	-1.20	0	7.90	-	-0.52	6	7.96	-	0.00	0	10.35	-
11/17/17	0.00	0	8.39	-	0.30	0	8.62	-	0.00	0	10.49	-
11/17/17 - EOE	-0.06	0	8.87	-	0.00	0	8.92	-	0.00	0	10.96	-
12/11/17 - Baseline	-0.04	0	6.08	-	-0.81	0	6.93	-	-0.06	0	7.91	-
12/11/17 - EOD	-0.10	0	6.96	-	-0.03	0	8.50	-	-0.03	0	9.11	-
12/15/17	-0.07	0	8.39	-	-0.06	0	8.71	-	0.00	0	9.57	-
12/15/17 - EOE	-0.07	0	7.60	-	-0.15	0	8.89	-	-0.16	0	9.81	-
1/15/18 - Baseline	0.00	0	6.65	-	0.17	0	7.82	-	0.00	0	8.57	-
1/15/18 - EOD	0.00	0	7.82	-	-0.06	0	8.90	-	-0.07	0	9.99	-
1/19/18	-0.07	0	9.05	-	-0.29	0	10.35	-	0.00	0	11.12	-
1/19/18 - EOE	-0.48	0	8.41	-	-0.16	0	9.71	-	-0.35	0	10.39	-
2/12/18 - Baseline	0.00	0	6.60	-	0.00	0	6.85	-	0.00	11	7.42	-
2/12/18 - EOD	-0.85	0	6.20	-	-0.14	0	7.65	-	-0.08	0	8.47	-
2/16/18	-1.11	0	7.91	-	-0.31	0	8.10	-	-0.11	0	8.91	-
2/16/18 - EOE	-1.18	0	8.16	-	-0.40	0	8.12	-	-0.12	0	8.90	-
3/12/18 - Baseline	0.00	0	6.82	-	0.00	0	8.09	-	0.00	0	8.67	-
3/12/18 - EOD	-0.15	0	7.75	-	-0.05	0	8.94	-	0.00	0	9.77	-
3/16/18	-0.40	35	8.56	-	-0.04	15	9.72	-	-0.29	22	10.46	-
3/16/18 - EOE	-0.06	NM	8.36	-	-0.02	NM	9.60	-	-0.02	NM	10.32	-
11/11/19 - Baseline	0.00	0	9.57	-	0.00	0	11.12	-	0.00	>10600	11.81	-
11/11/19 - EOD	0.00	0	10.56	-	0.00	0	11.95	-	0.00	>10000	12.63	-
11/18/19	-0.05	0	10.48	-	-0.40	0	11.89	-	-0.46	310	12.52	-
11/18/19 - EOE	-0.05	0	10.48	-	-0.22	0	11.88	-	-0.42	300	12.52	-
12/9/19 - Baseline	0.00	0	9.19	-	0.00	9	10.57	-	0.00	>13000	11.00	-
12/10/19	0.00	0	10.61	-	-1.33	0	11.00	-	0.00	>23000	11.52	-
12/13/19 - EOE	0.00	0	9.75	-	-0.42	0	13.13	-	-0.30	>1900	11.63	-
1/13/20 - Baseline	0.00	75	7.95	-	0.00	0	9.28	-	0.00	>1000	9.54	-
1/13/20	-0.68	0	8.49	-	0.00	0	9.84	-	-0.31	>1000	10.13	-
1/17/20 - EOE	-0.50	0	8.45	-	-0.04	0	10.03	-	0.00	>1000	10.52	-
6/8/2020 - BASELINE	0.00	0	9.08	-	0.00	0	10.53	-	0.00	>18000	10.90	-
6/8/20	0.35	0	9.12	-	0.20	0	10.58	-	0.00	>19000	11.03	-
6/12/2020 - EOE	5.51	0	8.00	-	0.50	0	9.22	-	0.55	>12000	9.68	-
7/13/2020 - BASELINE	NM	NM	NM	-	0.00	0	9.70	-	0.00	>30000	10.48	-
7/13/20	NM	NM	NM	-	0.20	0	10.25	-	0.33	>30000	10.83	-
7/17/2020 - EOE	0.00	0	8.21	-	0.22	0	9.62	-	0.15	>30000	10.65	-
8/24/2020 - BASELINE	0.00	0	7.82	-	0.00	0	8.84	-	0.00	>10000	9.71	-
8/24/20	0.00	0	7.80	-	0.05	0	8.82	-	0.10	>30000	9.52	-
8/28/2020 - EOE	0.00	0	8.98	-	0.21	0	8.99	-	1.12	>30000	9.96	-

**TABLE 6: MPESYSTEM INFLUENCE MONITORING PARAMETERS**

DTW = Feet      Vac = in of H<sub>2</sub>O

DTP = Feet      FID = ppm

EOD = End of Day    EOE = End of Event

Facility Name:                      Union 76 Johns  
 Facility ID#:                        63/8519168

WELL NO. WELL DEPTH SCREEN INT.	MW-71S				MW-72S				MW-73S			
	18				18				18			
	8-18				8-18				8-18			
DATE	Vac	FID	DTW	DTP	Vac	FID	DTW	DTP	Vac	FID	DTW	DTP
10/23/17 - Baseline	0.00	36	7.66	-	0.00	2563	9.75	8.04	0.00	1	7.65	-
10/23/17	-0.33	54	9.10	-	-0.24	2	9.42	9.39	-0.17	0	9.00	-
10/24/17	0.00	1045	8.04	-	0.00	239	9.28	8.91	0.00	15	8.10	-
10/25/17	NS	NS	NS	-	0.00	1883	9.34	8.90	0.00	4	8.11	-
10/26/17	0.00	3385	8.15	-	0.00	30200	9.35	-	0.00	420	8.14	-
10/27/17 - EOE	-0.50	NS	9.22	-	-0.33	NS	10.19	10.17	-0.14	NS	9.18	-
11/13/17 - Baseline	0.00	48	9.01	-	0.00	1021	9.95	9.62	0.00	0	9.32	-
11/13/17 - EOD	0.00	0	9.03	-	-0.48	13	10.95	10.55	-0.61	0	9.33	-
11/17/17	0.09	980	10.10	9.94	0.14	308	11.34	10.70	-0.12	0	9.98	-
11/17/17 - EOE	0.00	855	10.83	10.58	Not Collected due to Stinger in Well				-0.15	0	10.31	-
12/11/17 - Baseline	-2.30	>3320	8.21	-	-0.02	>3320	8.70	8.25	-0.05	0	7.56	-
12/11/17 - EOD	-0.03	>3320	8.82	-	Not Collected due to Stinger in Well				-0.05	0	8.30	-
12/15/17	-0.11	>3491	9.29	Sheen	0.00	>3491	9.76	9.50	-0.05	0	8.70	-
12/15/17 - EOE	-0.15	1721	9.55	Sheen	Not Collected due to Stinger in Well				-0.18	0	8.87	-
1/15/18 - Baseline	0.05	>3300	8.20	-	-0.03	>3300	9.09	9.07	-0.02	0	8.16	-
1/15/18 - EOD	-0.10	>3300	9.68	-	Not Collected due to Stinger in Well				-0.03	0	9.32	-
1/19/18	-2.80	>4585	11.37	-	-0.28	>4585	11.57	11.30	-0.19	0	10.53	-
1/19/18 - EOE	-0.38	>4585	10.22	10.20	Not Collected due to Stinger in Well				-0.35	0	9.91	-
2/12/18 - Baseline	0.00	>3444	7.16	-	0.00	>3444	7.86	7.85	0.00	0	7.10	-
2/12/18 - EOD	-1.19	>3444	7.99	Sheen	Not Collected due to Stinger in Well				-0.41	0	7.66	-
2/16/18	-2.36	107	8.19	-	-1.08	890	9.11	Sheen	-0.68	0	8.23	-
2/16/18 - EOE	-2.18	27	8.18	-	Not Collected due to Stinger in Well				-0.70	0	8.20	-
3/12/18 - Baseline	0.00	2471	8.48	8.40	0.00	>50,000	9.35	9.07	0.00	0	8.05	-
3/12/18 - EOD	-0.42	3	9.56	9.45	-0.13	0.00	10.20	10.19	-0.29	0	9.25	-
3/16/18	-0.11	1717	10.48	10.20	-0.24	>50000	11.11	10.81	-0.30	28	10.01	-
3/16/18 - EOE	-0.44	NM	10.21	10.10	-0.44	NM	10.65	10.60	-0.22	NM	9.71	-
11/11/19 - Baseline	0.00	>8800	12.21	11.21	0.00	>8800	12.91	12.00	0.00	0	11.40	-
11/11/19 - EOD	0.00	215	13.10	11.90	-0.10	17	13.76	12.76	0.00	0	12.11	-
11/18/19	-0.63	42	13.01	-	-0.39	26	13.54	-	-0.01	0	12.02	-
11/18/19 - EOE	-0.65	38	13.00	-	-0.41	29	13.53	-	0.00	0	12.03	-
12/9/19 - Baseline	0.00	>10000	11.70	10.82	0.00	>10000	12.45	11.38	0.00	0	10.75	-
12/10/19	0.00	>21000	11.93	11.00	0.00	>25000	12.78	11.80	0.00	0	11.11	-
12/13/19 - EOE	0.00	>22000	12.07	11.19	0.00	>20000	12.77	11.95	0.00	0	14.72	-
1/13/20 - Baseline	0.00	590	9.75	9.15	0.00	>600	10.69	9.82	0.00	0	9.46	-
1/13/20	-0.30	>1000	10.55	9.95	-0.11	>1010	11.53	10.65	-0.09	0	9.97	-
1/17/20 - EOE	-0.25	>1000	10.64	10.15	-0.05	>1000	11.49	10.78	0.00	0	10.00	-
6/8/2020 - Baseline	0.00	>33000	9.82	9.46	0.00	>29000	10.66	10.09	0.00	0	10.91	-
6/8/20	-0.05	>32000	9.95	9.55	0.24	>29000	10.78	10.20	0.50	0	10.63	-
6/12/2020 - EOE	0.28	>27000	9.65	9.35	0.05	>28000	10.55	10.00	0.20	0	9.31	-
7/13/2020 - BASELINE	0.00	>30000	11.10	10.70	0.00	>30000	11.57	10.80	0.00	0	10.20	-
7/13/20	0.25	>30000	11.10	10.35	0.35	>30000	11.92	11.22	0.25	0	10.54	-
7/17/2020 - EOE	0.25	>28000	10.11	9.85	0.10	>30000	11.12	10.48	0.33	0	9.86	-
8/24/2020 - BASELINE	0.00	>10000	10.53	9.95	0.00	>10000	9.58	9.25	0.00	0	9.27	-
8/24/20	0.00	>30000	10.58	9.99	0.00	>30000	9.60	9.27	0.25	0	9.28	-
8/28/2020 - EOE	0.30	>30000	10.80	10.15	0.00	>30000	9.85	9.47	-0.59	0	9.51	-

**APPENDIX D**  
**Example Equipment Specifications**



Vacuum pumps    Bombas de vacío    Pompes à vide    Bombas de vácuo

VLR

**ZEPHYR**

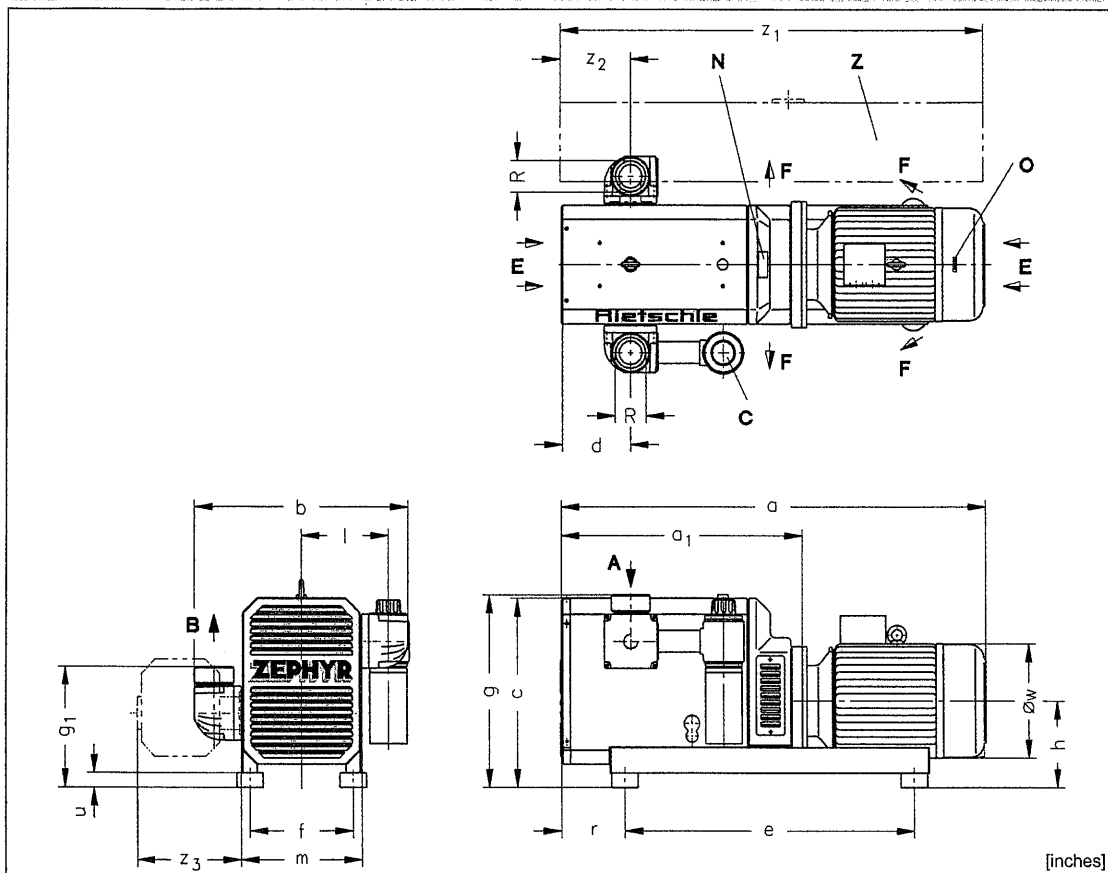
VLR 100

VLR 250

VLR 300

VLR 400

VLR 500



[inches]

A	Vacuum connection	Conexión vacío	Raccord du vide	Conexão do vácuo
B	Exhaust	Escape	Refolement	Exaustão
C	Vacuum regulating valve	Válvula reguladora de vacío	Valve réglage vide	Válvula de regulagem do vácuo
E	Cooling air entry	Entrada aire refrigerante	Entrée air refroidissement	Entrada do ar refrigerante
F	Cooling air exit	Salida aire refrigerante	Sortie air refroidissement	Saída do ar refrigerante
N	Data plate	Placa fecha	Étiquette caractéristique	Placa da data
O	Rotation arrow	Dirección de rotación	Flèche sens rotation	Direção da rotação
Z	Exhaust silencer	Silenciador escape	Silencieux refolement	Silenciador de exaustão

VLR		100	250	300	400	500	
[inches]	a	50 Hz	26.02	31.73	35.08	41.69	47.28
		60 Hz	29.28	35.43	35.43	42.05	43.89
	a <sub>1</sub>	50 Hz	15.43	19.13	19.13	23.62	26.93
		60 Hz	17.60	19.92	19.92	26.54	27.32
	b	17.48	22.20	22.20	23.62	23.62	
	c	14.17	20.67	20.67	20.67	20.67	
	d	3.62	3.94	3.39	7.76	7.76	
	e	17.32	28.35	28.35	32.28	32.28	
	f	8.66	11.42	11.42	11.42	11.42	
	g	14.53	19.41	19.41	20.94	20.94	
	g <sub>1</sub>	8.23	11.54	11.54	13.07	13.07	
	h	5.91	9.45	9.45	9.45	9.45	
	l	7.17	9.25	9.25	9.65	9.65	
	m	10.24	13.39	13.39	13.39	13.39	
	r	3.03	4.37	4.37	7.05	7.05	
	u	5.91	1.57	1.57	1.57	1.57	
	Øw	50 Hz	6.93	8.66	9.68	9.68	12.28
		60 Hz	6.62	9.57	9.57	9.57	11.47
	z <sub>1</sub> / z <sub>2</sub> / z <sub>3</sub>		25.59 / 3.94 / 7.68	39.37 / 3.15 / 10.63	39.37 / 3.15 / 10.63	47.24 / 7.87 / 11.42	47.24 / 7.87 / 11.42
	R		1 1/2" NPT	2" NPT	2" NPT	3" NPT	3" NPT

DA 880

2.2.2000

**Rietschle Inc.**

7222 Parkway Drive  
Hanover, MD 21076 USA

☎ 410-712-4100

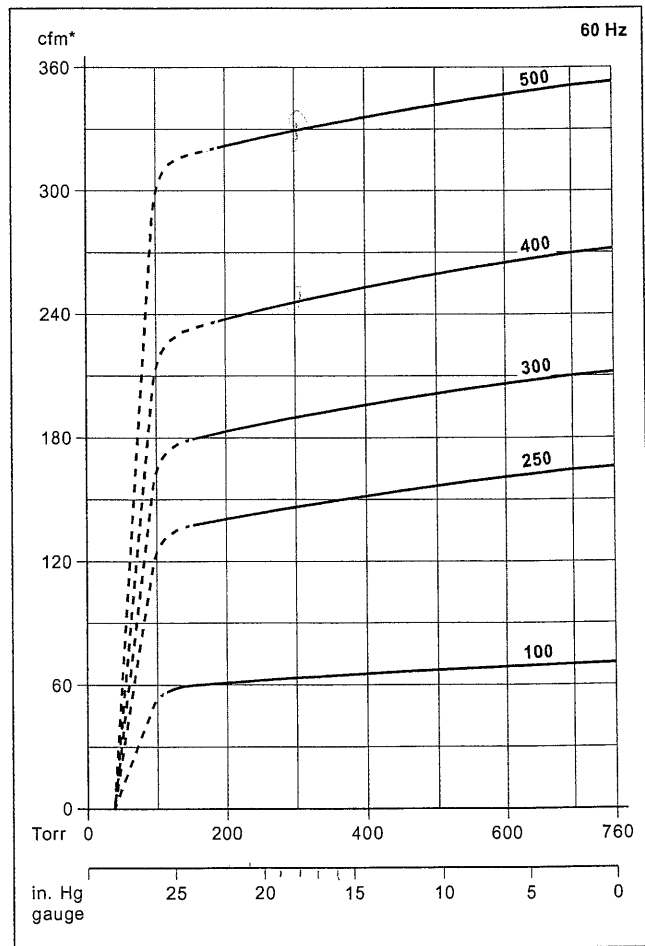
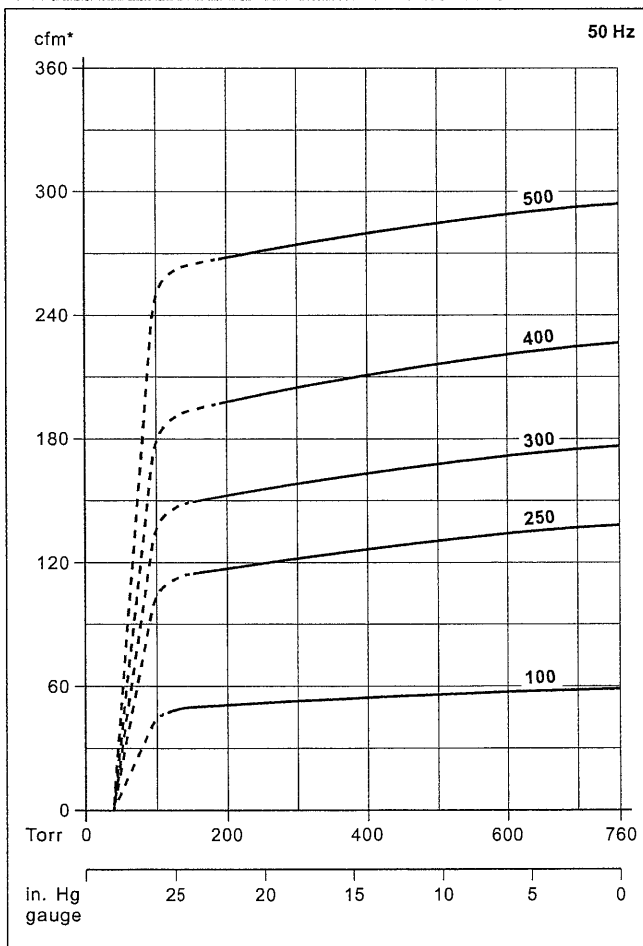
Fax 410-712-4148

E-Mail:  
info@rietschlepumps.com

http://  
www.rietschlepumps.com

VLR		100	250	300	400	500
cfm	50 Hz	58.9	138	177	227	294
	60 Hz	70.6	166	212	272	353
p <sub>1</sub>		38 Torr - 28.44 in. Hg (gauge)				
p <sub>2</sub>		113 Torr-24.49 in.Hg(gauge) 150 Torr - 24.02 in. Hg (gauge) 188 Torr - 22.54 in. Hg (gauge)				
3~	50 Hz	230/400V ± 10%			400/690V ± 10%	
	60 Hz	208-230/460V ± 10%				
kw	50 Hz	2.2	4.0	5.5	7.5	9.0
	60 Hz	3.0	7.5	7.5	10	15
hp	50 Hz	8.7/5.0	14.4/8.3	11.0/6.4	15.0/8.7	19.0/11.0
	60 Hz	8.1-7.6/3.8	21-18.8/9.4	21-18.8/9.4	25-24/12	39-37/18.5
rpm	50 Hz	2850				
	60 Hz	3450				
dB(A)	50 Hz	78	78	79	82	82
	60 Hz	82	82	83	84	84
lbs	50 Hz	220	386	496	551	606
	60 Hz	237	430	496	565	639
l		0.5	0.9	0.9	0.9	0.9
ZRK / ZVF		40 (03) / 32 (54)	50 (03) / 50 (53)	50 (03) / 50 (53)	80 (03) / 100 (51)	80 (03) / 100 (51)
ZMS / ZSZ / ZAD		#	#	#	#	#

	Capacity	Capacidad	Débit	Capacidade
cfm	Ultimate vacuum max.	Vacío final máx.	Vide limite maxi.	Vácuo final max.
p <sub>1</sub>	Ult. vacuum continuous operation	Vacío final permanente	Vide limite fonctionnement continu	Vácuo final permanente
p <sub>2</sub>	Motor version	Versión motor	Exécution moteur	Versão do motor
3~	Motor rating	Datos motor	Puissance moteur	Potência do motor
kw / hp	Full load amperage	Amperaje de plena carga	Intensité absorbée	Amperagem da carga total
A	Speed	Velocidad	Vitesse rotation	Velocidade
rpm	Average noise level + ZSZ	Nivel de ruido medio + ZSZ	Niveau sonore moyen + ZSZ	Nível médio de ruído + ZSZ
dB(A)	Weight	Peso	Poids	Peso
lbs	Oil capacity (Gear)	Instrumentos capacidad aceite	Charge d'huile (Engrenage)	Engrenagem da capacidade do óleo
l				
ZRK	Accessories	Accesorios	Accessoires	Acessórios
ZVF	Non return valve	Válvula retención	Clapet anti-retour	Válvula sem retorno
ZMS	Vacuum tight suction filter	Filtro succión hermético	Filtre d'aspiration étanche	Filtro de sucção à prova de vácuo
ZSZ	Motor starter	Arranque motor	Disjoncteur moteur	Arranque do motor
ZAD	Exhaust silencer	Silenciador extractor	Silencieux refoulement	Silenciador de descarga
	Soft starter	Soft starter	Démarrage progressif	Soft starter



\* Relates to pump inlet conditions./ se refiere a las condiciones de entrada de la bomba./ relatif à l'état règnant à l'aspiration./ refere-se a condições de entrada da bomba.  
 Curves and tables refer to vacuum pump at normal operating temperature./ Las curvas y las tablas se refieren a la bomba de vacío a la temperatura normal de operación./ Les courbes et tableaux sont établies, pompe à température de fonctionnement./ As curvas e tabelas referem-se à bomba a vácuo a temperatura normal de operação.  
 Technical information is subject to change without notice!/ La información técnica está sujeta a cambios sin previo aviso!/ Sous réserve de modification technique./ A informação técnica está sujeita a mudança sem aviso prévio!  
 The listed values for a, ø w and full load amperage may vary because of different motor manufacturers./ Los valores listados para a, ø w y para el amperaje de carga completa pueden variar para distintos fabricantes de motores./ Les dimensions a et ø w ainsi que l'ampérage peuvent différer des données indiquées ci-dessus, selon le fabricant du moteur./ Como variam os fabricantes de motores, poderá haver variação dos valores indicados para a, ø w e para uma amperagem da carga total.  
 # on request # on pedido # sur demande # a pedido

# CARBTROL®

## AIR PURIFICATION CANISTERS 140-200 LB. ACTIVATED CARBON

G-1  
G-2  
G-3



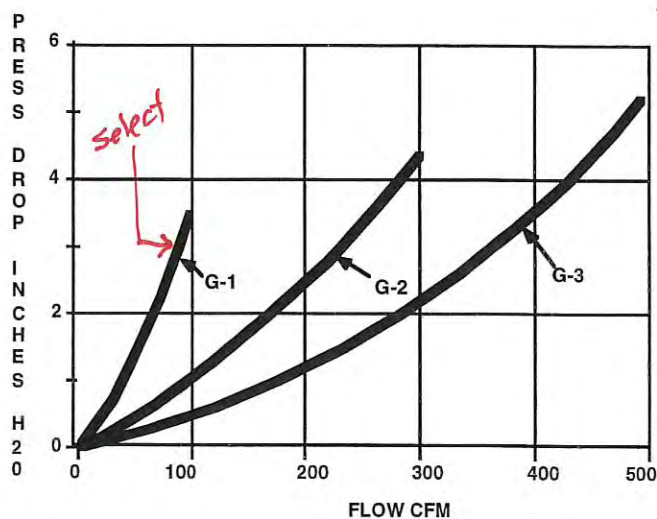
The CARBTROL "G" Canisters handles flows up to 500 CFM.

### FEATURES

- High activity carbon.
- Epoxy lined steel or polyethylene construction.
- Acceptable for transport of hazardous spent carbon.
- Side drain for removal of accumulated condensate.
- Low pressure drop.
- PVC internal piping.
- High temperature (180°F) steel units available.

### APPLICATIONS

- Soil vapor remediation
- Air stripper exhausts
- Tank vents
- Exhaust hoods
- Work area purification
- Sewage plant odor control



© Copyright 1991 Carbtrol Corporation - 7/27/99

AT-116/#1

**CARBTROL®**  
CORPORATION

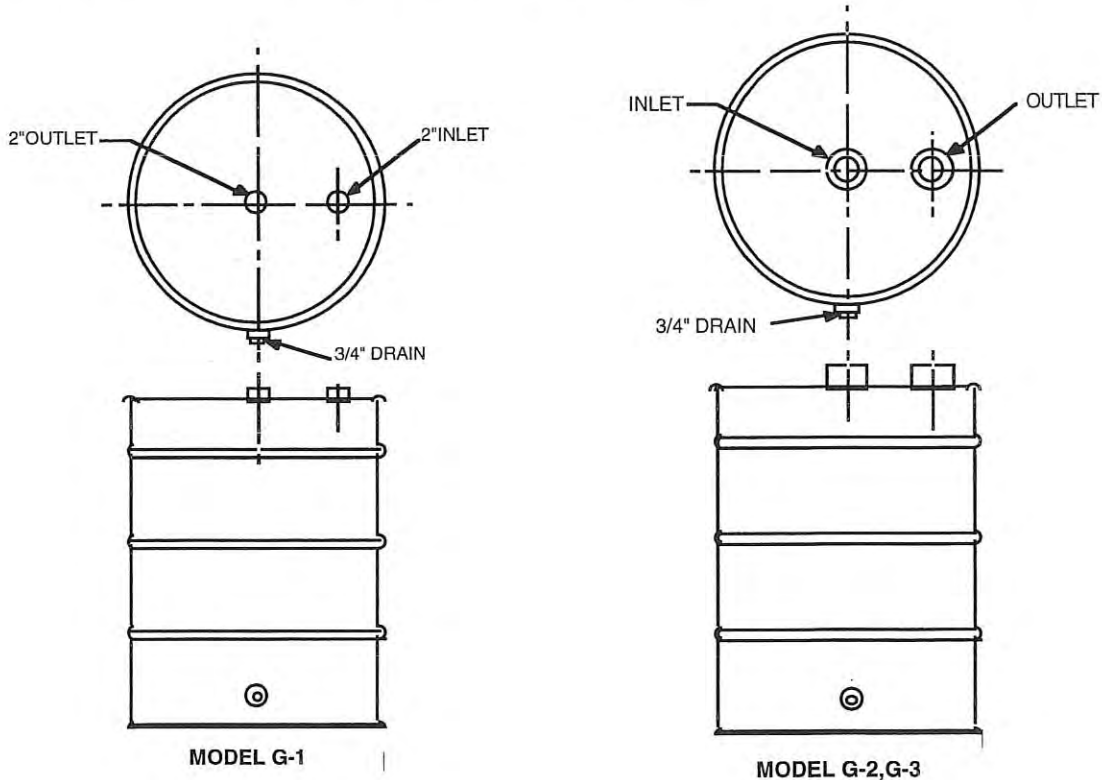
51 Riverside Avenue  
Westport, CT 06880

1-800-242-1150 • Fax # (203) 226-5322  
Web Address: <http://www.carbtrol.com>

# CARBOTROL®

## AIR PURIFICATION CANISTERS 140-200 LB. ACTIVATED CARBON

G-1  
G-2  
G-3



### SPECIFICATIONS

<u>MODEL</u>	<u>DIAMETER/HEIGHT</u>	<u>CARBON WEIGHT</u>	<u>INLET/OUTLET</u>	<u>MAXIMUM RATED FLOW</u>	<u>APPROXIMATE SHIP WEIGHT</u>
G-1*	24"/36"	200 lbs.	2"/2"	100 CFM	240 lbs.
G-2*	24"/36"	170 lbs.	4"/4"	300 CFM	210 lbs.
G-3P	24"/36"	140 lbs.	6"/6"	500 CFM	180 lbs.
G-3S	24"/34"	140 lbs.	4"/4"	500 CFM	180 lbs.

\* Specify: Polyethylene (P) or Epoxy Lined Steel (S)

### SAFETY

Certain chemical compounds in the presence of activated carbon may oxidize, decompose or polymerize. This could result in temperature increases sufficient to cause ignition of the activated carbon or adsorbed material. If a compounds reaction with activated carbon is unknown, appropriate tests should be considered.

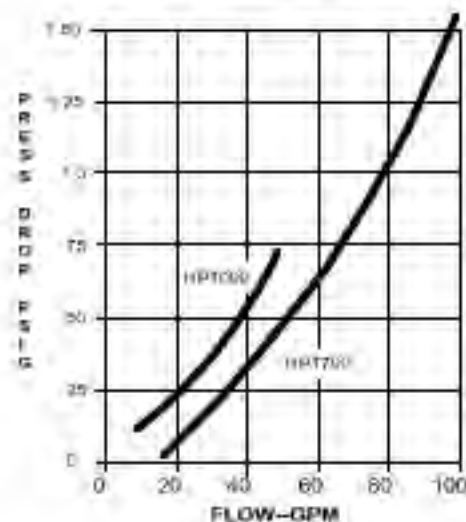
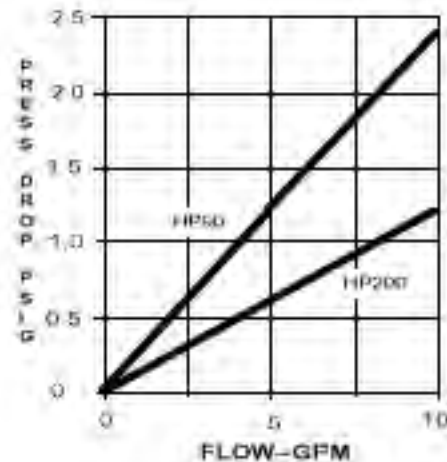
# CARBOTROL®

## HIGH PRESSURE ACTIVATED CARBON WATER PURIFICATION SYSTEMS



### SIZES

MODEL	CARBON QUANTITY	FLOW CAPACITY
HP-90	90 lbs.	10 gpm
HP-200	200 lbs.	10 gpm
HP-1000	1000 lbs.	50 gpm
HP-1700	1700 lbs.	100 gpm



### FEATURES

- High activity liquid phase carbon.
- Operating pressure to 75 psi.
- Corrosion resistant, wound epoxy/fiberglass construction.
- ABS fittings, polypropylene internal piping.
- Standard NPT fittings for easy installation.
- Complete with support stand.

### OPTIONAL:

- NSF certified carbon for potable water applications.

ADV. HP90/200  
10-10-92  
REV 6-10-90

© Copyright 1993 Carbtrol Corporation - 10/4/02

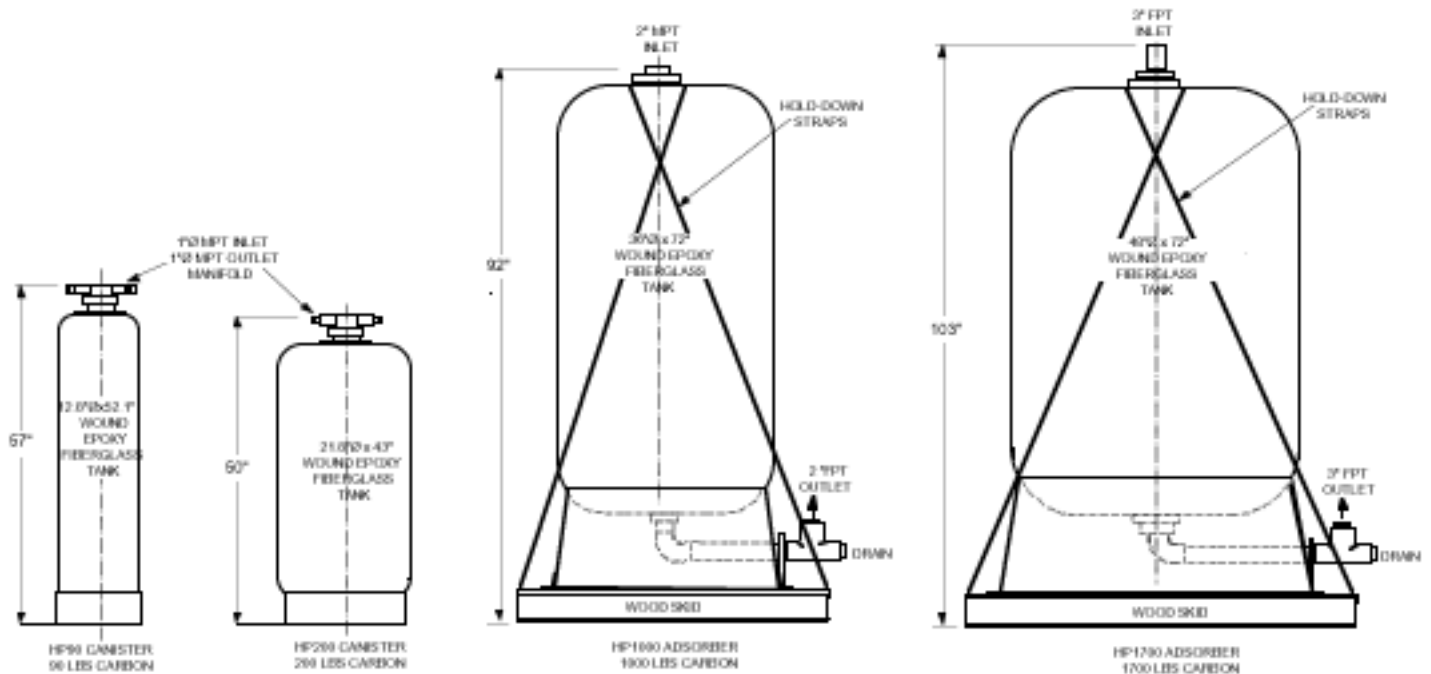
AT-0084

**CARBOTROL™**  
CORPORATION

955 Connecticut Ave., Suite 5202  
Bridgeport, CT 06607

800-242-1150 Fax: 203-337-4347  
[www.carbtrol.com](http://www.carbtrol.com) [info@carbtrol.com](mailto:info@carbtrol.com)

## HIGH PRESSURE ACTIVATED CARBON WATER PURIFICATION SYSTEMS



Note: Dimensions given above are approximate.

### SPECIFICATIONS

MODEL	APPROX. DIAMETER/ HEIGHT	FILL/ CLEANOUT PORT	CARBON WEIGHT	INLET/ OUTLET	SHIPPING WEIGHT
HP-90	13" / 57"	4 1/2"	90 lbs.	1" MPT	135 lbs.
HP-200	22" / 50"	4 1/2"	200 lbs.	1" MPT	250 lbs.
HP-1000	36" / 92"	6"	1000 lbs.	2" MPT / 2" FPT	1500 lbs.
HP-1700	48" / 103"	6"	1700 lbs.	3" FPT	2400 lbs.

**APPENDIX E**  
**FDEP Milestone Tables and Graphs**

### MILESTONE SCHEDULE

Facility Name	Union 76 - Johns
Facility ID #	63/8519168

Baseline Sampling Date	11/22/2023
System Startup Date	

Baseline Constituent Concentrations (ug/l)														
Contaminant Group Per March 1, 2004 RAI		Group 1	Group 2				Group 3				Group 4	Group 5	Group 6	Group 7
Milestone Well #	Monitoring Wells	Benzene	Toluene	Ethylbenzene	Xylenes	Sum TEX	Naphthalene	1-Methyl Naph.	2-Methyl Naph.	Sum Naphs	MTBE	TRPH	PAH (I) <sup>1</sup>	PAH (II) <sup>2</sup>
First Well	MW-25	3.9	0.49	1.1	9.6	11.19	1.9	2	2	5.9	1.3			
Second Well	MW-75S	0.18	0.49	18	95	113.49	7.3	27	53	87.3	0.24			
Third Well	MW-77S	0.18	0.49	71	410	481.49	19	6.6	12	37.6	0.24			
Fourth Well						0				0				
Fifth Well						0				0				
Sixth Well						0				0				

Defined Cleanup Target Levels (ug/l)												
Contaminant Group Per March 1, 2004 RAI	Group 1	Group 2			Group 3			Group 4	Group 5	Group 6	Group 7	
Cleanup Target	Benzene	Sum: Toluene, Ethylbenzene, Total Xylenes			Sum: Naphthalenes			MTBE	TRPH	PAH (I) <sup>1</sup>	PAH (II) <sup>2</sup>	
Groundwater Cleanup Target Level (ug/l)	1	90			70			20	5000			
Natural Attenuation Default Conc. (ug/l)	100	900			700			200	50000			
70% Natural Attenuation Default Conc. (ug/l)	70	630			490			140	35000			
<b>90% Baseline Reduction (ug/l)</b>												
First Well	MW-25	0	1			1			0	0	0	0
Second Well	MW-75S	0	11			9			0	0	0	0
Third Well	MW-77S	0	48			4			0	0	0	0
Fourth Well	0	0	0			0			0	0	0	0
Fifth Well	0	0	0			0			0	0	0	0
Sixth Well	0	0	0			0			0	0	0	0

**Selected Active Remediation Goal**

Groundwater Cleanup Target Level (ug/l)

**Estimated Active Remediation Time**

Milestones are based on pre-startup baseline sampling per Section C.2 of the March 1, 2004 FDEP RAI.

Groundwater Cleanup Target Levels and Natural Attenuation Default Concentrations (NADC) as established in Chapter 62-777, F.A.C.

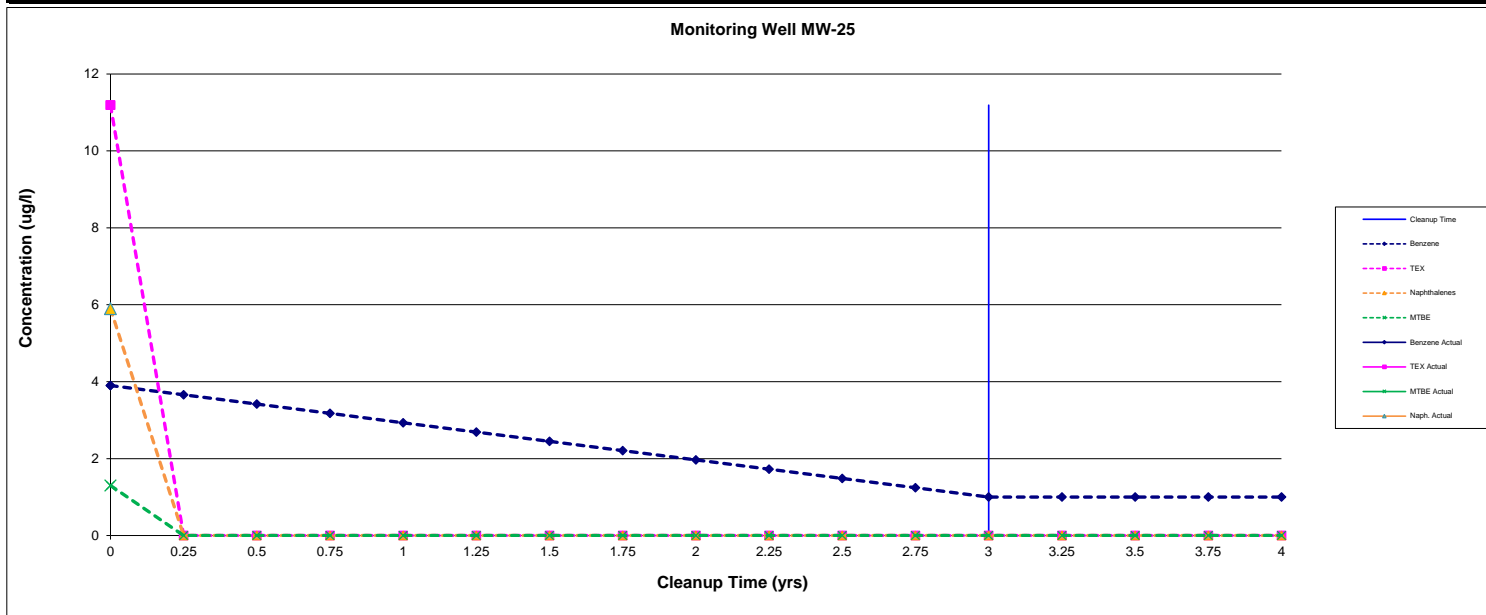
<sup>1</sup>Sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene, Chrysene, and Indeno(1,2,3-cd)pyrene.

<sup>2</sup>Sum of other PAH's not included in Group 3 or Group 6

<b>Monitoring Well MW-25</b>	Facility Name	Union 76 - Johns
	Facility ID #	63/8519168

Baseline Sampling Date	11/22/2023
System Startup Date	1/0/1900

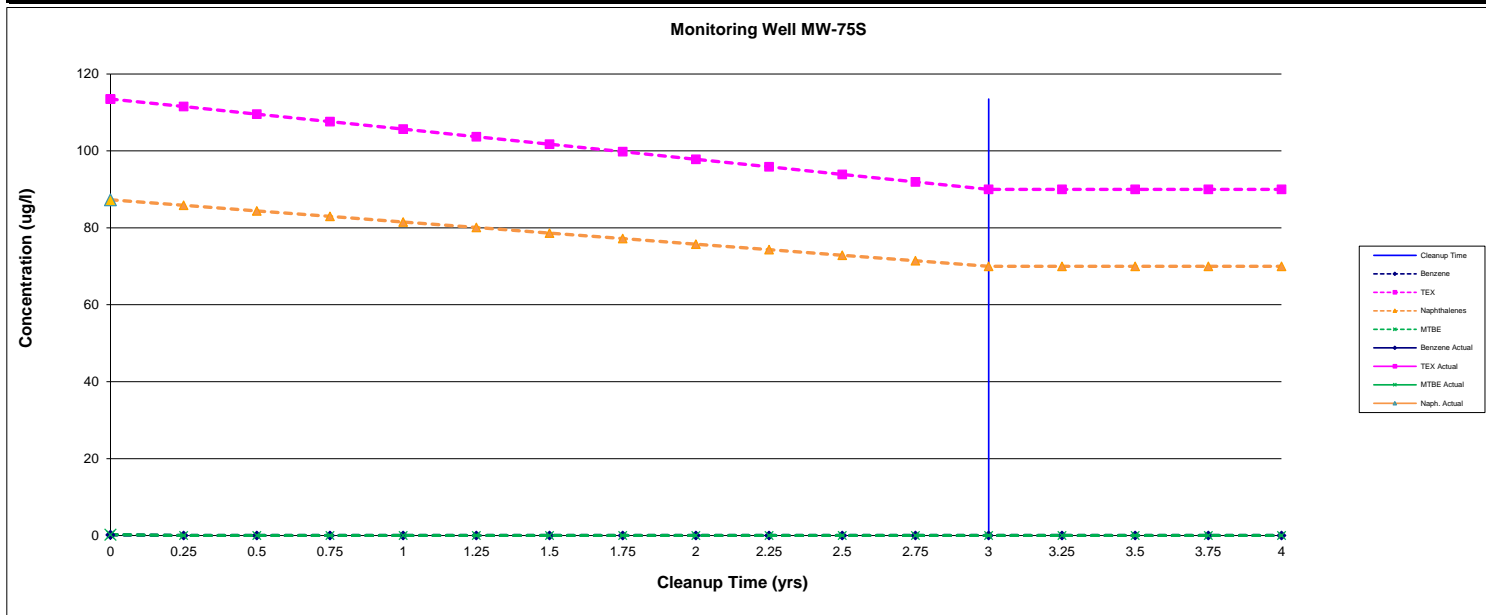
Constituent Concentration Group Milestones (ug/l)																
Projected Cleanup Time (yrs)	Actual Sampling Date	Actual Cleanup Time (yrs)	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6		Group 7	
			Benzene		Sum Toluene, Ethylbenzene, & Xylenes		Naphthalenes		MTBE		TRPH		PAH (I)		PAH (II)	
			Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual
0.00	11/22/2023	0.00	4	3.9	11	11.19	6	5.9	1	1.3	NA	NA	NA	NA	NA	NA
0.25			4													
0.50			3													
0.75			3													
1.00			3													
1.25			3													
1.50			2													
1.75			2													
2.00			2													
2.25			2													
2.50			1													
2.75			1													
3.00			1													
3.25			1													
3.50			1													
3.75			1													
4.00			1													
Remediation Goal (ug/l)			1		90		70		20		5000		0		0	



<b>Monitoring Well MW-75S</b>	Facility Name	Union 76 - Johns
	Facility ID #	63/8519168

Baseline Sampling Date	11/22/2023
System Startup Date	1/0/1900

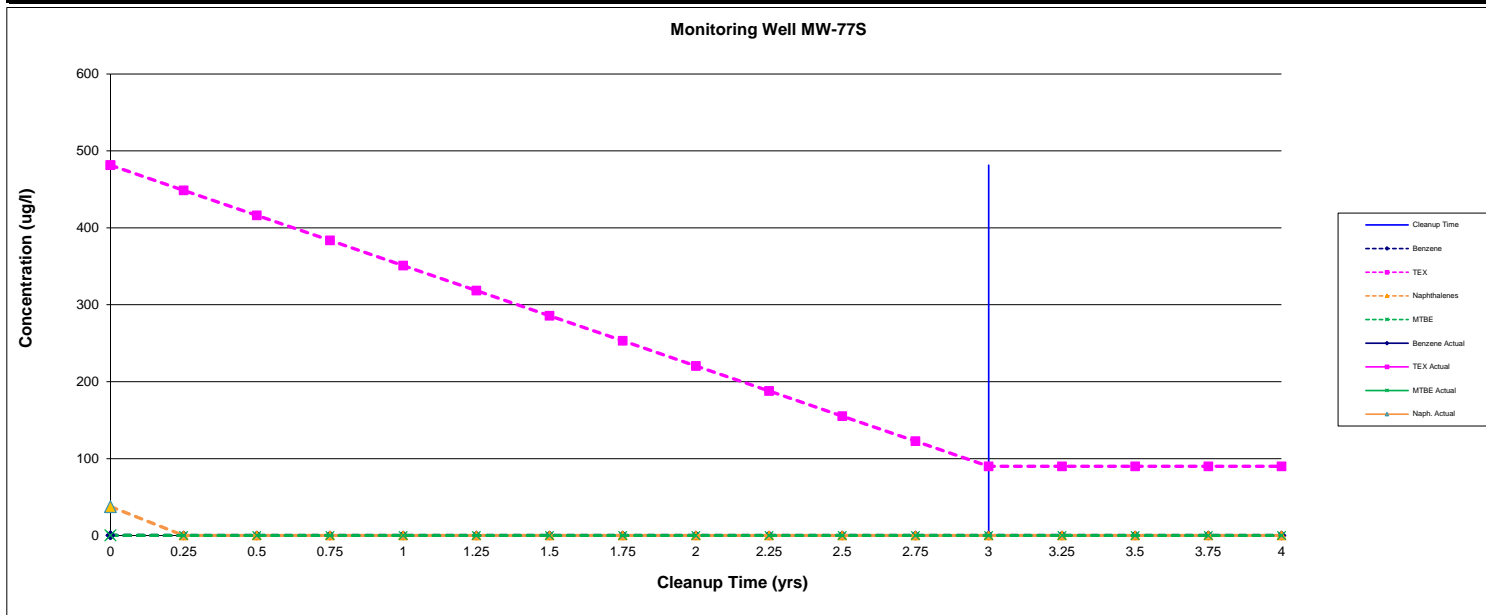
Constituent Concentration Group Milestones (ug/l)																
Projected Cleanup Time (yrs)	Actual Sampling Date	Actual Cleanup Time (yrs)	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6		Group 7	
			Benzene		Sum Toluene, Ethylbenzene, & Xylenes		Naphthalenes		MTBE		TRPH		PAH (I)		PAH (II)	
			Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual
0.00	11/22/2023	0.00	0	0.18	113	113.49	87	87.3	0	0.24	NA	NA	NA	NA	NA	NA
0.25					112		86									
0.50					110		84									
0.75					108		83									
1.00					106		82									
1.25					104		80									
1.50					102		79									
1.75					100		77									
2.00					98		76									
2.25					96		74									
2.50					94		73									
2.75					92		71									
3.00					90		70									
3.25					90		70									
3.50					90		70									
3.75					90		70									
4.00					90		70									
Remediation Goal (ug/l)			1		90		70		20		5000		0		0	



<b>Monitoring Well MW-77S</b>	Facility Name	Union 76 - Johns
	Facility ID #	63/8519168

Baseline Sampling Date	11/22/2023
System Startup Date	1/0/1900

Constituent Concentration Group Milestones (ug/l)																
Projected Cleanup Time (yrs)	Actual Sampling Date	Actual Cleanup Time (yrs)	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6		Group 7	
			Benzene		Sum Toluene, Ethylbenzene, & Xylenes		Naphthalenes		MTBE		TRPH		PAH (I)		PAH (II)	
			Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual
0.00	11/22/2023	0.00	0	0.18	481	481.49	38	37.6	0	0.24	NA	NA	NA	NA	NA	NA
0.25					449											
0.50					416											
0.75					384											
1.00					351											
1.25					318											
1.50					286											
1.75					253											
2.00					220											
2.25					188											
2.50					155											
2.75					123											
3.00					90											
3.25					90											
3.50					90											
3.75					90											
4.00					90											
Remediation Goal (ug/l)			1		90		70		20		5000		0		0	



**APPENDIX F**  
**Proposed Construction SPI Rate Sheet**

**Petroleum Contamination Site Response Action Services  
SCHEDULE OF PAY ITEMS INVOICE RATE SHEET**

Facility Name: UNION 76-JOHNS  
 7-Digit Facility ID #: 8519168  
 County: 63  
 Region: North  
 Site Manager Name: Gene Honeycutt  
 Site Manager Phone: 352-264-6805  
 Site Manager Email: ghoneycutt@alachuacounty.us

Contractor: WSP USA E&I, Inc  
 CID #: 01259 Retainage %: 5% Purchase Order: C106B2  
 Contract #: GC788 FDEP Cost Share %: 100.00% Download Date: 11/18/22 14:50  
 SPI ID #: 27717 Total Extended Cost: \$ 189,942.66 Assignment Type: SCOPE  
 Without Handling Fee: \$ 189,552.66  
 Transition Agreement:  Yes  No

PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PO Rate Sheet			Previously Invoiced	This Invoice		Balance
			UNITS	NEGOTIATED ITEM PRICE	TOTAL EXTENDED PRICE	UNITS	UNITS	EXTENDED PRICE	UNITS
<b>Task 1</b>									
1-2.a.	Site Health & Safety Plan for Continued Work (no cost to FDEP)	Per Site	1	\$ -	\$ -	0	0	\$ -	1
		<b>RETAINAGE</b>			\$ -	\$ -		\$ -	\$ -
		<b>SUBTOTAL</b>			\$ -	\$ -		\$ -	\$ -
<b>Task 2</b>									
1-4.	Permit Fees (actual fee only, cost to obtain permit is included in applicable pay items)	Reimbursable*	500	\$ 1.00	\$ 500.00	0	0	\$ -	500
1-7.	6% Handling Fee for Cost Reimbursable Items	% Surcharge	6500	\$ 0.06	\$ 390.00	0	0	\$ -	6500
3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	2	\$ 486.00	\$ 972.00	0	0	\$ -	2
3-3.	Heavy Duty/Stakebed Truck (3/4 ton +) - ≤ 100 miles each way	Per Round Trip	2	\$ 508.50	\$ 1,017.00	0	0	\$ -	2
3-5.	Work Trailer - ≤ 100 miles each way	Per Round Trip	1	\$ 254.00	\$ 254.00	0	0	\$ -	1
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	9	\$ 232.00	\$ 2,088.00	0	0	\$ -	9
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$ 33.00	\$ 33.00	0	0	\$ -	1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	9	\$ 42.74	\$ 384.66	0	0	\$ -	9
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	9	\$ 92.40	\$ 831.60	0	0	\$ -	9
9-36.	Water, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	9	\$ 55.44	\$ 498.96	0	0	\$ -	9
9-68.	Air, Total Petroleum Hydrocarbons (EPA Method 18 or TO-3)	Per Sample	6	\$ 112.20	\$ 673.20	0	0	\$ -	6
15-1.a.	Trenching and Installation of 1-10 Plumbing (and Electrical) Lines in Trench	Per Linear Foot of Trench	30	\$ 75.10	\$ 2,253.00	0	0	\$ -	30
15-4.a.	System Installation/Integration/Startup - 1 Technology Component - 1-10 Recovery/Treatment Points	Per Startup	1	\$ 20,900.00	\$ 20,900.00	0	0	\$ -	1
19-19.	Remedial Action Startup Report	Per Report	1	\$ 2,970.00	\$ 2,970.00	0	0	\$ -	1
21-6.b.	P.E. Project Oversight for Remediation System Integration and Startup - Medium System	Per System	1	\$ 2,150.00	\$ 2,150.00	0	0	\$ -	1
21-29.	P.E. Review, Evaluation and Certification of As-Built Drawings (P.E. sealed red lined modifications)	Per Set of Drawings	1	\$ 178.00	\$ 178.00	0	0	\$ -	1
22-1.	Piping and Fittings for Connection to Stub-up Locations	Reimbursable*	1000	\$ 1.00	\$ 1,000.00	0	0	\$ -	1000
22-2.	Locate Existing Effluent Discharge Line in Trench and Connect to Existing RW-4, RW-5, RW-34 Piping in Trench	Reimbursable*	5000	\$ 1.00	\$ 5,000.00	0	0	\$ -	5000
		<b>RETAINAGE</b>			\$ 2,104.67	\$ -		\$ -	\$ 2,104.67
		<b>SUBTOTAL</b>			\$ 42,093.42	\$ -		\$ -	\$ 42,093.42
<b>Task 3</b>									
3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	5	\$ 486.00	\$ 2,430.00	0	0	\$ -	5
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	3	\$ 232.00	\$ 696.00	0	0	\$ -	3
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$ 33.00	\$ 33.00	0	0	\$ -	1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	3	\$ 42.74	\$ 128.22	0	0	\$ -	3
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	3	\$ 92.40	\$ 277.20	0	0	\$ -	3

**Petroleum Contamination Site Response Action Services  
SCHEDULE OF PAY ITEMS INVOICE RATE SHEET**

PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PO Rate Sheet			Previously Invoiced	This Invoice		Balance
			UNITS	NEGOTIATED ITEM PRICE	TOTAL EXTENDED PRICE	UNITS	UNITS	EXTENDED PRICE	UNITS
9-36.	Water, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	3	\$ 55.44	\$ 166.32	0	0	\$ -	3
9-68.	Air, Total Petroleum Hydrocarbons (EPA Method 18 or TO-3)	Per Sample	12	\$ 112.20	\$ 1,346.40	0	0	\$ -	12
17-2.	System O&M Package - Medium	Per Month	3	\$ 3,850.00	\$ 11,550.00	0	0	\$ -	3
18-26.	MPE System - Medium - Long Term > 6 mos.	Per Month	3	\$ 4,400.00	\$ 13,200.00	0	0	\$ -	3
18-35.	Carbon Off Gas Treatment - Add On - Small - Short Term ≤ 6 mos.	Per Month	3	\$ 825.00	\$ 2,475.00	0	0	\$ -	3
19-21.	Operation & Maintenance Report, Quarterly or Non-Annual	Per Report	1	\$ 1,890.00	\$ 1,890.00	0	0	\$ -	1
21-8.	P.E. Project Oversight for Remediation System Operation and Maintenance	Per Month	3	\$ 1,700.00	\$ 5,100.00	0	0	\$ -	3
		<b>RETAINAGE</b>			\$ 1,964.61	\$ -		\$ -	\$ 1,964.61
		<b>SUBTOTAL</b>			\$ 39,292.14	\$ -		\$ -	\$ 39,292.14
<b>Task 4</b>									
3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	1	\$ 486.00	\$ 486.00	0	0	\$ -	1
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	3	\$ 232.00	\$ 696.00	0	0	\$ -	3
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$ 33.00	\$ 33.00	0	0	\$ -	1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	3	\$ 42.74	\$ 128.22	0	0	\$ -	3
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	3	\$ 92.40	\$ 277.20	0	0	\$ -	3
9-36.	Water, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	3	\$ 55.44	\$ 166.32	0	0	\$ -	3
9-68.	Air, Total Petroleum Hydrocarbons (EPA Method 18 or TO-3)	Per Sample	6	\$ 112.20	\$ 673.20	0	0	\$ -	6
17-2.	System O&M Package - Medium	Per Month	3	\$ 3,850.00	\$ 11,550.00	0	0	\$ -	3
18-26.	MPE System - Medium - Long Term > 6 mos.	Per Month	3	\$ 4,400.00	\$ 13,200.00	0	0	\$ -	3
18-35.	Carbon Off Gas Treatment - Add On - Small - Short Term ≤ 6 mos.	Per Month	3	\$ 825.00	\$ 2,475.00	0	0	\$ -	3
19-21.	Operation & Maintenance Report, Quarterly or Non-Annual	Per Report	1	\$ 1,890.00	\$ 1,890.00	0	0	\$ -	1
21-8.	P.E. Project Oversight for Remediation System Operation and Maintenance	Per Month	3	\$ 1,700.00	\$ 5,100.00	0	0	\$ -	3
		<b>RETAINAGE</b>			\$ 1,833.75	\$ -		\$ -	\$ 1,833.75
		<b>SUBTOTAL</b>			\$ 36,674.94	\$ -		\$ -	\$ 36,674.94
<b>Task 5</b>									
3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	1	\$ 486.00	\$ 486.00	0	0	\$ -	1
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	3	\$ 232.00	\$ 696.00	0	0	\$ -	3
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$ 33.00	\$ 33.00	0	0	\$ -	1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	3	\$ 42.74	\$ 128.22	0	0	\$ -	3
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	3	\$ 92.40	\$ 277.20	0	0	\$ -	3
9-36.	Water, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	3	\$ 55.44	\$ 166.32	0	0	\$ -	3
9-68.	Air, Total Petroleum Hydrocarbons (EPA Method 18 or TO-3)	Per Sample	3	\$ 112.20	\$ 336.60	0	0	\$ -	3
17-2.	System O&M Package - Medium	Per Month	3	\$ 3,850.00	\$ 11,550.00	0	0	\$ -	3
18-26.	MPE System - Medium - Long Term > 6 mos.	Per Month	3	\$ 4,400.00	\$ 13,200.00	0	0	\$ -	3
19-21.	Operation & Maintenance Report, Quarterly or Non-Annual	Per Report	1	\$ 1,890.00	\$ 1,890.00	0	0	\$ -	1
21-8.	P.E. Project Oversight for Remediation System Operation and Maintenance	Per Month	3	\$ 1,700.00	\$ 5,100.00	0	0	\$ -	3
		<b>RETAINAGE</b>			\$ 1,693.17	\$ -		\$ -	\$ 1,693.17
		<b>SUBTOTAL</b>			\$ 33,863.34	\$ -		\$ -	\$ 33,863.34
<b>Task 6</b>									
3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	1	\$ 486.00	\$ 486.00	0	0	\$ -	1
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	9	\$ 232.00	\$ 2,088.00	0	0	\$ -	9

**Petroleum Contamination Site Response Action Services  
SCHEDULE OF PAY ITEMS INVOICE RATE SHEET**

PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PO Rate Sheet			Previously Invoiced	This Invoice		Balance
			UNITS	NEGOTIATED ITEM PRICE	TOTAL EXTENDED PRICE	UNITS	UNITS	EXTENDED PRICE	UNITS
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	1	\$ 33.00	\$ 33.00	0	0	\$ -	1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	9	\$ 42.74	\$ 384.66	0	0	\$ -	9
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	9	\$ 92.40	\$ 831.60	0	0	\$ -	9
9-36.	Water, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	9	\$ 55.44	\$ 498.96	0	0	\$ -	9
9-68.	Air, Total Petroleum Hydrocarbons (EPA Method 18 or TO-3)	Per Sample	3	\$ 112.20	\$ 336.60	0	0	\$ -	3
17-2.	System O&M Package - Medium	Per Month	3	\$ 3,850.00	\$ 11,550.00	0	0	\$ -	3
18-26.	MPE System - Medium - Long Term > 6 mos.	Per Month	3	\$ 4,400.00	\$ 13,200.00	0	0	\$ -	3
19-22.	Operation & Maintenance Annual Report	Per Report	1	\$ 3,510.00	\$ 3,510.00	0	0	\$ -	1
21-8.	P.E. Project Oversight for Remediation System Operation and Maintenance	Per Month	3	\$ 1,700.00	\$ 5,100.00	0	0	\$ -	3
		<b>RETAINAGE</b>			\$ 1,900.94	\$ -		\$ -	\$ 1,900.94
		<b>SUBTOTAL</b>			\$ 38,018.82	\$ -		\$ -	\$ 38,018.82
		<b>TOTAL COST</b>			\$ 189,942.66	\$ -		\$ -	\$ 189,942.66
						<b>Owner Cost Share:</b>	\$ -	\$ -	\$ -
						<b>FDEP Cost Share:</b>	\$ 189,942.66	\$ -	\$ 189,942.66
						<b>Retainage:</b>	\$ 9,497.13	\$ -	\$ 9,497.13
						<b>FDEP Less Retainage:</b>	\$ 180,445.53	\$ -	\$ 180,445.53

Version: 12.0

Site Manager Approval: \_\_\_\_\_  
 Print Name \_\_\_\_\_  
 \_\_\_\_\_  
 Signature \_\_\_\_\_  
 \_\_\_\_\_  
 Date of Review Letter \_\_\_\_\_

**APPENDIX G**  
**Schedule of Pay Items Invoice Rate Sheet**

**Petroleum Contamination Site Response Action Services  
SCHEDULE OF PAY ITEMS INVOICE RATE SHEET**

Facility Name: UNION 76-JOHNS  
 7-Digit Facility ID #: 8519168  
 County: 63  
 Region: North  
 Site Manager Name: Gene Honeycutt  
 Site Manager Phone: 352-264-6805  
 Site Manager Email: ghoneycutt@alachuacounty.us

Contractor: WSP USA E&I, Inc  
 CID #: 01259 Retainage %: 5% Purchase Order: C106B2  
 Contract #: GC788 FDEP Cost Share %: 100.00% Download Date: 11/18/22 14:50  
 SPI ID #: 27717 Total Extended Cost: \$ 35,403.98 Assignment Type: SCOPE  
 Without Handling Fee: \$ 35,151.98  
 Transition Agreement:  Yes  No

PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PO Rate Sheet			Previously Invoiced	This Invoice		Balance
			UNITS	NEGOTIATED ITEM PRICE	TOTAL EXTENDED PRICE	UNITS	UNITS	EXTENDED PRICE	UNITS
<b>Task 1</b>									
1-2.a.	Site Health & Safety Plan for Continued Work (no cost to FDEP)	Per Site	1	\$ -	\$ -	1	0	\$ -	0
1-7.	6% Handling Fee for Cost Reimbursable Items	% Surcharge	4200	\$ 0.06	\$ 252.00	2100	0	\$ -	2100
3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	3	\$ 486.00	\$ 1,458.00	2	0	\$ -	1
3-7.a.	DPT Rig and Support Vehicles Mobilization - ≤ 100 miles each way	Per Round Trip	1	\$ 648.00	\$ 648.00	0	0	\$ -	1
5-2.	Hand Auger Boring ≤ 10 foot total depth	Per Boring	4	\$ 178.25	\$ 713.00	0	0	\$ -	4
5-3.a.	Direct Push Technology (DPT) Rig and Equipment	Full Day	2	\$ 3,449.50	\$ 6,899.00	2	0	\$ -	0
6-1.	Well Installation - 1 inch diameter	Per Foot	79	\$ 31.75	\$ 2,508.25	79	0	\$ -	0
8-1.	Monitoring Well Sampling with Water Level, ≤ 100 foot depth	Per Well	8	\$ 232.00	\$ 1,856.00	5	0	\$ -	3
8-6.	Soil/Sediment Sample Collection	Per Sample	5	\$ 87.50	\$ 437.50	2	0	\$ -	3
8-7.	Water Level or Free Product Gauging	Per Well	7	\$ 21.50	\$ 150.50	7	0	\$ -	0
8-8.	Free Product Gauging & Bailing	Per Well	2	\$ 87.50	\$ 175.00	2	0	\$ -	0
8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	2	\$ 33.00	\$ 66.00	2	0	\$ -	0
9-2.	Soil, BTEX + MTBE (EPA 8021 or EPA 8260)	Per Sample	5	\$ 46.20	\$ 231.00	2	0	\$ -	3
9-5.	Soil, Polycyclic Aromatic Hydrocarbons (EPA 8270 or EPA 8310)	Per Sample	4	\$ 86.62	\$ 346.48	2	0	\$ -	2
9-8.	Soil, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	4	\$ 51.98	\$ 207.92	2	0	\$ -	2
9-11.	Soil, Arsenic (EPA 6010 or EPA 6020)	Per Sample	1	\$ 13.86	\$ 13.86	0	0	\$ -	1
9-12.	Soil, Cadmium (EPA 6010 or EPA 6020)	Per Sample	1	\$ 13.86	\$ 13.86	0	0	\$ -	1
9-13.	Soil, Chromium (EPA 6010 or EPA 6020)	Per Sample	1	\$ 13.86	\$ 13.86	0	0	\$ -	1
9-14.	Soil, Lead (EPA 6010 or EPA 6020)	Per Sample	1	\$ 13.86	\$ 13.86	0	0	\$ -	1
9-27.	Water, BTEX + MTBE (EPA 602, EPA 624, EPA 8021 or EPA 8260)	Per Sample	8	\$ 42.74	\$ 341.92	5	0	\$ -	3
9-30.	Water, Polycyclic Aromatic Hydrocarbons, including 1-methylnaphthalene + 2-methylnaphthalene (EPA 610 [HPLC], EPA 625, EPA 8270 or EPA 8310)	Per Sample	8	\$ 92.40	\$ 739.20	5	0	\$ -	3
9-36.	Water, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	8	\$ 55.44	\$ 443.52	5	0	\$ -	3
12-6.	Transport and Disposal of Petroleum Impacted Soil (includes drum)	Per Drum	1	\$ 205.50	\$ 205.50	1	0	\$ -	0
12-13.	Transport and Disposal of Petroleum Contact Water (includes drum)	Per Drum	1	\$ 231.00	\$ 231.00	0	0	\$ -	1
19-27.	Interim Assessment Report	Per Report	1	\$ 594.00	\$ 594.00	1	0	\$ -	0
22-1.	Dolly Rig	Reimbursable*	4200	\$ 1.00	\$ 4,200.00	2100	0	\$ -	2100
					<b>RETAINAGE</b>	\$ 1,137.96	\$ 822.69	\$ -	\$ 315.27
					<b>SUBTOTAL</b>	\$ 22,759.23	\$ 16,453.75	\$ -	\$ 6,305.48
<b>Task 2</b>									
19-15.	Level 3 Limited Scope Remedial Action Plan or RAP Modification Plan	Per Plan	1	\$ 5,952.00	\$ 5,952.00	0	1	\$ 5,952.00	0
21-27.	P.E. Review, Evaluation and Certification of a Level 3 Limited Scope Remedial Action Plan or RAP Modification Plan	Per Plan	1	\$ 1,360.00	\$ 1,360.00	0	1	\$ 1,360.00	0
					<b>RETAINAGE</b>	\$ 365.60	\$ -	\$ 365.60	\$ -

**Petroleum Contamination Site Response Action Services  
SCHEDULE OF PAY ITEMS INVOICE RATE SHEET**

PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PO Rate Sheet			Previously Invoiced	This Invoice		Balance
			UNITS	NEGOTIATED ITEM PRICE	TOTAL EXTENDED PRICE	UNITS	UNITS	EXTENDED PRICE	UNITS
		<b>SUBTOTAL</b>			\$ 7,312.00	\$ -		\$ 7,312.00	\$ -
<i>Task 3</i>									
19-17.	Construction Drawings and Specs Report	Per Report	1	\$ 4,320.00	\$ 4,320.00	0	0	\$ -	1
20-3.	Engineer (Key)	Per Hour	4	\$ 118.00	\$ 472.00	0	0	\$ -	4
21-1.	Professional Engineer (Key)	Per Hour	1	\$ 170.00	\$ 170.00	0	0	\$ -	1
21-35.	P.E. Review, Evaluation, and Certification of Construction Drawings	Per Set of Drawings	1	\$ 355.00	\$ 355.00	0	0	\$ -	1
23-1.	Contingent Funding - Allowance only to be used as offset for field change orders	NOT BILLABLE	15.75	\$ 1.00	\$ 15.75	n/a	n/a	n/a	15.75
		<b>RETAINAGE</b>			\$ 266.64	\$ -		\$ -	\$ 266.64
		<b>SUBTOTAL</b>			\$ 5,332.75	\$ -		\$ -	\$ 5,332.75
		<b>TOTAL COST</b>			\$ 35,403.98	\$ 16,453.75		\$ 7,312.00	\$ 11,638.23
<b>Owner Cost Share:</b>						\$ -	\$ -	\$ -	\$ -
<b>FDEP Cost Share:</b>						\$ 35,403.98	\$ 16,453.75	\$ 7,312.00	\$ 11,638.23
<b>Retainage:</b>						\$ 1,770.20	\$ 822.69	\$ 365.60	\$ 581.91
<b>FDEP Less Retainage:</b>						\$ 33,633.78	\$ 15,631.06	\$ 6,946.40	\$ 11,056.32

Version: 12.0

Site Manager Approval: \_\_\_\_\_  
 Print Name  
 \_\_\_\_\_  
 Signature  
 \_\_\_\_\_  
 Date of Review Letter