PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

ESCAMBIA COUNTY BOARD OF COUNTY COMMISSIONERS
MACDONALDS SHOPPING CENTER PROPERTY
1803 W. FAIRFIELD DRIVE
PENSACOLA, FLORIDA

PPM PROJECT NO. 22186001

FEBRUARY 11, 2016

Environmental Science and Engineering

PPM CONSULTANTS

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

CONDUCTED UNDER ESCAMBIA COUNTY COMMUNITY &
ENVIRONMENTAL DIVISION
AGREEMENT

AT

MACDONALDS SHOPPING CENTER PROPERTY
1803 WEST FAIRFIELD DRIVE
PENSACOLA, FLORIDA

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FEBRUARY 11, 2016

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1.0 INTRODUCTION

PPM Consultants, Inc. was retained by the Escambia County Community and Environment Division (County) to conduct a Phase II Environmental Site Assessment (ESA) of the parcel of property owned by MacDonalds Properties at 2816 North Pace Boulevard in Pensacola, Florida. This investigation was conducted to evaluate whether past uses of the site and/or surrounding area have resulted in soil and/or groundwater contamination above regulatory standards. The work is being conducted for the Escambia County Board of County Commissioners under their Community and Environment Division.

The scope of work for the Phase II ESA was outlined in PPM's December 23, 2015 response to the County request for a Phase II Environmental Assessment for the MacDonalds Shopping Center Property located at 1803 W. Fairfield Drive, Pensacola, Florida. Phase II activities included:

- A soil and groundwater assessment in the area around locations of two previously identified Areas of Concern (AOC).

- The first AOC is the former gasoline service station located northeast of the parcel along Fairfield Drive.

- The second is the parcel located on the northwest corner of the property (currently the Homestead Kitchen restaurant) which was identified as an AOC due to its potential to have historically stored and distributed petroleum products.

This report describes the scope of work, procedures and methods implemented during field activities; provides a summary of the investigations conducted at the site; and presents results and conclusions from the investigation. **Figures** and **Tables** are presented in **Appendix A** and **Appendix B**, respectively.

2.0 BACKGROUND

2.1 SITE DESCRIPTION

The subject property is currently a commercially developed 14.32 acre parcel located at latitude 30° 44' 37''N, longitude 87° 23' 86''W as shown in **Figure 1, Site Location Map**, **Appendix A**. The north, west and southwest portions of the subject property are commercially developed including a strip mall, restaurant, pawn shop and paved parking areas. The southeast portion of the subject property includes multiple commercial buildings.

Properties surrounding the subject consist of commercial use to the north, commercial developed and the Escambia County Jail Complex to the south and east, and commercial developed and commercial vacant property to the west.

The surrounding properties have remained constant with undeveloped, residential developed and commercial developed including petroleum service stations to the northwest, undeveloped and commercial developed properties to the south. The Escambia County Prison is to the east and undeveloped, residential developed and commercial developed residential property to the west. **Figure 2, Vicinity / Area Use Map** in **Appendix A** illustrates properties surrounding the subject parcel.

2.2 SITE HISTORY

The subject property remained undeveloped until 1952 until it was developed for various commercial retail uses. The MacDonalds Shopping Center was erected on the site in the late 1950s and continues to operate in the north portion of the site today.

A gasoline service station was operated on the northeast corner of the property along Fairfield Drive. Underground tank closure documentation is not available and subsurface assessment/evaluation had not been performed. Since no records were found indicating whether underground petroleum storage and distribution systems were present on the property, additional investigation was recommended. Also, a conservation with the property owner indicated the restaurant currently operating as the Homestead Kitchen located at the northwest corner of the property was a location where a gasoline service station operated.

2.3 CHEMICALS OF CONCERN

The chemicals of concern associated with the storage and distribution of gasoline are petroleum fuel (gasoline and diesel), petroleum product additives and possibly storage and disposal of used motor oil. Petroleum compounds and petroleum compound additives that are chemicals of concern to the Florida Department of Environmental Protection (FDEP) include benzene, toluene, ethylbenzene, total xylenes (collectively BTEX), polynuclear aromatic hydrocarbons (PAH), methyl tertiary-butyl ether (MTBE) and Total Recoverable Petroleum Hydrocarbons (TRPH). In addition, used oil indicator compounds are priority pollutant (PP) volatile organic compounds (VOC), PAHs and four RCRA metals (arsenic, cadmium, chromium and lead).

2.4 GOALS AND OBJECTIVES

The Phase II ESA objective is to determine the presence, if any, of soil and groundwater impacts from on and offsite historical usages of petroleum products or hazardous substances.

Impact is defined as concentrations of chemicals of concern that exceed Chapter 62-777 Florida Administrative Code (FAC) FDEP SCTLs or GCTLs. The Phase II ESA scope of work is designed to confirm the presence or absence of environmental impacts by collecting soil and groundwater samples in the locations where impact is considered most likely to exist based on the findings of the Phase I ESA. If there is a need for additional assessment, such recommendation will be made in this report.

2.5 RECOGNIZED ENVIRONMENTAL CONDITIONS

PPM was contracted to assess recognized environmental conditions (REC) as identified by others. In addition, PPM was contracted to conduct a ground penetrating radar (GPR) survey to identify whether underground storage tanks (UST) and/or UST systems remained beneath the subject property. If additional RECs were detected, then a groundwater assessment would be conducted.

3.0 SCOPE OF WORK

This scope of work took into consideration the documented locations of onsite structures, RECs and the constituents likely to be associated with these types of activities, the media likely to be impacted (soil and groundwater), the site configuration, and physical obstructions. The site activities were performed and prepared in accordance with FDEP guidelines, including Chapter 62-780, FAC, *FDEP Standard Operating Procedures for Field Sampling (FDEP-SOP-001/01).*

Specific activities included:

- Preparation a site-specific Health and Safety Plan (HASP).
- Location of subsurface utilities prior to drilling by contacting the Sunshine One Call System and local utilities not under contract to the One-Call service; visual inspection for the evidence of utilities and subsurface structures. This information was used to prevent impact to subsurface utilities.
- Performance of a GPR survey to identify USTs and/or UST systems.
- Drilling technology for the purpose of soil and groundwater sampling included direct push technology.

A total of 14 soil borings were advanced near potential source areas in the vicinity of the former gas stations located on the northeast and northwest sections of the parcel. Soil samples were field screened and laboratory analyzed at various intervals. A total of three temporary monitoring wells were installed to assist with determining water quality. Groundwater samples were collected and laboratory analyzed from temporary monitoring wells installed in borings completed along the northwest corner of the parcel. **Figure 3A, Site Map – Western Site** and **Figure 3B, Site Map – Eastern Site, Appendix A** illustrates the boring and well locations as described below:

- Eleven soil borings (SB-1 through SB-11) were placed in suspected areas of concern via direct push technology (DPT) at the former gasoline service station located at the northeast area of the parcel and along Fairfield Drive.
- Three soil borings (SB-12, SB-13 and SB-14) were placed around the UST basin AOC via DPT at the Homestead Kitchen location.
- Three soil samples from the northeast former gas station were submitted for laboratory analysis for VOCs per EPA Method 8260, Semi-volatile Organic Compounds (SVOC) per Environmental Protection Agency (EPA) Method 8270 and TRPH per Florida Petroleum Range Organics (PRO).
- Three soil borings SB-12/TW-1, SB-13/TW-2 and SB-14/TW-3 were completed to temporary monitoring wells.
- Groundwater flow direction was determined surveying the top of casings of the temporary wells and collecting depth to water measurements from individual wells.
- One grab groundwater sample was collected from each temporary monitoring well and submitted for laboratory analysis for VOCs plus naphthalene per EPA Method 8260.

4.0 FIELD METHODOLOGY

PPM conducted assessment activities in accordance with FDEP rules and guidance documents, including Chapter 62-780, FAC and the FDEP Standard Operating Procedures for Field Sampling (FDEP-SOP-001/01).

4.1 GROUND PENEDTRATING RADAR

On January 15, 2016, a GPR survey was conducted at the former service station located along the northeastern area of the parcel and at the Homestead Kitchen located at the northwestern area of the parcel. The survey was performed by Southern Radar Imaging

located in Athens, Alabama. GPR is an electromagnetic evaluation technique designed for locating subsurface targets. The purpose of the survey was to evaluate subsurface areas suspected of housing undocumented petroleum storage and distribution systems.

The GPR survey identified five underground anomalies. The boundaries of the anomalies were illustrated directly on the surface with marking paint. Area 1 was identified north of the former gas station and north of the building service bays. Areas 2, 3, 4, and 5 were identified north of the Homestead Kitchen and south of Fairfield Drive. Photographs of the identified surface marked anomalies are included in **Appendix C, GPR Report**.

4.2 SOIL BORING INSTALLATION

Fourteen soil borings (SB-1 through SB-14) were advanced on January 15 and 18, 2016 by Walker Hill Environmental under the supervision of PPM personnel. The borings were advanced at locations as follows:

- SB-1 through SB-4 was advanced within and near the former dispenser island.
- SB-5, SB-6 and SB-7 were advanced around an identified UST (via GPR) located north of the former service bays.
- SB-8 and SB-9 were advanced in the suspected former UST location and west of the dispenser island.
- SB-10 was advanced west of the building.
- SB-11 was advanced south of the building.
- SB-12 was advanced south of the Homestead Kitchen restaurant located at Pace Boulevard and Fairfield Drive.
- SB-13 and SB-14 were advanced on the north side of the Homestead Kitchen building and east and west of suspected identified USTs (via GPR).

Boring locations are shown in **Figure 3A, Site Map, Western Site** and **Figure 3B, Site Map, Eastern Site, Appendix A**.

The soil borings were each installed via hand auger and direct push technology (Geoprobe 6620DT). Soil borings SB-1 through SB-4, SB-6, SB-7 SB-8, SB-10 and SB-11 were terminated at a total depth of 20 feet below ground surface (BGS). Soil borings SB-5, SB-9, SB-12, SB-13, and SB-14 were terminated at a total depth of 40 feet BGS (groundwater encountered at approximately 38 feet BGS). Three borings, SB-12/TW-1, SB-13/TW-2, and SB-14/TW-3 were converted into temporary monitoring wells in order to collect groundwater samples. When groundwater sampling was complete, well materials were pulled, and the boreholes were backfilled with cement grout.

4.3 MONITOR WELL INSTALLATION

Temporary monitoring wells TW-1 (SB-12), TW-2 (SB-13) and TW-3 (SB-14) were installed on January 18, 2016. Temporary monitoring wells were constructed of 38 feet of 1-inch diameter PVC casing attached to 10-feet of prepack 1-inch diameter PVC well screen. Well locations are shown in **Figure 3A, Site Map Western Site, Appendix A**. Well details are included in **Appendix D**, **Soil Boring and Well Construction Logs**.

4.4 SOIL SAMPLING

Soil samples were collected from 14 soil borings (SB-1 through SB-14) at approximate 2-foot intervals for lithologic description and field organic vapor analyzer (OVA) screening using a HealthTek gas monitor equipped with a flame ionization detector (FID).

Three soil samples were collected from borings SB-2 (6-8 feet BGS), SB-5 (34-36 feet BGS) and SB-9 (36-38 feet BGS) and shipped to TestAmerica Laboratory for analysis for VOCs per USEPA Method 8260, PAHs per USEPA Method 8270 and TRPH per the FL PRO Method.

4.5 GROUNDWATER SAMPLING

Groundwater samples were collected from temporary monitoring wells TW-1, TW-2 and TW-3 on January 18, 2016. All groundwater samples were hand delivered to TestAmerica Laboratory located in Pensacola, Florida for analyses for the VOCs and naphthalene per EPA Method 8260. **Equipment Calibration and Groundwater Sampling Log Field Forms** are included in **Appendix E**.

5.0 ASSESSMENT RESULTS

5.1 LITHOLOGY

Subsurface lithology at the site was determined by visual inspection of soil samples collected during the soil boring advancements on January 15 and 18, 2016. The lithology consisted primarily of moist, brown fine grained Sand to about 10 feet BGS becoming a red and orange clayey poor-sorted Sand with fines between 10 and 20 feet BGS. Below 20 feet, lithology graded into a white and orange poor-sorted fine to medium grained Sand. The lithologic section investigated to the maximum depth of 40 feet BGS was consistent in borings advanced across the site. Saturated soil was encountered at depths ranging from 38 to 39 feet BGS. Soil boring logs are included in **Appendix D**.

5.2 SOIL ORGANIC VAPOR AND ANALYTCAIL RESULTS

Soil sample OVA headspace concentrations ranged from less than (<) 1 parts per million (ppm) to a maximum of 36 ppm in SB-14 at 36-40 feet BGS. **Table 1, Appendix B** provides a summary of **Soil Organic Vapor Readings**. **Soil Screening Results** are depicted in **Figure 4A** and **Figure 4B, Appendix A**.

Laboratory analytical results collected from the three soil samples on January 15, 2016 revealed no COCs at concentration's above their respective SCTL.

Soil laboratory analytical data are depicted in **Figure 5**, **Soil Sample Locations and Analytical Results, Eastern Site** in **Appendix A**. Soil laboratory analytical data are summarized in **Table 2A**, **Soil Analytical Summary – BTEX** and **MTBE** and **Table 2B**, **Soil Analytical Summary – PAHs**. Laboratory analytical reports are included in **Appendix F, Laboratory Reports**.

5.3 GROUNDWATER SAMPLING RESULTS

Laboratory analysis results from the January 18, 2016 groundwater sampling event conducted in temporary monitoring wells TW-1, TW-2 and TW-3 revealed all analyzed chemicals were below the GCTLs.

Groundwater Sample Locations and Analytical Results are depicted in **Figure 6, Western Site, Appendix A**. Groundwater sampling data are summarized in **Table 3**, **Groundwater Analytical Summary - BTEX, MTBE and Naphthalene**. **Laboratory Reports** are included in **Appendix F**.

5.4 GROUNDWATER ELEVATION

Prior to temporary monitoring well abandonment, the top of casings for the wells were surveyed (in-house) and arbitrary elevations were established. Groundwater elevations ranged from 12.54 feet in TW-2 to 12.99 feet in TW-3. **Figure 7, Groundwater Elevation Contour Map (January 18, 2016), Appendix A** illustrates a general west, southwest groundwater flow direction under a hydraulic gradient of about 0.02 feet per foot. A **Groundwater Elevation Summary** is provided as **Table 4, Appendix B**.

6.0 SUMMARY

- A GPR survey was conducted at the former service station located along the northeastern area of the parcel and at the Homestead Kitchen located at the northwestern area of the parcel. The GPR survey identified five underground anomalies. In Area 1, one anomaly was identified north of the former gas station and north of the building service bays. Areas 2, 3, 4, and 5 were identified north of the Homestead Kitchen and south of Fairfield Drive.

- A total of 14 borings (SB-1 through SB-14) were advanced to a maximum depth of 40 feet BGS on January 15 and 18, 2016. Soil samples were field-screened at 2-foot intervals using an OVA. OVA readings ranged from <1 ppm to a maximum of 36 ppm.

- Results of laboratory analysis of soils samples revealed no COCs at concentrations above their respective SCTLs.

- Three temporary monitoring wells (TW-1, TW-2 and TW-3) were installed at the northwest portion of the site (Homestead Kitchen) and south of Fairfield Drive the site on January 18, 2016 to a total depth of 48 feet BGS using 10 feet of screen attached to 38 feet of riser casing.

- Laboratory analysis of groundwater samples collected from three temporary wells revealed no COCs at concentrations above their respective GCTLs.

- Groundwater flow was in a general west, southwest direction.

7.0 CONCLUSIONS

The Phase II ESA activities indicate that adverse environmental impacts to site soil and groundwater above FDEP SCTLs and GCTLs associated with historical land use was not evident at the locations investigated.

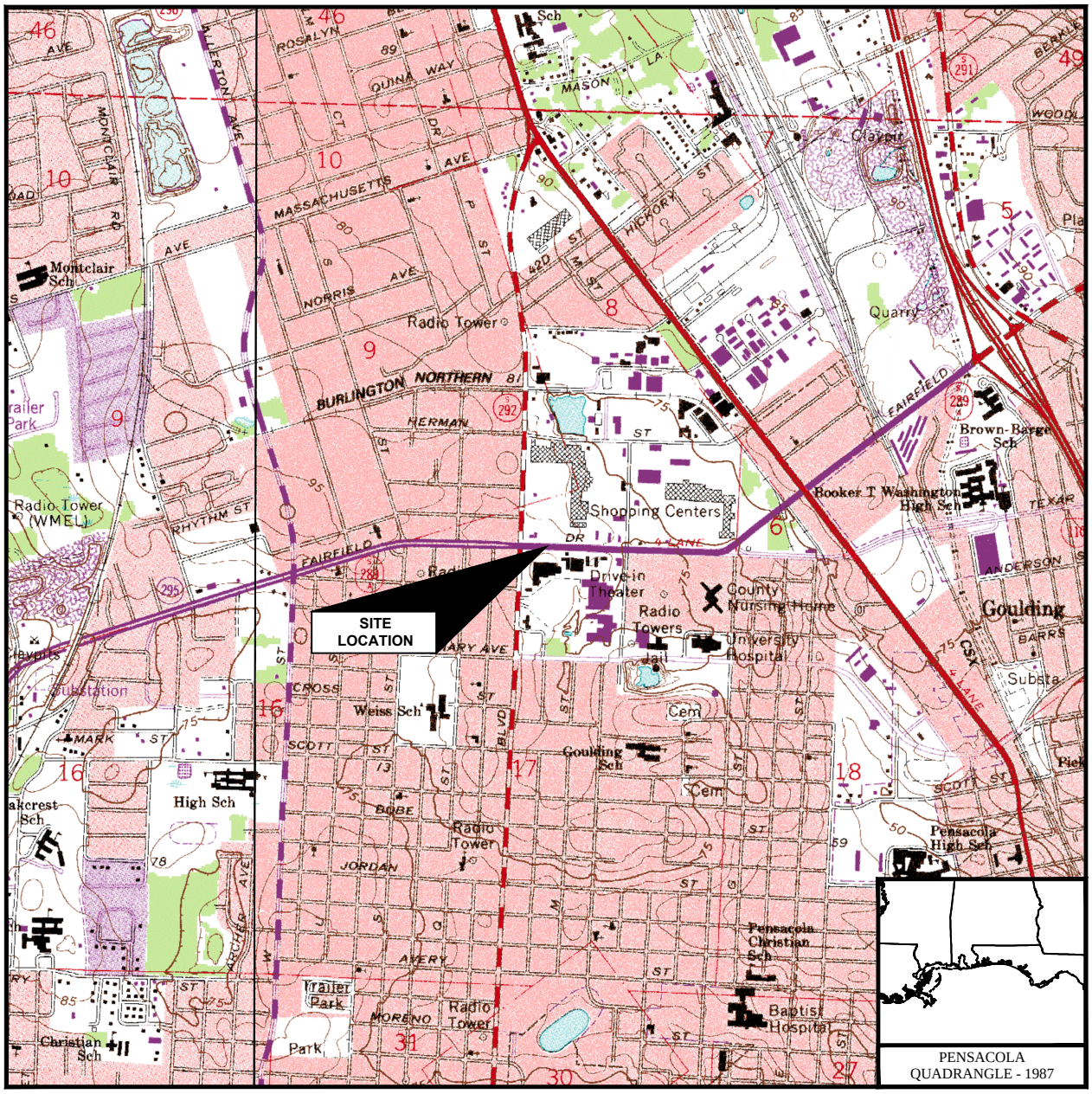
No petroleum hydrocarbon impacts to soil and groundwater were detected in samples collected from borings and wells placed across the site and adjacent to potential source areas.

8.0 RECOMMENDATIONS

Based on results of soil and groundwater sample analysis, PPM recommends that a Discharge Reporting Form not be submitted to the FDEP. PPM further recommends that the existing USTs be closed in accordance with Chapters 62-761 and 62-780, Florida Administrative Code.

APPENDICES

APPENDIX A – FIGURES



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1000 0 1000 5000 10,000 FEET

1 0 KILOMETER 1 2

1000 0 METER 1000 2000

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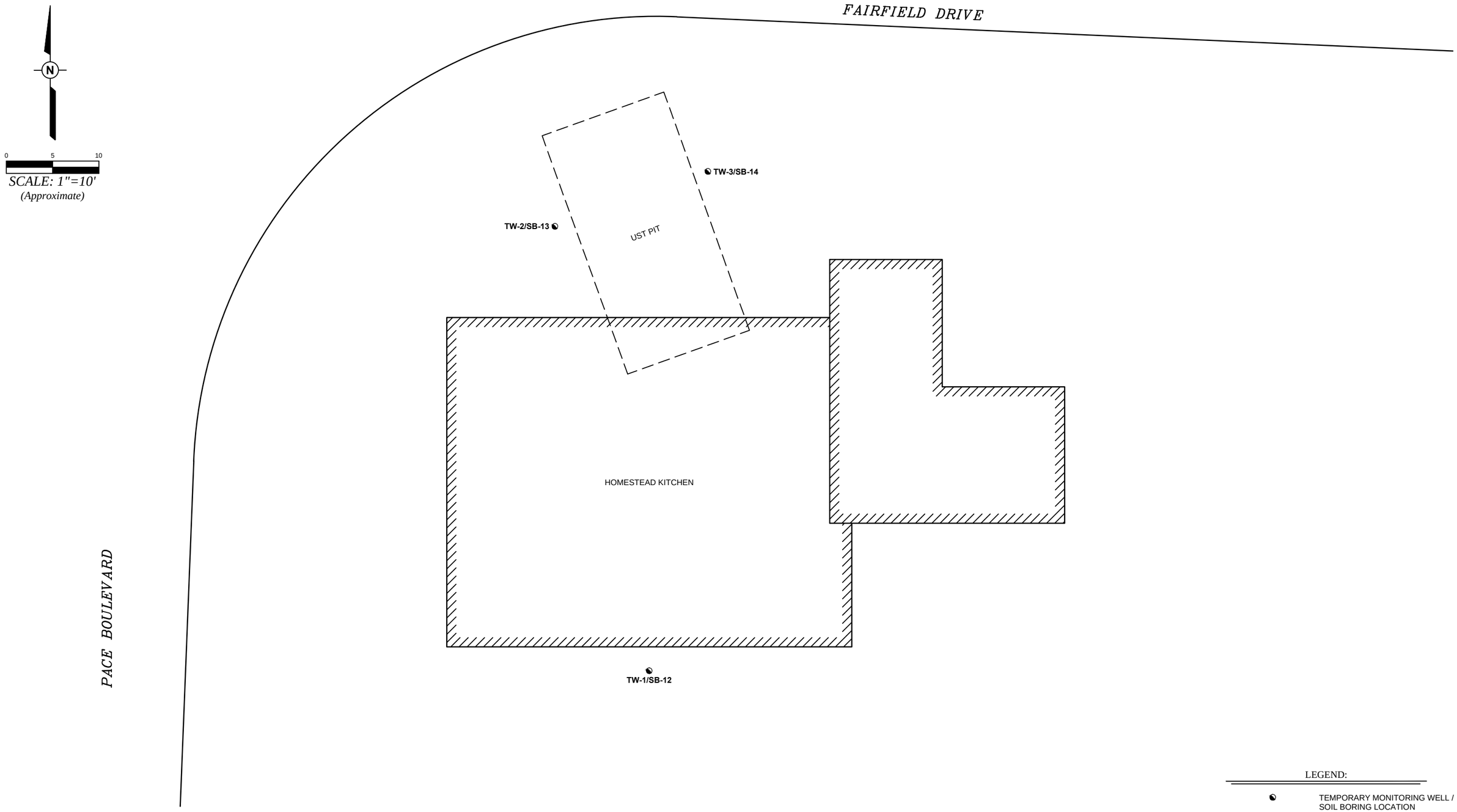
PPM CONSULTANTS, INC. www.ppmco.com		ESCAMBIA COUNTY BOARD OF COUNTY COMISSIONERS **MCDONALDS SHOPPING CENTER PROPERTY** 1803 WEST FAIRFIELD DRIVE PENSACOLA, FLORIDA	SITE LOCATION MAP
DRAWN BY: MLR	DRAWN DATE: 02/09/16		FIGURE NUMBER 1
PROJECT NUMBER: 22186001	BILLING GROUP: ESAII		

Z:\Escambia County\22186001 - Former Gas Stations\ESA2\22186001-ESA2.dwg, 1 Site Location Map, 2/9/2016 9:26:55 AM, Mike Rawls

Z:\Escambia County\22186001 - Former Gas Stations\ESA2\22186001-ESA2.dwg, 2 Vicinity-Area Map, 2/9/2016 9:26:57 AM, Mike Rawls

PPM CONSULTANTS, INC. www.ppmco.com	ESCAMBIA COUNTY BOARD OF COUNTY COMISSIONERS **MCDONALDS SHOPPING CENTER PROPERTY** 1803 WEST FAIRFIELD DRIVE PENSACOLA, FLORIDA	VICINITY / AREA USE MAP	FIGURE NUMBER 2
DRAWN BY: MLR / DRAWN DATE: 02/09/16			
PROJECT NUMBER: 22186001 / BILLING GROUP: ESAII			



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1803 WEST FAIRFIELD DRIVE
PENSACOLA, FLORIDA

SITE MAP - WESTERN SITE

FIGURE NUMBER
3A

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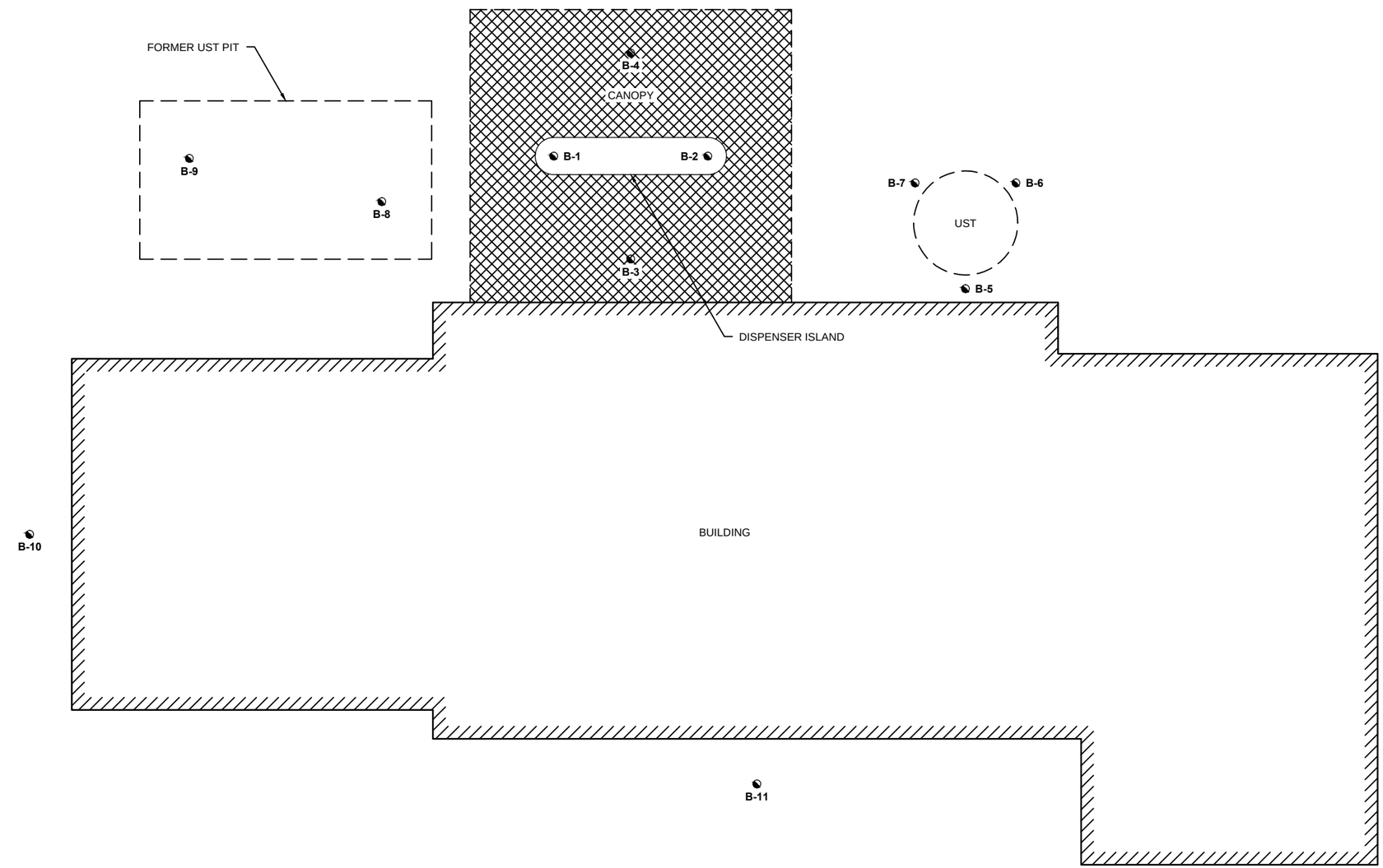

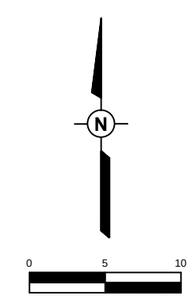

SCALE: 1"=10'
(Approximate)

LEGEND:

SOIL BORING LOCATION

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PENSACOLA, FLORIDA

SITE MAP - EASTERN SITE

FIGURE NUMBER
3B

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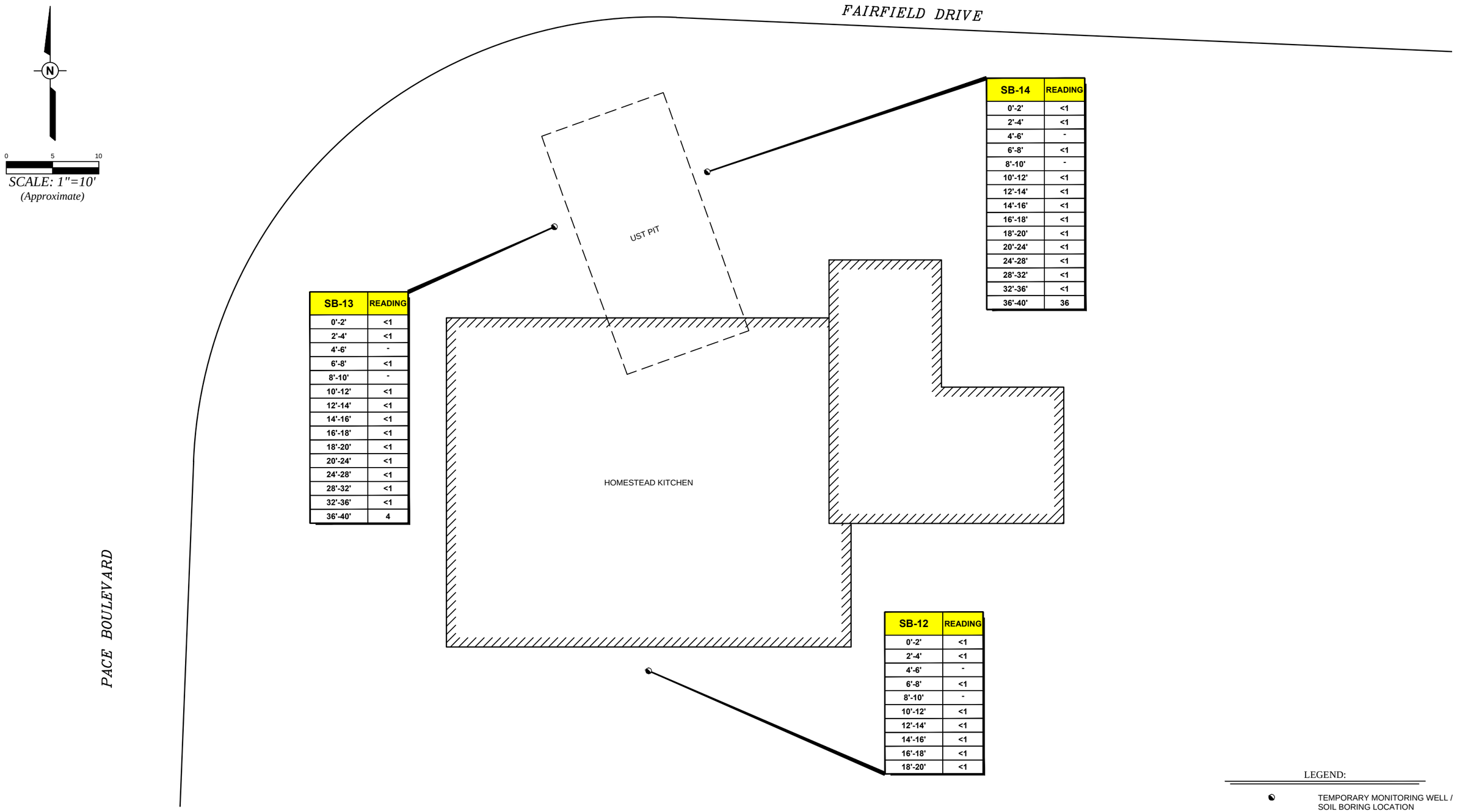

SB-13	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1
20'-24'	<1
24'-28'	<1
28'-32'	<1
32'-36'	<1
36'-40'	4

SB-14	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1
20'-24'	<1
24'-28'	<1
28'-32'	<1
32'-36'	<1
36'-40'	36

SB-12	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

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1803 WEST FAIRFIELD DRIVE
PENSACOLA, FLORIDA

SOIL SCREENING RESULTS - WESTERN SITE

FIGURE NUMBER
4A

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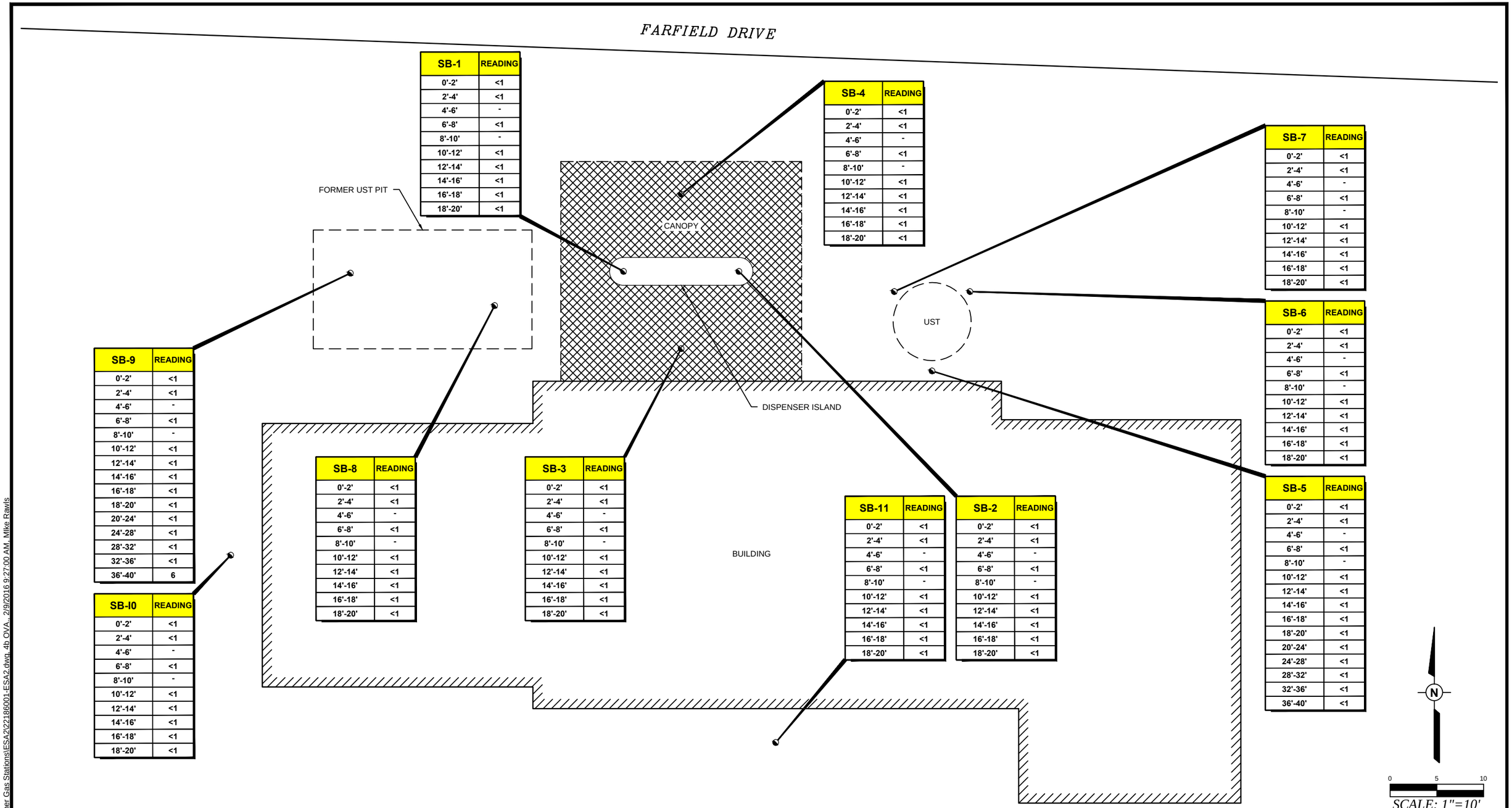

SB-1	READING
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2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

SB-4	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

SB-7	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

SB-6	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

SB-5	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1
20'-24'	<1
24'-28'	<1
28'-32'	<1
32'-36'	<1
36'-40'	<1

SB-9	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1
20'-24'	<1
24'-28'	<1
28'-32'	<1
32'-36'	<1
36'-40'	6

SB-I0	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
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SB-8	READING
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2'-4'	<1
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6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

SB-3	READING
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2'-4'	<1
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6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

SB-11	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

SB-2	READING
0'-2'	<1
2'-4'	<1
4'-6'	-
6'-8'	<1
8'-10'	-
10'-12'	<1
12'-14'	<1
14'-16'	<1
16'-18'	<1
18'-20'	<1

LEGEND:

SOIL BORING LOCATION

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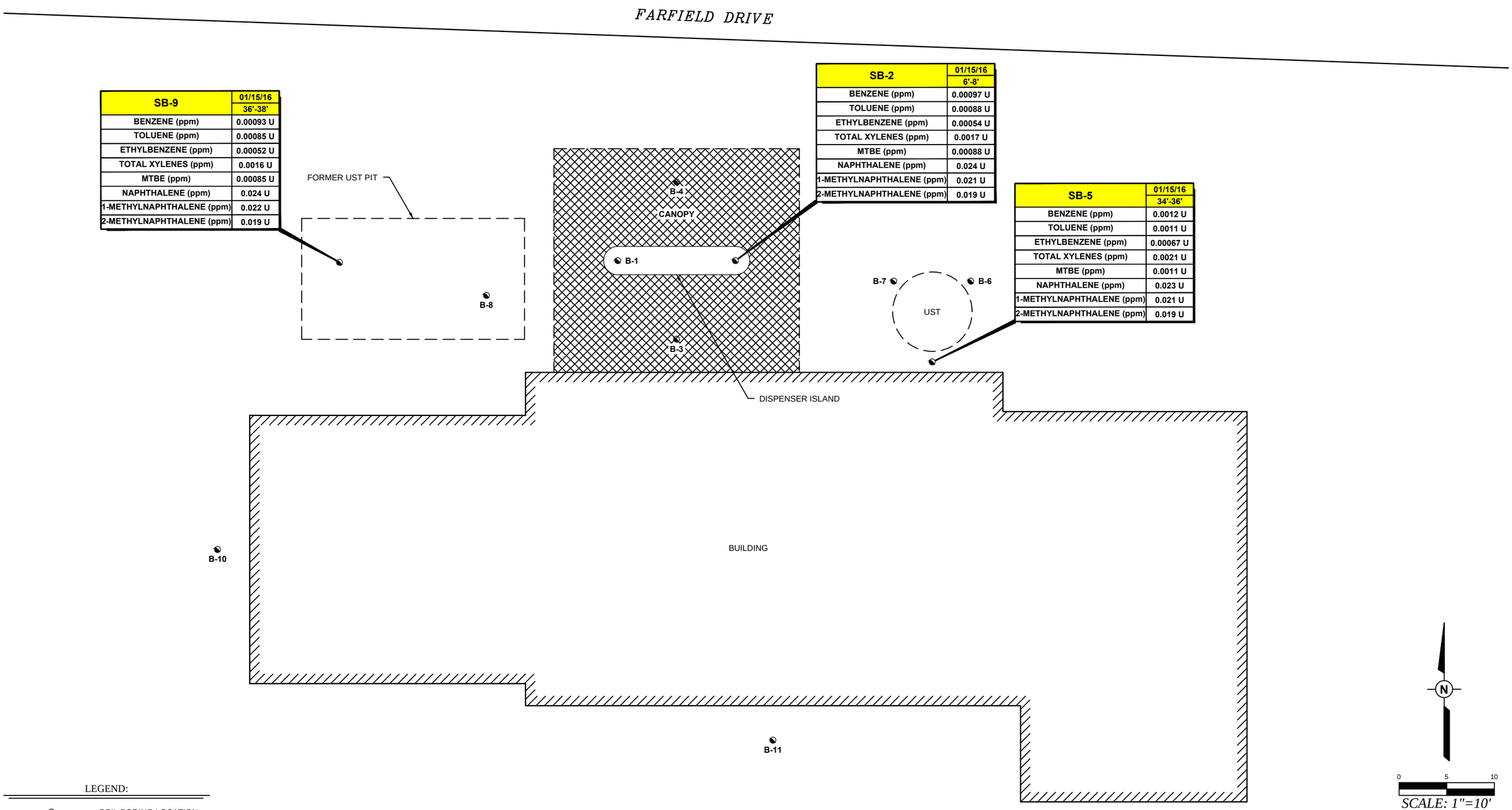
PROJECT NUMBER:	BILLING GROUP:
22186001	ESAII

ESCAMBIA COUNTY BOARD OF COUNTY COMISSIONERS
MCDONALDS SHOPPING CENTER PROPERTY
1803 WEST FAIRFIELD DRIVE
PENSACOLA, FLORIDA

SOIL SCREENING RESULTS - EASTERN SITE

FIGURE NUMBER
4B

Z:\Escambia County\22186001 - Former Gas Stations\ESA2\22186001-ESA2.dwg, 4b OVA, 2/9/2016 9:27:00 AM, Mike Rawls



SB-9	01/15/16
	36'-38'
BENZENE (ppm)	0.00093 U
TOLUENE (ppm)	0.00085 U
ETHYLBENZENE (ppm)	0.00052 U
TOTAL XYLENES (ppm)	0.0016 U
MTBE (ppm)	0.00085 U
NAPHTHALENE (ppm)	0.024 U
1-METHYLNAPHTHALENE (ppm)	0.022 U
2-METHYLNAPHTHALENE (ppm)	0.019 U

SB-2	01/15/16
	6'-8'
BENZENE (ppm)	0.00097 U
TOLUENE (ppm)	0.00088 U
ETHYLBENZENE (ppm)	0.00054 U
TOTAL XYLENES (ppm)	0.0017 U
MTBE (ppm)	0.00088 U
NAPHTHALENE (ppm)	0.024 U
1-METHYLNAPHTHALENE (ppm)	0.021 U
2-METHYLNAPHTHALENE (ppm)	0.019 U

SB-5	01/15/16
	34'-36'
BENZENE (ppm)	0.0012 U
TOLUENE (ppm)	0.0011 U
ETHYLBENZENE (ppm)	0.00067 U
TOTAL XYLENES (ppm)	0.0021 U
MTBE (ppm)	0.0011 U
NAPHTHALENE (ppm)	0.023 U
1-METHYLNAPHTHALENE (ppm)	0.021 U
2-METHYLNAPHTHALENE (ppm)	0.019 U

LEGEND:

SOIL BORING LOCATION

U — CONSTITUENT NOT DETECTED ABOVE INSTRUMENT MINIMUM DETECTION LIMIT

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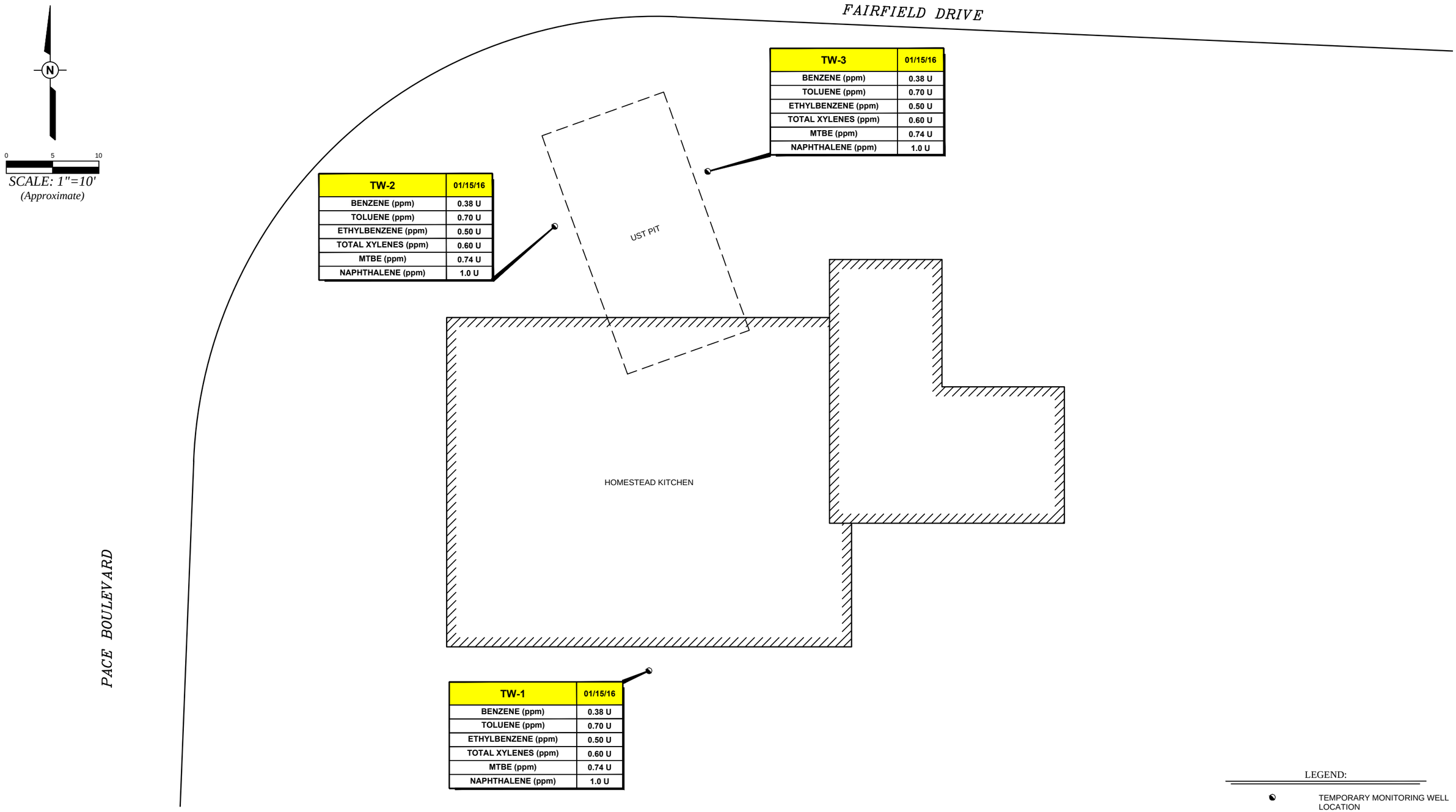
DRAWN BY:	DRAWN DATE:
MLR	02/09/16
PROJECT NUMBER:	BILLING GROUP:
22186001	ESAII

ESCAMBIA COUNTY BOARD OF COUNTY COMISSIONERS
MCDONALDS SHOPPING CENTER PROPERTY
1803 WEST FAIRFIELD DRIVE
PENSACOLA, FLORIDA

SOIL SAMPLE LOCATION AND ANALYTICAL RESULTS - EASTERN SITE

FIGURE NUMBER
5

Z:\Escambia County\22186001 - Former Gas Stations\ESA2\22186001-ESA2.dwg, 5 Soil Samples, 2/9/2016 9:27:01 AM, Mike Rawls



TW-1	01/15/16
BENZENE (ppm)	0.38 U
TOLUENE (ppm)	0.70 U
ETHYLBENZENE (ppm)	0.50 U
TOTAL XYLENES (ppm)	0.60 U
MTBE (ppm)	0.74 U
NAPHTHALENE (ppm)	1.0 U

TW-2	01/15/16
BENZENE (ppm)	0.38 U
TOLUENE (ppm)	0.70 U
ETHYLBENZENE (ppm)	0.50 U
TOTAL XYLENES (ppm)	0.60 U
MTBE (ppm)	0.74 U
NAPHTHALENE (ppm)	1.0 U

TW-3	01/15/16
BENZENE (ppm)	0.38 U
TOLUENE (ppm)	0.70 U
ETHYLBENZENE (ppm)	0.50 U
TOTAL XYLENES (ppm)	0.60 U
MTBE (ppm)	0.74 U
NAPHTHALENE (ppm)	1.0 U

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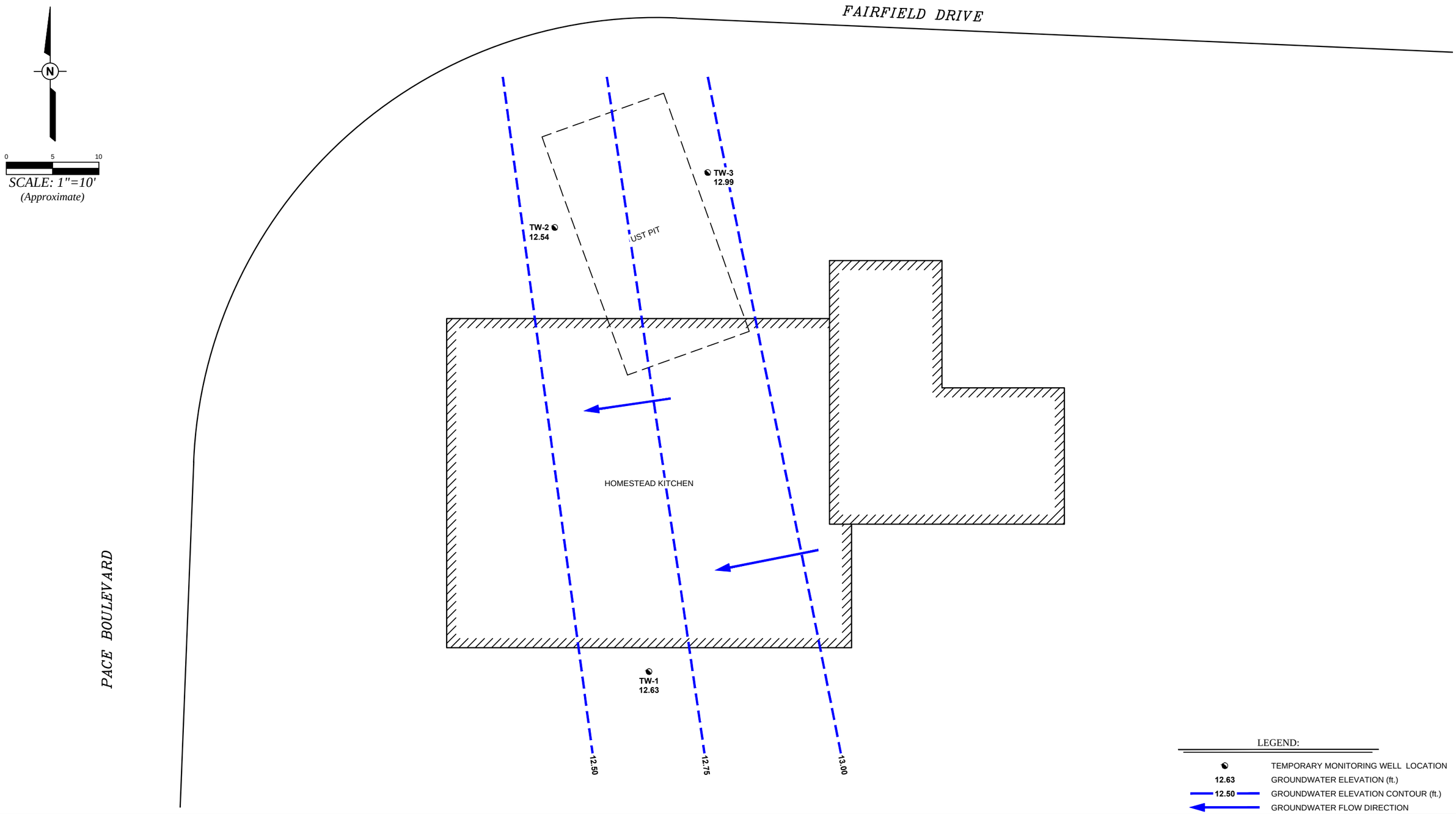
PROJECT NUMBER:	BILLING GROUP:
22186001	ESAII

ESCAMBIA COUNTY BOARD OF COUNTY COMISSIONERS
MCDONALDS SHOPPING CENTER PROPERTY
1803 WEST FAIRFIELD DRIVE
PENSACOLA, FLORIDA

GROUNDWATER SAMPLE LOCATIONS AND ANALYTICAL RESULTS - WESTERN SITE

FIGURE NUMBER
6

Z:\Escambia County\22186001 - Former Gas Stations\ESA2\22186001-ESA2.dwg, 6 GW Samples, 2/9/2016 9:27:02 AM, Mike Rawls



Z:\Escambia County\22186001 - Former Gas Stations\ESA2\22186001-ESA2.dwg, 7 GW Elevations, 2/9/2016 9:27:03 AM, Mike Rawls

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DRAWN BY:	DRAWN DATE:
MLR	02/09/16
PROJECT NUMBER:	BILLING GROUP:
22186001	ESAII

ESCAMBIA COUNTY BOARD OF COUNTY COMISSIONERS
MCDONALDS SHOPPING CENTER PROPERTY
1803 WEST FAIRFIELD DRIVE
PENSACOLA, FLORIDA

GROUNDWATER ELEVATION MAP - WESTERN SITE
(JANUARY 18, 2016)

FIGURE NUMBER
7

APPENDIX B – TABLES

TABLE 1: SOIL ORGANIC VAPOR READINGS

Facility Name: MacDonalds Shopping Center Property
1803 West Fairfield Drive, Pensacola, Florida

Boring	Depth (FT BGS)	Date Collected	Depth to Water (ft)	OVA Concentration (ppm)	Comments
SB-1	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining
SB-2	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining (Lab Sample)
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining
SB-3	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining
SB-4	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining

TABLE 1: SOIL ORGANIC VAPOR READINGS

Facility Name: MacDonalds Shopping Center Property
1803 West Fairfield Drive, Pensacola, Florida

Boring	Depth (FT BGS)	Date Collected	Depth to Water (ft)	OVA Concentration (ppm)	Comments
SB-5	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining
	20-24	01/15/16		<1	No Odor or Staining
	24-28	01/15/16		<1	No Odor or Staining
	28-32	01/05/16		<1	No Odor or Staining
	32-36	01/15/16		<1	No Odor or Staining (Lab Sample)
	36-40	01/15/16	38.00	<1	No Odor or Staining
SB-6	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining
SB-7	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining
SB-8	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining

TABLE 1: SOIL ORGANIC VAPOR READINGS

Facility Name: MacDonalds Shopping Center Property
1803 West Fairfield Drive, Pensacola, Florida

Boring	Depth (FT BGS)	Date Collected	Depth to Water (ft)	OVA Concentration (ppm)	Comments
SB-9	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining
	20-24	01/15/16		<1	No Odor or Staining
	24-28	01/15/16		<1	No Odor or Staining
	28-32	01/05/16		<1	No Odor or Staining
	32-36	01/15/16		<1	No Odor or Staining
	36-40	01/15/16	39.00	6	No Odor or Staining (Lab Sample)
SB-10	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining
SB-11	0-2	01/15/16		<1	No Odor or Staining
	2-4	01/15/16		<1	No Odor or Staining
	4-6	01/15/16		--	No Recovery
	6-8	01/15/16		<1	No Odor or Staining
	8-10	01/15/16		--	No Recovery
	10-12	01/15/16		<1	No Odor or Staining
	12-14	01/15/16		<1	No Odor or Staining
	14-16	01/15/16		<1	No Odor or Staining
	16-18	01/15/16		<1	No Odor or Staining
	18-20	01/15/16		<1	No Odor or Staining

TABLE 1: SOIL ORGANIC VAPOR READINGS

Facility Name: MacDonalds Shopping Center Property
1803 West Fairfield Drive, Pensacola, Florida

Boring	Depth (FT BGS)	Date Collected	Depth to Water (ft)	OVA Concentration (ppm)	Comments
SB-12	0-2	01/18/16		<1	No Odor or Staining
	2-4	01/18/16		<1	No Odor or Staining
	4-6	01/18/16		--	No Recovery
	6-8	01/18/16		<1	No Odor or Staining
	8-10	01/18/16		--	No Recovery
	10-12	01/18/16		<1	No Odor or Staining
	12-14	01/18/16		<1	No Odor or Staining
	14-16	01/18/16		<1	No Odor or Staining
	16-18	01/18/16		<1	No Odor or Staining
	18-20	01/18/16		<1	No Odor or Staining
	20-24	01/18/16		<1	No Odor or Staining
	24-28	01/18/16		<1	No Odor or Staining
	28-32	01/18/16		<1	No Odor or Staining
	32-36	01/18/16		<1	No Odor or Staining
	36-40	01/18/16	38.00	4	No Odor or Staining
SB-13	0-2	01/18/16		<1	No Odor or Staining
	2-4	01/18/16		<1	No Odor or Staining
	4-6	01/18/16		--	No Recovery
	6-8	01/18/16		<1	No Odor or Staining
	8-10	01/18/16		<1	No Odor or Staining
	10-12	01/18/16		<1	No Odor or Staining
	12-14	01/18/16		--	No Recovery
	14-16	01/18/16		<1	No Odor or Staining
	16-18	01/18/16		<1	No Odor or Staining
	18-20	01/18/16		<1	No Odor or Staining
	20-24	01/18/16		<1	No Odor or Staining
	24-28	01/18/16		<1	No Odor or Staining
	28-32	01/18/16		<1	No Odor or Staining
	32-36	01/18/16		<1	No Odor or Staining
	36-40	01/18/16	38.00	6	No Odor or Staining
SB-14	0-2	01/18/16		<1	No Odor or Staining
	2-4	01/18/16		<1	No Odor or Staining
	4-6	01/18/16		--	No Recovery
	6-8	01/18/16		<1	No Odor or Staining
	8-10	01/18/16		--	No Recovery
	10-12	01/18/16		<1	No Odor or Staining
	12-14	01/18/16		--	No Recovery
	14-16	01/18/16		<1	No Odor or Staining
	16-18	01/18/16		<1	No Odor or Staining
	18-20	01/18/16		<1	No Odor or Staining
	20-24	01/18/16		<1	No Odor or Staining
	24-28	01/18/16		<1	No Odor or Staining
	28-32	01/18/16		<1	No Odor or Staining
	32-36	01/18/16		<1	No Odor or Staining
	36-40	01/18/16	38.00	36	No Odor or Staining

Notes:

FT BGS = feet below ground surface

OVA = organic vapor analyzer
ppm = parts per million

TABLE 2A: SOIL ANALYTICAL SUMMARY - BTEX & MTBE

Facility Name: MacDonalds Shopping Center Property
1803 West Fairfield Drive, Pensacola, Florida

Sample ID	Date Collected	Depth To Water (ft)	Sample Depth (ft BGS)	Net OVA Reading (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)
FDEP Leachability-Based SCTL					**0.007**	**0.5**	**0.6**	**0.2**	**0.09**
FDEP Residential Direct Exposure-Based SCTL					**1.2**	**7,500**	**1,500**	**130**	**4,400**
SB-2 (6-8)	01/15/16	38	6-8	<1	0.00097 U	0.00088 U	0.00054 U	0.0017 U	0.00088 U
SB-5 (34-36)	01/15/16	38	34-36	<1	0.0012 U	0.0011 U	0.00067 U	0.0021 U	0.0011 U
SB-9 (36-38)	01/15/16	38	36-38	6	0.00093 U	0.00085 U	0.00052 U	0.0016 U	0.00085 U

Notes:
ft BGS = Feet below ground surface
OVA = organic vapor analyzer
ppm = parts per million (milligrams per kilogram [mg/kg])
Bold type indicates that the concentration exceed FDEP Soil Cleanup Target Level
SCTL = FDEP Soil Cleanup Target Level per Chapter 62-777 of the Florida Administrative Code
BTEX = Benzene, toluene, ethylbenzene, total xylenes
MTBE = Methyl tert-butyl ether
U = Constituent not detected above instrument Minimum Detection Limit

TABLE 2B: SOIL ANALYTICAL SUMMARY - PAHs

Facility Name: MacDonalds Shopping Center Property
1803 West Fairfield Drive, Pensacola, Florida

Sample ID	Date Collected	Depth to Water (ft)	Sample Depth (ft BGS)	Net OVA Reading (ppm)	Naphthalene (ppm)	1-Methyl naphthalene (ppm)	2-Methyl naphthalene (ppm)	Acenaphthene (ppm)	Acenaphthylene (ppm)	Anthracene (ppm)	Benzo (a) anthracene (ppm)	Benzo (a) pyrene (ppm)	Benzo (b) fluoranthene (ppm)
FDEP Leachability-Based SCTL					**1.2**	**3.1**	**8.5**	**2.1**	**27**	**2500**	**0.8**	**8**	**2.4**
FDEP Residential Direct Exposure-Based SCTL					**55**	**200**	**210**	**2,400**	**1,800**	**21,000**	*****	**0.1**	*****
SB-2 (6-8)	01/15/16	38	6-8	<1	0.024 U	0.021 U	0.019 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.027 U
SB-5 (34-36)	01/15/16	38	34-36	<1	0.023 U	0.021 U	0.019 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.026 U
SB-9 (36-38)	01/15/16	38	36-38	6	0.024 U	0.022 U	0.019 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.027 U

Sample ID	Date Collected	Depth to Water (ft)	Sample Depth (ft BGS)	Net OVA Reading (ppm)	Benzo (g,h,i) perylene (ppm)	Benzo (k) fluoranthene (ppm)	Chrysene (ppm)	Dibenz (a,h) anthracene (ppm)	Fluoranthene (ppm)	Fluorene (ppm)	Indeno (1,2,3-cd) pyrene (ppm)	Phenanthrene (ppm)	Pyrene (ppm)
FDEP Leachability-Based SCTL					**32,000**	**24**	**77**	**0.7**	**1,200**	**160**	**6.6**	**250**	**340**
FDEP Residential Direct Exposure-Based SCTL					**2,500**	*****	*****	*****	**3,200**	**2,600**	*****	**2,200**	**460**
SB-2 (6-8)	01/15/16	38	6-8	<1	0.032 U	0.024 U	0.024 U	0.027 U	0.027 U	0.021 U	0.027 U	0.021 U	0.027 U
SB-5 (34-36)	01/15/16	38	34-36	<1	0.032 U	0.023 U	0.023 U	0.026 U	0.026 U	0.021 U	0.026 U	0.021 U	0.026 U
SB-9 (36-38)	01/15/16	38	36-38	6	0.032 U	0.024 U	0.024 U	0.027 U	0.027 U	0.022 U	0.027 U	0.022 U	0.027 U

Notes:
ft BGS = feet below ground surface
ppm = parts per million (milligrams per kilogram [mg/kg])
OVA = organic vapor analyzer
Bold type indicates that the concentration exceed FDEP Soil Cleanup Target Level
SCTL = FDEP Soil Cleanup Target Level per Chapter 62-777 of the Florida Administrative Code
PAHs = Polynuclear aromatic hydrocarbons
U = Constituent not detected above instrument Minimum Detection Limit

TABLE 3: GROUNDWATER ANALYTICAL SUMMARY - BTEX, MTBE AND NAPHTHALENE

Facility Name: MacDonalds Shopping Center Property
1803 West Fairfield Drive, Pensacola, Florida

Sample		Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Naph-thalene
Location	**Date**	**(ppb)**	**(ppb)**	**(ppb)**	**(ppb)**	**(ppb)**	**(ppb)**
TW-1	1/18/2016	0.38 U	0.70 U	0.50 U	0.60 U	0.74 U	1.0 U
TW-2	1/18/2016	0.38 U	0.70 U	0.50 U	0.60 U	0.74 U	1.0 U
TW-3	1/18/2016	0.38 U	0.70 U	0.50 U	0.60 U	0.74 U	1.0 U
GCTLs		1	40	30	20	20	14
NADSCs		100	400	300	200	200	140

Notes:

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.
NADSCs = Natural Attenuation Default Source Concentrations specified in Table I of Chapter 62-777, F.A.C.
U=Not detected

Bold Text=Exceeds GCTL Limit

TABLE 4: GROUNDWATER ELEVATION SUMMARY

Facility Name: MacDonalds Shopping Center Property

1803 West Fairfield Drive, Pensacola, Florida

WELL NO.	TW-1			TW-2			TW-3		
DIAMETER (INCHES)	1.00			1.00			1.00		
WELL DEPTH (FEET BTOC)	48.00			48.00			48.00		
SCREEN INTERVAL (FEET BTOC)	38-48			38-48			38-48		
TOC ELEVATION (FEET)	52.30			51.54			51.74		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
12/22/2015	12.63	39.67	0.00	12.54	39.00	0.00	12.99	38.75	0.00

Notes:
TOC = Top Of Casing
DTW = Depth to water, in feet, from below top of casing
NM = Not measured
NS=Not Surveyed
Elev = Water level elevation in feet referenced to estimated site elevation datum
FP = Free product thickness
Arbitary Elevation set at 50 feet

APPENDIX C – GPR REPORT

Southern Radar Imaging

Radar Services & Inclusion Locating

1207-D East Forrest Street, #216 Athens, AL 35613 Office (256) 412-3287

Job Location: 1803 W Fairfield Drive Pensacola, FL	Date: 01/15/16
Client Name: PPM Consultants	Job Number: 1178
Client Contact: Ben Clabaugh	Report Number: 1178-161501
Representatives: Matthew Wilbanks	Purchase Order: 22359004 ESA2

What is Ground Penetrating RADAR (GPR)?

A Ground Penetrating RADAR system is made up of three main components:
1) Control unit, 2) Antenna and 3) Power supply

GPR equipment can be run with a variety of power supplies ranging from small rechargeable batteries to vehicle batteries and normal 110-volt current. Connectors and adapters are available for each power source type.

The control unit contains the electronics that produce and regulate the pulse of radar energy that the antenna sends into the ground. It also has a built in computer and hard disk to record and store data for examination after fieldwork.

The antenna receives the electrical pulse produced by the control unit, amplifies it and transmits it into the ground or other medium at a particular frequency. Antenna frequency is a major factor in depth penetration. The higher the frequency of the antenna, the shallower into the ground it will penetrate. A higher frequency antenna will also ‘see’ smaller targets.

GPR Method

GPR works by sending a tiny pulse of energy into a material and recording the strength and the time required for the return of any reflected signal. A series of pulses over a single area make up what is called a scan. Reflections are produced whenever the energy pulse enters into a material with different electrical conduction properties (dielectric permittivity) from the material it left. The strength, or amplitude, of the reflection is determined by the contrast in the dielectric constants of the two materials. This means that a pulse which moves from dry sand (diel of 5) to wet sand (diel of 30) will produce a very strong, brilliantly visible reflection, while one moving from dry sand (5) to limestone (7) will produce a very weak reflections. Materials with a high dielectric are very conductive.

While some of the GPR energy pulse is reflected back to the antenna, energy also keeps traveling through the material until it either dissipates (attenuates) or the GPR control unit has closed its time window. The rate of signal attenuation varies widely and is dependent on the dielectric properties of the material through which the pulse is passing.

Ground Penetrating Radar is an accepted electromagnetic evaluation technique designed for non-destructively locating subsurface targets prior to digging, trenching, conducting site assessments or mapping. Using our high resolution antennas manufactured by Geophysical Survey Systems, even small subsurface targets are located in real-time and can be seen at depths ranging to 12 feet or more through natural or manmade surfaces. Unlike radio frequency locators, GPR produces an image that displays the exact location and depth of both metallic and non-metallic subsurface utilities. The technology is successful in a variety of difficult applications, such as the location of plastic and terracotta pipelines, water and sewer lines, cable, voids, tree roots, buried drums and underground storage tanks.

Reason for Assistance

A representative from our firm was present as requested by Ben Clabaugh of PPM to evaluate subsurface areas at 1803 W Fairfield Drive in Pensacola, FL. The purpose of the evaluation was to locate any anomalies underground that could possibly be underground storage tanks (UST's). To assist in locating the presence of anomalies our representative employed a ground penetrating RADAR system manufactured by Geophysical survey systems. Photos of the subject areas are provided below.

Data Collection

The control unit that was used for data collection was a SIR System – 3000 and the antenna used was a 400 MHz. The study was performed on Friday January 15th, 2016. The system emitted an electromagnetic pulse into the underground surfaces evaluated and recorded the location as it scanned, once the velocity of the electromagnetic pulse was recorded to an object and back it was then combined with the distance recorded by the survey wheel. Both the velocity and distance data were sent to the main processing computer where the data was processed and a visual real time interpretation of the data was performed.

GPR Equipment Used for Survey

Findings

From the GPR data collected on the property in question there were five areas where underground anomalies consistent with Underground Storage Tanks were located. The boundaries of all anomalies were marked directly on the surface with marking paint. Additionally the estimated depths to the top of the anomalies were marked on the surface with marking paint. It is possible that the anomalies found to be present could be objects other than UST's. There is also a possibility other anomalies could be present that were not identified in the GPR data collected. The results of the GPR Evaluation were explained onsite to Barry Long of PPM. Photos of the findings are provided below.

Area where anomaly #1 was present.

Area where anomaly #1 was present.

Area where anomalies 2, 3, 4, and 5 were located.

APPENDIX D – SOIL BORING AND WELL CONSTRUCTION LOGS

LOG OF BORING: SB-1

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 7:25 - 7:50
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SP/SM		SAND with fines, brown, fine grained, poorly sorted, moist.	1	N/A	<1	100%	
					SAND with fines, tan to brown, fine grained, poorly sorted, moist.	2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SP/SM		SAND with fines, tan to brown, fine grained, poorly sorted, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM		SILTY SAND, tan to dull red, fine grained, moist.	6	N/A	<1	100%	10
			SC		CLAYEY SAND, red, fine grained, poorly sorted, moist.	7	N/A	<1	100%	
15						8	N/A	<1	100%	15
			SC/SM		CLAYEY SAND with fines, red, very fine grained, moist.	9	N/A	<1	100%	
						10	N/A	<1	100%	
20					TD SB-1 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-2

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 8:05 - 8:35
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SM		SILTY SAND, brown, fine grained, poorly sorted, moist.	1	N/A	<1	100%	
						2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SP/SM		SILTY SAND, tan to dull red, fine grained, moist.	4	N/A	*<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM/SC		SILTY CLAYEY SAND, orange and red, poorly sorted, moist.	6	N/A	<1	100%	10
			SC		CLAYEY SAND, red, fine grained, poorly sorted, moist.	7	N/A	<1	100%	
15						8	N/A	<1	100%	15
						9	N/A	<1	100%	
			SM/SC		SILTY CLAYEY SAND, orange and red, very poorly sorted, moist.	10	N/A	<1	100%	
20					TD SB-2 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery
- * indicates that a sample was submitted for laboratory analysis.

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-3

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 8:40 - 9:05
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SM		SILTY SAND, brown and tan, fine grained, moist.	1	N/A	<1	100%	
					SAND with fines, brown, fine grained, moist.	2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM		SILTY SAND, tan, fine grained, poorly sorted, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM		SILTY SAND, orange, fine grained, poorly sorted, moist.	6	N/A	<1	100%	10
						7	N/A	<1	100%	
15						8	N/A	<1	100%	15
			SM/SC		CLAYEY SAND with fines, red and tan, poorly sorted, moist.	9	N/A	<1	100%	
			SC		CLAYEY SAND, red, poorly sorted, moist.	10	N/A	<1	100%	
20					TD SB-3 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-4

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 9:10 - 9:30
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SM		SILTY SAND with fines, brown, fine grained, moist.	1	N/A	<1	100%	
						2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM		SILTY SAND with fines, tan, fine grained, poorly sorted, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM		SILTY SAND with fines, tan, fine grained, poorly sorted, moist.	6	N/A	<1	100%	10
			SC		CLAYEY SAND, red, fine grained, poorly sorted, moist.	7	N/A	<1	100%	
15						8	N/A	<1	100%	15
			SM/SC		CLAYEY SAND with fines, orange and red, moist.	9	N/A	<1	100%	
						10	N/A	<1	100%	
20					TD SB-4 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-5

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 9:40 - 10:10
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	40 ft BGS
Initial Saturation (ft)/Date:	37 ft BGS / 1-15-2016
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT	1	N/A	<1	100%	0
			SM		SILTY SAND, brown, fine grained, poorly sorted, moist.	2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM/SP		SILTY SAND with less fines, tan to dull orange, fine grained, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SC		CLAYEY SAND, red, very fine grained, poorly sorted, moist.	6	N/A	<1	100%	10
			SM/SC		CLAYEY SAND, red and orange, poorly sorted, moist.	7	N/A	<1	100%	
15						8	N/A	<1	100%	15
						9	N/A	<1	100%	
						10	N/A	<1	100%	
20			SP/SM		SAND with few fines, white and orange, fine grained, moist.	11	N/A	<1	100%	20
						12	N/A	<1	100%	
25										25
30						13	N/A	<1	100%	30
35					SAND with some fines, white and orange, fair sorting, wet.	14	N/A	*<1	100%	35
			SP		SAND less fines, white and orange, fine to medium grained, saturated.					
40					TD SB-5 @ 40' BGS.					40
45										45

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery
-* indicates sample submitted for laboratory analysis.

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-6

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 10:35 - 10:55
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SM		SILTY SAND with fines, brown, fine grained, moist.	1	N/A	<1	100%	
						2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM		SILTY SAND, brown and tan, fine grained, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM/SC		SILTY CLAYEY SAND, red, fine grained, poorly sorted, moist.	6	N/A	<1	100%	10
			SC		CLAYEY SAND, red and orange, fine grained, moist.	7	N/A	<1	100%	
15						8	N/A	<1	100%	15
						9	N/A	<1	100%	
						10	N/A	<1	100%	
20					TD SB-6 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-7

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 11:50 - 12:20
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SM		SILTY SAND, brown, fine grained, poorly sorted, moist.	1	N/A	<1	100%	
						2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM		SILTY SAND with fines, tan, fine grained, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM/SC		SILTY CLAYEY SAND, red and orange, moist.	6	N/A	<1	100%	10
						7	N/A	<1	100%	
15						8	N/A	<1	100%	15
			SM		SILTY SAND, white and orange, poorly sorted, moist.	9	N/A	<1	100%	
						10	N/A	<1	100%	
20					TD SB-7 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-8

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 12:25 - 12:35
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SM		SILTY SAND, brown, fine grained, moist.	1	N/A	<1	100%	
					SILTY SAND, tan and brown, fine grained, moist.	2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM		SILTY SAND, tan and brown, fine grained, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM/SC		CLAYEY SILTY SAND, red, moist.	6	N/A	<1	100%	10
						7	N/A	<1	100%	
15			SM		SILTY SAND, orange and red, moist.	8	N/A	<1	100%	15
			SM/SC		SILTY SAND with some clay, orange and red, moist.	9	N/A	<1	100%	
					SILTY CLAYEY SAND, white, orange and red, moist.	10	N/A	<1	100%	
20					TD SB-8 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-9

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 12:40 - 13:10
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	40 ft BGS
Initial Saturation (ft)/Date:	37 ft BGS / 1-15-2016
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT	1	N/A	<1	100%	0
			SM		SILTY SAND, brown, fine grained, poorly sorted, moist.	2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM/SP		SILTY SAND, dull orange and red, poorly sorted, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM		SILTY SAND, tan and red, fairly sorted, moist.	6	N/A	<1	100%	10
						7	N/A	<1	100%	
15			SC		CLAYEY SAND, red, poorly sorted, moist.	8	N/A	<1	100%	15
						9	N/A	<1	100%	
20			SP		SAND with little fines, white and orange, fine grained, moist.	10	N/A	<1	100%	20
						11	N/A	<1	100%	
25						12	N/A	<1	100%	25
30					SAND, white and orange, loose, fine grained, moist.	13	N/A	<1	100%	30
35					SAND, white and orange, loose, fine grained, wet.	14	N/A	*<1	100%	35
					SAND with some fines, white, fine grained, saturated.	15	N/A	6	100%	
40					TD SB-9 @ 40' BGS.					40
45										45

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery
-* indicates sample submitted for laboratory analysis.

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-10

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 13:20 - 13:40
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SM		SILTY SAND, brown, fine grained, moist.	1	N/A	<1	100%	
						2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM		SILTY SAND, light tan, fine grained, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SM		SILTY SAND, brown and orange, fine grained, moist.	6	N/A	<1	100%	10
						7	N/A	<1	100%	
15						8	N/A	<1	100%	15
			SM/SP		SILTY CLAYEY SAND, orange, moist.	9	N/A	<1	100%	
						10	N/A	<1	100%	
20					TD SB-10 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-11

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-15-2016 / 14:15 - 14:35
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	20 ft BGS
Initial Saturation (ft)/Date:	NA
Static GW level (ft)/Date:	NA
Surface Elevation (ft):	NA
Sampling Interval:	Continuous

Well Information:

Well Type:	NA
Well Purpose:	NA
Well Construction Date:	NA
Total Well Depth:	NA
Screened Interval:	NA
Screen Slot Size:	NA
Development Method:	NA
Gallons Purged:	NA

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev.	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery	Depth in Feet
0			BR		ASPHALT					0
			SM		SILTY SAND, brown, fine grained, moist.	1	N/A	<1	100%	
						2	N/A	<1	100%	
5					NO RECOVERY	3	N/A	NR	0%	5
			SM		SILTY SAND, light tan, fine grained, moist.	4	N/A	<1	100%	
					NO RECOVERY	5	N/A	NR	0%	
10			SC		CLAYEY SAND, red, fine grained, poorly sorted, moist.	6	N/A	<1	100%	10
			CL		SANDY CLAY, red, fine grained, moist.	7	N/A	<1	100%	
15						8	N/A	<1	100%	15
						9	N/A	<1	100%	
			SP		SAND with little fines, orange and white, fine grained, moist.	10	N/A	<1	100%	
20					TD SB-11 @ 20' BGS.					20
25										25

NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

LOG OF BORING: SB-12/TW-1

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-18-2016 / 10:00 - 10:45
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	45 ft BGS
Initial Saturation (ft)/Date:	37 ft BGS / 1-18-2016
Static GW level (ft)/Date:	39.67 ft BTOC / 1-18-2016
Surface Elevation (ft):	49.30 ft AMSL
Sampling Interval:	Continuous

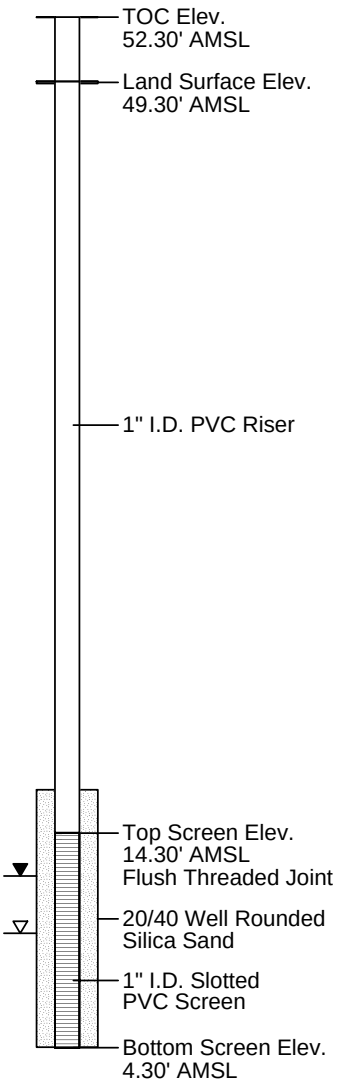
Well Information:

Well Type:	Temporary
Well Purpose:	Sampling
Well Construction Date:	1-18-2016
Total Well Depth:	48 ft BTOC
Screened Interval:	38 - 48 ft BTOC
Screen Slot Size:	0.01"
Development Method:	Peristaltic Pump
Gallons Purged:	

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev. 49.30	USCS	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery
-5	54						
0	49	BR	ASPHALT	1	N/A	<1	100%
		SM	SILTY SAND, brown, fine grained, moist.	2	N/A	<1	100%
5	44		NO RECOVERY	3	N/A	NR	0%
		SM/SP	SILTY SAND, tan and brown, fine grained, well sorted, moist.	4	N/A	<1	100%
				5	N/A	<1	100%
10	39	SM/SP	SILTY SAND with some clay, dull red to brown, fine grained, moist.	6	N/A	<1	100%
				7	N/A	<1	100%
15	34	SC	CLAYEY SAND, red, very fine grained, moist.	8	N/A	<1	100%
				9	N/A	<1	100%
20	29	SP/SC	SAND with some fines, orange, fine to medium grained, moist.	10	N/A	<1	100%
			SAND with more fines, orange, fine to medium grained, moist.	11	N/A	<1	100%
25	24	SP	SAND, with little fines, white and orange, fine grained, moist.	12	N/A	<1	100%
30	19		SAND with some fines, white, fine grained, moist.	13	N/A	<1	100%
			SAND with some fines, white, fine grained, wet.	14	N/A	<1	100%
35	14		SAND with little fines, white and orange, fine to medium grained, saturated.	15	N/A	4	100%
40	9		TD SB-12 @ 40' BGS.				
45			TD TW-1 @ 45' BGS.				

Well Schematic: SB-12/TW-1



NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

02-05-2016 O:_overhead\Boring Logs\2015 boring logs\22186001.ESAII\SB-12 TW-1.bor

LOG OF BORING: SB-13/TW-2

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-18-2016 / 11:00 - 11:40
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	45 ft BGS
Initial Saturation (ft)/Date:	37 ft BGS / 1-18-2016
Static GW level (ft)/Date:	39.00 ft BTOC / 1-18-2016
Surface Elevation (ft):	48.54 ft AMSL
Sampling Interval:	Continuous

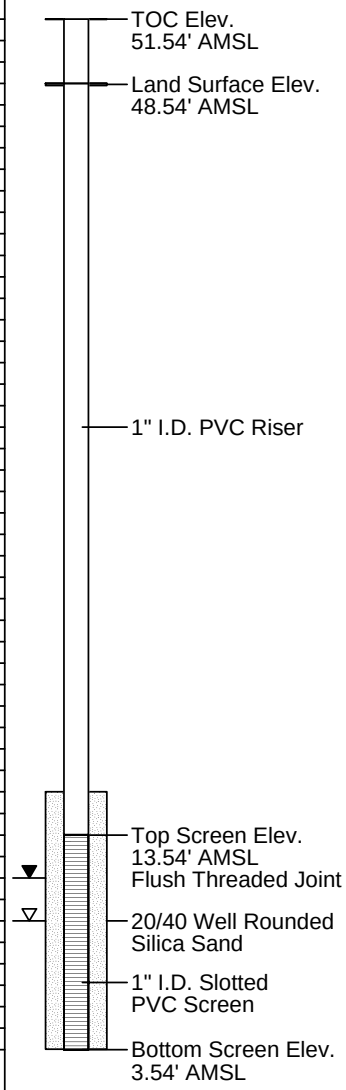
Well Information:

Well Type:	Temporary
Well Purpose:	Sampling
Well Construction Date:	1-18-2016
Total Well Depth:	48 ft BTOC
Screened Interval:	38 - 48 ft BTOC
Screen Slot Size:	0.01"
Development Method:	Peristaltic Pump
Gallons Purged:	

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev. 48.54	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery
-5	53								
0	48		BR		ASPHALT	1	N/A	<1	100%
			SM		SILTY SAND, dark brown to tan, fine grained, poorly sorted, moist.	2	N/A	<1	100%
5	43				NO RECOVERY	3	N/A	NR	0%
			SM		SILTY SAND, tan, fine grained, poorly sorted, moist.	4	N/A	<1	100%
10	38		SC		CLAYEY SAND, red/brown, poorly sorted, moist.	5	N/A	<1	100%
						6	N/A	<1	100%
					NO RECOVERY	7	N/A	NR	0%
15	33		SC		CLAYEY SAND, red/brown, poorly sorted, moist.	8	N/A	<1	100%
			SC/CL		CLAYEY SAND to SANDY CLAY, orange and red, moist.	9	N/A	<1	100%
						10	N/A	<1	100%
20	28		SM		SILTY SAND, orange, very poorly sorted, moist.	11	N/A	<1	100%
25	23		SP		SAND, white and light orange, fine grained, soft, moist.	12	N/A	<1	100%
30	18					13	N/A	<1	100%
					SAND with little to no fines, white, fine grained, wet.	14	N/A	<1	100%
35	13	▼ ▽	SP/SM		SAND with some fines, orange, fine to medium grained, poorly sorted, saturated.	15	N/A	6	100%
40	8				TD SB-13 @ 40' BGS.				
45					TD TW-2 @ 45' BGS.				

Well Schematic: SB-13/TW-2



NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

02-05-2016 O:_overhead\Boring Logs\2015 boring logs\22186001.ESAII\SB-13 TW-2.bor

LOG OF BORING: SB-14/TW-3

PPM CONSULTANTS

Client / Site Information:

Client:	Escambia County
Site:	MacDonalds Property
Location:	Pensacola, Florida
Agency Interest No.:	NA
PPM Project No.:	22186001.ESAII
Project Type:	ESA Phase II

Boring Information:

Date / Time:	1-18-2016 / 12:20 - 12:50
Logged By:	Barry Long, P.G.
Drilling Company / Driller:	WHE
Drilling Method:	Direct Push
Total Boring Depth:	45 ft BGS
Initial Saturation (ft)/Date:	37 ft BGS / 1-18-2016
Static GW level (ft)/Date:	38.75 ft BTOC / 1-18-2016
Surface Elevation (ft):	48.74 ft AMSL
Sampling Interval:	Continuous

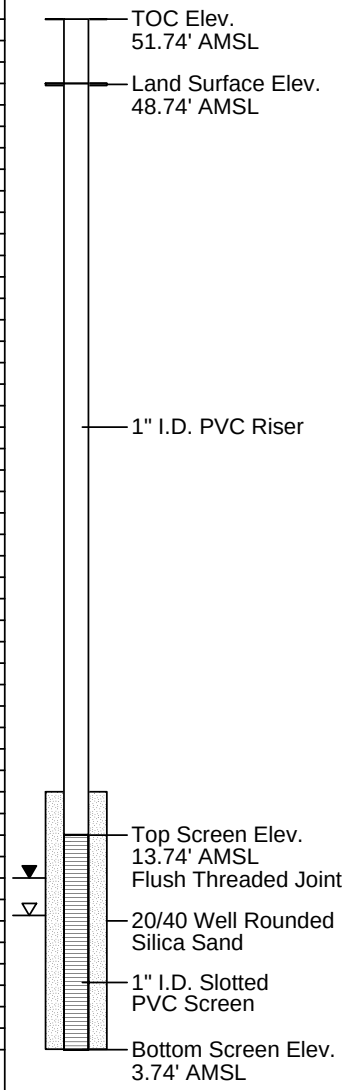
Well Information:

Well Type:	Temporary
Well Purpose:	Sampling
Well Construction Date:	1-18-2016
Total Well Depth:	48 ft BTOC
Screened Interval:	38 - 48 ft BTOC
Screen Slot Size:	0.01"
Development Method:	Peristaltic Pump
Gallons Purged:	

Water Levels
▼ Static GW level
▽ Initial Saturation

Depth in Feet	Surf. Elev. 48.74	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Blow Count	Headspace Concentration (ppmv)	Percent Recovery
-5	53								
0	48		BR		ASPHALT	1	N/A	<1	100%
			SM		SILTY SAND, brown, fine grained, moist.	2	N/A	<1	100%
5	43				NO RECOVERY	3	N/A	NR	0%
			SM		SILTY SAND, dull orange, fine grained, moist.	4	N/A	<1	100%
					NO RECOVERY	5	N/A	NR	0%
10	38		SC		CLAYEY SAND, red, poorly sorted, moist.	6	N/A	<1	100%
					NO RECOVERY	7	N/A	NR	0%
15	33		SC		CLAYEY SAND, red, poorly sorted, moist.	8	N/A	<1	100%
						9	N/A	<1	100%
			CL/SP		SILTY CLAYEY SAND, orange, poorly sorted, moist.	10	N/A	<1	100%
20	28		SP		SAND with some fines, orange and white, moist.	11	N/A	<1	100%
25	23					12	N/A	<1	100%
30	18				SAND, yellow and white, fine grained, moist.	13	N/A	<1	100%
					SAND, yellow and white, fine grained, wet.	14	N/A	<1	100%
35	13	▼ ▽	SP/SM		SAND with some fines, orange and white, fine to medium grained, saturated.	15	N/A	<1	100%
40	8				TD SB-14 @ 40' BGS.				
45					TD TW-3 @ 45' BGS.				

Well Schematic: SB-14/TW-3



NOTES:
- Hand cleared to 5.0' BGS prior to drilling
- Headspace conducted using FID
- NR: No Recovery

- Soil descriptions generally based on visual inspection/professional judgment as described in ASTM D2488-09a: Standard Practice for Description and Identification of Soils -Visual-Manual Procedure. Laboratory testing not conducted, and the data should not be used for engineering purposes.

02-05-2016 O:_overhead\Boring Logs\2015 boring logs\22186001.ESAII\SB-14 TW-3.bor

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number: TW-1	Site Name: MacDonald's Property Homestead Kitchen	FDEP Facility I.D. Number:	Well Install Date(s): 1-18-15

Well Location and Type (check appropriate boxes):
- [x] On-Site
- [ ] Right-of-Way
- [ ] Off-Site Private Property
- [ ] Above Grade (AG)
- [ ] Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- [ ] Perched Monitoring
- [x] Shallow (Water-Table) Monitoring
- [ ] Intermediate or Deep Monitoring
- [ ] Remediation or Other (describe)

Well Install Method: DP

Surface Casing Install Method: NA

Borehole Depth (feet): 48	Well Depth (feet): 48	Borehole Diameter (inches): 2	Manhole Diameter (inches): NA	Well Pad Size: NA ____ feet by ____ feet

Riser Diameter and Material: 1" PVC	Riser/Screen Connections: [x] Flush-Threaded [ ] Other (describe)	Riser Length: 38 feet from 0 feet to 38 feet
Screen Diameter and Material: 1" PVC	Screen Slot Size: 0.01	Screen Length: 10 feet from 38 feet to 48 feet
1st Surface Casing Material: also check: [ ] Permanent [ ] Temporary	1st Surface Casing I.D. (inches):	1st Surface Casing Length: ____ feet from 0 feet to ____ feet
2nd Surface Casing Material: also check: [ ] Permanent [ ] Temporary	2nd Surface Casing I.D. (inches):	2nd Surface Casing Length: ____ feet from 0 feet to ____ feet
3rd Surface Casing Material: also check: [ ] Permanent [ ] Temporary	3rd Surface Casing I.D. (inches):	3rd Surface Casing Length: ____ feet from 0 feet to ____ feet
Filter Pack Material and Size: Silica Sand 8/40	Prepacked Filter Around Screen (check one): [x] Yes [ ] No	Filter Pack Length: 10 feet from 38 feet to 48 feet
Filter Pack Seal Material and Size: NA		Filter Pack Seal Length: ____ feet NA from ____ feet to ____ feet
Surface Seal Material: NA		Surface Seal Length: ____ feet NA from ____ feet to ____ feet

WELL DEVELOPMENT DATA

Well Development Date: 1-18-15	Well Development Method (check one): [ ] Surge/Pump [ ] Pump [ ] Compressed Air [x] Other (describe) Check Valve + Tubing		
Development Pump Type (check): [ ] Centrifugal [ ] Peristaltic [ ] Submersible [x] Other (describe) check valve / Tubing		Depth to Groundwater (before developing in feet): 39	
Pumping Rate (gallons per minute): ~ 0.1	Maximum Drawdown of Groundwater During Development (feet): Not Measured		Well Purged Dry (check one): [ ] Yes [x] No
Pumping Condition (check one): [x] Continuous [ ] Intermittent	Total Development Water Removed (gallons): 1	Development Duration (minutes): 10	Development Water Drummed (check one): [ ] Yes [x] No
Water Appearance (color and odor) At Start of Development: Brown Cloudy		Water Appearance (color and odor) At End of Development: Brown Cloudy	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Well abandoned after Sample Collection

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number: TW-2	Site Name: MacDonald Property Homestead Kitchen	FDEP Facility I.D. Number:	Well Install Date(s): 1-18-15
Well Location and Type (check appropriate boxes): ☐ On-Site ☐ Right-of-Way ☐ Off-Site Private Property ☐ Above Grade (AG) ☐ Flush-to-Grade If AG, list feet of riser above land surface:	Well Purpose: ☐ Perched Monitoring ☑ Shallow (Water-Table) Monitoring ☐ Intermediate or Deep Monitoring ☐ Remediation or Other (describe)		Well Install Method: DP Surface Casing Install Method: NA
Borehole Depth (feet): 48	Well Depth (feet): 45	Borehole Diameter (inches): 2	Manhole Diameter (inches): NA
Well Pad Size: NA ____ feet by ____ feet			
Riser Diameter and Material: 1 PVC	Riser/Screen Connections: ☐ Flush-Threaded ☐ Other (describe)		Riser Length: 38 feet from 0 feet to 30 feet
Screen Diameter and Material: 2 PVC	Screen Slot Size: 0.01		Screen Length: 16 feet from 30 feet to 46 feet
1st Surface Casing Material: also check: ☐ Permanent ☐ Temporary	1st Surface Casing I.D. (inches):		1st Surface Casing Length: ____ feet from 0 feet to ____ feet
2nd Surface Casing Material: also check: ☐ Permanent ☐ Temporary	2nd Surface Casing I.D. (inches):		2nd Surface Casing Length: ____ feet from 0 feet to ____ feet
3rd Surface Casing Material: also check: ☐ Permanent ☐ Temporary	3rd Surface Casing I.D. (inches):		3rd Surface Casing Length: ____ feet from 0 feet to ____ feet
Filter Pack Material and Size: Silica Sand 20/40	Prepacked Filter Around Screen (check one): ☑ Yes ☐ No		Filter Pack Length: 16 feet from 32 feet to 48 feet
Filter Pack Seal Material and Size: NA			Filter Pack Seal Length: ____ feet NA from ____ feet to ____ feet
Surface Seal Material: NA			Surface Seal Length: ____ feet NA from ____ feet to ____ feet

WELL DEVELOPMENT DATA

Well Development Date: 1-18-15	Well Development Method (check one): ☐ Surge/Pump ☐ Pump ☐ Compressed Air ☑ Other (describe) Check Valve + Tubing		
Development Pump Type (check): ☐ Centrifugal ☐ Peristaltic ☐ Submersible ☑ Other (describe) Check Valve + Tubing		Depth to Groundwater (before developing in feet): 39.06	
Pumping Rate (gallons per minute): 0.1	Maximum Drawdown of Groundwater During Development (feet): Not Measured		Well Purged Dry (check one): ☐ Yes ☑ No
Pumping Condition (check one): ☑ Continuous ☐ Intermittent	Total Development Water Removed (gallons): 1	Development Duration (minutes): 10	Development Water Drummed (check one): ☐ Yes ☑ No
Water Appearance (color and odor) At Start of Development: Brown cloudy		Water Appearance (color and odor) At End of Development: Brown cloudy	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

well abandoned after sample collection

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number: TW-3	Site Name: MacDonald Property	FDEP Facility I.D. Number:	Well Install Date(s): 1-18-15
Well Location and Type (check appropriate boxes): ☑ On-Site ☐ Right-of-Way ☐ Off-Site Private Property ☐ Above Grade (AG) ☐ Flush-to-Grade If AG, list feet of riser above land surface:	Well Purpose: ☐ Perched Monitoring ☑ Shallow (Water-Table) Monitoring ☐ Intermediate or Deep Monitoring ☐ Remediation or Other (describe)		Well Install Method: DP Surface Casing Install Method: NA
Borehole Depth (feet): 48	Well Depth (feet): 48	Borehole Diameter (inches): 2	Manhole Diameter (inches): NA
Well Pad Size: NA ____ feet by ____ feet			
Riser Diameter and Material: 1" PVC	Riser/Screen Connections: ☑ Flush-Threaded ☐ Other (describe)		Riser Length: 28 feet from 0 feet to 28 feet
Screen Diameter and Material: 1" PVC	Screen Slot Size: 0.01		Screen Length: 10 feet from 38 feet to 48 feet
1st Surface Casing Material: also check: ☐ Permanent ☐ Temporary	1st Surface Casing I.D. (inches):		1st Surface Casing Length: ____ feet from 0 feet to ____ feet
2nd Surface Casing Material: also check: ☐ Permanent ☐ Temporary	2nd Surface Casing I.D. (inches):		2nd Surface Casing Length: ____ feet from 0 feet to ____ feet
3rd Surface Casing Material: also check: ☐ Permanent ☐ Temporary	3rd Surface Casing I.D. (inches):		3rd Surface Casing Length: ____ feet from 0 feet to ____ feet
Filter Pack Material and Size: Silica Sand	Prepacked Filter Around Screen (check one): ☑ Yes ☐ No		Filter Pack Length: 16 feet from 30 feet to 48 feet
Filter Pack Seal Material and Size: NA			Filter Pack Seal Length: ____ feet NA from ____ feet to ____ feet
Surface Seal Material: NA			Surface Seal Length: ____ feet NA from ____ feet to ____ feet

WELL DEVELOPMENT DATA

Well Development Date: 1-18-15	Well Development Method (check one): ☐ Surge/Pump ☐ Pump ☐ Compressed Air ☑ Other (describe) check valve & Tubing		
Development Pump Type (check): ☐ Centrifugal ☐ Peristaltic ☐ Submersible ☑ Other (describe) check valve & Tubing		Depth to Groundwater (before developing in feet): 28.95	
Pumping Rate (gallons per minute): 0.1	Maximum Drawdown of Groundwater During Development (feet): Not Measured	Well Purged Dry (check one): ☐ Yes ☑ No	
Pumping Condition (check one): ☑ Continuous ☐ Intermittent	Total Development Water Removed (gallons): 1	Development Duration (minutes): 10	Development Water Drummed (check one): ☐ Yes ☑ No
Water Appearance (color and odor) At Start of Development: Brown / Cloudy		Water Appearance (color and odor) At End of Development: Brown / Cloudy	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

well abandoned after Sample collection

APPENDIX E – EQUIPMENT CALIBRATION AND GROUNDWATER SAMPLING LOG FIELD FORMS

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: McDonalds Property	SITE LOCATION: Pace + Fairfield Pensacola	
WELL NO: TW-3	SAMPLE ID: TW-3	DATE: 1-18-16

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: 38 feet to 48 feet	STATIC DEPTH TO WATER (feet): 38.75	PURGE PUMP TYPE OR (BAILER): B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (48 feet – 38.75 feet) X 0.02 gallons/foot = 0.185 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
NA = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: 1320	PURGING ENDED AT: 1333	TOTAL VOLUME PURGED (gallons): 0.6

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
1325	0.2	0.2	0.05	NM*	6.08	23.31	34	2.8	936	Cloudy	No	-96
1329	0.2	0.4	0.05		6.21	23.26	34	2.77	>1000	Tan	No	-128
1333	0.2	0.6	0.05		6.19	23.28	35	2.71	>1000			-125

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. Long / PPM	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1333	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y N (replaced) NA DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
TW-3	3	CG	40ml	HCl	None	—	8260	B	200

REMARKS: DTW not recorded due to well diameter

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After 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)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: MacDonald's Property		SITE LOCATION: Pace & Fairfield Pensacola	
WELL NO: TW-2	SAMPLE ID: TW-2		DATE: 1-18-16

PURGING DATA

WELL DIAMETER (inches): 3/4 ID	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: 38 feet to 48 feet	STATIC DEPTH TO WATER (feet): 39.00	PURGE PUMP TYPE OR (BAILER): B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (48 feet – 39.00 feet) X 0.02 gallons/foot = 0.18 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
NA = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: 1337	PURGING ENDED AT: 1350	TOTAL VOLUME PURGED (gallons): 0.6

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1342	0.2	0.2	0.05	NM*	6.35	23.39	0.26	1.87	>1000	Tan	None
1346	0.2	0.4	0.05		6.25	23.79	0.26	1.15	"		
1350	0.2	0.6	0.05		6.24	25.78	0.25	1.10	"		

0.1
-199
-191
-186

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: Tony Long / PPM	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1350	SAMPLING ENDED AT: 1353
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y N (replaced) NA DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
TW-2	3	CG	40ml	HCl	None	–	8260	B	100

REMARKS: * DTW not collected due to well diameter

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After 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)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: McDonalds Property		SITE LOCATION: Pace of Fairfield Pensacola	
WELL NO: TW-1	SAMPLE ID: TW-1		DATE: 1-12-16

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: 38 feet to 48 feet	STATIC DEPTH TO WATER (feet): 39.67	PURGE PUMP TYPE OR (BAILER): B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (48 feet – 39.67 feet) X 0.02 gallons/foot = 0.17 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
NA = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: 1410	PURGING ENDED AT: 1417	TOTAL VOLUME PURGED (gallons): 0.6

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1409	0.2	0.2	0.05	x	6.25	24.32	18	1.43	>1000	Tan	No
1413	0.2	0.4	0.05		6.29	24.29	16	1.28			
1417	0.2	0.6	0.05		6.31	24.29	16	1.26			

0/P
-165
-155
-158

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: Barry Long / PPM	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1417	SAMPLING ENDED AT: 1415
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y N (replaced) NA	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
TW-1	3	CG	40 ml	HCl	None	–	8260	B	<100

REMARKS: DTW not collected due to well Diameter.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After 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)

Revision Date: February 12, 2009

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) Heath Tech **INSTRUMENT #** Detecto Pak III

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER VOC's

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 100 ppm methane
Standard B 1000 ppm methane
Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
16/01/15	0700	A	100	98	2	No	Init	BL
16/01/18	1530	A	100	97	3	No	Cont	BL
16/01/18	0945	A	100	99	1	No	Init	BL
16/01/18	1515	A	100	100	0	No	Cont	BL

MacDonald Property

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) Horiba / C6 **INSTRUMENT #** Horiba

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 0.0 NTU
Standard B 10.0 NTU
Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
16/01/10	0950	B	10	10.11	1	NO	Init	RL

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

Form FD9000-8 **CALIBRATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)** *11-10-05*

Project/Site: MacDonald Property Date: 1-18-16 Meter # _____

Temperature (Quarterly) *For Date of Last Temperature Verification see* _____ *in log book* _____

Dissolved Oxygen	**DEP SOP FT 1500**	Initials	Date	Time	Probe Charge	Probe Gain	mg/L	Temp °c	% DO	Saturation mg/L (from chart)	Pass *or* Fail
											Acceptance Criteria:+/-0.3mg/l
CAL ICV CCV		BL	1/18/16	1119			8.94	13.7			(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

Specific Conductance	**DEP SOP FT 1200**	Initials	Date	Time	Standard µmhos/cm	Exp. Date	Lot #	Bottle #	Cell Constant	Reading µmhos/cm	Pass *or* Fail
											Acceptance Criteria: +/- 5%
CAL ICV CCV		BL	1/18/16	1120	449	3-16	1406 0005			454	(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

pH	**DEP SOP FT 1100**	Initials	Date	Time	Standard SU	Exp. Date	Lot #	Bottle #	Slope	Reading SU	Pass *or* Fail
											Acceptance Criteria: +/- 0.2 SU
CAL ICV CCV		BL	1/18/16	1122	7.0	2-16	0559 2-GL			6.98	(P) F
CAL ICV CCV		BL	1/18/16	1123	10.0	2-16	0594 2-CL			9.94	(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

Maintenance: Weekly pH Slope: _____ Specific Conductance Probe Cleaned? Yes (No) Dissolved Oxygen Membrane Changed: Yes (No)

Notes: Horiba rental calibrated at Pine Inst

Perform only in Calibrate Mode: **CAL** - Calibrate -
Perform only in Run Mode: **ICV** - Initial Calibration Verification
Perform only in Run Mode: **CCV** - Continuing Calibration Verification

APPENDIX F - LABORATORY REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-116373-1
TestAmerica Sample Delivery Group: Proj. 22359004-ESA2
Client Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,FL
Revision: 1

For:
PPM Consultants, Inc.
30704 Sgt. E.I. "Boots" Thomas Dr.
Spanish Fort, Alabama 36527

Attn: Mr. Ben Clabaugh

Authorized for release by:
1/22/2016 3:06:15 PM

Carolyn Hooper, Project Manager I
(850)474-1001
carolyn.hooper@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-116373-1	SB-2 6-8	Solid	01/15/16 09:30	01/15/16 14:40
400-116373-2	SB-5 34-36	Solid	01/15/16 10:20	01/15/16 14:40
400-116373-3	SB-9 36-38	Solid	01/15/16 13:10	01/15/16 14:40

Detection Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Client Sample ID: SB-2 6-8 — Lab Sample ID: 400-116373-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C8-C40)	1.9	I	11	1.8	mg/Kg	1	☼	FL-PRO	Total/NA

Client Sample ID: SB-5 34-36 — Lab Sample ID: 400-116373-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C8-C40)	2.9	I	11	1.8	mg/Kg	1	☼	FL-PRO	Total/NA

Client Sample ID: SB-9 36-38 — Lab Sample ID: 400-116373-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Client Sample ID: SB-2 6-8

Date Collected: 01/15/16 09:30
Date Received: 01/15/16 14:40

Lab Sample ID: 400-116373-1

Matrix: Solid
Percent Solids: 93.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00097	U	0.0044	0.00097	mg/Kg	☼	01/19/16 09:40	01/19/16 16:23	1
Toluene	0.00088	U	0.0044	0.00088	mg/Kg	☼	01/19/16 09:40	01/19/16 16:23	1
Ethylbenzene	0.00054	U	0.0044	0.00054	mg/Kg	☼	01/19/16 09:40	01/19/16 16:23	1
Xylenes, Total	0.0017	U	0.0088	0.0017	mg/Kg	☼	01/19/16 09:40	01/19/16 16:23	1
Methyl tert-butyl ether	0.00088	U	0.0044	0.00088	mg/Kg	☼	01/19/16 09:40	01/19/16 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 122*	*01/19/16 09:40*	*01/19/16 16:23*	*1*
Dibromofluoromethane	*96*		*79 - 123*	*01/19/16 09:40*	*01/19/16 16:23*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*	*01/19/16 09:40*	*01/19/16 16:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Acenaphthylene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Anthracene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Benzo[a]anthracene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Benzo[a]pyrene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Benzo[b]fluoranthene	0.027	U	0.35	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Benzo[g,h,i]perylene	0.032	U	0.35	0.032	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Benzo[k]fluoranthene	0.024	U	0.35	0.024	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Chrysene	0.024	U	0.35	0.024	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Dibenz(a,h)anthracene	0.027	U	0.35	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Fluoranthene	0.027	U	0.35	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Fluorene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Indeno[1,2,3-cd]pyrene	0.027	U	0.35	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
1-Methylnaphthalene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
2-Methylnaphthalene	0.019	U	0.35	0.019	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Naphthalene	0.024	U	0.35	0.024	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Phenanthrene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1
Pyrene	0.027	U	0.35	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*44 - 120*	*01/18/16 12:52*	*01/19/16 04:07*	*1*
Nitrobenzene-d5	*70*		*27 - 120*	*01/18/16 12:52*	*01/19/16 04:07*	*1*
Terphenyl-d14	*94*		*36 - 134*	*01/18/16 12:52*	*01/19/16 04:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	**1.9**	**I**	11	1.8	mg/Kg	☼	01/18/16 09:16	01/19/16 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*78*		*60 - 118*	*01/18/16 09:16*	*01/19/16 16:07*	*1*
o-Terphenyl	*82*		*62 - 109*	*01/18/16 09:16*	*01/19/16 16:07*	*1*

Client Sample Results

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Client Sample ID: SB-5 34-36

Date Collected: 01/15/16 10:20
Date Received: 01/15/16 14:40

Lab Sample ID: 400-116373-2

Matrix: Solid
Percent Solids: 94.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0012	U	0.0055	0.0012	mg/Kg	☼	01/19/16 09:40	01/19/16 16:45	1
Toluene	0.0011	U	0.0055	0.0011	mg/Kg	☼	01/19/16 09:40	01/19/16 16:45	1
Ethylbenzene	0.00067	U	0.0055	0.00067	mg/Kg	☼	01/19/16 09:40	01/19/16 16:45	1
Xylenes, Total	0.0021	U	0.011	0.0021	mg/Kg	☼	01/19/16 09:40	01/19/16 16:45	1
Methyl tert-butyl ether	0.0011	U	0.0055	0.0011	mg/Kg	☼	01/19/16 09:40	01/19/16 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 122*	*01/19/16 09:40*	*01/19/16 16:45*	*1*
Dibromofluoromethane	*92*		*79 - 123*	*01/19/16 09:40*	*01/19/16 16:45*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*	*01/19/16 09:40*	*01/19/16 16:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Acenaphthylene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Anthracene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Benzo[a]anthracene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Benzo[a]pyrene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Benzo[b]fluoranthene	0.026	U	0.35	0.026	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Benzo[g,h,i]perylene	0.032	U	0.35	0.032	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Benzo[k]fluoranthene	0.023	U	0.35	0.023	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Chrysene	0.023	U	0.35	0.023	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Dibenz(a,h)anthracene	0.026	U	0.35	0.026	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Fluoranthene	0.026	U	0.35	0.026	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Fluorene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Indeno[1,2,3-cd]pyrene	0.026	U	0.35	0.026	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
1-Methylnaphthalene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
2-Methylnaphthalene	0.019	U	0.35	0.019	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Naphthalene	0.023	U	0.35	0.023	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Phenanthrene	0.021	U	0.35	0.021	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1
Pyrene	0.026	U	0.35	0.026	mg/Kg	☼	01/18/16 12:52	01/19/16 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*44 - 120*	*01/18/16 12:52*	*01/19/16 04:44*	*1*
Nitrobenzene-d5	*75*		*27 - 120*	*01/18/16 12:52*	*01/19/16 04:44*	*1*
Terphenyl-d14	*104*		*36 - 134*	*01/18/16 12:52*	*01/19/16 04:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	**2.9**	**I**	11	1.8	mg/Kg	☼	01/18/16 09:16	01/19/16 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*76*		*60 - 118*	*01/18/16 09:16*	*01/19/16 16:17*	*1*
o-Terphenyl	*80*		*62 - 109*	*01/18/16 09:16*	*01/19/16 16:17*	*1*

Client Sample Results

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Client Sample ID: SB-9 36-38

Date Collected: 01/15/16 13:10
Date Received: 01/15/16 14:40

Lab Sample ID: 400-116373-3

Matrix: Solid
Percent Solids: 91.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00093	U	0.0042	0.00093	mg/Kg	☼	01/19/16 09:40	01/19/16 17:06	1
Toluene	0.00085	U	0.0042	0.00085	mg/Kg	☼	01/19/16 09:40	01/19/16 17:06	1
Ethylbenzene	0.00052	U	0.0042	0.00052	mg/Kg	☼	01/19/16 09:40	01/19/16 17:06	1
Xylenes, Total	0.0016	U	0.0085	0.0016	mg/Kg	☼	01/19/16 09:40	01/19/16 17:06	1
Methyl tert-butyl ether	0.00085	U	0.0042	0.00085	mg/Kg	☼	01/19/16 09:40	01/19/16 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 122*	*01/19/16 09:40*	*01/19/16 17:06*	*1*
Dibromofluoromethane	*95*		*79 - 123*	*01/19/16 09:40*	*01/19/16 17:06*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*	*01/19/16 09:40*	*01/19/16 17:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.022	U	0.36	0.022	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Acenaphthylene	0.022	U	0.36	0.022	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Anthracene	0.022	U	0.36	0.022	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Benzo[a]anthracene	0.022	U	0.36	0.022	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Benzo[a]pyrene	0.022	U	0.36	0.022	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Benzo[b]fluoranthene	0.027	U	0.36	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Benzo[g,h,i]perylene	0.032	U	0.36	0.032	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Benzo[k]fluoranthene	0.024	U	0.36	0.024	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Chrysene	0.024	U	0.36	0.024	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Dibenz(a,h)anthracene	0.027	U	0.36	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Fluoranthene	0.027	U	0.36	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Fluorene	0.022	U	0.36	0.022	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Indeno[1,2,3-cd]pyrene	0.027	U	0.36	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
1-Methylnaphthalene	0.022	U	0.36	0.022	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
2-Methylnaphthalene	0.019	U	0.36	0.019	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Naphthalene	0.024	U	0.36	0.024	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Phenanthrene	0.022	U	0.36	0.022	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1
Pyrene	0.027	U	0.36	0.027	mg/Kg	☼	01/18/16 12:52	01/19/16 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*44 - 120*	*01/18/16 12:52*	*01/19/16 05:22*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*01/18/16 12:52*	*01/19/16 05:22*	*1*
Terphenyl-d14	*95*		*36 - 134*	*01/18/16 12:52*	*01/19/16 05:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	1.9	U	11	1.9	mg/Kg	☼	01/18/16 09:16	01/19/16 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-C39	*99*		*60 - 118*	*01/18/16 09:16*	*01/19/16 16:26*	*1*
o-Terphenyl	*99*		*62 - 109*	*01/18/16 09:16*	*01/19/16 16:26*	*1*

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

GC Semi 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.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Job ID: 400-116373-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-116373-1

Receipt
The samples were received on 1/15/2016 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0ºC.

Revision 1
This report has been revised to change the formatter for Florida reporting.

Method Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
FL-PRO	Florida - Petroleum Range Organics (GC)	FL-DEP	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Client Sample ID: SB-2 6-8
Lab Sample ID: 400-116373-1
Date Collected: 01/15/16 09:30
Matrix: Solid
Date Received: 01/15/16 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	290893	01/18/16 17:52	JLB	TAL PEN

Client Sample ID: SB-2 6-8
Lab Sample ID: 400-116373-1
Date Collected: 01/15/16 09:30
Matrix: Solid
Date Received: 01/15/16 14:40
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			290987	01/19/16 09:40	HLW	TAL PEN
Total/NA	Analysis	8260B		1	290928	01/19/16 16:23	CS	TAL PEN
Total/NA	Prep	3550B			290820	01/18/16 12:52	PMJ	TAL PEN
Total/NA	Analysis	8270C		1	290903	01/19/16 04:07	AJR	TAL PEN
Total/NA	Prep	3550B			290783	01/18/16 09:16	PMJ	TAL PEN
Total/NA	Analysis	FL-PRO		1	291006	01/19/16 16:07	C1M	TAL PEN

Client Sample ID: SB-5 34-36
Lab Sample ID: 400-116373-2
Date Collected: 01/15/16 10:20
Matrix: Solid
Date Received: 01/15/16 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	290893	01/18/16 17:52	JLB	TAL PEN

Client Sample ID: SB-5 34-36
Lab Sample ID: 400-116373-2
Date Collected: 01/15/16 10:20
Matrix: Solid
Date Received: 01/15/16 14:40
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			290987	01/19/16 09:40	HLW	TAL PEN
Total/NA	Analysis	8260B		1	290928	01/19/16 16:45	CS	TAL PEN
Total/NA	Prep	3550B			290820	01/18/16 12:52	PMJ	TAL PEN
Total/NA	Analysis	8270C		1	290903	01/19/16 04:44	AJR	TAL PEN
Total/NA	Prep	3550B			290783	01/18/16 09:16	PMJ	TAL PEN
Total/NA	Analysis	FL-PRO		1	291006	01/19/16 16:17	C1M	TAL PEN

Client Sample ID: SB-9 36-38
Lab Sample ID: 400-116373-3
Date Collected: 01/15/16 13:10
Matrix: Solid
Date Received: 01/15/16 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	290893	01/18/16 17:52	JLB	TAL PEN

Lab Chronicle

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Client Sample ID: SB-9 36-38

Date Collected: 01/15/16 13:10
Date Received: 01/15/16 14:40

Lab Sample ID: 400-116373-3

Matrix: Solid
Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			290987	01/19/16 09:40	HLW	TAL PEN
Total/NA	Analysis	8260B		1	290928	01/19/16 17:06	CS	TAL PEN
Total/NA	Prep	3550B			290820	01/18/16 12:52	PMJ	TAL PEN
Total/NA	Analysis	8270C		1	290903	01/19/16 05:22	AJR	TAL PEN
Total/NA	Prep	3550B			290783	01/18/16 09:16	PMJ	TAL PEN
Total/NA	Analysis	FL-PRO		1	291006	01/19/16 16:26	C1M	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Surrogate Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-122)	(79-123)	(80-120)
400-116280-B-2-E MS	Matrix Spike	97	100	106
400-116280-B-2-F MSD	Matrix Spike Duplicate	97	102	105
400-116373-1	SB-2 6-8	101	96	108
400-116373-2	SB-5 34-36	101	92	107
400-116373-3	SB-9 36-38	103	95	107
LCS 400-290987/2-A	Lab Control Sample	97	117	107
MB 400-290987/1-A	Method Blank	101	94	108

Surrogate Legend

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

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(44-120)	(27-120)	(36-134)
400-116373-1	SB-2 6-8	70	70	94
400-116373-1 MS	SB-2 6-8	56	54	73
400-116373-1 MSD	SB-2 6-8	70	68	88
400-116373-2	SB-5 34-36	80	75	104
400-116373-3	SB-9 36-38	73	71	95
LCS 400-290820/8-A	Lab Control Sample	71	67	76
MB 400-290820/9-A	Method Blank	65	62	73

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPH = Terphenyl-d14

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		C39	OTPH
Lab Sample ID	Client Sample ID	(60-118)	(62-109)
400-116373-1	SB-2 6-8	78	82
400-116373-2	SB-5 34-36	76	80
400-116373-3	SB-9 36-38	99	99
660-71505-J-3-B MS	Matrix Spike	111	99
660-71505-J-3-C MSD	Matrix Spike Duplicate	116	107
LCS 400-290783/12-A	Lab Control Sample	114	103
MB 400-290783/13-A	Method Blank	92	95

Surrogate Legend

C39 = n-C39
OTPH = o-Terphenyl

QC Association Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,F

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

GC/MS VOA

Analysis Batch: 290928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116280-B-2-E MS	Matrix Spike	Total/NA	Solid	8260B	290987
400-116280-B-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	290987
400-116373-1	SB-2 6-8	Total/NA	Solid	8260B	290987
400-116373-2	SB-5 34-36	Total/NA	Solid	8260B	290987
400-116373-3	SB-9 36-38	Total/NA	Solid	8260B	290987
LCS 400-290987/2-A	Lab Control Sample	Total/NA	Solid	8260B	290987
MB 400-290987/1-A	Method Blank	Total/NA	Solid	8260B	290987

Prep Batch: 290987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116280-B-2-E MS	Matrix Spike	Total/NA	Solid	5035	
400-116280-B-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
400-116373-1	SB-2 6-8	Total/NA	Solid	5035	
400-116373-2	SB-5 34-36	Total/NA	Solid	5035	
400-116373-3	SB-9 36-38	Total/NA	Solid	5035	
LCS 400-290987/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-290987/1-A	Method Blank	Total/NA	Solid	5035	

GC/MS Semi VOA

Analysis Batch: 290770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-290820/8-A	Lab Control Sample	Total/NA	Solid	8270C	290820
MB 400-290820/9-A	Method Blank	Total/NA	Solid	8270C	290820

Prep Batch: 290820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116373-1	SB-2 6-8	Total/NA	Solid	3550B	
400-116373-1 MS	SB-2 6-8	Total/NA	Solid	3550B	
400-116373-1 MSD	SB-2 6-8	Total/NA	Solid	3550B	
400-116373-2	SB-5 34-36	Total/NA	Solid	3550B	
400-116373-3	SB-9 36-38	Total/NA	Solid	3550B	
LCS 400-290820/8-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 400-290820/9-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 290903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116373-1	SB-2 6-8	Total/NA	Solid	8270C	290820
400-116373-1 MS	SB-2 6-8	Total/NA	Solid	8270C	290820
400-116373-1 MSD	SB-2 6-8	Total/NA	Solid	8270C	290820
400-116373-2	SB-5 34-36	Total/NA	Solid	8270C	290820
400-116373-3	SB-9 36-38	Total/NA	Solid	8270C	290820

GC Semi VOA

Prep Batch: 290783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116373-1	SB-2 6-8	Total/NA	Solid	3550B	
400-116373-2	SB-5 34-36	Total/NA	Solid	3550B	
400-116373-3	SB-9 36-38	Total/NA	Solid	3550B	

GC Semi VOA (Continued)

Prep Batch: 290783 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-71505-J-3-B MS	Matrix Spike	Total/NA	Solid	3550B	
660-71505-J-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550B	
LCS 400-290783/12-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 400-290783/13-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 291006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116373-1	SB-2 6-8	Total/NA	Solid	FL-PRO	290783
400-116373-2	SB-5 34-36	Total/NA	Solid	FL-PRO	290783
400-116373-3	SB-9 36-38	Total/NA	Solid	FL-PRO	290783
660-71505-J-3-B MS	Matrix Spike	Total/NA	Solid	FL-PRO	290783
660-71505-J-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	FL-PRO	290783
LCS 400-290783/12-A	Lab Control Sample	Total/NA	Solid	FL-PRO	290783
MB 400-290783/13-A	Method Blank	Total/NA	Solid	FL-PRO	290783

General Chemistry

Analysis Batch: 290893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116373-1	SB-2 6-8	Total/NA	Solid	Moisture	
400-116373-1 DU	SB-2 6-8	Total/NA	Solid	Moisture	
400-116373-2	SB-5 34-36	Total/NA	Solid	Moisture	
400-116373-3	SB-9 36-38	Total/NA	Solid	Moisture	

QC Sample Results

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,Fl

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-290987/1-A
Matrix: Solid
Analysis Batch: 290928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 290987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0011	U	0.0050	0.0011	mg/Kg		01/19/16 09:40	01/19/16 11:45	1
Toluene	0.0010	U	0.0050	0.0010	mg/Kg		01/19/16 09:40	01/19/16 11:45	1
Ethylbenzene	0.00061	U	0.0050	0.00061	mg/Kg		01/19/16 09:40	01/19/16 11:45	1
Xylenes, Total	0.0019	U	0.010	0.0019	mg/Kg		01/19/16 09:40	01/19/16 11:45	1
Methyl tert-butyl ether	0.0010	U	0.0050	0.0010	mg/Kg		01/19/16 09:40	01/19/16 11:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 122*	*01/19/16 09:40*	*01/19/16 11:45*	*1*
Dibromofluoromethane	*94*		*79 - 123*	*01/19/16 09:40*	*01/19/16 11:45*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*	*01/19/16 09:40*	*01/19/16 11:45*	*1*

Lab Sample ID: LCS 400-290987/2-A
Matrix: Solid
Analysis Batch: 290928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 290987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0351		mg/Kg		70	65 - 130
Toluene	0.0500	0.0428		mg/Kg		86	70 - 130
Ethylbenzene	0.0500	0.0445		mg/Kg		89	70 - 130
Xylenes, Total	0.100	0.0879		mg/Kg		88	70 - 130
Methyl tert-butyl ether	0.0500	0.0393		mg/Kg		79	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 122*
Dibromofluoromethane	*117*		*79 - 123*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 400-116280-B-2-E MS
Matrix: Solid
Analysis Batch: 290928

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 290987

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0014	U	0.0615	0.0423		mg/Kg	☼	69	38 - 131
Toluene	0.0013	U	0.0615	0.0483		mg/Kg	☼	79	42 - 130
Ethylbenzene	0.00080	U	0.0615	0.0483		mg/Kg	☼	79	35 - 130
Xylenes, Total	0.0025	U	0.123	0.0960		mg/Kg	☼	78	35 - 130
Methyl tert-butyl ether	0.0013	U	0.0615	0.0466		mg/Kg	☼	76	34 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 122*
Dibromofluoromethane	*100*		*79 - 123*
Toluene-d8 (Surr)	*106*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-116280-B-2-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 290928 — **Prep Batch: 290987**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0014	U	0.0626	0.0445		mg/Kg	☼	71	38 - 131	5	36
Toluene	0.0013	U	0.0626	0.0502		mg/Kg	☼	80	42 - 130	4	37
Ethylbenzene	0.00080	U	0.0626	0.0485		mg/Kg	☼	78	35 - 130	1	46
Xylenes, Total	0.0025	U	0.125	0.0951		mg/Kg	☼	76	35 - 130	1	39
Methyl tert-butyl ether	0.0013	U	0.0626	0.0498		mg/Kg	☼	80	34 - 132	7	31

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 122*
Dibromofluoromethane	*102*		*79 - 123*
Toluene-d8 (Surr)	*105*		*80 - 120*

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

Lab Sample ID: MB 400-290820/9-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 290770 — **Prep Batch: 290820**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.020	U	0.33	0.020	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Acenaphthylene	0.020	U	0.33	0.020	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Anthracene	0.020	U	0.33	0.020	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Benzo[a]anthracene	0.020	U	0.33	0.020	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Benzo[a]pyrene	0.020	U	0.33	0.020	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Benzo[b]fluoranthene	0.025	U	0.33	0.025	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Benzo[g,h,i]perylene	0.030	U	0.33	0.030	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Benzo[k]fluoranthene	0.022	U	0.33	0.022	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Chrysene	0.022	U	0.33	0.022	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Dibenz(a,h)anthracene	0.025	U	0.33	0.025	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Fluoranthene	0.025	U	0.33	0.025	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Fluorene	0.020	U	0.33	0.020	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Indeno[1,2,3-cd]pyrene	0.025	U	0.33	0.025	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
1-Methylnaphthalene	0.020	U	0.33	0.020	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
2-Methylnaphthalene	0.018	U	0.33	0.018	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Naphthalene	0.022	U	0.33	0.022	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Phenanthrene	0.020	U	0.33	0.020	mg/Kg		01/18/16 12:52	01/18/16 23:48	1
Pyrene	0.025	U	0.33	0.025	mg/Kg		01/18/16 12:52	01/18/16 23:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*44 - 120*	*01/18/16 12:52*	*01/18/16 23:48*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*01/18/16 12:52*	*01/18/16 23:48*	*1*
Terphenyl-d14	*73*		*36 - 134*	*01/18/16 12:52*	*01/18/16 23:48*	*1*

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

Lab Sample ID: LCS 400-290820/8-A
Matrix: Solid
Analysis Batch: 290770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 290820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.993	0.776		mg/Kg		78	62 - 120
Acenaphthylene	0.993	0.801		mg/Kg		81	61 - 120
Anthracene	0.993	0.790		mg/Kg		80	68 - 120
Benzo[a]anthracene	0.993	0.795		mg/Kg		80	67 - 120
Benzo[a]pyrene	0.993	0.847		mg/Kg		85	64 - 120
Benzo[b]fluoranthene	0.993	0.812		mg/Kg		82	58 - 121
Benzo[g,h,i]perylene	0.993	0.869		mg/Kg		88	49 - 151
Benzo[k]fluoranthene	0.993	0.837		mg/Kg		84	61 - 123
Chrysene	0.993	0.818		mg/Kg		82	65 - 120
Dibenz(a,h)anthracene	0.993	0.857		mg/Kg		86	58 - 130
Fluoranthene	0.993	0.831		mg/Kg		84	67 - 123
Fluorene	0.993	0.793		mg/Kg		80	64 - 120
Indeno[1,2,3-cd]pyrene	0.993	0.896		mg/Kg		90	55 - 133
1-Methylnaphthalene	0.993	0.759		mg/Kg		76	66 - 120
2-Methylnaphthalene	0.993	0.764		mg/Kg		77	64 - 120
Naphthalene	0.993	0.721		mg/Kg		73	59 - 120
Phenanthrene	0.993	0.791		mg/Kg		80	62 - 130
Pyrene	0.993	0.813		mg/Kg		82	57 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*44 - 120*
Nitrobenzene-d5	*67*		*27 - 120*
Terphenyl-d14	*76*		*36 - 134*

Lab Sample ID: 400-116373-1 MS
Matrix: Solid
Analysis Batch: 290903

Client Sample ID: SB-2 6-8
Prep Type: Total/NA
Prep Batch: 290820

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.021	U	1.06	0.670		mg/Kg	☼	63	10 - 150
Acenaphthylene	0.021	U	1.06	0.710		mg/Kg	☼	67	10 - 150
Anthracene	0.021	U	1.06	0.747		mg/Kg	☼	70	10 - 150
Benzo[a]anthracene	0.021	U	1.06	0.726		mg/Kg	☼	68	10 - 150
Benzo[a]pyrene	0.021	U	1.06	0.718		mg/Kg	☼	68	10 - 150
Benzo[b]fluoranthene	0.027	U	1.06	0.706		mg/Kg	☼	66	10 - 150
Benzo[g,h,i]perylene	0.032	U	1.06	0.787		mg/Kg	☼	74	10 - 150
Benzo[k]fluoranthene	0.024	U	1.06	0.750		mg/Kg	☼	71	10 - 150
Chrysene	0.024	U	1.06	0.735		mg/Kg	☼	69	10 - 150
Dibenz(a,h)anthracene	0.027	U	1.06	0.797		mg/Kg	☼	75	32 - 120
Fluoranthene	0.027	U	1.06	0.699		mg/Kg	☼	66	10 - 150
Fluorene	0.021	U	1.06	0.708		mg/Kg	☼	67	10 - 150
Indeno[1,2,3-cd]pyrene	0.027	U	1.06	0.791		mg/Kg	☼	74	10 - 150
1-Methylnaphthalene	0.021	U	1.06	0.647		mg/Kg	☼	61	10 - 150
2-Methylnaphthalene	0.019	U	1.06	0.652		mg/Kg	☼	61	10 - 150
Naphthalene	0.024	U	1.06	0.599		mg/Kg	☼	56	10 - 150
Phenanthrene	0.021	U	1.06	0.754		mg/Kg	☼	71	10 - 150
Pyrene	0.027	U	1.06	0.797		mg/Kg	☼	75	10 - 150

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

Lab Sample ID: 400-116373-1 MS
Matrix: Solid
Analysis Batch: 290903

Client Sample ID: SB-2 6-8
Prep Type: Total/NA
Prep Batch: 290820

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	56		44 - 120
Nitrobenzene-d5	54		27 - 120
Terphenyl-d14	73		36 - 134

Lab Sample ID: 400-116373-1 MSD
Matrix: Solid
Analysis Batch: 290903

Client Sample ID: SB-2 6-8
Prep Type: Total/NA
Prep Batch: 290820

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.021	U	1.06	0.739		mg/Kg	☼	70	10 - 150	10	36
Acenaphthylene	0.021	U	1.06	0.780		mg/Kg	☼	74	10 - 150	9	29
Anthracene	0.021	U	1.06	0.772		mg/Kg	☼	73	10 - 150	3	30
Benzo[a]anthracene	0.021	U	1.06	0.754		mg/Kg	☼	71	10 - 150	4	33
Benzo[a]pyrene	0.021	U	1.06	0.749		mg/Kg	☼	71	10 - 150	4	30
Benzo[b]fluoranthene	0.027	U	1.06	0.765		mg/Kg	☼	72	10 - 150	8	31
Benzo[g,h,i]perylene	0.032	U	1.06	0.802		mg/Kg	☼	76	10 - 150	2	30
Benzo[k]fluoranthene	0.024	U	1.06	0.786		mg/Kg	☼	74	10 - 150	5	29
Chrysene	0.024	U	1.06	0.748		mg/Kg	☼	71	10 - 150	2	33
Dibenz(a,h)anthracene	0.027	U	1.06	0.798		mg/Kg	☼	75	32 - 120	0	30
Fluoranthene	0.027	U	1.06	0.679		mg/Kg	☼	64	10 - 150	3	42
Fluorene	0.021	U	1.06	0.760		mg/Kg	☼	72	10 - 150	7	36
Indeno[1,2,3-cd]pyrene	0.027	U	1.06	0.801		mg/Kg	☼	76	10 - 150	1	31
1-Methylnaphthalene	0.021	U	1.06	0.739		mg/Kg	☼	70	10 - 150	13	29
2-Methylnaphthalene	0.019	U	1.06	0.747		mg/Kg	☼	70	10 - 150	14	32
Naphthalene	0.024	U	1.06	0.697		mg/Kg	☼	66	10 - 150	15	33
Phenanthrene	0.021	U	1.06	0.784		mg/Kg	☼	74	10 - 150	4	34
Pyrene	0.027	U	1.06	0.905		mg/Kg	☼	85	10 - 150	13	45

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	70		44 - 120
Nitrobenzene-d5	68		27 - 120
Terphenyl-d14	88		36 - 134

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

Lab Sample ID: MB 400-290783/13-A
Matrix: Solid
Analysis Batch: 291006

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 290783

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C8-C40)	1.7	U	10	1.7	mg/Kg		01/18/16 09:16	01/19/16 15:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-C39	92		60 - 118	01/18/16 09:16	01/19/16 15:48	1
o-Terphenyl	95		62 - 109	01/18/16 09:16	01/19/16 15:48	1

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

Lab Sample ID: LCS 400-290783/12-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 291006 — **Prep Batch: 290783**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Petroleum Hydrocarbons (C8-C40)			112	91.3		mg/Kg		81	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-C39	*114*		*60 - 118*
o-Terphenyl	*103*		*62 - 109*

Lab Sample ID: 660-71505-J-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 291006 — **Prep Batch: 290783**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Petroleum Hydrocarbons (C8-C40)	3.6	I	130	102		mg/Kg	☼	75	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-C39	*111*		*60 - 118*
o-Terphenyl	*99*		*62 - 109*

Lab Sample ID: 660-71505-J-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 291006 — **Prep Batch: 290783**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Petroleum Hydrocarbons (C8-C40)	3.6	I	129	112		mg/Kg	☼	84	62 - 204	10	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-C39	*116*		*60 - 118*
o-Terphenyl	*107*		*62 - 109*

Chain of Custody Record

Lab Report No.:

Company: PPM Consultants	Gulf Coast LabNet, Inc. An Environmental Lab Services Co.	Modified from DEP Form #: 62-770.900(2) — Page 1 of 1
Address: P.O. Box 2478, Daphne, AL 36526	Phone: (251) 625-1331	FDEP Facility No.:
	Fax: (251) 625-1299	Project Name: MACDONALD'S SHOPPING CTR
		Location: PENSACOCA, FL
		Project No.: 22359004-ESA2

Attn: BEN CLABAUGH — Phone: — Fax:

Sampled by [Print Name]/Affiliation: Kerry Long — Sampler Signature:

400-116373 COC

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Comp.	Matrix Codes	No. Cont.	8260 (BTEX, MTBE)	8270 (PAH)	FL-PRO	Remarks	Lab. No.
							H	H	H		
1	SB-2 6-8	1-15-16	0936	G	SO	4	X	X	X	48 HR. HOLD	
2	SB-5 34-36	1-15-16	1020	G	SO	4	X	X	X		
3	SB-9 36-38	1-15-16	1310	G	SO	4	X	X	X		

← Preservative

← Analysis

REQUESTED DUE DATE: NTT 1-22-16

Shipment Method — Out: / / Via: — Returned: / / Via:

Additional Comments

← Total Number of Containers: 12

Item #	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
1-3	[signature] PPM	1-15-16	1400	[signature] GCL	1-15-16	1400
	[signature] GCL	1-15-16	1440	Jeremy Johnson	1-15-16	1440

Cooler No.(s) / Temperature(s) (°C)	Sampling Kit No.	Equipment ID No.
0.0°C	14258	IR-5 (4.6°C) 709 (1/15)

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify) $H_2O + CH_3OH$

Login Sample Receipt Checklist

Client: PPM Consultants, Inc.

Job Number: 400-116373-1
SDG Number: Proj. 22359004-ESA2

Login Number: 116373
List Number: 1
Creator: Benforado, Jessica L

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	0.0°C IR-5
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.	True	
Sample containers have legible labels.	True	
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	
Sample Preservation Verified.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S SHOPPING CTR. - Pensacola,FI

TestAmerica Job ID: 400-116373-1
SDG: Proj. 22359004-ESA2

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-116471-1
TestAmerica Sample Delivery Group: Proj. 22395004 - ESA2
Client Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

For:
PPM Consultants, Inc.
30704 Sgt. E.I. "Boots" Thomas Dr.
Spanish Fort, Alabama 36527

Attn: Mr. Ben Clabaugh

Authorized for release by:
1/27/2016 1:06:08 PM

Carolyn Hooper, Project Manager I
(850)474-1001
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LINKS

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Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-116471-1	TW-3	Water	01/18/16 13:33	01/19/16 15:30
400-116471-2	TW-2	Water	01/18/16 13:50	01/19/16 15:30
400-116471-3	TW-1	Water	01/18/16 14:17	01/19/16 15:30

Detection Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Client Sample ID: TW-3 — Lab Sample ID: 400-116471-1

No Detections.

Client Sample ID: TW-2 — Lab Sample ID: 400-116471-2

No Detections.

Client Sample ID: TW-1 — Lab Sample ID: 400-116471-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Client Sample ID: TW-3

Date Collected: 01/18/16 13:33
Date Received: 01/19/16 15:30

Lab Sample ID: 400-116471-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			01/20/16 15:17	1
Toluene	0.70	U	1.0	0.70	ug/L			01/20/16 15:17	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			01/20/16 15:17	1
Xylenes, Total	0.60	U	5.0	0.60	ug/L			01/20/16 15:17	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			01/20/16 15:17	1
Naphthalene	1.0	U	1.0	1.0	ug/L			01/20/16 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*01/20/16 15:17*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*01/20/16 15:17*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/20/16 15:17*	*1*

Client Sample Results

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Client Sample ID: TW-2

Date Collected: 01/18/16 13:50
Date Received: 01/19/16 15:30

Lab Sample ID: 400-116471-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			01/21/16 09:19	1
Toluene	0.70	U	1.0	0.70	ug/L			01/21/16 09:19	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			01/21/16 09:19	1
Xylenes, Total	0.60	U	5.0	0.60	ug/L			01/21/16 09:19	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			01/21/16 09:19	1
Naphthalene	1.0	U	1.0	1.0	ug/L			01/21/16 09:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*01/21/16 09:19*	*1*
Dibromofluoromethane	*109*		*81 - 121*		*01/21/16 09:19*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/21/16 09:19*	*1*

Client Sample Results

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Client Sample ID: TW-1

Date Collected: 01/18/16 14:17
Date Received: 01/19/16 15:30

Lab Sample ID: 400-116471-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			01/21/16 09:45	1
Toluene	0.70	U	1.0	0.70	ug/L			01/21/16 09:45	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			01/21/16 09:45	1
Xylenes, Total	0.60	U	5.0	0.60	ug/L			01/21/16 09:45	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			01/21/16 09:45	1
Naphthalene	1.0	U	1.0	1.0	ug/L			01/21/16 09:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*01/21/16 09:45*	*1*
Dibromofluoromethane	*111*		*81 - 121*		*01/21/16 09:45*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*01/21/16 09:45*	*1*

Definitions/Glossary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Method Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN

Protocol References:

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

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Client Sample ID: TW-3 — Lab Sample ID: 400-116471-1

Date Collected: 01/18/16 13:33 — **Matrix: Water**
Date Received: 01/19/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	291095	01/20/16 15:17	CS	TAL PEN

Client Sample ID: TW-2 — Lab Sample ID: 400-116471-2

Date Collected: 01/18/16 13:50 — **Matrix: Water**
Date Received: 01/19/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	291206	01/21/16 09:19	S1S	TAL PEN

Client Sample ID: TW-1 — Lab Sample ID: 400-116471-3

Date Collected: 01/18/16 14:17 — **Matrix: Water**
Date Received: 01/19/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	291206	01/21/16 09:45	S1S	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Surrogate Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(78-118)	(81-121)	(80-120)
400-116471-1	TW-3	103	96	107
400-116471-1 MS	TW-3	96	99	104
400-116471-1 MSD	TW-3	97	99	107
400-116471-2	TW-2	93	109	89
400-116471-3	TW-1	93	111	91
400-116482-A-2 MS	Matrix Spike	98	105	92
400-116482-A-2 MSD	Matrix Spike Duplicate	99	105	92
LCS 400-291095/1002	Lab Control Sample	98	98	106
LCS 400-291206/1002	Lab Control Sample	99	102	95
MB 400-291095/4	Method Blank	104	95	108
MB 400-291206/4	Method Blank	92	113	90

Surrogate Legend

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

QC Association Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

GC/MS VOA

Analysis Batch: 291095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116471-1	TW-3	Total/NA	Water	8260B	
400-116471-1 MS	TW-3	Total/NA	Water	8260B	
400-116471-1 MSD	TW-3	Total/NA	Water	8260B	
LCS 400-291095/1002	Lab Control Sample	Total/NA	Water	8260B	
MB 400-291095/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 291206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-116471-2	TW-2	Total/NA	Water	8260B	
400-116471-3	TW-1	Total/NA	Water	8260B	
400-116482-A-2 MS	Matrix Spike	Total/NA	Water	8260B	
400-116482-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 400-291206/1002	Lab Control Sample	Total/NA	Water	8260B	
MB 400-291206/4	Method Blank	Total/NA	Water	8260B	

QC Sample Results

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-291095/4
Matrix: Water
Analysis Batch: 291095

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			01/20/16 14:34	1
Toluene	0.70	U	1.0	0.70	ug/L			01/20/16 14:34	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			01/20/16 14:34	1
Xylenes, Total	0.60	U	5.0	0.60	ug/L			01/20/16 14:34	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			01/20/16 14:34	1
Naphthalene	1.0	U	1.0	1.0	ug/L			01/20/16 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*78 - 118*		*01/20/16 14:34*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*01/20/16 14:34*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/20/16 14:34*	*1*

Lab Sample ID: LCS 400-291095/1002
Matrix: Water
Analysis Batch: 291095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	45.1		ug/L		90	70 - 130
Toluene	50.0	51.5		ug/L		103	70 - 130
Ethylbenzene	50.0	53.0		ug/L		106	70 - 130
Xylenes, Total	100	106		ug/L		106	70 - 130
Methyl tert-butyl ether	50.0	47.8		ug/L		96	66 - 130
Naphthalene	50.0	53.6		ug/L		107	47 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: 400-116471-1 MS
Matrix: Water
Analysis Batch: 291095

Client Sample ID: TW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.38	U	50.0	45.6		ug/L		91	56 - 142
Toluene	0.70	U	50.0	52.5		ug/L		105	65 - 130
Ethylbenzene	0.50	U	50.0	53.8		ug/L		108	58 - 131
Xylenes, Total	0.60	U	100	107		ug/L		107	59 - 130
Methyl tert-butyl ether	0.74	U	50.0	42.0		ug/L		84	59 - 137
Naphthalene	1.0	U	50.0	54.5		ug/L		109	25 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-116471-1 MSD — **Client Sample ID: TW-3**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291095

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.38	U	50.0	46.3		ug/L		93	56 - 142	1	30
Toluene	0.70	U	50.0	53.8		ug/L		108	65 - 130	3	30
Ethylbenzene	0.50	U	50.0	54.7		ug/L		109	58 - 131	2	30
Xylenes, Total	0.60	U	100	107		ug/L		107	59 - 130	1	30
Methyl tert-butyl ether	0.74	U	50.0	47.8		ug/L		96	59 - 137	13	30
Naphthalene	1.0	U	50.0	56.9		ug/L		114	25 - 160	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: MB 400-291206/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.38	U	1.0	0.38	ug/L			01/21/16 08:53	1
Toluene	0.70	U	1.0	0.70	ug/L			01/21/16 08:53	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			01/21/16 08:53	1
Xylenes, Total	0.60	U	5.0	0.60	ug/L			01/21/16 08:53	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			01/21/16 08:53	1
Naphthalene	1.0	U	1.0	1.0	ug/L			01/21/16 08:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*01/21/16 08:53*	*1*
Dibromofluoromethane	*113*		*81 - 121*		*01/21/16 08:53*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*01/21/16 08:53*	*1*

Lab Sample ID: LCS 400-291206/1002 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	49.6		ug/L		99	70 - 130
Toluene	50.0	47.0		ug/L		94	70 - 130
Ethylbenzene	50.0	46.6		ug/L		93	70 - 130
Xylenes, Total	100	94.1		ug/L		94	70 - 130
Methyl tert-butyl ether	50.0	47.6		ug/L		95	66 - 130
Naphthalene	50.0	47.1		ug/L		94	47 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*78 - 118*
Dibromofluoromethane	*102*		*81 - 121*
Toluene-d8 (Surr)	*95*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-116482-A-2 MS
Matrix: Water
Analysis Batch: 291206

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.38	U	50.0	48.3		ug/L		97	56 - 142
Toluene	0.70	U	50.0	43.4		ug/L		87	65 - 130
Ethylbenzene	0.50	U	50.0	42.0		ug/L		84	58 - 131
Xylenes, Total	0.60	U	100	85.0		ug/L		85	59 - 130
Methyl tert-butyl ether	0.74	U	50.0	46.0		ug/L		92	59 - 137
Naphthalene	1.0	U	50.0	40.8		ug/L		82	25 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: 400-116482-A-2 MSD
Matrix: Water
Analysis Batch: 291206

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.38	U	50.0	47.5		ug/L		95	56 - 142	2	30
Toluene	0.70	U	50.0	42.0		ug/L		84	65 - 130	3	30
Ethylbenzene	0.50	U	50.0	40.2		ug/L		80	58 - 131	5	30
Xylenes, Total	0.60	U	100	80.4		ug/L		80	59 - 130	6	30
Methyl tert-butyl ether	0.74	U	50.0	46.9		ug/L		94	59 - 137	2	30
Naphthalene	1.0	U	50.0	40.1		ug/L		80	25 - 160	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*92*		*80 - 120*

Chain of Custody Record

Lab Report No.:

Company: PPM

Address: 109 Bayridge Dr
Gulf Breeze FL 32561

Gulf Coast LabNet, Inc.
An Environmental Lab Services Co.

Phone: (251) 625-1331
Fax: (251) 625-1299

Modified from DEP Form #: 62-770.900(2)

Page 1 of 1

FDEP Facility No.:

Project Name: MacDonald Property

Location: 1803 W Fairfield Dr Pensacola

Project No.: 22395004 ESA 2

Attn: Ron Osborne

Phone: 850 429 1536

Fax:

Sampled by [Print Name]/Affiliation: Barry Long / PPM

Sampler Signature:

← Preservative: HCl

← Analysis: BTEX + 8260 + MTBE

REQUESTED DUE DATE: NTT

400-116471 COC

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Comp.	Matrix Codes	No. Cont.	Remarks	Lab. No.
1	TW-3	1-18-16	1333	G	GW	3		
2	TW-2	1-18-16	1350	G	GW	3		
3	TW-1	1-18-16	1417	G	GW	3		

Shipment Method

Out: / / Via:

Returned: / / Via:

Additional Comments

← Total Number of Containers

Item #	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
1-3	[signature] PPM	1-18-16	1700	[signature] KCL	1-18-16	1500
1-3	[signature]	1-18-16	1530	DCAhens	1-19-16	1530

Cooler No.(s) / Temperature(s) (°C)	Sampling Kit No.	Equipment ID No.
1.3°C TW-2		

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

Login Sample Receipt Checklist

Client: PPM Consultants, Inc.

Job Number: 400-116471-1
SDG Number: Proj. 22395004 - ESA2

Login Number: 116471
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	1.3°C IR-2
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.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: PPM Consultants, Inc.
Project/Site: MACDONALD'S PROPERTY - Pensacola, FL

TestAmerica Job ID: 400-116471-1
SDG: Proj. 22395004 - ESA2

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.