Appendix B

Laboratory Analytical Report
& Chain of Custody Record

FINAL
ANALYTICAL REPORT

ETL PROJECT ID: 18-3332 **10/5/2018 - Revision 0**

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CLIENT PROJECT NAME: CIRCLE K #2726536
CLIENT PROJECT ID:
FACILITY ID:

Enclosed are the analytical results for sample(s) received by Environmental Testing Laboratories on September 29, 2018. Results reported herein are reported on an as received basis and conform to current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Sample analyses performed by Environmental Testing Laboratories, Inc. (ETL) unless otherwise noted. ETL is accredited through NELAC and the Florida Department of Health, Certification #E87684. Scope of analyses: RCRA/CERCLA Metals, General Chemistry, Extractable Organics, and Volatile Organics. Effective Dates: February 14, 2002 through June 30, 2019.

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Authorized for release by:

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Laboratory Qualifiers

!	Data deviate from historically established concentration ranges.
#	Surrogate compound inadvertently omitted.
$	Due to dilution, surrogate compound was not detected.
*****	Not reported due to interference
?	Data are rejected as should not be used.
A	Value reported is the arithmetic mean (average) of two or more determinations.
B	Results based upon colony counts outside the acceptable range.
D	Measurement made in the field.
E	Extra samples were taken at composite stations.
F	When reporting species, F indicates the female sex.
H	Value based on fied kit determination; results may not be accurate.
I	The reported value is between the laboratory method detection limit and the laboratory practical
J	Estimated value.
K	Off-scale low. Actual value is known to be less than the value given.
L	Off-scale high. Actual value is known to be greater than the value given.
M	Presence of material is verified but not quantified; the actual value is less than the value given.
N	Presumptive evidence of presence of material.
O	Sampled, but analysis lost or not performed.
Q	Sample held beyond the accepted holding time.
R	Significant rain in the past 48 hours.
S1	Surrogate recovery reported is outside of laboratory established QA/QC Limits
S2	Analyte recovery reported is outside of laboratory established QA/QC Limits
S3	Analyte precision reported is outside of laboratory established QA/QC Limits
T	Value reported is less than the laboratory method detection limit.
U	Compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	Laboratory analysis was from an improperly preserved sample. Data may not be accurate.
Z	Too many colonies were present; numeric value represents the filtration volume.

Project Narrative

#E87684

Environmental Testing Laboratories, Inc. is accredited through NELAC and the Florida Department of Health.

Solid samples are reported on a dry weight basis unless otherwise noted.

Please refer to Section 4.0 of the ETL Quality Assurance Manual for a measure of uncertainty.

All analyses are performed using EPA or FL-DEP methods and certified to meet NELAC requirements, except where noted.

Analytical Method Summary

E87684 **Environmental Testing Laboratories Inc.**
412 W. Walcott Street, Thomasville, GA 31792
(229) 228-2592

GC/MS (EPA 8260)	SW-846 Final Update III
Semivolatiles low level for PAH only (EPA 8270/PAH Low Level)	
GC/FID (FDEP FL-PRO)	Florida Department of Environmental Protection

Sample Summary

Laboratory Sample ID	Client Sample ID	Matrix	End Date / Time Sampled		Grab / Composite	Percent Moisture
235699	SB-5/6	SOILS	9/28/2018	10:30	G	12.8

Executive Summary

Analyte	Analytical Method	Result	Units	Qualifiers	Result Comments
SB-5/6 (235699)					
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	5.0	mg/Kg	I	
Fluoranthene	EPA 8270/PAH Low Level	0.013	mg/Kg	I	
Pyrene	EPA 8270/PAH Low Level	0.013	mg/Kg	I	
Benzo(a)anthracene	EPA 8270/PAH Low Level	0.0092	mg/Kg	I	
Chrysene	EPA 8270/PAH Low Level	0.0095	mg/Kg	I	
Benzo(g,h,i)perylene	EPA 8270/PAH Low Level	0.014	mg/Kg	I	

Analytical Data

Client Sample ID: SB-5/6
Sample Location:
Date Collected: 09/28/2018 10:30 AM

Laboratory Sample ID: 235699
Matrix: SOILS
Percent Moisture: 12.8

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00089	U	mg/Kg	0.00089	0.0038	10/1/2018 4:17:00 PM
Ethylbenzene	1.0	0.00072	U	mg/Kg	0.00072	0.0038	10/1/2018 4:17:00 PM
Methyl-t-butyl ether	1.0	0.00050	U	mg/Kg	0.00050	0.0038	10/1/2018 4:17:00 PM
Toluene	1.0	0.00089	U	mg/Kg	0.00089	0.0038	10/1/2018 4:17:00 PM
Xylenes- Total	1.0	0.0018	U	mg/Kg	0.0018	0.011	10/1/2018 4:17:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	102			80% - 136%	10/1/2018 4:17:00 PM
4-Bromofluorobenzene	1.0	88.1			51% - 145%	10/1/2018 4:17:00 PM
Dibromofluoromethane	1.0	81.9			70% - 130%	10/1/2018 4:17:00 PM
Toluene-d8	1.0	93.7			76% - 120%	10/1/2018 4:17:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.013	U	mg/Kg	0.013	0.077	10/3/2018 11:59:00 PM
2-Methylnaphthalene	1.0	0.018	U	mg/Kg	0.018	0.077	10/3/2018 11:59:00 PM
Acenaphthene	1.0	0.016	U	mg/Kg	0.016	0.077	10/3/2018 11:59:00 PM
Acenaphthylene	1.0	0.010	U	mg/Kg	0.010	0.077	10/3/2018 11:59:00 PM
Anthracene	1.0	0.0092	U	mg/Kg	0.0092	0.077	10/3/2018 11:59:00 PM
Benzo(a)anthracene	1.0	**0.0092**	I	mg/Kg	0.0080	0.077	10/3/2018 11:59:00 PM
Benzo(a)pyrene	1.0	0.0064	U	mg/Kg	0.0064	0.077	10/3/2018 11:59:00 PM
Benzo(b)fluoranthene	1.0	0.0072	U	mg/Kg	0.0072	0.077	10/3/2018 11:59:00 PM
Benzo(g,h,i)perylene	1.0	**0.014**	I	mg/Kg	0.0097	0.077	10/3/2018 11:59:00 PM
Benzo(k)fluoranthene	1.0	0.0046	U	mg/Kg	0.0046	0.077	10/3/2018 11:59:00 PM
Chrysene	1.0	**0.0095**	I	mg/Kg	0.0091	0.077	10/3/2018 11:59:00 PM
Dibenzo(a,h)anthracene	1.0	0.0093	U	mg/Kg	0.0093	0.077	10/3/2018 11:59:00 PM
Fluoranthene	1.0	**0.013**	I	mg/Kg	0.0078	0.077	10/3/2018 11:59:00 PM
Fluorene	1.0	0.0087	U	mg/Kg	0.0087	0.077	10/3/2018 11:59:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.010	U	mg/Kg	0.010	0.077	10/3/2018 11:59:00 PM
Naphthalene	1.0	0.021	U	mg/Kg	0.021	0.077	10/3/2018 11:59:00 PM
Phenanthrene	1.0	0.014	U	mg/Kg	0.014	0.077	10/3/2018 11:59:00 PM
Pyrene	1.0	**0.013**	I	mg/Kg	0.0086	0.077	10/3/2018 11:59:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	59.4			26% - 110%	10/3/2018 11:59:00 PM
Nitrobenzene-d5	1.0	81.6			12% - 104%	10/3/2018 11:59:00 PM
p-Terphenyl-d14	1.0	66.1			39% - 120%	10/3/2018 11:59:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	**5.0**	I	mg/Kg	1.9	19	10/2/2018 1:55:00 PM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
Nonatriacontane(C39)	1.0	91.2			60% - 118%		10/2/2018 1:55:00 PM
Ortho-terphenyl	1.0	100			62% - 109%		10/2/2018 1:55:00 PM

Data Chronicle

Client Sample ID: SB-5/6
Sample Location:
Date Collected: 09/28/2018 10:30 AM

Laboratory Sample ID: 235699
Matrix: SOILS
Percent Moisture: 12.8

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100118	10/1/2018 4:17:00 PM	10/1/2018 4:17:00 PM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA100318	10/3/2018 9:30:00 AM	10/3/2018 11:59:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100118	10/1/2018 10:00:00 AM	10/2/2018 1:55:00 PM	BW	E87684

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SMSVA100118 | Analysis Method: EPA 8260 | Preparation Type: 5035 (Low)

Method Batch ID: MSMSVA100118 | Preparation Date: 10/1/2018 2:13:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SMSVA100118MB				Client Sample ID: SMSVA100118MB					Date Analyzed: 10/1/2018 2:13:00 PM		
Benzene	0.0012	0.0050	0.0012	U	mg/Kg							
Ethylbenzene	0.00096	0.0050	0.00096	U	mg/Kg							
Methyl-t-butyl ether	0.00067	0.0050	0.00067	U	mg/Kg							
Toluene	0.0012	0.0050	0.0012	U	mg/Kg							
Xylenes- Total	0.0024	0.015	0.0024	U	mg/Kg							
Toluene-d8			47.2		ug/kg	50.0	94.4	76.0	-	120		
4-Bromofluorobenzene			47.4		ug/kg	50.0	94.8	51.0	-	145		
Dibromofluoromethane			48.6		ug/kg	50.0	97.2	70.0	-	130		
1,2-Dichloroethane-d4			48.4		ug/kg	50.0	96.8	80.0	-	136		
QA/QC Type: LCS	Lab Sample ID: SMSVA100118LCS				Client Sample ID: SMSVA100118LCS					Date Analyzed: 10/1/2018 12:35:00 PM		
Benzene	0.0012	0.0050	0.057		mg/Kg	0.060	95.0	82.0	-	121		
Ethylbenzene	0.00096	0.0050	0.063		mg/Kg	0.060	105	82.0	-	119		
Methyl-t-butyl ether	0.00067	0.0050	0.054		mg/Kg	0.060	90.0	80.0	-	126		
Toluene	0.0012	0.0050	0.060		mg/Kg	0.060	100	83.0	-	118		
Xylenes- Total	0.0024	0.015	0.188		mg/Kg	0.180	104	83.0	-	119		
Toluene-d8			48.8		ug/kg	50.0	97.6	76.0	-	120		
4-Bromofluorobenzene			50.5		ug/kg	50.0	101	51.0	-	145		
Dibromofluoromethane			49.7		ug/kg	50.0	99.4	70.0	-	130		
1,2-Dichloroethane-d4			47.9		ug/kg	50.0	95.8	80.0	-	136		
QA/QC Type: LCSD	Lab Sample ID: SMSVA100118LCSD				Client Sample ID: SMSVA100118LCSD					Date Analyzed: 10/1/2018 1:00:00 PM		
Benzene	0.0012	0.0050	0.057		mg/Kg	0.060	95.0	82.0	-	121	0	20.0
Ethylbenzene	0.00096	0.0050	0.063		mg/Kg	0.060	105	82.0	-	119	0	19.0
Methyl-t-butyl ether	0.00067	0.0050	0.055		mg/Kg	0.060	91.7	80.0	-	126	1.8	23.0
Toluene	0.0012	0.0050	0.059		mg/Kg	0.060	98.3	83.0	-	118	1.7	18.0
Xylenes- Total	0.0024	0.015	0.183		mg/Kg	0.180	102	83.0	-	119	2.7	18.0
Toluene-d8			48.9		ug/kg	50.0	97.8	76.0	-	120		
4-Bromofluorobenzene			50.1		ug/kg	50.0	100	51.0	-	145		
Dibromofluoromethane			52.4		ug/kg	50.0	105	70.0	-	130		
1,2-Dichloroethane-d4			47.6		ug/kg	50.0	95.2	80.0	-	136		
QA/QC Type: MS	Lab Sample ID: SMSVA100118MS				Client Sample ID: 235700MS					Date Analyzed: 10/2/2018 3:54:00 PM		
Benzene	0.00087	0.0036	0.039		mg/Kg	0.043	90.7	52.0	-	120		
Ethylbenzene	0.00070	0.0036	0.035		mg/Kg	0.043	81.4	38.0	-	130		

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SMSVA100118 | Analysis Method: EPA 8260 | Preparation Type: 5035 (Low)

Method Batch ID: MSMSVA100118 | Preparation Date: 10/1/2018 2:13:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MS	Lab Sample ID: SMSVA100118MS				Client Sample ID: 235700MS						Date Analyzed: 10/2/2018 3:54:00 PM	
Methyl-t-butyl ether	0.00049	0.0036	0.027		mg/Kg	0.043	62.8	54.0	-	128		
Toluene	0.00087	0.0036	0.039		mg/Kg	0.043	90.7	55.0	-	113		
Xylenes- Total	0.0017	0.011	0.109		mg/Kg	0.130	83.8	46.0	-	121		
Toluene-d8			49.3		ug/kg	50.0	98.6	76.0	-	120		
4-Bromofluorobenzene			45.0		ug/kg	50.0	90.0	51.0	-	145		
Dibromofluoromethane			43.7		ug/kg	50.0	87.4	70.0	-	130		
1,2-Dichloroethane-d4			44.0		ug/kg	50.0	88.0	80.0	-	136		
QA/QC Type: DUP	Lab Sample ID: SMSVA100118DUP				Client Sample ID: 235612DUP						Date Analyzed: 10/2/2018 3:30:00 PM	
Benzene	0.00087	0.0036	0.00087	U	mg/Kg						0	34.0
Ethylbenzene	0.00070	0.0036	0.00070	U	mg/Kg						0	46.0
Methyl-t-butyl ether	0.00049	0.0036	0.00049	U	mg/Kg						0	37.0
Toluene	0.00087	0.0036	0.00087	U	mg/Kg						0	29.0
Xylenes- Total	0.0018	0.011	0.0018	U	mg/Kg						0	37.0
Toluene-d8			47.7		ug/kg	50.0	95.4	76.0	-	120		
4-Bromofluorobenzene			41.5		ug/kg	50.0	83.0	51.0	-	145		
Dibromofluoromethane			43.9		ug/kg	50.0	87.8	70.0	-	130		
1,2-Dichloroethane-d4			51.3		ug/kg	50.0	103	80.0	-	136		

Comments:

Preparation Batch ID: SPAHA100318 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA100318 | Preparation Date: 10/3/2018 9:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPAHA100318MB				Client Sample ID: SPAHA100318MB						Date Analyzed: 10/3/2018 10:11:00 PM	
Naphthalene	0.018	0.067	0.018	U	mg/Kg							
Acenaphthylene	0.0091	0.067	0.0091	U	mg/Kg							
Acenaphthene	0.014	0.067	0.014	U	mg/Kg							
Fluorene	0.0076	0.067	0.0076	U	mg/Kg							
Phenanthrene	0.012	0.067	0.012	U	mg/Kg							
Anthracene	0.0080	0.067	0.0080	U	mg/Kg							
Fluoranthene	0.0068	0.067	0.0068	U	mg/Kg							

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SPAHA100318 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA100318 | Preparation Date: 10/3/2018 9:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPAHA100318MB				Client Sample ID: SPAHA100318MB						Date Analyzed: 10/3/2018 10:11:00 PM	
1-Methylnaphthalene	0.011	0.067	0.011	U	mg/Kg							
2-Methylnaphthalene	0.016	0.067	0.016	U	mg/Kg							
Pyrene	0.0075	0.067	0.0075	U	mg/Kg							
Benzo(a)anthracene	0.0070	0.067	0.0070	U	mg/Kg							
Chrysene	0.0079	0.067	0.0079	U	mg/Kg							
Benzo(b)fluoranthene	0.0063	0.067	0.0063	U	mg/Kg							
Benzo(k)fluoranthene	0.0040	0.067	0.0040	U	mg/Kg							
Benzo(a)pyrene	0.0056	0.067	0.0056	U	mg/Kg							
Indeno(1,2,3-cd)pyrene	0.0087	0.067	0.0087	U	mg/Kg							
Dibenzo(a,h)anthracene	0.0081	0.067	0.0081	U	mg/Kg							
Benzo(g,h,i)perylene	0.0085	0.067	0.0085	U	mg/Kg							
Nitrobenzene-d5			90.4		%	100	90.4	12.0	-	104		
2-Fluorobiphenyl			60.4		%	100	60.4	26.0	-	110		
p-Terphenyl-d14			70.1		%	100	70.1	39.0	-	120		
QA/QC Type: LCS	Lab Sample ID: SPAHA100318LCS				Client Sample ID: SPAHA100318LCS						Date Analyzed: 10/3/2018 8:23:00 PM	
Naphthalene	0.018	0.067	1.47		mg/Kg	1.67	88.0	40.0	-	106		
Acenaphthylene	0.0091	0.067	1.39		mg/Kg	1.67	83.2	38.0	-	115		
Acenaphthene	0.014	0.067	1.53		mg/Kg	1.67	91.6	46.0	-	121		
Fluorene	0.0076	0.067	1.47		mg/Kg	1.67	88.0	46.0	-	123		
Phenanthrene	0.012	0.067	1.45		mg/Kg	1.67	86.8	52.0	-	129		
Anthracene	0.0080	0.067	1.49		mg/Kg	1.67	89.2	47.0	-	124		
Fluoranthene	0.0068	0.067	1.57		mg/Kg	1.67	94.0	45.0	-	125		
1-Methylnaphthalene	0.011	0.067	1.44		mg/Kg	1.67	86.2	39.0	-	113		
2-Methylnaphthalene	0.016	0.067	1.47		mg/Kg	1.67	88.0	39.0	-	110		
Pyrene	0.0075	0.067	1.65		mg/Kg	1.67	98.8	47.0	-	129		
Benzo(a)anthracene	0.0070	0.067	1.75		mg/Kg	1.67	105	45.0	-	129		
Chrysene	0.0079	0.067	1.70		mg/Kg	1.67	102	44.0	-	129		
Benzo(b)fluoranthene	0.0063	0.067	1.78		mg/Kg	1.67	107	45.0	-	122		
Benzo(k)fluoranthene	0.0040	0.067	1.74		mg/Kg	1.67	104	43.0	-	124		
Benzo(a)pyrene	0.0056	0.067	1.74		mg/Kg	1.67	104	39.0	-	116		
Indeno(1,2,3-cd)pyrene	0.0087	0.067	1.50		mg/Kg	1.67	89.8	41.0	-	125		
Dibenzo(a,h)anthracene	0.0081	0.067	1.55		mg/Kg	1.67	92.8	40.0	-	123		
Benzo(g,h,i)perylene	0.0085	0.067	1.55		mg/Kg	1.67	92.8	34.0	-	120		
Nitrobenzene-d5			88.9		%	100	88.9	12.0	-	104		

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SPAHA100318 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA100318 | Preparation Date: 10/3/2018 9:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: LCS	**Lab Sample ID: SPAHA100318LCS**				**Client Sample ID: SPAHA100318LCS**					**Date Analyzed: 10/3/2018 8:23:00 PM**		
2-Fluorobiphenyl			57.6		%	100	57.6	26.0	-	110		
p-Terphenyl-d14			62.8		%	100	62.8	39.0	-	120		
QA/QC Type: LCSD	**Lab Sample ID: SPAHA100318LCSD**				**Client Sample ID: SPAHA100318LCSD**					**Date Analyzed: 10/3/2018 8:59:00 PM**		
Naphthalene	0.018	0.067	1.41		mg/Kg	1.67	84.4	40.0	-	106	4.2	33.0
Acenaphthylene	0.0091	0.067	1.36		mg/Kg	1.67	81.4	38.0	-	115	2.2	38.0
Acenaphthene	0.014	0.067	1.47		mg/Kg	1.67	88.0	46.0	-	121	4.0	38.0
Fluorene	0.0076	0.067	1.42		mg/Kg	1.67	85.0	46.0	-	123	3.5	38.0
Phenanthrene	0.012	0.067	1.45		mg/Kg	1.67	86.8	52.0	-	129	0	39.0
Anthracene	0.0080	0.067	1.45		mg/Kg	1.67	86.8	47.0	-	124	2.7	38.0
Fluoranthene	0.0068	0.067	1.56		mg/Kg	1.67	93.4	45.0	-	125	0.64	40.0
1-Methylnaphthalene	0.011	0.067	1.39		mg/Kg	1.67	83.2	39.0	-	113	3.5	37.0
2-Methylnaphthalene	0.016	0.067	1.41		mg/Kg	1.67	84.4	39.0	-	110	4.2	36.0
Pyrene	0.0075	0.067	1.65		mg/Kg	1.67	98.8	47.0	-	129	0	41.0
Benzo(a)anthracene	0.0070	0.067	1.68		mg/Kg	1.67	101	45.0	-	129	4.1	42.0
Chrysene	0.0079	0.067	1.65		mg/Kg	1.67	98.8	44.0	-	129	3.0	42.0
Benzo(b)fluoranthene	0.0063	0.067	1.70		mg/Kg	1.67	102	45.0	-	122	4.6	39.0
Benzo(k)fluoranthene	0.0040	0.067	1.66		mg/Kg	1.67	99.4	43.0	-	124	4.7	40.0
Benzo(a)pyrene	0.0056	0.067	1.67		mg/Kg	1.67	100	39.0	-	116	4.1	39.0
Indeno(1,2,3-cd)pyrene	0.0087	0.067	1.44		mg/Kg	1.67	86.2	41.0	-	125	4.1	42.0
Dibenzo(a,h)anthracene	0.0081	0.067	1.46		mg/Kg	1.67	87.4	40.0	-	123	6.0	42.0
Benzo(g,h,i)perylene	0.0085	0.067	1.47		mg/Kg	1.67	88.0	34.0	-	120	5.3	43.0
Nitrobenzene-d5			85.8		%	100	85.8	12.0	-	104		
2-Fluorobiphenyl			54.6		%	100	54.6	26.0	-	110		
p-Terphenyl-d14			61.6		%	100	61.6	39.0	-	120		
QA/QC Type: MS	**Lab Sample ID: SPAHA100318MS**				**Client Sample ID: 235699MS**					**Date Analyzed: 10/4/2018 9:42:00 AM**		
Naphthalene	0.021	0.077	1.81		mg/Kg	1.92	94.3	6.70	-	125		
Acenaphthylene	0.010	0.077	1.82		mg/Kg	1.92	94.8	28.0	-	111		
Acenaphthene	0.016	0.077	1.89		mg/Kg	1.92	98.4	35.0	-	115		
Fluorene	0.0087	0.077	1.87		mg/Kg	1.92	97.4	35.0	-	117		
Phenanthrene	0.014	0.077	1.82		mg/Kg	1.92	94.8	39.0	-	125		
Anthracene	0.0092	0.077	1.88		mg/Kg	1.92	97.9	37.0	-	118		
Fluoranthene	0.0078	0.077	1.94		mg/Kg	1.92	100	34.0	-	122		
1-Methylnaphthalene	0.013	0.077	1.73		mg/Kg	1.92	90.1	27.0	-	110		

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SPAHA100318 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA100318 | Preparation Date: 10/3/2018 9:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MS	Lab Sample ID: SPAHA100318MS				Client Sample ID: 235699MS			Date Analyzed: 10/4/2018 9:42:00 AM				
2-Methylnaphthalene	0.018	0.077	1.75		mg/Kg	1.92	91.1	30.0	-	103		
Pyrene	0.0086	0.077	1.97		mg/Kg	1.92	102	35.0	-	126		
Benzo(a)anthracene	0.0080	0.077	1.93		mg/Kg	1.92	100	33.0	-	123		
Chrysene	0.0091	0.077	2.16		mg/Kg	1.92	112	31.0	-	125		
Benzo(b)fluoranthene	0.0072	0.077	2.17		mg/Kg	1.92	113	30.0	-	121		
Benzo(k)fluoranthene	0.0046	0.077	2.12		mg/Kg	1.92	110	30.0	-	121		
Benzo(a)pyrene	0.0064	0.077	2.02		mg/Kg	1.92	105	27.0	-	109		
Indeno(1,2,3-cd)pyrene	0.010	0.077	1.70		mg/Kg	1.92	88.5	30.0	-	117		
Dibenzo(a,h)anthracene	0.0093	0.077	1.80		mg/Kg	1.92	93.8	30.0	-	115		
Benzo(g,h,i)perylene	0.0097	0.077	1.64		mg/Kg	1.92	84.7	22.0	-	111		
Nitrobenzene-d5			93.1		%	100	93.1	12.0	-	104		
2-Fluorobiphenyl			64.0		%	100	64.0	26.0	-	110		
p-Terphenyl-d14			68.7		%	100	68.7	39.0	-	120		
QA/QC Type: MSD	Lab Sample ID: SPAHA100318MSD				Client Sample ID: 235699MSD			Date Analyzed: 10/4/2018 10:19:00 AM				
Naphthalene	0.021	0.077	1.54		mg/Kg	1.92	80.2	6.70	-	125	16	59.0
Acenaphthylene	0.010	0.077	1.59		mg/Kg	1.92	82.8	28.0	-	111	13	41.0
Acenaphthene	0.016	0.077	1.61		mg/Kg	1.92	83.9	35.0	-	115	16	40.0
Fluorene	0.0087	0.077	1.58		mg/Kg	1.92	82.3	35.0	-	117	17	41.0
Phenanthrene	0.014	0.077	1.67		mg/Kg	1.92	87.0	39.0	-	125	8.6	43.0
Anthracene	0.0092	0.077	1.72		mg/Kg	1.92	89.6	37.0	-	118	8.9	40.0
Fluoranthene	0.0078	0.077	1.78		mg/Kg	1.92	92.0	34.0	-	122	8.6	44.0
1-Methylnaphthalene	0.013	0.077	1.46		mg/Kg	1.92	76.0	27.0	-	110	17	42.0
2-Methylnaphthalene	0.018	0.077	1.48		mg/Kg	1.92	77.1	30.0	-	103	17	36.0
Pyrene	0.0086	0.077	1.81		mg/Kg	1.92	93.6	35.0	-	126	8.5	46.0
Benzo(a)anthracene	0.0080	0.077	1.75		mg/Kg	1.92	90.7	33.0	-	123	9.8	45.0
Chrysene	0.0091	0.077	1.88		mg/Kg	1.92	97.4	31.0	-	125	14	47.0
Benzo(b)fluoranthene	0.0072	0.077	1.85		mg/Kg	1.92	96.4	30.0	-	121	16	46.0
Benzo(k)fluoranthene	0.0046	0.077	1.85		mg/Kg	1.92	96.4	30.0	-	121	14	46.0
Benzo(a)pyrene	0.0064	0.077	1.74		mg/Kg	1.92	90.6	27.0	-	109	15	41.0
Indeno(1,2,3-cd)pyrene	0.010	0.077	1.43		mg/Kg	1.92	74.5	30.0	-	117	17	44.0
Dibenzo(a,h)anthracene	0.0093	0.077	1.55		mg/Kg	1.92	80.7	30.0	-	115	15	42.0
Benzo(g,h,i)perylene	0.0097	0.077	1.42		mg/Kg	1.92	73.2	22.0	-	111	14	44.0
Nitrobenzene-d5			78.1		%	100	78.1	12.0	-	104		
2-Fluorobiphenyl			54.5		%	100	54.5	26.0	-	110		

Preparation Batch ID: SPAHA100318 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA100318 | Preparation Date: 10/3/2018 9:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MSD	Lab Sample ID: SPAHA100318MSD				Client Sample ID: 235699MSD						Date Analyzed: 10/4/2018 10:19:00 AM	
p-Terphenyl-d14			62.4		%	100	62.4	39.0	-	120		

Comments:

Preparation Batch ID: SPROA100118 | Analysis Method: FDEP FL-PRO | Preparation Type: 3550

Method Batch ID: MSPROA100118 | Preparation Date: 10/1/2018 10:00:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPROA100118MB				Client Sample ID: SPROA100118MB						Date Analyzed: 10/2/2018 8:19:00 AM	
Total Recoverable Pet. Hydrocarbons	1.7	17	1.7	U	mg/Kg							
Ortho-terphenyl			103		%	100	103	62.0	-	109		
Nonatriacontane(C39)			88.3		%	100	88.3	60.0	-	118		
QA/QC Type: LCS	Lab Sample ID: SPROA100118LCS				Client Sample ID: SPROA100118LCS						Date Analyzed: 10/2/2018 6:56:00 AM	
Total Recoverable Pet. Hydrocarbons	1.7	17	21.9		mg/Kg	28.3	77.4	63.0	-	153		
Ortho-terphenyl			104		%	100	104	62.0	-	109		
Nonatriacontane(C39)			71.2		%	100	71.2	60.0	-	118		
QA/QC Type: LCSD	Lab Sample ID: SPROA100118LCSD				Client Sample ID: SPROA100118LCSD						Date Analyzed: 10/2/2018 7:38:00 AM	
Total Recoverable Pet. Hydrocarbons	1.7	17	22.0		mg/Kg	28.3	77.7	63.0	-	153	0.46	25.0
Ortho-terphenyl			105		%	100	105	62.0	-	109		
Nonatriacontane(C39)			80.6		%	100	80.6	60.0	-	118		
QA/QC Type: MS	Lab Sample ID: SPROA100118MS				Client Sample ID: 235573MS						Date Analyzed: 10/2/2018 4:02:00 PM	
Total Recoverable Pet. Hydrocarbons	1.9	19	24.5		mg/Kg	32.2	76.1	62.0	-	204		
Ortho-terphenyl			86.1		%	100	86.1	62.0	-	109		
Nonatriacontane(C39)			79.4		%	100	79.4	60.0	-	118		
QA/QC Type: MSD	Lab Sample ID: SPROA100118MSD				Client Sample ID: 235573MSD						Date Analyzed: 10/2/2018 4:42:00 PM	
Total Recoverable Pet. Hydrocarbons	1.9	19	22.4		mg/Kg	32.2	69.6	62.0	-	204	9.0	25.0
Ortho-terphenyl			74.9		%	100	74.9	62.0	-	109		
Nonatriacontane(C39)			83.0		%	100	83.0	60.0	-	118		

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: SPROA100118 | Analysis Method: FDEP FL-PRO | Preparation Type: 3550

Method Batch ID: MSPROA100118 | Preparation Date: 10/1/2018 10:00:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: DUP	Lab Sample ID: SPROA100118DUP				Client Sample ID: 235610DUP						Date Analyzed: 10/3/2018 1:20:00 PM	
Total Recoverable Pet. Hydrocarbons	38	380	6100		mg/Kg						4.8	25.0
Ortho-terphenyl			$	S1	%	100	0	62.0	-	109		
Nonatriacontane(C39)			$	S1	%	100	0	60.0	-	118		

Comments:

Chain of Custody Record

Company: AET-L

Address: 4265 New Tampa Hwy Lakeland

Telephone Number: Telefax Number:

Sampled by [Print Name(s)] / Affiliation: V. Poloca

Sampler(s) Signature(s):

Environmental Testing Laboratories, Inc.
412 W. Walcott Street
Thomasville, GA 31792-4359
229/228-2592 (telephone)
229/228-2594 (telefax)
www.etl-inc.com

Page 1 of 1

Project Name: Circle K #2726536

Project Number: N/A

Project Manager: Keith

Facility ID Number: 8943516

REQUESTED DUE DATE: / /

Analyses Requested: 8021 BTEX, 8270 PAH, DRO-TRPH-FL-M

Item No.	Field ID No.	Sample Date	Sample Time	Grab or Composite	Matrix (see Codes)	Number of Containers	Remarks	Lab Number
	SB-16	9/28/18	10:30	2'	SO	4		235699

Shipment Method: Total Number of Containers:

← Preservatives (see Codes) ICE: ☑ Yes ☐ No

Out: / / Via:

Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	Fed-Ex	9/28/18	12:27	Fed-Ex		
	Fed-Ex	9/29/18	1000			

Cooler Number(s) / Temperature(s) (°C): 1/2@1.4

Sampling Kit Number:

Received in Lab By: M 9/29/18 1000

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

PRESERVATIVE CODES: H = Hydrochloric acid S = Sulfuric acid N = Nitric Na = Sodium Hydroxide O = Other (specify)

PRESERVATIVE CODES: SOIL VOCS MS = Methanol / Sodium Bisulfate MD = Methanol / DI Water

ETL PROJECT NO. 183332

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

18-3332

Project Details

Client: ADVANCED ENVIRONMENTAL TECHNOLOGIES

Project Name: CIRCLE K #2726536

Shipping and Receiving

Date/Time Received: 9/29/2018 10:00:00 AM

Sampling Personnel: U POPOCA

Shipping Method: Federal Express

Shipping Tracking Number: 100191574421000317920

If present, were cooler custody seals intact? ○ Yes ○ No ◉ N/A

If present, were sample bottle custody seals intact ○ Yes ○ No ◉ N/A

Thermal Preservation

Cooler Temp Method: Sample Temperature

Thermometer ID: 16032413

Number of Coolers: 1

Were cooler temperatues in compliance? (0.1-6.0C) ◉ Yes ○ No ○ N/A

Cooler Temperatures: 1.4

Chain of Custody

Was the chain-of-custody received in coolers?	◉ Yes	○ No	○ N/A
Was the chain-of-custody signed and properly relinquished?	◉ Yes	○ No	○ N/A
Does the chain-of-custody agree with samples and analyses?	◉ Yes	○ No	○ N/A

Container Receipt

Were samples received in appropriate bottleware for analyses?	◉ Yes	○ No	○ N/A
Was sufficient volume submitted for analyses requested?	◉ Yes	○ No	○ N/A
Were samples received within method holding times?	◉ Yes	○ No	○ N/A
Were VOA vials received with zero headspace?	○ Yes	○ No	◉ N/A
Were aqeuous samples received at an acceptable pH?	○ Yes	○ No	◉ N/A

pH Test Strip Lot: HC730269

Comments

I certify I have answered the questions contained herein to the best of my knowledge and have affixed labels with unique IDs onto each sample container received. I certify any discrepancies regarding the samples as received by the laboratory have been documented completely in the comments section of this form.

M

Kevin Moran

ENVIRONMENTAL TESTING LABORATORIES INC.

Project Receipt Summary

18-3332

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
235699	**SB-5/6**	**SOILS**	☐	☐	☐
235699-A1 (BTEXM)					
235699-A2 (BTEXM)					
235699-A3 (BTEXM)					
235699-B1 (PAH/TRPH/%M)					

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

18-3332

Project Bottle Count Summary

Container Type	Preservative	Number of Containers
40mL VOA Vial	MeOH/ICE	1
40mL VOA Vial w/ Stirbar	DiH2O/ICE	2
Glass Jar	NONE	1
	Total	4

October 6, 2022

Ms. Helen Gainey
City of Jacksonville Environmental Quality Division
214 North Hogan Street, 5th Floor
Jacksonville, Florida 32202
VIA EMAIL ONLY: hgainey@coj.net

RE: Closure Assessment Report
Circle K #2726536
12405 North Main Street
Jacksonville, Duval County, Florida
FDEP Facility ID No. 16/8943516
AET Project No.: 28522.00

Dear Ms. Gainey:

Advanced Environmental Technologies, LLC (AET) is pleased to provide you with this Closure Assessment Report detailing the sampling activities associated with the replacement of entry boots at the above noted location. The entry boots were associated with the 1-2, 3-4, and 5-6 dispenser sumps. This closure assessment was performed in accordance with Florida Department of Environmental Protection (FDEP) "*Instructions for Conducting Sampling During Underground Storage Tank Closure*" dated July 2019 and Chapter 62-761, Florida Administrative Code (FAC). The following data is provided for this report:

- **Figure 1** Site Map with Soil Analytical Data

- **Table 1** Soil Screening Summary
- **Table 2A** Soil Analytical Summary – VOAs, TRPHs and Metals
- **Table 2B** Soil Analytical Summary – Non-Carcinogenic PAHs
- **Table 2C** Soil Analytical Summary – Carcinogenic PAHs
- **Table 3** Benzo(a)Pyrene Conversion Table

- **Appendix A** Field Notes, Field Equipment Calibration Logs
- **Appendix B** Soil Laboratory Analytical Report and Chain of Custody

Site Location

The subject site is located at 12405 Main Street, Jacksonville, Duval County, Florida. The site is an active retail/fueling facility that lies on the east side of North Main Street, just north of New Berlin Road.

The site currently maintains one 20,000-gallon double wall steel underground storage tank (UST) containing unleaded gasoline and one 20,000-gallon double wall steel compartmented UST containing unleaded gasoline and vehicular diesel. The tanks were installed in June 2005 replaced five former USTs installed in February 1989. **Figure 1** is a Site Map showing the site layout and dispenser area.

Closure Assessment Activities

Soil Sampling and Laboratory Analyses

AET personnel were on-site on September 1, 2022 to conduct a closure assessment of the entry boots associated with the 1-2, 3-4, and 5-6 dispenser sumps. A boring was advanced to approximately 4-feet below land surface (bls) using a core drill and stainless steel hand auger in order to collect a soil sample adjacent to each sump. Soils were collected at 2-foot intervals for organic vapor analysis (OVA) screening. Elevated OVA readings were not encountered. Groundwater was not encountered.

A laboratory soil sample was collected at 2- to 4-feet bls at each boring location and submitted for analysis of benzene, toluene, ethyl benzene, total xylenes, and methyl tert-butyl ether (BTEX+MTBE) via EPA Method 8260B, polycyclic aromatic hydrocarbons (PAH) via EPA Method 8270C, and total recoverable hydrocarbons (TRPH) using the FL-PRO Method. The soil samples were placed in laboratory-provided sample containers, labeled, packed on ice in a cooler and transported under chain-of-custody to Environmental Testing Laboratories, Inc., a State of Florida NELAC-certified laboratory, in Thomasville, Georgia.

Laboratory results indicated concentrations of all contaminants of concern below their respective Soil Cleanup Target Level (SCTL) in all samples collected.

A site map illustrating the underground storage tank (UST) area, petroleum dispenser area, and soil boring data, is provided as **Figure 1**. OVA data is summarized on **Table 1.** Soil analytical data is summarized in **Table 2A-2C.** Benzo(a)Pyrene Conversion Tables are included in **Table 3**. A copy of the field notes, soil boring and field equipment calibration logs are provided in **Appendix A**. Copies of the soil laboratory report and chain of custody are provided in **Appendix B**.

Quality Assurance and Quality Control

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

Based on the DEP field sampling logs, QA/QC measurements appeared consistent with data normally taken with environmental sampling and analysis. Detailed sample collection and preservation procedures, as well as laboratory QA/QC data for analyses, were included in the report for the collected samples. The laboratory analytical results of method blanks, surrogate recovery results, and acceptable limits were included in the reports. None of the constituents analyzed contained contaminant parameters that were found in the method blank. In the event that the method blank indicated detection (i.e. results flagged with a "V" value), AET would utilize the ten times rule as far as validating the data as being usable or not. The ten times rule is based on the Environmental Protection Agency (EPA) guidance document for organic data review. If after applying the rules, the results do not meet the GCTL or SCTL limits, then the sample must be re-analyzed and or re-sampled (excluding those low level PAHs whose CTLs cannot be achieved). It should also be noted that no equipment blanks, field blanks, trip blanks or duplicate samples were included in this project. These types of samples are useful in the QA/QC validation process.

All soil sampling activities were performed in accordance with the FDEP's SOP Guidance Memos and Chapter 62-160, Florida Administrative Code (FAC).

CONCLUSIONS

- AET personnel were on-site September 1, 2022 to conduct closure assessment activities. AET advanced a hand auger boring adjacent to the 1-2, 3-4, and 5-6 dispenser sumps. Field observations indicated no elevated OVA readings or evidence of contamination.

- A laboratory soil sample was collected at 2- to 4-feet bls adjacent to the 1-2, 3-4, and 5-6 dispenser sumps for analysis of BTEX+MTBE, PAH and TRPH. Laboratory analysis indicated concentrations of all contaminants of concern below their respective SCTLs.

- Groundwater was not encountered, and collection of groundwater samples was not warranted.

RECOMMENDATIONS

Based on the field observations and soil analytical data, AET recommends that no further assessment be conducted at the facility. If you should have any questions concerning this Closure Assessment Report, feel free to contact the undersigned at (850) 270-6153.

Sincerely,
Advanced Environmental Technologies, LLC



Jay Blanton, P.E.
Project Manager

Attachments: Figure, Tables, Appendices A – C

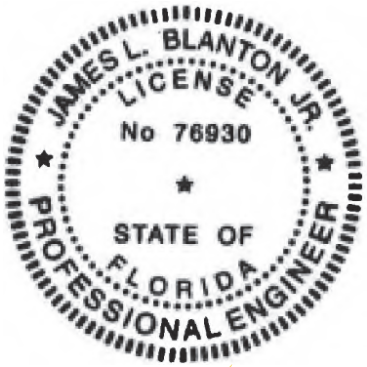
Statement of Professional Review

Closure Assessment Report
Circle K #2726536
12405 Main Street
Jacksonville, Duval County, Florida
FDEP Facility ID No. 16/8943516
AET Project No.: 28522.00

I, J. Blanton, Florida PE # 76930, certify that I currently hold an active license in the state of Florida and am competent through education and experience to provide the engineering service contained in this report. I further certify that, in my professional judgment, the components of this report satisfy the requirements set forth in Chapter 62-761, Florida Administrative Code (FAC) and was prepared by me or under my responsible charge. Moreover, I certify that AET holds an active Certificate of Authorization #8215 to provide this engineering service. No warranties are implied or intended.

_____ I personally prepared this document

__X__ This document was prepared by _____Chris Marsden_____ working under my direct supervision



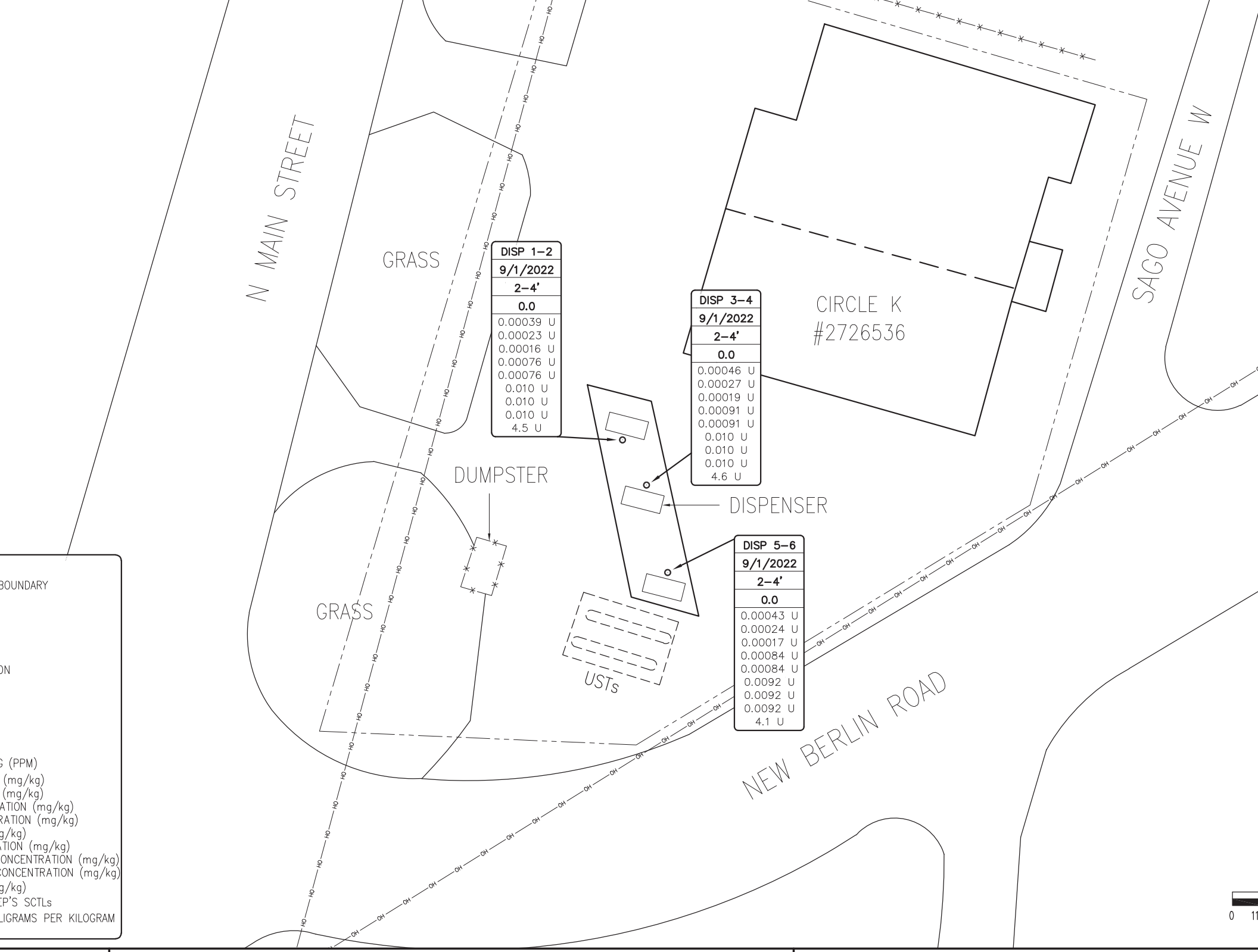
Digitally signed by: J. Blanton
Date: 2022.10.06 16:15:57 -04'00'

This item has been electronically signed and sealed by J. L. Blanton Jr., P.E. on October 6, 2022 using a SHA-1 authentication code.

Printed copies of this document are not considered signed and sealed and all SHA-1 authentication codes must be verified on any electronic copies.

J. L. Blanton Jr., P.E.
Florida License No. 76930
Advanced Environmental Technologies, LLC
CA# 8215

FIGURE


N MAIN STREET
SAGO AVENUE W
NEW BERLIN ROAD
GRASS
GRASS
CIRCLE K
#2726536
DUMPSTER
DISPENSER
USTs
DISP 1–2
9/1/2022
2–4'
0.0
0.00039 U
0.00023 U
0.00016 U
0.00076 U
0.00076 U
0.010 U
0.010 U
0.010 U
4.5 U
DISP 3–4
9/1/2022
2–4'
0.0
0.00046 U
0.00027 U
0.00019 U
0.00091 U
0.00091 U
0.010 U
0.010 U
0.010 U
4.6 U
DISP 5–6
9/1/2022
2–4'
0.0
0.00043 U
0.00024 U
0.00017 U
0.00084 U
0.00084 U
0.0092 U
0.0092 U
0.0092 U
4.1 U
BOUNDARY
ON
G (PPM)
(mg/kg)
(mg/kg)
ATION (mg/kg)
RATION (mg/kg)
g/kg)
ATION (mg/kg)
ONCENTRATION (mg/kg)
CONCENTRATION (mg/kg)
g/kg)
EP'S SCTLs
LIGRAMS PER KILOGRAM
0 11

TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Circle K #2726536

Facility ID#: 8943516

FBLS = Feet Below Land Surface
ppm = Parts Per Million
- = No Reading Taken

SAMPLE			OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
DISP 1/2@4'	9/1/2022	0-2	0	--	0	
		2-4	0	--	0	
DISP 3/4@4'	9/1/2022	0-2	0	--	0	
		2-4	0	--	0	
DISP 5/6@4'	9/1/2022	0-2	0	--	0	
		2-4	0	--	0	

TABLE 2A: SOIL ANALYTICAL SUMMARY - VOAs, TRPHs and Metals

Facility ID#: 8943516 **Facility Name: Circle K #2726536**

See notes at end of table.

Sample				OVA	Laboratory Analyses										
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (mg/kg)	Ethyl-benzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)	Arsenic (mg/kg)	Cad-mium (mg/kg)	Chro-mium (mg/kg)	Lead (mg/kg)	Comments
DSP 1/2@4'	9/1/2022	24.5'	2-4'	0	0.00039 U	0.00016 U	0.00023 U	0.00076 U	0.00076 U	4.5 U	NS	NS	NS	NS	
DSP 3/4@4'	9/1/2022	24.5'	2-4'	0	0.00046 U	0.00019 U	0.00027 U	0.00091 U	0.00091 U	4.6 U	NS	NS	NS	NS	
DSP 5/6@4'	9/1/2022	24.5'	2-4'	0	0.00043 U	0.00017 U	0.00024 U	0.00084 U	0.00084 U	4.1 U	NS	NS	NS	NS	
Leachability Based on Groundwater Criteria (mg/kg)					0.007	0.6	0.5	0.2	0.09	340	*	7.5	38	*	
Direct Exposure Residential (mg/kg)					1.2	1,500	7,500	130	4,400	460	2.1	82	210	400	

Notes: NA = Not Available.

NS = Not Sampled.

* = Leachability value may be determined using TCLP.

U = Compound was analyzed for but not detected.

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

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 2B: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility ID#: 8943516 **Facility Name: Circle K #2726536**

See notes at end of table.

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
DSP 1/2@4'	9/1/2022	24.5'	2-4'	0	0.010 U	0.010 U	0.010 U	0.011 U	0.013 U	0.010 U	0.019 U	0.0088 U	0.0088 U	0.010 U	0.0088 U	
DSP 3/4@4'	9/1/2022	24.5'	2-4'	0	0.010 U	0.010 U	0.010 U	0.012 U	0.013 U	0.010 U	0.019 U	0.0090 U	0.0090 U	0.010 U	0.0090 U	
DSP 5/6@4'	9/1/2022	24.5'	2-4'	0	0.0092 U	0.0092 U	0.0092 U	0.010 U	0.012 U	0.0092 U	0.017 U	0.013 I	0.0081 U	0.0092 U	0.011 I	
Leachability Based on Groundwater Criteria (mg/kg)					1.2	3.1	8.5	2.1	27	2,500	32,000	1,200	160	250	880	
Direct Exposure Residential (mg/kg)					55	200	210	2,400	1,800	21,000	2,500	3,200	2,600	2,200	2,400	

Notes: NA = Not Available.

NS = Not Sampled.

U = Compound was analyzed for but not detected.

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

If analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 2C: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility ID#: 8943516 Facility Name: Circle K #2726536

See notes at end of table.

Sample				OVA	Laboratory Analyses								
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chry-sene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
DSP 1/2@4'	9/1/2022	24.5'	2-4'	0	0.0063 U	0.0088 U	0.0050 U	0.0075 U	0.0088 U	0.0038 U	0.010 U	0.0	
DSP 3/4@4'	9/1/2022	24.5'	2-4'	0	0.0064 U	0.0090 U	0.0051 I	0.0077 U	0.0090 U	0.0038 U	0.010 U	0.0	
DSP 5/6@4'	9/1/2022	24.5'	2-4'	0	0.0077 I	0.0081 U	0.0077 I	0.0069 U	0.0084 I	0.0035 U	0.0092 U	0.0	
Leachability Based on Groundwater Criteria (mg/kg)					8	0.8	2.4	24	77	0.7	6.6	**	
Direct Exposure Residential (mg/kg)					0.1	#	#	#	#	#	#	0.1	

Notes: NA = Not Available.

NS = Not Sampled.

** = Leachability value not applicable.

= Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent.

U = Compound was analyzed for but not detected.

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

If analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

Benzo(a)pyrene Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Instructions can be found below the table

Facility/Site Name:	Circle K #2726536
Site Location:	Jacksonville, Duval County, Florida
Facility/Site ID No.:	16/8943516

SCTL Type	Value	Units
Residential Direct Exposure SCTL	0.1	mg/kg
Industrial Direct Exposure SCTL	0.7	mg/kg
Alternative SCTL (Optional)		mg/kg
Site Specific Background (Optional)		mg/kg

TEF = Toxic Equivalency Factor

	Soil Sample #	DISP 1/2@4'	DISP 3/4@4'	DISP 5/6@4'							
	Sample Date	9/1/2022	9/1/2022	9/1/2022							
	Sample Location:	DISP 1/2	DISP 3/4	DISP 5/6							
	Depth (ft):	2-4'	2-4'	2-4'							
Contaminant Concentrations											
Contaminant	**TEF**	DISP 1/2@4' (mg/kg)	DISP 3/4@4' (mg/kg)	DISP 5/6@4' (mg/kg)							
Benzo(a)pyrene	1.0	0.00315	0.0032	0.0077							
Benzo(a)anthracene	0.1	0.0044	0.0045	0.00405							
Benzo(b)fluoranthene	0.1	0.0025	0.0051	0.0077							
Benzo(k)fluoranthene	0.01	0.00375	0.00385	0.00345							
Chrysene	0.001	0.0044	0.0045	0.0084							
Dibenz(a,h)anthracene	1.0	0.0019	0.0019	0.00175							
Indeno(1,2,3-cd)pyrene	0.1	0.005	0.005	0.0046							
Benzo(a)pyrene Equivalents											
Contaminant	**TEF**	DISP 1/2@4' (mg/kg)	DISP 3/4@4' (mg/kg)	DISP 5/6@4' (mg/kg)							
Benzo(a)pyrene	1.0	0.0032	0.0032	0.0077	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Benzo(a)anthracene	0.1	0.0004	0.0005	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Benzo(b)fluoranthene	0.1	0.0003	0.0005	0.0008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Benzo(k)fluoranthene	0.01	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Chrysene	0.001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Dibenz(a,h)anthracene	1.0	0.0019	0.0019	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Indeno(1,2,3-cd)pyrene	0.1	0.0005	0.0005	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total Equivalents											
Total Benzo(a)pyrene Equivalents		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Comparisons to SCTLs											
Does This Sample Exceed:		**DISP 1/2@4' (mg/kg)**	**DISP 3/4@4' (mg/kg)**	**DISP 5/6@4' (mg/kg)**							
The Residential Direct Exposure SCTL of 0.1 mg/kg?		**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**
The Industrial Direct Exposure SCTL of 0.7 mg/kg?		**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**
No Alternative SCTL Given		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
No Site Specific Background Given		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

APPENDIX B

Soil Laboratory Analytical Report and Chain of Custody

FINAL
ANALYTICAL REPORT

ETL PROJECT ID: 22-3311 **9/8/2022 - Revision 0**

JAY BLANTON
ADVANCED ENVIRONMENTAL TECHNOLOGIES
4864 CORLETT STREET
TALLAHASSEE, FL 32303-
TEL: (850) 385-2010
FAX: (850) 385-2423

CLIENT PROJECT NAME: CK#2726536
CLIENT PROJECT ID: 27110.00
FACILITY ID: 16/8943516

Enclosed are the analytical results for sample(s) received by Environmental Testing Laboratories on September 02, 2022. Results reported herein are reported on an as received basis and conform to current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Sample analyses performed by Environmental Testing Laboratories, Inc. (ETL) unless otherwise noted. ETL is accredited through NELAC and the Florida Department of Health, Certification #E87684. Scope of analyses: RCRA/CERCLA Metals, General Chemistry, Extractable Organics, and Volatile Organics. Effective Dates: February 14, 2002 through June 30, 2023.

This report shall not be reproduced, except in full, without the written consent of Environmental Testing Laboratories, Inc. This report has been signed and authorized by the signatory using an electronic signature and is intended to be the legally binding equivalent of a traditionally handwritten signature.

Authorized for release by:

Brad Williams
Digitally signed by Brad Williams
Date: 2022.09.08 21:36:15 -04'00'

ENVIRONMENTAL TESTING LABORATORIES INC

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Laboratory Qualifiers

!	Data deviate from historically established concentration ranges.
#	Surrogate compound inadvertently omitted.
$	Due to dilution, surrogate compound was not detected.
*****	Not reported due to interference
?	Data are rejected as should not be used.
A	Value reported is the arithmetic mean (average) of two or more determinations.
B	Results based upon colony counts outside the acceptable range.
BRL	Analyte not detected above specified Method Detection/Reporting Limit.
D	Measurement made in the field.
E	Extra samples were taken at composite stations.
F	When reporting species, F indicates the female sex.
H	Value based on fied kit determination; results may not be accurate.
I	The reported value is between the laboratory method detection limit and the laboratory practical
J	Estimated value.
K	Off-scale low. Actual value is known to be less than the value given.
L	Off-scale high. Actual value is known to be greater than the value given.
M	Presence of material is verified but not quantified; the actual value is less than the value given.
N	Presumptive evidence of presence of material.
ND	Analyte not detected above specified Method Detection/Reporting Limit.
O	Sampled, but analysis lost or not performed.
Q	Sample held beyond the accepted holding time.
R	Significant rain in the past 48 hours.
S1	Surrogate recovery reported is outside of laboratory established QA/QC Limits
S2	Analyte recovery reported is outside of laboratory established QA/QC Limits
S3	Analyte precision reported is outside of laboratory established QA/QC Limits
T	Value reported is less than the laboratory method detection limit.
U	Compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	Laboratory analysis was from an improperly preserved sample. Data may not be accurate.
Z	Too many colonies were present; numeric value represents the filtration volume.

Project Narrative

#E87684

Environmental Testing Laboratories, Inc. is accredited through NELAC and the Florida Department of Health.

Solid samples are reported on a dry weight basis unless otherwise noted.

Please refer to Section 4.0 of the ETL Quality Assurance Manual for a measure of uncertainty.

All analyses are performed using EPA or FL-DEP methods and certified to meet NELAC requirements, except where noted.

Analytical Method Summary

E87684 **Environmental Testing Laboratories Inc.**
412 W. Walcott Street, Thomasville, GA 31792
(229) 228-2592

GC/MS (EPA 8260)	SW-846 Final Update III
Semivolatiles low level for PAH only (EPA 8270/PAH Low Level)	
GC/FID (FDEP FL-PRO)	Florida Department of Environmental Protection

Sample Summary

Laboratory Sample ID	Client Sample ID	Matrix	End Date / Time Sampled		Grab / Composite	Percent Moisture
300015	DSP 1/2@4'	SOILS	9/1/2022	12:10	G	20.2
300016	DSP 3/4@4'	SOILS	9/1/2022	12:25	G	21.9
300017	DSP 5/6@4'	SOILS	9/1/2022	12:35	G	13.2

Executive Summary

Analyte	Analytical Method	Result	Units	Qualifiers	Result Comments
DSP 3/4@4' (300016)					
Benzo(b)fluoranthene	EPA 8270/PAH Low Level	0.0051	mg/Kg	I	
DSP 5/6@4' (300017)					
Fluoranthene	EPA 8270/PAH Low Level	0.013	mg/Kg	I	
Pyrene	EPA 8270/PAH Low Level	0.011	mg/Kg	I	
Chrysene	EPA 8270/PAH Low Level	0.0084	mg/Kg	I	
Benzo(b)fluoranthene	EPA 8270/PAH Low Level	0.0077	mg/Kg	I	
Benzo(a)pyrene	EPA 8270/PAH Low Level	0.0077	mg/Kg	I	

Analytical Data

Client Sample ID: DSP 1/2@4'
Sample Location:
Date Collected: 09/01/2022 12:10 PM

Laboratory Sample ID: 300015
Matrix: SOILS
Percent Moisture: 20.2

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00039	U	mg/Kg	0.00039	0.0035	9/6/2022 1:38:00 AM
Ethylbenzene	1.0	0.00016	U	mg/Kg	0.00016	0.0035	9/6/2022 1:38:00 AM
Methyl-t-butyl ether	1.0	0.00076	U	mg/Kg	0.00076	0.0035	9/6/2022 1:38:00 AM
Toluene	1.0	0.00023	U	mg/Kg	0.00023	0.0035	9/6/2022 1:38:00 AM
Xylenes- Total	1.0	0.00076	U	mg/Kg	0.00076	0.011	9/6/2022 1:38:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	107			80% - 136%	9/6/2022 1:38:00 AM
4-Bromofluorobenzene	1.0	108			51% - 145%	9/6/2022 1:38:00 AM
Dibromofluoromethane	1.0	101			70% - 130%	9/6/2022 1:38:00 AM
Toluene-d8	1.0	90.4			76% - 120%	9/6/2022 1:38:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.010	U	mg/Kg	0.010	0.084	9/7/2022 2:41:00 AM
2-Methylnaphthalene	1.0	0.010	U	mg/Kg	0.010	0.084	9/7/2022 2:41:00 AM
Acenaphthene	1.0	0.011	U	mg/Kg	0.011	0.084	9/7/2022 2:41:00 AM
Acenaphthylene	1.0	0.013	U	mg/Kg	0.013	0.084	9/7/2022 2:41:00 AM
Anthracene	1.0	0.010	U	mg/Kg	0.010	0.084	9/7/2022 2:41:00 AM
Benzo(a)anthracene	1.0	0.0088	U	mg/Kg	0.0088	0.084	9/7/2022 2:41:00 AM
Benzo(a)pyrene	1.0	0.0063	U	mg/Kg	0.0063	0.084	9/7/2022 2:41:00 AM
Benzo(b)fluoranthene	1.0	0.0050	U	mg/Kg	0.0050	0.084	9/7/2022 2:41:00 AM
Benzo(g,h,i)perylene	1.0	0.019	U	mg/Kg	0.019	0.084	9/7/2022 2:41:00 AM
Benzo(k)fluoranthene	1.0	0.0075	U	mg/Kg	0.0075	0.084	9/7/2022 2:41:00 AM
Chrysene	1.0	0.0088	U	mg/Kg	0.0088	0.084	9/7/2022 2:41:00 AM
Dibenzo(a,h)anthracene	1.0	0.0038	U	mg/Kg	0.0038	0.084	9/7/2022 2:41:00 AM
Fluoranthene	1.0	0.0088	U	mg/Kg	0.0088	0.084	9/7/2022 2:41:00 AM
Fluorene	1.0	0.0088	U	mg/Kg	0.0088	0.084	9/7/2022 2:41:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.010	U	mg/Kg	0.010	0.084	9/7/2022 2:41:00 AM
Naphthalene	1.0	0.010	U	mg/Kg	0.010	0.084	9/7/2022 2:41:00 AM
Phenanthrene	1.0	0.010	U	mg/Kg	0.010	0.084	9/7/2022 2:41:00 AM
Pyrene	1.0	0.0088	U	mg/Kg	0.0088	0.084	9/7/2022 2:41:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	69.6			30% - 150%	9/7/2022 2:41:00 AM
Nitrobenzene-d5	1.0	77.0			30% - 150%	9/7/2022 2:41:00 AM
p-Terphenyl-d14	1.0	68.7			30% - 150%	9/7/2022 2:41:00 AM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	4.5	U	mg/Kg	4.5	7.1	9/7/2022 2:21:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	137	S1		36% - 132%	9/7/2022 2:21:00 AM
Ortho-terphenyl	1.0	87.0			66% - 136%	9/7/2022 2:21:00 AM

Analytical Data

Client Sample ID: DSP 3/4@4'
Sample Location:
Date Collected: 09/01/2022 12:25 PM

Laboratory Sample ID: 300016
Matrix: SOILS
Percent Moisture: 21.9

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00046	U	mg/Kg	0.00046	0.0041	9/6/2022 2:03:00 AM
Ethylbenzene	1.0	0.00019	U	mg/Kg	0.00019	0.0041	9/6/2022 2:03:00 AM
Methyl-t-butyl ether	1.0	0.00091	U	mg/Kg	0.00091	0.0041	9/6/2022 2:03:00 AM
Toluene	1.0	0.00027	U	mg/Kg	0.00027	0.0041	9/6/2022 2:03:00 AM
Xylenes- Total	1.0	0.00091	U	mg/Kg	0.00091	0.012	9/6/2022 2:03:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	115			80% - 136%	9/6/2022 2:03:00 AM
4-Bromofluorobenzene	1.0	105			51% - 145%	9/6/2022 2:03:00 AM
Dibromofluoromethane	1.0	98.2			70% - 130%	9/6/2022 2:03:00 AM
Toluene-d8	1.0	79.7			76% - 120%	9/6/2022 2:03:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.010	U	mg/Kg	0.010	0.086	9/7/2022 4:59:00 AM
2-Methylnaphthalene	1.0	0.010	U	mg/Kg	0.010	0.086	9/7/2022 4:59:00 AM
Acenaphthene	1.0	0.012	U	mg/Kg	0.012	0.086	9/7/2022 4:59:00 AM
Acenaphthylene	1.0	0.013	U	mg/Kg	0.013	0.086	9/7/2022 4:59:00 AM
Anthracene	1.0	0.010	U	mg/Kg	0.010	0.086	9/7/2022 4:59:00 AM
Benzo(a)anthracene	1.0	0.0090	U	mg/Kg	0.0090	0.086	9/7/2022 4:59:00 AM
Benzo(a)pyrene	1.0	0.0064	U	mg/Kg	0.0064	0.086	9/7/2022 4:59:00 AM
Benzo(b)fluoranthene	1.0	**0.0051**	I	mg/Kg	0.0051	0.086	9/7/2022 4:59:00 AM
Benzo(g,h,i)perylene	1.0	0.019	U	mg/Kg	0.019	0.086	9/7/2022 4:59:00 AM
Benzo(k)fluoranthene	1.0	0.0077	U	mg/Kg	0.0077	0.086	9/7/2022 4:59:00 AM
Chrysene	1.0	0.0090	U	mg/Kg	0.0090	0.086	9/7/2022 4:59:00 AM
Dibenzo(a,h)anthracene	1.0	0.0038	U	mg/Kg	0.0038	0.086	9/7/2022 4:59:00 AM
Fluoranthene	1.0	0.0090	U	mg/Kg	0.0090	0.086	9/7/2022 4:59:00 AM
Fluorene	1.0	0.0090	U	mg/Kg	0.0090	0.086	9/7/2022 4:59:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.010	U	mg/Kg	0.010	0.086	9/7/2022 4:59:00 AM
Naphthalene	1.0	0.010	U	mg/Kg	0.010	0.086	9/7/2022 4:59:00 AM
Phenanthrene	1.0	0.010	U	mg/Kg	0.010	0.086	9/7/2022 4:59:00 AM
Pyrene	1.0	0.0090	U	mg/Kg	0.0090	0.086	9/7/2022 4:59:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	66.4			30% - 150%	9/7/2022 4:59:00 AM
Nitrobenzene-d5	1.0	70.0			30% - 150%	9/7/2022 4:59:00 AM
p-Terphenyl-d14	1.0	67.0			30% - 150%	9/7/2022 4:59:00 AM

PQL: Practical Quantitation Limit | RL: Report Limit | MDL: Method Detection Limit | DF: Dilution Factor

Analytical Data

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	4.6	U	mg/Kg	4.6	7.3	9/7/2022 3:49:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	110			36% - 132%	9/7/2022 3:49:00 AM
Ortho-terphenyl	1.0	77.7			66% - 136%	9/7/2022 3:49:00 AM

Analytical Data

Client Sample ID: DSP 5/6@4'
Sample Location:
Date Collected: 09/01/2022 12:35 PM

Laboratory Sample ID: 300017
Matrix: SOILS
Percent Moisture: 13.2

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00043	U	mg/Kg	0.00043	0.0038	9/6/2022 2:30:00 AM
Ethylbenzene	1.0	0.00017	U	mg/Kg	0.00017	0.0038	9/6/2022 2:30:00 AM
Methyl-t-butyl ether	1.0	0.00084	U	mg/Kg	0.00084	0.0038	9/6/2022 2:30:00 AM
Toluene	1.0	0.00024	U	mg/Kg	0.00024	0.0038	9/6/2022 2:30:00 AM
Xylenes- Total	1.0	0.00084	U	mg/Kg	0.00084	0.011	9/6/2022 2:30:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	110			80% - 136%	9/6/2022 2:30:00 AM
4-Bromofluorobenzene	1.0	110			51% - 145%	9/6/2022 2:30:00 AM
Dibromofluoromethane	1.0	96.5			70% - 130%	9/6/2022 2:30:00 AM
Toluene-d8	1.0	80.1			76% - 120%	9/6/2022 2:30:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.0092	U	mg/Kg	0.0092	0.077	9/7/2022 5:46:00 AM
2-Methylnaphthalene	1.0	0.0092	U	mg/Kg	0.0092	0.077	9/7/2022 5:46:00 AM
Acenaphthene	1.0	0.010	U	mg/Kg	0.010	0.077	9/7/2022 5:46:00 AM
Acenaphthylene	1.0	0.012	U	mg/Kg	0.012	0.077	9/7/2022 5:46:00 AM
Anthracene	1.0	0.0092	U	mg/Kg	0.0092	0.077	9/7/2022 5:46:00 AM
Benzo(a)anthracene	1.0	0.0081	U	mg/Kg	0.0081	0.077	9/7/2022 5:46:00 AM
Benzo(a)pyrene	1.0	**0.0077**	I	mg/Kg	0.0058	0.077	9/7/2022 5:46:00 AM
Benzo(b)fluoranthene	1.0	**0.0077**	I	mg/Kg	0.0046	0.077	9/7/2022 5:46:00 AM
Benzo(g,h,i)perylene	1.0	0.017	U	mg/Kg	0.017	0.077	9/7/2022 5:46:00 AM
Benzo(k)fluoranthene	1.0	0.0069	U	mg/Kg	0.0069	0.077	9/7/2022 5:46:00 AM
Chrysene	1.0	**0.0084**	I	mg/Kg	0.0081	0.077	9/7/2022 5:46:00 AM
Dibenzo(a,h)anthracene	1.0	0.0035	U	mg/Kg	0.0035	0.077	9/7/2022 5:46:00 AM
Fluoranthene	1.0	**0.013**	I	mg/Kg	0.0081	0.077	9/7/2022 5:46:00 AM
Fluorene	1.0	0.0081	U	mg/Kg	0.0081	0.077	9/7/2022 5:46:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.0092	U	mg/Kg	0.0092	0.077	9/7/2022 5:46:00 AM
Naphthalene	1.0	0.0092	U	mg/Kg	0.0092	0.077	9/7/2022 5:46:00 AM
Phenanthrene	1.0	0.0092	U	mg/Kg	0.0092	0.077	9/7/2022 5:46:00 AM
Pyrene	1.0	**0.011**	I	mg/Kg	0.0081	0.077	9/7/2022 5:46:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	68.5			30% - 150%	9/7/2022 5:46:00 AM
Nitrobenzene-d5	1.0	73.9			30% - 150%	9/7/2022 5:46:00 AM
p-Terphenyl-d14	1.0	67.0			30% - 150%	9/7/2022 5:46:00 AM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	4.1	U	mg/Kg	4.1	6.6	9/7/2022 4:32:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	114			36% - 132%	9/7/2022 4:32:00 AM
Ortho-terphenyl	1.0	74.6			66% - 136%	9/7/2022 4:32:00 AM

PQL: Practical Quantitation Limit RL: Report Limit MDL: Method Detection Limit DF: Dilution Factor

Data Chronicle

Client Sample ID: DSP 1/2@4' **Laboratory Sample ID:** 300015
Sample Location: **Matrix:** SOILS
Date Collected: 09/01/2022 12:10 PM **Percent Moisture:** 20.2

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA090522	9/6/2022 1:38:00 AM	9/6/2022 1:38:00 AM	NC	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA090622	9/6/2022 8:30:00 AM	9/7/2022 2:41:00 AM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA090622	9/6/2022 8:30:00 AM	9/7/2022 2:21:00 AM	BW	E87684

Client Sample ID: DSP 3/4@4' **Laboratory Sample ID:** 300016
Sample Location: **Matrix:** SOILS
Date Collected: 09/01/2022 12:25 PM **Percent Moisture:** 21.9

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA090522	9/6/2022 2:03:00 AM	9/6/2022 2:03:00 AM	NC	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA090622	9/6/2022 8:30:00 AM	9/7/2022 4:59:00 AM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA090622	9/6/2022 8:30:00 AM	9/7/2022 3:49:00 AM	BW	E87684

Client Sample ID: DSP 5/6@4' **Laboratory Sample ID:** 300017
Sample Location: **Matrix:** SOILS
Date Collected: 09/01/2022 12:35 PM **Percent Moisture:** 13.2

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA090522	9/6/2022 2:30:00 AM	9/6/2022 2:30:00 AM	NC	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA090622	9/6/2022 8:30:00 AM	9/7/2022 5:46:00 AM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA090622	9/6/2022 8:30:00 AM	9/7/2022 4:32:00 AM	BW	E87684

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SMSVA090522 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MSMSVA090522 | Preparation Date: 9/6/2022 12:22:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SMSVA090522MB				Client Sample ID: SMSVA090522MB			Date Analyzed: 9/6/2022 12:22:00 AM				
Benzene	0.00056	0.0050	0.00056	U	mg/Kg							
Ethylbenzene	0.00023	0.0050	0.00023	U	mg/Kg							
Methyl-t-butyl ether	0.0011	0.0050	0.0011	U	mg/Kg							
Toluene	0.00032	0.0050	0.00032	U	mg/Kg							
Xylenes- Total	0.0011	0.015	0.0011	U	mg/Kg							
Toluene-d8			45.7		ug/kg	50.0	91.4	76.0	-	120		
4-Bromofluorobenzene			53.5		ug/kg	50.0	107	51.0	-	145		
Dibromofluoromethane			46.8		ug/kg	50.0	93.6	70.0	-	130		
1,2-Dichloroethane-d4			47.1		ug/kg	50.0	94.2	80.0	-	136		
QA/QC Type: LCS	Lab Sample ID: SMSVA090522LCS				Client Sample ID: SMSVA090522LCS			Date Analyzed: 9/5/2022 8:36:00 PM				
Benzene	0.00056	0.0050	0.043		mg/Kg	0.050	86.0	82.0	-	121		
Ethylbenzene	0.00023	0.0050	0.048		mg/Kg	0.050	96.0	82.0	-	119		
Methyl-t-butyl ether	0.0011	0.0050	0.043		mg/Kg	0.050	86.0	80.0	-	126		
Toluene	0.00032	0.0050	0.046		mg/Kg	0.050	92.0	83.0	-	118		
Xylenes- Total	0.0011	0.015	0.146		mg/Kg	0.150	97.3	83.0	-	119		
Toluene-d8			46.2		ug/kg	50.0	92.4	76.0	-	120		
4-Bromofluorobenzene			54.5		ug/kg	50.0	109	51.0	-	145		
Dibromofluoromethane			46.9		ug/kg	50.0	93.8	70.0	-	130		
1,2-Dichloroethane-d4			46.4		ug/kg	50.0	92.8	80.0	-	136		
QA/QC Type: LCSD	Lab Sample ID: SMSVA090522LCSD				Client Sample ID: SMSVA090522LCSD			Date Analyzed: 9/5/2022 9:01:00 PM				
Benzene	0.00056	0.0050	0.044		mg/Kg	0.050	88.0	82.0	-	121	2.3	20.0
Ethylbenzene	0.00023	0.0050	0.048		mg/Kg	0.050	96.0	82.0	-	119	0	19.0
Methyl-t-butyl ether	0.0011	0.0050	0.045		mg/Kg	0.050	90.0	80.0	-	126	4.5	23.0
Toluene	0.00032	0.0050	0.047		mg/Kg	0.050	94.0	83.0	-	118	2.2	18.0
Xylenes- Total	0.0011	0.015	0.153		mg/Kg	0.150	102	83.0	-	119	4.7	18.0
Toluene-d8			45.9		ug/kg	50.0	91.8	76.0	-	120		
4-Bromofluorobenzene			59.6		ug/kg	50.0	119	51.0	-	145		
Dibromofluoromethane			47.8		ug/kg	50.0	95.6	70.0	-	130		
1,2-Dichloroethane-d4			44.7		ug/kg	50.0	89.4	80.0	-	136		
QA/QC Type: MS	Lab Sample ID: SMSVA090522MS				Client Sample ID: 300017MS			Date Analyzed: 9/5/2022 9:26:00 PM				
Benzene	0.00044	0.0039	0.032		mg/Kg	0.039	82.1	52.0	-	120		
Ethylbenzene	0.00018	0.0039	0.036		mg/Kg	0.039	92.3	38.0	-	130		

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SMSVA090522 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MSMSVA090522 | Preparation Date: 9/6/2022 12:22:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MS	Lab Sample ID: SMSVA090522MS				Client Sample ID: 300017MS					Date Analyzed: 9/5/2022 9:26:00 PM		
Methyl-t-butyl ether	0.00085	0.0039	0.037		mg/Kg	0.039	94.9	54.0	-	128		
Toluene	0.00025	0.0039	0.036		mg/Kg	0.039	92.3	55.0	-	113		
Xylenes- Total	0.00085	0.012	0.113		mg/Kg	0.116	97.4	46.0	-	121		
Toluene-d8			47.0		ug/kg	50.0	94.0	76.0	-	120		
4-Bromofluorobenzene			57.8		ug/kg	50.0	116	51.0	-	145		
Dibromofluoromethane			48.3		ug/kg	50.0	96.6	70.0	-	130		
1,2-Dichloroethane-d4			50.1		ug/kg	50.0	100	80.0	-	136		
QA/QC Type: MSD	Lab Sample ID: SMSVA090522MSD				Client Sample ID: 300017MSD					Date Analyzed: 9/5/2022 9:51:00 PM		
Benzene	0.00043	0.0038	0.031		mg/Kg	0.038	81.6	52.0	-	120	3.2	34.0
Ethylbenzene	0.00017	0.0038	0.033		mg/Kg	0.038	86.8	38.0	-	130	8.7	46.0
Methyl-t-butyl ether	0.00084	0.0038	0.035		mg/Kg	0.038	92.1	54.0	-	128	5.6	37.0
Toluene	0.00024	0.0038	0.033		mg/Kg	0.038	86.8	55.0	-	113	8.7	29.0
Xylenes- Total	0.00084	0.011	0.103		mg/Kg	0.114	90.4	46.0	-	121	9.3	37.0
Toluene-d8			47.0		ug/kg	50.0	94.0	76.0	-	120		
4-Bromofluorobenzene			57.6		ug/kg	50.0	115	51.0	-	145		
Dibromofluoromethane			48.1		ug/kg	50.0	96.2	70.0	-	130		
1,2-Dichloroethane-d4			49.1		ug/kg	50.0	98.2	80.0	-	136		

Comments:

Preparation Batch ID: SPAHA090622 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3546

Method Batch ID: MSPAHA090622 | Preparation Date: 9/6/2022 8:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPAHA090622MB				Client Sample ID: SPAHA090622MB					Date Analyzed: 9/6/2022 6:58:00 PM		
Naphthalene	0.0080	0.067	0.0080	U	mg/Kg							
Acenaphthylene	0.010	0.067	0.010	U	mg/Kg							
Acenaphthene	0.0090	0.067	0.0090	U	mg/Kg							
Fluorene	0.0070	0.067	0.0070	U	mg/Kg							
Phenanthrene	0.0080	0.067	0.0080	U	mg/Kg							
Anthracene	0.0080	0.067	0.0080	U	mg/Kg							
Fluoranthene	0.0070	0.067	0.0070	U	mg/Kg							

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SPAHA090622 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3546

Method Batch ID: MSPAHA090622 | Preparation Date: 9/6/2022 8:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPAHA090622MB				Client Sample ID: SPAHA090622MB					Date Analyzed: 9/6/2022 6:58:00 PM		
1-Methylnaphthalene	0.0080	0.067	0.0080	U	mg/Kg							
2-Methylnaphthalene	0.0080	0.067	0.0080	U	mg/Kg							
Pyrene	0.0070	0.067	0.0070	U	mg/Kg							
Benzo(a)anthracene	0.0070	0.067	0.0070	U	mg/Kg							
Chrysene	0.0070	0.067	0.0070	U	mg/Kg							
Benzo(b)fluoranthene	0.0040	0.067	0.0040	U	mg/Kg							
Benzo(k)fluoranthene	0.0060	0.067	0.0060	U	mg/Kg							
Benzo(a)pyrene	0.0050	0.067	0.0050	U	mg/Kg							
Indeno(1,2,3-cd)pyrene	0.0080	0.067	0.0080	U	mg/Kg							
Dibenzo(a,h)anthracene	0.0030	0.067	0.0030	U	mg/Kg							
Benzo(g,h,i)perylene	0.015	0.067	0.015	U	mg/Kg							
Nitrobenzene-d5			82.5		%	100	82.5	30.0	-	150		
2-Fluorobiphenyl			73.9		%	100	73.9	30.0	-	150		
p-Terphenyl-d14			72.9		%	100	72.9	30.0	-	150		
QA/QC Type: LCS	Lab Sample ID: SPAHA090622LCS				Client Sample ID: SPAHA090622LCS					Date Analyzed: 9/6/2022 5:19:00 PM		
Naphthalene	0.0080	0.067	1.21		mg/Kg	1.67	72.5	30.0	-	150		
Acenaphthylene	0.010	0.067	1.31		mg/Kg	1.67	78.4	30.0	-	150		
Acenaphthene	0.0090	0.067	1.29		mg/Kg	1.67	77.2	30.0	-	150		
Fluorene	0.0070	0.067	1.38		mg/Kg	1.67	82.6	30.0	-	150		
Phenanthrene	0.0080	0.067	1.29		mg/Kg	1.67	77.2	30.0	-	150		
Anthracene	0.0080	0.067	1.33		mg/Kg	1.67	79.6	30.0	-	150		
Fluoranthene	0.0070	0.067	1.37		mg/Kg	1.67	82.0	30.0	-	150		
1-Methylnaphthalene	0.0080	0.067	1.19		mg/Kg	1.67	71.3	30.0	-	150		
2-Methylnaphthalene	0.0080	0.067	1.29		mg/Kg	1.67	77.2	30.0	-	150		
Pyrene	0.0070	0.067	1.31		mg/Kg	1.67	78.4	30.0	-	150		
Benzo(a)anthracene	0.0070	0.067	1.37		mg/Kg	1.67	82.0	30.0	-	150		
Chrysene	0.0070	0.067	1.30		mg/Kg	1.67	77.8	30.0	-	150		
Benzo(b)fluoranthene	0.0040	0.067	1.40		mg/Kg	1.67	83.8	30.0	-	150		
Benzo(k)fluoranthene	0.0060	0.067	1.41		mg/Kg	1.67	84.4	30.0	-	150		
Benzo(a)pyrene	0.0050	0.067	1.32		mg/Kg	1.67	79.0	30.0	-	150		
Indeno(1,2,3-cd)pyrene	0.0080	0.067	1.43		mg/Kg	1.67	85.6	30.0	-	150		
Dibenzo(a,h)anthracene	0.0030	0.067	1.25		mg/Kg	1.67	74.9	30.0	-	150		
Benzo(g,h,i)perylene	0.015	0.067	1.28		mg/Kg	1.67	76.6	30.0	-	150		
Nitrobenzene-d5			76.2		%	100	76.2	30.0	-	150		

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SPAHA090622 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3546

Method Batch ID: MSPAHA090622 | Preparation Date: 9/6/2022 8:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: LCS	Lab Sample ID: SPAHA090622LCS				Client Sample ID: SPAHA090622LCS			Date Analyzed: 9/6/2022 5:19:00 PM				
2-Fluorobiphenyl			67.2		%	100	67.2	30.0	-	150		
p-Terphenyl-d14			68.0		%	100	68.0	30.0	-	150		
QA/QC Type: LCSD	Lab Sample ID: SPAHA090622LCSD				Client Sample ID: SPAHA090622LCSD			Date Analyzed: 9/6/2022 6:10:00 PM				
Naphthalene	0.0080	0.067	1.25		mg/Kg	1.67	74.9	30.0	-	150	3.3	35.0
Acenaphthylene	0.010	0.067	1.33		mg/Kg	1.67	79.6	30.0	-	150	1.5	35.0
Acenaphthene	0.0090	0.067	1.31		mg/Kg	1.67	78.4	30.0	-	150	1.5	35.0
Fluorene	0.0070	0.067	1.41		mg/Kg	1.67	84.4	30.0	-	150	2.2	35.0
Phenanthrene	0.0080	0.067	1.32		mg/Kg	1.67	79.0	30.0	-	150	2.3	35.0
Anthracene	0.0080	0.067	1.36		mg/Kg	1.67	81.4	30.0	-	150	2.2	35.0
Fluoranthene	0.0070	0.067	1.39		mg/Kg	1.67	83.2	30.0	-	150	1.4	35.0
1-Methylnaphthalene	0.0080	0.067	1.21		mg/Kg	1.67	72.5	30.0	-	150	1.7	35.0
2-Methylnaphthalene	0.0080	0.067	1.31		mg/Kg	1.67	78.4	30.0	-	150	1.5	35.0
Pyrene	0.0070	0.067	1.34		mg/Kg	1.67	80.2	30.0	-	150	2.3	35.0
Benzo(a)anthracene	0.0070	0.067	1.43		mg/Kg	1.67	85.6	30.0	-	150	4.3	35.0
Chrysene	0.0070	0.067	1.29		mg/Kg	1.67	77.2	30.0	-	150	0.77	35.0
Benzo(b)fluoranthene	0.0040	0.067	1.42		mg/Kg	1.67	85.0	30.0	-	150	1.4	35.0
Benzo(k)fluoranthene	0.0060	0.067	1.43		mg/Kg	1.67	85.6	30.0	-	150	1.4	35.0
Benzo(a)pyrene	0.0050	0.067	1.36		mg/Kg	1.67	81.4	30.0	-	150	3.0	35.0
Indeno(1,2,3-cd)pyrene	0.0080	0.067	1.33		mg/Kg	1.67	79.6	30.0	-	150	7.2	35.0
Dibenzo(a,h)anthracene	0.0030	0.067	1.26		mg/Kg	1.67	75.4	30.0	-	150	0.80	35.0
Benzo(g,h,i)perylene	0.015	0.067	1.35		mg/Kg	1.67	80.8	30.0	-	150	5.3	35.0
Nitrobenzene-d5			75.2		%	100	75.2	30.0	-	150		
2-Fluorobiphenyl			64.4		%	100	64.4	30.0	-	150		
p-Terphenyl-d14			66.7		%	100	66.7	30.0	-	150		
QA/QC Type: MS	Lab Sample ID: SPAHA090622MS				Client Sample ID: 299692MS			Date Analyzed: 9/7/2022 1:04:00 PM				
Naphthalene	0.0094	0.079	1.31		mg/Kg	1.97	65.6	30.0	-	150		
Acenaphthylene	0.012	0.079	1.50		mg/Kg	1.97	76.1	30.0	-	150		
Acenaphthene	0.011	0.079	1.45		mg/Kg	1.97	73.6	30.0	-	150		
Fluorene	0.0083	0.079	1.59		mg/Kg	1.97	80.7	30.0	-	150		
Phenanthrene	0.0094	0.079	1.52		mg/Kg	1.97	76.0	30.0	-	150		
Anthracene	0.0094	0.079	1.54		mg/Kg	1.97	78.2	30.0	-	150		
Fluoranthene	0.0083	0.079	1.66		mg/Kg	1.97	84.3	30.0	-	150		
1-Methylnaphthalene	0.0094	0.079	1.30		mg/Kg	1.97	66.0	30.0	-	150		

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SPAHA090622 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3546

Method Batch ID: MSPAHA090622 | Preparation Date: 9/6/2022 8:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MS	Lab Sample ID: SPAHA090622MS				Client Sample ID: 299692MS			Date Analyzed: 9/7/2022 1:04:00 PM				
2-Methylnaphthalene	0.0094	0.079	1.42		mg/Kg	1.97	71.4	30.0	-	150		
Pyrene	0.0083	0.079	1.59		mg/Kg	1.97	80.7	30.0	-	150		
Benzo(a)anthracene	0.0083	0.079	1.80		mg/Kg	1.97	91.4	30.0	-	150		
Chrysene	0.0083	0.079	1.54		mg/Kg	1.97	78.2	30.0	-	150		
Benzo(b)fluoranthene	0.0047	0.079	1.82		mg/Kg	1.97	92.4	30.0	-	150		
Benzo(k)fluoranthene	0.0071	0.079	1.79		mg/Kg	1.97	90.9	30.0	-	150		
Benzo(a)pyrene	0.0059	0.079	1.73		mg/Kg	1.97	87.8	30.0	-	150		
Indeno(1,2,3-cd)pyrene	0.0094	0.079	1.63		mg/Kg	1.97	82.7	30.0	-	150		
Dibenzo(a,h)anthracene	0.0035	0.079	1.63		mg/Kg	1.97	82.7	30.0	-	150		
Benzo(g,h,i)perylene	0.018	0.079	1.59		mg/Kg	1.97	80.7	30.0	-	150		
Nitrobenzene-d5			66.3		%	100	66.3	30.0	-	150		
2-Fluorobiphenyl			63.3		%	100	63.3	30.0	-	150		
p-Terphenyl-d14			67.7		%	100	67.7	30.0	-	150		
QA/QC Type: MSD	Lab Sample ID: SPAHA090622MSD				Client Sample ID: 299692MSD			Date Analyzed: 9/7/2022 1:56:00 PM				
Naphthalene	0.0094	0.079	1.45		mg/Kg	1.97	72.7	30.0	-	150	10	35.0
Acenaphthylene	0.012	0.079	1.66		mg/Kg	1.97	84.3	30.0	-	150	10	35.0
Acenaphthene	0.011	0.079	1.60		mg/Kg	1.97	81.2	30.0	-	150	9.8	35.0
Fluorene	0.0083	0.079	1.75		mg/Kg	1.97	88.8	30.0	-	150	9.6	35.0
Phenanthrene	0.0094	0.079	1.64		mg/Kg	1.97	82.1	30.0	-	150	7.6	35.0
Anthracene	0.0094	0.079	1.67		mg/Kg	1.97	84.8	30.0	-	150	8.1	35.0
Fluoranthene	0.0083	0.079	1.71		mg/Kg	1.97	86.8	30.0	-	150	3.0	35.0
1-Methylnaphthalene	0.0094	0.079	1.46		mg/Kg	1.97	74.1	30.0	-	150	12	35.0
2-Methylnaphthalene	0.0094	0.079	1.62		mg/Kg	1.97	81.6	30.0	-	150	13	35.0
Pyrene	0.0083	0.079	1.64		mg/Kg	1.97	83.2	30.0	-	150	3.1	35.0
Benzo(a)anthracene	0.0083	0.079	1.79		mg/Kg	1.97	90.9	30.0	-	150	0.56	35.0
Chrysene	0.0083	0.079	1.64		mg/Kg	1.97	83.2	30.0	-	150	6.3	35.0
Benzo(b)fluoranthene	0.0047	0.079	1.84		mg/Kg	1.97	93.4	30.0	-	150	1.1	35.0
Benzo(k)fluoranthene	0.0071	0.079	1.78		mg/Kg	1.97	90.4	30.0	-	150	0.56	35.0
Benzo(a)pyrene	0.0059	0.079	1.72		mg/Kg	1.97	87.3	30.0	-	150	0.58	35.0
Indeno(1,2,3-cd)pyrene	0.0094	0.079	1.70		mg/Kg	1.97	86.3	30.0	-	150	4.2	35.0
Dibenzo(a,h)anthracene	0.0035	0.079	1.17		mg/Kg	1.97	59.4	30.0	-	150	33	35.0
Benzo(g,h,i)perylene	0.018	0.079	1.06	S3	mg/Kg	1.97	53.8	30.0	-	150	40	35.0
Nitrobenzene-d5			75.4		%	100	75.4	30.0	-	150		
2-Fluorobiphenyl			69.5		%	100	69.5	30.0	-	150		

Preparation Batch ID: SPAHA090622 Analysis Method: EPA 8270/PAH Low Level Preparation Type: 3546

Method Batch ID: MSPAHA090622 Preparation Date: 9/6/2022 8:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MSD Lab Sample ID: SPAHA090622MSD Client Sample ID: 299692MSD Date Analyzed: 9/7/2022 1:56:00 PM												
p-Terphenyl-d14			70.9		%	100	70.9	30.0	-	150		
QA/QC Type: DUP Lab Sample ID: SPAHA090622DUP Client Sample ID: 299694DUP Date Analyzed: 9/7/2022 12:13:00 PM												
Naphthalene	0.010	0.087	0.010	U	mg/Kg						0	35.0
Acenaphthylene	0.013	0.087	0.013	U	mg/Kg						0	35.0
Acenaphthene	0.012	0.087	0.029	I	mg/Kg						3.4	35.0
Fluorene	0.0091	0.087	0.013	I	mg/Kg						0	35.0
Phenanthrene	0.010	0.087	0.020	I	mg/Kg						9.5	35.0
Anthracene	0.010	0.087	0.018	I	mg/Kg						0	35.0
Fluoranthene	0.0091	0.087	0.0091	U	mg/Kg						0	35.0
1-Methylnaphthalene	0.010	0.087	0.033	I	mg/Kg						8.7	35.0
2-Methylnaphthalene	0.010	0.087	0.046	I	mg/Kg						10	35.0
Pyrene	0.0091	0.087	0.0091	U	mg/Kg						0	35.0
Benzo(a)anthracene	0.0091	0.087	0.0091	U	mg/Kg						0	35.0
Chrysene	0.0091	0.087	0.0091	U	mg/Kg						0	35.0
Benzo(b)fluoranthene	0.0052	0.087	0.0052	U	mg/Kg						0	35.0
Benzo(k)fluoranthene	0.0078	0.087	0.0078	U	mg/Kg						0	35.0
Benzo(a)pyrene	0.0065	0.087	0.0065	U	mg/Kg						0	35.0
Indeno(1,2,3-cd)pyrene	0.010	0.087	0.010	U	mg/Kg						0	35.0
Dibenzo(a,h)anthracene	0.0039	0.087	0.0039	U	mg/Kg						0	35.0
Benzo(g,h,i)perylene	0.020	0.087	0.020	U	mg/Kg						0	35.0
Nitrobenzene-d5			61.4		%	100	61.4	30.0	-	150		
2-Fluorobiphenyl			65.0		%	100	65.0	30.0	-	150		
p-Terphenyl-d14			66.9		%	100	66.9	30.0	-	150		

Comments:

Preparation Batch ID: SPROA090622 Analysis Method: FDEP FL-PRO Preparation Type: 3546

Method Batch ID: MSPROA090622 Preparation Date: 9/6/2022 8:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB Lab Sample ID: SPROA090622MB Client Sample ID: SPROA090622MB Date Analyzed: 9/6/2022 9:20:00 PM												
Total Recoverable Pet. Hydrocarbons	3.6	5.7	3.6	U	mg/Kg							

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: SPROA090622 | Analysis Method: FDEP FL-PRO | Preparation Type: 3546

Method Batch ID: MSPROA090622 | Preparation Date: 9/6/2022 8:30:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPROA090622MB				Client Sample ID: SPROA090622MB						Date Analyzed: 9/6/2022 9:20:00 PM	
Ortho-terphenyl			5.99		mg/Kg	6.67	89.8	66.0	-	136		
Nonatriacontane(C39)			6.11		mg/Kg	6.67	91.6	36.0	-	132		
QA/QC Type: LCS	Lab Sample ID: SPROA090622LCS				Client Sample ID: SPROA090622LCS						Date Analyzed: 9/6/2022 7:57:00 PM	
Total Recoverable Pet. Hydrocarbons	3.6	5.7	25.7		mg/Kg	22.7	113	65.0	-	119		
Ortho-terphenyl			6.17		mg/Kg	6.67	92.5	66.0	-	136		
Nonatriacontane(C39)			5.60		mg/Kg	6.67	84.0	36.0	-	132		
QA/QC Type: LCSD	Lab Sample ID: SPROA090622LCSD				Client Sample ID: SPROA090622LCSD						Date Analyzed: 9/6/2022 8:39:00 PM	
Total Recoverable Pet. Hydrocarbons	3.6	5.7	21.9		mg/Kg	22.7	96.5	65.0	-	119	16	25.0
Ortho-terphenyl			5.52		mg/Kg	6.67	82.8	66.0	-	136		
Nonatriacontane(C39)			5.46		mg/Kg	6.67	81.9	36.0	-	132		
QA/QC Type: MS	Lab Sample ID: SPROA090622MS				Client Sample ID: 300018MS						Date Analyzed: 9/7/2022 3:09:00 PM	
Total Recoverable Pet. Hydrocarbons	4.0	6.3	26.5		mg/Kg	25.3	105	65.0	-	119		
Ortho-terphenyl			5.39		mg/Kg	6.67	80.8	66.0	-	136		
Nonatriacontane(C39)			8.40		mg/Kg	6.67	126	36.0	-	132		
QA/QC Type: DUP	Lab Sample ID: SPROA090622DUP				Client Sample ID: 299805DUP						Date Analyzed: 9/7/2022 1:31:00 PM	
Total Recoverable Pet. Hydrocarbons	3.9	6.1	410		mg/Kg						16	25.0
Ortho-terphenyl			11.9	S1	mg/Kg	6.67	178	66.0	-	136		
Nonatriacontane(C39)			8.50		mg/Kg	6.67	127	36.0	-	132		

Comments:

Chain of Custody Record

Company: AET

Address: Tallahassee, FL

Telephone Number: Telefax Number:

Sampled by [Print Name(s)] / Affiliation: Bobby Phillips AET

Sampler(s) Signature(s): Bobby Phillips

Environmental Testing Laboratories, Inc.
412 W. Walcott Street
Thomasville, GA 31792-4359
229/228-2592 (telephone)
229/228-2594 (telefax)
www.etl-inc.com

Page 1 of 1

Project Name: CLC#2726536

Project Number: 27110.00

Project Manager: JAY

Facility ID Number: 161894351G

REQUESTED DUE DATE: NT 1A

Item No.	Field ID No.	Sample Date	Sample Time	Grab or Composite	Matrix (see Codes)	Number of Containers	BTEX/MTBE SPLP VOC	MAVPH	PAH/TEPH MGEPH/SPLP	Remarks	Lab Number
1	DSP 1/2 @4'	9/1/22	1210	C	SO	8	X	X	X		300015
2	DSP 3/4 @4'	"	1225	"	"	8	X	X	X		016
3	DSP 5/16 @4'	"	1235	"	"	8	X	X	X		017

Shipment Method: Total Number of Containers:

← Preservatives (see Codes) ICE: ☑ Yes ☐ No

Out: 9 1 22 Via: Drop off

Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
1-3	Bobby Phillips AET	9/1/22	1925			

Cooler Number(s) / Temperature(s) (°C): 1@ 3.5

Sampling Kit Number:

Received in Lab By: Jeremy Edgerson 9-2-22 0925

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

PRESERVATIVE CODES: H = Hydrochloric acid S = Sulfuric acid N = Nitric Na = Sodium Hydroxide O = Other (specify)

PRESERVATIVE CODES: SOIL VOCS MS = Methanol / Sodium Bisulfate MD = Methanol / DI Water

ETL PROJECT NO. 22-3311

ENVIRONMENTAL TESTING LABORATORIES INC.

Project Receipt Summary

22-3311

Project Details

Client: ADVANCED ENVIRONMENTAL TECHNOLOGIES

Project Name: CK#2726536

Shipping and Receiving

Date/Time Received: 9/2/2022 9:25:00 AM

Sampling Personnel: BOBBY PHILLIPS

Shipping Method: Laboratory Courier

Shipping Tracking Number:

If present, were cooler custody seals intact?

○ Yes ○ No ◉ N/A

If present, were sample bottle custody seals intact

○ Yes ○ No ◉ N/A

Thermal Preservation

Cooler Temp Method: Sample Temperature

Thermometer ID: 160372413

Number of Coolers: 1

Were cooler temperatues in compliance? (0.1-6.0C)

◉ Yes ○ No ○ N/A

Cooler Temperatures: 3.5

Chain of Custody

Was the chain-of-custody received in coolers?	◉ Yes	○ No	○ N/A
Was the chain-of-custody signed and properly relinquished?	◉ Yes	○ No	○ N/A
Does the chain-of-custody agree with samples and analyses?	◉ Yes	○ No	○ N/A

Container Receipt

Were samples received in appropriate bottleware for analyses?	◉ Yes	○ No	○ N/A
Was sufficient volume submitted for analyses requested?	◉ Yes	○ No	○ N/A
Were samples received within method holding times?	◉ Yes	○ No	○ N/A
Were VOA vials received with zero headspace?	○ Yes	○ No	◉ N/A
Were aqeuous samples received at an acceptable pH?	◉ Yes	○ No	○ N/A

pH Test Strip Manufacturer / Lot #: MQUANT/HC042657

Comments

I certify I have answered the questions contained herein to the best of my knowledge and have affixed labels with unique IDs onto each sample container received. I certify any discrepancies regarding the samples as received by the laboratory have been documented completely in the comments section of this form.

Jeremy Edenfield

Jeremy Edenfield

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

22-3311

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
300015	**DSP 1/2@4'**	**SOILS**	☐	☐	☐
300015-A1 (BTEXM)					
300015-A2 (BTEXM)					
300015-A3 (BTEXM)					
300015-A4 (MaVPH)					
300015-A5 (MaVPH)					
300015-A6 (MaVPH)					
300015-B1 (PAH/TRPH/Ma EPH/ SPLP/%M)					
300015-D1 (SPLP VOC)					
300016	**DSP 3/4@4'**	**SOILS**	☐	☐	☐
300016-A1 (BTEXM)					
300016-A2 (BTEXM)					
300016-A3 (BTEXM)					
300016-A4 (MaVPH)					
300016-A5 (MaVPH)					
300016-A6 (MaVPH)					
300016-B1 (PAH/TRPH/Ma EPH/ SPLP/%M)					
300016-D1 (SPLP VOC)					
300017	**DSP 5/6@4'**	**SOILS**	☐	☐	☐
300017-A1 (MaVPH)					
300017-A2 (MaVPH)					
300017-A3 (MaVPH)					
300017-A4 (BTEXM)					
300017-A5 (BTEXM)					
300017-A6 (BTEXM)					
300017-B1 (PAH/TRPH/Ma EPH/ SPLP/%M)					
300017-D1 (SPLP VOC)					

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

22-3311

Project Bottle Count Summary

Container Type	Preservative	Number of Containers
25g Encore Sampler	NONE	3
40mL VOA Vial	MeOH/ICE	12
40mL VOA Vial w/ Stirbar	DiH2O/ICE	6
Glass Jar	NONE	3
	Total	24

SITE 5 – Batman Auto Repair

No assessment information available

SITE 6 – Harry's Paint and Body Shop and Speed Queen Laundry

No assessment information available

SITE 8 – Rainbow Food Store

NAM Report, Revision One, dated July 10, 2015 (text, figures, tables, and laboratory analytical data) – 68 pages

SRCO, dated August 29, 2016 – 15 pages

CAR, dated March 5, 1996 (text, figures, tables, and laboratory analytical data) – 100 pages

ECT Environmental Consulting & Technology, Inc.

July 10, 2015
ECT No. 140444-0100

Ms. Vanetta Thomas
City of Jacksonville
Environmental and Compliance Department
Environmental Quality Division
214 North Hogan Street, Fifth Floor
Ed Ball Building
Jacksonville, Florida 32202

Re: Natural Attenuation Monitoring Report, Revision One
Rainbow Food Stores of Jacksonville
12615 North Main Street
Jacksonville, Duval County, Florida
FDEP Facility Identification No. 168507117
Discharge Date: December 27, 1988 (EDI), Score: 51
Purchase Order No. AA79F2 (PRP No. 805-006A)

Dear Ms. Thomas:

Environmental Consulting & Technology, Inc. (ECT) was authorized by Florida Department of Environmental Protection (FDEP) and City of Jacksonville Environmental Quality Division (EQD) on June 11, 2014 to conduct site sampling activities in accordance with the above referenced Purchase Order (Appendix A). Work was performed under the guidelines of Chapter 62-780, Florida Administrative Code (F.A.C.). A site location map is presented as Figure 1 and a site plan is included as Figure 2.

The following tasks were performed on April 15, 2015, as part of this authorization:

- Collected water level measurements from monitoring wells MW-7, MW-8, MW-9, MW-16, and MW-17.
- Sampled monitoring wells MW-7, MW-9, MW-16, and MW-17 for laboratory analysis using Environmental Protection Agency (EPA) Methods 8260B BTEX/MTBE. Monitoring wells MW-16 and MW-17 were also analyzed for EPA 8270C PAHs and for total recoverable petroleum hydrocarbons (TRPH) by the Florida Petroleum Residual Organic (FL-PRO) Method.

3701 Northwest 98th Street
Gainesville, FL 32606

(352) 332-0444

FAX
(352) 332-6722

An Equal Opportunity/Affirmative Action Employer
www.ectinc.com

- Prepared this letter report.

SITE HISTORY

A petroleum discharge at this facility was reported to FDEP on December 27, 1988. The site was found eligible for the Early Detection Incentive (EDI) program on December 28, 1989. The underground storage tanks (USTs) and fueling system were removed from the Rainbow Food Store facility in 1989. Between 1995 and 2007, at least 13 shallow monitoring wells and 5 deep monitoring wells were installed by previous consultants to delineate the groundwater contaminant plume. Handex of Florida (Handex) conducted a limited source removal in 2005 adjacent to the former tank farm. In 2007, Handex installed numerous deep soil borings on the properties to the north and northwest of the facility after drinking water wells located northwest of the facility were found to be impacted with petroleum constituents.

ECT assumed contractor duties for the Rainbow Food Store site in 2008. ECT installed shallow, intermediate, and deep monitoring wells along the northern and northwestern edge of the property to determine if the Rainbow Food Store facility was the source of the offsite contamination. Sampling results indicated that the Rainbow Food Store property was not the source of the offsite contamination. In 2009, Post Active Remediation Monitoring (PARM) commenced and ECT began quarterly well sampling.

During 2009 and 2010, concentrations of ethylbenzene and naphthalene fluctuated in monitoring wells MW-5 and MW-9. ECT recommended episodic remediation to bring the concentrations below the Groundwater Cleanup Target Levels (GCTLs) established in Chapter 62-777 F.A.C. EQD requested that an AS/SVE pilot test be conducted. An 8-hour pilot test was conducted in November 2011. Post pilot test groundwater sampling showed that concentrations were below GCTLs in MW-5 and that ethylbenzene remained above GCTLs in MW-9. ECT recommended that site wells be sampled for two additional quarters under Natural Attenuation Monitoring (NAM). The EQD requested that a new monitoring well be installed southwest of monitoring well MW-16 in the FDOT right-of-way.

Under the previous work order in 2012, ECT applied for an FDOT right-of-way permit to install the right-of-way monitoring well. Issuance of the permit was delayed and ECT completed the remainder of the work order without installing the right-of-way well. ECT personnel sampled monitoring wells MW-1, MW-5, MW-7, MW-8, MW-9, and MW-16 on September 28, 2012. Groundwater concentrations in all the tested wells were below GCTLs.

Work Order 2013-16-W4131A was approved on January 14, 2013 for two quarters of monitoring. Under Event 1 of this work order, ECT obtained the FDOT right-of-way permit on September 20, 2013 to install one monitoring well into the western right-of-way of U.S. Highway 17. On October 17, 2013, ECT personnel oversaw the installation of one 15 feet deep monitoring well in the western right-of-way of U.S. Highway 17. No soil analytical samples were collected from the well installation. ECT personnel collected groundwater samples from monitoring wells MW-1, MW-5, MW-7, MW-8, MW-9, MW-16, and newly installed MW-17 on October 21, 2013. Monitoring wells MW-9 and MW-16 yielded concentrations above GCTLs. The remaining sampled wells yielded concentrations below GCTLs. ECT recommended that the NAM continue under the current work order.

Under Event 2 of this work order, ECT personnel collected groundwater samples from monitoring wells MW-1, MW-5, MW-7, MW-8, MW-9, MW-16, and MW-17. Prior to sample collection from the monitoring wells, depth-to-water measurements were obtained from all sampled wells. Groundwater concentrations in monitoring wells MW-1, MW-5, MW-7, MW-8, MW-9, and MW-17 were below GCTLs. Offsite monitoring well MW-16 yielded ethylbenzene at 399 micrograms per liter (µg/L), total xylene at 1,060 µg/L, 1-methylnaphthalene at 40.6 µg/L, 2-methylnaphthalene at 49.4 µg/L, naphthalene at 176 µg/L, and TRPH at 6,920 µg/L, all above GCTLs. All other detected contaminants were below GCTLs. With the exception of offsite well MW-16, concentrations on site have decreased since the last sampling event and are below GCTLs. ECT recommended that the NAM continue under a new work order.

FIELD METHODOLOGIES

OCTOBER 16, 2014

ECT personnel collected groundwater samples from monitoring wells MW-7, MW-8, MW-9, MW-16, and MW-17. Prior to sample collection from the monitoring wells, depth-to-water measurements were obtained from all sampled wells. Groundwater was purged from the wells using a peristaltic pump in accordance with Chapter 62-160, F.A.C., specifically DEP-SOP-001/01. Groundwater samples were collected in accordance with DEP-SOP-001/01. Groundwater sampling logs, field notes, and equipment calibration forms are included in Appendix B.

Groundwater samples were submitted to Advanced Environmental Laboratories (AEL) of Jacksonville, Florida for laboratory analysis using EPA Methods 8260 BTEX/MTBE and 8270C PAHs, and for TRPH by the FL-PRO method. The NAM parameters (iron, nitrate, orthophosphate, sulfate, and methane) were analyzed in groundwater samples from wells MW-7, MW-8, and MW-9 during this monitoring event, and discussion of that data is included in this report. Samples were collected, labeled, and placed on ice for delivery to AEL in Jacksonville, Florida.

APRIL 15, 2015

ECT personnel collected groundwater samples from monitoring wells MW-7, MW-8, MW-9, MW-16, and MW-17. Prior to sample collection from the monitoring wells, depth-to-water measurements were obtained from all sampled wells. Groundwater was purged from the wells using a peristaltic pump in accordance with Chapter 62-160, F.A.C., specifically DEP-SOP-001/01. Groundwater samples were collected in accordance with DEP-SOP-001/01. Groundwater sampling logs, field notes, and equipment calibration forms are included in Appendix B.

Groundwater samples were submitted to AEL) of Jacksonville, Florida for laboratory analysis using EPA Methods 8260 BTEX/MTBE and 8270C PAHs, and for TRPH by the FL-PRO method. Samples were collected, labeled, and placed on ice for delivery to AEL in Jacksonville, Florida.

GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

OCTOBER 16, 2014 and APRIL 15, 2015

Average depth to water at the site on October 16, 2014 was 3.00 feet below land surface (ft bls). Table 1 includes current and historical groundwater level information. Direction of groundwater flow in the upper surficial aquifer beneath the subject site is toward the southwest. Groundwater contours for October 16, 2014 data are presented in Figure 3. Average depth to water at the site on April 15, 2015 was 4.07 ft bls. Direction of flow in the upper surficial aquifer beneath the subject site is toward the southwest. Figure 4 illustrates the direction of flow at the site for April 15, 2015.

GROUNDWATER LABORATORY ANALYTICAL RESULTS

PETROLEUM PARAMETERS

Monitoring wells MW-7, MW-8, MW-9, MW-16, and MW-17 were sampled on October 16, 2014. Groundwater concentrations in monitoring wells MW-7, MW-8, MW-9, and MW-17 were below GCTLs. Offsite monitoring well MW-16 yielded ethylbenzene at 170 µg/L, total xylene at 89 µg/L, 1-methylnaphthalene at 23 µg/L, 2-methylnaphthalene at 26 µg/L, naphthalene at 85 µg/L, and TRPH at 4,200 µg/L. Each of those six parameters were measured above the applicable method detection limit; and, ethylbenzene, total xylene, and naphthalene were above GCTLs. The applicable other detected contaminants were below GCTLs.

For the April 15, 2015, sampling event only monitoring wells MW-7, MW-9, MW-16, and MW-17 were sampled. Groundwater concentrations in monitoring wells MW-7, MW-9, and MW-17 were below GCTLs. Offsite monitoring well MW-16 yielded ethylbenzene at 200 µg/L, total xylene at 120 µg/L, 1-methylnaphthalene at 49 µg/L, 2-methylnaphthalene at 59 µg/L, naphthalene at 200 µg/L, all above GCTLs. All other detected contaminants

were below GCTLs. With the exception of offsite well MW-16, concentrations on site have decreased since the last sampling event and are below GCTLs.

Analytical results from both the October 16, 2014, and April 15, 2015, sampling events are summarized in Table 2. Contaminant concentrations from the sampling events are shown on Figure 5 and 6. A copy of the AEL analytical report is included in Appendix C.

Plots of concentration changes versus time for the two monitoring events covered in this report, and concentration data versus distance from the center of the plume based on data from the April monitoring results are included in Appendix D.

NAM PARAMETERS

The FDEP scope of work for the October 16, 2014, monitoring event included the analysis of NAM parameters in wells MW-7, MW-8, and MW-9. The NAM parameters selected by the regulatory authority included nitrate, iron, orthophosphate, sulfate, and methane. The purpose of sampling for the NAM parameters is to assess the potential for biodegradation and to examine for the presence macronutrients or metabolic byproducts. This information is then used to evaluate whether the current subsurface environment is conducive to natural attenuation via either the aerobic or anaerobic pathways. Table 2 presents a summary of the laboratory analyses for the NAM parameters specified in the purchase order. DO levels and ORP data is also included in Table 3.

Aerobic degradation of hydrocarbons is the most effective biodegradation route for petroleum hydrocarbons. Oxygen is the electron acceptor used in aerobic processes. The primary anaerobic electron acceptors are, in order of increasing energy, produced by the metabolism of hydrocarbons, nitrates, sulfates, and iron. Oxygen levels in the subsurface of this site when the NAM parameters were monitored were below 2 parts per million (ppm), which is the level at which aerobic degradation of hydrocarbons proceeds effectively. Therefore, natural attenuation processes involving aerobic biodegradation may not effectively occur. Higher DO levels were observed during the more recent sampling event, and in some instances these concentrations would facilitate aerobic biodegradation.

Facultative anaerobic heterotrophs use nitrate as an electron acceptor. After aerobic hydrocarbon degradation, this would be the most favorable natural attenuation pathway for the metabolism of hydrocarbons. Nitrate is also a macronutrient that facilities the growth of the microbial population in the subsurface. Nitrates are not present in the subsurface of the site so this is not a viable pathway for hydrocarbon degradation, and its absence could also inhibit the expansion of the microbe population at the site.

Sulfate as an electron acceptor also requires indigenous heterotrophs, but yields less energy during metabolism than occurs with the oxygen and nitrate electron acceptors. Sulfate is present in the site subsurface, but at relatively low concentrations. Because of the low energy produced by this pathway and the relatively low concentrations of sulfate in the subsurface, the possibility of timely biodegradation involving the sulfate pathway is low.

Iron is the least effective of the aerobic electron acceptors. Biodegradation involving iron occurs as ferric iron is oxidized to ferrous iron. Iron is available in the subsurface at the Rainbow Food Store site, but with this pathway alone degradation of hydrocarbons at a sufficient rate to reach GCTLs in a reasonable length of time is improbable.

Methane is a possible indicator that methanogenic degradation has occurred at a site. Its presence in the subsurface does not, however, prove that hydrocarbons are being degraded by this process. The levels of methane at this site are low. This could be because the methane has volatilized or there may have never been much present or produced at the site. Without more detailed studies, it cannot be assumed that methanogenic degradation of the petroleum hydrocarbons is occurring.

Orthophosphate is a macronutrient that facilitates organic activity. As shown by the data in Table 3, this compound is lacking in the subsurface, which could lead to decreased effectiveness of bioremediation and a stunted microbial consortium in the subsurface of the site.

GRAPHICAL EVALUATIONS OF GROUNDWATER DATA

During the previous monitoring event five compounds ethylbenzene, total xylene, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene, were detected in groundwater samples at concentrations in excess of their applicable GCTLs in samples collected from MW-16. Isoconcentration contours of ethylbenzene, total xylene, and naphthalene as observed during the October 16, 2014, monitoring event are provided as Figures 7 thru 9. In the April 15, 2015, monitoring event, all five parameters were the compounds that were found at concentrations exceeding the applicable GCTLs. Isoconcentration plots of ethylbenzene (Figure 10), total xylene (Figure 11), naphthalene (Figure 12), 1-methylnaphthalene (Figure 13), and 2-methylnaphthalene (Figure 14) for that sampling event are also provided.

The natural attenuation parameters measured on October 16, 2014, are presented on a site plan on Figure 15. Figures 16 through 19 shows the isoconcentration maps of the detected natural attenuation parameters, iron, nitrate, sulfate, and methane, respectively. The figures and plots referenced in this section are based on data from between one and three points. As such, constructing contours from this limited number of data points involves a considerable amount of interpretation and assumptions.

CONCLUSIONS

SUMMARY

Groundwater samples were collected from monitoring wells MW-7, MW-9, MW-16, and MW-17 on January 21, 2014. Concentrations in the applicable onsite monitoring wells were detected below the GCTLs established in Chapter 62-777, F.A.C. Groundwater samples collected from offsite monitoring well MW-16 yielded ethylbenzene, total xylenes, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene concentrations above GCTLs. In general, the detected concentrations in the onsite wells have decreased since the previous sampling event.

RECOMMENDATIONS

Based on the groundwater analytical results collected on April 15, 2015, all onsite wells have exhibited concentrations below applicable GCTLs for two consecutive semi-annual sampling events. No Further Action (NFA) criteria for the site's groundwater media appear to have been met. Thus, the following recommendations in order to close out the site in relation to the discharge dated December 27, 1988. Based on a review of historical soil and groundwater data as it relates to the discharge, three confirmatory soil borings are recommended to assign NFA status to the soil media. The locations for these three soil borings should be as follows:

- Adjacent to MW-9.
- Adjacent to MW-5.
- Half-way between MW-5 and MW-9.

Each boring will be screened at 1-ft intervals to 1 ft below the water table using an OVA-FID. The highest net OVA interval in the vadose zone for each boring will be sampled for lab analysis. If none of the net OVA readings exceed 10 ppm, then one sample will be collected from one of the borings in the vadose zone. Each boring should be sampled for BTEX and MTBE (EPA Method 8260, PAHs EPA Method 8270), and TRPH (FL-PRO Method).

Other recommended closure activities include the following: abandon 26 onsite monitoring wells and 3 off site monitoring wells; and, document site closure activities with photos.

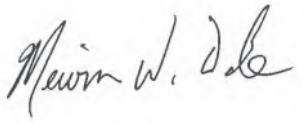
Offsite well MW-16 continues to exhibit concentrations above applicable GCTLs. Site assessment activities have indicated that the Rainbow Food Store site is not the source of contamination in this well. Additional investigation is recommended to determine the source of impacts within this well.

If you have any questions or concerns, please contact me at 352.332.0444.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.





Alan R. Blackwell
Associate Scientist

Mervin W. Dale, P.G.
Staff Scientist II

ARB/saw

APPENDICES

APPENDIX A—FDEP PURCHASE ORDER NO. AA79F2 AND ACCESS AGREEMENTS
APPENDIX B—FIELD NOTES, GROUNDWATER SAMPLING LOGS, AND EQUIPMENT CALIBRATION LOGS
APPENDIX C—LABORATORY ANALYTICAL REPORTS
APPENDIX D—GRAPHICAL TREND PLOTS

cc: Mr. Mike Shahala, 9321 N. Cypress Shore Lane, Jacksonville, FL 32257
Mr. Mark West, 3039 Southside Boulevard, Jacksonville, FL 32216

NATURAL ATTENUATION MONITORING
PROFESSIONAL REVIEW CERTIFICATION

Rainbow Food Stores of Jacksonville
12615 North Main Street
Jacksonville, Duval County, Florida
FDEP Facility Identification No. 168507117
Score: 51
Discharge Date: December 27, 1988 (EDI)
Purchase Order No. AA79F2 (PRP No. 805-006A)

The technical contents of this Natural Attenuation Monitoring Report for The Rainbow Food Store site, located in Jacksonville, Duval County, Florida, represent our professional interpretations arrived at in accordance with generally accepted hydrogeologic practices. The findings and results of this report are the sole use and benefit of Rainbow Food Stores and the City of Jacksonville, Environmental and Compliance Department. Utilization of this report by other parties is at their risk, and Environmental Consulting & Technology, Inc. is not liable for consequences or damages extending therefrom. No warranties are implied or intended.

I certify that this report, including the geological and hydrogeological interpretations, has been produced by me and by staff under my supervision.

Reviewed by: _____

Mervin W. Dale, P.G.
Florida Professional Geologist No. 001917

Date: 7/10/01



ECT Environmental Consulting & Technology, Inc.

TABLES

TABLE 1: GROUNDWATER ELEVATION TABLE

All Measurements = Feet
UNK = Unknown
NI = Not Installed
NM = Not Measured

Facility Name: Rainbow Food Store **Facility I. D. No. 168507117**

WELL NO.	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
DIAMETER	2"	2"	2"	2"	2"	2"
WELL DEPTH	11.39	11.26	11.41	11.27	11.37	11.39
SCREEN INTERVAL	1.39 - 11.39	1.26 - 11.26	1.41 - 11.41	1.27 - 11.27	1.37 - 11.37	1.39 - 11.39
TOC ELEVATION	99.04	98.41	98.19	98.85	98.70	98.97

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
08/07/95	95.26	3.78		95.32	3.09		94.92	3.27			NI			NI			NI	
08/18/95	94.44	4.60		94.34	4.07		94.29	3.90		94.43	4.42		94.48	4.22		94.47	4.50	
09/19/85	95.97	3.07		95.86	2.55		95.83	2.36		95.97	2.88		96.02	2.68		96.00	2.97	
02/09/96	94.54	4.50		94.47	3.94		94.40	3.79		94.55	4.30		94.59	4.11		94.57	4.40	
05/28/96	95.72	3.32		95.60	2.81		95.57	2.62			NM		95.75	2.95			NM	
08/21/02	94.03	5.01		93.99	4.42		93.90	4.29		94.05	4.80		94.08	4.62		94.08	4.89	
09/03/04		NM			NM			NM			NM			NM		95.66	3.31	
09/15/05		NM			NM		94.75	3.44		95.10	3.75		94.78	3.92		ABANDONED		
12/15/05		NM			NM			NM			NM			NM				
02/15/06		NM			NM			NM			NM			NM				
04/10/06		NM			NM			NM			NM			NM				
07/19/06		NM			NM			NM			NM		92.38	6.32				
11/19/07		NM			NM			NM			NM			NM				
12/15/08	93.41	5.63			NM			NM		93.39	5.46		93.35	5.35				
11/19/09	93.61	5.43			NM			NM		93.60	5.25		93.60	5.10				
02/11/10	95.13	3.91											95.09	3.61				
08/09/10	92.40	6.64											92.42	6.28				
07/12/11													92.09	6.61				
12/02/11													91.17	7.53				
09/28/12	95.13	3.91											95.11	3.59				
10/21/13	94.07	4.97											94.01	4.69				
01/21/14	94.72	4.32											94.67	4.03				

TABLE 1: GROUNDWATER ELEVATION TABLE

All Measurements = Feet
UNK = Unknown
NI = Not Installed
NM = Not Measured

Facility Name: Rainbow Food Store **Facility I. D. No. 168507117**

WELL NO.	MW-6R	MW-7	MW-8	MW-9	MW-10	MW-11
DIAMETER	2"	2"	2"	2"	2"	2"
WELL DEPTH	12.00	11.41	11.42	11.37	11.70	11.72
SCREEN INTERVAL	2 - 12	1.41 - 11.41	1.42 - 11.42	1.37 - 11.37	1.70 - 11.70	1.72 - 11.72
TOC ELEVATION	98.98	98.57	99.29	98.93	99.26	99.31

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
08/18/95		NI		94.39	4.18		94.49	4.80		94.43	4.50			NI			NI	
09/19/85		NI		95.94	2.63		96.02	3.27		95.98	2.95			NI			NI	
02/09/96		NI		94.51	4.06		94.60	4.69		94.55	4.38		94.50	4.76		94.54	4.77	
05/28/96		NI		95.69	2.88			NM			NM			NM			NM	
08/21/02		NI		94.01	4.56		94.11	5.18		94.07	4.86		94.00	5.26		94.05	5.26	
09/03/04		NI			NM			NM			NM			NM			NM	
09/15/05	94.98	4.00			NM			NM		94.97	3.96			NM			NM	
12/15/05		NM		94.60	3.97			NM		94.64	4.29			NM			NM	
02/15/06		NM		95.14	3.43			NM		95.15	3.78			NM			NM	
04/10/06		NM		94.31	4.26			NM		94.35	4.58			NM			NM	
07/19/06		NM		92.31	6.26			NM		92.38	6.55			NM			NM	
11/19/07		NM			NM			NM			NM			NM			NM	
12/15/08	93.40	5.58		93.34	5.23		93.43	5.86		93.37	5.56			NM			NM	
11/19/09	93.62	5.36			NM		93.66	5.63		93.61	5.32			NM			NM	
02/11/10	95.09	3.89		95.06	3.51		95.15	4.14		95.09	3.84					95.06	4.25	
08/09/10	92.46	6.52		92.39	6.18		92.47	6.82		92.43	6.50							
07/12/11	92.14	6.84		92.07	6.50					92.12	6.81							
12/02/11	91.22	7.76		91.14	7.43					91.18	7.75							
09/28/12				95.07	3.50		95.19	4.10		95.13	3.80							
10/21/13				93.99	4.58		94.08	5.21		94.03	4.90							
01/21/14				94.67	3.90		94.76	4.53		94.70	4.23							
10/16/14				95.38	3.19		95.53	3.76		95.45	3.48							
04/15/15				94.27	4.30		94.37	4.92		94.30	4.63							

TABLE 1: GROUNDWATER ELEVATION TABLE

All Measurements = Feet
UNK = Unknown
NI = Not Installed
NM = Not Measured

Facility Name: Rainbow Food Store **Facility I. D. No. 168507117**

WELL NO.	MW-12	MW-13	MW-14	MW-15	MW-16	IW-1
DIAMETER	2"	2"	2"	2"	2"	2"
WELL DEPTH	11.53	12.68	12.00	12.00	12.00	30.00
SCREEN INTERVAL	1.53 - 11.53	2.68 - 12.68	2 - 12	2 - 12	2 - 12	25 - 30
TOC ELEVATION	98.20	98.37	98.60	98.26	97.76	98.92

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
02/09/96	94.50	3.70		94.55	3.82			NI			NI			NI			NI	
05/28/96		NM		95.73	2.64			NI			NI			NI			NI	
08/21/02	93.99	4.21		94.03	4.34			NI			NI			NI			NI	
09/03/04		NM			NM			NI			NI			NI			NI	
09/15/05	94.86	3.34			NM			NI			NI			NI			NI	
12/15/05		NM		94.61	3.76			NI			NI			NI			NI	
02/15/06		NM		95.13	3.24			NI			NI			NI			NI	
04/10/06		NM		94.34	4.03			NI			NI			NI			NI	
07/19/06		NM		92.32	6.05			NI			NI			NI			NI	
11/19/07		NM			NM			NI			NI			NI			NI	
12/15/08		NM			NM		93.61	4.99		93.58	4.68		93.53	4.23		93.01	5.91	
11/19/09		NM			NM		93.71	4.89			NM			NM			NM	
01/13/10		NM			NM								94.22	3.54				
02/11/10	95.00	3.20		95.07	3.30													
07/12/11	92.02	6.18		92.06	6.31													
12/02/11				91.13	7.24													
09/28/12													95.17	2.59				
10/21/13													94.16	3.60				
01/21/14													94.81	2.95				
10/16/14													95.41	2.35				
04/15/15													94.44	3.32				

TABLE 1: GROUNDWATER ELEVATION TABLE

All Measurements = Feet
UNK = Unknown
NI = Not Installed
NM = Not Measured

Facility Name: Rainbow Food Store **Facility I. D. No. 168507117**

WELL NO.	IW-2	IW-3	IW-4	DW-1	DW-2	DW-3
DIAMETER	2"	2"	2"	2"	2"	2"
WELL DEPTH	30.00	30.00	30.00	32.34	30.42	105
SCREEN INTERVAL	25 - 30	25 - 30	25 - 30	27.24 - 32.34	25.42 - 30.42	100 - 105
TOC ELEVATION	98.78	98.30	97.67	98.83	98.98	98.21

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
02/09/96		NI			NI			NI		94.20	4.63			NI			NI	
05/28/96		NI			NI			NI			NM			NM			NI	
08/21/02		NI			NI			NI		93.57	5.26		93.52	5.46			NI	
09/03/04		NI			NI			NI		94.82	4.01			NM			NI	
09/15/05		NI			NI			NI		ABANDONED			94.41	4.57			NI	
12/15/05		NI			NI			NI						NM			NI	
02/15/06		NI			NI			NI						NM			NI	
04/10/06		NI			NI			NI						NM			NI	
07/19/06		NI			NI			NI						NM			NI	
11/19/07		NI			NI			NI						NM		80.76	17.45	
12/15/08	93.17	5.61		93.31	4.99		93.13	4.54					92.89	6.09		80.80	17.41	
01/13/10							93.87	3.80										

TABLE 1: GROUNDWATER ELEVATION TABLE

All Measurements = Feet
UNK = Unknown
NI = Not Installed
NM = Not Measured

Facility Name: Rainbow Food Store **Facility I. D. No. 168507117**

WELL NO.	DW-4	DW-5	DW-6	DW-7	DW-8	DW-9
DIAMETER	2"	2"	2"	2"	2"	2"
WELL DEPTH	105	105	50.00	50.00	50.00	50.00
SCREEN INTERVAL	100 - 105	100 - 105	45 - 50	45 - 50	45 - 50	45 - 50
TOC ELEVATION	99.32	97.88	98.96	98.33	98.45	97.72

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
11/19/07	81.19	18.13		80.85	17.03			NI			NI			NI			NI	
12/15/08	81.28	18.04		80.92	16.96		88.22	10.74		85.71	12.62		85.45	13.00		86.71	11.01	
01/13/10																88.03	9.69	

WELL NO.	SVE-PT1	MW-17				
DIAMETER	4"	2"				
WELL DEPTH	12.00	15.00				
SCREEN INTERVAL	2.00 - 10.00	3.00-15.00				
TOC ELEVATION		97.43				

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
12/02/11		7.39																
10/21/13				93.96	3.47													
01/21/14				94.71	2.72													
10/16/14				95.22	2.21													
04/15/15				94.24	3.19													

Sources: Handex, 2007. ECT, 2009, 2010, 2011,2012, 2013, 2014 and 2015.

TABLE 2: GROUNDWATER ANALYTICAL SUMMARY

NA = Not Analyzed
µg/L = micrograms per liter
mg/L = miligrams per liter
ND = non detected

< = Below Method Detection Limit U = Not Detected
I = Between Method Detection Limit and Practical Quantitation Limit
* = Offsite Monitoring Wells for Imminent Threat Investigation

Facility Name: Rainbow Food Store
Facility I. D. No. 168507117

Sample																	
Location	Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
MW-1	03/23/95	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/18/95	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.39 U	0.39 U	0.39 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.32 U	0.32 U	0.32 U	NA	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66U	0.20 U	NA	NA	0.93	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
MW-2	03/23/95	< 1.0	< 1.0	< 1.0	< 1.0	3	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/18/95	< 1.0	< 1.0	< 1.0	< 1.0	2	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
MW-3	03/23/95	< 1.0	< 1.0	< 1.0	< 1.0	3	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/18/95	< 1.0	< 1.0	< 1.0	< 1.0	3	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	< 0.16	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
MW-4	08/18/95	**2**	< 1.0	20	13	1	NA	NA	**27**	**30**	**42**	1100	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	13.0	17.2	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	< 0.16	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	4.2	0.18 U	NA	NA	NA	NA	NA	NA
MW-5	08/18/95	**180**	32	**750**	**1300**	**95**	NA	NA	**240**	**35**	**65**	1000	NA	NA	NA	NA	NA
	02/09/96	NA	NA	NA	NA	NA	< 0.010	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	**61.7**	**117**	< 2.0	NA	NA	13.5	< 2.1	< 2.1	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.78	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	07/19/06	< 0.21	3.7	**47**	**157**	< 0.35	NA	NA	13	5.4	7.9	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	2.5	1.3	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.38 I	15	1.2 I	0.23 U	NA	NA	9.7	0.66	0.33 I	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.44 I	20	12	0.31 U	NA	NA	13	2.9	5.1	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	13	10	0.31 U	NA	NA	**26**	6.4	13	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.34	0.52 U	0.34 U	NA	NA	6.0	1.6	3.0	NA	NA	NA	NA	NA	NA
	12/02/11	0.20 U	0.20	1.1	0.52 U	0.34 U	NA	NA	2.3	0.72	0.85	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.35 U	0.35 U	0.35 U	NA	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66 U	0.20 U	NA	NA	0.33 U	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA

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Facility Name: Rainbow Food Store
Facility I. D. No. 168507117

Sample																	
Location	Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
MW-6	08/18/95	< 1.0	1	< 1.0	< 1.0	3	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.1	< 2.1	NA	NA	NA	NA	NA	NA
	09/03/04	< 0.30	< 0.29	< 0.27	< 0.86	< 0.31	NA	NA	2.2	0.26 I	0.62 I	NA	NA	NA	NA	NA	NA
MW-6R	09/15/05	< 0.21	< 0.23	3.7	< 0.63	< 0.35	NA	NA	5.5	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	12/02/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
MW-7	08/18/95	**1**	1	< 1.0	< 1.0	1	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	12/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	1.1	0.97	< 0.18	NA	NA	NA	NA	NA	NA
	02/14/06	< 0.21	< 0.23	0.92	< 0.63	< 0.35	NA	NA	2.7	1.4	0.38 I	NA	NA	NA	NA	NA	NA
	04/10/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.40 I	1.3	< 0.18	NA	NA	NA	NA	NA	NA
	07/19/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.69	0.52	0.24 I	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.24 I	0.18 U	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	12/02/11	0.20 U	0.20 U	3.0	0.52 U	0.34 U	NA	NA	0.63 I	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.33 U	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66 U	0.20 U	NA	NA	0.33 U	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
	10/16/14	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	NA	NA	NA	NA	38	5.2	0.050 U	43	ND
	04/15/15	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	08/18/95	< 1.0	1	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.33 U	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66 U	0.20 U	NA	NA	0.34 I	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
	10/16/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38	5.9	0.050 U	32	ND

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Sample																	
Location	Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
MW-9	08/18/95	**350**	15	**560**	**95**	31	NA	NA	**170**	**48**	**81**	2200	NA	NA	NA	NA	NA
	02/09/96	NA	NA	NA	NA	NA	< 0.010	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/22/02	**10.9**	< 2.0	28.4	< 6.0	< 2.0	NA	NA	**54.1**	11.5	16.1	NA	NA	NA	NA	NA	NA
	09/15/05	**3.2**	1.5 I	**58**	< 5.29 I	< 1.1	NA	NA	**100**	20	26	NA	NA	NA	NA	NA	NA
	12/15/05	**1.4**	0.68 I	25	1.72 I	< 0.35	NA	NA	**41**	11	9.8	NA	NA	NA	NA	NA	NA
	02/14/06	**1.5**	0.99	**33**	3.25 I	< 0.35	NA	NA	**42**	7.7	6.1	NA	NA	NA	NA	NA	NA
	04/10/06	**1.9**	1.3	**40**	3.76 I	< 0.35	NA	NA	**120**	27	**32**	NA	NA	NA	NA	NA	NA
	07/19/06	**2.9**	1.4	**69**	4.13	< 0.35	NA	NA	**150**	**40**	**52**	NA	NA	NA	NA	NA	NA
	12/15/08	0.66	0.50 U	7.2	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.38 I	0.28 U	**33**	3.1	0.23 U	NA	NA	**99**	12	5.0	NA	NA	NA	NA	NA	NA
	02/11/10	0.32 I	0.28 U	14	1.4 I	0.31 U	NA	NA	**30**	6.0	2.6	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.34 I	30	0.91 I	0.31 U	NA	NA	**22**	6.4	4.2	NA	NA	NA	NA	NA	NA
	07/12/11	0.45	0.25	12.6	0.82	0.34 U	NA	NA	**23.5**	4.0	0.66	NA	NA	NA	NA	NA	NA
	12/02/11	0.23 I	0.26 I	**35.1**	1.7 I	0.34 U	NA	NA	10.2	2.2 I	0.47 I	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	5.7	0.50 U	0.21 U	NA	NA	0.69 I	0.39 U	0.39 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 I	0.20 U	**38.8**	1.4 I	0.21 U	NA	NA	**18.1**	4.6	0.44 I	NA	NA	NA	NA	NA	NA
	01/21/14	0.27 I	0.20 U	30.2	1.7 I	0.20 U	NA	NA	14.5	4.2	0.33 U	NA	NA	NA	NA	NA	NA
	10/16/14	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	NA	NA	NA	NA	520	0.50 U	0.50 U	16	0.22
	04/15/15	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	02/09/96	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
MW-11	02/09/96	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
MW-12	02/09/96	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	< 0.15	6.7	0.58 I	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA

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Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
MW-13	02/09/96	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	12/15/02	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.16 I	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	02/14/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	< 0.15	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	04/10/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.26 I	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	07/19/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.36 I	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	12/02/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
MW-14	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
MW-15	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-16*	12/15/08	**7.6**	**96.9 c**	**276 c**	**999 c**	14.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/10	0.63 U	7.9	**250**	**780**	NA	NA	NA	**140**	NA	NA	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	4.0	3.5	0.21U	NA	NA	4.8	6.0	1.6	549	NA	NA	NA	NA	NA
	10/21/13	0.32 I	4.0	**384**	**684**	0.21 U	NA	NA	**149**	**40.9**	**32.4**	**6710**	NA	NA	NA	NA	NA
	01/21/14	0.32 I	6.9	**399**	**1060**	0.20 U	NA	NA	**176**	**40.6**	**49.4**	**6920**	NA	NA	NA	NA	NA
	10/16/14	0.63 U	0.69 U	**170**	**89**	0.96 U	NA	NA	**85**	23	26	4200	NA	NA	NA	NA	NA
	04/15/15	0.63 U	0.69 U	**200**	**120**	0.96 U	NA	NA	**200**	**49**	**59**	4900	NA	NA	NA	NA	NA
MW-17*	10/21/13	0.21 U	0.20 U	2.2	0.50 I	0.21 U	N/A	N/A	7.1	1.6	1.9	330	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66 U	0.20 U	N/A	N/A	0.32 U	0.32 U	0.32 U	140 U	NA	NA	NA	NA	NA
	10/16/14	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	N/A	N/A	0.065 I	0.063 I	0.085 I	180 I	NA	NA	NA	NA	NA
	04/15/15	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	0.10 I	0.048 U	0.045 U	240 I	NA	NA	NA	NA	NA
IW-1	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IW-2	12/15/08	0.50 U	0.50 U	5.3	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IW-3	12/15/08	0.50 U	0.63	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IW-4*	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/10	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-1	02/09/96	< 1.0	< 1.0	6.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 1.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	08/22/02	**2.3**	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	09/03/04	0.53 I	< 0.29	< 0.27	< 0.86	< 0.31	NA	NA	1.9	0.24 I	0.50 I	NA	NA	NA	NA	NA	NA

TABLE 2: GROUNDWATER ANALYTICAL SUMMARY

NA = Not Analyzed
µg/L = micrograms per liter
mg/L = miligrams per liter
ND = non detected

< = Below Method Detection Limit U = Not Detected
I = Between Method Detection Limit and Practical Quantitation Limit
* = Offsite Monitoring Wells for Imminent Threat Investigation

Facility Name: Rainbow Food Store
Facility I. D. No. 168507117

Sample																	
Location	Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
DW-2	05/28/96	< 1.0	< 1.0	9.4	8.8	< 1.0	NA	NA	17	9.6	19	2700	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.1	< 2.1	< 2.1	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.20 I	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-3	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-4	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-5	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-6	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-7	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-8	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-9*	12/15/08	0.50 U	5.0	6.4	**23.9**	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/10	0.21 U	0.28 U	0.33 I	1.1 I	NA	NA	NA	1.4 U	NA	NA	NA	NA	NA	NA	NA	NA
SVE-PT1	12/02/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA

Sources: HANDEX, 2007. ECT, 2008, 2009, 2010, 2011, 2012, 2013, and 2014.

FIGURES

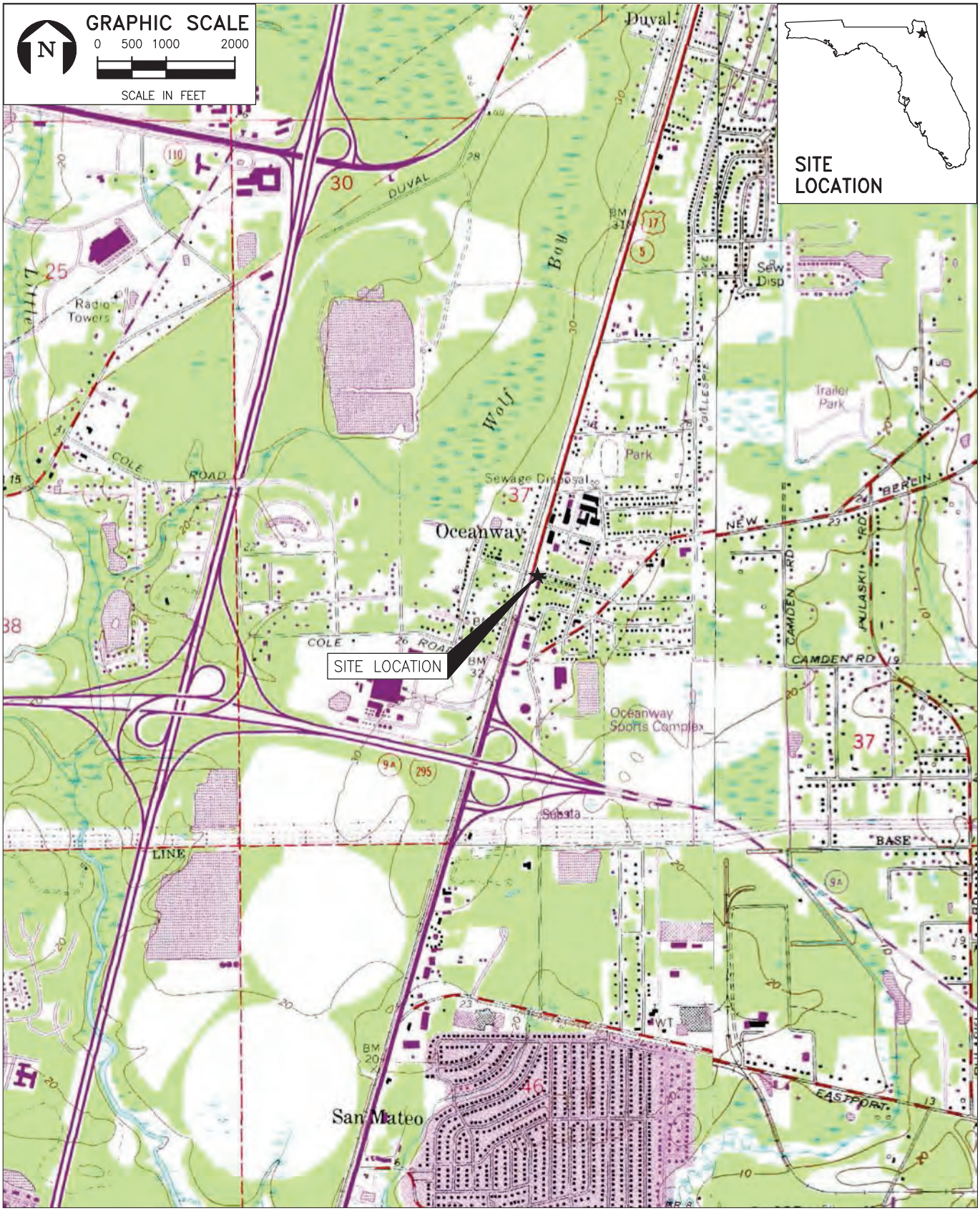


FIGURE 1.
SITE LOCATION MAP
RAINBOW FOOD STORE
12615 NORTH MAIN ST., JACKSONVILLE, FL.
Sources: USGS Quad: Trout River/Eastport, FL., 1997; ECT, 2014.

ECT Environmental Consulting & Technology, Inc.

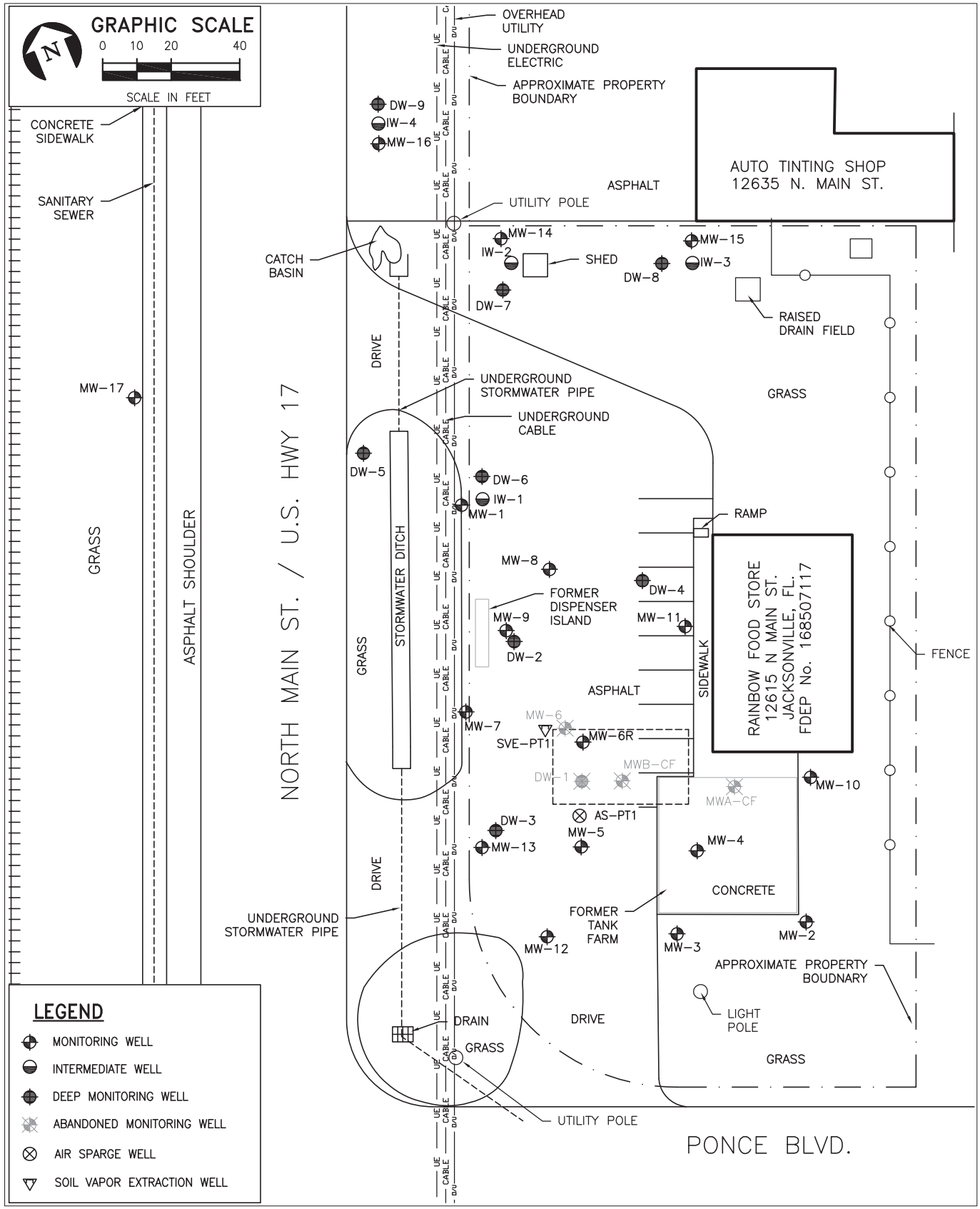


FIGURE 2.

SITE PLAN

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

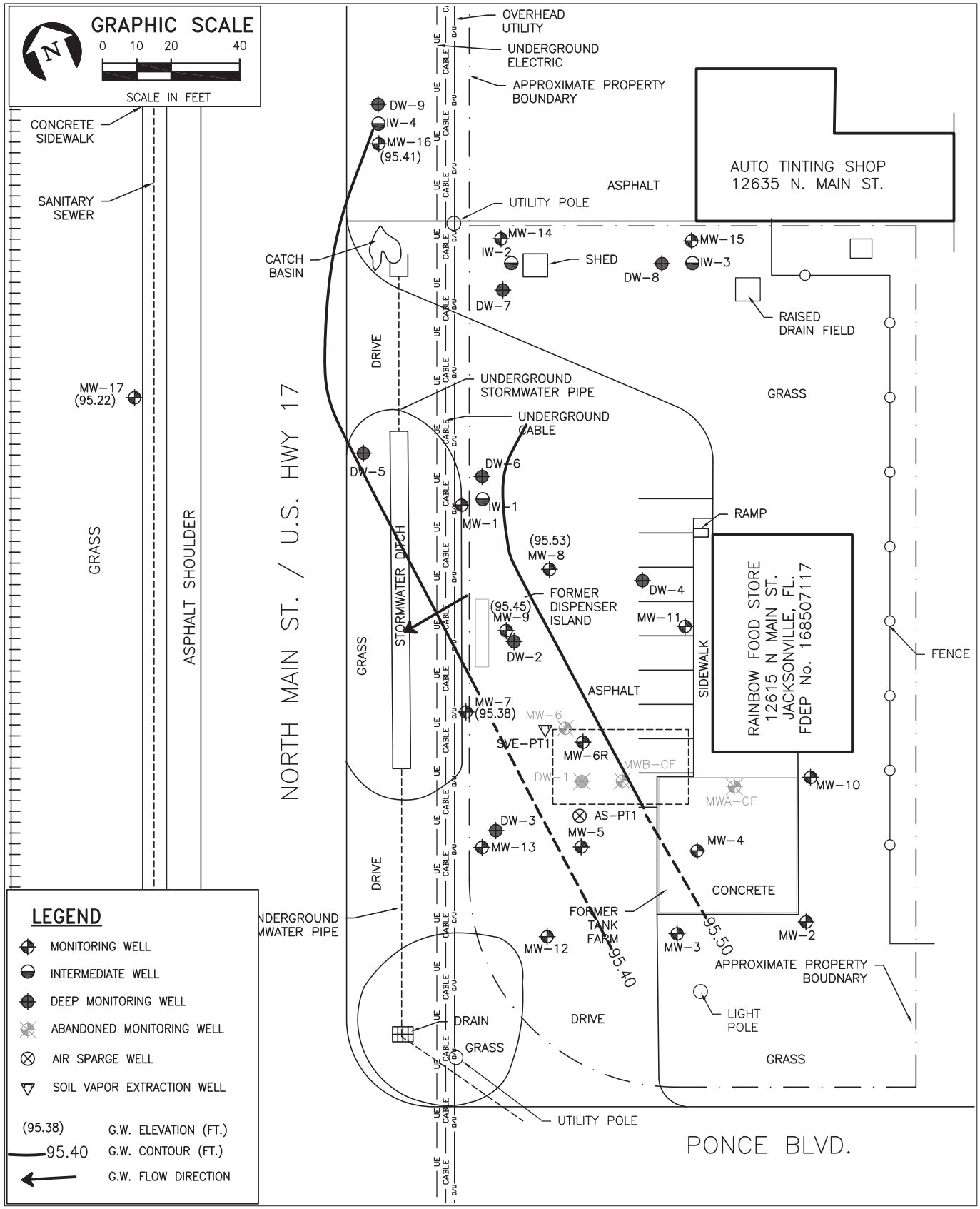


FIGURE 3.

GROUNDWATER CONTOUR MAP

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

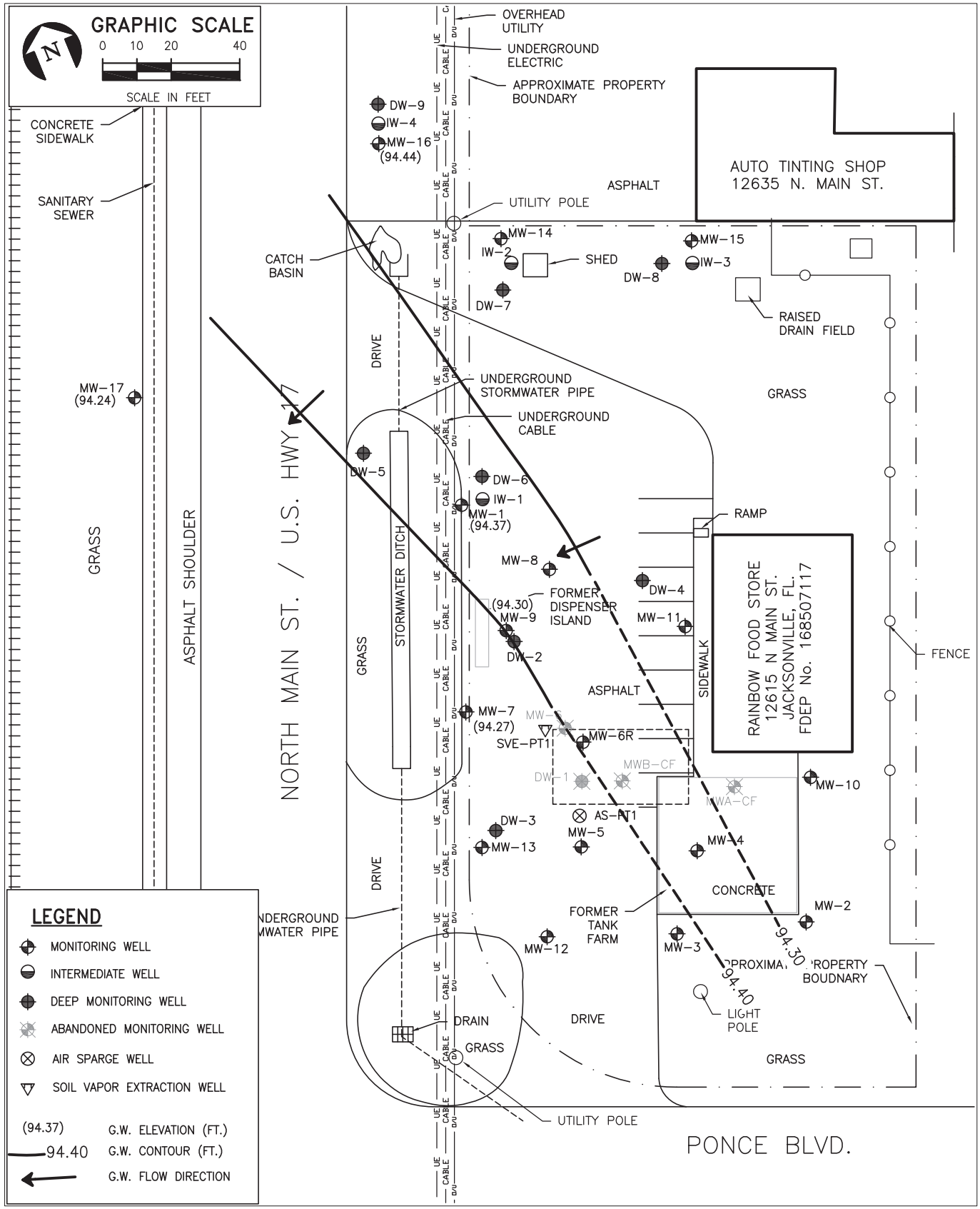


FIGURE 4.

GROUNDWATER CONTOUR MAP

APRIL 15, 2015

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

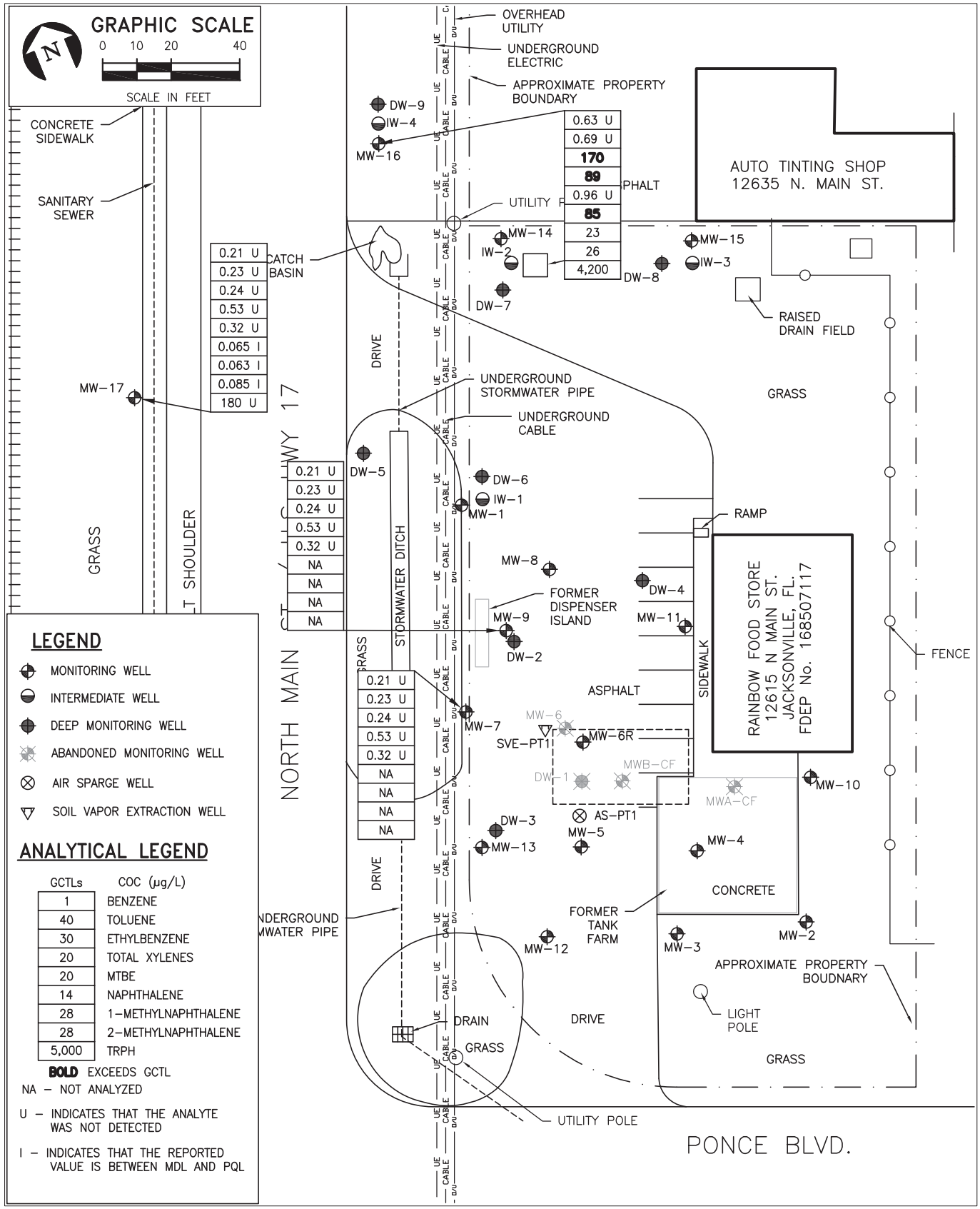


FIGURE 5.

GROUNDWATER CONTAMINANT CONCENTRATIONS

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

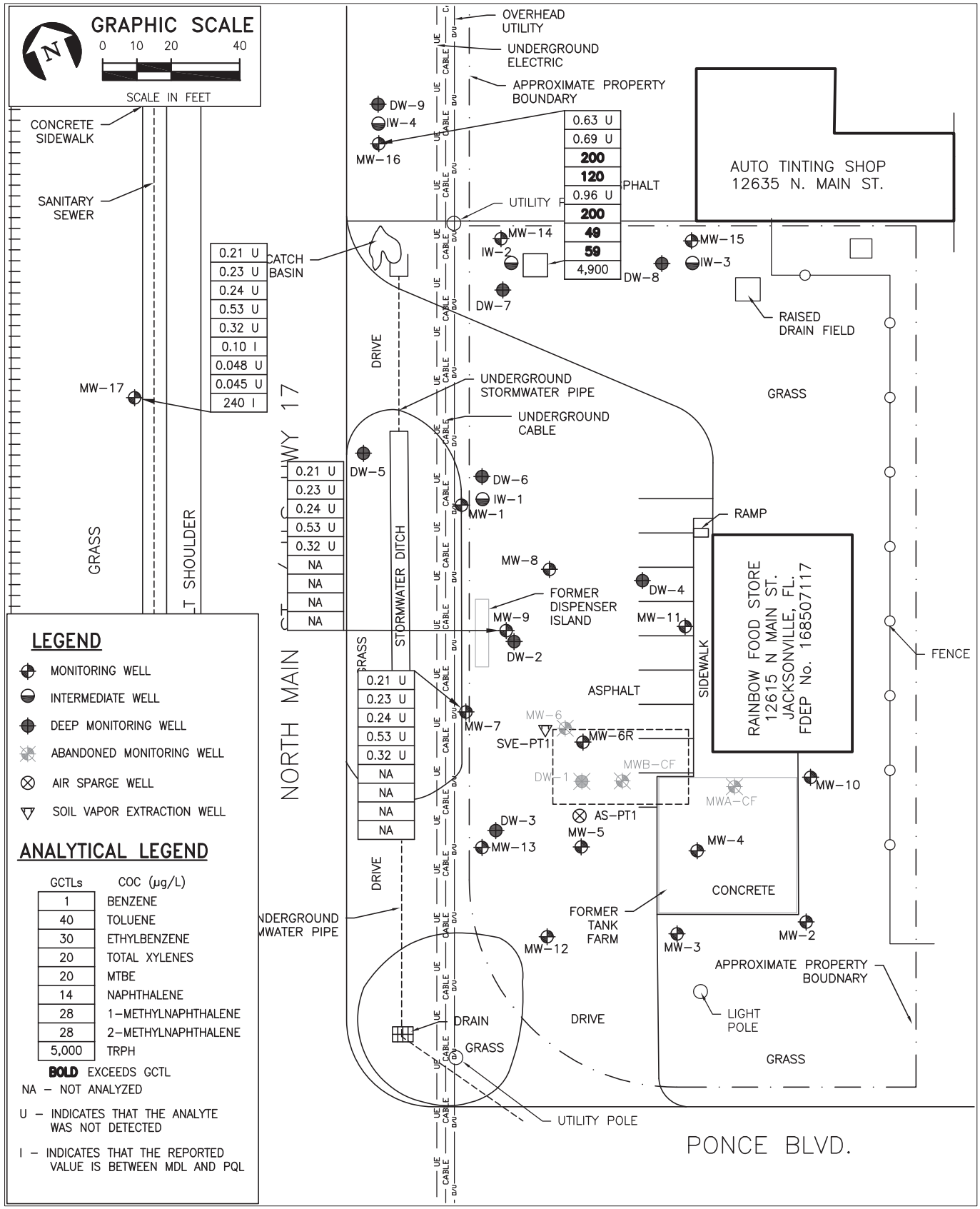


FIGURE 6.

GROUNDWATER CONTAMINANT CONCENTRATIONS

APRIL 15, 2015

Source: Handex, 1997; ECT, 2015.

Environmental Consulting & Technology, Inc.

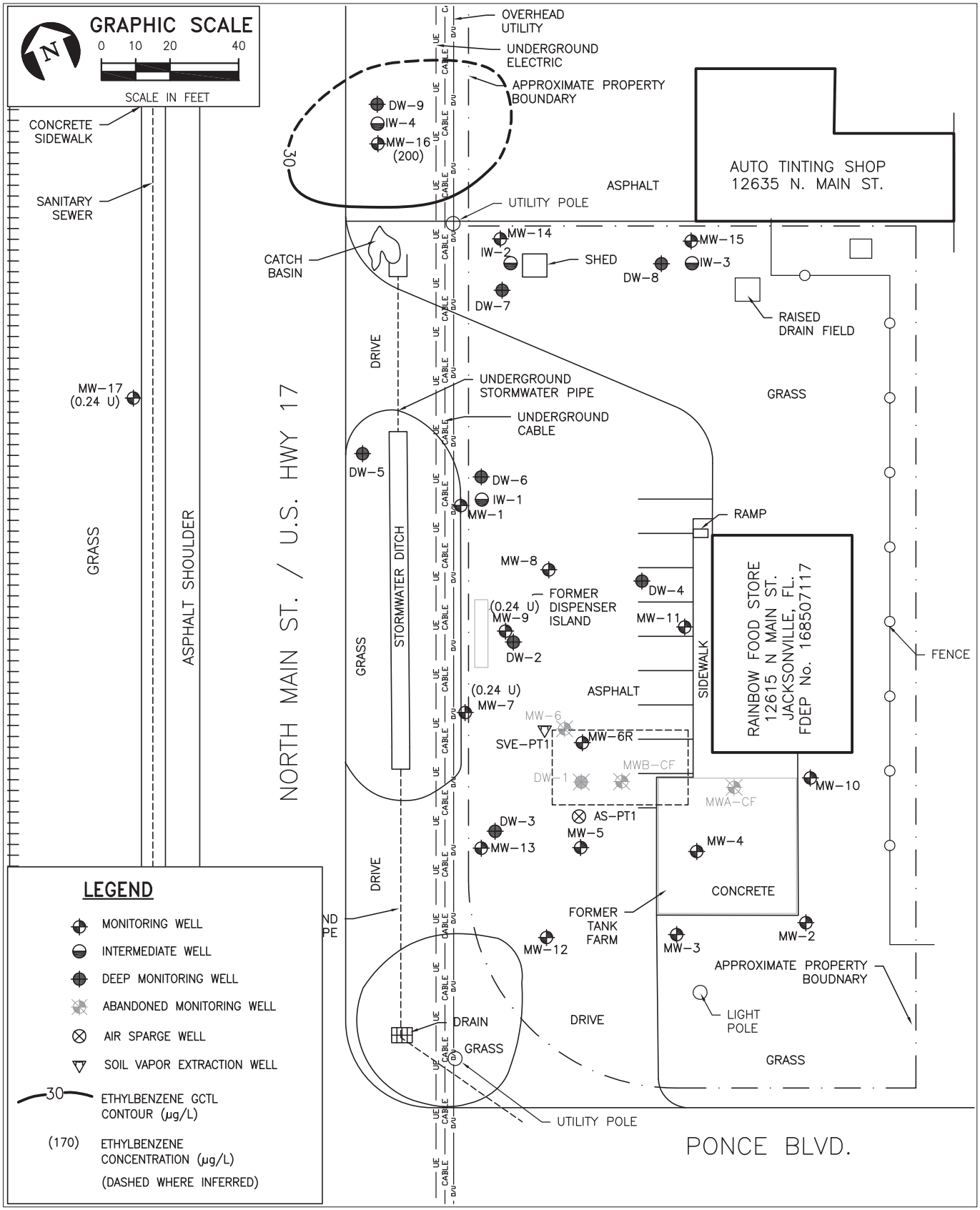


FIGURE 7.

ETHYLBENZENE CONCENTRATION CONTOUR MAP

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

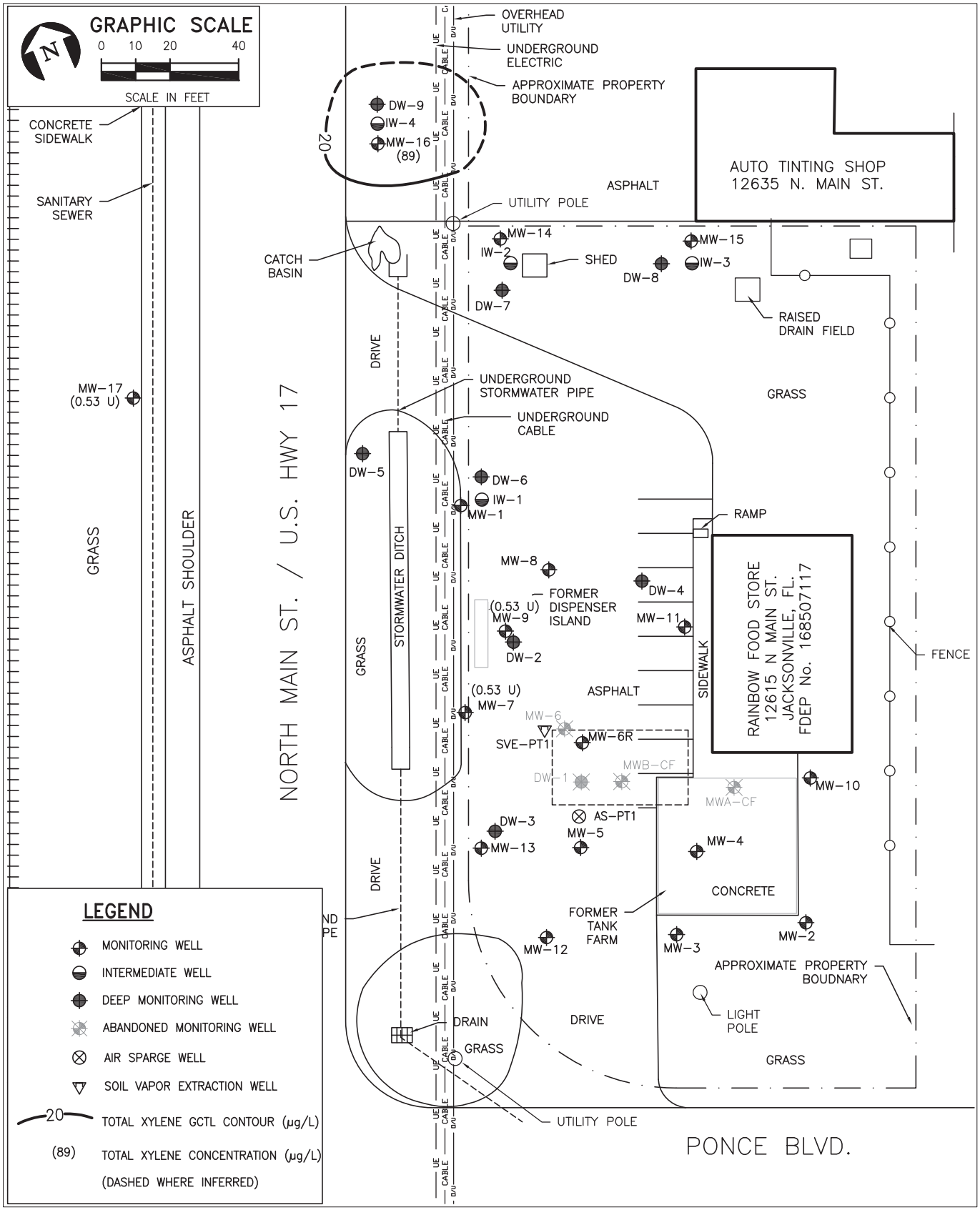


FIGURE 8.

TOTAL XYLENE CONCENTRATION CONTOUR MAP

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

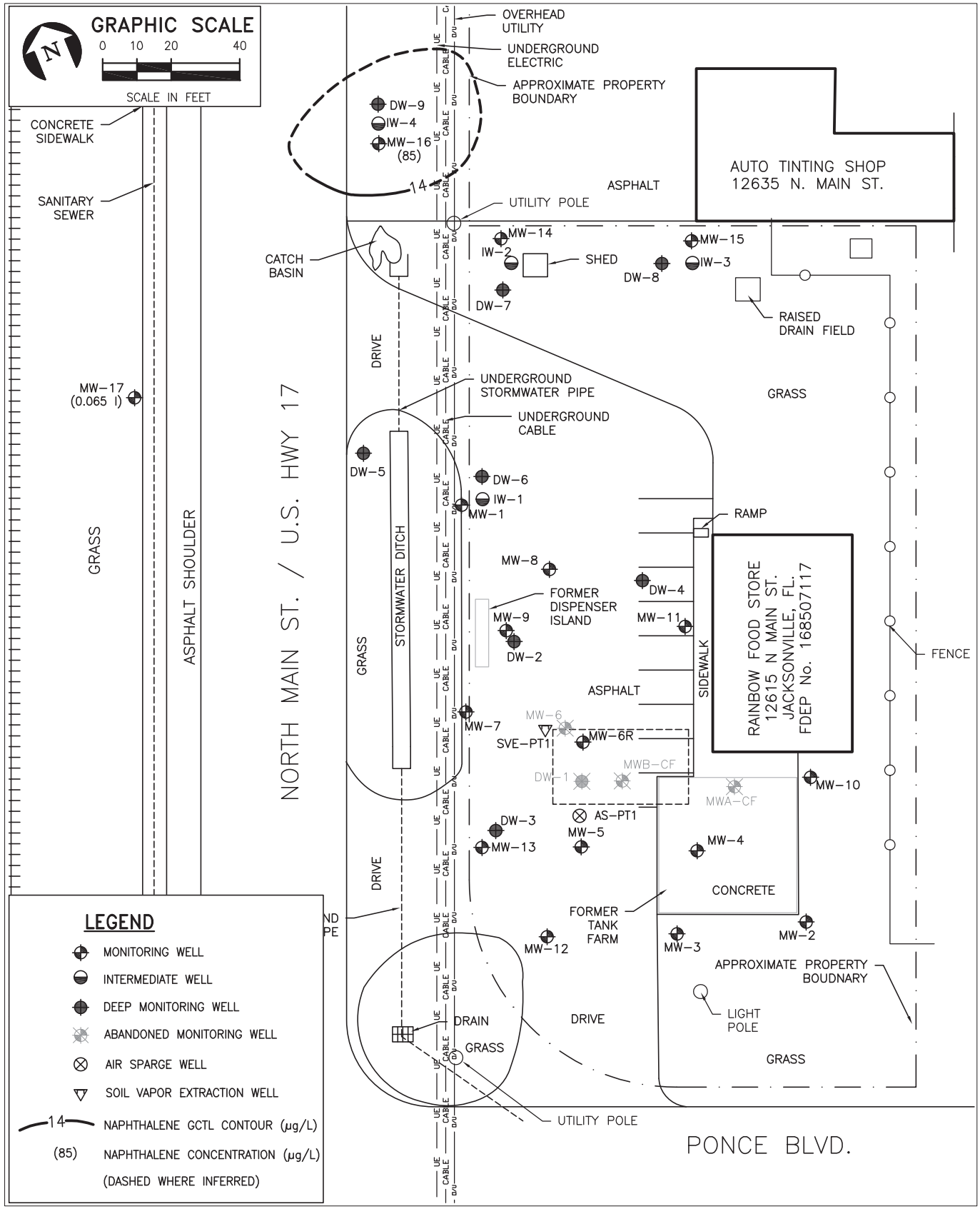


FIGURE 9.

NAPHTHALENE CONCENTRATION CONTOUR MAP

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

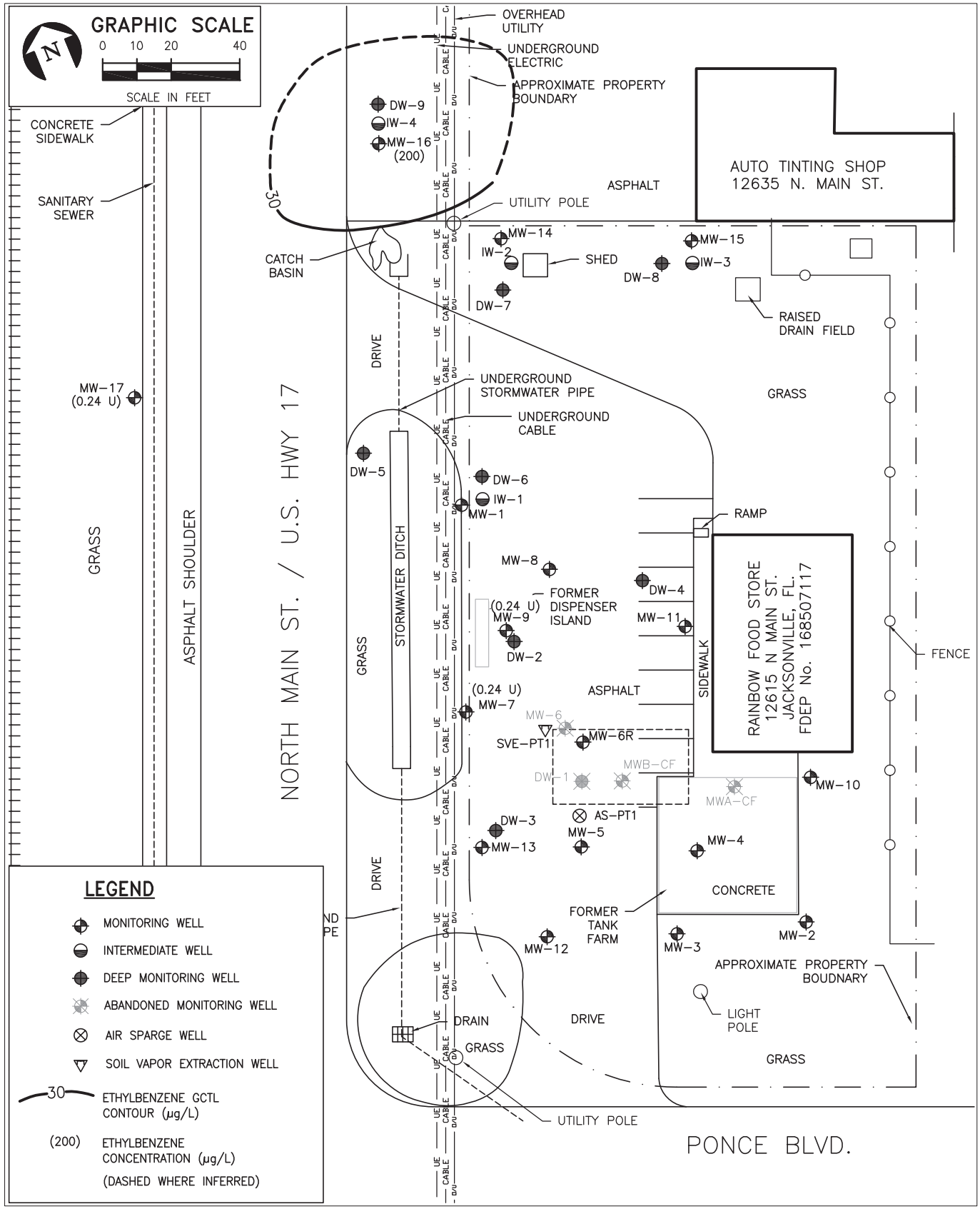


FIGURE 10.

ETHYLBENZENE CONCENTRATION CONTOUR MAP

APRIL 15, 2015

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

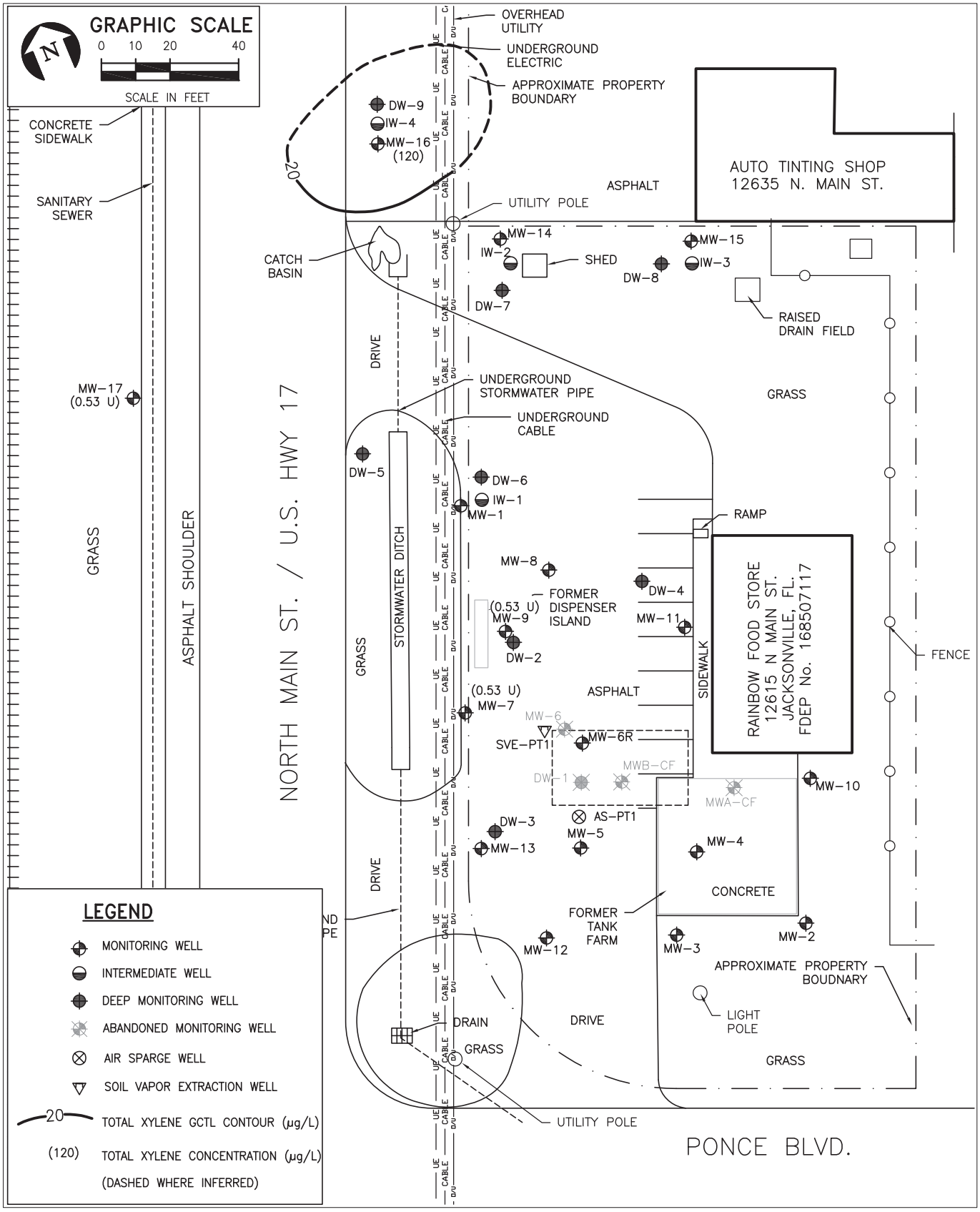


FIGURE 11.

TOTAL XYLENE CONCENTRATION CONTOUR MAP

APRIL 15, 2015

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

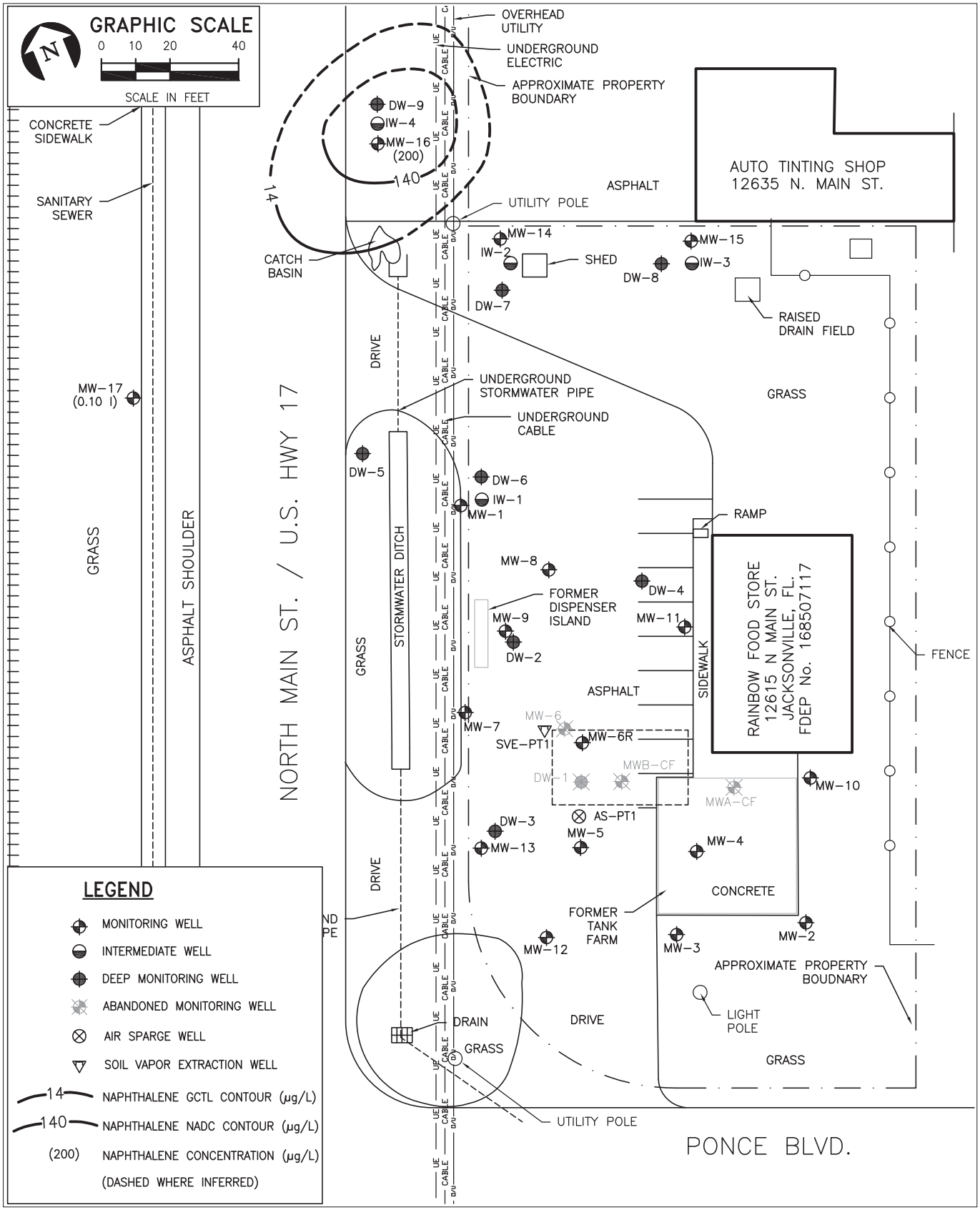


FIGURE 12.

NAPHTHALENE CONCENTRATION CONTOUR MAP

APRIL 15, 2015

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

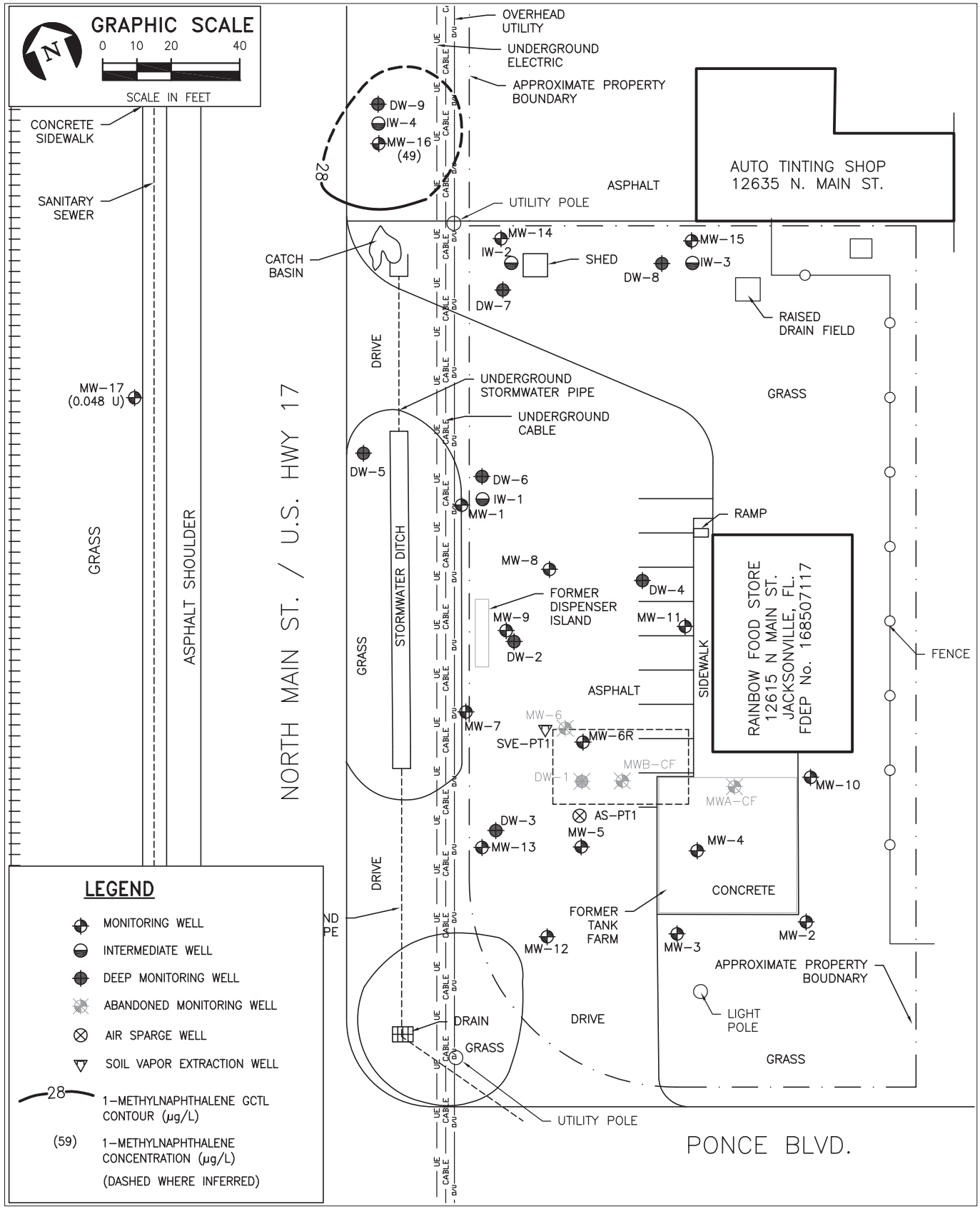


FIGURE 13.

1-METHYLNAPHTHALENE CONCENTRATION CONTOUR MAP - APRIL 15, 2015

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

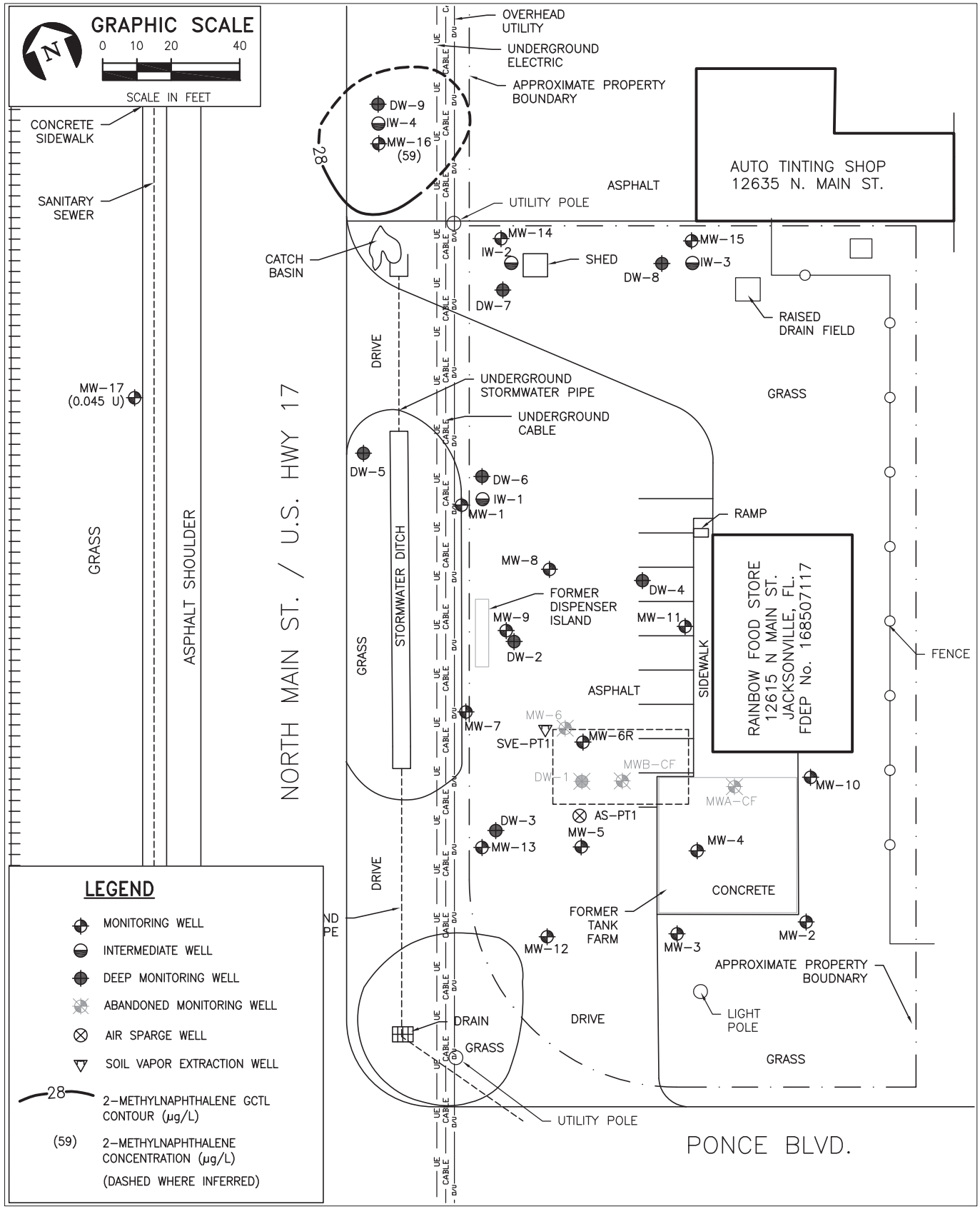


FIGURE 14.

2-METHYLNAPHTHALENE CONCENTRATION CONTOUR MAP - APRIL 15, 2015

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

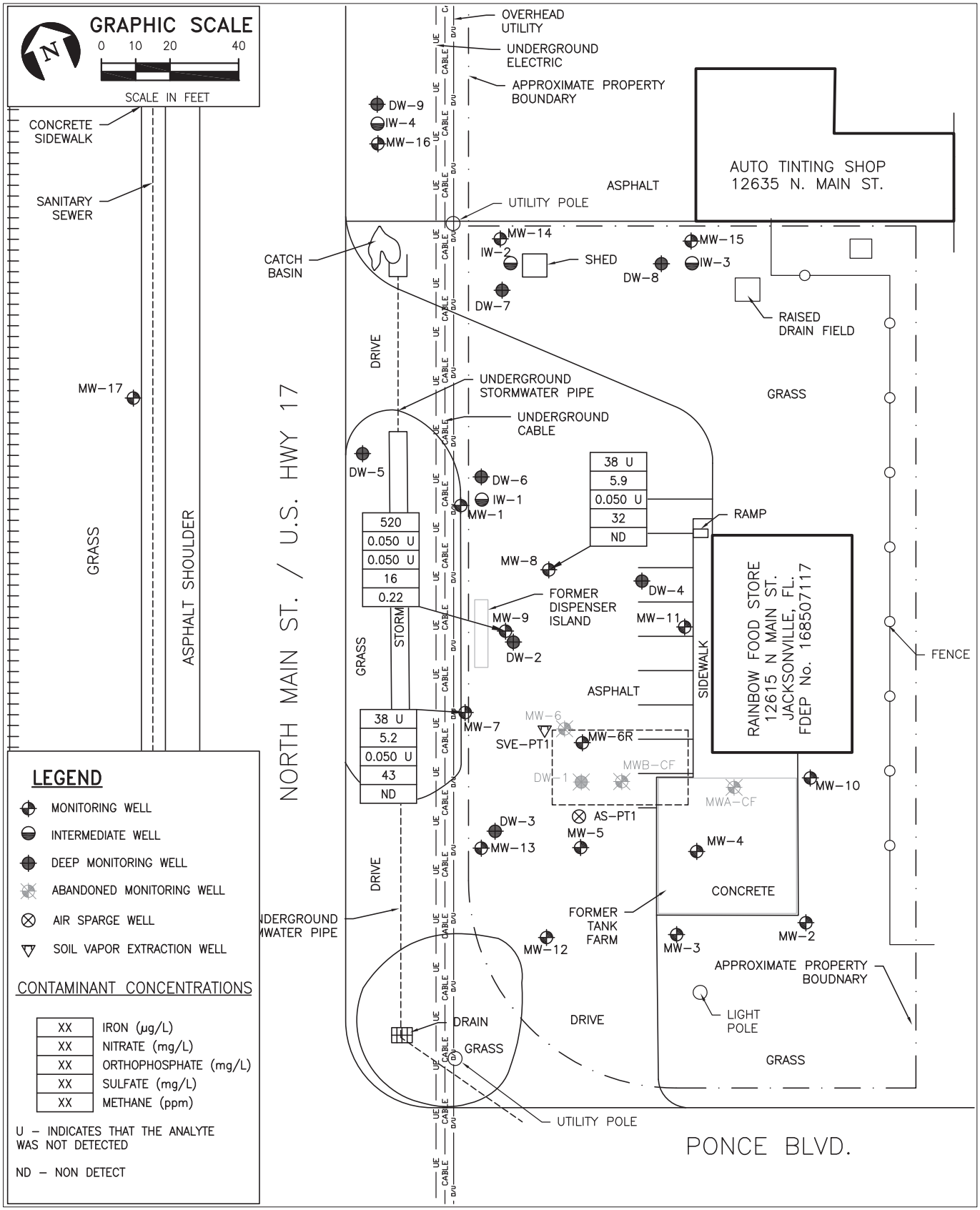


FIGURE 15.

NATURAL ATTENUATION PARAMETERS GROUNDWATER DATA - OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

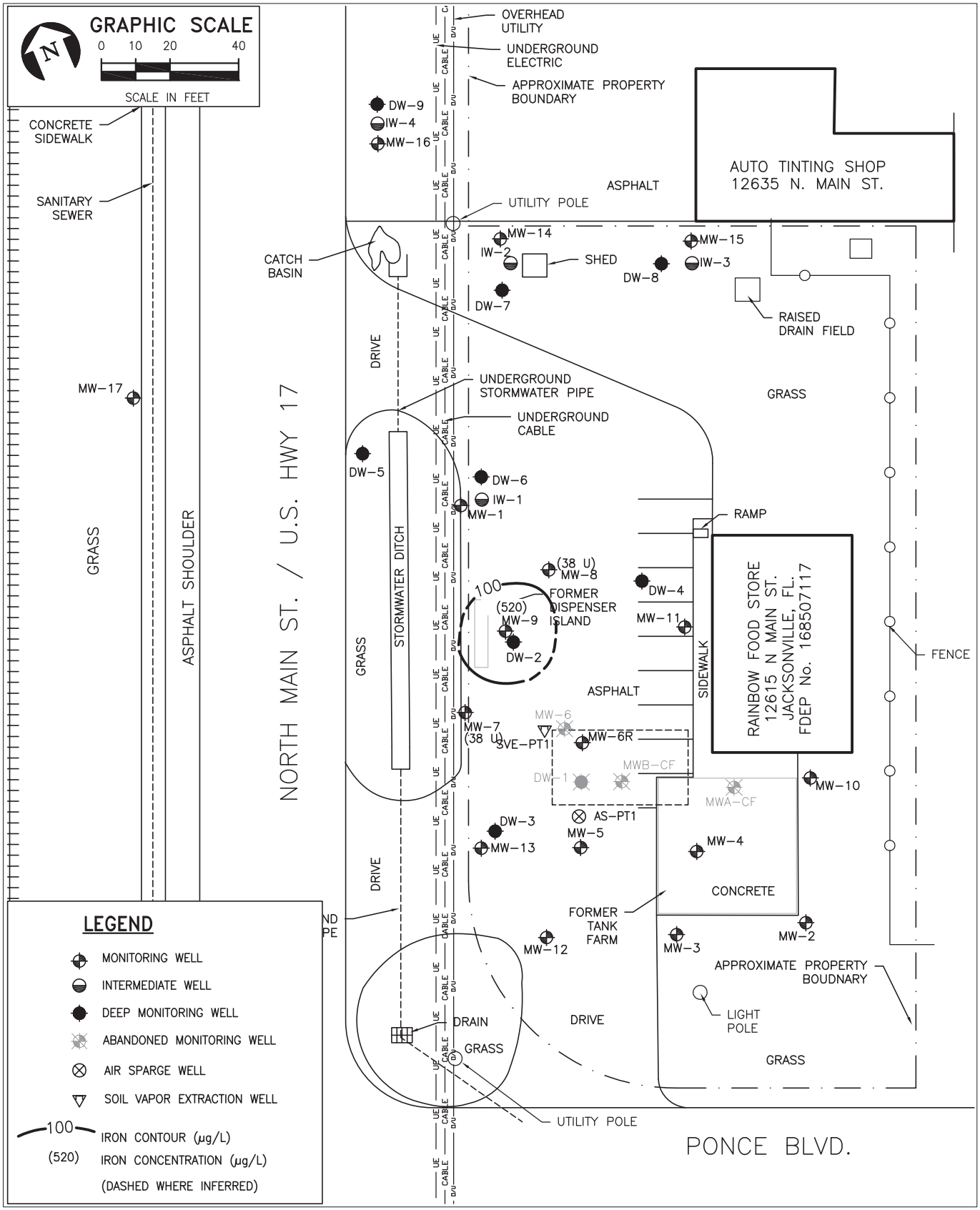


FIGURE 16.

DISSOLVED IRON PLUME

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

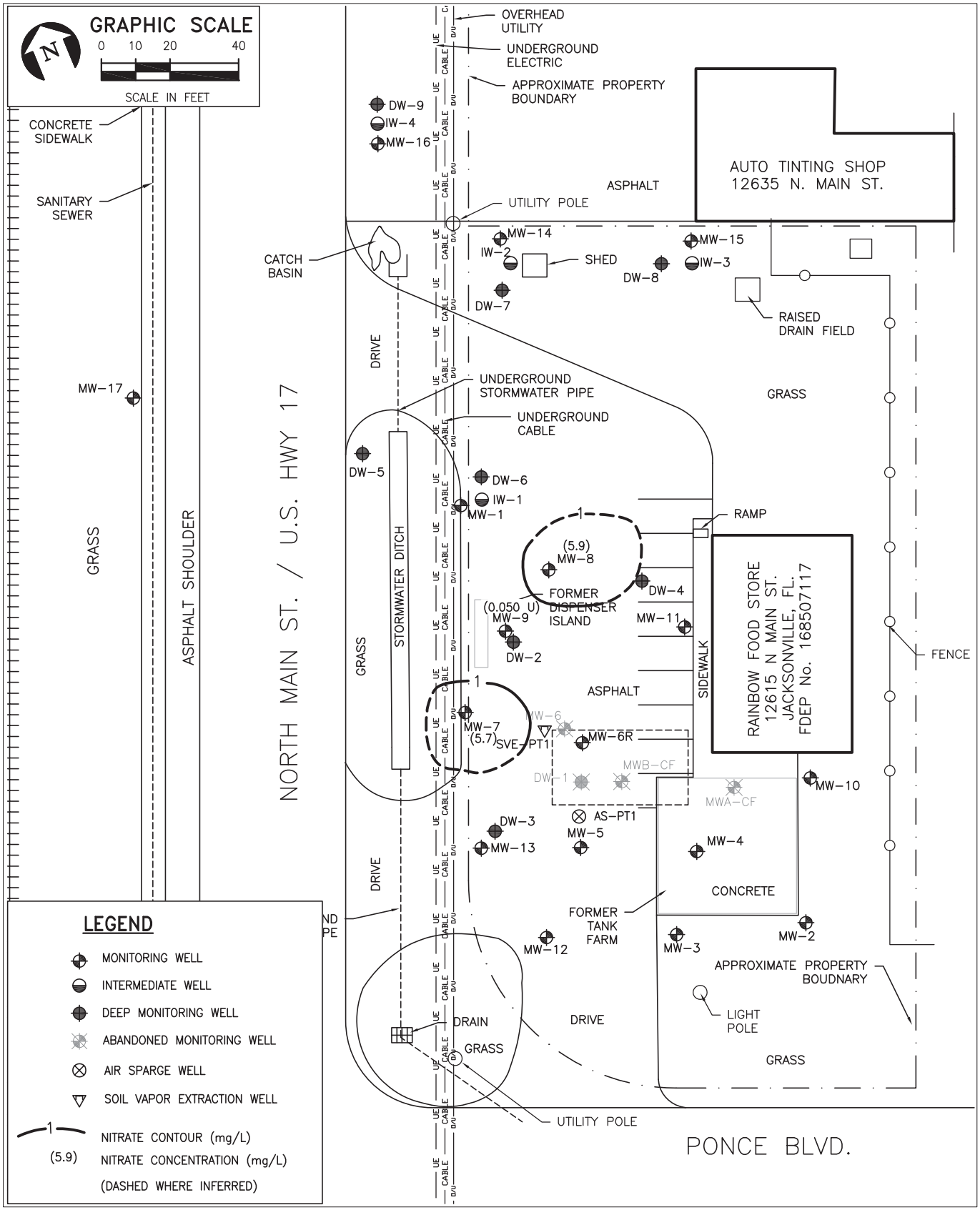


FIGURE 17.

DISSOLVED NITRATE PLUME

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

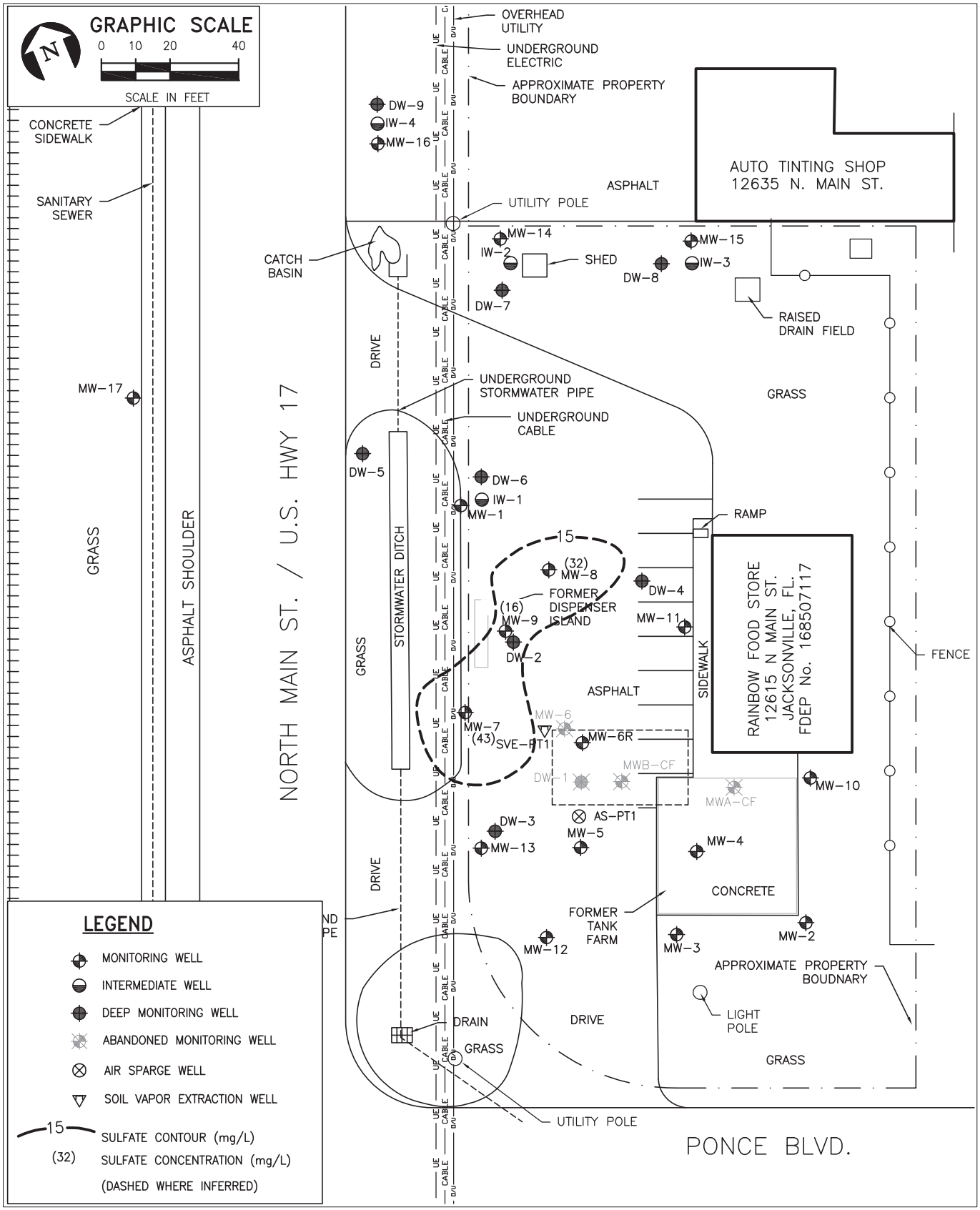


FIGURE 18.

DISSOLVED SULFATE PLUME

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

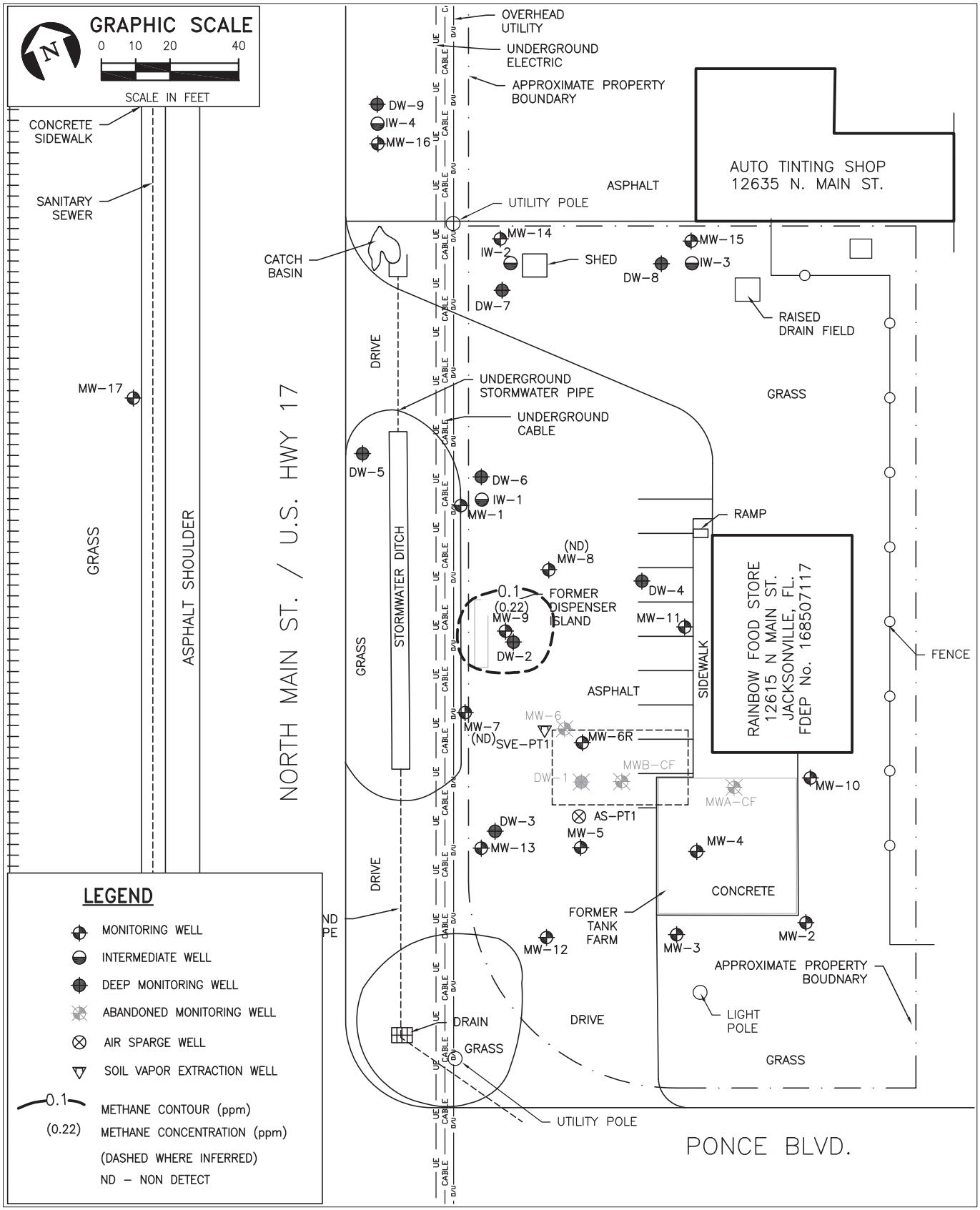


FIGURE 19.

METHANE PLUME

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

APPENDIX C—
LABORATORY ANALYTICAL REPORTS

Advanced
Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

April 20, 2015

Alan Blackwell
ECT
3701 NW 98th St
Gainesville, FL 32606

RE: Workorder: J1503342 Rainbow Food Store

Dear Alan Blackwell:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, April 15, 2015. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul Gunsaulies

Paul Gunsaulies
PGunsaulies@AELLab.com

Enclosures

CERTIFICATE OF ANALYSIS

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Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

SAMPLE SUMMARY

Workorder: J1503342 Rainbow Food Store

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1503342001	MW-7	Water	4/15/2015 11:35	4/15/2015 13:10
J1503342002	MW-9	Water	4/15/2015 12:16	4/15/2015 13:10
J1503342003	MW-16	Water	4/15/2015 12:06	4/15/2015 13:10
J1503342004	MW-17	Water	4/15/2015 11:29	4/15/2015 13:10

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Phone (904)363-9350
Fax (904)363-9354

ANALYTICAL RESULTS

Workorder: J1503342 Rainbow Food Store

Lab ID: **J1503342001** Date Received: 04/15/15 13:10 Matrix: Water
Sample ID: **MW-7** Date Collected: 04/15/15 11:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
Benzene	0.21	U	ug/L	1	1.0	0.21	4/18/2015 06:11	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	4/18/2015 06:11	J
Methyl tert-butyl Ether (MTBE)	0.32	U	ug/L	1	1.0	0.32	4/18/2015 06:11	J
Toluene	0.23	U	ug/L	1	1.0	0.23	4/18/2015 06:11	J
Xylene (Total)	0.53	U	ug/L	1	3.0	0.53	4/18/2015 06:11	J
1,2-Dichloroethane-d4 (S)	94		%	1	80-120		4/18/2015 06:11	
Toluene-d8 (S)	101		%	1	88-110		4/18/2015 06:11	
Bromofluorobenzene (S)	105		%	1	86-115		4/18/2015 06:11	

Lab ID: **J1503342002** Date Received: 04/15/15 13:10 Matrix: Water
Sample ID: **MW-9** Date Collected: 04/15/15 12:16

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
Benzene	0.21	U	ug/L	1	1.0	0.21	4/18/2015 06:57	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	4/18/2015 06:57	J
Methyl tert-butyl Ether (MTBE)	0.32	U	ug/L	1	1.0	0.32	4/18/2015 06:57	J
Toluene	0.23	U	ug/L	1	1.0	0.23	4/18/2015 06:57	J
Xylene (Total)	0.53	U	ug/L	1	3.0	0.53	4/18/2015 06:57	J
1,2-Dichloroethane-d4 (S)	95		%	1	80-120		4/18/2015 06:57	
Toluene-d8 (S)	99		%	1	88-110		4/18/2015 06:57	
Bromofluorobenzene (S)	106		%	1	86-115		4/18/2015 06:57	

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1503342 Rainbow Food Store

Lab ID: J1503342003 Date Received: 04/15/15 13:10 Matrix: Water
Sample ID: MW-16 Date Collected: 04/15/15 12:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
SEMIVOLATILES								
Analysis Desc: Flo-Pro Analysis, Water	Preparation Method: FL-PRO							
	Analytical Method: FL-PRO							
TPH	4.9		mg/L	1	0.42	0.10	4/17/2015 09:52	J
o-Terphenyl (S)	88		%	1	82-142		4/17/2015 09:52	
Nonatricontane-C39 (S)	69		%	1	42-193		4/17/2015 09:52	
Analysis Desc: 8270C-SIM Analysis, Water	Preparation Method: SW-846 3510C							
	Analytical Method: SW-846 8270C (SIM)							
1-Methylnaphthalene	49		ug/L	1	0.20	0.048	4/16/2015 22:07	J
2-Methylnaphthalene	59		ug/L	1	0.20	0.045	4/16/2015 22:07	J
Acenaphthene	0.30		ug/L	1	0.20	0.034	4/16/2015 22:07	J
Acenaphthylene	0.030	U	ug/L	1	0.20	0.030	4/16/2015 22:07	J
Anthracene	0.028	U	ug/L	1	0.20	0.028	4/16/2015 22:07	J
Benzo[a]anthracene	0.030	U	ug/L	1	0.20	0.030	4/16/2015 22:07	J
Benzo[a]pyrene	0.093	U	ug/L	1	0.20	0.093	4/16/2015 22:07	J
Benzo[b]fluoranthene	0.040	U	ug/L	1	0.10	0.040	4/16/2015 22:07	J
Benzo[g,h,i]perylene	0.083	U	ug/L	1	0.20	0.083	4/16/2015 22:07	J
Benzo[k]fluoranthene	0.099	U	ug/L	1	0.20	0.099	4/16/2015 22:07	J
Chrysene	0.041	U	ug/L	1	0.20	0.041	4/16/2015 22:07	J
Dibenzo[a,h]anthracene	0.057	U	ug/L	1	0.20	0.057	4/16/2015 22:07	J
Fluoranthene	0.030	U	ug/L	1	0.20	0.030	4/16/2015 22:07	J
Fluorene	0.24		ug/L	1	0.20	0.030	4/16/2015 22:07	J
Indeno(1,2,3-cd)pyrene	0.061	U	ug/L	1	0.20	0.061	4/16/2015 22:07	J
Naphthalene	200		ug/L	10	2.0	0.53	4/17/2015 18:20	J
Phenanthrene	0.036	U	ug/L	1	0.20	0.036	4/16/2015 22:07	J
Pyrene	0.040	U	ug/L	1	0.20	0.040	4/16/2015 22:07	J
Nitrobenzene-d5 (S)	89		%	1	32-147		4/16/2015 22:07	
2-Fluorobiphenyl (S)	70		%	1	34-140		4/16/2015 22:07	
p-Terphenyl-d14 (S)	107		%	1	54-138		4/16/2015 22:07	
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B							
	Analytical Method: SW-846 8260B							
Benzene	0.63	U	ug/L	3	3.0	0.63	4/18/2015 07:42	J
Ethylbenzene	200		ug/L	3	3.0	0.72	4/18/2015 07:42	J
Methyl tert-butyl Ether (MTBE)	0.96	U	ug/L	3	3.0	0.96	4/18/2015 07:42	J
Toluene	0.69	U	ug/L	3	3.0	0.69	4/18/2015 07:42	J

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ANALYTICAL RESULTS

Workorder: J1503342 Rainbow Food Store

Lab ID: J1503342003 Date Received: 04/15/15 13:10 Matrix: Water
Sample ID: MW-16 Date Collected: 04/15/15 12:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Xylene (Total)	120		ug/L	3	9.0	1.6	4/18/2015 07:42	J
1,2-Dichloroethane-d4 (S)	92		%	3	80-120		4/18/2015 07:42	
Toluene-d8 (S)	99		%	3	88-110		4/18/2015 07:42	
Bromofluorobenzene (S)	107		%	3	86-115		4/18/2015 07:42	

Lab ID: J1503342004 Date Received: 04/15/15 13:10 Matrix: Water
Sample ID: MW-17 Date Collected: 04/15/15 11:29

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
SEMIVOLATILES								
Analysis Desc: Flo-Pro Analysis, Water	Preparation Method: FL-PRO							
	Analytical Method: FL-PRO							
TPH	0.24	I	mg/L	1	0.42	0.10	4/17/2015 10:19	J
o-Terphenyl (S)	90		%	1	82-142		4/17/2015 10:19	
Nonatriacontane-C39 (S)	65		%	1	42-193		4/17/2015 10:19	
Analysis Desc: 8270C-SIM Analysis, Water	Preparation Method: SW-846 3510C							
	Analytical Method: SW-846 8270C (SIM)							
1-Methylnaphthalene	0.048	U	ug/L	1	0.20	0.048	4/16/2015 22:35	J
2-Methylnaphthalene	0.045	U	ug/L	1	0.20	0.045	4/16/2015 22:35	J
Acenaphthene	0.034	U	ug/L	1	0.20	0.034	4/16/2015 22:35	J
Acenaphthylene	0.030	U	ug/L	1	0.20	0.030	4/16/2015 22:35	J
Anthracene	0.028	U	ug/L	1	0.20	0.028	4/16/2015 22:35	J
Benzo[a]anthracene	0.030	U	ug/L	1	0.20	0.030	4/16/2015 22:35	J
Benzo[a]pyrene	0.093	U	ug/L	1	0.20	0.093	4/16/2015 22:35	J
Benzo[b]fluoranthene	0.040	U	ug/L	1	0.10	0.040	4/16/2015 22:35	J
Benzo[g,h,i]perylene	0.083	U	ug/L	1	0.20	0.083	4/16/2015 22:35	J
Benzo[k]fluoranthene	0.099	U	ug/L	1	0.20	0.099	4/16/2015 22:35	J
Chrysene	0.041	U	ug/L	1	0.20	0.041	4/16/2015 22:35	J
Dibenzo[a,h]anthracene	0.057	U	ug/L	1	0.20	0.057	4/16/2015 22:35	J
Fluoranthene	0.030	U	ug/L	1	0.20	0.030	4/16/2015 22:35	J
Fluorene	0.030	U	ug/L	1	0.20	0.030	4/16/2015 22:35	J
Indeno(1,2,3-cd)pyrene	0.061	U	ug/L	1	0.20	0.061	4/16/2015 22:35	J
Naphthalene	0.10	I	ug/L	1	0.20	0.053	4/16/2015 22:35	J

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ANALYTICAL RESULTS

Workorder: J1503342 Rainbow Food Store

Lab ID: J1503342004 Date Received: 04/15/15 13:10 Matrix: Water
Sample ID: MW-17 Date Collected: 04/15/15 11:29

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Phenanthrene	0.036	U	ug/L	1	0.20	0.036	4/16/2015 22:35	J
Pyrene	0.040	U	ug/L	1	0.20	0.040	4/16/2015 22:35	J
Nitrobenzene-d5 (S)	92		%	1	32-147		4/16/2015 22:35	
2-Fluorobiphenyl (S)	85		%	1	34-140		4/16/2015 22:35	
p-Terphenyl-d14 (S)	106		%	1	54-138		4/16/2015 22:35	
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B							
	Analytical Method: SW-846 8260B							
Benzene	0.21	U	ug/L	1	1.0	0.21	4/18/2015 08:27	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	4/18/2015 08:27	J
Methyl tert-butyl Ether (MTBE)	0.32	U	ug/L	1	1.0	0.32	4/18/2015 08:27	J
Toluene	0.23	U	ug/L	1	1.0	0.23	4/18/2015 08:27	J
Xylene (Total)	0.53	U	ug/L	1	3.0	0.53	4/18/2015 08:27	J
1,2-Dichloroethane-d4 (S)	84		%	1	80-120		4/18/2015 08:27	
Toluene-d8 (S)	100		%	1	88-110		4/18/2015 08:27	
Bromofluorobenzene (S)	101		%	1	86-115		4/18/2015 08:27	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J1503342 Rainbow Food Store

PARAMETER QUALIFIERS

U The compound was analyzed for but not detected.

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

LAB QUALIFIERS

J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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QUALITY CONTROL DATA

Workorder: J1503342 Rainbow Food Store

QC Batch: EXTj/1427 Analysis Method: SW-846 8270C (SIM)
QC Batch Method: SW-846 3510C Prepared: 04/15/2015 17:30
Associated Lab Samples: J1503342003, J1503342004

METHOD BLANK: 1727169

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Naphthalene	ug/L	0.053	0.053	U
2-Methylnaphthalene	ug/L	0.045	0.045	U
1-Methylnaphthalene	ug/L	0.048	0.048	U
Acenaphthylene	ug/L	0.030	0.030	U
Acenaphthene	ug/L	0.034	0.034	U
Fluorene	ug/L	0.030	0.030	U
Phenanthrene	ug/L	0.036	0.036	U
Anthracene	ug/L	0.028	0.028	U
Fluoranthene	ug/L	0.030	0.030	U
Pyrene	ug/L	0.040	0.040	U
Benzo[a]anthracene	ug/L	0.030	0.030	U
Chrysene	ug/L	0.041	0.041	U
Benzo[b]fluoranthene	ug/L	0.040	0.040	U
Benzo[k]fluoranthene	ug/L	0.099	0.099	U
Benzo[a]pyrene	ug/L	0.093	0.093	U
Indeno(1,2,3-cd)pyrene	ug/L	0.061	0.061	U
Dibenzo[a,h]anthracene	ug/L	0.057	0.057	U
Benzo[g,h,i]perylene	ug/L	0.083	0.083	U
Nitrobenzene-d5 (S)	%	90	32-147	
2-Fluorobiphenyl (S)	%	86	34-140	
p-Terphenyl-d14 (S)	%	97	54-138	

QC Batch: EXTj/1428 Analysis Method: FL-PRO
QC Batch Method: FL-PRO Prepared: 04/15/2015 17:30
Associated Lab Samples: J1503342003, J1503342004

METHOD BLANK: 1727171

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
TPH	mg/L	0.10	0.10	U
o-Terphenyl (S)	%	103	82-142	
Nonatriacontane-C39 (S)	%	104	42-193	

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QUALITY CONTROL DATA

Workorder: J1503342 Rainbow Food Store

QC Batch:	MSVj/1359	Analysis Method	SW-846 8260B
QC Batch Method:	SW-846 5030B	Prepared:	04/17/2015 13:34

Associated Lab Samples: J1503342001, J1503342002, J1503342003, J1503342004

METHOD BLANK: 1729057

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Methyl tert-butyl Ether (MTBE)	ug/L	0.32	0.32	U
Benzene	ug/L	0.21	0.21	U
Toluene	ug/L	0.23	0.23	U
Ethylbenzene	ug/L	0.24	0.24	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	88	80-120	
Toluene-d8 (S)	%	101	88-110	
Bromofluorobenzene (S)	%	105	86-115	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1503342 Rainbow Food Store

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1503342003	MW-16	SW-846 3510C	EXTj/1427	SW-846 8270C (SIM)	MSSj/1211
J1503342004	MW-17	SW-846 3510C	EXTj/1427	SW-846 8270C (SIM)	MSSj/1211
J1503342003	MW-16	FL-PRO	EXTj/1428	FL-PRO	GCSj/1298
J1503342004	MW-17	FL-PRO	EXTj/1428	FL-PRO	GCSj/1298
J1503342001	MW-7	SW-846 5030B	MSVj/1359	SW-846 8260B	MSVj/1360
J1503342002	MW-9	SW-846 5030B	MSVj/1359	SW-846 8260B	MSVj/1360
J1503342003	MW-16	SW-846 5030B	MSVj/1359	SW-846 8260B	MSVj/1360
J1503342004	MW-17	SW-846 5030B	MSVj/1359	SW-846 8260B	MSVj/1360

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☐ Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32301 • 85
☐ Tampa: 9610 Princess Palm Ave • Tampa, FL 33619 • 813.630.9516 • Fax 813.630.4327

J1503342

Client Name: ECT, Inc.
Address: 3701 NW 98th St.
Gainesville, FL 32606
Phone: (352) 332-0444
FAX: (352) 332-6733
Contact: Alan Blackwell
Sampled By: A. Blackwell / T. Richards
Turn Around Time: ☒ STANDARD ☐ RUSH
Page 1 of 1

Project Name: Rainbow Food Store
P.O. Number/Project Number: 140444-0100
Project Location: Jacksonville, FL
REMARKS/SPECIAL INSTRUCTIONS: Project #
Fac. ID: 140444-0100
16/8507117
12615 N. Main St.
Jacksonville, FL

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	ANALYSIS REQUIRED: BTEX/MTBE EPA 8260B	PAHs EPA 8270C	TRPHs FL-PRO	LABORATORY I.D. NUMBER
MW-7	groundwater	G	4/15/15	1135	GW	3		X			001
MW-9				1216		3		X			002
MW-16				1206		4		X	X	X	003
MW-17				1129		4		X	X	X	004

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge
Preservation Code: I = Ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on ice: ☒ Yes ☐ No ☒ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received: 2 (in degrees celcius)

Form revised 01-12-2012

Device used for measuring Temp by unique identifier (circle IR temp gun used): J: 9A G: T-1 LT-2 T: 10A A: 3A M: 1A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1		4/15/15	1310		4-15-15	13:10
2						
3						
4						

FOR DRINKING WATER USE:
(When PWS information not otherwise supplied) PWS ID: _____
Contact Person: _____ Phone: _____
Supplier of Water: _____
Site Address: _____

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October 28, 2014

Stan Stokes
Environmental Consulting Technology
6440 Southpoint Parkway
Suite 130
Jacksonville, FL 32216

RE: Workorder: J1409603 Rainbow Food Store

Dear Stan Stokes

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, October 16, 2014. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul Gunsaulies

Paul Gunsaulies
PGunsaulies@AELLab.com

Enclosures

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SAMPLE SUMMARY

Workorder: J1409603 Rainbow Food Store

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1409603001	MW-9	Water	10/16/2014 13:15	10/16/2014 16:08
J1409603002	MW-7	Water	10/16/2014 13:25	10/16/2014 16:08
J1409603003	MW-16	Water	10/16/2014 14:10	10/16/2014 16:08
J1409603004	MW-8	Water	10/16/2014 14:17	10/16/2014 16:08
J1409603005	MW-17	Water	10/16/2014 14:50	10/16/2014 16:08

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ANALYTICAL RESULTS

Workorder: J1409603 Rainbow Food Store

Lab ID: J1409603001 Date Received: 10/16/14 16:08 Matrix: Water

Sample ID: MW-9 Date Collected: 10/16/14 13:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Dissolved	Preparation Method: SW-846 3005A Analytical Method: SW-846 6010,Dissolved							
Iron	520		ug/L	1	200	38	10/23/2014 11:48	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
Benzene	0.21	U	ug/L	1	1.0	0.21	10/24/2014 02:04	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	10/24/2014 02:04	J
Methyl tert-butyl Ether (MTBE)	0.32	U	ug/L	1	1.0	0.32	10/24/2014 02:04	J
Toluene	0.23	U	ug/L	1	1.0	0.23	10/24/2014 02:04	J
Xylene (Total)	0.53	U	ug/L	1	3.0	0.53	10/24/2014 02:04	J
1,2-Dichloroethane-d4 (S)	104		%	1	80-120		10/24/2014 02:04	
Toluene-d8 (S)	109		%	1	88-110		10/24/2014 02:04	
Bromofluorobenzene (S)	109		%	1	86-115		10/24/2014 02:04	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	0.050	U	mg/L	1	0.50	0.050	10/16/2014 19:11	J
Orthophosphate	0.050	U	mg/L	1	0.50	0.050	10/16/2014 19:11	J
Sulfate	16		mg/L	1	5.0	0.50	10/16/2014 19:11	J

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ANALYTICAL RESULTS

Workorder: J1409603 Rainbow Food Store

Lab ID: J1409603002 Date Received: 10/16/14 16:08 Matrix: Water
Sample ID: MW-7 Date Collected: 10/16/14 13:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis, Dissolved	Preparation Method: SW-846 3005A Analytical Method: SW-846 6010,Dissolved							
Iron	38	U	ug/L	1	200	38	10/23/2014 11:52	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
Benzene	0.21	U	ug/L	1	1.0	0.21	10/24/2014 02:50	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	10/24/2014 02:50	J
Methyl tert-butyl Ether (MTBE)	0.32	U	ug/L	1	1.0	0.32	10/24/2014 02:50	J
Toluene	0.23	U	ug/L	1	1.0	0.23	10/24/2014 02:50	J
Xylene (Total)	0.53	U	ug/L	1	3.0	0.53	10/24/2014 02:50	J
1,2-Dichloroethane-d4 (S)	104		%	1	80-120		10/24/2014 02:50	
Toluene-d8 (S)	110		%	1	88-110		10/24/2014 02:50	
Bromofluorobenzene (S)	110		%	1	86-115		10/24/2014 02:50	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	5.2		mg/L	1	0.50	0.050	10/16/2014 19:27	J
Orthophosphate	0.050	U	mg/L	1	0.50	0.050	10/16/2014 19:27	J
Sulfate	43		mg/L	1	5.0	0.50	10/16/2014 19:27	J

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ANALYTICAL RESULTS

Workorder: J1409603 Rainbow Food Store

Lab ID: J1409603003 Date Received: 10/16/14 16:08 Matrix: Water

Sample ID: MW-16 Date Collected: 10/16/14 14:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
SEMIVOLATILES								
Analysis Desc: Flo-Pro Analysis, Water	Preparation Method: FL-PRO Analytical Method: FL-PRO							
TPH	4.2		mg/L	1	0.42	0.10	10/20/2014 19:58	J
o-Terphenyl (S)	120		%	1	82-142		10/20/2014 19:58	
Nonatricontane-C39 (S)	112		%	1	42-193		10/20/2014 19:58	
Analysis Desc: 8270C-SIM Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: SW-846 8270C (SIM)							
1-Methylnaphthalene	23		ug/L	1	0.20	0.048	10/22/2014 00:58	J
2-Methylnaphthalene	26		ug/L	1	0.20	0.045	10/22/2014 00:58	J
Acenaphthene	0.13	I	ug/L	1	0.20	0.034	10/22/2014 00:58	J
Acenaphthylene	0.030	U	ug/L	1	0.20	0.030	10/22/2014 00:58	J
Anthracene	0.028	U	ug/L	1	0.20	0.028	10/22/2014 00:58	J
Benzo[a]anthracene	0.026	U	ug/L	1	0.20	0.026	10/22/2014 00:58	J
Benzo[a]pyrene	0.024	U	ug/L	1	0.20	0.024	10/22/2014 00:58	J
Benzo[b]fluoranthene	0.040	U	ug/L	1	0.10	0.040	10/22/2014 00:58	J
Benzo[g,h,i]perylene	0.034	U	ug/L	1	0.20	0.034	10/22/2014 00:58	J
Benzo[k]fluoranthene	0.058	U	ug/L	1	0.20	0.058	10/22/2014 00:58	J
Chrysene	0.041	U	ug/L	1	0.20	0.041	10/22/2014 00:58	J
Dibenzo[a,h]anthracene	0.042	U	ug/L	1	0.20	0.042	10/22/2014 00:58	J
Fluoranthene	0.027	U	ug/L	1	0.20	0.027	10/22/2014 00:58	J
Fluorene	0.13	I	ug/L	1	0.20	0.030	10/22/2014 00:58	J
Indeno(1,2,3-cd)pyrene	0.048	U	ug/L	1	0.20	0.048	10/22/2014 00:58	J
Naphthalene	85		ug/L	1	0.20	0.053	10/22/2014 00:58	J
Phenanthrene	0.036	U	ug/L	1	0.20	0.036	10/22/2014 00:58	J
Pyrene	0.033	U	ug/L	1	0.20	0.033	10/22/2014 00:58	J
Nitrobenzene-d5 (S)	49		%	1	32-147		10/22/2014 00:58	
2-Fluorobiphenyl (S)	44		%	1	34-140		10/22/2014 00:58	
p-Terphenyl-d14 (S)	65		%	1	54-138		10/22/2014 00:58	
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
Benzene	0.63	U	ug/L	3	3.0	0.63	10/25/2014 04:04	J
Ethylbenzene	170		ug/L	3	3.0	0.72	10/25/2014 04:04	J
Methyl tert-butyl Ether (MTBE)	0.96	U	ug/L	3	3.0	0.96	10/25/2014 04:04	J
Toluene	0.69	U	ug/L	3	3.0	0.69	10/25/2014 04:04	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1409603 Rainbow Food Store

Lab ID: J1409603003 Date Received: 10/16/14 16:08 Matrix: Water

Sample ID: MW-16 Date Collected: 10/16/14 14:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Xylene (Total)	89		ug/L	3	9.0	1.6	10/25/2014 04:04	J
1,2-Dichloroethane-d4 (S)	106		%	3	80-120		10/25/2014 04:04	
Toluene-d8 (S)	108		%	3	88-110		10/25/2014 04:04	
Bromofluorobenzene (S)	108		%	3	86-115		10/25/2014 04:04	

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ANALYTICAL RESULTS

Workorder: J1409603 Rainbow Food Store

Lab ID: **J1409603004** Date Received: 10/16/14 16:08 Matrix: Water

Sample ID: **MW-8** Date Collected: 10/16/14 14:17

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Dissolved	Preparation Method: SW-846 3005A Analytical Method: SW-846 6010,Dissolved							
Iron	38	U	ug/L	1	200	38	10/23/2014 11:57	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	5.9		mg/L	1	0.50	0.050	10/16/2014 19:43	J
Orthophosphate	0.050	U	mg/L	1	0.50	0.050	10/16/2014 19:43	J
Sulfate	32		mg/L	1	5.0	0.50	10/16/2014 19:43	J

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ANALYTICAL RESULTS

Workorder: J1409603 Rainbow Food Store

Lab ID: J1409603005 Date Received: 10/16/14 16:08 Matrix: Water

Sample ID: MW-17 Date Collected: 10/16/14 14:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
SEMIVOLATILES								
Analysis Desc: Flo-Pro Analysis, Water	Preparation Method: FL-PRO Analytical Method: FL-PRO							
TPH	0.18	I	mg/L	1	0.42	0.10	10/20/2014 20:25	J
o-Terphenyl (S)	112		%	1	82-142		10/20/2014 20:25	
Nonatricontane-C39 (S)	111		%	1	42-193		10/20/2014 20:25	
Analysis Desc: 8270C-SIM Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: SW-846 8270C (SIM)							
1-Methylnaphthalene	0.063	I	ug/L	1	0.20	0.048	10/22/2014 01:25	J
2-Methylnaphthalene	0.085	I	ug/L	1	0.20	0.045	10/22/2014 01:25	J
Acenaphthene	0.034	U	ug/L	1	0.20	0.034	10/22/2014 01:25	J
Acenaphthylene	0.030	U	ug/L	1	0.20	0.030	10/22/2014 01:25	J
Anthracene	0.028	U	ug/L	1	0.20	0.028	10/22/2014 01:25	J
Benzo[a]anthracene	0.026	U	ug/L	1	0.20	0.026	10/22/2014 01:25	J
Benzo[a]pyrene	0.024	U	ug/L	1	0.20	0.024	10/22/2014 01:25	J
Benzo[b]fluoranthene	0.040	U	ug/L	1	0.10	0.040	10/22/2014 01:25	J
Benzo[g,h,i]perylene	0.034	U	ug/L	1	0.20	0.034	10/22/2014 01:25	J
Benzo[k]fluoranthene	0.058	U	ug/L	1	0.20	0.058	10/22/2014 01:25	J
Chrysene	0.041	U	ug/L	1	0.20	0.041	10/22/2014 01:25	J
Dibenzo[a,h]anthracene	0.042	U	ug/L	1	0.20	0.042	10/22/2014 01:25	J
Fluoranthene	0.027	U	ug/L	1	0.20	0.027	10/22/2014 01:25	J
Fluorene	0.030	U	ug/L	1	0.20	0.030	10/22/2014 01:25	J
Indeno(1,2,3-cd)pyrene	0.048	U	ug/L	1	0.20	0.048	10/22/2014 01:25	J
Naphthalene	0.065	I	ug/L	1	0.20	0.053	10/22/2014 01:25	J
Phenanthrene	0.036	U	ug/L	1	0.20	0.036	10/22/2014 01:25	J
Pyrene	0.033	U	ug/L	1	0.20	0.033	10/22/2014 01:25	J
Nitrobenzene-d5 (S)	65		%	1	32-147		10/22/2014 01:25	
2-Fluorobiphenyl (S)	64		%	1	34-140		10/22/2014 01:25	
p-Terphenyl-d14 (S)	94		%	1	54-138		10/22/2014 01:25	
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
Benzene	0.21	U	ug/L	1	1.0	0.21	10/22/2014 13:43	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	10/22/2014 13:43	J
Methyl tert-butyl Ether (MTBE)	0.32	U	ug/L	1	1.0	0.32	10/22/2014 13:43	J
Toluene	0.23	U	ug/L	1	1.0	0.23	10/22/2014 13:43	J

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ANALYTICAL RESULTS

Workorder: J1409603 Rainbow Food Store

Lab ID: **J1409603005** Date Received: 10/16/14 16:08 Matrix: Water

Sample ID: **MW-17** Date Collected: 10/16/14 14:50

Sample Description: Location

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	3.0	0.53	10/22/2014 13:43	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	80-120		10/22/2014 13:43	
Toluene-d8 (S)	**110**		**%**	**1**	88-110		10/22/2014 13:43	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-115		10/22/2014 13:43	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J1409603 Rainbow Food Store

PARAMETER QUALIFIERS

U The compound was analyzed for but not detected.

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

LAB QUALIFIERS

J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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QUALITY CONTROL DATA

Workorder: J1409603 Rainbow Food Store

QC Batch: WCAJ/2788 Analysis Method: EPA 300 0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1409603001, J1409603002, J1409603004

METHOD BLANK: 1582717

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Nitrate	mg/L	0.050	0.050	U
Orthophosphate	mg/L	0.050	0 050	U
Sulfate	mg/L	0 50	0.50	U

QC Batch: EXTj/1941 Analysis Method: SW-846 8270C (SIM)

QC Batch Method: SW-846 3510C Prepared: 10/19/2014 08:00

Associated Lab Samples: J1409603003, J1409603005

METHOD BLANK: 1583738

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Naphthalene	ug/L	0 053	0.053	U
2-Methylnaphthalene	ug/L	0.045	0.045	U
1-Methylnaphthalene	ug/L	0.048	0.048	U
Acenaphthylene	ug/L	0.030	0.030	U
Acenaphthene	ug/L	0.034	0.034	U
Fluorene	ug/L	0.030	0.030	U
Phenanthrene	ug/L	0.036	0.036	U
Anthracene	ug/L	0.028	0.028	U
Fluoranthene	ug/L	0.027	0.027	U
Pyrene	ug/L	0.033	0.033	U
Benzo[a]anthracene	ug/L	0.026	0.026	U
Chrysene	ug/L	0.041	0.041	U
Benzo[b]fluoranthene	ug/L	0.040	0.040	U
Benzo[k]fluoranthene	ug/L	0.058	0.058	U
Benzo[a]pyrene	ug/L	0 024	0.024	U
Indeno(1,2,3-cd)pyrene	ug/L	0 048	0.048	U
Dibenzo[a,h]anthracene	ug/L	0 042	0.042	U
Benzo[g,h,i]perylene	ug/L	0.034	0.034	U
Nitrobenzene-d5 (S)	%	80	32-147	
2-Fluorobiphenyl (S)	%	78	34-140	
p-Terphenyl-d14 (S)	%	96	54-138	

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QUALITY CONTROL DATA

Workorder: J1409603 Rainbow Food Store

QC Batch: EXTJ/1942 Analysis Method: FL-PRO
QC Batch Method: FL-PRO Prepared: 10/19/2014 08:00
Associated Lab Samples: J1409603003, J1409603005

METHOD BLANK: 1583740

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
TPH	mg/L	0.10	0.10	U
o-Terphenyl (S)	%	118	82-142	
Nonatricontane-C39 (S)	%	103	42-193	

QC Batch: DGMJ/2236 Analysis Method: SW-846 6010,Dissolved
QC Batch Method: SW-846 3010A Prepared: 10/21/2014 03:30
Associated Lab Samples: J1409603001, J1409603002, J1409603004

METHOD BLANK: 1584281

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Iron	ug/L	38	38	U

QC Batch: MSVJ/1822 Analysis Method: SW-846 8260B
QC Batch Method: SW-846 5030B Prepared: 10/21/2014 22:25
Associated Lab Samples: J1409603005

METHOD BLANK: 1586344

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Methyl tert-butyl Ether (MTBE)	ug/L	0.32	0.32	U
Benzene	ug/L	0.21	0.21	U
Toluene	ug/L	0.23	0.23	U
Ethylbenzene	ug/L	0.24	0.24	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	97	80-120	
Toluene-d8 (S)	%	105	88-110	
Bromofluorobenzene (S)	%	108	86-115	

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QUALITY CONTROL DATA

Workorder: J1409603 Rainbow Food Store

QC Batch: MSVj/1827 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 10/23/2014 10:01

Associated Lab Samples: J1409603001, J1409603002

METHOD BLANK: 1588481

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Methyl tert-butyl Ether (MTBE)	ug/L	0.32	0.32	U
Benzene	ug/L	0.21	0.21	U
Toluene	ug/L	0.23	0.23	U
Ethylbenzene	ug/L	0.24	0.24	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	102	80-120	
Toluene-d8 (S)	%	109	88-110	
Bromofluorobenzene (S)	%	108	86-115	

QC Batch: MSVj/1833 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 10/24/2014 11:15

Associated Lab Samples: J1409603003

METHOD BLANK: 1589989

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Methyl tert-butyl Ether (MTBE)	ug/L	0.32	0.32	U
Benzene	ug/L	0.21	0.21	U
Toluene	ug/L	0.23	0.23	U
Ethylbenzene	ug/L	0.24	0.24	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	106	80-120	
Toluene-d8 (S)	%	108	88-110	
Bromofluorobenzene (S)	%	111	86-115	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1409603 Rainbow Food Store

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1409603001	MW-9			EPA 300.0	WCAj/2788
J1409603002	MW-7			EPA 300.0	WCAj/2788
J1409603004	MW-8			EPA 300.0	WCAj/2788
J1409603003	MW-16	SW-846 3510C	EXTj/1941	SW-846 8270C (SIM)	MSSj/1431
J1409603005	MW-17	SW-846 3510C	EXTj/1941	SW-846 8270C (SIM)	MSSj/1431
J1409603003	MW-16	FL-PRO	EXTj/1942	FL-PRO	GCSj/1629
J1409603005	MW-17	FL-PRO	EXTj/1942	FL-PRO	GCSj/1629
J1409603001	MW-9	SW-846 3005A	DGMj/2236	SW-846 6010,Dissolved	ICPj/1695
J1409603002	MW-7	SW-846 3005A	DGMj/2236	SW-846 6010,Dissolved	ICPj/1695
J1409603004	MW-8	SW-846 3005A	DGMj/2236	SW-846 6010,Dissolved	ICPj/1695
J1409603005	MW-17	SW-846 5030B	MSVj/1822	SW-846 8260B	MSVj/1823
J1409603001	MW-9	SW-846 5030B	MSVj/1827	SW-846 8260B	MSVj/1828
J1409603002	MW-7	SW-846 5030B	MSVj/1827	SW-846 8260B	MSVj/1828
J1409603003	MW-16	SW-846 5030B	MSVj/1833	SW-846 8260B	MSVj/1834

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☒ Jacksonville: 6681 Southpoint Pkwy. • Jackso
☐ Miramar: 10200 USA Today Way, Miramar, FL 3
☐ Tallahassee: 1288 Cedar Center Drive, Tallaha
☐ Tampa: 9610 Princess Palm Ave. • Tampa, FL 3361

(407.937.1597

J1409603

Client Name: ECT
Address: 6410 Southpoint Parkway, Suite
Jacksonville FL
Phone:
FAX:
Contact: Staci Sheker
Sampled By: David Thomas - Gary Dal
Turn Around Time: ☒ STANDARD ☐ RUSH
Page 1 of 1

Project Name: Seaboard Fuel Store
Project Number: 140441-0100
Project Location: Orange Park
REMARKS/SPECIAL INSTRUCTIONS:
ADaPT
ECT ATC Rates
Rec ID: 160507-117

SAMPLE ID	SAMPLE DESCRIPTION	Grab/Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: Chloride / Nitrate	VOC RSK-175	BTEX MTBE	Dissolved Methane	Dissolved Phosphorus	EDB 504.1	LABORATORY I.D. NUMBER
MW-9	G.W	Grab	10/16	1045	GW	9			1	3	3	1	1		01
MW-7	G.W	Grab	10/16	1025	GW	9			1	3	3	1	1		02
MW-16	G.W	Grab	10/16	1102	GW	4					3			1	03
MW-8	G.W	Grab	10/16	1117	GW	5			1	3		1	1		04
MW-17	GW	Grab	10/16	1150	GW	4					3			1	05

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = Ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice: ☒ Yes ☐ No ☒ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received 3 (in degrees celcius)

Form revised 08/15/2013 Device used for measuring Temp by unique identifier (circle IR temp gun used): IR-1A IR-1B LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1	David Thomas	10-16-14	1425		10-16-14	1605
2						
3						
4						

FOR DRINKING WATER USE:
(When PWS information not otherwise supplied) PWS ID:
Contact Person: Phone :
Supplier of Water:
Site Address:

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.setlab.com

WO#: 14102397
Date Reported: 10/30/2014
Company: Advanced Environmental Laboratories, In
Address: 6601 Southpoint Parkway
Jacksonville FL 32216
Received: 10/22/2014
Project#: 44384 HBN 315

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	RL	Run	Analyst
J1409603001	001	10/16/2014	Methane	0.22	ppm	Non-Potable Water	RSK-175	1	0.010	10/24/2014	AMZ

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	RL	Run	Analyst
J1409603002	002	10/16/2014	Methane	ND	ppm	Non-Potable Water	RSK-175	1	0.010	10/24/2014	AMZ

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	RL	Run	Analyst
J1409603004	003	10/16/2014	Methane	ND	ppm	Non-Potable Water	RSK-175	1	0.010	10/24/2014	AMZ

Florida Department of Environmental Protection

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

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

August 29, 2016

CERTIFIED MAIL #7013 1710 0002 1881 9500
RETURN RECEIPT REQUESTED

Mr. Mike Shahala
Rainbow Food Stores of Jax Inc.
9321 N. Cypress Shore Lane
Jacksonville, Florida 32257

Subject: Site Rehabilitation Completion Order
Rainbow Food Stores of Jacksonville
12615 North Main Street
Jacksonville, Duval County
FDEP Facility ID Number 168507117
Discharge Date: December 27, 1988 (EDI)

Dear Mr. Shahala:

The City of Jacksonville, Environmental Quality Division (EQD), on behalf of the Florida Department of Environmental Protection (Department), has reviewed the Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) dated May 7, 2015 (received May 5, 2015), and the Monitoring Well Abandonment Report dated May 31, 2016 (received May 31, 2016), for the petroleum product discharge referenced above. Documentation submitted with the SRCR/NFAP confirms that criteria set forth in Subsection 62-780.680(1), Florida Administrative Code (F.A.C.)., have been met.

Please refer to the attached map of the source property and analytical summary tables, Exhibits A and B respectively and hereby incorporated by reference. The SRCR/NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the facility for petroleum product contamination associated with the discharge referenced above, except as set forth below.

In the event concentrations of contaminants of concern are detected above the levels approved in this Order, the department will reevaluate the contamination and reinitiate State-funded site or discharge rehabilitation to reduce concentrations of contaminants of concern to the levels approved in the Order or otherwise allowed by Chapter 62-780, F.A.C., in accordance with the State-funded eligibility provisions that are applicable for the site or discharge. This includes any confirmed impacts found to be migrating beyond the site's property boundary. If groundwater is being used for potable uses in the area affected by the contamination, the Department will take all necessary steps to protect public health, safety and welfare under Chapter 376, F.S., as necessary. If a new or subsequent discharge occurs at the facility that

is not eligible for state funding, the contamination must be evaluated and addressed as provided in Chapter 62-780, F.A.C.

Legal Issues

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

Persons affected by this Order have the following options:

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

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

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

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

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

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

For good cause shown, pursuant to Subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Rainbow Food Stores of Jax Inc., shall mail a copy of the request to Rainbow Food Stores of Jax Inc. at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Rainbow Food Stores of Jax Inc., shall mail a copy of the petition to Rainbow Food Stores of Jax Inc. at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

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

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

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

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

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

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

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

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

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

Judicial Review

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

Questions

Any questions regarding the EQD's review of the SRCR/NFAP should be directed to Vanetta Thomas at (904) 255-7100. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 168507117. Please use this identification on all future correspondence with the Department.

Sincerely,

Diane D. Pickett
Program Administrator
Petroleum Restoration Program

DDP/vt

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

Jeanne Sanders — Clerk (or Deputy Clerk)

9-13-2016 — Date

Exhibits: A: map(s) of the source property; B: updated analytical summary tables and map(s) of the source property

ec: Timothy Dohaney, FDEP Northeast District office - timothy.dohaney@dep.state.fl.us
Vanetta Thomas, EQD – vthomas@coj.net
Allene Rachal, P.G. – EQD – mcintosh@coj.net
Mervin W. Dale, ECT - mdale@ectinc.com
Wesley Curtis, St. Johns River Water Management District – wcurtis@sjrwmd.com
File

Jacksonville
Where Florida Begins.

P.G. CERTIFICATION

Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) dated May 7, 2015 (received May 5, 2015), and the Monitoring Well Abandonment Report dated May 31, 2016 (received May 31, 2016), for Rainbow Food Stores of Jacksonville located at 12615 North Main Street, Jacksonville, Duval County, FDEP Facility ID# 168507117.

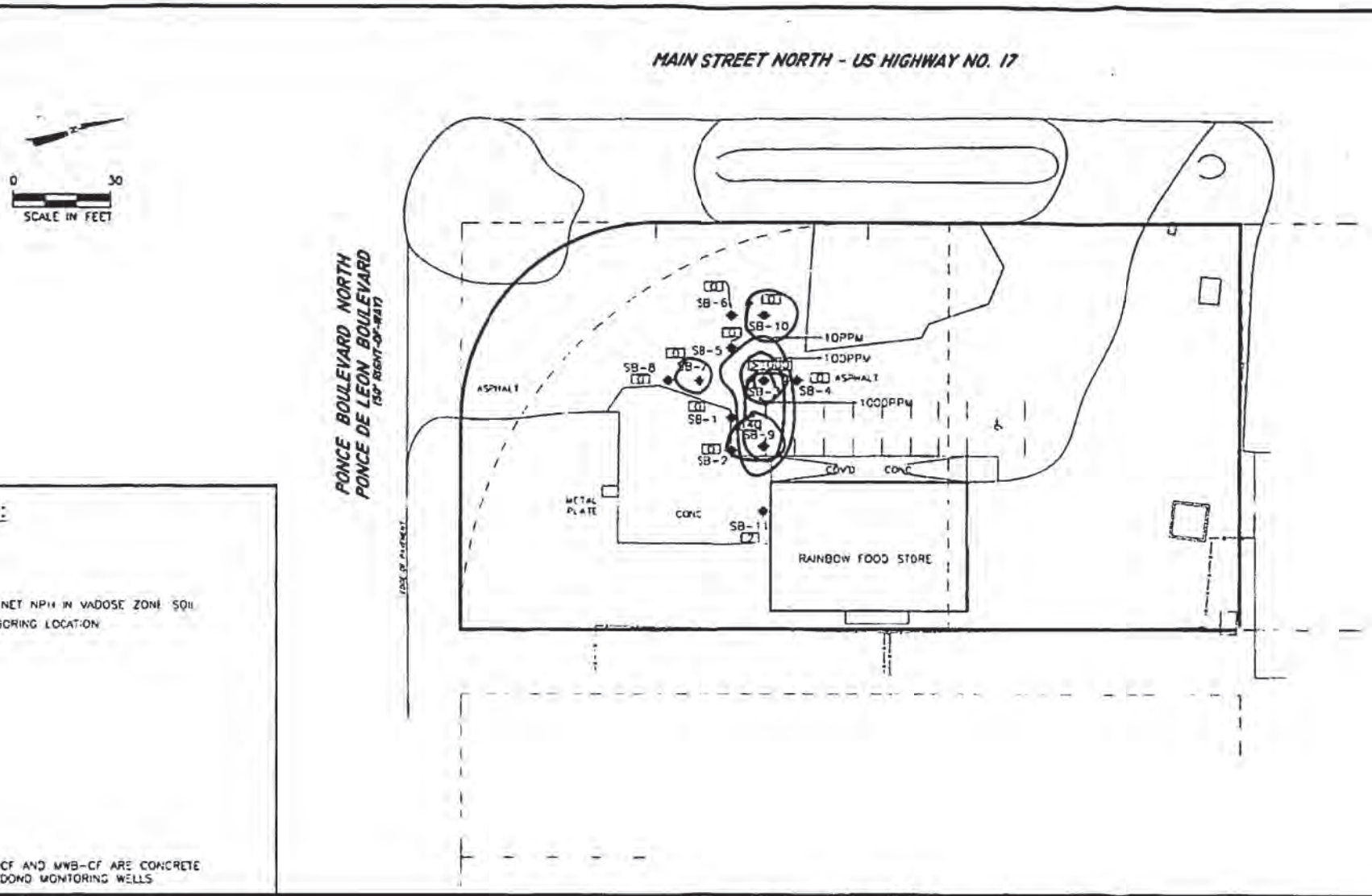
I hereby certify that in my professional judgment, the components of this Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) prepared for the December 27, 1988 petroleum product discharge discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-780, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the site rehabilitation objectives stated in Chapter 62-780, F.A.C., have been met.

___ I personally completed this review.

_X_ This review was conducted by Vanetta Thomas working under my direct supervision.

George R. Maihack, P.G.
Professional Geologist 1353
City of Jacksonville, Environmental Quality Division





HANDEX
Practical Environmental Solutions

RAINBOW FOOD STORES of Jacksonville #m
17615 NORTH MAIN STREET
JACKSONVILLE, FLORIDA
3-8-03

168507117

FIGURE 4A
MAX NET NPH IN
VADOSE ZONE (0'-3')

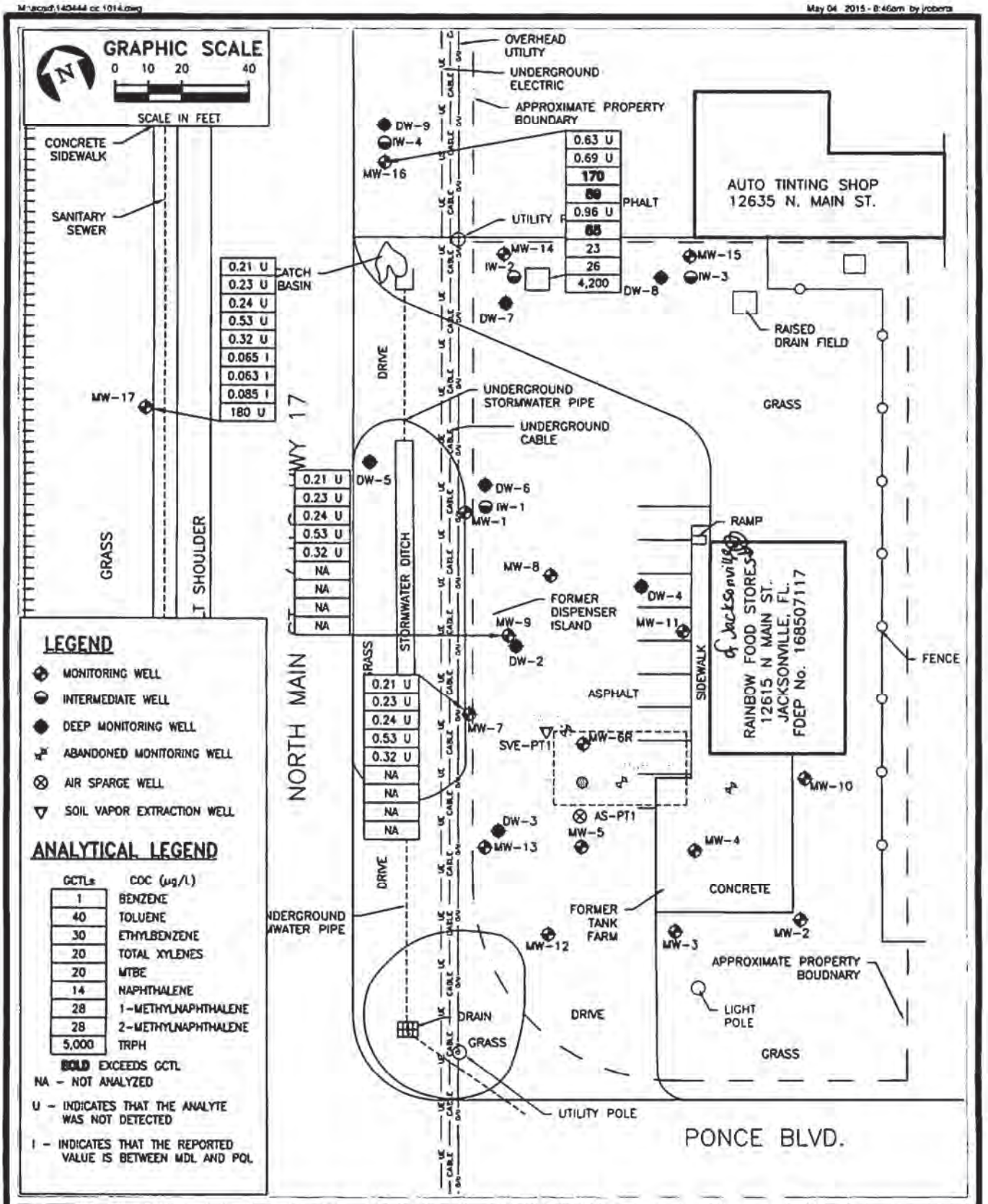


FIGURE 5.

GROUNDWATER CONTAMINANT CONCENTRATIONS

OCTOBER 16, 2014

Source: Handex, 1997; ECT, 2015.

ECT Environmental Consulting & Technology, Inc.

TABLE 2: GROUNDWATER ANALYTICAL SUMMARY

Facility Name: Rainbow Food Stores of Jacksonville
Facility I. D. No. 168507117

NA = Not Analyzed
µg/L = micrograms per liter
mg/L = milligrams per liter
ND = non detected

< = Below Method Detection Limit U = Not Detected
I = Between Method Detection Limit and Practical Quantitation Limit
* = Offsite Monitoring Wells for Imminent Threat Investigation

Sample																	
Location	Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
MW-1	03/23/95	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/18/95	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.39 U	0.39 U	0.39 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.32 U	0.32 U	0.32 U	NA	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66U	0.20 U	NA	NA	0.93	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
MW-2	03/23/95	< 1.0	< 1.0	< 1.0	< 1.0	3	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/18/95	< 1.0	< 1.0	< 1.0	< 1.0	2	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
MW-3	03/23/95	< 1.0	< 1.0	< 1.0	< 1.0	3	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/18/95	< 1.0	< 1.0	< 1.0	< 1.0	3	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	< 0.16	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
MW-4	08/18/95	2	< 1.0	20	13	1	NA	NA	27	30	42	1100	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	13.0	17.2	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	< 0.16	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	4.2	0.18 U	NA	NA	NA	NA	NA	NA
MW-5	08/18/95	180	32	750	1300	95	NA	NA	240	35	65	1000	NA	NA	NA	NA	NA
	02/09/96	NA	NA	NA	NA	NA	< 0.010	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	61.7	117	< 2.0	NA	NA	13.5	< 2.1	< 2.1	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.78	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	07/19/08	< 0.21	3.7	47	157	< 0.35	NA	NA	13	5.4	7.9	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	2.5	1.3	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.38 I	15	1.2 I	0.23 U	NA	NA	9.7	0.66	0.33 I	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.44 I	20	12	0.31 U	NA	NA	13	2.9	5.1	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	13	10	0.31 U	NA	NA	26	6.4	13	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.34	0.52 U	0.34 U	NA	NA	6.0	1.6	3.0	NA	NA	NA	NA	NA	NA
	12/02/11	0.20 U	0.20	1.1	0.52 U	0.34 U	NA	NA	2.3	0.72	0.85	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.35 U	0.35 U	0.35 U	NA	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66 U	0.20 U	NA	NA	0.33 U	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA

TABLE 2: GROUNDWATER ANALYTICAL SUMMARY

NA = Not Analyzed
µg/L = micrograms per liter
mg/L = miligrams per liter
ND = non detected

< = Below Method Detection Limit U = Not Detected
I = Between Method Detection Limit and Practical Quantitation Limit
* = Offsite Monitoring Wells for Imminent Threat Investigation

Facility Name: Rainbow Food Stores of Jacksonville (W)
Facility I. D. No. 168507117

Sample Location	Sample Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/l	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
MW-6	08/18/95	< 1.0	1	< 1.0	< 1.0	3	NA	NA	< 10	< 10	< 10	< 2000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.1	< 2.1	NA	NA	NA	NA	NA	NA
	09/03/04	< 0.30	< 0.29	< 0.27	< 0.86	< 0.31	NA	NA	2.2	0.26 I	0.62 I	NA	NA	NA	NA	NA	NA
MW-6R	09/15/05	< 0.21	< 0.23	3.7	< 0.63	< 0.35	NA	NA	5.5	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	12/02/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
MW-7	08/18/95	1	1	< 1.0	< 1.0	1	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	12/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	1.1	0.97	< 0.18	NA	NA	NA	NA	NA	NA
	02/14/06	< 0.21	< 0.23	0.92	< 0.63	< 0.35	NA	NA	2.7	1.4	0.38 I	NA	NA	NA	NA	NA	NA
	04/10/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.40 I	1.3	< 0.18	NA	NA	NA	NA	NA	NA
	07/19/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.69	0.52	0.24 I	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.24 I	0.18 U	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	12/02/11	0.20 U	0.20 U	3.0	0.52 U	0.34 U	NA	NA	0.63 I	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.33 U	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66 U	0.20 U	NA	NA	0.33 U	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
	10/16/14	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	NA	NA	NA	NA	38	5.2	0.050 U	43	ND
	04/15/15	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	08/18/95	< 1.0	1	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	NA	NA	0.33 U	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66 U	0.20 U	NA	NA	0.34 I	0.33 U	0.33 U	NA	NA	NA	NA	NA	NA
	10/16/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38	5.9	0.050 U	32	ND

TABLE 2: GROUNDWATER ANALYTICAL SUMMARY

NA = Not Analyzed
µg/L = micrograms per liter
mg/L = milligrams per liter
ND = non detected

< = Below Method Detection Limit U = Not Detected
I = Between Method Detection Limit and Practical Quantitation Limit
* = Offsite Monitoring Wells for Imminent Threat Investigation

Facility Name: Rainbow Food Stores of Jacksonville ©
Facility I. D. No. 168507117

Sample Location	Sample Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
MW-9	09/18/95	350	15	560	95	31	NA	NA	170	48	81	2200	NA	NA	NA	NA	NA
	02/09/96	NA	NA	NA	NA	NA	< 0.010	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/22/02	10.9	< 2.0	28.4	< 6.0	< 2.0	NA	NA	54.1	11.5	16.1	NA	NA	NA	NA	NA	NA
	09/15/05	3.2	1.5 I	58	< 5.29 I	< 1.1	NA	NA	100	20	26	NA	NA	NA	NA	NA	NA
	12/15/05	1.4	0.68 I	25	1.72 I	< 0.35	NA	NA	41	11	9.8	NA	NA	NA	NA	NA	NA
	02/14/06	1.6	0.99	33	3.25 I	< 0.35	NA	NA	42	7.7	6.1	NA	NA	NA	NA	NA	NA
	04/10/06	1.9	1.3	40	3.76 I	< 0.35	NA	NA	120	27	32	NA	NA	NA	NA	NA	NA
	07/19/06	2.9	1.4	69	4.13	< 0.35	NA	NA	150	40	52	NA	NA	NA	NA	NA	NA
	12/15/08	0.66	0.50 U	7.2	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.38 I	0.28 U	33	3.1	0.23 U	NA	NA	99	12	5.0	NA	NA	NA	NA	NA	NA
	02/11/10	0.32 I	0.28 U	14	1.4 I	0.31 U	NA	NA	30	6.0	2.6	NA	NA	NA	NA	NA	NA
	08/09/10	0.30 U	0.34 I	30	0.91 I	0.31 U	NA	NA	22	6.4	4.2	NA	NA	NA	NA	NA	NA
	07/12/11	0.45	0.25	12 6	0.82	0.34 U	NA	NA	23.5	4.0	0.60	NA	NA	NA	NA	NA	NA
	12/02/11	0.23 I	0.26 I	36.1	1.7 I	0.34 U	NA	NA	10.2	2.2 I	0.47 I	NA	NA	NA	NA	NA	NA
	09/26/12	0.21 U	0.20 U	5.7	0.50 U	0.21 U	NA	NA	0.69 I	0.39 U	0.39 U	NA	NA	NA	NA	NA	NA
	10/21/13	0.21 I	0.20 U	38.8	1.4 I	0.21 U	NA	NA	18.1	4.6	0.44 I	NA	NA	NA	NA	NA	NA
	01/21/14	0.27 I	0.20 U	30.2	1.7 I	0.20 U	NA	NA	14.5	4.2	0.33 U	NA	NA	NA	NA	NA	NA
	10/16/14	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	NA	NA	NA	NA	520	0.50 U	0.50 U	16	0.22
	04/15/15	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	02/09/96	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
MW-11	02/09/96	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
MW-12	02/09/96	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	< 0.15	6.7	0.58 I	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA

TABLE 2: GROUNDWATER ANALYTICAL SUMMARY

NA = Not Analyzed
µg/L = micrograms per liter
mg/L = milligrams per liter
ND = non detected

< = Below Method Detection Limit U = Not Detected
I = Between Method Detection Limit and Practical Quantitation Limit
* = Offsite Monitoring Wells for Imminent Threat Investigation
(upgradient to site well) (W)

Facility Name: Rainbow Food Stores of Jacksonville (W)
Facility I. D. No. 168507117

Sample Location	Sample Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
MW-13	02/09/96	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	12/15/02	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.16 I	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	02/14/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	< 0.15	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	04/10/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.26 I	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	07/19/06	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.36 I	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	02/11/10	0.30 U	0.28 U	0.17 U	0.63 U	0.31 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
	07/12/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
	12/02/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA
MW-14	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/09	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	0.15 U	0.12 U	0.18 U	NA	NA	NA	NA	NA	NA
MW-15	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-16*	12/15/08	7.6	96.9 c	276 c	999 c	14.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/10	0.63 U	7.9	250	780	NA	NA	NA	140	NA	NA	NA	NA	NA	NA	NA	NA
	09/28/12	0.21 U	0.20 U	4.0	3.5	0.21U	NA	NA	4.8	6.0	1.6	549	NA	NA	NA	NA	NA
	10/21/13	0.32 I	4.0	384	684	0.21 U	NA	NA	149	40.9	32.4	6710	NA	NA	NA	NA	NA
	01/21/14	0.32 I	6.9	399	1060	0.20 U	NA	NA	176	40.6	49.4	6920	NA	NA	NA	NA	NA
	10/13/14	0.63 U	0.69 U	170	89	0.96 U	NA	NA	85	23	26	4200	NA	NA	NA	NA	NA
	04/15/15	0.63 U	0.69 U	200	120	0.96 U	NA	NA	200	49	69	4900	NA	NA	NA	NA	NA
MW-17*	10/21/13	0.21 U	0.20 U	2.2	0.50 I	0.21 U	N/A	N/A	7.1	1.8	1.9	330	NA	NA	NA	NA	NA
	01/21/14	0.24 U	0.20 U	0.28 U	0.66 U	0.20 U	N/A	N/A	0.32 U	0.32 U	0.32 U	140 U	NA	NA	NA	NA	NA
	10/13/14	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	N/A	N/A	0.065 I	0.063 I	0.085 I	180 I	NA	NA	NA	NA	NA
	04/15/15	0.21 U	0.23 U	0.24 U	0.53 U	0.32 U	NA	NA	0.10 I	0.048 U	0.045 U	240 I	NA	NA	NA	NA	NA
IW-1	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IW-2	12/15/08	0.50 U	0.50 U	5.3	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IW-3	12/15/08	0.50 U	0.63	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IW-4*	12/15/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/10	0.21 U	0.28 U	0.17 U	0.59 U	0.23 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-1	02/09/96	< 1.0	< 1.0	6.0	< 1.0	< 1.0	NA	NA	< 10	< 10	< 10	< 1000	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 1.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	08/22/02	2.3	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.0	< 2.0	< 2.0	NA	NA	NA	NA	NA	NA
	09/03/04	0.53 I	< 0.29	< 0.27	< 0.86	< 0.31	NA	NA	1.9	0.24 I	0.50 I	NA	NA	NA	NA	NA	NA

+ well abandoned + (W)

TABLE 2: GROUNDWATER ANALYTICAL SUMMARY

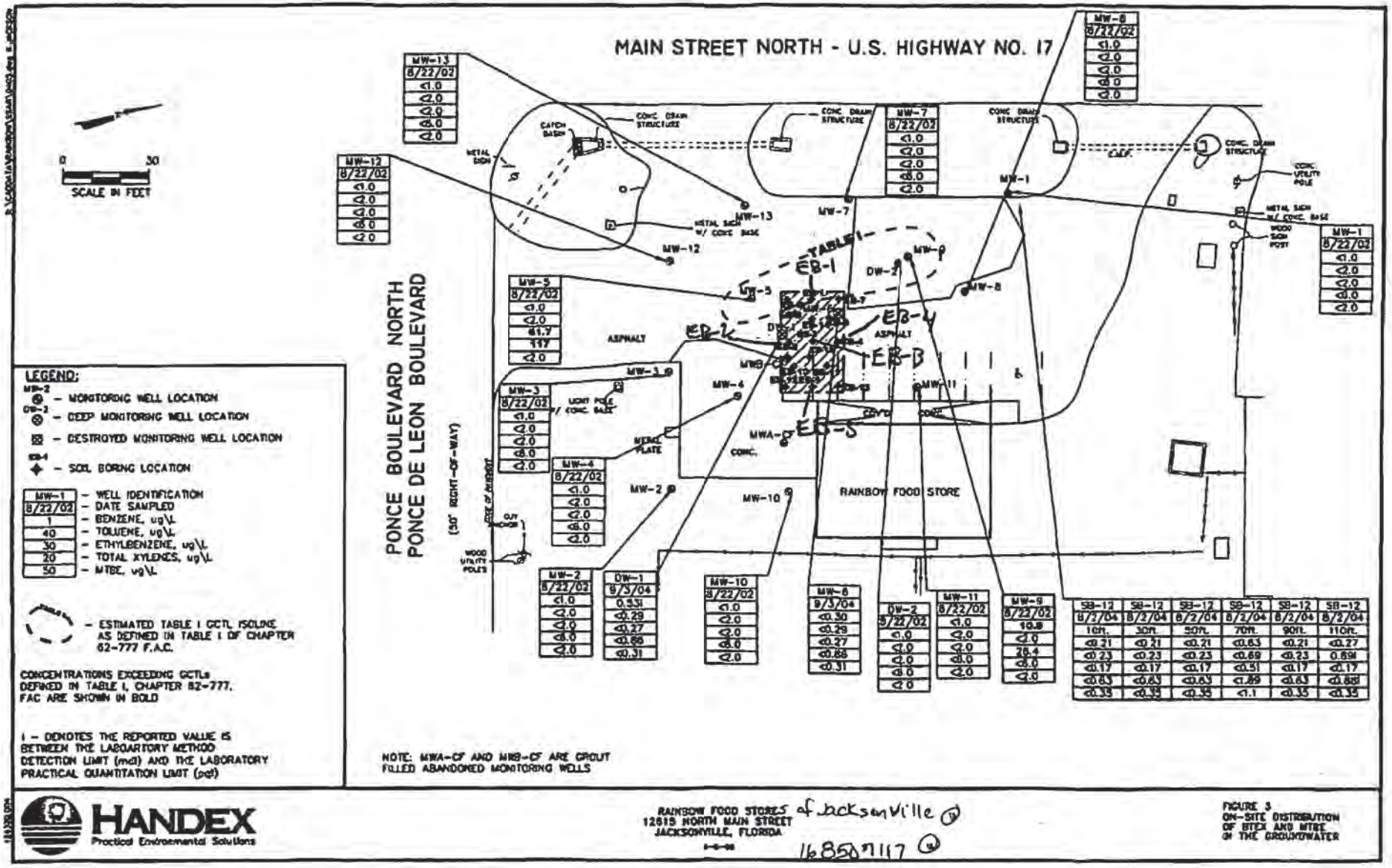
NA = Not Analyzed
µg/L = micrograms per liter
mg/L = miligrams per liter
ND = non detected

< = Below Method Detection Limit U = Not Detected
I = Between Method Detection Limit and Practical Quantitation Limit
* = Offsite Monitoring Wells for Imminent Threat Investigation
(upgradient to site well)

Facility Name: Rainbow Food Stores of Jacksonville
Facility I. D. No. 168507117

Sample Location	Sample Date	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	EDB	Lead	Naph-thalene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	TRPH	Iron	Nitrate (mg/L)	Ortho-phosphate (mg/L)	Sulfate (mg/L)	Methane (ppm)
Chapter 62-777, F.A.C. GCTL		(1) µg/L	(40) µg/L	(30) µg/L	(20) µg/L	(20) µg/L	(0.02) µg/L	(15) µg/L	(14) µg/L	(28) µg/L	(28) µg/L	(5000) µg/L	300 µg/L	10 mg/L	none	250 mg/L	none
Chapter 62-777, F.A.C. Perimeter		(100) µg/L	(400) µg/L	(300) µg/L	(200) µg/L	(200) µg/L	(2) µg/L	(150) µg/L	(140) µg/L	(280) µg/L	(280) µg/L	(50000) µg/L	none	none	none	none	none
DW-2	05/28/96	< 1.0	< 1.0	9.4	8.8	< 1.0	NA	NA	17	9.6	19	2700	NA	NA	NA	NA	NA
	08/22/02	< 1.0	< 2.0	< 2.0	< 6.0	< 2.0	NA	NA	< 2.1	< 2.1	< 2.1	NA	NA	NA	NA	NA	NA
	09/15/05	< 0.21	< 0.23	< 0.17	< 0.63	< 0.35	NA	NA	0.20 I	< 0.12	< 0.18	NA	NA	NA	NA	NA	NA
	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-3	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-4	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-5	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-6	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-7	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-8	12/16/08	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DW-8*	12/16/08	0.50 U	5.0	6.4	23.9	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/10	0.21 U	0.28 U	0.33 I	1.1 I	NA	NA	NA	1.4 U	NA	NA	NA	NA	NA	NA	NA	NA
SVE-PT1	12/02/11	0.20 U	0.20 U	0.20 U	0.52 U	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA

Sources: HANDEX, 2007. ECT, 2008, 2009, 2010, 2011, 2012, 2013, and 2014.



HANDEX
Practical Environmental Solutions

RAINBOW FOOD STORES of Jacksonville
12815 NORTH MAIN STREET
JACKSONVILLE, FLORIDA
16850 7117

FIGURE 3
ON-SITE DISTRIBUTION OF BTEX AND MTBE IN THE GROUNDWATER

TABLE 2: SOIL SAMPLING
ANALYTICAL RESULTS SUMMARY

Facility Name: Rainbow Foods Stores of Jacksonville ③ Facility ID#: 16/8507117

Sample			Method 8021					FL-PRO	Method 8310		
Location	Date	NPH Reading (ppm)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TRPH	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene
Residential Direct Exposure Target Levels			1,100	1,300,000	1,400,000	1,200,000	3,200,000	340,000	40,000	4,300,000	600,000
Leachability Target Levels			7	500	600	2000	200	340,000	1,700	2,000	2,100
EB-1 at 3 feet	02/23/2005	0	<0.58	<0.53	0.62 i	<1.78	<0.49	10,000	<47	<36	<40
EB-2 at 3 feet	02/23/2005	0	<0.56	<0.51	<0.54	<1.66	<0.47	11,000	<250	<190	<210
EB-3 at 5 feet	02/23/2005	0	<0.51	<0.46	<0.49	<1.51	<0.43	290,000	4,200	5,000	10,000
EB-4 at 3 feet	02/23/2005	0	<0.54	<0.49	<0.53	<1.64	<0.45	10,000	<46	<35	<39
EB-5 at 3 feet	02/23/2005	0	<0.39	<0.36	<0.38	<1.17	<0.78	10,000	270	310	610

Below water table ③

Sample			Method 8310								
Location	Date	NPH Reading (ppm)	Ace-naphthene	Ace-naphthylene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Chrysene
Residential Direct Exposure Target Levels			1,900,000	1,900,000	15,000,000	1,400	140	1,400	2,300,000	14,000	140,000
Leachability Target Levels			2,100	2,200	2,500,000	1,200	8,000	10,000	32,000,000	120,000	770,000
EB-1 at 3 feet	02/23/2005	0	<32	<31	<30	<23	<32	<27	<28	<31	<22
EB-2 at 3 feet	02/23/2005	0	<170	<160	<160	<120	<170	<140	<150	<160	<110
EB-3 at 5 feet	02/23/2005	0	<34	33	<32	<24	<34	<29	<30	<33	<23
EB-4 at 3 feet	02/23/2005	0	<31	<30	<29	<22	<31	<6	<28	<30	<21
EB-5 at 3 feet	02/23/2005	0	<32	<31	<30	<23	<32	<27	<29	<31	<22

Sample			Method 8310					
Location	Date	NPH Reading (ppm)	Dibenz(a,h) anthracene	Fluor-anthene	Fluorene	Indeno (1,2,3-c, d) pyrene	Phen-anthrene	Pyrene
Residential Direct Exposure Target Levels			1,400	2,300,000	2,300,000	1,400	2,000,000	2,300,000
Leachability Target Levels			30,000	280,000	160,000	28,000	250,000	1,800,000
EB-1 at 3 feet	02/23/2005	0	<24	<29	<33	<20	<29	<26
EB-2 at 3 feet	02/23/2005	0	<130	<150	<180	<110	<150	<140
EB-3 at 5 feet	02/23/2005	0	<26	<31	47 i	<22	53 i	<28
EB-4 at 3 feet	02/23/2005	0	<24	<28	<33	<20	<29	<26
EB-5 at 3 feet	02/23/2005	0	<24	<29	<33	<20	<29	<27

NOTE: All results reported in micrograms per kilogram (ug/kg)
'MTBE' denotes methyl tert-butyl ether
'TRPH' denoted total recoverable petroleum hydrocarbons
'i' denotes a value between the laboratory method detection limit and practical quantitation limit
Target Levels based on Table II Soil Cleanup Target Levels in Chapter 62-777 Florida Administrative Code

TABLE 4: SOIL SAMPLING
ANALYTICAL RESULTS SUMMARY

Facility Name: Rainbow Foods Store of Stockmarket
Facility ID#: 168507117

Below Detection Limits = BDL
Not Sampled = NS
Analytical Result units are ug/kg

Sample			Method 8021						FL-PRO	
Location/Date	NPH Reading	Depth Below Ground Surface (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOAs	MTBE	TRPH	
*Direct Exposure Table II in (ug/kg)			1,100	380,000	1,100,000	5,900,000	<>	3,200,000	340,000	
Leachability: Table II in (ug/kg)			7	500	600	700	<>	200	340,000	
SB-3 / 8-21-02	>1000	4	<200	<200	1,650	1,400	<3,450	<200	836,000	
SB-7 / 8-21-02	>200	5	<4.1	<4.1	46.1	<12	<66.3	<4.1	8,460	
SB-9 / 10-25-02	21	2	<300	<300	1,500	1,880	<3,980	<300	412,000	
SB-10 / 10-25-02	0	1	<5.5	<5.5	<5.5	<16	<32.5	<5.5	12,900	

Sample			Method 8310							
Location/Date	NPH Reading	Depth Below Ground Surface (ft)	Naphthalene	1-methylnaphthalene	2-methylnaphthalene	MAX Other PAH				
*Direct Exposure: II in (ug/kg)			40,000	68,000	60,000					
Leachability: Table II in (ug/kg)			1,700	2,200	6,100					
SB-3 / 8-21-02	>1000	4	12,100	11,500	21,400	<5600				
SB-7 / 8-21-02	>200	5	<440	<440	<440	<890				
SB-9 / 10-25-02	21	2	26,500	19,000	41,800	<7,300				
SB-10 / 10-25-02	0	1	<360	<360	<360	<720				

Handex

CONTAMINATION ASSESSMENT REPORT

Huntley Jiffy Store # 6

12615 North Main Street
Jacksonville, Florida

Duval County
FDEP Facility ID No: 16 85 07117

Prepared For:

Mr. Roy Orren



Prepared By:

Roger Park
Project Manager
March 5, 1996

Reviewed By:

Stephen G. McMahon, P.G.
Vice President/Sr. Hydrogeologist
March 5, 1996

SEAL



INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.
3787 Old Middleburg Road
Jacksonville, Florida 32210

IES PROJECT NO: 95-105R

CONTAMINATION ASSESSMENT REPORT SUMMARY SHEET

FACILITY NAME: Huntley Jiffy Store No. 6 REIMBURSEMENT SITE[X]
LOCATION: 12615 North Main Street, Jacksonville, Florida, FL STATE CONTRACT SITE [ ]
EDI #: _____ FAC I.D. #: 168507117 OTHER: _____ [ ]

DATE REVIEWED: _____ LOCAL GOVERNMENT: DUVAL COUNTY

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(1) SOURCE OF SPILL: UNKNOWN DATE OF SPILL: UNKNOWN

(2) TYPE OF PRODUCT:

GASOLINE GROUP	GALLONS LOST	KEROSENE GROUP	GALLONS LOST
[ ] LEADED	_____	[ ] KEROSENE	_____
[X] UNLEAD. REG.	UNKNOWN	[X] DIESEL	UNKNOWN
[ ] UNLEAD. PREM.	_____	[ ] JP-4 JET FUEL	_____
[ ] GASOHOL	_____	[ ] JET A FUEL	_____

(3) DESCRIPTION OF IRA (IF ANY): 150 tons excessively contaminated soils removed

[ ] FREE PRODUCT REMOVAL: N/A GALLONS
[ ] SOIL REMOVAL: _____ CUBIC YARDS
[x] SOIL INCINERATION: 150 TONS

(4) FREE PRODUCT STILL PRESENT? NO
MAXIMUM APPARENT PRODUCT THICKNESS: N/A FEET

(5) MAXIMUM GROUNDWATER CONTAMINANT LEVELS (PPB):

TOTAL VOA: 2262 ppb BENZENE: 350 ppb EDB: NONE
LEAD: 0.0053 ppb MTBE: 35 ppb OTHER: tot NAPs 340 PPB

(6) BRIEF LITHOLOGIC DESCRIPTION: 0-1' backfill; 1-3' dark brown fine sand; 3-10' reddish brown fine sand coated with organic matter; 10-12' brown fine sand; 12-13' brown sandy clay; 13-35' light tan medium fine sand

(7) AREAL AND VERTICAL EXTENT OF SOILS CONTAMINATION DEFINED? YES

(8) LOWER AQUIFER CONTAMINATED? NO
DEPTH OF VERTICAL CONTAMINATION: Less than 30' below ground level

(9) DATE OF LAST COMPLETE ROUND OF GROUNDWATER SAMPLING: 02/09/96
DATE OF LAST SOIL SAMPLING: N/A

(10) QAPP APPROVED? YES DATE: 12/20/95, IES' COMP QAP #890280G

(11) DIRECTION (e.g. NNW) OF SURFICIAL GROUNDWATER FLOW: NNW
(FIGURE 10 ON PAGE 20)

(12) AVERAGE DEPTH TO GROUNDWATER: 4 FEET

(13) OBSERVED RANGE OF SEASONAL GROUNDWATER FLUCTUATIONS: 1 Foot

(14) ESTIMATED RATE OF GROUNDWATER FLOW: 0.0070 FEET/DAY

(15) HYDRAULIC GRADIENT ACROSS SITE: 0.00023 FEET/FEET

(16) AQUIFER CHARACTERISTICS:

	VALUE	UNITS	METHOD
HYDRAULIC CONDUCTIVITY	19.11	ft/day	Average of slug tests
STORAGE COEFFICIENT	20	%	Same as effective porosity for unconfined aquifers
AQUIFER THICKNESS	30	ft	Drilling logs
EFFECTIVE SOIL POROSITY	20	%	"Groundwater and Wells", p. 67
TRANSMISSIVITY	919.5	ft^2/day	Hyd. cond. x aquifer thickness

(17) OTHER REMARKS: No free product found, area is not tidally influenced, vertical & horizontal extent of contamination is defined

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VIII. APPENDICES

Appendix A Tank Closure Reports

Appendix B Well Completion Reports

Appendix C Slug Test Data

Appendix D Laboratory Reports

I. INTRODUCTION AND BACKGROUND INFORMATION

A. Purpose

The primary purpose of this contamination assessment is to define the vertical and horizontal extent of petroleum contamination at Huntley Jiffy Store No. 6 (the "site"). A secondary purpose is to identify the source and type of contamination.

The site is included in the state's Early Detection Incentive Program (EDI) under reimbursement status. The FDEP facility identification number is 16 85 07117.

This contamination assessment report was prepared according to the format recommended in the FDEP document "Guidelines for the Preparation of Contamination Assessment Reports for Petroleum Contaminated Sites", Division of Waste Management, Bureau of Waste Cleanup, Technical Review Section, October 1989.

B. Site Location and Area of Investigation

1. The site is located at 12615 North Main Street in Jacksonville, Duval County, Florida as shown in Figures 1 and 2. The topography in the vicinity of the site slopes generally to the south and west.

2. Land use in the vicinity of the site is a mixture of commercial and residential usage as follows:

   North: The properties fronting North Main Street are predominantly commercial businesses. The adjoining property to the north is an automobile radio, alarm and window tinting business.

   East: The adjoining property to the east and the extended vicinity to the east is residential usage.

   South: The vicinity to the south is primarily commercial. Ponce Boulevard adjoins the site on the south and the Oceanway Shopping Center Plaza is located approximately ½-mile to the south.

   West: North Main Street adjoins the site property on the west and the CSX Railroad right-of-way and trackage is to the west of North Main Street. The extended vicinity to the west is residential.

3. The site layout is shown in Figure 3.

C. Site History and Operations

1. Past and Present Uses of Site

   The 1968 and 1977 historical aerial photographs show a prior gasoline station building located near the northeast corner of the site property. These photographs show fuel dispensers located in the general vicinity of the present building. The 1987 aerial photograph shows the site property as it appears

today. Currently, the site is being operated as the Rainbow Foods store. Petroleum fuels are not currently dispensed or stored on the site.

The underground storage tanks (USTs) and petroleum product dispensing systems were removed by Capital Petroleum Equipment Company on August 16, 1989. IT Environmental Services, Inc. performed the environmental closure assessment and report. According to the closure report, the removed equipment consisted of petroleum product dispensing lines, vent lines, two 12,000 gallon USTs used for gasoline storage and one 3,000 gallon UST used for storage of kerosene product.

NOTE: Integrated Environmental Solutions, Inc. (IES) makes no representations, warranty or guaranty concerning the quality, reliability, accuracy or completeness of data or information, or, of any work performed by Capital Petroleum Equipment Co. and/or IT Environmental Services, Inc. at this site.

IES EXPRESSLY DISCLAIMS ANY LIABILITY FOR INACCURATE OR INCOMPLETE DATA GENERATED BY CAPITAL PETROLEUM EQUIPMENT CO. and/or IT ENVIRONMENTAL SERVICES, INC. PRIOR TO THE DATE OF THIS CONTAMINATION ASSESSMENT.

IES further disclaims any liability which may arise from errors, omissions or inaccuracies in information provided to IES by Capital Petroleum Equipment Co. or previously submitted by others to the site Owner/Operator, and/or, any regulatory agency concerning this project or site.

The former UST tank farm and fuel/dispenser island locations are shown in Figure 3.

2. Structural Integrity of Product Storage/Distribution System

No tank or line tightness test records are available. The entire petroleum fuels storage and dispensing systems were removed on August 16, 1989 and have not been replaced.

3. Initial Remedial Action

An initial remedial action (IRA) was performed in conjunction with the USTs, dispenser islands and product lines removal on August 16, 1989 by Capital Petroleum Equipment Company and IT Environmental Services, Inc. Approximately 150 tons of excessively contaminated soils were removed from the tank farm and fuel island excavation areas. The approximate areal extent of the excavations are shown in the closure report (included in Appendix A) prepared by IT Environmental Services, Inc.

NOTE: Integrated Environmental Solutions, Inc. (IES) makes no representations, warranty or guaranty concerning the quality, reliability, accuracy or completeness of data or information, or, of any work performed by Capital Petroleum Equipment Co. at this site.

IES EXPRESSLY DISCLAIMS ANY LIABILITY FOR INACCURATE OR INCOMPLETE DATA GENERATED BY CAPITAL PETROLEUM EQUIPMENT CO. PRIOR TO THE DATE OF THIS CONTAMINATION ASSESSMENT.

D. Results of Previous Investigations

No previous investigations other than the UST tank closure assessment are known to have been conducted prior to this CAR.

E. Regional Geology and Hydrogeology

1. Regional Lithology

The uppermost geologic formations in the vicinity of the site are deposits of Pleistocene and Recent age. These are underlain by deposits of Miocene or Pliocene age which are underlain by several thousand feet of limestones of Eocene age. Table 1 lists the formations with depth and lithology down through the Lake City Limestone.

Soils within the surface layers of the site are classified as Pottsburg fine sand. This type of soil is a nearly level, somewhat poorly drained soil on the flatwoods at slightly higher elevations than the surrounding soils. Typically, Pottsburg fine sand soil has a surface layer of gray fine sand about three inches thick. The subsurface layer extends to a depth of approximately 57 inches and is generally: a brown fine sand seven inches thick, grayish brown fine sand 24 inches thick and light gray fine sand 23 inches thick. The subsoil, between 57 inches and 80 inches, is dark reddish brown fine sand that is weakly cemented and well coated with organic matter.

2. Regional Aquifers and Confining Units

The groundwater in the vicinity of the site occurs under both artesian and nonartesian conditions. The site is underlain by three Class G-II aquifer units.

The uppermost is a nonartesian aquifer that includes Pleistocene deposits and Miocene or Pliocene deposits. Recharge occurs from direct infiltration of local rainfall and by upward leakage from the underlying aquifers. Discharge results from pumpage, outflow from springs and seeps, downward percolation and by evapotranspiration. Clayey sand and silty clay layers serve as confining units.

The secondary artesian aquifer is composed of sand, limestone and dolomite lenses within the Hawthorn Formation. It is recharged by rainfall through the overlying nonartesian aquifer and from the underlying Floridan aquifer.

The Floridan aquifer exists under artesian conditions and is the principal source of freshwater in northeast Florida. It includes the Crystal River, Williston, Inglis, Avon Park and Lake City formations. An extensive aquiclude in the overlying Hawthorn Formation separates the Floridan from the shallow aquifer systems. Hard relatively impermeable dolomite beds further restrict vertical movement within the Floridan. Recharge occurs in western and southeastern Putnam county through breaches in the aquiclude.

F. Well Survey

A record survey was conducted at the Duval County Regulatory and Environmental Services Department, Water Quality Division for the public and private wells located within a ½ mile and ¼ mile radius, respectively, of the site. A walk-through well survey was performed of the private residences within a ¼-mile radius of the site on 08/10/95.

There are five public supply wells located within a ½-mile radius of the site. Their locations are shown on Figure 4. A water well used for public consumption is located near the northwest corner of the site property; this well supplies water to the Rainbow Food Store facility.

All of the private residences within the site vicinity are connected to the City of Jacksonville public utility water distribution system. This public utility water system has serviced this area of Jacksonville, Florida for approximately ten years. Prior to this time all private residences and businesses within a ½-mile radius obtained water from private wells.

II. SITE ASSESSMENT

A. Soil Borings and Monitoring Wells

Twenty-eight soil borings and fourteen monitor wells were installed for this assessment. The monitor well locations are shown in Figure 5 and the soil boring locations are shown in Figure 6.

The soil borings, SB-1 through SB-28, were performed in a grid configuration. The purpose is to investigate the soil condition in the entire area that was possibly used for the distribution and storage of petroleum products. All the soil borings penetrated to a depth of 4 feet below land surface (bls) or to the top of the water table if the depth to water table was found to be less than 4 feet.

Monitor wells MW-1 through MW-13 are shallow wells (11.5 feet bls) and are all screened above the water table. DW-1 is a double-cased deep monitor well (35 ft bls) with 5 ft of screen on bottom. The well completion reports for all wells are found in Appendix B. Shallow monitor well construction details are shown in Figure 7 and the double-cased deep well construction details are shown in Figure 8. Additionally, Table 2 lists the monitor well construction details. The objective for the placement locations of all shallow monitoring wells was to define the maximum extent of horizontal groundwater contamination. The purpose of the deep well was to determine the maximum extent of vertical groundwater contamination. Well locations and placement rationale are found in Table 3.

B. Site Specific Geology and Hydrogeology

1. Site Lithology

Land surface elevations at the site varied less than one foot. The natural site lithology was found to be generally homogeneous and continuous across the site. The site lithology is as follows:

THICKNESS			LITHOLOGY
Surface	to	1 ft	Backfill and Roadbase
1 ft	to	3 ft	Dark Brown Fine Sand
3 ft	to	10 ft	Reddish Brown Fine Sand Coated with Organic Matter
10 ft	to	12 ft	Brown Fine Sand
12 ft	to	13 ft	Brown Sandy Clay
13 ft	to	35 ft	Light Tan Medium Fine Sand

Figure 9 is a lithologic cross section through the site.

2. Aquifers and Confining Units

The aquifer assessed is a shallow aquifer with a G-II groundwater classification. This is an unconfined and unconsolidated aquifer. The water table was generally found at 3 ft to 4 ft bls in all the installed monitor wells.

Slug tests were performed on MW-3, MW-7 and MW-8. The calculated hydraulic conductivities (permeabilities), K, are as follows:

Well Number	Hydraulic Conductivity (K)
MW-3	**27.67 ft/day**
MW-7	**39.45 ft/day**
MW-8	**24.85 ft/day**

The average hydraulic conductivity (K) is 30.65 ft/day.

Slug test field data and calculations are found in Appendix C.

One semi-confining layer of sandy clay was identified at 12 ft to 13 ft bls. This clay layer may act as an aquitard that would restrict the vertical migration of the groundwater within the soils beneath the site. No additional vertical confining layers were found within 35 ft of ground level. Groundwater contamination was not found at concentration levels above the state standards at 35 ft bls, therefore, efforts to find additional confining layers were discontinued.

2. Groundwater Flow Direction and Rate

The groundwater flow direction at this site appears to be influenced by storm water flow across the site surface. A surface water drainage ditch is located parallel to the west perimeter of the site and flows generally to the north northwest. The groundwater elevation difference across the site was too slight to determine a groundwater flow direction. However, the water table elevation data and local topographic features indicate that the general flow in the immediate site vicinity is west to northwest.

Four separate water table elevation measurements were taken concurrent with monitor well installation and groundwater sampling events on the following dates: 08/07/95, 08/18/95, 09/19/95 and 02/09/96. Water table elevation data are found in Table 4.

Groundwater contour maps are presented in Figures 10 and 11. The groundwater underlying the site is not tidally influenced and the seasonal groundwater fluctuations was observed to be less than two feet.

The groundwater flow velocity through the pore space (V_p) is calculated according to the following FDEP recommended equation:

$$V_p = \frac{K \times I}{n} = 0.035 \text{ ft/day} \quad (12.7 \text{ ft/yr.})$$

Where:
K = hydraulic conductivity (from slug test avg) = 30.65 ft/day
I = hydraulic gradient (calculated from Figures 10 and 11) = 0.00023 ft/ft.
n = effective porosity (from "Groundwater and Wells", page 67) = 20%

The net linear (horizontal) flow velocity (V_n) is calculated using Darcy's Equation and the same K and I as above as follows:

$$V_n = K \times I = 0.0070 \text{ ft/day} \quad (2.5 \text{ ft/yr.})$$

The transmissivity (T) of the assessed aquifer is calculated as the product of hydraulic conductivity and effective aquifer thickness (total interval from the water table to the bottom of the deep monitor well) as follows:

$$T = 30.65 \text{ ft/day} \times 30 \text{ ft} = 919.5 \text{ ft}^2\text{/day}$$

C. Soil and Groundwater Quality

1. Soil Assessment

Soil samples were taken and analyzed at one-foot intervals from ground level to the water table during the drilling process. Split soil samples were obtained for each soil location. The soil samples were placed into two 16-ounce jars, then covered with aluminum foil. After waiting several minutes to allow stabilization, a small hole was made in the aluminum foil to sample the headspace using portable organic vapor analyzer (OVA) flame ionization detector (FID) meter. A carbon filter assembly was used to determine the methane concentration of the filtered sample. New carbon was

used in the filter each day to insure quality control. Table 5 presents the headspace analyses results of the OVA/FID field screening. This table includes a column listing the unfiltered readings, one listing the filtered readings and a column listing the corrected OVA/FID values.

The OVA/FID detected excessively contaminated soils in the vadose zone of DW-1, SB-4, SB-11, SB-12, SB-13, SB-15, SB-16, and SB-17. The Kerosene Analytical Group soil standard (net OVA/FID reading of 50 parts per million [ppm] or greater) was used to define excessively contaminated soils. The extent of excessively contaminated soils in the vadose zone is illustrated in Figure 12.

2. Groundwater Assessment

No free product was found during the groundwater assessment. Groundwater samples were collected from all the wells by first purging a volume of water equal to a minimum of five well volumes per well. Groundwater was then collected using pre-cleaned disposable bailers in accordance with the sampling, decontamination and handling procedures of IES's approved Comprehensive Quality Assurance Plan (CompQAP) No. 890280G.

The groundwater samples were analyzed by V.O.C. Analytical Laboratories, Inc. in accordance with their approved CompQAP No. 900376G.

Three intervals of groundwater sampling were conducted during this assessment. Table 6 is a summary of the laboratory results from the initial sampling event of March 23, 1995 and Table 7 is a summary of the laboratory results for the interval from August 18, 1995 through February 9, 1996. The complete laboratory reports are found in Appendix D.

All groundwater samples were analyzed for: total recoverable petroleum hydrocarbons by EPA Method 418.1; volatile aromatics (EPA Method 602 compounds) including MTBE by EPA Method 8021; polynuclear aromatic hydrocarbons (EPA Method 610 compounds) by EPA Method 8270 or EPA Method 610.

Additionally, MW-5 and MW-9 groundwater samples were analyzed for the presence of: volatile halocarbons (EPA Method 601 compounds) by EPA Method 8260; lead by EPA Method 6010A, and, 1,2-dibromoethane [EDB] by EPA Method 8011. This is the representative or "hot spot" sample specified in section II.C.3.ii of the FDEP document "Guidelines for the Preparation of Contamination Assessment Reports for Petroleum Contaminated Sites". Monitor wells MW-5 and MW-9 were chosen as the representative wells because these were the site locations with the highest BTEX and total naphthalenes concentrations. The results of all of these additional analyses were found to be below the minimum detection limits or the state standard (see Table 7).

Figure 13, Figure 14 and Figure 15 are plume maps that illustrate the horizontal extent of benzene, BTEX and total naphthalenes in the groundwater beneath the site for each sampling interval. Benzene, BTEX and total naphthalenes were the only constituents detected above the state standards. These maps were prepared from the laboratory data found in Table 7.

III. CONCLUSIONS

Free product was not found in any monitor well.

No volatile halocarbons (EPA Method 601), 1,2-dibromoethane [EDB] (EPA Method 8011), or lead (EPA Method 6010A) were detected.

Benzene has been detected at concentrations above the state standard in MW-4, MW-5 and MW-9. BTEX constituents have been detected at levels above the state standard in MW-5 and MW-9. Total naphthalenes have been detected at levels above the state standard in MW-5 and MW-9. No benzene, BTEX, or total naphthalenes were detected in any other monitor well above their respective minimum detection limits.

Excessively contaminated soils were detected in the vadose zone of monitor well DW-1 and soil borings SB-11, SB-12, SB-15, SB-18, SB-19 and SB-22. The areal extent of the excessively contaminated soil encompasses 232.5 square feet as calculated from Figure 11.

The maximum areal extent of the benzene contamination plume encompasses 2973.94 square feet as calculated from Figure 13. The maximum areal extent of the BTEX contamination plume encompasses 2703.20 square feet as calculated from Figure 14. The maximum areal extent of the total naphthalenes contamination plume encompasses 2533.75 square feet as calculated from Figure 15.

The total soil and groundwater contamination plume to be remediated, a combination of the overlay of the maximum benzene, BTEX, total naphthalenes and excessively contaminated soil plumes, encompasses 3775.80 square feet. The areal extent of the plumes was determined using a Tamaya digital planimeter.

The vertical extent of the groundwater contamination does not extend to 27 ft. bls or 25 ft. below the water table (top of well screen in DW-1). The low concentrations of BTEX and total naphthalenes detected in DW-1 are most likely the result of carry down which occurred during the well installation.

The predominant groundwater flow direction is to the west northwest and is not tidally influenced.

The exact source of the petroleum hydrocarbons contamination is unknown. However, the source appears to have been abated in August 1989 when the entire petroleum fuel storage/dispensing system was removed and not replaced.

IV. RECOMMENDATIONS

A Remedial Action Plan (RAP) addressing the delineated contamination plume is the next phase for this site.

V. REFERENCES

1. Guidelines for Assessment and Remediation of Petroleum Contaminated Soils, Florida Department of Environmental Regulation, Office of Technical Support, Bureau of Waste Cleanup, Division of Waste Management, May, 1992.

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3. No Further Action and Monitoring Only Guidelines for Petroleum Contaminated Sites, Florida Department of Environmental Regulation, Division of Waste Management, Bureau of Waste Cleanup, Technical Review Section, October, 1990.

4. Groundwater and Wells, Second Edition, Fletcher Driscoll, 1986. Pages 67 and 210.

5. Geology and Ground-Water Resources of Flagler, Putnam, and St. Johns Counties, Florida, Report of Investigations No. 32, Florida Geological Survey, B.J. Bermes, G.W. Leve, and G.R. Tarver, 1963.

6. Ground Water in Duval and Nassau Counties, Florida, Report of Investigations No. 43, Florida Geological Survey, Gilbert W. Leve, 1966.

7. Soil Survey of the City of Jacksonville, Duval County, Florida, United States Department of Agriculture, Soil Conservation Service, 1978.

8. Integrated Environmental Solutions, Inc. Comprehensive QA Plan # 890280G.

9. V.O.C. Analytical Laboratories, Inc. Comprehensive QA Plan # 900376G.

SECTION VII

TABLES

Table 1. REGIONAL GEOLOGY

DEPTH BELOW LAND SURFACE	GEOLOGIC AGE	FORMATION	LITHOLOGY
0 - 80 ft	Recent & Pleistocene	Recent & Pleistocene Deposits	Sand & sandy clay, unconsolidated
80 - 120 ft	Pliocene or Miocene	Pliocene or Upper Miocene Deposits	Sand, shell, silty clay, clayey sand, unconsolidated
120 - 480 ft	Miocene	Hawthorn	Calcareous, phosphatic sandy clays & clayey sands with sand, limestone & dolomite lenses
480 - 590 ft	Eocene	Crystal River	Chalky massive fossiliferous marine limestone
590 - 640 ft	Eocene	Williston	Granular marine limestone
640 - 780 ft	Eocene	Inglis	Granular calcitic marine limestone with thin dolomitic zones near base
780 - 830 ft	Eocene	Avon Park	Hard massive dolomite containing zones of granular fossiliferous limestone
830 - 1320 ft	Eocene	Lake City	Chalky to granular limestone and massive to finely crystalline dolomite

Table 2. MONITOR WELL CONSTRUCTION DETAILS

WELL NUMBER	CASING DEPTH	SCREEN LENGTH	WELL DEPTH	CASING DIAMETER	COMPLETION DATE
MW-1	1.5 ft	10 ft	11.5 ft	2"	03 / 22 / 95
MW-2	1.5 ft	10 ft	11.5 ft	2"	03 / 22 / 95
MW-3	1.5 ft	10 ft	11.5 ft	2"	03 / 22 / 95
MW-4	1.5 ft	10 ft	11.5 ft	2"	08 / 16 / 95
MW-5	1.5 ft	10 ft	11.5 ft	2"	08 / 16 / 95
MW-6	1.5 ft	10 ft	11.5 ft	2"	08 / 16 / 95
MW-7	1.5 ft	10 ft	11.5 ft	2"	08 / 16 / 95
MW-8	1.5 ft	10 ft	11.5 ft	2"	08 / 16 / 95
MW-9	1.5 ft	10 ft	11.5 ft	2"	08 / 16 / 95
DW-1	30 ft	5 ft	35.0 ft	2"	09 / 19 / 95
MW-10	1.5 ft	10 ft	11.5 ft	2"	09 / 28 / 95
MW-11	1.5 ft	10 ft	11.5 ft	2"	09 / 28 / 95
MW-12	1.5 ft	10 ft	11.5 ft	2"	09 / 28 / 95
MW-13	1.5 ft	10 ft	11.5 ft	2"	09 / 28 / 95

Table 3. WELL LOCATIONS

WELL NO.	DATE INSTALLED	LOCATION AND PLACEMENT RATIONALE
MW-1	03/22/95	This well was located approximately four feet west of the northwest corner of the fuel island and dispensers excavation. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction northwest of the excavation area; to determine site lithology, petroleum constituent movement and groundwater flow direction; to determine if the plume extends off-site.
MW-2	03/22/95	This well was located adjacent to the southeast corner of the removed tank farm excavation. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction southeast of the removed tank farm excavation area; to determine site lithology, petroleum constituent movement and groundwater flow direction.
MW-3	03/22/95	This well was located south of and adjacent to the removed tank farm excavation. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction south of the removed tank farm excavation area; to determine site lithology, petroleum constituent movement and groundwater flow direction.
MW-4	08/16/95	This well was located in the area of the tank farm excavation where excessively contaminated soils were removed during the UST closure. The purpose is to identify the hydrocarbon constituents in the groundwater, petroleum constituent movement and groundwater flow direction.
MW-5	08/16/95	This well was placed twenty feet west of the former tank farm excavation. The purpose is to define the horizontal extent of any contamination plume in the direction west of the tank excavation area and to determine the site lithology, petroleum constituent movement, groundwater flow direction, and, to perform a soil boring and OVA/FID soils screening.

WELL NO.	DATE INSTALLED	LOCATION AND PLACEMENT RATIONALE
MW-6	08/16/95	This well was placed approximately three feet southeast of the corner of the fuel island and dispensers excavation. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction southeast of this excavation area; to determine site lithology, petroleum constituent movement and groundwater flow direction.
MW-7	08/16/95	This well was placed approximately three feet southwest from the corner of the fuel island and dispensers excavation. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction southwest of the excavation area; to determine site lithology, petroleum constituent movement, groundwater flow direction and to determine if the plume extends off-site.
MW-8	08/16/95	This well was placed northeast of the fuel island and dispensers excavation. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction northeast of the excavation area; to determine site lithology, petroleum constituent movement and the groundwater flow direction.
MW-9	08/16/95	This well was located in the backfilled excavation area of the removed fuel islands and dispensers where excessively contaminated soils were removed during the UST closure. The purpose is to identify the hydrocarbon constituents in the groundwater, petroleum constituent movement and groundwater flow direction.
MW-10	09/28/95	This well was installed after the initial groundwater analyses from MW-4 showed the presence of BTEX and Total NAPs. MW-10 is located northeast of the removed tank farm excavation. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction northeast of the removed tank farm excavation area; to determine site lithology, petroleum constituent movement and groundwater flow direction.

WELL NO.	DATE INSTALLED	LOCATION AND PLACEMENT RATIONALE
MW-11	09/28/95	This well was installed after the initial groundwater analyses from MW-9 (sample date 09/18/95) showed the presence of BTEX and Total NAPs. MW-11 is located east of the removed fuel islands and dispensers IRA excavation and approximately 45 feet east of MW-9. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction northeast of the excavation area; to determine site lithology, petroleum constituent movement, and the groundwater flow direction.
MW-12	09/28/95	This well was installed after the initial groundwater analyses from MW-5 (sample date 09/18/95) showed the presence of BTEX and Total NAPs. MW-12 is located southwest of the removed tank farm excavation and approximately 30 feet southwest of MW-5. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction southwest of MW-5 and southwest of the removed tank farm excavation area; to determine site lithology, petroleum constituent movement and groundwater flow direction.
MW-13	09/28/95	This well was installed after the initial groundwater analyses from MW-5 (sample date 09/18/95) showed the presence of BTEX and Total NAPs. MW-13 is located west of the removed tank farm excavation and approximately 30 feet west of MW-5. This well was placed to: perform a soil boring and OVA/FID soils screening, to define the horizontal extent of hydrocarbon plumes in the groundwater in the direction west of MW-5 and west of the removed tank farm excavation area; to determine site lithology, petroleum constituent movement, the groundwater flow direction, and, to determine if the plume extends off-site.
DW-1	09/19/95	This double-cased well was installed after the initial groundwater analyses from monitor wells MW-1 through MW-9 (sample date 09/18/95) were available. DW-1 is located adjacent to MW-5. This location was selected because the groundwater analyses from MW-5 has the greatest concentrations of BTEX and Total NAPs. The purpose of this well is to define the vertical extent of the plume.

Table 4. Water Level Elevations

WELL NUMBER	Top Of Casing Elevation (ft ASL)	Depth To Water (ft BLS) 08/07/95	Water Level Elevation (ft ASL) 08/07/95	Depth To Water (ft BLS) 08/18/95	Water Level Elevation (ft ASL) 08/18/95	Depth To Water (ft BLS) 09/19/95	Water Level Elevation (ft ASL) 09/19/95	Depth To Water (ft ASL) 02/09/96	Water Level Elevation (ft ASL) 02/09/96
MW-1	30.00	3.78	26.22	4.60	25.40	3.07	26.93	4.50	25.50
MW-2	29.92	3.09	26.83	4.07	25.85	2.55	27.37	3.94	25.98
MW-3	29.24	3.27	25.97	3.90	25.34	2.36	26.88	3.79	25.45
MW-4	29.78			4.42	25.36	2.88	26.90	4.30	25.48
MW-5	29.58			4.22	25.36	2.68	26.90	4.11	25.47
MW-6	29.87			4.50	25.37	2.97	26.90	4.40	25.47
MW-7	29.52			4.18	25.34	2.63	26.89	4.06	25.46
MW-8	30.18			4.80	25.38	3.27	26.91	4.69	25.49
MW-9	29.87			4.50	25.37	2.95	26.92	4.38	25.49
MW-10	30.22							4.76	25.46
MW-11	30.26							4.77	25.49
MW-12	29.15							3.70	25.45
MW-13	29.27							3.82	25.45
DW-1	29.72							4.63	25.09

NOTE:

(ft ASL) = Feet Above Sea Level (based on arbitrary data point)
(ft BLS) = Feet Below Land Surface

Table 5. FIELD SCREENING OF SOILS

WELL NUMBER	DEPTH (ft. BLS)	OVA READING W/O CARBON FILTER (ppm)	OVA READING With CARBON FILTER (ppm)	OVA READING NET (ppm)	WELL NUMBER	DEPTH (ft. BLS)	OVA READING W/O CARBON FILTER (ppm)	OVA READING With CARBON FILTER (ppm)	OVA READING NET (ppm)
MW-1	1	0	NR	0	MW-8	1	0	NR	0
	2	0	NR	0		2	0	NR	0
	3	0	NR	0		3	0	NR	0
	4	0	NR	0		4	0	NR	0
MW-2	1	0	NR	0	MW-9	1	0	NR	0
	2	0	NR	0		2	0	NR	0
	3	0	NR	0		3	0	NR	0
	4	0	NR	0		4	0	NR	0
MW-3	1	0	NR	0	MW-10	1	0	NR	0
	2	0	NR	0		2	0	NR	0
	3	0	NR	0		3	200	200	0
	4	0	NR	0		4	150	150	0
MW-4	1	0	NR	0	MW-11	1	0	NR	0
	2	0	NR	0		2	0	NR	0
	3	0	NR	0		3	0	NR	0
	4	0	NR	0		4	0	NR	0
MW-5	1	0	NR	0	MW-12	1	0	NR	0
	2	0	NR	0		2	0	NR	0
	3	0	NR	0		3	0	NR	0
	4	0	NR	0		4	0	NR	0
MW-6	1	0	NR	0	MW-13	1	0	NR	0
	2	0	NR	0		2	0	NR	0
	3	0	NR	0		3	0	NR	0
	4	0	NR	0		4	0	NR	0
MW-7	1	0	NR	0	DW-1	1	0	NR	0
	2	0	NR	0		2	5000	0	5000
	3	0	NR	0		3	5000	0	5000
	4	0	NR	0		4	5000	0	5000

NOTE: OVA readings from an organic vapor analyzer (OVA) flame ionization detector (FID) meter and are in parts per million (ppm).

BLS = Below Land Surface

ppm = Parts Per Million

NR = Not required When Unfiltered Reading Equals Zero

SOIL BORING NUMBER	DEPTH (ft BLS)	OVA READING W/O CARBON FILTER (ppm)	OVA READING With CARBON FILTER (ppm)	OVA READING NET (ppm)
SB-1	1	0	NR	0
	2	0	NR	0
	3	10	10	0
	4	10	10	0
SB-2	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-3	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-4	1	0	NR	0
	2	0	NR	0
	3	20	20	0
	4	10	10	0
SB-5	1	0	NR	0
	2	0	NR	0
	3	20	20	0
	4	25	25	0
SB-6	1	0	NR	0
	2	0	NR	0
	3	20	20	0
	4	0	NR	0
SB-7	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-8	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-9	1	0	NR	0
	2	0	NR	0
	3	15	15	0
	4	0	NR	0
SB-10	1	0	NR	0
	2	0	NR	0
	3	20	20	0
	4	10	10	0
SB-11	1	0	NR	0
	2	1000	0	1000
	3	2500	0	2500
	4	2500	0	2500
SB-12	1	0	NR	0
	2	5000	0	5000
	3	5000	0	5000
	4	5000	0	5000
SB-13	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-14	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-15	1	0	NR	0
	2	350	0	350
	3	1000	0	1000
	4	800	0	800
SB-16	1	0	NR	0
	2	0	NR	0
	3	40	15	25
	4	60	20	40
SB-17	1	0	NR	0
	2	0	NR	0
	3	10	10	0
	4	0	NR	0
SB-18	1	0	NR	0
	2	1200	0	1200
	3	3000	0	3000
	4	3000	0	3000
SB-19	1	0	NR	0
	2	5000	0	5000
	3	5000	0	5000
	4	5000	0	5000
SB-20	1	0	NR	0
	2	0	NR	0
	3	20	20	0
	4	0	NR	0
SB-21	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-22	1	0	NR	0
	2	2500	0	2500
	3	3000	0	3000
	4	3000	0	3000
SB-23	1	0	NR	0
	2	0	NR	0
	3	60	15	45
	4	60	20	40
SB-24	1	0	NR	0
	2	0	NR	0
	3	20	20	0
	4	10	10	0
SB-25	1	0	NR	0
	2	0	NR	0
	3	20	20	0
	4	0	NR	0
SB-26	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-27	1	0	NR	0
	2	0	NR	0
	3	0	NR	0
	4	0	NR	0
SB-28	1	0	NR	0
	2	20	20	0
	3	50	50	0
	4	0	NR	0

NOTE: OVA readings from an organic vapor analyzer (OVA) flame ionization detector (FID) meter and are in parts per million (ppm).

Table 6. LABORATORY RESULTS

Date Sampled: March 23, 1995

WELL NUMBER	BENZENE	BTEX	MTBE	TOTAL NAPs	TOTAL PAHs	EPA 418.1	EPA 8010	EPA 6010A	EPA 8011
MW-1	ND	ND	ND	ND	ND	ND	--	--	--
MW-2	ND	ND	3	ND	ND	ND	--	--	--
MW-3	ND	ND	3	ND	ND	ND	--	--	--

Table 7. LABORATORY RESULTS

Date Sampled: August 18, 1995 Through February 9, 1996

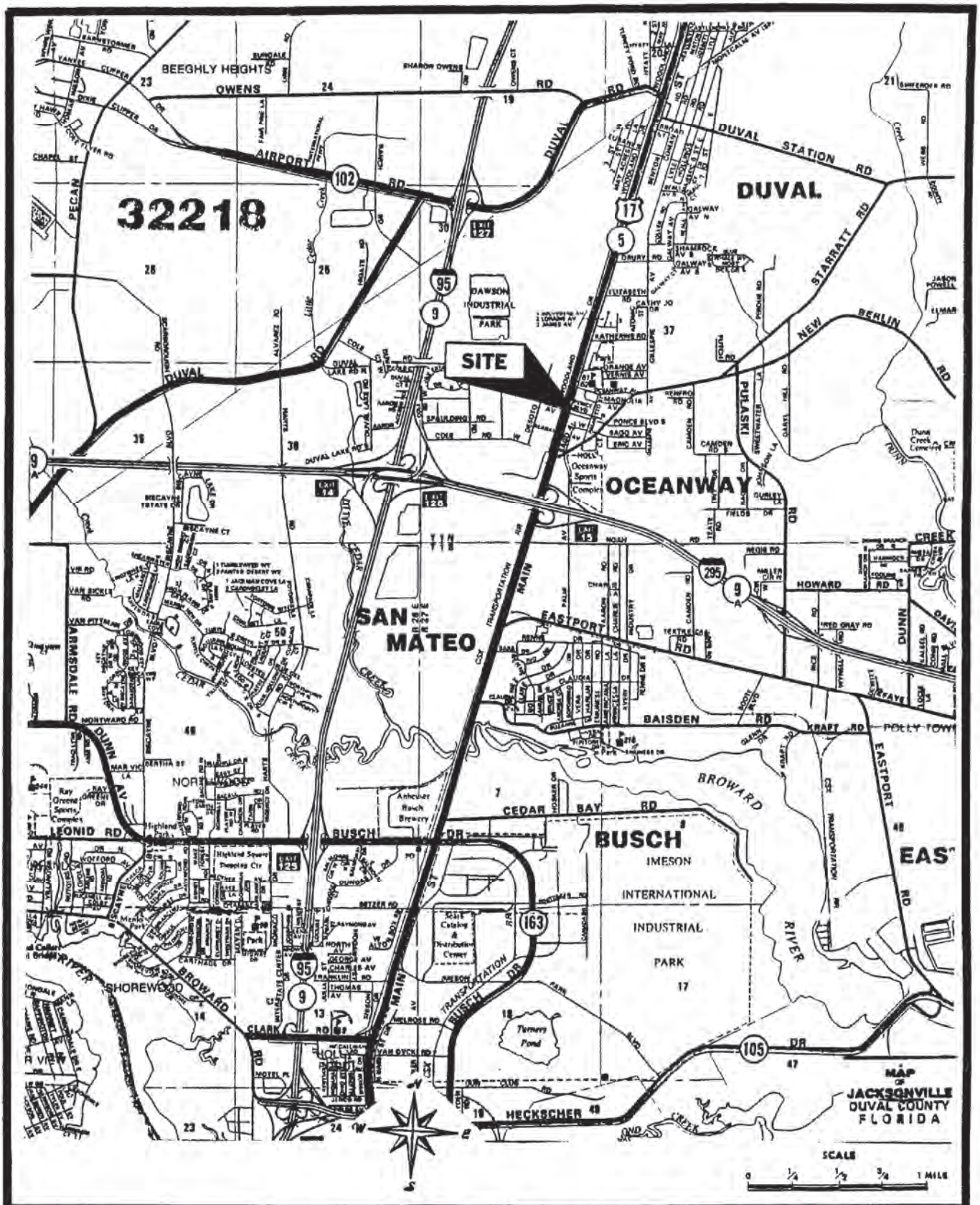
WELL NUMBER	BENZENE	BTEX	MTBE	TOTAL NAPs	TOTAL PAHs	EPA 418.1	EPA 8260	EPA 6010A	EPA 8011
MW-1	ND	ND	ND	ND	ND	ND	--	--	--
MW-2	ND	ND	2	ND	ND	ND	--	--	--
MW-3	ND	ND	3	ND	ND	ND	--	--	--
MW-4	2	35	1	99	ND	1.1	--	--	--
MW-5	180	2262	35	340	ND	1	ND	ND	ND
MW-6	ND	1	ND	ND	ND	ND	--	--	--
MW-7	1	2	1	ND	ND	ND	--	--	--
MW-8	ND	1	ND	ND	ND	ND	--	--	--
MW-9	350	1010	31	299	ND	2.2	ND	0.0053	ND
MW-10	ND	ND	ND	ND	ND	ND	--	--	--
MW-11	ND	ND	ND	ND	ND	ND	--	--	--
MW-12	ND	ND	ND	ND	ND	ND	--	--	--
MW-13	ND	ND	ND	ND	ND	ND	--	--	--
DW-1	ND	6	ND	11	ND	ND	--	--	--

NOTE: All constituents are in parts per billion (ppb) except EPA 418.1 and EPA 6010A which are in parts per million (ppm).

ND	=	Not Detected
--	=	Not Analyzed
TOTAL NAPs	=	Total Naphthalenes (total of 1-Methylnaphthalene, 2-Methylnaphthalene & Naphthalene)
Total PAHs	=	Total Polynuclear Aromatic Hydrocarbons (total of EPA 610 constituents less Total NAPs)
EPA 418.1	=	Total Recoverable Petroleum Hydrocarbons
EPA 8260	=	Chlorinated Solvents (total of EPA 601 constituents)
EPA 6010A	=	Lead
EPA 8011	=	EDB (1,2-Dibromoethane)

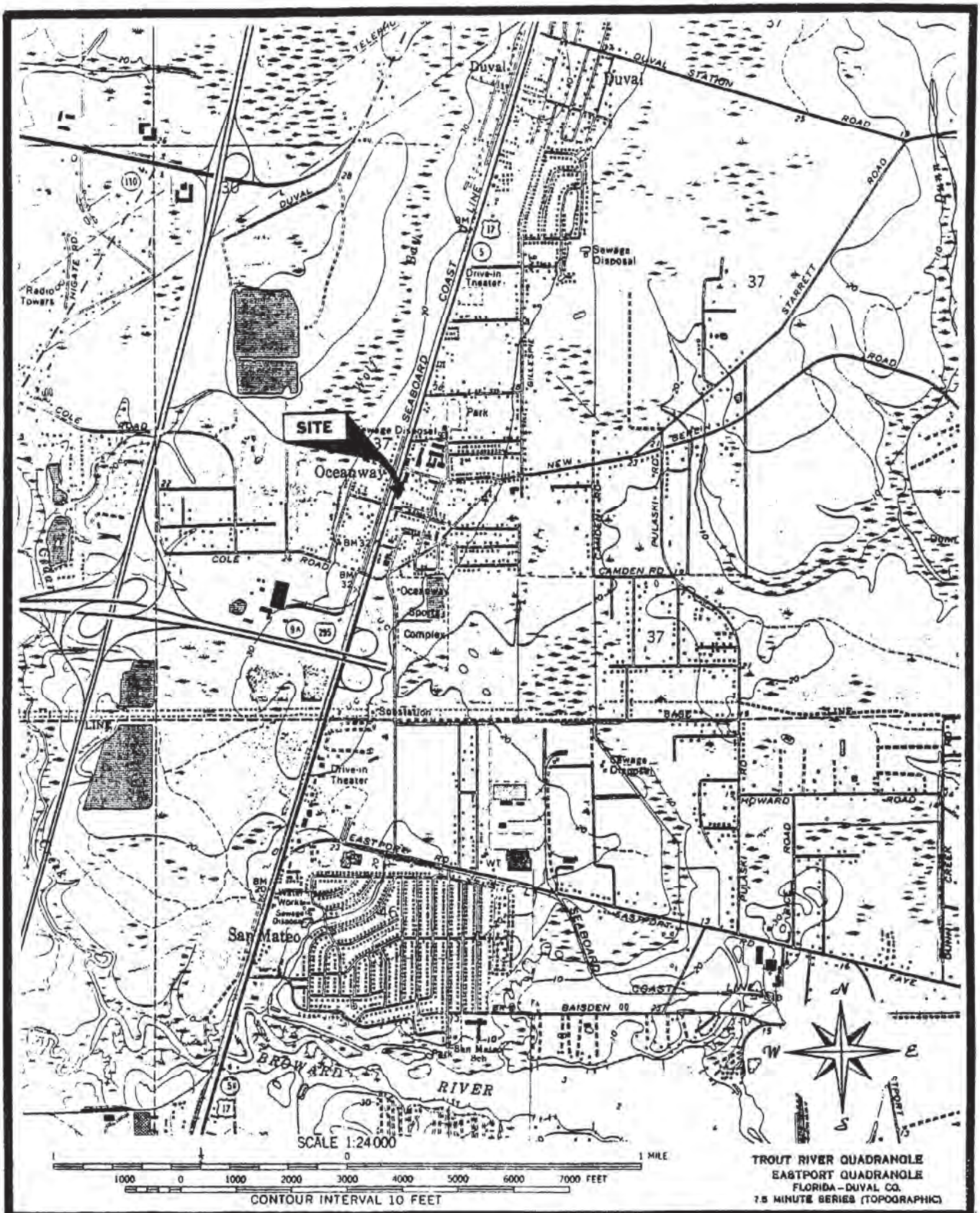
SECTION VI

FIGURES



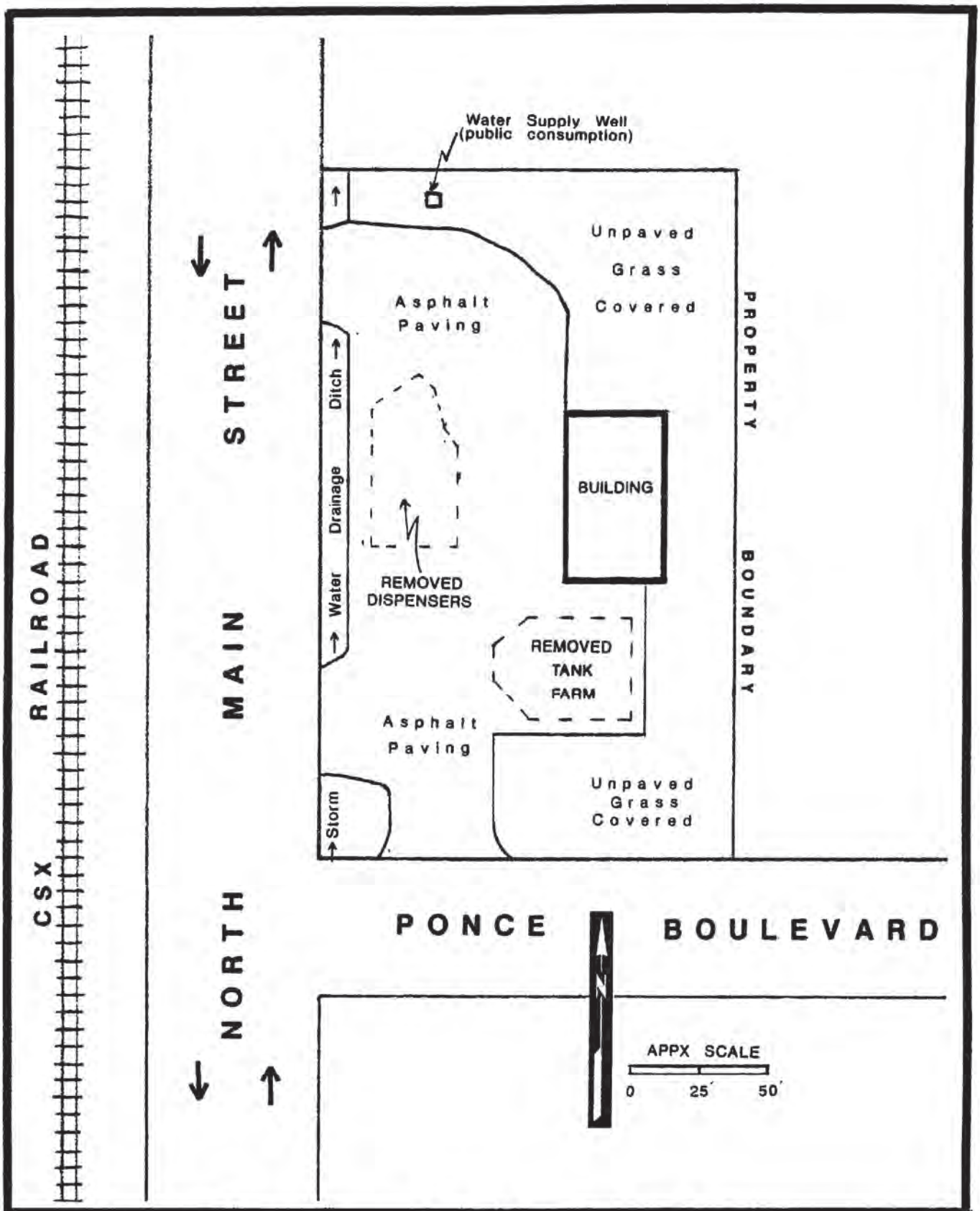
IES INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.
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Figure 1. Location Map
Huntley Jiffy Store No. 6
12615 North Main Street,
Jacksonville, Florida
IES PROJECT NO. 95-105R



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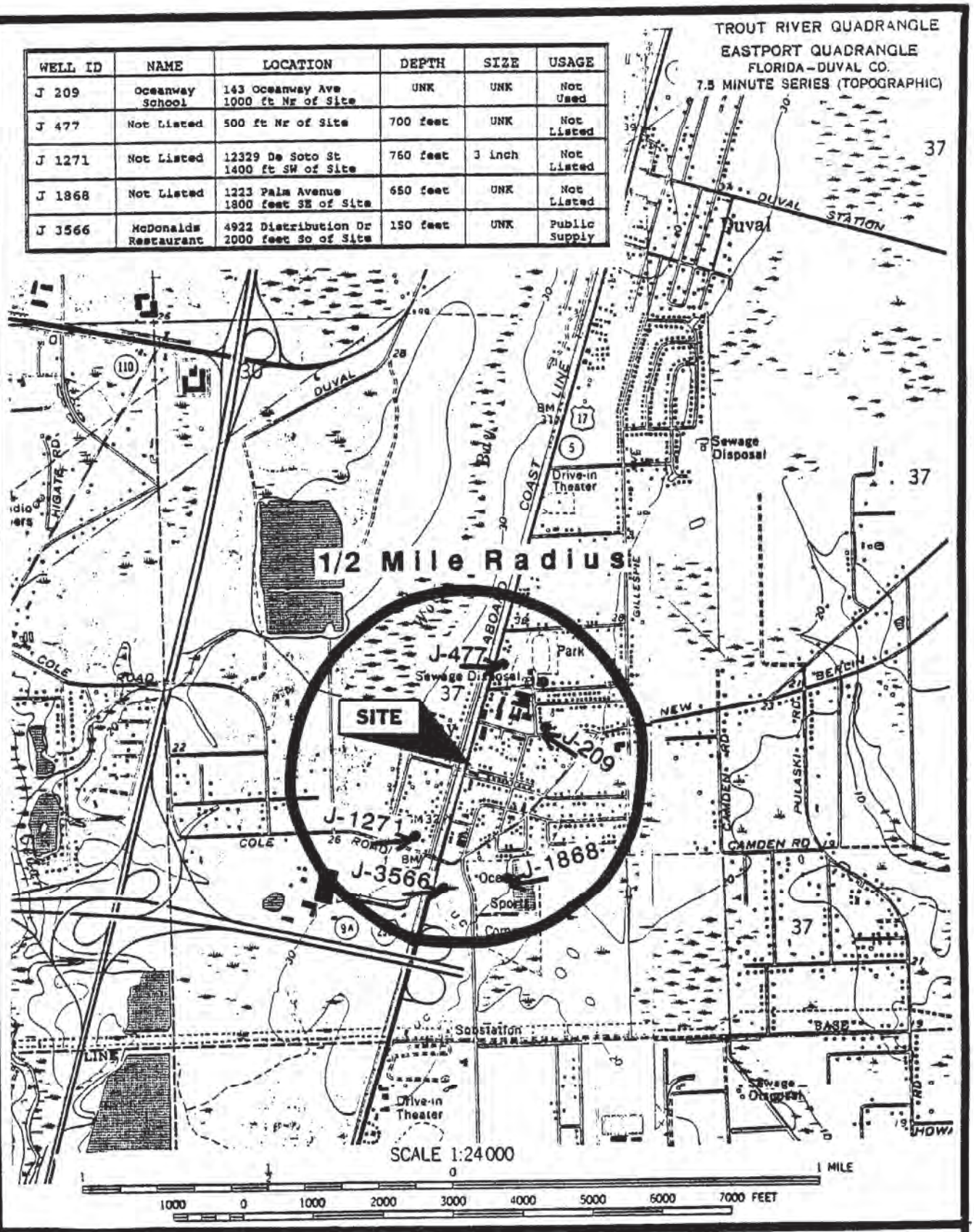
Figure 2. Vicinity Map
Huntley Jiffy Store No. 6
12615 North Main Street,
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Figure 3. Site Map
Huntley Jiffy Store No. 6
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WELL ID	NAME	LOCATION	DEPTH	SIZE	USAGE
J 209	Oceanway School	143 Oceanway Ave 1000 ft Nr of Site	UNK	UNK	Not Used
J 477	Not Listed	500 ft Nr of Site	700 feet	UNK	Not Listed
J 1271	Not Listed	12329 De Soto St 1400 ft SW of Site	760 feet	3 inch	Not Listed
J 1868	Not Listed	1223 Palm Avenue 1800 feet SE of Site	650 feet	UNK	Not Listed
J 3566	McDonalds Restaurant	4922 Distribution Dr 2000 feet So of Site	150 feet	UNK	Public Supply



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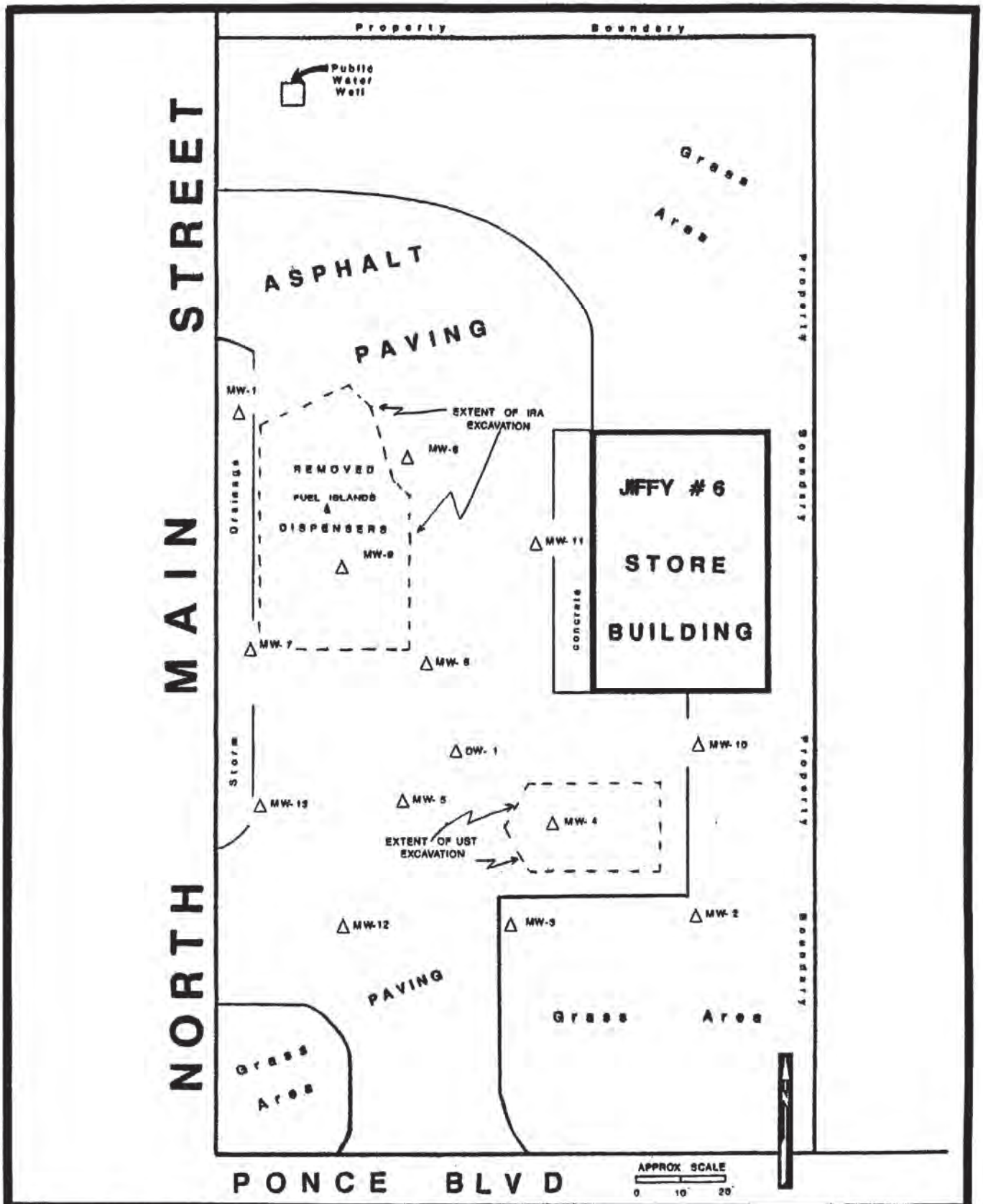
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Figure 4. Public Well Survey

Huntley Jiffy Store No. 6
12615 North Main Street,
Jacksonville, Florida

IES PROJECT NO. 95-105R

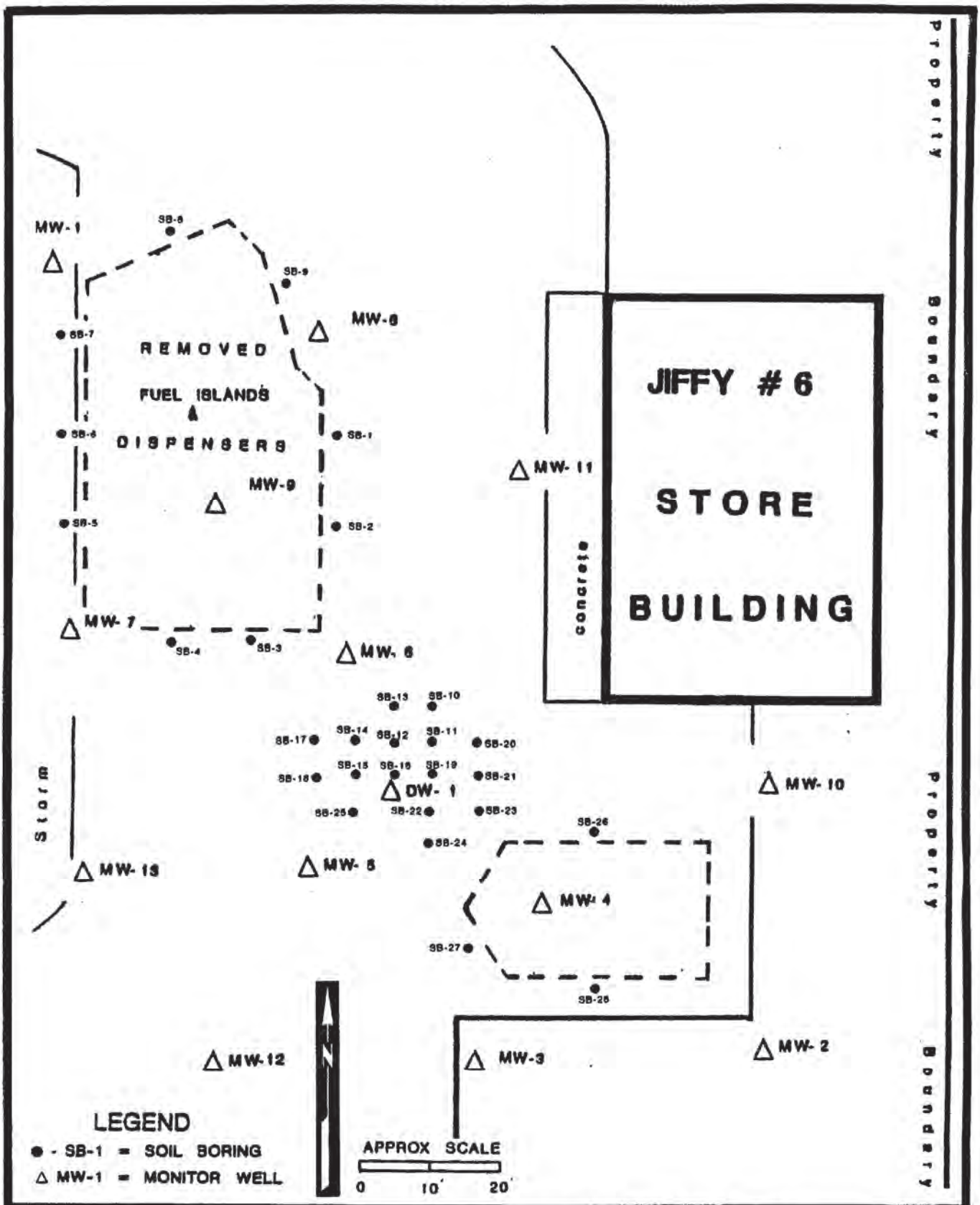


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Figure 5. Monitor Well Locations
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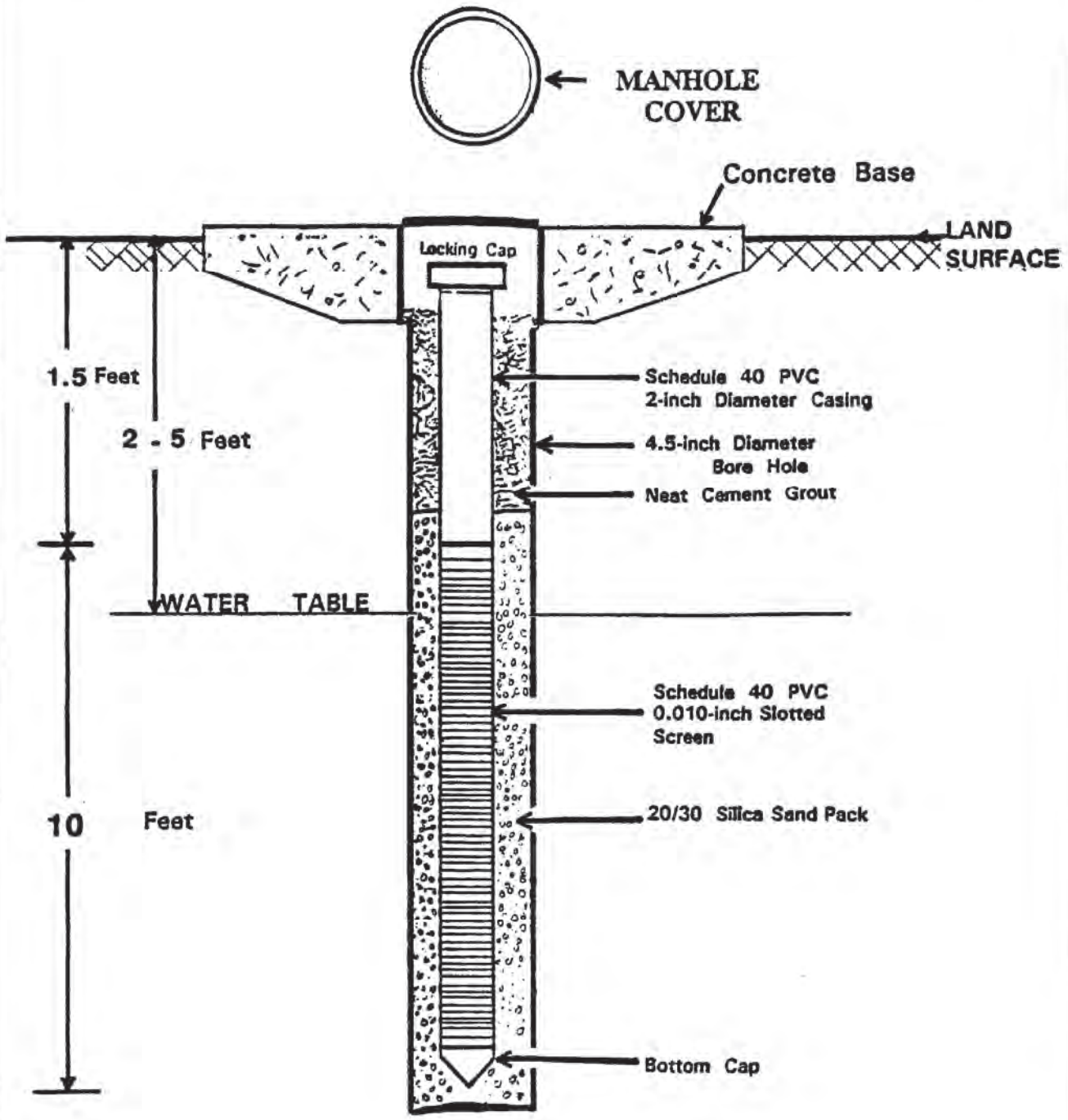
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Figure 6. Soil Boring Locations

Huntley Jiffy Store No. 6
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Jacksonville, Florida

IES PROJECT NO. 95-105R

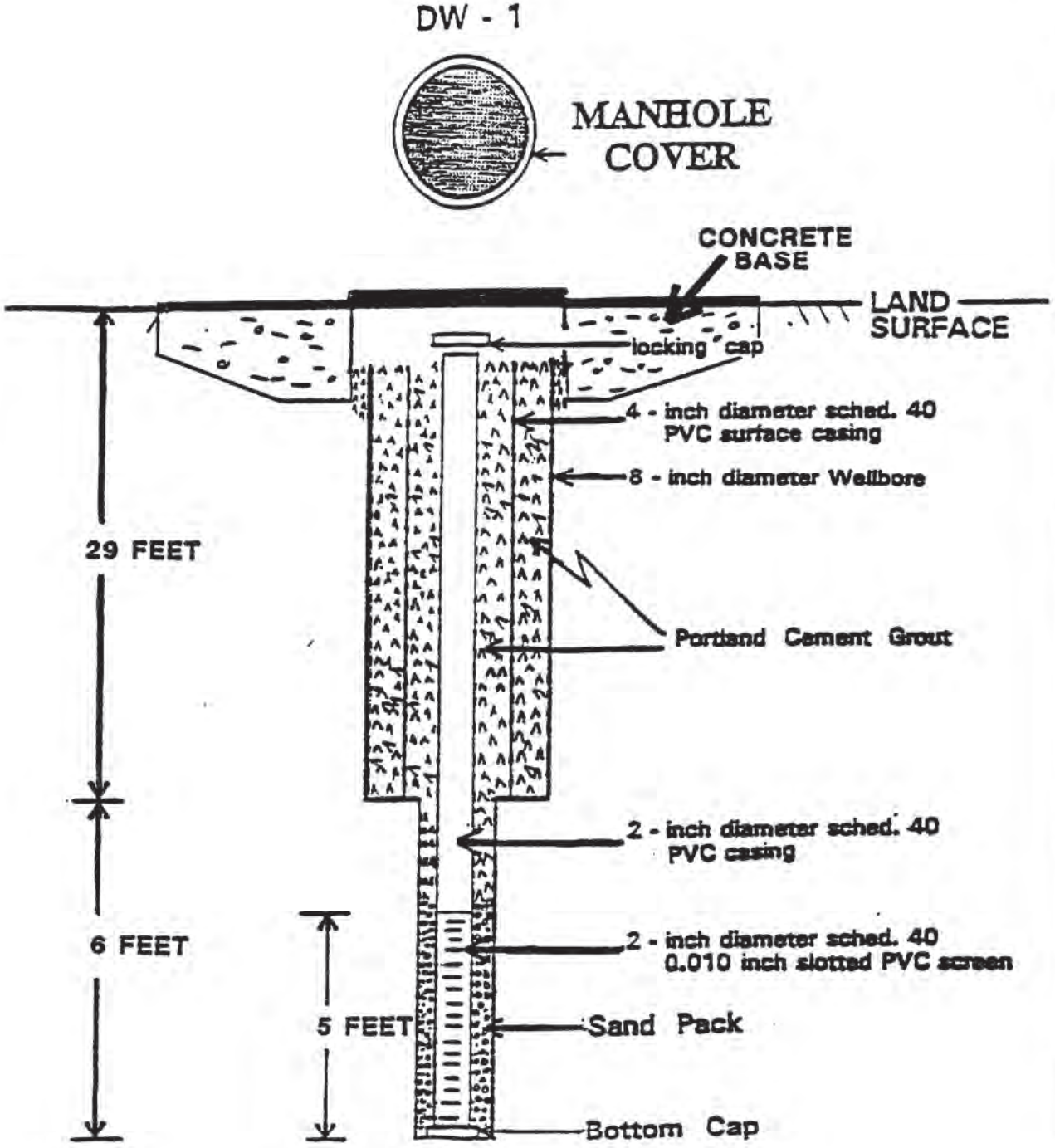


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Figure 7. Monitor Well Construction
Huntley Jiffy Store No. 6
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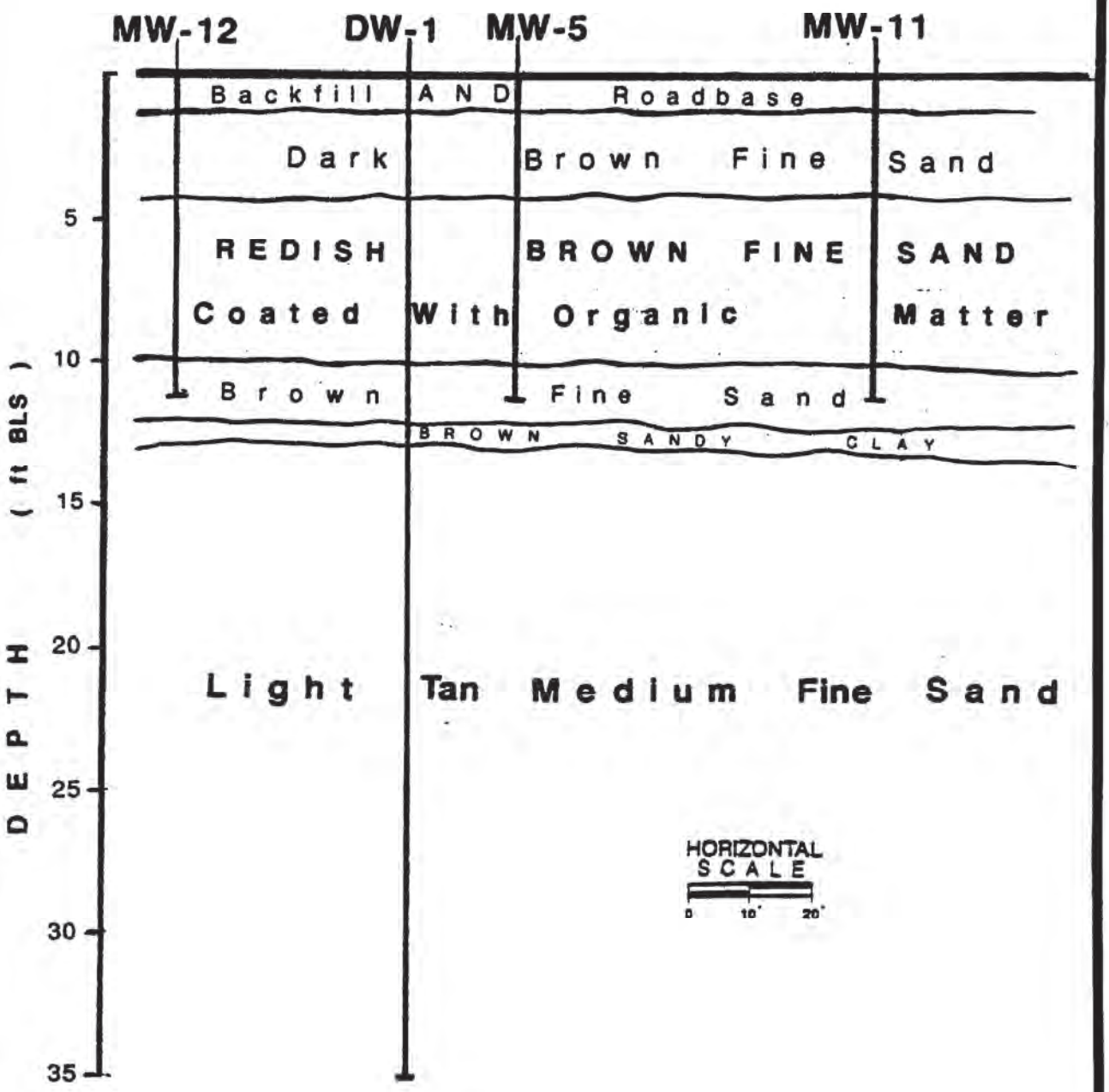
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Figure 8. Deep Well Construction

Huntley Jiffy Store No. 6
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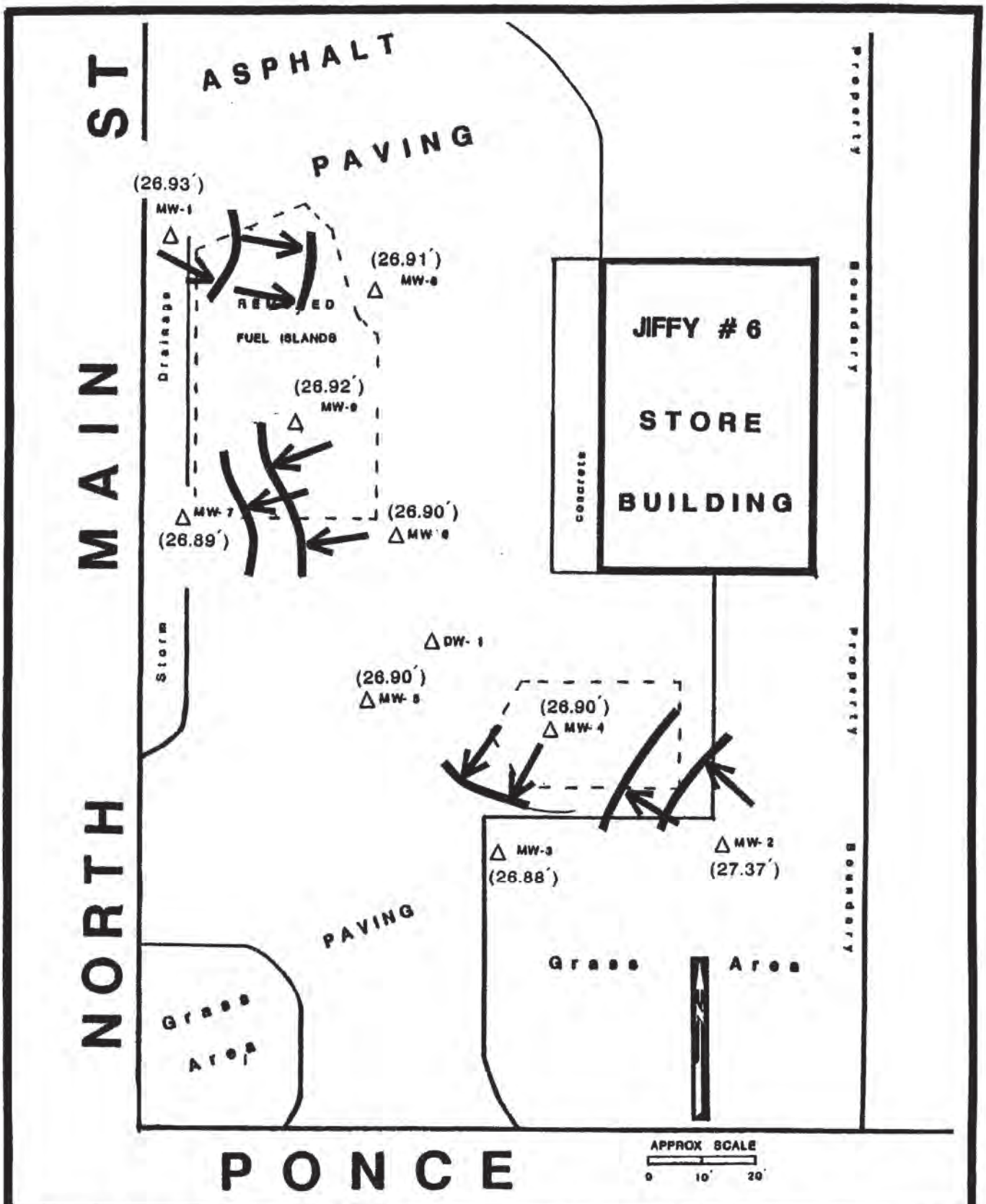
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Figure 9. Site Cross Section

Huntley Jiffy Store No. 6
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Jacksonville, Florida

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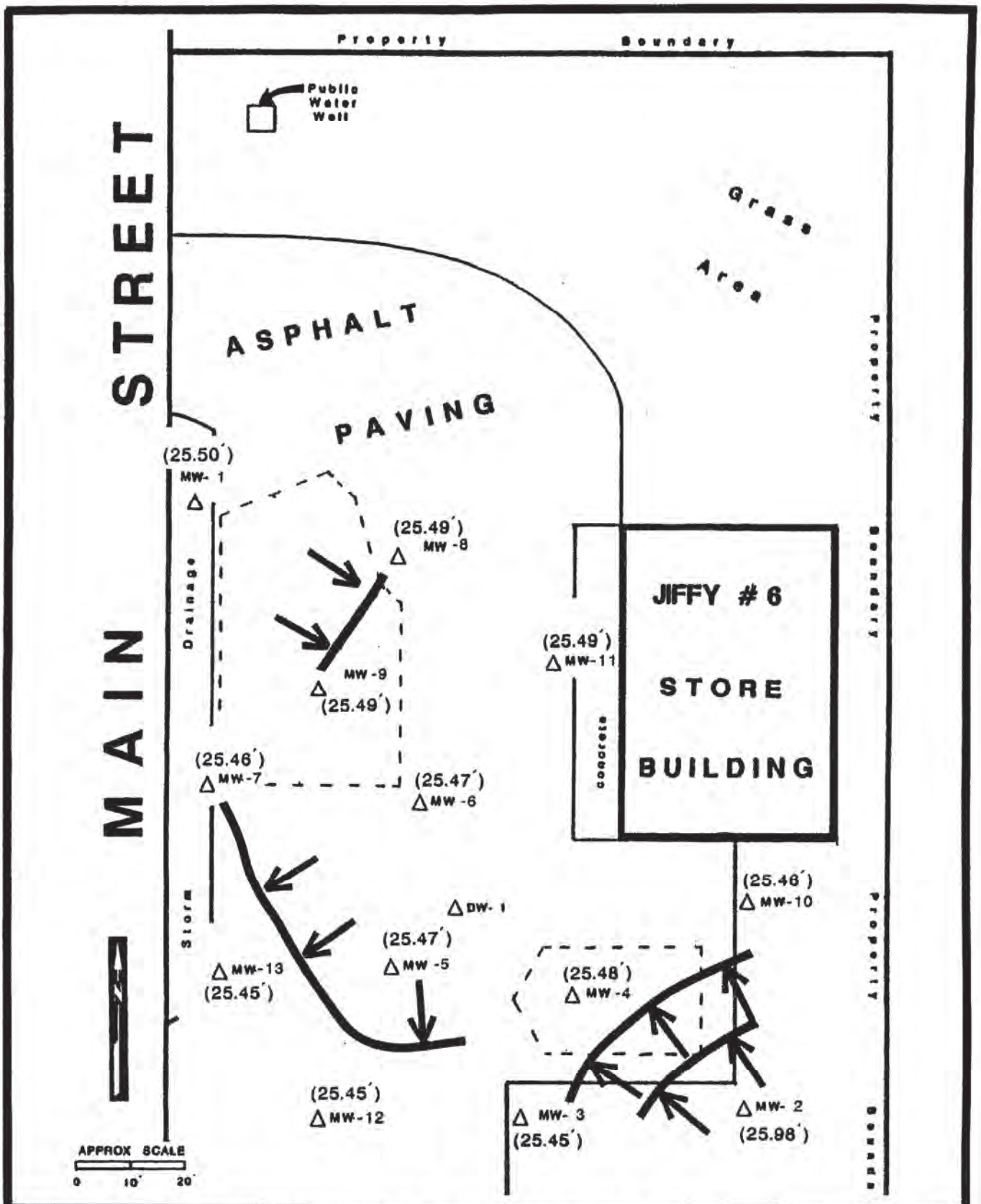
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Figure 10. Groundwater Contour Map (09/19/95)

Huntley Jiffy Store No. 6
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IES PROJECT NO. 95-105R



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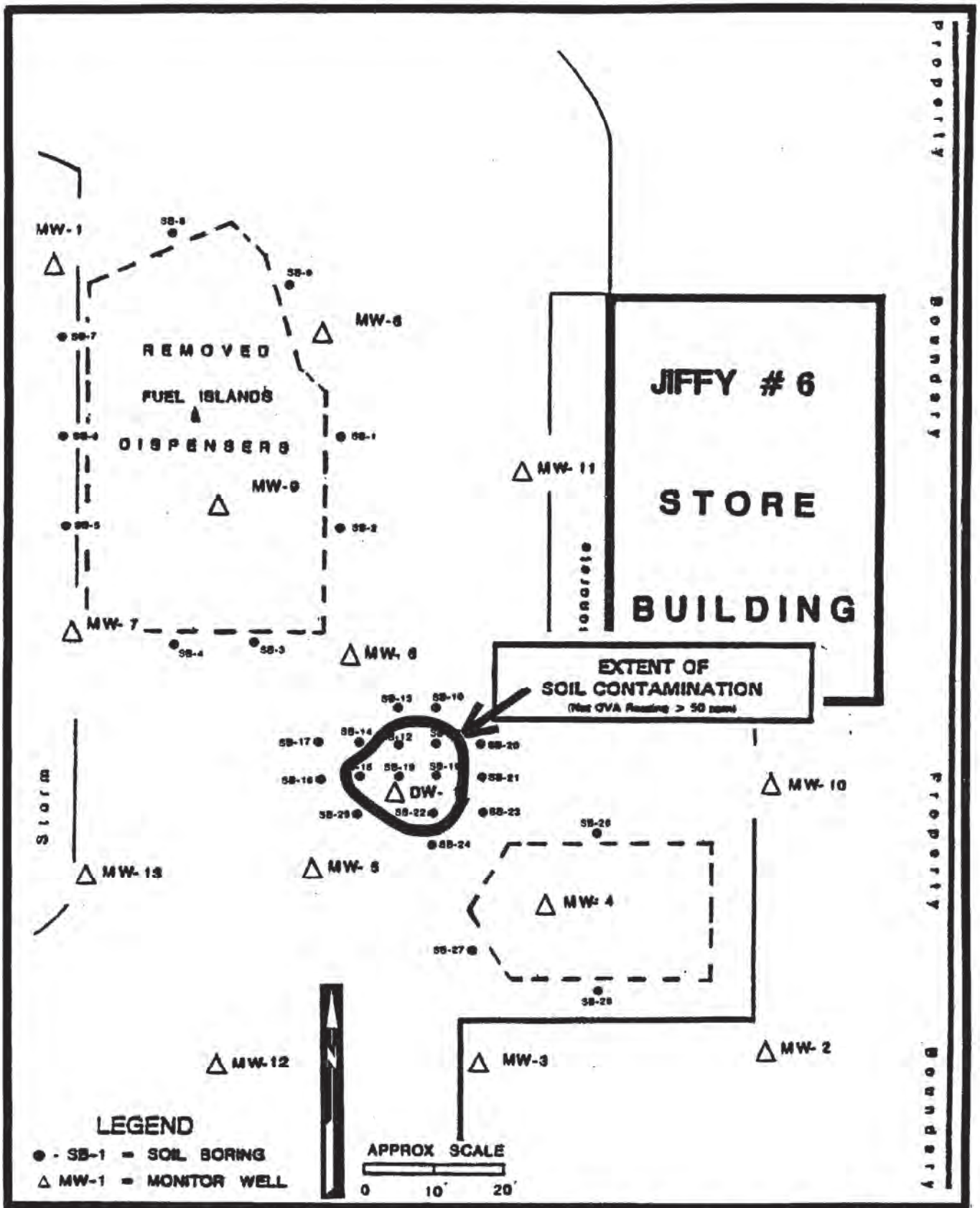
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Figure 11. Groundwater Contour Map (02/09/96)

Huntley Jiffy Store No. 6
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Jacksonville, Florida

IES PROJECT NO. 95-105R



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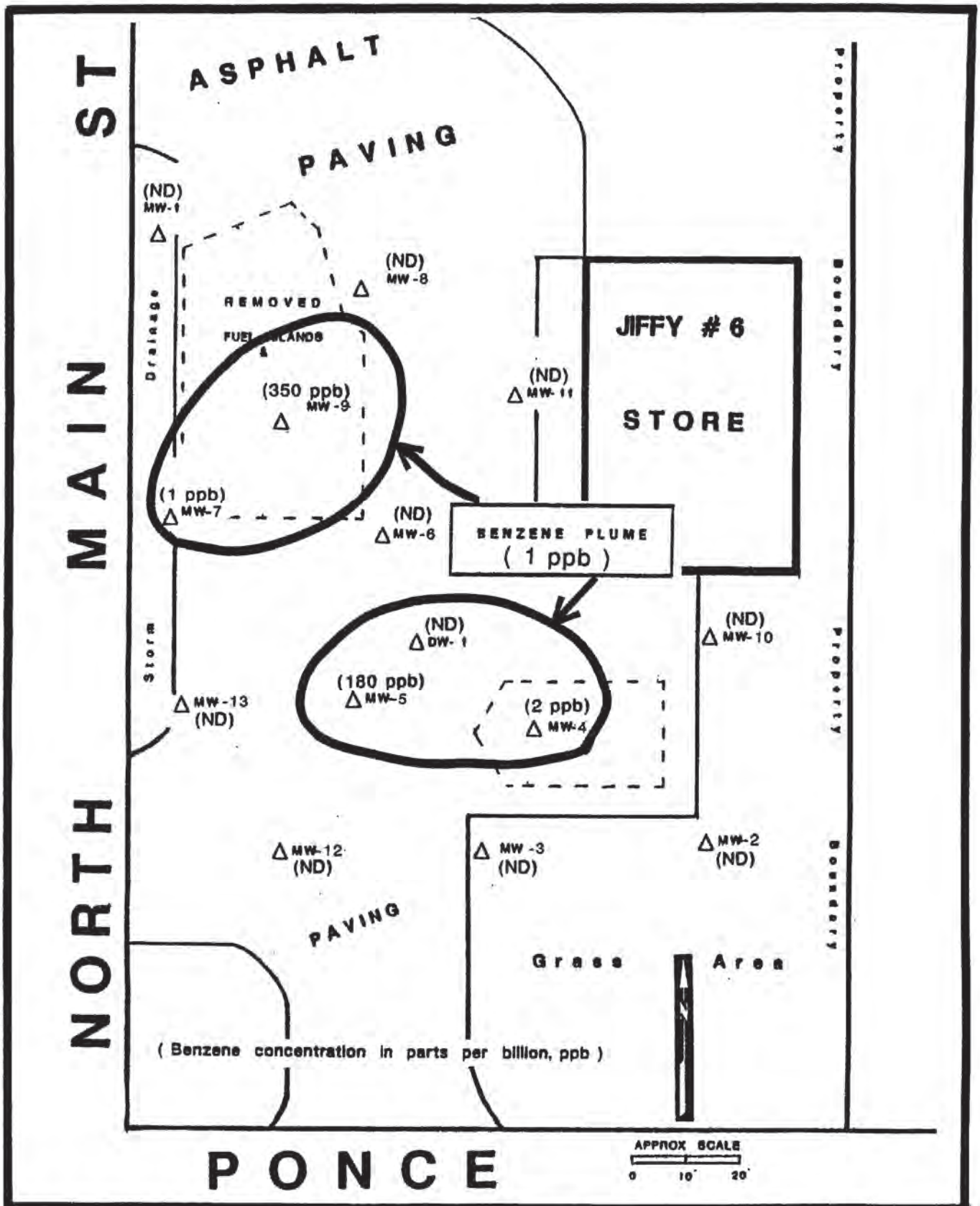
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Figure 12. Soil Contamination Plume

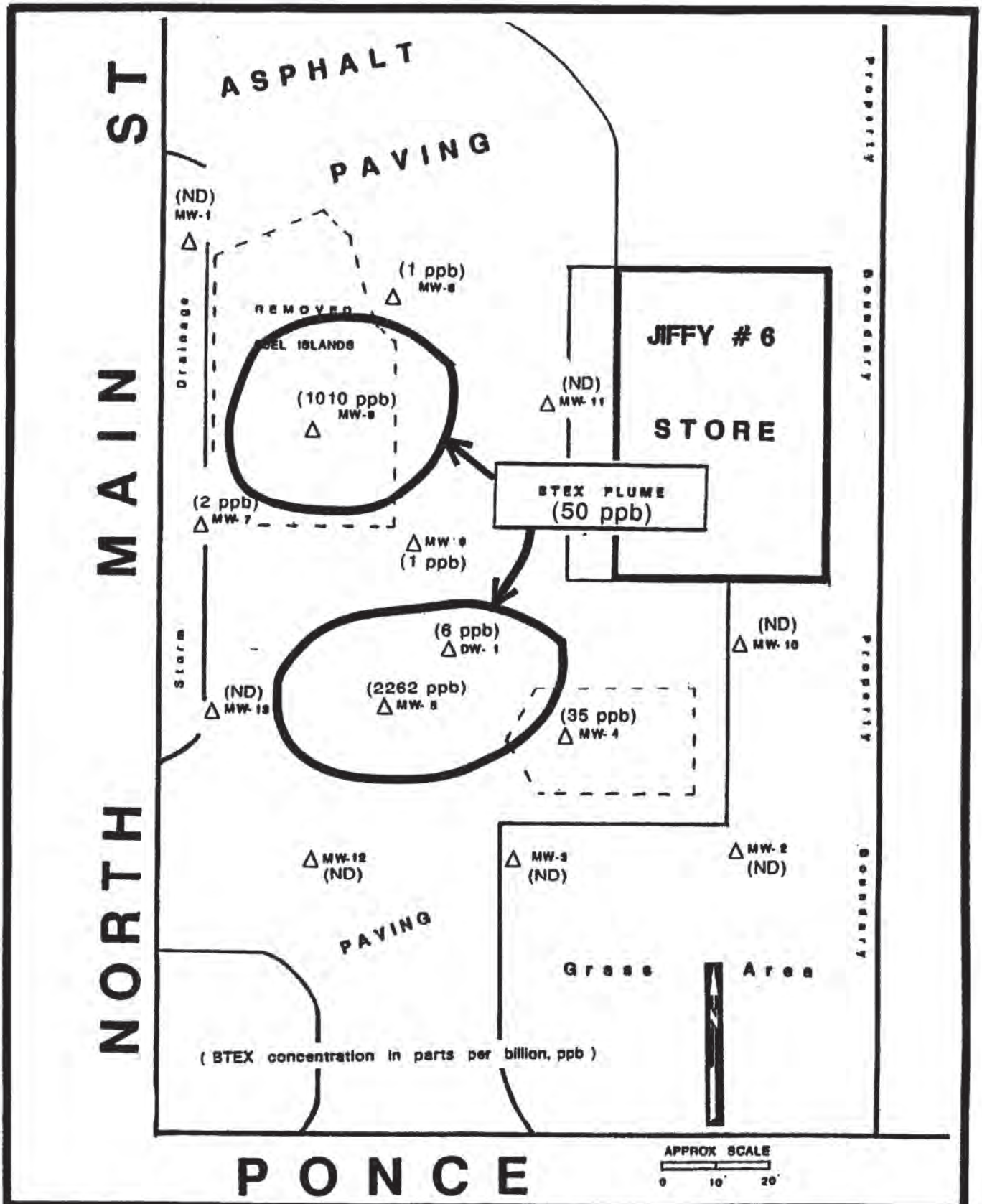
Huntley Jiffy Store No. 6
12615 North Main Street,
Jacksonville, Florida

IES PROJECT NO. 95-105R



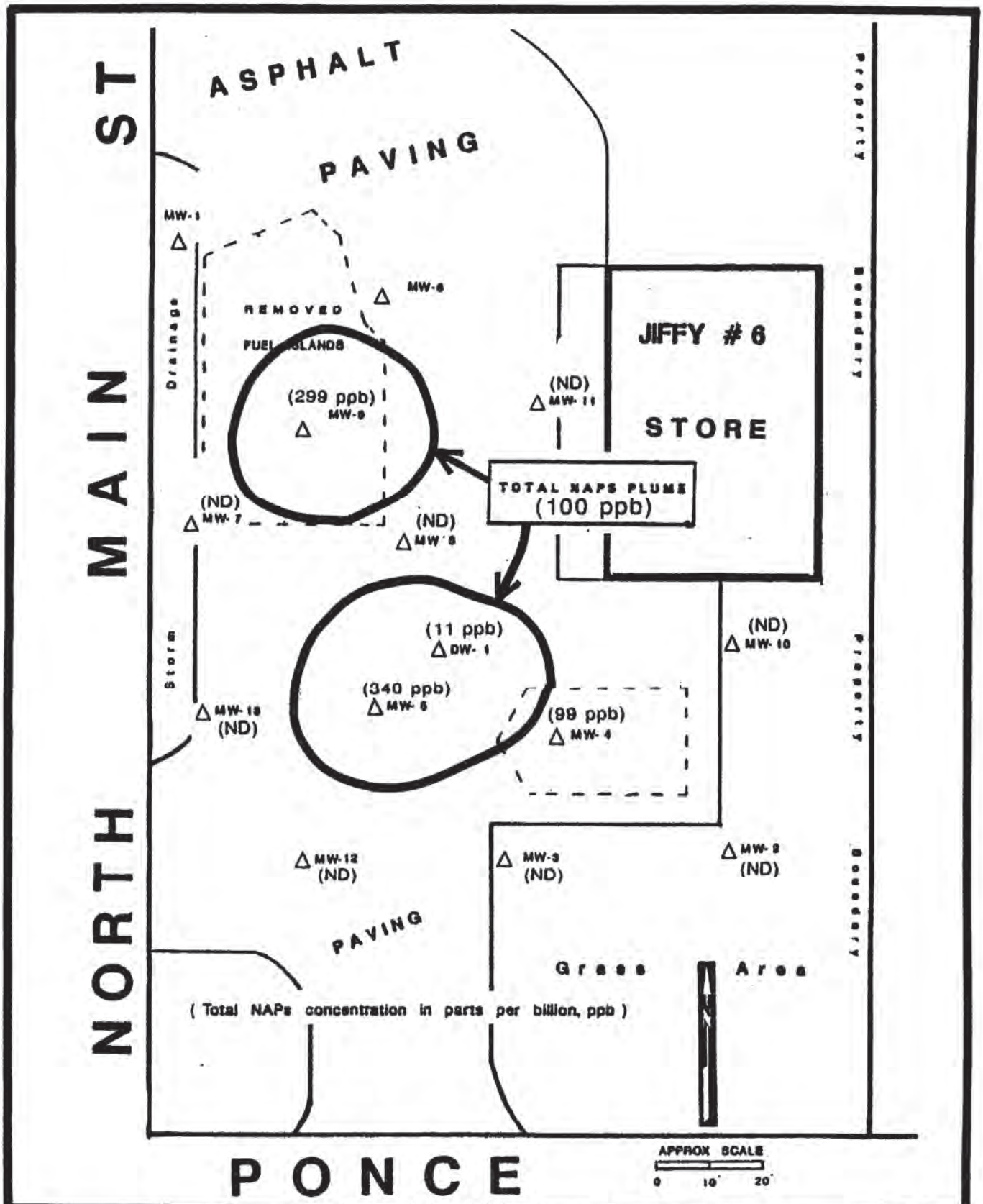
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Figure 13. Benzene Plume Map
Huntley Jiffy Store No. 6
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Figure 14. BTEX Plume Map
Huntley Jiffy Store No. 6
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IES PROJECT NO. 95-105R



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Figure 15. Total NAPS Plume Map
Huntley Jiffy Store No. 6
12615 North Main Street,
Jacksonville, Florida
IES PROJECT NO. 95-105R

Appendix D

Laboratory Analysis Reports

Our Quality Control Is Your Quality Assurance

Client #: 369J
Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 04/03/95
Log #: 20337-01

Sample Description:
Integrated Envt'l. Solutions
95-105R

Water Analysis

Label: MW-1
Date Sampled: 03/23/95
Date Received: 03/24/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Dilution Factor	1	ug/l	5030/8021	.	03/26/95	03/26/95	FS
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Fluorene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD

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Address: Integrated Envt'l. Solutions
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Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 04/03/95
Log #: 20337-01

Sample Description:
Integrated Envt'l. Solutions
95-105R

Water Analysis

Label: MW-1
Date Sampled: 03/23/95
Date Received: 03/24/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Chrysene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
TRPH	BDL	mg/l	418.1	2.0	03/28/95	03/28/95	NK

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea

Edward Dabrea
Laboratory Director

20337-01

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 04/03/95
Log #: 20337-02

Sample Description:
Integrated Envt'l. Solutions
95-105R

Water Analysis

Label: MW-2
Date Sampled: 03/23/95
Date Received: 03/24/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
MTBE	3	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Dilution Factor	1	ug/l	5030/8021	.	03/26/95	03/26/95	FS
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Fluorene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 04/03/95
Log #: 20337-02

Sample Description:
Integrated Envt'l. Solutions
95-105R

Water Analysis

Label: MW-2
Date Sampled: 03/23/95
Date Received: 03/24/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Chrysene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
TRPH	BDL	mg/l	418.1	2.0	03/28/95	03/28/95	NK

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea

Edward Dabrea
Laboratory Director

20337-02

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 04/03/95
Log #: 20337-03

Sample Description:
Integrated Envt'l. Solutions
95-105R

Water Analysis

Label: MW-3
Date Sampled: 03/23/95
Date Received: 03/24/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
MTBE	3	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Dilution Factor	1	ug/l	5030/8021	.	03/26/95	03/26/95	FS
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Fluorene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 04/03/95
Log #: 20337-03

Sample Description:
Integrated Envt'l. Solutions
95-105R

Water Analysis

Label: MW-3
Date Sampled: 03/23/95
Date Received: 03/24/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Chrysene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
TRPH	BDL	mg/l	418.1	2.0	03/28/95	03/28/95	NK

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

20337-03

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 04/03/95
Log #: 20337-04

Sample Description:
Integrated Envt'l. Solutions
95-105R

Water Analysis

Label: EQ Blk
Date Sampled: 03/23/95
Date Received: 03/24/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	03/26/95	03/26/95	FS
Dilution Factor	1	ug/l	5030/8021	.	03/26/95	03/26/95	FS
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Fluorene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD

Client #: 369J
Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 04/03/95
Log #: 20337-04

Sample Description:
Integrated Envt'l. Solutions
95-105R

Water Analysis

Label: EQ Blk
Date Sampled: 03/23/95
Date Received: 03/24/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Chrysene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	03/27/95	03/28/95	JD
TRPH	BDL	mg/l	418.1	2.0	03/28/95	03/28/95	NK

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

20337-04

IES INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.
ENVIRONMENTAL CONSULTANTS
3787 Old Middleburg Road • Jacksonville, Florida 32210

CHAIN OF CUSTODY RECORD

LABORATORY: V.O.C. Analytical Laboratories

PROJECT DESCRIPTION IES Project # 95-105R

SEND RESULTS TO ATTENTION: R. PARK

SAMPLER (SIGNATURE) Roger Park

Page 1 of 1

FIELD ID #	DATE	TIME (MILITARY)	SAMPLE DESCRIPTION	EPA 602 compounds (Preserve HCl)	EPA 610 compounds	EPA method 418.1 (Preserve H_2SO_4)	NO OF SAMPLE CONTAINERS	FT. DTW	COND.	TEMP.	pH	D.O.
MW-1	03/23/95	1230	H_2O	X	X	X						
MW-2	03/23/95	1315	H_2O	X	X	X						
MW-3	03/23/95	1400	H_2O	X	X	X						
EqBl	03/23/95	1415	H_2O	X	X	X						

RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)	RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)
[signature]	3/24/95	970	[signature]	3/24/95	0940						
RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)	REMARKS: cooler temp at 4°C All samples entered immediately into ice in cooler					

Our Quality Control Is Your Quality Assurance

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-01

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-1
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Acenaphthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Fluorene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Phenanthrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-01

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-1
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Chrysene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	DG
TRPH	BDL	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
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Respectfully submitted,

Edward Dabrea

Edward Dabrea
Laboratory Director

24367-01

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-02

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-2
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	2	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Fluorene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-02

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-2
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Chrysene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Indeno(1.2.3-cd)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
TRPH	BDL	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-02

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-03

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-3
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	3	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Fluorene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD

Client #: 369J

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Page: 2
Date: 08/29/95
Log #: 24367-03

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-3
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Chrysene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
TRPH	BDL	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-03

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-04

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-4
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	2	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	20	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	13	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	35	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	27	ug/l	3510/8270	10	08/22/95	08/23/95	JD
2-Methylnaphthalene	42	ug/l	3510/8270	10	08/22/95	08/23/95	JD
1-Methylnaphthalene	30	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Fluorene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD

Client #: 369J

Address: Integrated Envt'l. Solutions
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Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-04

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-4
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Chrysene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
TRPH	1.1	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-04

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-05

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-5
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	180	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Toluene	32	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Ethyl benzene	750	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Total xylenes	1300	ug/l	5030/8021	10	08/23/95	08/23/95	CR
MTBE	35	ug/l	5030/8021	10	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	10	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	10	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Total BTEX	2262	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Dilution Factor	10	ug/l	5030/8021	0.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	240	ug/l	3510/8270	10	08/22/95	08/23/95	JD
2-Methylnaphthalene	65	ug/l	3510/8270	10	08/22/95	08/23/95	JD
1-Methylnaphthalene	35	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Fluorene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD

Client #: 369J

Address: Integrated Envt'l. Solutions
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Jacksonville, FL 32210
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Page: 2
Date: 08/29/95
Log #: 24367-05

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-5
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Chrysene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/22/95	08/23/95	JD
TRPH	1.0	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-05

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-06

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-6
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Acenaphthene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Fluorene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Phenanthrene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD

Client #: 369J

Address: Integrated Envt'l. Solutions
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Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-06

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-6
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Chrysene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/22/95	08/24/95	JD
TRPH	BDL	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
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ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-06

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-07

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-7
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	2	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluorene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Phenanthrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG

Client #: 369J

Address: Integrated Envt'l. Solutions
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Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-07

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-7
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Chrysene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
TRPH	BDL	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea

Edward Dabrea
Laboratory Director

24367-07

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-08

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-8
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluorene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Phenanthrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-08

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-8
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Chrysene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
TRPH	BDL	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-08

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-09

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-9
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	350	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Toluene	15	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Ethyl benzene	560	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Total xylenes	85	ug/l	5030/8021	10	08/23/95	08/23/95	CR
MTBE	31	ug/l	5030/8021	10	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	10	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	10	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Total BTEX	1010	ug/l	5030/8021	10	08/23/95	08/23/95	CR
Dilution Factor	10	ug/l	5030/8021	0.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	170	ug/l	3510/8270	10	08/23/95	08/24/95	DG
2-Methylnaphthalene	81	ug/l	3510/8270	10	08/23/95	08/24/95	DG
1-Methylnaphthalene	48	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluorene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Phenanthrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-09

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: MW-9
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Chrysene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
TRPH	2.2	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-09

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-10

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: Dup
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	2	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	21	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	6	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	1	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	29	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	140	ug/l	3510/8270	10	08/23/95	08/24/95	DG
2-Methylnaphthalene	68	ug/l	3510/8270	10	08/23/95	08/24/95	DG
1-Methylnaphthalene	41	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluorene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Phenanthrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-10

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: Dup
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Chrysene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
TRPH	2.8	mg/l	5520F	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-10

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-11

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: Eq Blk
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR
EPA 610 Compounds							
Naphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthlyene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Acenaphthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluorene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Phenanthrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-11

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: Eq Blk
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Chrysene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	10	08/23/95	08/24/95	DG
TRPH	BDL	mg/l	418.1	1.0	08/26/95	08/26/95	BH

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-11

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 1
Date: 08/29/95
Log #: 24367-12

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: Trip Blk
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds							
Benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Toluene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total xylenes	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
MTBE	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Total BTEX	BDL	ug/l	5030/8021	1.0	08/23/95	08/23/95	CR
Dilution Factor	1	ug/l	5030/8021	.	08/23/95	08/23/95	CR

Client #: 369J

Address: Integrated Envt'l. Solutions
3787 Old Middleburg Road
Jacksonville, FL 32210
Attn: Roger Park

Page: 2
Date: 08/29/95
Log #: 24367-12

Sample Description:
Integrated Envt'l. Solutions
#95-105R

Water Analysis

Label: Trip Blk
Date Sampled: 08/18/95
Date Received: 08/21/95
Collected By: CLIENT

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully submitted,

Edward Dabrea
Laboratory Director

24367-12

IES INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.
ENVIRONMENTAL CONSULTANTS
3787 Old Middleburg Road • Jacksonville, Florida 32210

CHAIN OF CUSTODY RECORD

LABORATORY: V.O.C. Analytical

PROJECT DESCRIPTION: IES Project # 95-105R

SEND RESULTS TO ATTENTION: R. PARK

SAMPLER (SIGNATURE): Roger Park

Page 1 of 1

FIELD ID #	DATE	TIME (MILITARY)	SAMPLE DESCRIPTION	NO OF SAMPLE CONTAINERS: 2	1	1	ANALYSIS REQUEST: EPA Method 602 compounds (Pres w/ HCl)	EPA Method 610 compounds	EPA Method 418.1 (Pres w/ H_2SO_4)	FT. DTW	COND.	TEMP.	pH	D.O.
MW-1	8/18/95		H_2O				X	X	X					
MW-2	"		"				X	X	X					
MW-3							X	X	X					
MW-4							X	X	X					
MW-5							X	X	X					
MW-6							X	X	X					
MW-7							X	X	X					
MW-8							X	X	X					
MW-9							X	X	X					

RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)	RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)
Stephen McMahon	8/21/95	1:00	J Carr	8/21/95	9:00						
RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)	REMARKS: Cooler Temp at <4°C All samples entered immediately into cooler					

IES INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.
ENVIRONMENTAL CONSULTANTS
3787 Old Middleburg Road • Jacksonville, Florida 32210

CHAIN OF CUSTODY RECORD

LABORATORY: V.O.C. Analytical

PROJECT DESCRIPTION IES Project # 95-105R

SEND RESULTS TO ATTENTION:

SAMPLER (SIGNATURE) Roger Parks

FIELD ID #	DATE	TIME (MILITARY)	SAMPLE DESCRIPTION	ANALYSIS REQUEST: EPA Method 602 compounds (PSV w/ HCl)	EPA Method 610 compounds	EPA Method 418.1 (PSV w/ H_2SO_4)										FT. DTW	COND.	TEMP.	pH	D.O.
			NO OF SAMPLE CONTAINERS	2	1	1														
DUP	8/18/95		H_2O	X	X	X														
EB 81	8/18/95		H_2O	X	X	X														
Trip Bl	8/18/95		H_2O	X																

RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)	RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)
Steve Mc	8/21/95	7:00	J Carr	8/21/95	9:00						
RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)	REMARKS: Cooler Temp at < 4°C Samples entered immediately into cooler					

Our Quality Control Is Your Quality Assurance

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-1

Sample Description:

H2O Analysis
95-105R

Label: MW-5
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Halocarbons							
Bromodichloromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Bromoform	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Bromomethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Carbon Tetrachloride	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
2-Chloroethylvinyl Ether	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chloroform	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chloromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Dibromochloromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Dichlorodifluoromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Vinyl Chloride	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1-Dichloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1-Dichloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Trans-1,2-Dichloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichloropropane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Cis-1,3-Dichloropropene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Trans-1,3-Dichloropropene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Methylene Chloride	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1,2,2-Tetrachloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Tetrachloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1,1-Trichloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1,2-Trichloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Trichloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Trichlorofluoromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Cis-1,2-Dichloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Dilution Factor	1.0		5030/8260		02/14/96	02/14/96	MEL
EDB/DBCP in Liquid							

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-1

Sample Description:

H2O Analysis
95-105R

Label: MW-5
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
EDB/DBCP in Liquid (continued)							
EDB	BDL	ug/l	3510/8011	0.010	02/15/96	02/15/96	MW
DBCP	BDL	ug/l	3510/8011	0.020	02/15/96	02/15/96	MW
Dilution Factor	1.0		3510/8011		02/15/96	02/15/96	MW
Metals							
Lead	BDL	mg/l	3010/6010A	0.0050	02/13/96	02/13/96	JK

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,S86048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-PL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-1

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-2

Sample Description:

H2O Analysis
95-105R

Label: MW-9
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Halocarbons							
Bromodichloromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Bromoform	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Bromomethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Carbon Tetrachloride	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Chloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
2-Chloroethylvinyl Ether	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Chloroform	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Chloromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Dibromochloromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Dichlorodifluoromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Vinyl Chloride	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1-Dichloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,2-Dichloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1-Dichloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Trans-1,2-Dichloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,2-Dichloropropane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Cis-1,3-Dichloropropene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Trans-1,3-Dichloropropene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Methylene Chloride	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1,2,2-Tetrachloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Tetrachloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1,1-Trichloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1,2-Trichloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Trichloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Trichlorofluoromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Cis-1,2-Dichloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Dilution Factor	10.		5030/8260		02/14/96	02/14/96	MEL
EDB/DBCP in Liquid							

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 2 of 2
Date: 02/16/96
Log #: L2309-2

Sample Description:

H2O Analysis
95-105R

Label: MW-9
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
EDB/DBCP in Liquid (continued)							
EDB	BDL	ug/l	3510/8011	0.010	02/15/96	02/15/96	MW
DBCP	BDL	ug/l	3510/8011	0.020	02/15/96	02/15/96	MW
Dilution Factor	1.0		3510/8011		02/15/96	02/15/96	MW
Metals							
Lead	0.0053	mg/l	3010/6010A	0.0050	02/13/96	02/13/96	JK

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,E86048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-2

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-3

Sample Description:

H2O Analysis
95-105R

Label: MW-10
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Aromatics							
Benzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Toluene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Ethylbenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total xylenes	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
MTBE	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total BTEX	BDL	ug/l	5030/8260		02/14/96	02/14/96	MEL
Dilution Factor	1.0		5030/8260		02/14/96	02/14/96	MEL
Polyaromatic Hydrocarbons							
Naphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluorene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Phenanthrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Chrysene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Indeno(1,2,3-c,d)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(g,h,i)perylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dilution Factor	1.0		3510/8270		02/13/96	02/14/96	DG

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 2 of 2
Date: 02/16/96
Log #: L2309-3

Sample Description:

H2O Analysis
95-105R

Label: MW-10
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
General Chemistry							
Total Petroleum Hydrocarbon	BDL	mg/l	418.1	1.0	02/14/96	02/14/96	JM

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G	HRS# E86240,86356
SUB HRS# 86122,86109,E86048	ADEM ID# 40850
SC CERT# 96031	NC CERT# 444
TN CERT# 02985	CT CERT# PH-0122
ELPAT# 13801	CA CERT# I-1068
VA CERT# 00395	AZ CERT# AZ0529
MA CERT# M-FL449	USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-3

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-4

Sample Description:

H2O Analysis
95-105R

Label: MW-11
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Aromatics							
Benzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Toluene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Ethylbenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total xylenes	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
MTBE	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total BTEX	BDL	ug/l	5030/8260		02/14/96	02/14/96	MEL
Dilution Factor	1.0		5030/8260		02/14/96	02/14/96	MEL
Polyaromatic Hydrocarbons							
Naphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluorene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Phenanthrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Chrysene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Indeno(1,2,3-c,d)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(g,h,i)perylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dilution Factor	1.0		3510/8270		02/13/96	02/14/96	DG

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-4

Sample Description:

H2O Analysis
95-105R

Label: MW-11
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
General Chemistry							
Total Petroleum Hydrocarbon	BDL	mg/l	418.1	1.0	02/14/96	02/14/96	JM

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,286048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-4

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-5

Sample Description:

H2O Analysis
95-105R

Label: MW-12
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Aromatics							
Benzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Toluene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Ethylbenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total xylenes	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
MTBE	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total BTEX	BDL	ug/l	5030/8260		02/14/96	02/14/96	MEL
Dilution Factor	1.0		5030/8260		02/14/96	02/14/96	MEL
Polyaromatic Hydrocarbons							
Naphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluorene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Phenanthrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Chrysene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Indeno(1,2,3-c,d)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(g,h,i)perylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dilution Factor	1.0		3510/8270		02/13/96	02/14/96	DG

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-5

Sample Description:

H2O Analysis
95-105R

Label: MW-12
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
General Chemistry							
Total Petroleum Hydrocarbon	BDL	mg/l	418.1	1.0	02/14/96	02/14/96	JM

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,E86048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-5

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-6

Sample Description:

H2O Analysis
95-105R

Label: MW-13
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Aromatics							
Benzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Toluene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Ethylbenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total xylenes	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
MTBE	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total BTEX	BDL	ug/l	5030/8260		02/14/96	02/14/96	MEL
Dilution Factor	1.0		5030/8260		02/14/96	02/14/96	MEL
Polyaromatic Hydrocarbons							
Naphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluorene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Phenanthrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Chrysene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Indeno(1,2,3-c,d)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(g,h,i)perylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dilution Factor	1.0		3510/8270		02/13/96	02/14/96	DG

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-6

Sample Description:

H2O Analysis
95-105R

Label: MW-13
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
General Chemistry							
Total Petroleum Hydrocarbon	BDL	mg/l	418.1	1.0	02/14/96	02/14/96	JM

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,E86048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-6

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-7

Sample Description:

H2O Analysis
95-105R

Label: DW-1
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Aromatics							
Benzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Toluene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Ethylbenzene	6.0	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total xylenes	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
MTBE	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total BTEX	6.0	ug/l	5030/8260		02/14/96	02/14/96	MEL
Dilution Factor	1.0		5030/8260		02/14/96	02/14/96	MEL
Polyaromatic Hydrocarbons							
Naphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
2-Methylnaphthalene	11.	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluorene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Phenanthrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Chrysene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Indeno(1,2,3-c,d)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(g,h,i)perylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dilution Factor	1.0		3510/8270		02/13/96	02/14/96	DG

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-7

Sample Description:

H2O Analysis
95-105R

Label: DW-1
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
General Chemistry							
Total Petroleum Hydrocarbon	BDL	mg/l	418.1	1.0	02/14/96	02/14/96	JM

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,E86048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted

Marino Fernandez
Laboratory Director

L2309-7

MW-11 Dup

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-9

Sample Description:

H2O Analysis
95-105R

Label: DUP 2
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Polyaromatic Hydrocarbons							
Naphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluorene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Phenanthrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Chrysene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Indeno(1,2,3-c,d)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(g,h,i)perylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dilution Factor	1.0		3510/8270		02/13/96	02/14/96	DG

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-9

Sample Description:

H2O Analysis
95-105R

Label: DUP 2
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst

Polyaromatic Hydrocarbons (continued)

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,E86048
SC CERT# 96031
TN CERT# 02985
SLPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-9

MW-12 Dup

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 1
Date: 02/16/96
Log #: L2309-10

Sample Description:

H2O Analysis
95-105R

Label: DUP 3
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
General Chemistry							
Total Petroleum Hydrocarbon	BDL	mg/l	418.1	1.0	02/14/96	02/14/96	JM

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,E86048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-10

MW-9 Dup

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-13

Sample Description:

H2O Analysis
95-105R

Label: DUP 4
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Halocarbons							
Bromodichloromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Bromoform	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Bromomethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Carbon Tetrachloride	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Chloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
2-Chloroethylvinyl Ether	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Chloroform	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Chloromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Dibromochloromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Dichlorodifluoromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Vinyl Chloride	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1-Dichloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,2-Dichloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1-Dichloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Trans-1,2-Dichloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,2-Dichloropropane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Cis-1,3-Dichloropropene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Trans-1,3-Dichloropropene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Methylene Chloride	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1,2,2-Tetrachloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Tetrachloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1,1-Trichloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
1,1,2-Trichloroethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Trichloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Trichlorofluoromethane	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Cis-1,2-Dichloroethene	BDL	ug/l	5030/8260	10.	02/14/96	02/14/96	MEL
Dilution Factor	10.		5030/8260		02/14/96	02/14/96	MEL

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-13

Sample Description:

H2O Analysis
95-105R

Label: DUP 4
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst

Purgeable Halocarbons (continued)

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,E86048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-13

Equipment Blank

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-11

Sample Description:

H2O Analysis
95-105R

Label: DUP 5
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Aromatics							
Benzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Toluene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Ethylbenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total xylenes	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
MTBE	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Total BTEX	BDL	ug/l	5030/8260		02/14/96	02/14/96	MEL
Dilution Factor	1.0		5030/8260		02/14/96	02/14/96	MEL
Polyaromatic Hydrocarbons							
Naphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Acenaphthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluorene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Phenanthrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Chrysene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Indeno(1,2,3-c,d)pyrene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Benzo(g,h,i)perylene	BDL	ug/l	3510/8270	10.	02/13/96	02/14/96	DG
Dilution Factor	1.0		3510/8270		02/13/96	02/14/96	DG

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Date: 02/16/96
Log #: L2309-11

Sample Description:

H2O Analysis
95-105R

Label: DUP 5
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst

Polyaromatic Hydrocarbons (continued)

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,E86048
SC CERT# 96031
TN CERT# 02985
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HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-11

Equipment Blank

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 1 of 2
Date: 02/16/96
Log #: L2309-12

Sample Description:

H2O Analysis
95-105R

Label: DUP 6
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
Purgeable Halocarbons							
Bromodichloromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Bromoform	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Bromomethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Carbon Tetrachloride	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
2-Chloroethylvinyl Ether	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chloroform	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chloromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Dibromochloromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,3-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,4-Dichlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Dichlorodifluoromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Chlorobenzene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Vinyl Chloride	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1-Dichloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1-Dichloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Trans-1,2-Dichloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,2-Dichloropropane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Cis-1,3-Dichloropropene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Trans-1,3-Dichloropropene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Methylene Chloride	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1,2,2-Tetrachloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Tetrachloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1,1-Trichloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
1,1,2-Trichloroethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Trichloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Trichlorofluoromethane	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Cis-1,2-Dichloroethene	BDL	ug/l	5030/8260	1.0	02/14/96	02/14/96	MEL
Dilution Factor	1.0		5030/8260		02/14/96	02/14/96	MEL
General Chemistry							

Client #: JAX-93-120246
Address: Integrated Environmental Solutions
3787 Old Middleburg Rd.
Jacksonville, FL 32210
Roger Park

Page: Page 2 of 2
Date: 02/16/96
Log #: L2309-12

Sample Description:

H2O Analysis
95-105R

Label: DUP 6
Date Sampled: 02/09/96
Time Sampled: 12:00
Date Received: 02/12/96
Collected By: Client

Parameter	Results	Units	Method	Reportable Detect Limit	Extr. Date	Analysis Date	Analyst
General Chemistry (continued)							
Total Petroleum Hydrocarbon	BDL	mg/l	418.1	1.0	02/14/96	02/14/96	JM
EDB/DBCP in Liquid							
EDB	BDL	ug/l	3510/8011	0.010	02/15/96	02/15/96	MW
DBCP	BDL	ug/l	3510/8011	0.020	02/15/96	02/15/96	MW
Dilution Factor	1.0		3510/8011		02/15/96	02/15/96	MW
Metals							
Lead	BDL	mg/l	3010/6010A	0.0050	02/13/96	02/13/96	JK

BDL = Below Detection Limits
* Compounds are Screened Only, with an estimated detection limit.
All analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP# 900376G
SUB HRS# 86122,86109,S86048
SC CERT# 96031
TN CERT# 02985
ELPAT# 13801
VA CERT# 00395
MA CERT# M-FL449
HRS# E86240,86356
ADEM ID# 40850
NC CERT# 444
CT CERT# PH-0122
CA CERT# I-1068
AZ CERT# AZ0529
USACE CERT

Respectfully submitted,

Marino Fernandez
Laboratory Director

L2309-12

INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.
ENVIRONMENTAL CONSULTANTS
3737 Old Middleburg Road • Jacksonville, Florida 32210

CHAIN OF CUSTODY RECORD

PRIORITY
Due 2/16/96

Client: **VOC JAX**

PROJECT DESCRIPTION IES Project# 95-105 R

ATTN: R PARK

To: VOC

SAMPLER (SIGNATURE) Roger Park

Page 1 of 2

FIELD ID #	DATE	TIME (MILITARY)	SAMPLE DESCRIPTION	EPA 602 Compounds	EPA 610 Compounds	EPA Method 418.1	EPA 601 Compounds	EPA Method 8011 EDB	EPA Method 6010A Pb	FT. DTW	COND.	TEMP.	pH	D.O.
				NO OF SAMPLE CONTAINERS										
				2	1	1	2	2	1					
MW-5	02/09/96		H_2O				X	X	X					
MW-9	〃		〃				X	X	X					
MW-10	〃		〃	X	X	X								
MW-11	〃		〃	X	X	X								
MW-12	〃		〃	X	X	X								
MW-13	〃		〃	X	X	X								
DW-1	〃		〃	X	X	X								
Dup-1	〃		〃	X										
Dup-2	〃		〃		X									
Dup-3	〃		〃			X								

RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)	RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)
R Park	2/9/96	1700	[illegible]	2/12	1700	[illegible]	2/12/96	1700	Connie Dipatri	2/12/96	1700
Connie Dipatri			[illegible]	2/13	[illegible]						

REMARKS:

INTEGRATED ENVIRONMENTAL SOLUTIONS, INC.
ENVIRONMENTAL CONSULTANTS
3787 Old Middleburg Road • Jacksonville, Florida 32210

CHAIN OF CUSTODY RECORD

PRIORITY

Client: **VOC JAX**

Due 2/11/96

PROJECT DESCRIPTION IES Project # 95-105R

ATTN: R PARK

To: VOC

SAMPLER (SIGNATURE) Roger Park

Page 2 of 2

FIELD ID #	DATE	TIME (MILITARY)	SAMPLE DESCRIPTION	NO OF SAMPLE CONTAINERS: 2	1	1	2	2	1	FT. DTW	COND.	TEMP.	pH	D.O.
				ANALYSIS REQUEST: EPA Method 602 Compounds	EPA Method 610 Compounds	EPA Method 418.1	EPA Method 601 Compounds	EPA Method 8011 EDB	EPA Method 6010A Pb					
Dup 5	02/09/96		H_2O	X*	X*									
Dup 6	02/09/96		H_2O			X*	X*	X*	X*					
Dup 4	02/09/96		H_2O				X							

RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)	RELINQUISHED BY (SIGNATURE)	DATE	TIME (MILITARY)	RECEIVED BY (SIGNATURE)	DATE	TIME (MILITARY)
R Park	2/9/96	1700	[illegible]	2/12	1700	[illegible]	2/12/96	1700	Courier Dispatch	2/12/96	1700
Courier Dispatch			[illegible]	2/13/96	[illegible]						

REMARKS:

SITE 9 – 12635 North Main Street

No assessment information available

SITE 10 – Advance Auto Parts

No assessment information available

SITE 11 – Tire Depot and Repair

No assessment information available

SITE 12 – Oceanway Middle School

TCAR, dated September 29, 1995 (text, figures, tables, and laboratory analytical data) – 40 pages

TCAR, dated October 2002 (text, figures, and laboratory analytical data) – 39 pages

RSDI Environmental, Inc.

Dohaney
NORTHEAST DISTRICT
RECEIVED
OCT 12 1995
DEP - JACKSONVILLE

October 6, 1995

Mr. Bruce R. Ackerman
Duval County School Board
1701 Prudential Drive
Jacksonville, FL 32207

Re: UST Closure Report - Oceanway Elementary School # 61
RSDI Project #94247.11 DSB

8841992

Dear Mr. Ackerman:

Please find enclosed one (1) copy of the closure assessment and report for the referenced closure activity. Please contact us if you require additional information or have any questions regarding this matter.

3 on site
heating fuel Tanks.
non regulated Tanks -
clear closure.

Sincerely,

RSDI Environmental, Inc.

Timothy M. Matthews

Timothy M. Matthews, P.E.
Director of Professional Services

TMM/rbc

Enclosure

cc: Timothy Dohaney FDEP

7820 Arlington Expressway
Suite 600B, Jacksonville, FL 32211
Tel (904) 725-1555
Fax (904) 725-8055

RSDI Environmental, Inc.
Consultants, Engineers & Services

NORTHEAST DISTRICT
RECEIVED
OCT 12 1995
DEP - JACKSONVILLE

UNDERGROUND STORAGE TANK CLOSURE REPORT

Conducted at:

Oceanway Elementary School
143 Oceanway Avenue
Jacksonville, FL 32218-2696

September 29, 1995

RSDI Project No. 94247.11

Prepared for:

Duval County Public Schools
Facilities Planning
1701 Prudential Drive
Jacksonville, FL 32207

Prepared by:

RSDI Environmental, Inc.
7820 Arlington Expressway, Suite 600-B
Jacksonville, FL 32211

7820 Arlington Expressway
Suite 600B, Jacksonville, FL 32211
Tel (904) 725-1555
Fax (904) 725-8055

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OVA Soil Screening and Results 1
Groundwater Sampling and Results 2
Soil and Liquid Removal 3
Closure and Registration Forms 3
Other Information 3
Recommendation 3

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(1) Site Plan
(2) Site Location Map
(3) Soil and Groundwater Sampling Locations UST #1
(4) Soil and Groundwater Sampling Locations USTs #2 & #3

TABLES
(1) OVA Soil Screening Results UST #1
(2) OVA Soil Screening Results UST #2
(3) OVA Soil Screening Results UST #3
(4) Groundwater Analytical Results

ATTACHMENTS
(A) Groundwater & Sludge Analytical Results
(B) Closure Assessment Form and UST Installation & Removal Form for Certified Contractors
(C) Other Information

Closure Report Summary

RSDI Environmental, Inc. performed an Underground Storage Tank (UST) closure and assessment for the Oceanway Elementary School located at 143 Oceanway Avenue, Jacksonville, FL. RSDI removed one (1) UST and closed in place two (2) USTs. The tank closures commenced on August 1, 1995 and were completed on August 23, 1995. The size and contents of the USTs are as follows:

Tank	Size	Capacity	Original Tank Content
1	4'-6" OD x 8'-4" L	1000 gal	Heating Fuel
2	4'-6" OD x 8'-4" L	1000 gal	Heating Fuel
3	10' OD x 10' L	6000 gal	Heating Fuel

Tank #1
Upon removal, UST #1 was visually inspected for defects; none were discovered. The UST was then cut, cleaned and salvaged as scrap metal. Associated fill, fuel and vent lines were also removed and disposed.

Tank #2
Due to numerous utility lines in the immediate area, UST #2 was closed in place. A two foot by three foot opening was made to provide access cleaning. An additional 200 gallons of heating fuel/water mixture and sludge was discovered and pumped. The tank was then cleaned and filled with grout.

Tank #3
UST #3 was also closed in place due to numerous utility lines. A three foot by four foot opening was made to provide access for cleaning to facilitate filling the tank with grout.

Figures (1) and (2) provide the site location and site map, respectively. Figures (3) and (4) are detailed site plans for each tank location.

OVA Soil Screening and Results

Soil samples were taken during the UST closures. These samples were screened for petroleum hydrocarbon vapors in accordance with Chapter 62-761 FAC and the Guidelines for Petroleum Storage Tank Closure Assessments. An Organic Volatile Analyzer (OVA) , Foxboro Century 128 Model, with a Flame Ionization Detector (FID) was used. Each soil sample was screened with and without a carbon filter in order to correct for methane gas.

The grab soil sample OVA screening results are provided in Tables 1 through 3. Grab soil sample OVA screening results were also taken along the fill and fuel lines and are also included in Tables 1 through 3.

Tank #1
The OVA soil screening results indicated no soil contamination in the excavation area. Figure 3 provides the soil boring locations.

Tank #2
The OVA soil screening results indicated no soil contamination in the tank closure area. Figure 4 provides the soil boring locations.

Tank #3
The OVA soil screening results indicated no soil contamination in the tank closure area. Figure 4 provides the soil boring locations.

Groundwater Sampling and Results

Tank #1
After UST #1 was removed, the excavation was backfilled with clean soil and one temporary groundwater sampling well (TMW-1) was installed near the center of the former UST location. The water table was approximately two and one half feet below land surface (BLS). A groundwater sample was collected from TMW-1 and analyzed for EPA Methods 602 and 610 parameters including Methyl Tert-Butyl Ether (MTBE). The analytical results showed that the groundwater concentrations for benzene, Total BTEX, MTBE and polynuclear aromatic hydrocarbons (PAH)s were below detection limits (BDL).

Tank #2
Four temporary groundwater sampling wells (TMW-2 through 5) were installed around the former tank area. The water table was approximately three feet BLS. Groundwater samples were collected from TMW-2 through 5 and analyzed for EPA Methods 602 and 610 parameters including Methyl Tert-Butyl Ether (MTBE). The analytical results indicate that BTEX and napthalene parameters were detected in TMW-4 and TMW-5, but below FDEP recommended maximum contaminant levels.

Tank #3
Four temporary groundwater sampling wells (TMW-6 through 9) were installed around the former tank area. The water table was approximately two and one half feet BLS. Groundwater samples were collected from TMW-6 through 9 and analyzed for EPA Methods 602 and 610 parameters including Methyl Tert-Butyl Ether (MTBE). The

analytical results indicate that ethylbenzene was detected in TMW-8, but total BTEX is below FDEP recommended maximum contaminant levels.

A summary of of groundwater analytical results may be found in Table (4). All groundwater sampling analytical results are provided as Attachment (A).

Soil and Liquid Removal

7400 gallons of oily wastewater and 1025 gallons of diesel/water were pumped from the three USTs by Industrial Water Services (IWS) and Southern Maintenance Company (SMC).

One drum of sludge and wash liquid from the tank #1 cleaning and the purge water from the groundwater sampling was collected and, subsequently, removed by Laidlaw Environmental Services, Inc. The contents were emptied at a certified collection center (Laidlaw) for treatment. Sludge analytical results are provided as Attachment (A).

Contaminated soil was not discovered during the tank closures.

Closure and Registration Forms

A Closure Assessment Form and an Underground Storage Tank Installation and Removal Form for Certified Contractors are presented in Attachment B.

Other Information

Other pertinent information such as manifests and disposal documentation are provided as Attachment C.

Recommendation

Based on the results of the assessment activities performed during the UST closures, RSDI recommends that "No Further Assessment" be performed on the subject site.

FIGURES

RSDI Environmental, Inc.

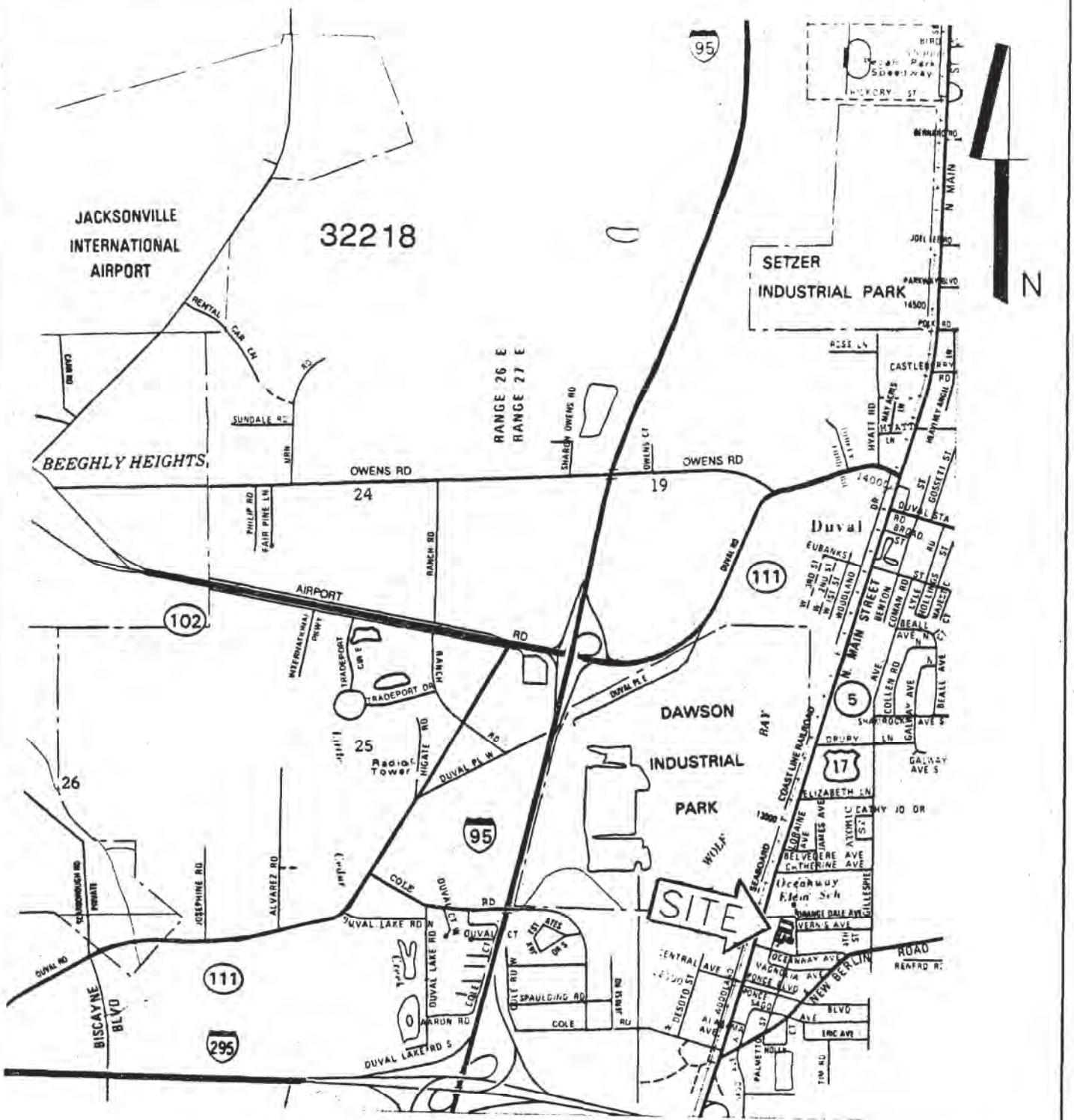


Figure: 1	SITE LOCATION MAP
Date: Sept. 29, 1995	Oceanway Elementary School
Scale: NTS	Jacksonville, Florida

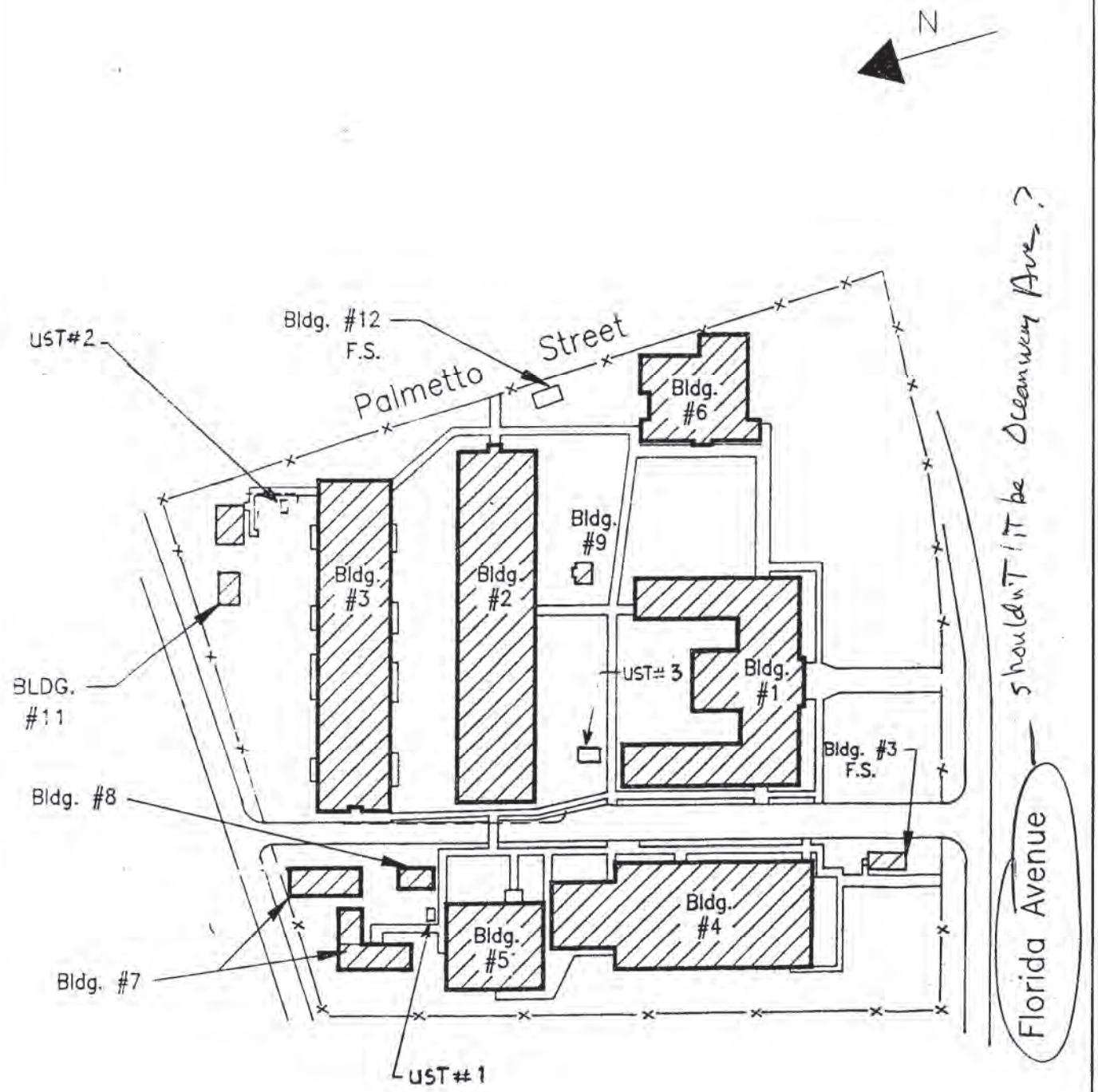
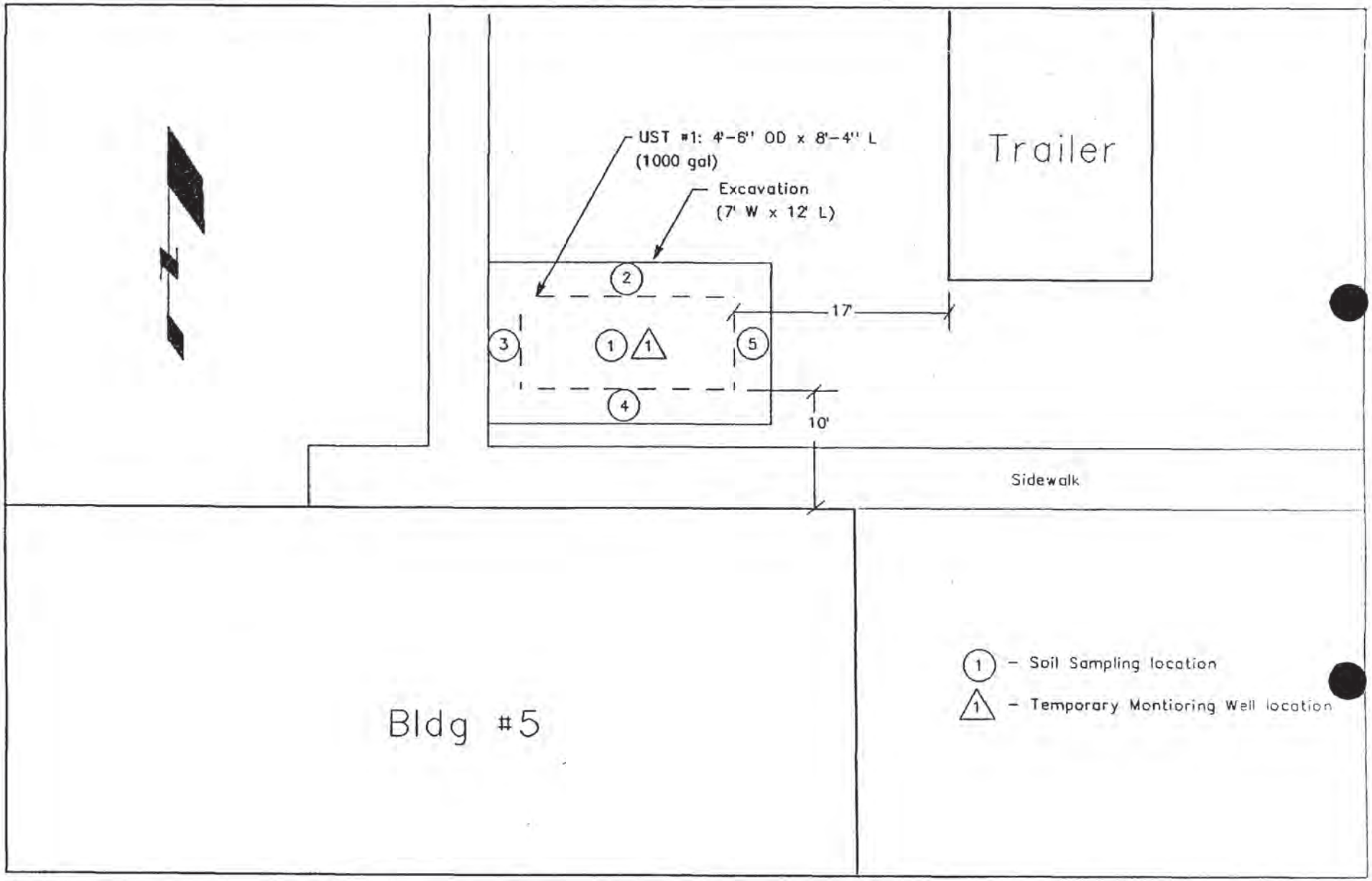


Figure: 2	Site Plan
Date: Sept. 29, 1995	DSB–Oceanway Elementary School Jacksonville, FL
Scale: NTS	



RSDI Environmental, Inc. 7820 Arlington Expressway, Suite 600B Jacksonville, FL 32211	FIGURE: 3 DATE: Sept. 29, 1995 SCALE: NTS	Soil and Groundwater Sampling Locations Oceanway Elementary School UST #1 Jacksonville, Florida

TABLES

TABLE I

OVA Soil Screening Results
UST #1
Oceanway Elementary School
143 Oceanway Avenue
Jacksonville, FL
UST Removal
RSDI Project No. 94247.11

Soil Sample Location	Depth of Sample (below grade)	ORGANIC VAPOR CONCENTRATION (parts per million) Unfiltered	Filtered	Corrected Value
1	1.0 ft	0.0	0.0	0.0
2	1.0 ft	0.0	0.0	0.0
	2.0 ft	0.0	0.0	0.0
3	2.0 ft	0.0	0.0	0.0
4	2.0 ft	0.0	0.0	0.0
5	2.0 ft	0.0	0.0	0.0

Groundwater was observed at 2.5' BLS

TABLE 2

OVA Soil Screening Results
UST #2
Oceanway Elementary School
143 Oceanway Avenue
Jacksonville, FL
UST Removal
RSDI Project No. 94247.11

Soil Sample Location	Depth of Sample (below grade)	ORGANIC VAPOR CONCENTRATION (parts per million) Unfiltered	Filtered	Corrected Value
1	2.0 ft	0.0	0.0	0.0
2	2.0 ft	0.0	0.0	0.0
3	2.0 ft	0.0	0.0	0.0
4	2.0 ft	0.0	0.0	0.0
5	2.0 ft	0.0	0.0	0.0

Groundwater was observed at 3' BLS

TABLE 3

OVA Soil Screening Results
UST #3
Oceanway Elementary School
143 Oceanway Avenue
Jacksonville, FL
UST Removal
RSDI Project No. 94247.11

Soil Sample Location	Depth of Sample (below grade)	ORGANIC VAPOR CONCENTRATION (parts per million) Unfiltered	Filtered	Corrected Value
1	2.0 ft	0.0	0.0	0.0
2	2.0 ft	0.0	0.0	0.0
3	2.0 ft	0.0	0.0	0.0
4	2.0 ft	0.0	0.0	0.0
5	2.0 ft	0.0	0.0	0.0
6	2.0 ft	0.0	0.0	0.0
7	2.0 ft	0.0	0.0	0.0
8	2.0 ft	0.0	0.0	0.0
9	2.0 ft	0.0	0.0	0.0
10	2.0 ft	0.0	0.0	0.0
11	2.0 ft	0.0	0.0	0.0

Groundwater was observed at 2.5' BLS

TABLE 4

Contaminant	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MCL
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.0
Total BTEX	BDL	BDL	BDL	1.9	6.8	BDL	BDL	3.1	BDL	50
MTBE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.02
Ttl Napthalene	BDL	BDL	BDL	82	18.3	BDL	BDL	BDL	BDL	100
PAHs	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	50

Concentrations in ppb

Notes:

BDL	Below detection limits
BTEX	Sum of benzene, toluene, ethylbenzene and xylene concentrations
MTBE	Methyl Tert-Butyl Ether
MCL	Chapter 62-770 Maximum Contaminant Levels
PAH	Polynuclear Aromatic Hydrocarbons
PPB	Parts per billion

ATTACHMENT A

Groundwater & Sludge Analytical Results



Our Quality Control Is Your Quality Assurance

ENTERED SEP - 7 '95

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-01

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
DI Water Analysis

Label: EQB
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 2393
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 2
Date: 08/23/95
Log #: 24265-01

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
DI Water Analysis

Label: EQB
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea
Laboratory Director

24265-01

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-02

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-1
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 2395
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 2
Date: 08/23/95
Log #: 24265-02

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-1
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea

Edward Dabrea
Laboratory Director

24265-02

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-03

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-2
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 2395
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 2
Date: 08/23/95
Log #: 24265-03

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-2
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea
Laboratory Director

24265-03

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-04

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-3
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 2393
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 2
Date: 08/23/95
Log #: 24265-04

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-3
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
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ADEM ID# 40720, 40850
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NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea
Laboratory Director

24265-04

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-05

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-4
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	1.9	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	1.9	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	13	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	32	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	37	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 2393
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

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Date: 08/23/95
Log #: 24265-05

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-4
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,
Edward Dabrea

Edward Dabrea
Laboratory Director

24265-05

Client #: 239J
Address: RSDI Environmental, Inc.
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Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-06

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-5
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	3.8	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	3.0	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	6.8	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	12	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	8.8	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	9.5	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

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Page: 2
Date: 08/23/95
Log #: 24265-06

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-5
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea
Laboratory Director

24265-06

Client #: 239J
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Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-07

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-6
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 239J
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7820 Arlington Expressway
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Attn: Robert Bolton

Page: 2
Date: 08/23/95
Log #: 24265-07

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-6
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea
Laboratory Director

24265-07

Client #: 239J
Address: RSDI Environmental, Inc.
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Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-08

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-7
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 239J
Address: RSDI Environmental, Inc.
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Suite 600B
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Attn: Robert Bolton

Page: 2
Date: 08/23/95
Log #: 24265-08

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-7
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,
Edward Dabrea

Edward Dabrea
Laboratory Director

24265-08

Client #: 239J
Address: RSDI Environmental, Inc.
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Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-09

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-8
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	3.1	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	3.1	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
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Jacksonville, FL 32211
Attn: Robert Bolton

Page: 2
Date: 08/23/95
Log #: 24265-09

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-8
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea
Laboratory Director

24265-09

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
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Jacksonville, FL 32211
Attn: Robert Bolton

Page: 1
Date: 08/23/95
Log #: 24265-10

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-9
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 602 Compounds	.	ug/l	5030/8021		08/19/95	08/19/95	FS
Benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Chlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Toluene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Ethyl benzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total xylenes	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
MTBE	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,2-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,3-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
1,4-Dichlorobenzene	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Total BTEX	BDL	ug/l	5030/8021	1.0	08/19/95	08/19/95	FS
Dilution Factor	1	ug/l	5030/8021	.	08/19/95	08/19/95	FS
PAH Compounds In Water	.	ug/l	3510/8270		08/18/95	08/19/95	DG
Naphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
2-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
1-Methylnaphthalene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Acenaphthylene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Acenaphthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluorene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Phenanthrene	BDL	ug/l	3510/8270	3.5	08/18/95	08/19/95	DG
Anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Pyrene	BDL	ug/l	3510/8270	2.0	08/18/95	08/19/95	DG
Benzo(a)anthracene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Chrysene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211
Attn: Robert Bolton

Page: 2
Date: 08/23/95
Log #: 24265-10

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
143 Oceanway Ave.
Groundwater Analysis

Label: TMW-9
Date Sampled: 08/17/95
Date Received: 08/17/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Benzo(b)fluoranthene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Benzo(k)fluoranthene	BDL	ug/l	3510/8270	2.5	08/18/95	08/19/95	DG
Benzo(a)pyrene	BDL	ug/l	3510/8270	3.0	08/18/95	08/19/95	DG
Dibenzo(a,h)anthracene	BDL	ug/l	3510/8270	7.0	08/18/95	08/19/95	DG
Indeno(1,2,3-cd)pyrene	BDL	ug/l	3510/8270	8.0	08/18/95	08/19/95	DG
Benzo(ghi)perylene	BDL	ug/l	3510/8270	4.0	08/18/95	08/19/95	DG
Dilution Factor	1	ug/l	3510/8270	.	08/18/95	08/19/95	DG

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea
Laboratory Director

24265-10

VOC JAX

LAB USE ONLY

BAR CODE

VOC ANALYTICAL LABORATORIES, INC.
877 N.W. 61 Street, Suite 202 • Ft. Lauderdale, FL 33309
(305) 938-8823 • FAX (305) 938-9558

CHAIN OF CUSTODY RECORD

LAB USE ONLY 24265

CLIENT ORIGINAL

Client: RSDI

Project Location: 143 Oceanway Ave.

Project Name or Number: Oceanway Elem.

Laboratory Analysis

ITEM NUMBER	SAMPLE LABEL	DATE	TIME	GROUND WATER	WASTE WATER	SOIL	OTHER (SPECIFY)	NUMBER OF CONTAINERS	PRES. TYPE	PARAMETER 602	PARAMETER 610	PARAMETER Bailers	COMMENTS
1	EQB	8-17	12:45	✓			DI water	4	HCl	✓	✓	✓	
2	TMW1	8-17	2:20	✓				4		✓	✓		
3	TMW2	8-17	1:15	✓				4		✓	✓		
4	TMW3	8-17	1:10	✓				4		✓	✓		
5	TMW4	8-17	1:20	✓				4		✓	✓		
6	TMW5	8-17	1:30	✓				4		✓	✓		
7	TMW6	8-17	2:40	✓				4		✓	✓		
8	TMW7	8-17	2:30	✓				4		✓	✓		
9	TMW8	8-17	2:45	✓				4		✓	✓		
0	TMW9	8-17	2:35	✓				4		✓	✓		

QC REPORT? _____ Yes _____ No

SAMPLER/SIGNATURE: Robert Bolton

REPORT TO: _____

FAX # : _____

REMARKS: 9 Bailers

Item Number	Transfers Relinquished by:	Date	Time	Accepted by:	Date	Time
	Robert Bolton	8-17	15:10	P. Dowling	8/17/95	15:10
1-10	P. Dowling	8-17-95	1700	Courier Dispatch	8-17-95	1700
1-10	Courier Dispatch	8/18	10		8/18	11

Our Quality Control Is Your Quality Assurance

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211

Page: 1
Date: 08/21/95
Log #: 24153-01

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
Oceanway North Main
Sludge Analysis

Label: Tank #2
Date Sampled: 08/04/95
Date Received: 08/14/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
EPA 8010 Compounds	.	mg/kg	5030/8021	------	08/15/95	08/15/95	WH
Bromodichloromethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Bromoform	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Bromomethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Carbon Tetrachloride	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Chloroethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Cis-1,2-Dichloroethene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Chloroform	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Chloromethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Dibromochloromethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,2-Dichlorobenzene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,3-Dichlorobenzene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,4-Dichlorobenzene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Dichlorodifluoromethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Chlorobenzene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Vinyl Chloride	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,1-Dichloroethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,2-Dichloroethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,1-Dichloroethene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Trans-1,2-Dichloroethen	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,2-Dichloropropane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Cis,-1,3-Dichloropropen	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Trans-1,3-Dichloroprope	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Methylene Chloride	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,1,2,2-Tetrachloroetha	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH

Client #: 239J
Address: RSDI Environmental, Inc.
7820 Arlington Expressway
Suite 600B
Jacksonville, FL 32211

Page: 2
Date: 08/21/95
Log #: 24153-01

Sample Description RSDI Environmental, Inc.
Oceanway Elementary
Oceanway North Main
Sludge Analysis

Label: Tank #2
Date Sampled: 08/04/95
Date Received: 08/14/95
Collected By: CLIENT

Parameter	Results	Units	Method	Detection Limit	Extr. Date	Analysis Date	Analyst
Tetrachloroethene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,1,1-Trichloroethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
1,1,2-Trichloroethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Trichloroethene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Trichlorofluoromethane	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
EPA 8020 Compounds	.	mg/kg	5030/8021	-----	08/15/95	08/15/95	WH
Benzene	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Toluene	43	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Ethyl Benzene	64	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Total Xylenes	390	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
MTBE	BDL	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Total BTEX	497	mg/kg	5030/8021	5.0	08/15/95	08/15/95	WH
Dilution Factor	100	mg/kg	5030/8021	.	08/15/95	08/15/95	WH
TRPH	960000	mg/kg	3550/9073	1.0	08/16/95	08/16/95	MF
TCLP Extraction	DONE		1311		08/16/95	08/17/95	PP
TCLP Cadmium	BDL	mg/l	1311/6010	0.10	08/16/95	08/17/95	FR
TCLP Lead	BDL	mg/l	1311/6010	0.10	08/16/95	08/17/95	FR
TCLP Selenium	BDL	mg/l	1311/6010	0.10	08/16/95	08/17/95	FR
TCLP Arsenic	BDL	mg/l	1311/6010	0.10	08/16/95	08/17/95	FR
TCLP Chromium	BDL	mg/l	1311/6010	0.10	08/16/95	08/17/95	FR
TCLP Mercury	BDL	mg/l	1311/7471	0.010	08/16/95	08/17/95	RM
TCLP Silver	BDL	mg/l	1311/6010	0.10	08/16/95	08/17/95	FR
TCLP Barium	1.9	mg/l	1311/6010	0.10	08/16/95	08/17/95	FR

BDL = Below Detection Limits
* These compounds are Screened Only, with an estimated detection limit.
All Analyses were performed using EPA, ASTM, USGS, or Standard Methods

QAP # 900376G
HRS # E86240, 86356
SUB HRS# 86122, 86109, E86048
ADEM ID# 40720, 40850
SC CERT #96031
NC Cert #444
Tennessee Lab #02985
Connecticut Lab Approval # PH-0122

Respectfully Submitted,

Edward Dabrea
Laboratory Director

24153-01

VOC JAX

VOC ANALYTICAL LABORATORIES, INC.
877 N.W. 61 Street, Suite 202
Ft. Lauderdale, FL 33309
(305) 938-8823

CHAIN OF CUSTODY RECORD

24153

VOC ANALYTICAL

Project Name or Number	Project Location
OCEANWAY ELEM	Oceanway North main

Client Name: RSDT ENVIRONMENTAL

Item Number	Sample Label	Date	Time	Sample Description (CHECK ONE): Ground Water	Surface Water	Soil	Other (specify)	Number of Containers	Laboratory Analysis: 8010	8020	TRPH	Sludge metals TCLP	Preservative Type	COMMENTS
TANK #2	Sludge	8/4	2:30				Sludge	2	✓			✓		

Will a Common Carrier be used? _____ Yes _____ No

Person Responsible for Sample: ROBERT BOLTON

Remarks:

Transfer Number	Item Number	Transfers Relinquished by:	Accepted by:	Date	Time
1	1	Robert Bolton	T. Carr	8/14/95	15 41
2	1	T. Carr	Courier Dispatch	8/14/95	1700
3	1	Courier Dispatch	BR	8-15-95	1310
4					

Reports
8841992

Tank Closure Assessment Report (TCAR)

Oceanway Elementary School

[illegible] Oceanway Avenue

Prepared For:
Duval County Public Schools
1701 Prudential Drive
Jacksonville, Florida 32207

Prepared By:
OHC Environmental Engineering, Inc.
1840 Southside Boulevard
Suite 3C
Jacksonville, Florida 32216

OHC ENVIRONMENTAL ENGINEERING

October 2002
OHC Project #021363EA

RECEIVED
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
2002 SEP 28 A 11:35
BUREAU OF PETROLEUM
STORAGE SYSTEMS
FAX



Signature Page

Site Name:	Oceanway Elementary School
Address:	143 Oceanway Avenue
City:	Jacksonville
County:	Duval County
Consultant Company:	OHC Environmental Engineering, Inc.
Address:	1840 Southside Boulevard, Suite 3C
City, State, ZIP:	Jacksonville, FL 32216
Consultant Representative:	Roy Stancil
Phone:	904-725-8279
Responsible Party Name:	Duval County Public Schools
Address:	1701 Prudential Drive
City, State, ZIP:	Jacksonville, Florida, 32207
Responsible Party Rep:	Bruce Ackerman
Phone:	904-390-2220

CERTIFICATION:

I hereby certify that I have supervised the fieldwork and preparation of this report, in accordance with Florida Rules and Regulations. As a registered professional engineer, as authorized by Chapters 492 and 471, Florida Statutes, I certify that I am a qualified groundwater professional, with knowledge and experience in groundwater contamination assessment and cleanup. To the best of my knowledge, the information and laboratory data summarized in the report are true, accurate, complete and in accordance with applicable State Rules and Regulations

George W. Schlossnagle, Ph.D., P.E., DEE
Florida Professional Registration Number 23269
Senior Vice President
OHC Environmental Engineering, Inc.

Date: December 5, 2002

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1.2 Background 3
1.3 Potable Well and Surface Water Survey 3

2.0 Closure Assessment Activities 4

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2.2.2 Soil Sampling and Analysis 5

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3.3 Piping 6
3.4 Sludge Information 6
3.5 Excessively Contaminated Soil 7

4.0 Conclusion and Recommendations 8

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Figure 2 Tank Location
Figure 3 Temporary Well Construction
Figure 4 Photos of tank removal

Appendices

Appendix A Chain of Custody, Laboratory Results
Appendix B Groundwater Sampling Log
Appendix C Soil Screening Data
Appendix D Liquid Manifests
Appendix E Limited Closure Summary Report

AST	Aboveground Storage Tank
bls	Below Land Surface
BTOC	Below Top Of Casing
CTLs	Cleanup Target Levels
DRF	Discharge Report Form
EPA	Environmental Protection Agency
EPCHC	Environmental Protection Commission of Hillsborough County
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FLPRO	Florida Petroleum Residual Organics
GCTLs	Groundwater Cleanup Target Levels
HCSB	Hillsborough County School Board
HCDSO	Hillsborough County District Safety Office
Micro-FID	Micro-Flame Ionization Detector
NADCs	Natural Attenuation Default Concentrations
NFA	No Further Action
OHC	OHC Environmental Engineering, Inc.
OVA	Organic Volatile Analyzer
PAHs	Polynuclear Aromatic Hydrocarbons
ppb	parts per billion
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
SAR	Site Assessment Report
SCTLs	Soil Cleanup Target Levels
Site	Robles Elementary School
SDHC	School District Hillsborough County
TCAR	Tank Closure Assessment Report
TOC	Top of Casing
TRPH	Total Recoverable Petroleum Hydrocarbons
VOCs	Volatile Organic Compounds

1.0 Introduction

On October 6th 2002 at approximately 5:00 PM, OHC Environmental Engineering, Inc. (OHC) received a call from Mr. Jody Wallick, of Ajax Building Corporation, in regard to a discharge that occurred at Oceanway Elementary School. According to Mr. Wallick, a track hoe drove over the fill port of an undocumented heating oil underground storage tank (UST). At that time, approximately 10 to 15 gallons of product discharged. Mr. Wallick was advised by OHC to immediate remove the visibly impacted soils and to place them on plastic or some other type of impervious surface.

On October 7th 2002 at approximately 8:00 AM, OHC met with Mr. Wallick and Rick McLeod of Moran Environmental Recovery (MER) to assess the impacted area. Some discoloration was noted around the tank and petroleum odor was obvious. Following the assessment, MER removed the free product and pressured washed the interior of the tank. A vacuum truck was utilized to remove both product and wash water. Next OHC instructed MER to lay down two layers of Visqueen Polyethylene sheathing and excavate the presumed impacted soils from around the tank. Two men with shovels and one with a small track hoe carefully excavated the soils surrounding the UST. During the excavation the tank was observed to have been punctured near the bung hole. Soils were screened with a MicroFID Organic Vapor Analyzer (OVA) to determine the extent of the impacted soils and to verify the extent of the excavation.

After the tank was removed and placed on Visqueen Polyethylene sheathing the excavation area was back filled with clean fill dirt. Confirmation samples from both the excavation area and the spoils pile were sent to Advanced Environmental Laboratories (AEL). Additionally, one temporary groundwater monitoring well was installed near the area of highest OVA readings.

The Code of Federal Regulations, Part 40, Section 280.72 and the Florida Department of Environmental Protection (FDEP) underground storage tank closure requirements, as outlined in Chapter 62-761 of the Florida Administrative Code under Storage Tank Systems requires that all storage tank system owners and or operators complete a closure assessment when a storage tank is permanently removed and/or taken out of service.

The guidelines set forth in the FDEP document titled Storage Tank Closure Assessment Requirements, revised April 1998 has been followed in the preparation of this closure assessment report. The certified pollutant storage systems specialty contractor used to accomplish the tank removal was MER. The field techniques used and test protocols followed to perform the tank removal, investigation and closure are described in this report.

1.1 Locations and Topography

Oceanway Elementary School is located at 143 Oceanway Avenue, Jacksonville, Florida. Figure 1 shows the site lay out and the location of the UST as well as the locations of the temporary groundwater well. Figure 2 shows the tank layout and sample locations for Tank 7. Figure 3 shows the property location on a United States Geological Survey quadrangle map. Figure 4 shows a diagram of the temporary well construction. Figure 5 shows photos of the tanks, prior location of the tanks, and the tank removal processes.

The area surrounding the school is primarily residential with the exception of a few commercial buildings located to the south of the school. Relief in the vicinity of the school area is relatively flat.

1.2 Background

OHC was contracted by the Duval County School Board to remove the heating oil tank after it was unintentionally run over by a track hoe at Oceanway Elementary School property.

1.3 Potable Well and Surface Water Survey

A potable well survey was not accomplished since groundwater was not impacted.

2.0 Closure Assessment Activities

The tank closure, sampling and assessments for Tank 7 has been accomplished following the FDEP's April, 1998 Storage Tank System Closure Assessment Requirements manual and Moran Environmental Recovery, LLC, and OHC's Comprehensive Quality Assurance Plans.

2.1 Groundwater

Groundwater at the tank was encountered at 6.78 feet below surface elevation.

2.1.2 Groundwater Sampling and Analysis

A Groundwater sample was collected from a temporary groundwater monitoring well and sent to Advanced Environmental Laboratories, Inc. (AEL) for analysis of the Kerosene Analytical Group (KAG). The well was constructed of 2" diameter PVC pipe containing a 5' screen factory slotted at 0.01 inch encased within a well sock.. A Horriba U-10 water indicator probe was used to detect pH, conductivity, temperature, and turbidity.

The results of the analysis found no contamination above Florida State Clean Up Levels for the sampled area. Appendix A contains a copy of the laboratory report and chain of custody. Appendix B contains a copy of the Groundwater Sampling Log.

2.2 Soil

2.2.1 Soil Screening

Soil samples from Tank 7 were taken from the spoil pile, and around the excavation pit. Soils screened, which had organic vapor readings over 20 ppm, were removed and added to the spoil pile. Once the pit was reduced to readings of less then 20 ppm a conformation sample was extracted from the area of highest OVA reading and sent to AEL for laboratory analysis.

2.2.2 Soil Sampling and Analysis

Confirmatory soil samples were taken from the four corners of the exaction pit and from the spoil pile. The samples were analyzed for KAG, EPA methods 504.1, 6010, 8270, 8260, TPH by FL-Pro, by AEL within the tank pit. Samples taken from the spoil pit were also analyzed for KAG as well as TCLP 8 RCRA Metals, EPA method 1311/6010, for analysis refer to Appendix A for chain of custody and analytical repot.

The results of the laboratory analysis indicated that the soils located at the four corners of the tank excavation area were below State Clean Up Target Levels.

However, the soils of the spoil pile contained levels above the State Clean Up Target Levels for benzene and toluene. For laboratory analytical results please refer to Appendix A.

3.0 Storage Tank Removal Activities

3.1 Product Removal

A total of 1900 gallons of heating oil and sludge was pumped from Tank 7 by a vacuum truck. Additionally, 400 gallons of surface water presumed to be negatively impacted by the release was removed from the tank pit. The non-hazardous product was then transported by MER to the Walter Recovery Inc. located at 1819 Albert Street in Jacksonville, Florida. The non-hazardous waste manifests are provided in Appendix E. Additionally, 75.56 tons of contaminated soil was removed from the excavation area.

3.2 Tank Closure

After removing all fuel and pressure cleaning the interior of the Tank it was disposed of by Burkhalter Wrecking, Inc. as scrap metal.

3.3 Piping

The fill port was straight to the tank. All product lines were drained, flushed, capped and left in place. OVA screening did not identify the presence of contamination beneath any of the supply lines.

3.4 Sludge Information

The tank was pressure washed and pumped dry by MER of Jacksonville, Florida. The heating oil and water/diesel sludge, which totaled 1,900 gallons, was removed from the tank and transported for recycling and re-use to Walter Recovery Inc. The non-hazardous waste manifests are provided in Appendix E.

3.5 Excessively Contaminated Soil

Excessively contaminated soil was stock piled and wrapped in visquine plastic until the pre burn analytical results were obtained. The soils, which totaled 75.56 tons, were transported by MER to Kedesh Inc. located at 1872 King Avenue in Kingsland, Georgia. According to the analytical results the soils were above target clean up levels for benzene and toluene.

4.0 Conclusion and Recommendations

One UST containing unregulated heating oil, was accidentally ruptured at the Oceanway Elementary School in Jacksonville, Florida. OVA sampling and laboratory analytical samples identified the extent of the impacted area. All contaminated soil was removed and clean fill was used to replenish the excavation area. The Limited Closure Summary Report can be found in Appendix G.

A total of 75.56 tons of soil was impacted and removed from the site and transferred by MER to Kedesh Inc., which is located in New Kings, Georgia. Additionally 400 gallons of ground water from the tank pit was presumed impacted and removed by MER and transported to Waters Recovery, Inc. in Jacksonville, Florida.

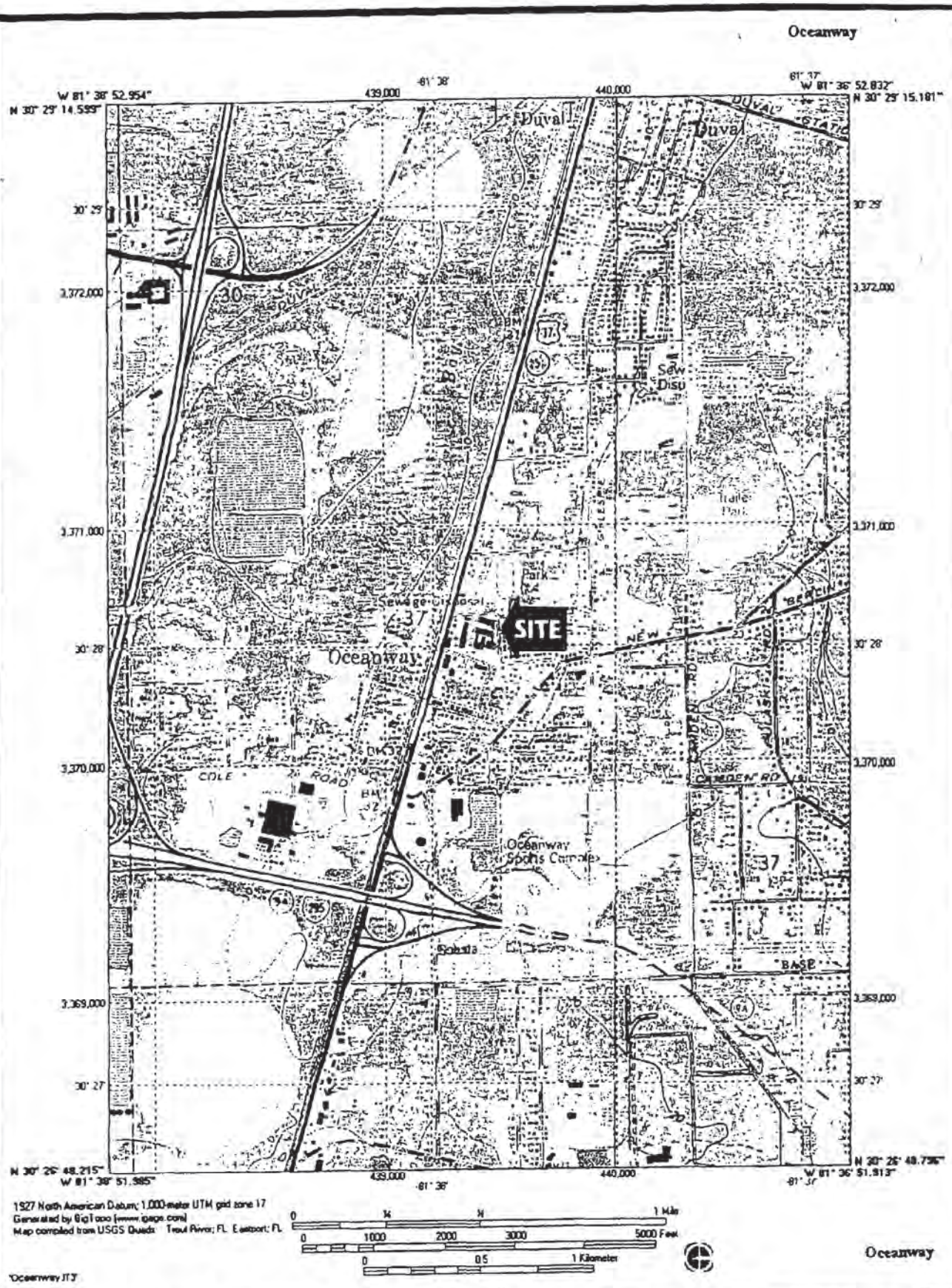
The UST was pressure washed and placed on visquien prior to being disposed of by Burkhaulter Wrecking Inc. as scrap metal.

The FDEP Document "Storage Tank Closure Assessment Requirements" (April 1998) requires that a site assessment be performed if the site meets any of the following criteria:

1) Soil contaminated with products in the Gasoline Analytical Group or Kerosene Analytical Group, that exceed the default soil cleanup target levels, remains on site, or
2) Soil stained with used oil, that exceeded the default soil cleanup target levels, remains on site, or
3) Free Product or sheen of petroleum products is detected in a monitoring well or in the tank excavation area, or
4) Any of the groundwater cleanup target levels has been exceeded.

Oceanway Elementary School does not meet any of the criteria outlined above and an additional site assessment is not required at this facility. In addition the analytical results of the onsite soils are below the cleanup target levels. Therefore OHC Environmental Engineering, Inc. recommends a No Further Action (NFA) status be granted, in regards to the USTs that was closed and removed from this site.

Figures



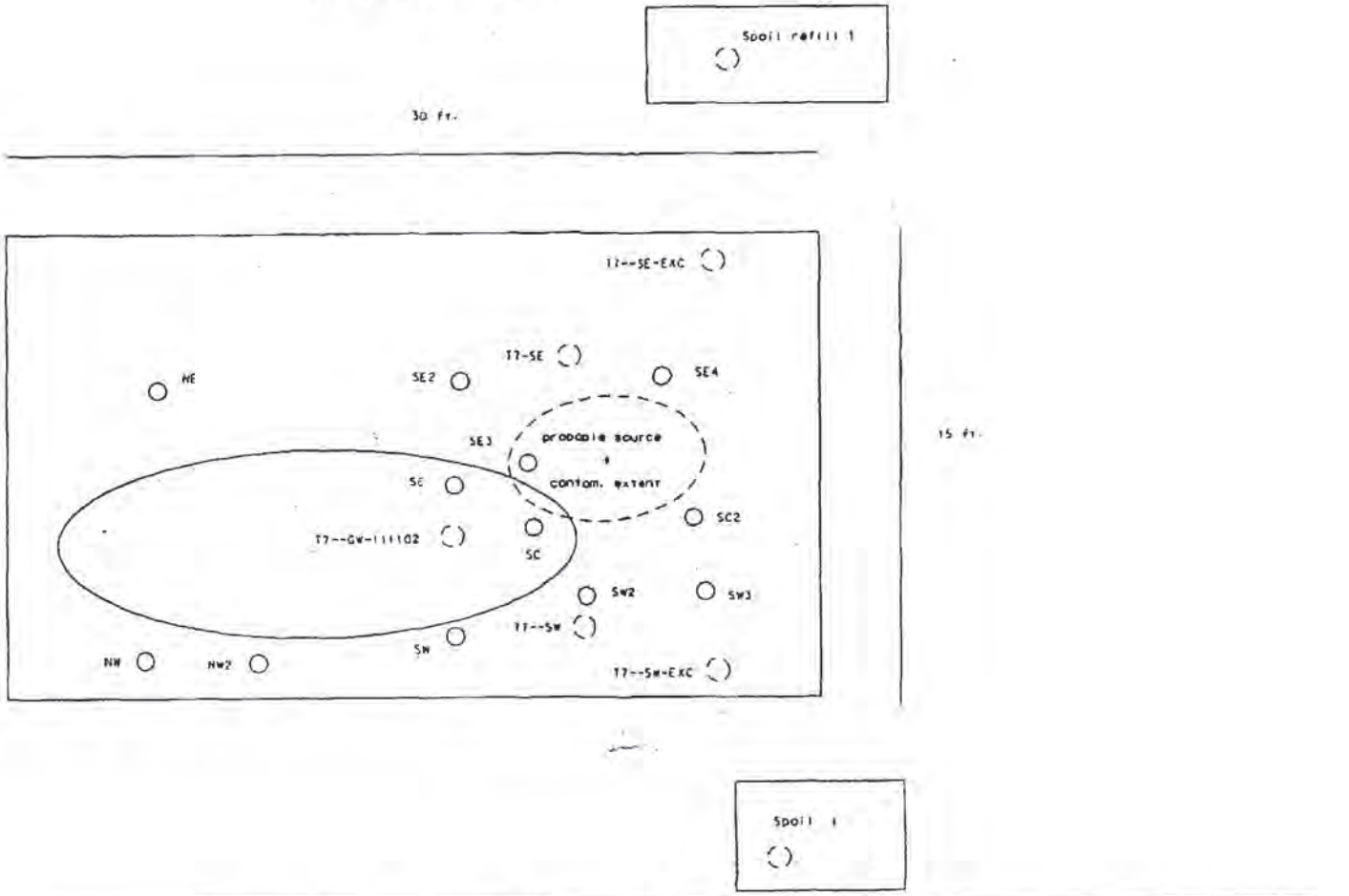
Topographic Map
Oceanway Elementary School
U.S. Geological Survey 7.5 Minute - Topographic Map
Trout River, Florida Quadrangle, 1927 Datum
OHC Project # 021200EA

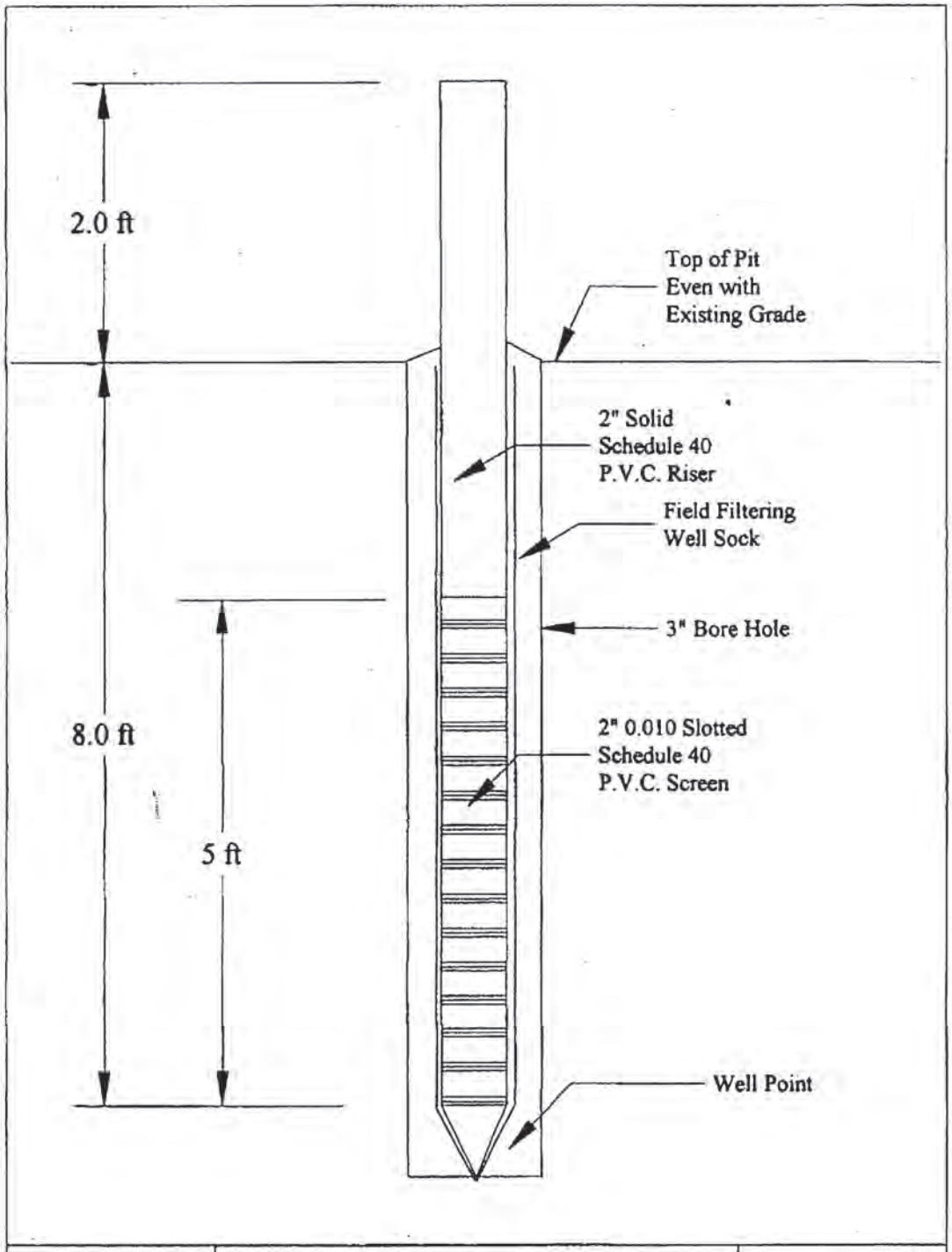
Figure 1

N

Excavation of Tank T. Dcpa Oceanway Elementary

2,000 gal. # 2 heating oil tank





Temporary Well Construction

Figure 3

Figure 4



Photo 1 View of UST after removal

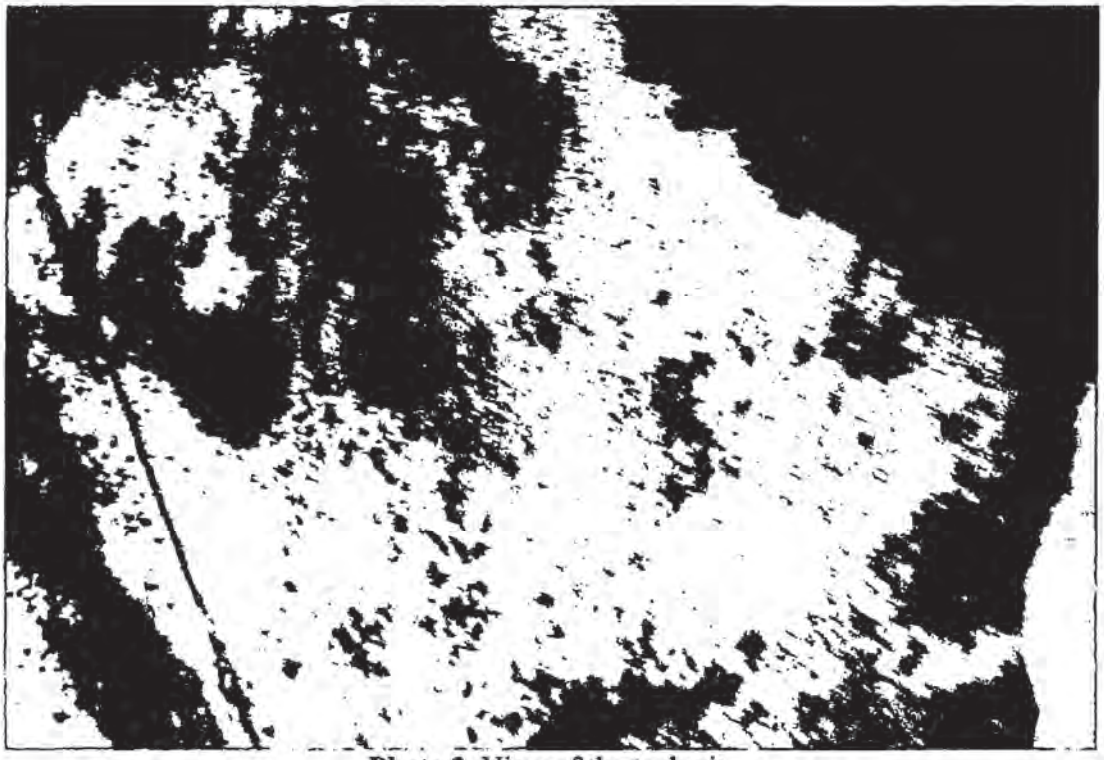


Photo 2 View of the tank pit.

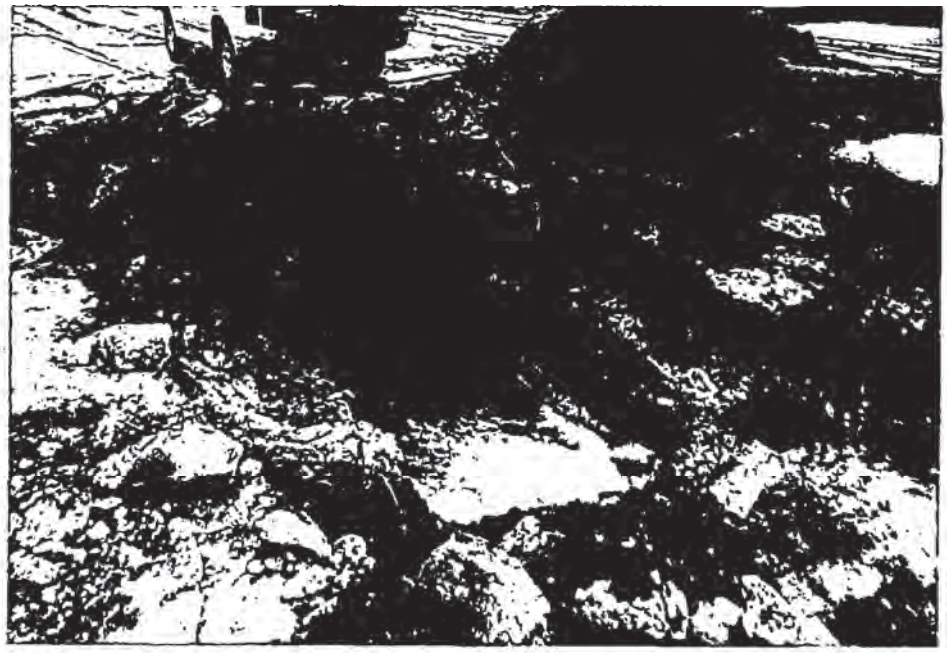


Photo 3:View of tank site



Photo 4: View of tank

Appendices

Appendix A

Chain of Custody, Laboratory Results

Advanced Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

LAB NUMBER: J025362

- ☑ Jacksonville: 6601 Southpoint Parkway, Jacksonville, FL 32216 • (904) 363-9350 Fax (904) 363-9354
- ☐ Tampa: 5810-D Breckenridge Parkway, Tampa, FL 33610 • (813) 630-9616 Fax (813) 630-4327
- ☐ Gainesville: 2106 NW 67th Place, Suite 7, Gainesville, FL 32606 • (352) 367-1500 Fax (352) 367-0050

Page 1 of 1

CLIENT NAME: OHC

PROJECT NAME: Oceanway Elem

ADDRESS: 1840 Southside Blvd

P.O. NUMBER / PROJECT NUMBER:

PROJECT LOCATION: Oceanway Elem. Hwy 17 N.

PHONE: 725 8279 FAX: 721 2809

CONTACT: Roy Stancil

SAMPLED BY: Mike Emerson

TURN AROUND TIME:

☐ STANDARD

☒ RUSH 5 day

REMARKS / SPECIAL INSTRUCTIONS:

WW= waste water SW=surface water GW=ground water DW=drinking water OIL A=air SO=soil SL=sludge

SAMPLE ID	SAMPLE DESCRIPTION	Grab Composite	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. CONT.	Preserv	ANALYSIS REQUIRED: KAG + TCLP - 8 RCRA	ANALYSIS REQUIRED: KAG	LAB NUMBER
Spoil 1	Spoil Pile - Tank 7	grab	11-7-02	0750	S	4		X		-1
T7-SW	SW Corner Tank 7	"		0830		4			X	-2
T7-SE	SE Corner Tank 7	"		0815		4			X	-3
AST-S1	AST Soil Sample					4			X	-4
AST-1	AST Pad H2O			1215	GW	6			X	-5

I = Ice H = (HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Shipment	Method	Sample Kit	Cooler #		Relinquished by:	Date	Time	Received by:	Date	Time
Out: / /	Via:	RB:	D/T	1	[signature]			[signature]	11-7-02	1640
		AB:	D/T	2						
Ret: / /	Via:	Trip Bl. ☐	☐	3						
				4						

revi

Advanced
Environmental Laboratories, Inc.

- ☑ Jacksonville: 6601 Southpoint Parkway, Jacksonville, FL 32216 • (904) 363-9350 Fax (904) 363-9354
- ☐ Tampa: 5810-D Breckenridge Parkway, Tampa, FL 33610 • (813) 630-9616 Fax (813) 630-4327
- ☐ Gainesville: 2106 NW 67th Place, Suite 7, Gainesville, FL 32606 • (352) 367-1500 Fax (352) 367-0050

CHAIN OF CUSTODY RECORD

LAB NUMBER: 025393

Page _____ of _____

CLIENT NAME: OHC Environmental Eng.

PROJECT NAME: Occanomay Elem Tank #7

ADDRESS: 1340 Southside Blvd

P.O. NUMBER / PROJECT NUMBER: 021324

PROJECT LOCATION:

PHONE: 7258279 FAX: 721205

CONTACT: Mike Emerson

SAMPLED BY:

TURN AROUND TIME:

☐ STANDARD

☒ RUSH _____

REMARKS / SPECIAL INSTRUCTIONS:

WW= waste water SW=surface water GW=ground water DW=drinking water OIL A=air SO=soil SL=sludge

SAMPLE ID	SAMPLE DESCRIPTION	Grab / Composite	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. CONT.	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED	LAB NUMBER
Spoil Refill S1	Spoil Refill	GM	11-8-02	1305	S		Preserv	KDG	-01
T7-SE-Exc	Tank 7 SE side	|	|	1315	|		|	-02
~~T7-SW-Exc~~	Tank 7 SW side	|	|	1350	|		|	-03
T7-SW-Exc									

I = Ice H = (HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

	Relinquished by:	Date	Time	Received by:	Date	Time
1	M E Emerson				11-12	1620
2						
3						
4						

Shipment	Method	Sample Kit	Cooler #
Out / /	Via	RB	D/T
		AB	D/T
Ret / /	Via	Trip Bl	

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025362-01
Client Sample ID: Spoil 1
Site: Spoil Pole-Tank 7

Report No.: J025362
Date/Time Sampled: 11/07/02 07:50
Date/Time Received: 11/7/02 16:40
Sampled By Mike Emerson
Shipping Method: Client drop off

Florida Petroleum Range Organics

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Total PHS	J	50	210	8400	mg/kg		FL-PRO	11/11/02 18:24	3550	11/8/02 08:00	MP

Metals

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
TCLP Arsenic	J	1	0.20	0.20	mg/L	U	6010	11/13/02 18:10	1311/3010	11/14/02 11:50	DS
TCLP Barium	J	1	2.5	2.5	mg/L	U	6010	11/13/02 18:10	1311/3010	11/14/02 11:50	DS
TCLP Cadmium	J	1	0.050	0.050	mg/L	U	6010	11/13/02 18:10	1311/3010	11/14/02 11:50	DS
TCLP Chromium	J	1	0.10	0.10	mg/L	U	6010	11/13/02 18:10	1311/3010	11/14/02 11:50	DS
TCLP Lead	J	1	0.10	0.10	mg/L	U	6010	11/13/02 18:10	1311/3010	11/14/02 11:50	DS
TCLP Mercury	J	1	0.020	0.020	mg/L	U	7470	11/14/02 12:08	1311/7470	11/14/02 07:00	TP
TCLP Selenium	J	1	0.20	0.20	mg/L	U	6010	11/13/02 18:10	1311/3010	11/14/02 11:50	DS
TCLP Silver	J	1	0.10	0.10	mg/L	U	6010	11/13/02 18:10	1311/3010	11/14/02 11:50	DS

Miscellaneous Analytes

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
% Moisture	J	1	0.10	5.5	%		SM2540G	11/11/02			KB

Petroleum Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1-Methylnaphthalene	J	10	0.11	14	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
2-Methylnaphthalene	J	10	0.11	22	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthene	J	10	0.11	0.75	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthylene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Anthracene	J	10	0.11	0.29	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)anthracene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)pyrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(b)fluoranthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(ghi)perylene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(k)fluoranthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Chrysene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Dibenzo(a,h)anthracene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluoranthene	J	10	0.11	0.35	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluorene	J	10	0.11	2.7	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Indeno(1,2,3-cd)pyrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Naphthalene	J	10	0.11	5.1	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Phenanthrene	J	10	0.11	4.2	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Pyrene	J	10	0.11	0.30	mg/Kg		8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP

Volatile Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Benzene	J	1	5.3	21	µg/kg		8260	11/12/02 21:04	5035		JA
Ethylbenzene	J	50	53	510	µg/kg		8260	11/12/02 21:04	5035		JA
m&p-Xylenes	J	50	53	1600	µg/kg		8260	11/12/02 21:04	5035		JA

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025362-01
Client Sample ID: Spoil 1
Site: Spoil Pole-Tank 7

Report No.: J025362
Date/Time Sampled: 11/07/02 07:50
Date/Time Received: 11/7/02 16:40
Sampled By Mike Emerson
Shipping Method: Client drop off

Methyl-tert-butyl Ether	J	1	5.3	5.3	ug/kg	U	8260	11/12/02	21:04	5035	JA
o-Xylene	J	50	53	880	ug/kg		8260	11/12/02	21:04	5035	JA
Toluene	J	50	53	1100	ug/kg		8260	11/12/02	21:04	5035	JA

Surrogates:	Control Limits	Percent Recovery		Qual.	Method	Analysis Date	Prep Method	Prep Date	Analyst
1,2-Dichloroethane-d4	80 - 120	103	%		8260	11/12/02	5035		JA
4-Bromofluorobenzene	74 - 121	127	%	J4	8260	11/12/02	5035		JA
Toluene d(8)	81 - 117	121	%	J4	8260	11/12/02	5035		JA
Decafluorobiphenyl	15 - 147	64	%		8270-SIM	11/12/02	3550	11/11/02	MP
Nonatricontane	60 - 118	78	%		FL-PRO	11/11/02	3550	11/08/02	MP
Ortho-Terphenyl	62 - 109	0	%	SDO	FL-PRO	11/11/02	3550	11/08/02	MP

J4 The sample matrix interfered with the ability to make an accurate determination.
SDO Surrogate diluted out of extract
U The compound was analyzed for but not detected.
All soil results are reported in dry weight basis
MRL Method Reporting Limit
J DOH certification #E82574 (AEL-JAX) (FL NELAC certification)

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025393-01
Client Sample ID: SPOIL REFILL S1
Site: Spoil Refill

Report No.: J025393
Date/Time Sampled: 11/08/02 13:00
Date/Time Received: 11/8/02 16:20
Sampled By Mike Emerson
Shipping Method: Client drop off

Florida Petroleum Range Organics

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Total PHS	J	1	4.5	15	mg/kg		FL-PRO	11/14/02 21:35	3550	11/14/02 13:10	MP

Miscellaneous Analytes

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
% Moisture	J	1	0.10	12	%		SM2540G	11/11/02			KB

Petroleum Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1-Methylnaphthalene	J^	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
2-Methylnaphthalene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthylene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Anthracene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)anthracene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)pyrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(b)fluoranthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(ghi)perylene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(k)fluoranthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Chrysene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Dibenzo(a,h)anthracene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluoranthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluorene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Indeno(1,2,3-cd)pyrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Naphthalene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Phenanthrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Pyrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP

Volatile Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Benzene	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
Ethylbenzene	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
m&p-Xylenes	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
Methyl-tert-butyl Ether	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
o-Xylene	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
Toluene	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025393-01
Client Sample ID: SPOIL REFILL S1
Site: Spoil Refill

Report No.: J025393
Date/Time Sampled: 11/08/02 13:00
Date/Time Received: 11/8/02 16:20
Sampled By Mike Emerson
Shipping Method: Client drop off

Surrogates:	Control Limits	Percent Recovery		Qual.	Method	Analysis Date	Prep Method	Prep Date	Analyst
1,2-Dichloroethane-d4	80 - 120	89	%		8260	11/13/02	5035		JA
4-Bromofluorobenzene	74 - 121	109	%		8260	11/13/02	5035		JA
Toluene d(8)	81 - 117	105	%		8260	11/13/02	5035		JA
Decafluorobiphenyl	15 - 147	84	%		8270-SIM	11/12/02	3550	11/11/02	MP
Nonatricontane	60 - 118	87	%		FL-PRO	11/14/02	3550	11/14/02	MP
Ortho-Terphenyl	62 - 109	88	%		FL-PRO	11/14/02	3550	11/14/02	MP

U The compound was analyzed for but not detected.
All soil results are reported in dry weight basis
MRL Method Reporting Limit
J^ Analysis performed by AEL Jacksonville, no certification.
J DOH certification #E82574 (AEL-JAX) (FL NELAC certification)

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025393-02
Client Sample ID: T7-SE-EXC
Site: Tank 7-SE Side

Report No.: J025393
Date/Time Sampled: 11/08/02 13:15
Date/Time Received: 11/8/02 16:20
Sampled By: Mike Emerson
Shipping Method: Client drop off

Florida Petroleum Range Organics

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Total PHS	J	1	5.1	5.1	mg/kg	U	FL-PRO	11/14/02 21:35	3550	11/14/02 13:10	MP

Miscellaneous Analytes

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
% Moisture	J	1	0.10	22	%		SM2540G	11/11/02			KB

Petroleum Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1-Methylnaphthalene	J^	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
2-Methylnaphthalene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthylene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(b)fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(ghi)perylene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(k)fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Chrysene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Dibenzo(a,h)anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluorene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Indeno(1,2,3-cd)pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Naphthalene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Phenanthrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP

Volatile Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Benzene	J	1	6.4	6.4	µg/kg	U	8260	11/13/02 19:36	5035		JA
Ethylbenzene	J	1	6.4	6.4	µg/kg	U	8260	11/13/02 19:36	5035		JA
m&p-Xylenes	J	1	6.4	6.4	µg/kg	U	8260	11/13/02 19:36	5035		JA
Methyl-tert-butyl Ether	J	1	6.4	6.4	µg/kg	U	8260	11/13/02 19:36	5035		JA
o-Xylene	J	1	6.4	6.4	µg/kg	U	8260	11/13/02 19:36	5035		JA
Toluene	J	1	6.4	6.4	µg/kg	U	8260	11/13/02 19:36	5035		JA

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025393-02
Client Sample ID: T7-SE-EXC
Site: Tank 7-SE Side

Report No.: J025393
Date/Time Sampled: 11/08/02 13:15
Date/Time Received: 11/8/02 16:20
Sampled By Mike Emerson
Shipping Method: Client drop off

Surrogates:	Control Limits	Percent Recovery		Qual.	Method	Analysis Date	Prep Method	Prep Date	Analyst
1,2-Dichloroethane-d4	80 - 120	99	%		8260	11/13/02	5035		JA
4-Bromofluorobenzene	74 - 121	99	%		8260	11/13/02	5035		JA
Toluene d(8)	81 - 117	95	%		8260	11/13/02	5035		JA
Decafluorobiphenyl	15 - 147	52	%		8270-SIM	11/12/02	3550	11/11/02	MP
Nonatricontane	60 - 118	96	%		FL-PRO	11/14/02	3550	11/14/02	MP
Ortho-Terphenyl	62 - 109	87	%		FL-PRO	11/14/02	3550	11/14/02	MP

U The compound was analyzed for but not detected.
All soil results are reported in dry weight basis
MRL Method Reporting Limit
J^ Analysis performed by AEL Jacksonville, no certification.
J DOH certification #E82574 (AEL-JAX) (FL NELAC certification)

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025393-03
Client Sample ID: T7-SW-EXC
Site: Tank 7-SW Side

Report No.: J025393
Date/Time Sampled: 11/08/02 13:30
Date/Time Received: 11/8/02 16:20
Sampled By: Mike Emerson
Shipping Method: Client drop off

Florida Petroleum Range Organics

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Total PHS	J	1	4.6	14	mg/kg		FL-PRO	11/14/02 21:35	3550	11/14/02 13:10	MP

Miscellaneous Analytes

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
% Moisture	J	1	0.10	13	%		SM2540G	11/11/02			KB

Petroleum Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1-Methylnaphthalene	J^	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
2-Methylnaphthalene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthylene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Anthracene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)anthracene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)pyrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(b)fluoranthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(ghi)perylene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(k)fluoranthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Chrysene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Dibenzo(a,h)anthracene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluoranthene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluorene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Indeno(1,2,3-cd)pyrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Naphthalene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Phenanthrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Pyrene	J	10	0.11	0.11	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP

Volatile Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Benzene	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
Ethylbenzene	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
m&p-Xylenes	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
Methyl-tert-butyl Ether	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
o-Xylene	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA
Toluene	J	1	5.7	5.7	µg/kg	U	8260	11/13/02 19:36	5035		JA

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025393-03
Client Sample ID: T7-SW-EXC
Site: Tank 7-SW Side

Report No.: J025393
Date/Time Sampled: 11/08/02 13:30
Date/Time Received: 11/8/02 16:20
Sampled By Mike Emerson
Shipping Method: Client drop off

Surrogates:	Control Limits	Percent Recovery		Qual.	Method	Analysis Date	Prep Method	Prep Date	Analyst
1,2-Dichloroethane-d4	80 - 120	96	%		8260	11/13/02	5035		JA
4-Bromofluorobenzene	74 - 121	102	%		8260	11/13/02	5035		JA
Toluene d(8)	81 - 117	100	%		8260	11/13/02	5035		JA
Decafluorobiphenyl	15 - 147	64	%		8270-SIM	11/12/02	3550	11/11/02	MP
Nonatricontane	60 - 118	96	%		FL-PRO	11/14/02	3550	11/14/02	MP
Ortho-Terphenyl	62 - 109	82	%		FL-PRO	11/14/02	3550	11/14/02	MP

U The compound was analyzed for but not detected.
All soil results are reported in dry weight basis
MRL Method Reporting Limit
J^ Analysis performed by AEL Jacksonville, no certification.
J DOH certification #E82574 (AEL-JAX) (FL NELAC certification)

Advanced Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

LAB NUMBER: J025393

- ☐ Jacksonville: 6601 Southpoint Parkway, Jacksonville, FL 32216 • (904) 363-9350 Fax (904) 363-9354
- ☐ Tampa: 5810-D Breckenridge Parkway, Tampa, FL 33610 • (813) 630-9616 Fax (813) 630-4327
- ☐ Gainesville: 2106 NW 67th Place, Suite 7, Gainesville, FL 32606 • (352) 367-1500 Fax (352) 367-0050

Page _____ of _____

CLIENT NAME: OHC Environmental Eng.	PROJECT NAME: Oceanway Elem Tank #7
ADDRESS: 1340 Southside Blvd	P.O. NUMBER / PROJECT NUMBER: 0213.3E4
	PROJECT LOCATION:
PHONE: 7258279 FAX: 7212305	
CONTACT: Mike Emerson	SAMPLED BY:

TURN AROUND TIME:

☐ STANDARD

☒ RUSH _____

REMARKS / SPECIAL INSTRUCTIONS:

WW= waste water SW=surface water GW=ground water DW=drinking water OIL A=air SO=soil SL=sludge

SAMPLE ID	SAMPLE DESCRIPTION	Grab / Composite	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. CONT.	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED	LAB NUMBER
Spoil Refill S1	Spoil Refill	GM	11-8-02	1300	S		Preserv	X	-1
T7-SE-Exc	Tank 7 SE side	|	|	1315	|		|	-2
~~T7-SW-Exc~~	Tank 7 SW side	|	|	1330	↓			↓	-3
T7-SW-Exc		|						

I = Ice H = (HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Shipment	Method	Sample Kit	Cooler #
Out: / /	Via:	RB D/T	
Ret: / /	Via:	AB D/T	
		Trip Bl ☐	☐

	Relinquished by:	Date	Time	Received by:	Date	Time
1	ME Emerson				11-12	1620
2						
3						
4						

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025362-02
Client Sample ID: T7-SW
Site: SW Corner

Report No.: J025362
Date/Time Sampled: 11/07/02 08:30
Date/Time Received: 11/7/02 16:40
Sampled By Mike Emerson
Shipping Method: Client drop off

Florida Petroleum Range Organics

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Total PHS	J	1	5.1	5.1	mg/kg	U	FL-PRO	11/11/02 18:24	3550	11/8/02 08:00	MP

Miscellaneous Analytes

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
% Moisture	J	1	0.10	21	%		SM2540G	11/11/02			KB

Petroleum Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1-Methylnaphthalene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
2-Methylnaphthalene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthylene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(b)fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(ghi)perylene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(k)fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Chrysene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Dibenzo(a,h)anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluorene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Indeno(1,2,3-cd)pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Naphthalene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Phenanthrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP

Volatile Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Benzene	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA
Ethylbenzene	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA
m&p-Xylenes	J	1	6.3	16	µg/kg		8260	11/12/02 21:04	5035		JA
Methyl-tert-butyl Ether	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA
o-Xylene	J	1	6.3	11	µg/kg		8260	11/12/02 21:04	5035		JA
Toluene	J	1	6.3	7.5	µg/kg		8260	11/12/02 21:04	5035		JA

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025362-02
Client Sample ID: T7-SW
Site: SW Corner

Report No.: J025362
Date/Time Sampled: 11/07/02 08:30
Date/Time Received: 11/7/02 16:40
Sampled By Mike Emerson
Shipping Method: Client drop off

Surrogates:	Control Limits	Percent Recovery		Qual.	Method	Analysis Date	Prep Method	Prep Date	Analyst
1,2-Dichloroethane-d4	80 - 120	102	%		8260	11/12/02	5035		JA
4-Bromofluorobenzene	74 - 121	109	%		8260	11/12/02	5035		JA
Toluene d(8)	81 - 117	107	%		8260	11/12/02	5035		JA
Decafluorobiphenyl	15 - 147	50	%		8270-SIM	11/12/02	3550	11/11/02	MP
Nonatricontane	60 - 118	96	%		FL-PRO	11/11/02	3550	11/08/02	MP
Ortho-Terphenyl	62 - 109	103	%		FL-PRO	11/11/02	3550	11/08/02	MP

U The compound was analyzed for but not detected.
All soil results are reported in dry weight basis
MRL Method Reporting Limit
J DOH certification #E82574 (AEL-JAX) (FL NELAC certification)

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025362-03
Client Sample ID: T7-SE
Site: SE Corner

Report No.: J025362
Date/Time Sampled: 11/07/02 08:15
Date/Time Received: 11/7/02 16:40
Sampled By: Mike Emerson
Shipping Method: Client drop off

Florida Petroleum Range Organics

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Total PHS	J	1	5.0	420	mg/kg		FL-PRO	11/08/02 22:03	3550	11/8/02 08:00	MP

Miscellaneous Analytes

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
% Moisture	J	1	0.10	21	%		SM2540G	11/11/02			KB

Petroleum Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1-Methylnaphthalene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
2-Methylnaphthalene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Acenaphthylene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(a)pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(b)fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(ghi)perylene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Benzo(k)fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Chrysene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Dibenzo(a,h)anthracene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluoranthene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Fluorene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Indeno(1,2,3-cd)pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Naphthalene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Phenanthrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP
Pyrene	J	10	0.13	0.13	mg/Kg	U	8270-SIM	11/12/02 17:26	3550	11/11/02 10:00	MP

Volatile Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Benzene	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA
Ethylbenzene	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA
m&p-Xylenes	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA
Methyl-tert-butyl Ether	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA
o-Xylene	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA
Toluene	J	1	6.3	6.3	µg/kg	U	8260	11/12/02 21:04	5035		JA

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Soils/Solids
Lab Code: J025362-03
Client Sample ID: T7-SE
Site: SE Corner

Report No.: J025362
Date/Time Sampled: 11/07/02 08:15
Date/Time Received: 11/7/02 16:40
Sampled By Mike Emerson
Shipping Method: Client drop off

Surrogates:	Control Limits	Percent Recovery		Qual.	Method	Analysis Date	Prep Method	Prep Date	Analyst
1,2-Dichloroethane-d4	80 - 120	104	%		8260	11/12/02	5035		JA
4-Bromofluorobenzene	74 - 121	137	%	J4	8260	11/12/02	5035		JA
Toluene d(8)	81 - 117	112	%		8260	11/12/02	5035		JA
Decafluorobiphenyl	15 - 147	74	%		8270-SIM	11/12/02	3550	11/11/02	MP
Nonatricontane	60 - 118	81	%		FL-PRO	11/08/02	3550	11/08/02	MP
Ortho-Terphenyl	62 - 109	63	%		FL-PRO	11/08/02	3550	11/08/02	MP

J4 The sample matrix interfered with the ability to make an accurate determination.
U The compound was analyzed for but not detected.
All soil results are reported in dry weight basis
MRL Method Reporting Limit
J DOH certification #E82574 (AEL-JAX) (FL NELAC certification)

Advanced Environmental Laboratories, Inc.

- ☒ Jacksonville: 6601 Southpoint Parkway, Jacksonville, FL 32216 • (904) 363-9350 Fax (904) 363-9354
- ☐ Tampa: 5810-D Breckenridge Parkway, Tampa, FL 33610 • (813) 630-9616 Fax (813) 630-4327
- ☐ Gainesville: 2106 NW 67th Place, Suite 7, Gainesville, FL 32606 • (352) 367-1500 Fax (352) 367-0050

CHAIN OF CUSTODY RECORD

LAB NUMBER: J025418

Page 1 of 1

CLIENT NAME: OHC Env. Engineering	PROJECT NAME: Oceanway Elem. Tank 7
ADDRESS: 1840 Southside Blvd Suite 3C Jax FL 32216	P.O. NUMBER / PROJECT NUMBER: 021363EA
	PROJECT LOCATION: Oceanway Elem
PHONE: 725-8279 FAX: 721-2809	
CONTACT: Ray Stancil	SAMPLED BY: Mike Emerson

TURN AROUND TIME:

☐ STANDARD

☒ RUSH _____

REMARKS / SPECIAL INSTRUCTIONS:

WW= waste water SW=surface water GW=ground water DW=drinking water OIL A=air SO=soil SL=sludge

SAMPLE ID	SAMPLE DESCRIPTION	Grab / Composite	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. CONT.	Preserv	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: RAG	LAB NUMBER
T7GW-111102	Tank 7 Excavation	G	111102	815	GW				X	01

I = Ice H = (HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Shipment	Method	Sample Kit	Cooler #		Relinquished by:	Date	Time	Received by:	Date	Time
Out: / /	Via:	RB	D/T	1	M E Emerson	111102	1500	J Clarke	11/4/02	1700
		AB	D/T	2						
Ret: / /	Via:	Trip Bl	☐ ☐	3						
				4						

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Ground Water
Lab Code: J025418-01
Client Sample ID: T7-GW-111102
Site: Tank 7-Excavation

Report No.: J025418
Date/Time Sampled: 11/11/02 08:15
Date/Time Received: 11/11/02 13:00
Sampled By Mike Emerson
Shipping Method: Client drop off

Ethylene Dibromide

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1,2-Dibromo-3-chloropropane	J	1	0.020	0.020	µg/L	U	504.1	11/11/02 21:46	504.1	11/11/02 13:45	ZP
Ethylene Dibromide	J	1	0.020	0.020	µg/L	U	504.1	11/11/02 21:46	504.1	11/11/02 13:45	ZP

Florida Petroleum Residual Organics

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Total PHS	J	1	200	1500	µg/L		FL-PRO	11/14/02 20:06	3510	11/13/02 17:30	MP

Metals

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
Lead	J	1	0.010	0.010	mg/L	U	6010	11/12/02 17:30	3010	11/12/02 07:45	DS

Polynuclear Aromatic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1-Methylnaphthalene	J*	1	1.0	4.9	µg/L		8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
2-Methylnaphthalene	J	1	1.0	2.5	µg/L		8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Acenaphthene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Acenaphthylene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Anthracene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Benzo(a)anthracene	J	1	0.20	0.20	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Benzo(a)pyrene	J	1	0.20	0.20	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Benzo(b)fluoranthene	J	1	0.20	0.20	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Benzo(ghi)perylene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Benzo(k)fluoranthene	J	1	0.50	0.50	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Chrysene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Dibenzo(a,h)anthracene	J	1	0.20	0.20	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Fluoranthene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Fluorene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Indeno(1,2,3-cd)pyrene	J	1	0.20	0.20	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Naphthalene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Phenanthrene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP
Pyrene	J	1	1.0	1.0	µg/L	U	8270-SIM	11/14/02 18:57	3510	11/14/02 08:30	MP

Volatile Organic Hydrocarbons

Analytes:	Lab	Dilution	MRL	Results	Units	Qualifier	Analysis Method	Analysis Date/Time	Prep Method	Prep Date/Time	Analyst
1,1,1-Trichloroethane	J	1	1.0	1.0	µg/L	U	8260	11/12/02 16:00	5030		JA
1,1,2,2-Tetrachloroethane	J	1	1.0	1.0	µg/L	U	8260	11/12/02 16:00	5030		JA
1,1,2-Trichloroethane	J	1	1.0	1.0	µg/L	U	8260	11/12/02 16:00	5030		JA
1,1-Dichloroethane	J	1	1.0	1.0	µg/L	U	8260	11/12/02 16:00	5030		JA
1,1-Dichloroethene	J	1	1.0	1.0	µg/L	U	8260	11/12/02 16:00	5030		JA
1,2-Dichlorobenzene	J	1	1.0	1.0	µg/L	U	8260	11/12/02 16:00	5030		JA
1,2-Dichloroethane	J	1	1.0	1.0	µg/L	U , AIC	8260	11/12/02 16:00	5030		JA
1,2-Dichloropropane	J	1	1.0	1.0	µg/L	U	8260	11/12/02 16:00	5030		JA
1,3-Dichlorobenzene	J	1	1.0	1.0	µg/L	U	8260	11/12/02 16:00	5030		JA

Advanced Environmental Laboratories, Inc.

Analytical Report

Client: OHC Environmental
Project Name: OceanWay Elementary
Matrix: Ground Water
Lab Code: J025418-01
Client Sample ID: T7-GW-111102
Site: Tank 7-Excavation

Report No.: J025418
Date/Time Sampled: 11/11/02 08:15
Date/Time Received: 11/11/02 13:00
Sampled By Mike Emerson
Shipping Method: Client drop off

1,4-Dichlorobenzene	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
2-Chloroethyl Vinyl Ether	J	1	100	100	µg/L	U	, AIC	8260	11/12/02	16:00	5030	JA
Benzene	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Bromodichloromethane	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Bromoform	J	1	1.0	1.0	µg/L	U	, AIC	8260	11/12/02	16:00	5030	JA
Bromomethane	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Carbon Tetrachloride	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Chlorobenzene	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Chloroethane	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Chloroform	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Chloromethane	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Cis-1,2-dichloroethene	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Cis-1,3-dichloropropene	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Dibromochloromethane	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Dichlorodifluoromethane	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Ethylbenzene	J	1	1.0	2.5	µg/L			8260	11/12/02	16:00	5030	JA
m&p-Xylenes	J	1	1.0	5.0	µg/L			8260	11/12/02	16:00	5030	JA
Methyl-tert-butyl Ether	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Methylene Chloride	J	1	5.0	5.0	µg/L	U		8260	11/12/02	16:00	5030	JA
o-Xylene	J	1	1.0	6.5	µg/L			8260	11/12/02	16:00	5030	JA
Tetrachloroethene	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Toluene	J	1	1.0	1.0	µg/L			8260	11/12/02	16:00	5030	JA
Trans-1,2-dichloroethene	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Trans-1,3-dichloropropene	J	1	1.0	1.0	µg/L	U	, AIC	8260	11/12/02	16:00	5030	JA
Trichloroethene	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Trichlorofluoromethane	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA
Vinyl Chloride	J	1	1.0	1.0	µg/L	U		8260	11/12/02	16:00	5030	JA

Surrogates:	Control Limits	Percent Recovery		Qual.	Method	Analysis Date	Prep Method	Prep Date	Analyst
Tetrachloro-m-xylene	30 - 120	91	%		504.1	11/11/02	504.1	11/11/02	ZP
1,2-Dichloroethane-d4	80 - 120	86	%		8260	11/12/02	5030		JA
4-Bromofluorobenzene	86 - 115	96	%		8260	11/12/02	5030		JA
Toluene d(8)	88 - 110	89	%		8260	11/12/02	5030		JA
Decafluorobiphenyl	15 - 147	47	%		8270-SIM	11/14/02	3510	11/14/02	MP
Nonatricontane	42 - 193	115	%		FL-PRO	11/14/02	3510	11/13/02	MP
Ortho-Terphenyl	82 - 142	93	%		FL-PRO	11/14/02	3510	11/13/02	MP

AIC Alternate initial calibration criteria used (mean RSD <15%)

U The compound was analyzed for but not detected.

All soil results are reported in dry weight basis

MRL Method Reporting Limit

J^ Analysis performed by AEL Jacksonville

J DOH certification #E82574 (AEL-JAX) (FL NELAC certification)

SITE 14 – Oceanway Ice and Fuel Service

No assessment information available

SITE 16 – Dehn's Garage

No assessment information available

SITE 19 – George's Auto Repair

No assessment information available

SITE 23 – AutoZone and Walgreens Pharmacy

No assessment information available

SITE 24 – Gate Station 1227

No assessment information available

SITE 25 – Tim’s Tech Master

No assessment information available

SITE 26 – RPM Automotive and Hertz

No assessment information available

SITE 28 – Gerber Collision and Glass

No assessment information available

SITE 29 – Strickland's Motors Auto Shop

No assessment information available

SITE 32 – Davis Auto Service

No assessment information available

SITE 33 – Regis Trucking

No assessment information available

SITE 34 – Kim’s Storage Sheds

No assessment information available

SITE 40 – Circle K 1430

STP Sumps, Spill Bucket, and Dispenser Pan Entry Boots report, dated March 4, 2020 (text, figures, tables, and laboratory analytical data) – 65 pages

STP Sump Closure Assessment Report, dated March 31, 2021 (text, figures, tables, and laboratory analytical data) – 33 pages

March 4, 2020

Ms. Jean Richards
Duval County / City of Jacksonville
Environmental Quality Division
214 North Hogan Street, 5th Floor
Jacksonville, Florida 32202
Via E-mail: JeanR@COJ.net

RE: STP Sumps, Spill Bucket, and Dispenser Pan Entry Boots
Closure Assessment Report
Circle K #2721430
13957 Main Street North
Jacksonville, Duval County, Florida
FDEP Facility I.D. #16/9809776
AET Project #27473.00

Dear Ms. Richards:

Advanced Environmental Technologies, LLC (AET) is pleased to provide this revised report detailing the recent closure assessment performed at the above referenced facility. On October 7 & 8, 2019, AET removed and replaced all the dispenser sump entry boots and electrical entry boots located within the each of the submersible turbine pump (STP) sumps. AET performed closure assessment on the referenced dates, which included the collection of soil samples for organic vapor analysis (OVA) and laboratory analysis. All work was performed in general accordance with Chapter 62-761, Florida Administrative Code (FAC) and Florida Department of Environmental Protection's (FDEP) *Instructions for Conducting Sampling During Underground Storage Tank Closure* dated August 2019. The following attachments are included with this report:

Figure 1	Site Map with Soil Screening / Sampling Locations & Soil Analytical Summary
Table 1	Soil Screening Summary
Tables 2A-2C	Soil Analytical Summary
Appendix A	Field Notes
Appendix B	Laboratory Analytical Report and Chain of Custody Record, Benzo(a)pyrene Conversion Tables

Site Location

The subject site is an active retail gas station located at 13957 Main Street North, Jacksonville, Duval County, Florida. **Figure 1** is a Site Map depicting the general site configuration, current Underground Storage Tank (UST) locations, dispensers, and the soil boring locations.

Site History

The subject facility has a documented history of petroleum storage in USTs since September 2007, when one 21,000-gallon and one 20,000-gallon compartmented USTs were installed to store unleaded gasoline and diesel fuel. These tanks were installed south of the current fuel dispenser island and are currently being utilized on site.

Since 2007, there have been two Incident Notification Forms (INF); however, no discharges have been reported for this site.

Dispenser, Spill Bucket, and STP Sump Entry Boots Replacement / Closure Assessment

On October 7 & 8, 2019, AET mobilized to the subject site to replace, inspect and make necessary repairs to the damaged or inoperable fuel system secondary containment components. AET personnel conducted closure sampling on October 7 & 8, 2019, including the collection of soil samples for OVA field screening. Soil samples were collected from 2-ft and 4-ft below land surface (bls) adjacent to the product entry boots at the premium, regular, and diesel STP sumps, the premium unleaded spill bucket, and at each of the fuel dispenser sumps. A MiniRAE 3000 Photoionization Detector (PID) was used to screen the samples. Groundwater was not encountered during the assessment.

The OVA screening results ranged from 0.0-parts per million (ppm) to 6.2-ppm. The highest net OVA responses were detected at the premium western STP sump (2.1-ppm @ 2-ft, 6.2-ppm @ 4-ft, SB-PRM/W), at diesel STP sump (5.5-ppm @ 2-ft, 2.4-ppm @ 4-ft, SB-DSL SUMP), and dispenser 3/4 (0.2-ppm @ 2-ft, SB-DISP 3/4). All remaining OVA screening results were 0.0-ppm. Copies of the field notes are included in **Appendix A**.

Following OVA screening, thirteen soil laboratory samples (SB-Disp 1/2 @ 2-ft, SB-Disp 3/4 @ 2-ft, SB-Disp 5/6 @ 2-ft, SB-Disp 7/8 @ 2-ft, SB-Disp 9/10 @ 2-ft, SB-Disp 11/12 @ 2-ft, SB-Disp 13/14 @ 2-ft, SB-Disp 15/16 @ 2-ft, SB-RUL @ 4-ft, SB-PRM/W @ 4-ft, SB-PRM Spill @ 2-ft, SB-DSL sump @ 2-ft, SB-PRM Sump @ 4-ft bls) were collected to confirm the OVA screening results. The samples were placed into laboratory-provided containers, labeled, packed on ice in a cooler, and shipped under chain-of-custody protocol to a State of Florida approved, NELAC certified laboratory (Environmental Testing Laboratories, Inc.) for analysis using U.S. Environmental Protection Agency (EPA) Method 8260 for benzene, toluene, ethylbenzene, total xylenes, and methyl tert-butyl ether (BTEX/MTBE), EPA Method 8270 for polycyclic aromatic hydrocarbons (PAH), and the FL-PRO Method for total recoverable petroleum hydrocarbons (TRPH). All samples were collected in general accordance with approved FDEP SOP and guidance memorandums.

Laboratory analytical results indicate concentrations of all contaminants of concern below laboratory detection limits (bdl) or their respective soil cleanup target level (SCTL).

The soil OVA data is summarized in **Table 1**, and the analytical results are summarized in **Tables 2A -2C**. Copies of the laboratory analytical report and chain-of-custody records for the October 2019 sampling event, and benzo(a)pyrene conversion tables, are provided in **Appendix B**.

Quality Assurance & Quality Control

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

Based on the FDEP field sampling logs, QA/QC measurements appeared consistent with data normally taken with environmental sampling and analysis. Detailed sample collection and preservation procedures, as well as laboratory QA/QC data for analyses, were included in the report for the collected samples. The laboratory analytical results of method blanks, surrogate recovery results, and acceptable limits were included in the reports. Upon review of the laboratory analytical reports, two of the samples indicated a reported value between the laboratory method detection limit and the laboratory practical quantitation limit (i.e. results flagged with an "I" value). The data appears valid and within SOP protocol. None of the samples indicated a "V" value. In the event data is flagged with a "V" qualifier, AET utilizes the ten times rule as far as validating the data as being usable or not. The ten times rule is based on the EPA guidance document for organic data review. If after applying the rules, the results do not meet the GCTL or SCTL limits, then the sample must be re-analyzed and/or re-sampled (excluding those low-level PAHs whose CTLs cannot be achieved).

Conclusions

- Field OVA screening results did not report organic vapors exceeding 6.2-ppm in any of the borings advanced.
- Thirteen soil laboratory samples were collected and analyzed for petroleum constituents from the product entry locations of the western premium STP sump, eastern premium STP sump, diesel STP sump, western regular unleaded STP sump, premium spill bucket, and eight fuel dispensers. Laboratory analytical results were bdl or below SCTL for all constituents analyzed.

Recommendations

AET recommends that no further assessment is warranted at the Circle K #2721430 at this time. Should you have any questions regarding this Closure Assessment Report or require additional information, please contact the undersigned at (850) 696-0552.

Respectfully submitted,
Advanced Environmental Technologies, LLC

Debbie Hitchcock, PE
Branch Manager

Cc: Mr. Brent Puzak, Circle K Stores, Inc.; via e-mail

Attachments: Figure, Tables, Appendices A – B

Statement of Professional Review

STP Sumps, Spill Bucket, and Dispenser Pan Entry Boots
Closure Assessment Report
Circle K #2721430
13957 Main Street North
Jacksonville, Duval County, Florida
FDEP Facility I.D. #16/9809776
AET Project #27473.00

I, J. Blanton, PE # 76930, certify that I currently hold an active license in the state of Florida and am competent through education and experience to provide the engineering service contained in this report. I further certify that, in my professional judgment, the components of this report satisfy the requirements set forth in Chapter 62-761, Florida Administrative Code (FAC) and was prepared by me or under my responsible charge. Moreover, I certify that AET holds an active Certificate of Authorization # 8215 to provide this engineering service. No warranties are implied or intended.

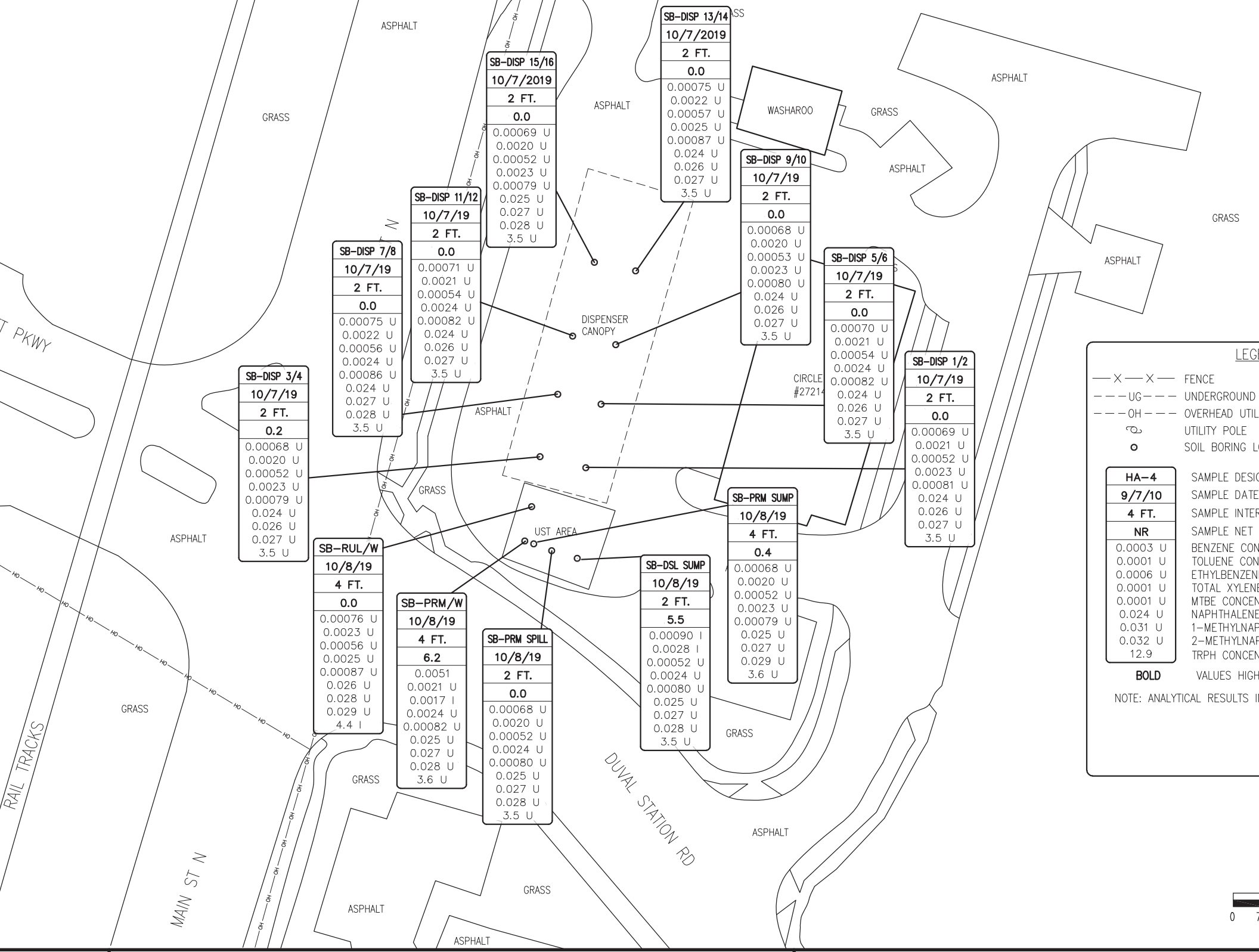
_____ I personally prepared this document

__X__ This document was prepared by Debbie Hitchcock working under my direct supervision



J. Blanton, P.E.
Florida License No. 76930
Advanced Environmental Technologies, LLC
CA# 8215

Figure


SB-DISP 13/14
10/7/2019
2 FT.
0.0
0.00075 U
0.0022 U
0.00057 U
0.0025 U
0.00087 U
0.024 U
0.026 U
0.027 U
3.5 U
SB-DISP 15/16
10/7/2019
2 FT.
0.0
0.00069 U
0.0020 U
0.00052 U
0.0023 U
0.00079 U
0.025 U
0.027 U
0.028 U
3.5 U
SB-DISP 11/12
10/7/19
2 FT.
0.0
0.00071 U
0.0021 U
0.00054 U
0.0024 U
0.00082 U
0.024 U
0.026 U
0.027 U
3.5 U
SB-DISP 9/10
10/7/19
2 FT.
0.0
0.00068 U
0.0020 U
0.00053 U
0.0023 U
0.00080 U
0.024 U
0.026 U
0.027 U
3.5 U
SB-DISP 7/8
10/7/19
2 FT.
0.0
0.00075 U
0.0022 U
0.00056 U
0.0024 U
0.00086 U
0.024 U
0.027 U
0.028 U
3.5 U
SB-DISP 5/6
10/7/19
2 FT.
0.0
0.00070 U
0.0021 U
0.00054 U
0.0024 U
0.00082 U
0.024 U
0.026 U
0.027 U
3.5 U
SB-DISP 3/4
10/7/19
2 FT.
0.2
0.00068 U
0.0020 U
0.00052 U
0.0023 U
0.00079 U
0.024 U
0.026 U
0.027 U
3.5 U
SB-DISP 1/2
10/7/19
2 FT.
0.0
0.00069 U
0.0021 U
0.00052 U
0.0023 U
0.00081 U
0.024 U
0.026 U
0.027 U
3.5 U
SB-PRM SUMP
10/8/19
4 FT.
0.4
0.00068 U
0.0020 U
0.00052 U
0.0023 U
0.00079 U
0.025 U
0.027 U
0.029 U
3.6 U
SB-RUL/W
10/8/19
4 FT.
0.0
0.00076 U
0.0023 U
0.00056 U
0.0025 U
0.00087 U
0.026 U
0.028 U
0.029 U
4.4 I
SB-PRM/W
10/8/19
4 FT.
6.2
0.0051
0.0021 U
0.0017 I
0.0024 U
0.00082 U
0.025 U
0.027 U
0.028 U
3.6 U
SB-PRM SPILL
10/8/19
2 FT.
0.0
0.00068 U
0.0020 U
0.00052 U
0.0024 U
0.00080 U
0.025 U
0.027 U
0.028 U
3.5 U
SB-DSL SUMP
10/8/19
2 FT.
5.5
0.00090 I
0.0028 I
0.00052 U
0.0024 U
0.00080 U
0.025 U
0.027 U
0.028 U
3.5 U
ASPHALT
GRASS
WASHAROO
DISPENSER CANOPY
UST AREA
CIRCLE #2721
DUVAL STATION RD
MAIN ST N
RAIL TRACKS
T PKWY
LEGE
FENCE
UNDERGROUND
OVERHEAD UTIL
UTILITY POLE
SOIL BORING L
HA-4
9/7/10
4 FT.
NR
0.0003 U
0.0001 U
0.0006 U
0.0001 U
0.0001 U
0.024 U
0.031 U
0.032 U
12.9
SAMPLE DESIG
SAMPLE DATE
SAMPLE INTER
SAMPLE NET
BENZENE CON
TOLUENE CON
ETHYLBENZEN
TOTAL XYLENE
MTBE CONCEN
NAPHTHALENE
1-METHYLNAP
2-METHYLNAP
TRPH CONCEN
BOLD
VALUES HIGH
NOTE: ANALYTICAL RESULTS I
0

Tables

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: **Circle K #2721430**
13957 Main Street North, Jacksonville, Duval County, FL
Facility ID#: **16/9809776**

FBLS = Feet Below Land Surface
ppm = Parts Per Million
- = No Reading Taken

SAMPLE			OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
SB-DISP 1/2	10/7/2019	2	0.0	-	0.0	Sample
		4	0.0	-	0.0	
SB-DISP 3/4	10/7/2019	2	0.2	-	0.2	Sample
		4	0.0	-	0.0	
SB-DISP 5/6	10/7/2019	2	0.0	-	0.0	Sample
		4	0.0	-	0.0	
SB-DISP 7/8	10/7/2019	2	0.0	-	0.0	Sample
		4	0.0	-	0.0	
SB-DISP 9/10	10/7/2019	2	0.0	-	0.0	Sample
		4	0.0	-	0.0	
SB-DISP 11/12	10/7/2019	2	0.0	-	0.0	Sample
		4	0.0	-	0.0	
SB-DISP 13/14	10/7/2019	2	0.0	-	0.0	Sample
		4	0.0	-	0.0	
SB-DISP 15/16	10/7/2019	2	0.0	-	0.0	Sample
		4	0.0	-	0.0	
SB-DSL SUMP	10/8/2019	2	5.5	-	5.5	Sample
		4	2.4	-	2.4	
SB-PRM E SUMP	10/8/2019	2	0.4	-	0.4	
		4	0.4	-	0.4	Sample
SB-PRM SPILL	10/8/2019	2	0.0	-	0.0	Sample
		4	0.0	-	0.0	
SB-PRM/W SUMP	10/8/2019	2	2.1	-	2.1	
		4	6.2	-	6.2	Sample
SB-RUL/W	10/8/2019	2	0.0	-	0.0	
		4	0.0	-	0.0	Sample

TABLE 2A: SOIL ANALYTICAL SUMMARY - VOAs and TRPHs

Facility ID#: 9809776 Facility Name: Circle K #2721430

Sample				OVA	Laboratory Analyses						
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (mg/kg)	Ethyl-benzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)	Comments
SB-DISP 1/2 @ 2'	10/7/2019	NA	2	0.0	0.00069 U	0.00052 U	0.0021 U	0.0023 U	0.00081 U	3.5 U	Dispenser 1/2
SB-DISP 3/4 @ 2'	10/7/2019	NA	2	0.2	0.00068 U	0.00052 U	0.0020 U	0.0023 U	0.00079 U	3.5 U	Dispenser 3/4
SB-DISP 5/6 @ 2'	10/7/2019	NA	2	0.0	0.00070 U	0.00054 U	0.0021 U	0.0024 U	0.00082 U	3.5 U	Dispenser 5/6
SB-DISP 7/8 @ 2'	10/7/2019	NA	2	0.0	0.00075 U	0.00056 U	0.0022 U	0.0024 U	0.00086 U	3.5 U	Dispenser 7/8
SB-DISP 9/10 @ 2'	10/7/2019	NA	2	0.0	0.00068 U	0.00053 U	0.0020 U	0.0023 U	0.00080 U	3.5 U	Dispenser 9/10
SB-DISP 11/12 @ 2'	10/7/2019	NA	2	0.0	0.00071 U	0.00054 U	0.0021 U	0.0024 U	0.00082 U	3.5 U	Dispenser 11/12
SB-DISP 13/14 @ 2'	10/7/2019	NA	2	0.0	0.00075 U	0.00057 U	0.0022 U	0.0025 U	0.00087 U	3.5 U	Dispenser 13/14
SB-DISP 15/16 @ 2'	10/7/2019	NA	2	0.0	0.00069 U	0.00052 U	0.0020 U	0.0023 U	0.00079 U	3.5 U	Dispenser 15/16
SB-DSL SUMP @ 2'	10/8/2019	NA	2	5.5	0.00090 I	0.00052 U	0.0028 I	0.0024 U	0.00080 U	3.5 U	Diesel STP Sump
SB-PRM SUMP @ 4'	10/8/2019	NA	4	0.4	0.00068 U	0.00052 U	0.0020 U	0.0023 U	0.00079 U	3.6 U	Premium East STP Sump
SB-PRM SPILL BUCKET @ 2'	10/8/2019	NA	2	0.0	0.00068 U	0.00052 U	0.0020 U	0.0024 U	0.00080 U	3.5 U	Premium Spill Bucket
SB-PRM/W @ 4'	10/8/2019	NA	4	6.2	0.0051	0.0017 I	0.0021 U	0.0024 U	0.00082 U	3.6 U	Premium West STP Sump
SB-RUL/W @ 4'	10/8/2019	NA	4	0.0	0.00076 U	0.00056 U	0.0023 U	0.0025 U	0.00087 U	4.4 I	Regular Unleaded West STP Sump
Leachability Based on Groundwater Criteria (mg/kg)					0.007	0.6	0.5	0.2	0.09	340	
Direct Exposure Residential (mg/kg)					1.2	1,500	7,500	130	4,400	460	

Notes:

NA = Not Available.

NS = Not Sampled.

* = Leachability value may be determined using TCLP.

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

U = Compound was analyzed for but not detected

TABLE 2B: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility ID#: 9809776 **Facility Name: Circle K #2721430**

See notes at end of table.

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
SB-DISP 1/2 @ 2'	10/7/2019	NA	2	0.0	0.024 U	0.026 U	0.027 U	0.043 U	0.033 U	0.047 U	0.021 U	0.042 U	0.036 U	0.043 U	0.042 U	Dispenser 1/2
SB-DISP 3/4 @ 2'	10/7/2019	NA	2	0.2	0.024 U	0.026 U	0.027 U	0.043 U	0.033 U	0.047 U	0.021 U	0.042 U	0.036 U	0.043 U	0.042 U	Dispenser 3/4
SB-DISP 5/6 @ 2'	10/7/2019	NA	2	0.0	0.024 U	0.026 U	0.027 U	0.043 U	0.033 U	0.047 U	0.021 U	0.042 U	0.036 U	0.043 U	0.042 U	Dispenser 5/6
SB-DISP 7/8 @ 2'	10/7/2019	NA	2	0.0	0.024 U	0.027 U	0.028 U	0.044 U	0.033 U	0.048 U	0.021 U	0.043 U	0.036 U	0.044 U	0.043 U	Dispenser 7/8
SB-DISP 9/10 @ 2'	10/7/2019	NA	2	0.0	0.024 U	0.026 U	0.027 U	0.043 U	0.033 U	0.047 U	0.021 U	0.042 U	0.036 U	0.043 U	0.042 U	Dispenser 9/10
SB-DISP 11/12 @ 2'	10/7/2019	NA	2	0.0	0.024 U	0.026 U	0.027 U	0.043 U	0.033 U	0.047 U	0.021 U	0.072	0.036 U	0.060 I	0.053 I	Dispenser 11/12
SB-DISP 13/14 @ 2'	10/7/2019	NA	2	0.0	0.024 U	0.026 U	0.027 U	0.043 U	0.032 U	0.047 U	0.021 U	0.053 I	0.036 U	0.045 I	0.042 U	Dispenser 13/14
SB-DISP 15/16 @ 2'	10/7/2019	NA	2	0.0	0.025 U	0.027 U	0.028 U	0.044 U	0.033 U	0.048 U	0.021 U	0.043 U	0.037 U	0.044 U	0.043 U	Dispenser 15/16
SB-DSL SUMP @ 2'	10/8/2019	NA	2	5.5	0.025 U	0.027 U	0.028 U	0.044 U	0.033 U	0.048 U	0.021 U	0.043 U	0.036 U	0.044 U	0.043 U	Diesel STP Sump
SB-PRM SUMP @ 4'	10/8/2019	NA	4	0.4	0.025 U	0.027 U	0.029 U	0.045 U	0.034 U	0.049 U	0.022 U	0.044 U	0.037 U	0.045 U	0.044 U	Premium East STP Sump
SB-PRM SPILL BUCKET @ 2'	10/8/2019	NA	2	0.0	0.025 U	0.027 U	0.028 U	0.044 U	0.033 U	0.048 U	0.021 U	0.043 U	0.036 U	0.044 U	0.043 U	Premium Spill Bucket
SB-PRM/W @ 4'	10/8/2019	NA	4	6.2	0.025 U	0.027 U	0.028 U	0.045 U	0.034 U	0.049 U	0.022 U	0.044 U	0.037 U	0.045 U	0.044 U	Premium West STP Sump
SB-RUL/W @ 4'	10/8/2019	NA	4	0.0	0.026 U	0.028 U	0.029 U	0.046 U	0.035 U	0.051 U	0.023 U	0.045 U	0.038 U	0.046 U	0.045 U	Regular Unleaded West STP Sump
Leachability Based on Groundwater Criteria (mg/kg)					1.2	3.1	8.5	2.1	27	2,500	32,000	1,200	160	250	880	
Direct Exposure Residential (mg/kg)					55	200	210	2,400	1,800	21,000	2,500	3,200	2,600	2,200	2,400	

Notes:

NA = Not Available.

NS = Not Sampled.

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

U = Compound was analyzed for but not detected

TABLE 2C: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility ID#: 9809776 **Facility Name: Circle K #2721430**

See notes at end of table.

Sample				OVA	Laboratory Analyses								
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chry-sene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
SB-DISP 1/2 @ 2'	10/7/2019	NA	2	0.0	0.037 U	0.033 U	0.040 U	0.036 U	0.029 U	0.024 U	0.029 U	NA	Dispenser 1/2
SB-DISP 3/4 @ 2'	10/7/2019	NA	2	0.2	0.037 U	0.033 U	0.040 U	0.036 U	0.029 U	0.024 U	0.029 U	NA	Dispenser 3/4
SB-DISP 5/6 @ 2'	10/7/2019	NA	2	0.0	0.037 U	0.033 U	0.040 U	0.036 U	0.029 U	0.024 U	0.029 U	NA	Dispenser 5/6
SB-DISP 7/8 @ 2'	10/7/2019	NA	2	0.0	0.037 U	0.033 U	0.040 U	0.036 U	0.030 U	0.024 U	0.030 U	NA	Dispenser 7/8
SB-DISP 9/10 @ 2'	10/7/2019	NA	2	0.0	0.037 U	0.033 U	0.040 U	0.036 U	0.029 U	0.024 U	0.029 U	NA	Dispenser 9/10
SB-DISP 11/12 @ 2'	10/7/2019	NA	2	0.0	0.037 U	0.033 U	0.040 U	0.036 U	0.040 I	0.024 U	0.030 U	0.1	Dispenser 11/12
SB-DISP 13/14 @ 2'	10/7/2019	NA	2	0.0	0.037 U	0.032 U	0.040 U	0.036 U	0.031 I	0.024 U	0.029 U	0.1	Dispenser 13/14
SB-DISP 15/16 @ 2'	10/7/2019	NA	2	0.0	0.038 U	0.033 U	0.041 U	0.037 U	0.030 U	0.025 U	0.030 U	NA	Dispenser 15/16
SB-DSL SUMP @ 2'	10/8/2019	NA	2	5.5	0.037 U	0.033 U	0.041 U	0.036 U	0.030 U	0.025 U	0.030 U	NA	Diesel STP Sump
SB-PRM SUMP @ 4'	10/8/2019	NA	4	0.4	0.038 U	0.034 U	0.042 U	0.037 U	0.031 U	0.025 U	0.031 U	NA	Premium East STP Sump
SB-PRM SPILL BUCKET @ 2'	10/8/2019	NA	2	0.0	0.037 U	0.033 U	0.041 U	0.036 U	0.030 U	0.025 U	0.030 U	NA	Premium Spill Bucket
SB-PRM/W @ 4'	10/8/2019	NA	4	6.2	0.038 U	0.034 U	0.041 U	0.037 U	0.031 U	0.025 U	0.031 U	NA	Premium West STP Sump
SB-RUL/W @ 4'	10/8/2019	NA	4	0.0	0.040 U	0.035 U	0.043 U	0.038 U	0.032 U	0.026 U	0.032 U	NA	Regular Unleaded West STP Sump
Leachability Based on Groundwater Criteria (mg/kg)					8	0.8	2.4	24	77	0.7	6.6	**	
Direct Exposure Residential (mg/kg)					0.1	#	#	#	#	#	#	0.1	

Notes:

NA = Not Available.

NS = Not Sampled.

** = Leachability value not applicable.

= Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent.

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

U = Compound was analyzed for but not detected

Benzo(a)pyrene Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Instructions can be found below the table

Facility/Site Name:	Circle K #2721430
Site Location:	13957 Main Street North, Jacksonville, FL
Facility/Site ID No.:	9809776

SCTL Type	Value	Units
Residential Direct Exposure SCTL	0.1	mg/kg
Industrial Direct Exposure SCTL	0.7	mg/kg
Alternative SCTL (Optional)		mg/kg
Site Specific Background (Optional)		mg/kg

TEF = Toxic Equivalency Factor

	Soil Sample #	SB-DISP 11/12	SB-DISP 13/14								
	Sample Date	10/7/2019	10/7/2019								
	Sample Location:	SB-DISP 11/12	SB-DISP 13/14								
	Depth (ft):	2	2								
Contaminant Concentrations											
Contaminant	**TEF**	SB-DISP 11/12 (mg/kg)	SB-DISP 13/14 (mg/kg)								
Benzo(a)pyrene	1.0	0.037	0.037								
Benzo(a)anthracene	0.1	0.033	0.032								
Benzo(b)fluoranthene	0.1	0.04	0.04								
Benzo(k)fluoranthene	0.01	0.036	0.036								
Chrysene	0.001	0.04	0.031								
Dibenz(a,h)anthracene	1.0	0.024	0.024								
Indeno(1,2,3-cd)pyrene	0.1	0.03	0.029								
Benzo(a)pyrene Equivalents											
Contaminant	**TEF**	SB-DISP 11/12 (mg/kg)	SB-DISP 13/14 (mg/kg)								
Benzo(a)pyrene	1.0	0.0370	0.0370	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Benzo(a)anthracene	0.1	0.0033	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Benzo(b)fluoranthene	0.1	0.0040	0.0040	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Benzo(k)fluoranthene	0.01	0.0004	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Chrysene	0.001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Dibenz(a,h)anthracene	1.0	0.0240	0.0240	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Indeno(1,2,3-cd)pyrene	0.1	0.0030	0.0029	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total Equivalents											
Total Benzo(a)pyrene Equivalents		**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Comparisons to SCTLs											
Does This Sample Exceed:		**SB-DISP 11/12 (mg/kg)**	**SB-DISP 13/14 (mg/kg)**								
The Residential Direct Exposure SCTL of 0.1 mg/kg?		**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**
The Industrial Direct Exposure SCTL of 0.7 mg/kg?		**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**
No Alternative SCTL Given		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
No Site Specific Background Given		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Appendix B

Laboratory Analytical Report
& Chain of Custody Record

REVISED
ANALYTICAL REPORT

ETL PROJECT ID: 19-3661 **10/20/2019 - Revision 1**

ANDRES SANCHEZ
ADVANCED ENVIRONMENTAL TECHNOLOGIES
4265 NEW TAMPA HIGHWAY
LAKELAND, FL 33815
TEL: (863) 619-9708
FAX: (863) 619-7467

CLIENT PROJECT NAME: CIRCLE K #2721430
CLIENT PROJECT ID: 27473.01
FACILITY ID: 16-9809776

Enclosed are the analytical results for sample(s) received by Environmental Testing Laboratories on October 08, 2019. Results reported herein are reported on an as received basis and conform to current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Sample analyses performed by Environmental Testing Laboratories, Inc. (ETL) unless otherwise noted. ETL is accredited through NELAC and the Florida Department of Health, Certification #E87684. Scope of analyses: RCRA/CERCLA Metals, General Chemistry, Extractable Organics, and Volatile Organics. Effective Dates: February 14, 2002 through June 30, 2020.

This report shall not be reproduced, except in full, without the written consent of Environmental Testing Laboratories, Inc. This report has been signed and authorized by the signatory using an electronic signature and is intended to be the legally binding equivalent of a traditionally handwritten signature.

Authorized for release by:

ENVIRONMENTAL TESTING LABORATORIES INC

412 W. Walcott Street | Thomasville, GA 31792 | Phone: (229)-228-2592 | Fax: (229)-228-2594

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Laboratory Qualifiers

!	Data deviate from historically established concentration ranges.
#	Surrogate compound inadvertently omitted.
$	Due to dilution, surrogate compound was not detected.
*****	Not reported due to interference
?	Data are rejected as should not be used.
A	Value reported is the arithmetic mean (average) of two or more determinations.
B	Results based upon colony counts outside the acceptable range.
D	Measurement made in the field.
E	Extra samples were taken at composite stations.
F	When reporting species, F indicates the female sex.
H	Value based on fied kit determination; results may not be accurate.
I	The reported value is between the laboratory method detection limit and the laboratory practical
J	Estimated value.
K	Off-scale low. Actual value is known to be less than the value given.
L	Off-scale high. Actual value is known to be greater than the value given.
M	Presence of material is verified but not quantified; the actual value is less than the value given.
N	Presumptive evidence of presence of material.
O	Sampled, but analysis lost or not performed.
Q	Sample held beyond the accepted holding time.
R	Significant rain in the past 48 hours.
S1	Surrogate recovery reported is outside of laboratory established QA/QC Limits
S2	Analyte recovery reported is outside of laboratory established QA/QC Limits
S3	Analyte precision reported is outside of laboratory established QA/QC Limits
T	Value reported is less than the laboratory method detection limit.
U	Compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	Laboratory analysis was from an improperly preserved sample. Data may not be accurate.
Z	Too many colonies were present; numeric value represents the filtration volume.

Project Narrative

#E87684

Environmental Testing Laboratories, Inc. is accredited through NELAC and the Florida Department of Health.

Solid samples are reported on a dry weight basis unless otherwise noted.

Please refer to Section 4.0 of the ETL Quality Assurance Manual for a measure of uncertainty.

All analyses are performed using EPA or FL-DEP methods and certified to meet NELAC requirements, except where noted.

Report Preparation General

Revision 1 issued to capture facility ID and correct site name.

Analytical Method Summary

E87684 **Environmental Testing Laboratories Inc.**
412 W. Walcott Street, Thomasville, GA 31792
(229) 228-2592

GC/MS (EPA 8260)	SW-846 Final Update III
Semivolatiles low level for PAH only (EPA 8270/PAH Low Level)	
GC/FID (FDEP FL-PRO)	Florida Department of Environmental Protection

Sample Summary

Laboratory Sample ID	Client Sample ID	Matrix	End Date / Time Sampled		Grab / Composite	Percent Moisture
252507	SB-DSL SUMP @ 2'	SOILS	10/8/2019	10:25	G	6.59
252508	SB-PRM SUMP @ 4'	SOILS	10/8/2019	11:21	G	8.87
252509	SB-PRM SPILL BUCKET @ 2'	SOILS	10/8/2019	11:39	G	6.39
252510	SB-PRM/W @ 4'	SOILS	10/8/2019	12:10	G	8.38
252511	SB-RU1/W @ 4'	SOILS	10/8/2019	12:13	G	11.4
252512	SB-DISP 15/16 @ 2'	SOILS	10/7/2019	13:30	G	6.87
252513	SB-DISP 13/14 @ 2'	SOILS	10/7/2019	14:00	G	4.47
252514	SB-DISP 11/12 @ 2'	SOILS	10/7/2019	14:53	G	5.26
252515	SB-DISP 9/10 @ 2'	SOILS	10/7/2019	15:11	G	4.87
252516	SB-DISP 7/8 @ 2'	SOILS	10/7/2019	16:25	G	6.12
252517	SB-DISP 5/6 @ 2'	SOILS	10/7/2019	16:47	G	4.75
252518	SB-DISP 1/2 @ 2'	SOILS	10/7/2019	17:13	G	4.65
252519	SB-DISP 3/4 @ 2'	SOILS	10/7/2019	17:31	G	4.91

Executive Summary

Analyte	Analytical Method	Result	Units	Qualifiers	Result Comments
SB-DSL SUMP @ 2' (252507)					
Benzene	EPA 8260	0.00090	mg/Kg	I	
Toluene	EPA 8260	0.0028	mg/Kg	I	
SB-PRM/W @ 4' (252510)					
Benzene	EPA 8260	0.0051	mg/Kg		
Ethylbenzene	EPA 8260	0.0017	mg/Kg	I	
SB-RU1/W @ 4' (252511)					
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	4.4	mg/Kg	I	
SB-DISP 13/14 @ 2' (252513)					
Phenanthrene	EPA 8270/PAH Low Level	0.045	mg/Kg	I	
Fluoranthene	EPA 8270/PAH Low Level	0.053	mg/Kg	I	
Chrysene	EPA 8270/PAH Low Level	0.031	mg/Kg	I	
SB-DISP 11/12 @ 2' (252514)					
Phenanthrene	EPA 8270/PAH Low Level	0.060	mg/Kg	I	
Fluoranthene	EPA 8270/PAH Low Level	0.072	mg/Kg		
Pyrene	EPA 8270/PAH Low Level	0.053	mg/Kg	I	
Chrysene	EPA 8270/PAH Low Level	0.040	mg/Kg	I	

Analytical Data

Client Sample ID: SB-DSL SUMP @ 2'
Sample Location:
Date Collected: 10/08/2019 10:25 AM

Laboratory Sample ID: 252507
Matrix: SOILS
Percent Moisture: 6.59

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	**0.00090**	I	mg/Kg	0.00070	0.0036	10/8/2019 9:27:00 PM
Ethylbenzene	1.0	0.00052	U	mg/Kg	0.00052	0.0036	10/8/2019 9:27:00 PM
Methyl-t-butyl ether	1.0	0.00080	U	mg/Kg	0.00080	0.0036	10/8/2019 9:27:00 PM
Toluene	1.0	**0.0028**	I	mg/Kg	0.0020	0.0036	10/8/2019 9:27:00 PM
Xylenes- Total	1.0	0.0024	U	mg/Kg	0.0024	0.011	10/8/2019 9:27:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	109			80% - 136%	10/8/2019 9:27:00 PM
4-Bromofluorobenzene	1.0	96.7			51% - 145%	10/8/2019 9:27:00 PM
Dibromofluoromethane	1.0	98.7			70% - 130%	10/8/2019 9:27:00 PM
Toluene-d8	1.0	97.0			76% - 120%	10/8/2019 9:27:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.072	10/11/2019 11:04:00 AM
2-Methylnaphthalene	1.0	0.028	U	mg/Kg	0.028	0.072	10/11/2019 11:04:00 AM
Acenaphthene	1.0	0.044	U	mg/Kg	0.044	0.072	10/11/2019 11:04:00 AM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.072	10/11/2019 11:04:00 AM
Anthracene	1.0	0.048	U	mg/Kg	0.048	0.072	10/11/2019 11:04:00 AM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.072	10/11/2019 11:04:00 AM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.072	10/11/2019 11:04:00 AM
Benzo(b)fluoranthene	1.0	0.041	U	mg/Kg	0.041	0.072	10/11/2019 11:04:00 AM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.072	10/11/2019 11:04:00 AM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.072	10/11/2019 11:04:00 AM
Chrysene	1.0	0.030	U	mg/Kg	0.030	0.072	10/11/2019 11:04:00 AM
Dibenzo(a,h)anthracene	1.0	0.025	U	mg/Kg	0.025	0.072	10/11/2019 11:04:00 AM
Fluoranthene	1.0	0.043	U	mg/Kg	0.043	0.072	10/11/2019 11:04:00 AM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.072	10/11/2019 11:04:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.030	U	mg/Kg	0.030	0.072	10/11/2019 11:04:00 AM
Naphthalene	1.0	0.025	U	mg/Kg	0.025	0.072	10/11/2019 11:04:00 AM
Phenanthrene	1.0	0.044	U	mg/Kg	0.044	0.072	10/11/2019 11:04:00 AM
Pyrene	1.0	0.043	U	mg/Kg	0.043	0.072	10/11/2019 11:04:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	89.0			26% - 110%	10/11/2019 11:04:00 AM
Nitrobenzene-d5	1.0	83.9			12% - 104%	10/11/2019 11:04:00 AM
p-Terphenyl-d14	1.0	97.1			39% - 120%	10/11/2019 11:04:00 AM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/10/2019 7:41:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	73.4			60% - 118%	10/10/2019 7:41:00 PM
Ortho-terphenyl	1.0	106			62% - 109%	10/10/2019 7:41:00 PM

Analytical Data

Client Sample ID: SB-PRM SUMP @ 4'
Sample Location:
Date Collected: 10/08/2019 11:21 AM

Laboratory Sample ID: 252508
Matrix: SOILS
Percent Moisture: 8.87

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00068	U	mg/Kg	0.00068	0.0036	10/8/2019 9:52:00 PM
Ethylbenzene	1.0	0.00052	U	mg/Kg	0.00052	0.0036	10/8/2019 9:52:00 PM
Methyl-t-butyl ether	1.0	0.00079	U	mg/Kg	0.00079	0.0036	10/8/2019 9:52:00 PM
Toluene	1.0	0.0020	U	mg/Kg	0.0020	0.0036	10/8/2019 9:52:00 PM
Xylenes- Total	1.0	0.0023	U	mg/Kg	0.0023	0.011	10/8/2019 9:52:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	107			80% - 136%	10/8/2019 9:52:00 PM
4-Bromofluorobenzene	1.0	95.5			51% - 145%	10/8/2019 9:52:00 PM
Dibromofluoromethane	1.0	100			70% - 130%	10/8/2019 9:52:00 PM
Toluene-d8	1.0	94.8			76% - 120%	10/8/2019 9:52:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.074	10/11/2019 11:41:00 AM
2-Methylnaphthalene	1.0	0.029	U	mg/Kg	0.029	0.074	10/11/2019 11:41:00 AM
Acenaphthene	1.0	0.045	U	mg/Kg	0.045	0.074	10/11/2019 11:41:00 AM
Acenaphthylene	1.0	0.034	U	mg/Kg	0.034	0.074	10/11/2019 11:41:00 AM
Anthracene	1.0	0.049	U	mg/Kg	0.049	0.074	10/11/2019 11:41:00 AM
Benzo(a)anthracene	1.0	0.034	U	mg/Kg	0.034	0.074	10/11/2019 11:41:00 AM
Benzo(a)pyrene	1.0	0.038	U	mg/Kg	0.038	0.074	10/11/2019 11:41:00 AM
Benzo(b)fluoranthene	1.0	0.042	U	mg/Kg	0.042	0.074	10/11/2019 11:41:00 AM
Benzo(g,h,i)perylene	1.0	0.022	U	mg/Kg	0.022	0.074	10/11/2019 11:41:00 AM
Benzo(k)fluoranthene	1.0	0.037	U	mg/Kg	0.037	0.074	10/11/2019 11:41:00 AM
Chrysene	1.0	0.031	U	mg/Kg	0.031	0.074	10/11/2019 11:41:00 AM
Dibenzo(a,h)anthracene	1.0	0.025	U	mg/Kg	0.025	0.074	10/11/2019 11:41:00 AM
Fluoranthene	1.0	0.044	U	mg/Kg	0.044	0.074	10/11/2019 11:41:00 AM
Fluorene	1.0	0.037	U	mg/Kg	0.037	0.074	10/11/2019 11:41:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.031	U	mg/Kg	0.031	0.074	10/11/2019 11:41:00 AM
Naphthalene	1.0	0.025	U	mg/Kg	0.025	0.074	10/11/2019 11:41:00 AM
Phenanthrene	1.0	0.045	U	mg/Kg	0.045	0.074	10/11/2019 11:41:00 AM
Pyrene	1.0	0.044	U	mg/Kg	0.044	0.074	10/11/2019 11:41:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	97.3			26% - 110%	10/11/2019 11:41:00 AM
Nitrobenzene-d5	1.0	92.7			12% - 104%	10/11/2019 11:41:00 AM
p-Terphenyl-d14	1.0	90.3			39% - 120%	10/11/2019 11:41:00 AM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.6	U	mg/Kg	3.6	19	10/10/2019 8:20:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	74.0			60% - 118%	10/10/2019 8:20:00 PM
Ortho-terphenyl	1.0	107			62% - 109%	10/10/2019 8:20:00 PM

Analytical Data

Client Sample ID: SB-PRM SPILL BUCKET @ 2'
Sample Location:
Date Collected: 10/08/2019 11:39 AM

Laboratory Sample ID: 252509
Matrix: SOILS
Percent Moisture: 6.39

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00068	U	mg/Kg	0.00068	0.0036	10/8/2019 10:17:00 PM
Ethylbenzene	1.0	0.00052	U	mg/Kg	0.00052	0.0036	10/8/2019 10:17:00 PM
Methyl-t-butyl ether	1.0	0.00080	U	mg/Kg	0.00080	0.0036	10/8/2019 10:17:00 PM
Toluene	1.0	0.0020	U	mg/Kg	0.0020	0.0036	10/8/2019 10:17:00 PM
Xylenes- Total	1.0	0.0024	U	mg/Kg	0.0024	0.011	10/8/2019 10:17:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	102			80% - 136%	10/8/2019 10:17:00 PM
4-Bromofluorobenzene	1.0	94.6			51% - 145%	10/8/2019 10:17:00 PM
Dibromofluoromethane	1.0	100			70% - 130%	10/8/2019 10:17:00 PM
Toluene-d8	1.0	91.6			76% - 120%	10/8/2019 10:17:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.072	10/11/2019 2:46:00 PM
2-Methylnaphthalene	1.0	0.028	U	mg/Kg	0.028	0.072	10/11/2019 2:46:00 PM
Acenaphthene	1.0	0.044	U	mg/Kg	0.044	0.072	10/11/2019 2:46:00 PM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.072	10/11/2019 2:46:00 PM
Anthracene	1.0	0.048	U	mg/Kg	0.048	0.072	10/11/2019 2:46:00 PM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.072	10/11/2019 2:46:00 PM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.072	10/11/2019 2:46:00 PM
Benzo(b)fluoranthene	1.0	0.041	U	mg/Kg	0.041	0.072	10/11/2019 2:46:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.072	10/11/2019 2:46:00 PM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.072	10/11/2019 2:46:00 PM
Chrysene	1.0	0.030	U	mg/Kg	0.030	0.072	10/11/2019 2:46:00 PM
Dibenzo(a,h)anthracene	1.0	0.025	U	mg/Kg	0.025	0.072	10/11/2019 2:46:00 PM
Fluoranthene	1.0	0.043	U	mg/Kg	0.043	0.072	10/11/2019 2:46:00 PM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.072	10/11/2019 2:46:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.030	U	mg/Kg	0.030	0.072	10/11/2019 2:46:00 PM
Naphthalene	1.0	0.025	U	mg/Kg	0.025	0.072	10/11/2019 2:46:00 PM
Phenanthrene	1.0	0.044	U	mg/Kg	0.044	0.072	10/11/2019 2:46:00 PM
Pyrene	1.0	0.043	U	mg/Kg	0.043	0.072	10/11/2019 2:46:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	91.8			26% - 110%	10/11/2019 2:46:00 PM
Nitrobenzene-d5	1.0	86.9			12% - 104%	10/11/2019 2:46:00 PM
p-Terphenyl-d14	1.0	96.5			39% - 120%	10/11/2019 2:46:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/10/2019 8:58:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	84.7			60% - 118%	10/10/2019 8:58:00 PM
Ortho-terphenyl	1.0	101			62% - 109%	10/10/2019 8:58:00 PM

PQL: Practical Quantitation Limit RL: Report Limit MDL: Method Detection Limit DF: Dilution Factor

Analytical Data

Client Sample ID: SB-PRM/W @ 4'
Sample Location:
Date Collected: 10/08/2019 12:10 PM

Laboratory Sample ID: 252510
Matrix: SOILS
Percent Moisture: 8.38

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	**0.0051**		mg/Kg	0.00071	0.0037	10/8/2019 10:41:00 PM
Ethylbenzene	1.0	**0.0017**	I	mg/Kg	0.00053	0.0037	10/8/2019 10:41:00 PM
Methyl-t-butyl ether	1.0	0.00082	U	mg/Kg	0.00082	0.0037	10/8/2019 10:41:00 PM
Toluene	1.0	0.0021	U	mg/Kg	0.0021	0.0037	10/8/2019 10:41:00 PM
Xylenes- Total	1.0	0.0024	U	mg/Kg	0.0024	0.011	10/8/2019 10:41:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	99.5			80% - 136%	10/8/2019 10:41:00 PM
4-Bromofluorobenzene	1.0	98.3			51% - 145%	10/8/2019 10:41:00 PM
Dibromofluoromethane	1.0	97.3			70% - 130%	10/8/2019 10:41:00 PM
Toluene-d8	1.0	94.9			76% - 120%	10/8/2019 10:41:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.073	10/11/2019 3:22:00 PM
2-Methylnaphthalene	1.0	0.028	U	mg/Kg	0.028	0.073	10/11/2019 3:22:00 PM
Acenaphthene	1.0	0.045	U	mg/Kg	0.045	0.073	10/11/2019 3:22:00 PM
Acenaphthylene	1.0	0.034	U	mg/Kg	0.034	0.073	10/11/2019 3:22:00 PM
Anthracene	1.0	0.049	U	mg/Kg	0.049	0.073	10/11/2019 3:22:00 PM
Benzo(a)anthracene	1.0	0.034	U	mg/Kg	0.034	0.073	10/11/2019 3:22:00 PM
Benzo(a)pyrene	1.0	0.038	U	mg/Kg	0.038	0.073	10/11/2019 3:22:00 PM
Benzo(b)fluoranthene	1.0	0.041	U	mg/Kg	0.041	0.073	10/11/2019 3:22:00 PM
Benzo(g,h,i)perylene	1.0	0.022	U	mg/Kg	0.022	0.073	10/11/2019 3:22:00 PM
Benzo(k)fluoranthene	1.0	0.037	U	mg/Kg	0.037	0.073	10/11/2019 3:22:00 PM
Chrysene	1.0	0.031	U	mg/Kg	0.031	0.073	10/11/2019 3:22:00 PM
Dibenzo(a,h)anthracene	1.0	0.025	U	mg/Kg	0.025	0.073	10/11/2019 3:22:00 PM
Fluoranthene	1.0	0.044	U	mg/Kg	0.044	0.073	10/11/2019 3:22:00 PM
Fluorene	1.0	0.037	U	mg/Kg	0.037	0.073	10/11/2019 3:22:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.031	U	mg/Kg	0.031	0.073	10/11/2019 3:22:00 PM
Naphthalene	1.0	0.025	U	mg/Kg	0.025	0.073	10/11/2019 3:22:00 PM
Phenanthrene	1.0	0.045	U	mg/Kg	0.045	0.073	10/11/2019 3:22:00 PM
Pyrene	1.0	0.044	U	mg/Kg	0.044	0.073	10/11/2019 3:22:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	98.0			26% - 110%	10/11/2019 3:22:00 PM
Nitrobenzene-d5	1.0	93.0			12% - 104%	10/11/2019 3:22:00 PM
p-Terphenyl-d14	1.0	98.6			39% - 120%	10/11/2019 3:22:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.6	U	mg/Kg	3.6	19	10/10/2019 9:37:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	112			60% - 118%	10/10/2019 9:37:00 PM
Ortho-terphenyl	1.0	100			62% - 109%	10/10/2019 9:37:00 PM

Analytical Data

Client Sample ID: SB-RU1/W @ 4'
Sample Location:
Date Collected: 10/08/2019 12:13 PM

Laboratory Sample ID: 252511
Matrix: SOILS
Percent Moisture: 11.4

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00076	U	mg/Kg	0.00076	0.0040	10/8/2019 11:06:00 PM
Ethylbenzene	1.0	0.00056	U	mg/Kg	0.00056	0.0040	10/8/2019 11:06:00 PM
Methyl-t-butyl ether	1.0	0.00087	U	mg/Kg	0.00087	0.0040	10/8/2019 11:06:00 PM
Toluene	1.0	0.0023	U	mg/Kg	0.0023	0.0040	10/8/2019 11:06:00 PM
Xylenes- Total	1.0	0.0025	U	mg/Kg	0.0025	0.012	10/8/2019 11:06:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	107			80% - 136%	10/8/2019 11:06:00 PM
4-Bromofluorobenzene	1.0	92.3			51% - 145%	10/8/2019 11:06:00 PM
Dibromofluoromethane	1.0	98.5			70% - 130%	10/8/2019 11:06:00 PM
Toluene-d8	1.0	93.2			76% - 120%	10/8/2019 11:06:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.028	U	mg/Kg	0.028	0.076	10/11/2019 3:59:00 PM
2-Methylnaphthalene	1.0	0.029	U	mg/Kg	0.029	0.076	10/11/2019 3:59:00 PM
Acenaphthene	1.0	0.046	U	mg/Kg	0.046	0.076	10/11/2019 3:59:00 PM
Acenaphthylene	1.0	0.035	U	mg/Kg	0.035	0.076	10/11/2019 3:59:00 PM
Anthracene	1.0	0.051	U	mg/Kg	0.051	0.076	10/11/2019 3:59:00 PM
Benzo(a)anthracene	1.0	0.035	U	mg/Kg	0.035	0.076	10/11/2019 3:59:00 PM
Benzo(a)pyrene	1.0	0.040	U	mg/Kg	0.040	0.076	10/11/2019 3:59:00 PM
Benzo(b)fluoranthene	1.0	0.043	U	mg/Kg	0.043	0.076	10/11/2019 3:59:00 PM
Benzo(g,h,i)perylene	1.0	0.023	U	mg/Kg	0.023	0.076	10/11/2019 3:59:00 PM
Benzo(k)fluoranthene	1.0	0.038	U	mg/Kg	0.038	0.076	10/11/2019 3:59:00 PM
Chrysene	1.0	0.032	U	mg/Kg	0.032	0.076	10/11/2019 3:59:00 PM
Dibenzo(a,h)anthracene	1.0	0.026	U	mg/Kg	0.026	0.076	10/11/2019 3:59:00 PM
Fluoranthene	1.0	0.045	U	mg/Kg	0.045	0.076	10/11/2019 3:59:00 PM
Fluorene	1.0	0.038	U	mg/Kg	0.038	0.076	10/11/2019 3:59:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.032	U	mg/Kg	0.032	0.076	10/11/2019 3:59:00 PM
Naphthalene	1.0	0.026	U	mg/Kg	0.026	0.076	10/11/2019 3:59:00 PM
Phenanthrene	1.0	0.046	U	mg/Kg	0.046	0.076	10/11/2019 3:59:00 PM
Pyrene	1.0	0.045	U	mg/Kg	0.045	0.076	10/11/2019 3:59:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	104			26% - 110%	10/11/2019 3:59:00 PM
Nitrobenzene-d5	1.0	99.8			12% - 104%	10/11/2019 3:59:00 PM
p-Terphenyl-d14	1.0	101			39% - 120%	10/11/2019 3:59:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	**4.4**	I	mg/Kg	3.7	19	10/10/2019 10:16:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	83.5			60% - 118%	10/10/2019 10:16:00 PM
Ortho-terphenyl	1.0	96.5			62% - 109%	10/10/2019 10:16:00 PM

PQL: Practical Quantitation Limit | RL: Report Limit | MDL: Method Detection Limit | DF: Dilution Factor

Analytical Data

Client Sample ID: SB-DISP 15/16 @ 2'
Sample Location:
Date Collected: 10/07/2019 01:30 PM

Laboratory Sample ID: 252512
Matrix: SOILS
Percent Moisture: 6.87

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00069	U	mg/Kg	0.00069	0.0035	10/8/2019 11:31:00 PM
Ethylbenzene	1.0	0.00052	U	mg/Kg	0.00052	0.0035	10/8/2019 11:31:00 PM
Methyl-t-butyl ether	1.0	0.00079	U	mg/Kg	0.00079	0.0035	10/8/2019 11:31:00 PM
Toluene	1.0	0.0020	U	mg/Kg	0.0020	0.0035	10/8/2019 11:31:00 PM
Xylenes- Total	1.0	0.0023	U	mg/Kg	0.0023	0.011	10/8/2019 11:31:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	108			80% - 136%	10/8/2019 11:31:00 PM
4-Bromofluorobenzene	1.0	94.5			51% - 145%	10/8/2019 11:31:00 PM
Dibromofluoromethane	1.0	97.9			70% - 130%	10/8/2019 11:31:00 PM
Toluene-d8	1.0	93.7			76% - 120%	10/8/2019 11:31:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.072	10/11/2019 4:36:00 PM
2-Methylnaphthalene	1.0	0.028	U	mg/Kg	0.028	0.072	10/11/2019 4:36:00 PM
Acenaphthene	1.0	0.044	U	mg/Kg	0.044	0.072	10/11/2019 4:36:00 PM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.072	10/11/2019 4:36:00 PM
Anthracene	1.0	0.048	U	mg/Kg	0.048	0.072	10/11/2019 4:36:00 PM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.072	10/11/2019 4:36:00 PM
Benzo(a)pyrene	1.0	0.038	U	mg/Kg	0.038	0.072	10/11/2019 4:36:00 PM
Benzo(b)fluoranthene	1.0	0.041	U	mg/Kg	0.041	0.072	10/11/2019 4:36:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.072	10/11/2019 4:36:00 PM
Benzo(k)fluoranthene	1.0	0.037	U	mg/Kg	0.037	0.072	10/11/2019 4:36:00 PM
Chrysene	1.0	0.030	U	mg/Kg	0.030	0.072	10/11/2019 4:36:00 PM
Dibenzo(a,h)anthracene	1.0	0.025	U	mg/Kg	0.025	0.072	10/11/2019 4:36:00 PM
Fluoranthene	1.0	0.043	U	mg/Kg	0.043	0.072	10/11/2019 4:36:00 PM
Fluorene	1.0	0.037	U	mg/Kg	0.037	0.072	10/11/2019 4:36:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.030	U	mg/Kg	0.030	0.072	10/11/2019 4:36:00 PM
Naphthalene	1.0	0.025	U	mg/Kg	0.025	0.072	10/11/2019 4:36:00 PM
Phenanthrene	1.0	0.044	U	mg/Kg	0.044	0.072	10/11/2019 4:36:00 PM
Pyrene	1.0	0.043	U	mg/Kg	0.043	0.072	10/11/2019 4:36:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	107			26% - 110%	10/11/2019 4:36:00 PM
Nitrobenzene-d5	1.0	103			12% - 104%	10/11/2019 4:36:00 PM
p-Terphenyl-d14	1.0	102			39% - 120%	10/11/2019 4:36:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/10/2019 10:56:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	93.9			60% - 118%	10/10/2019 10:56:00 PM
Ortho-terphenyl	1.0	108			62% - 109%	10/10/2019 10:56:00 PM

PQL: Practical Quantitation Limit RL: Report Limit MDL: Method Detection Limit DF: Dilution Factor

Analytical Data

Client Sample ID: SB-DISP 13/14 @ 2'
Sample Location:
Date Collected: 10/07/2019 02:00 PM

Laboratory Sample ID: 252513
Matrix: SOILS
Percent Moisture: 4.47

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00075	U	mg/Kg	0.00075	0.0040	10/8/2019 11:55:00 PM
Ethylbenzene	1.0	0.00057	U	mg/Kg	0.00057	0.0040	10/8/2019 11:55:00 PM
Methyl-t-butyl ether	1.0	0.00087	U	mg/Kg	0.00087	0.0040	10/8/2019 11:55:00 PM
Toluene	1.0	0.0022	U	mg/Kg	0.0022	0.0040	10/8/2019 11:55:00 PM
Xylenes- Total	1.0	0.0025	U	mg/Kg	0.0025	0.012	10/8/2019 11:55:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	109			80% - 136%	10/8/2019 11:55:00 PM
4-Bromofluorobenzene	1.0	93.8			51% - 145%	10/8/2019 11:55:00 PM
Dibromofluoromethane	1.0	98.3			70% - 130%	10/8/2019 11:55:00 PM
Toluene-d8	1.0	94.2			76% - 120%	10/8/2019 11:55:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.026	U	mg/Kg	0.026	0.070	10/11/2019 5:12:00 PM
2-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.070	10/11/2019 5:12:00 PM
Acenaphthene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 5:12:00 PM
Acenaphthylene	1.0	0.032	U	mg/Kg	0.032	0.070	10/11/2019 5:12:00 PM
Anthracene	1.0	0.047	U	mg/Kg	0.047	0.070	10/11/2019 5:12:00 PM
Benzo(a)anthracene	1.0	0.032	U	mg/Kg	0.032	0.070	10/11/2019 5:12:00 PM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.070	10/11/2019 5:12:00 PM
Benzo(b)fluoranthene	1.0	0.040	U	mg/Kg	0.040	0.070	10/11/2019 5:12:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.070	10/11/2019 5:12:00 PM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 5:12:00 PM
Chrysene	1.0	**0.031**	I	mg/Kg	0.029	0.070	10/11/2019 5:12:00 PM
Dibenzo(a,h)anthracene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 5:12:00 PM
Fluoranthene	1.0	**0.053**	I	mg/Kg	0.042	0.070	10/11/2019 5:12:00 PM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 5:12:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 5:12:00 PM
Naphthalene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 5:12:00 PM
Phenanthrene	1.0	**0.045**	I	mg/Kg	0.043	0.070	10/11/2019 5:12:00 PM
Pyrene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 5:12:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	103			26% - 110%	10/11/2019 5:12:00 PM
Nitrobenzene-d5	1.0	98.7			12% - 104%	10/11/2019 5:12:00 PM
p-Terphenyl-d14	1.0	99.9			39% - 120%	10/11/2019 5:12:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/10/2019 11:35:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	97.9			60% - 118%	10/10/2019 11:35:00 PM
Ortho-terphenyl	1.0	101			62% - 109%	10/10/2019 11:35:00 PM

PQL: Practical Quantitation Limit RL: Report Limit MDL: Method Detection Limit DF: Dilution Factor

Analytical Data

Client Sample ID: SB-DISP 11/12 @ 2'
Sample Location:
Date Collected: 10/07/2019 02:53 PM

Laboratory Sample ID: 252514
Matrix: SOILS
Percent Moisture: 5.26

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00071	U	mg/Kg	0.00071	0.0038	10/9/2019 12:20:00 AM
Ethylbenzene	1.0	0.00054	U	mg/Kg	0.00054	0.0038	10/9/2019 12:20:00 AM
Methyl-t-butyl ether	1.0	0.00082	U	mg/Kg	0.00082	0.0038	10/9/2019 12:20:00 AM
Toluene	1.0	0.0021	U	mg/Kg	0.0021	0.0038	10/9/2019 12:20:00 AM
Xylenes- Total	1.0	0.0024	U	mg/Kg	0.0024	0.012	10/9/2019 12:20:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	104			80% - 136%	10/9/2019 12:20:00 AM
4-Bromofluorobenzene	1.0	92.3			51% - 145%	10/9/2019 12:20:00 AM
Dibromofluoromethane	1.0	99.7			70% - 130%	10/9/2019 12:20:00 AM
Toluene-d8	1.0	93.9			76% - 120%	10/9/2019 12:20:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.026	U	mg/Kg	0.026	0.071	10/11/2019 5:49:00 PM
2-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.071	10/11/2019 5:49:00 PM
Acenaphthene	1.0	0.043	U	mg/Kg	0.043	0.071	10/11/2019 5:49:00 PM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.071	10/11/2019 5:49:00 PM
Anthracene	1.0	0.047	U	mg/Kg	0.047	0.071	10/11/2019 5:49:00 PM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.071	10/11/2019 5:49:00 PM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.071	10/11/2019 5:49:00 PM
Benzo(b)fluoranthene	1.0	0.040	U	mg/Kg	0.040	0.071	10/11/2019 5:49:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.071	10/11/2019 5:49:00 PM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.071	10/11/2019 5:49:00 PM
Chrysene	1.0	**0.040**	I	mg/Kg	0.030	0.071	10/11/2019 5:49:00 PM
Dibenzo(a,h)anthracene	1.0	0.024	U	mg/Kg	0.024	0.071	10/11/2019 5:49:00 PM
Fluoranthene	1.0	**0.072**		mg/Kg	0.042	0.071	10/11/2019 5:49:00 PM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.071	10/11/2019 5:49:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.030	U	mg/Kg	0.030	0.071	10/11/2019 5:49:00 PM
Naphthalene	1.0	0.024	U	mg/Kg	0.024	0.071	10/11/2019 5:49:00 PM
Phenanthrene	1.0	**0.060**	I	mg/Kg	0.043	0.071	10/11/2019 5:49:00 PM
Pyrene	1.0	**0.053**	I	mg/Kg	0.042	0.071	10/11/2019 5:49:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	93.0			26% - 110%	10/11/2019 5:49:00 PM
Nitrobenzene-d5	1.0	88.6			12% - 104%	10/11/2019 5:49:00 PM
p-Terphenyl-d14	1.0	96.7			39% - 120%	10/11/2019 5:49:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/11/2019 12:55:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	78.6			60% - 118%	10/11/2019 12:55:00 AM
Ortho-terphenyl	1.0	98.4			62% - 109%	10/11/2019 12:55:00 AM

PQL: Practical Quantitation Limit RL: Report Limit MDL: Method Detection Limit DF: Dilution Factor

Analytical Data

Client Sample ID: SB-DISP 9/10 @ 2'
Sample Location:
Date Collected: 10/07/2019 03:11 PM

Laboratory Sample ID: 252515
Matrix: SOILS
Percent Moisture: 4.87

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00068	U	mg/Kg	0.00068	0.0036	10/9/2019 12:45:00 AM
Ethylbenzene	1.0	0.00053	U	mg/Kg	0.00053	0.0036	10/9/2019 12:45:00 AM
Methyl-t-butyl ether	1.0	0.00080	U	mg/Kg	0.00080	0.0036	10/9/2019 12:45:00 AM
Toluene	1.0	0.0020	U	mg/Kg	0.0020	0.0036	10/9/2019 12:45:00 AM
Xylenes- Total	1.0	0.0023	U	mg/Kg	0.0023	0.011	10/9/2019 12:45:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	106			80% - 136%	10/9/2019 12:45:00 AM
4-Bromofluorobenzene	1.0	93.6			51% - 145%	10/9/2019 12:45:00 AM
Dibromofluoromethane	1.0	99.2			70% - 130%	10/9/2019 12:45:00 AM
Toluene-d8	1.0	94.4			76% - 120%	10/9/2019 12:45:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.026	U	mg/Kg	0.026	0.070	10/11/2019 6:26:00 PM
2-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.070	10/11/2019 6:26:00 PM
Acenaphthene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 6:26:00 PM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.070	10/11/2019 6:26:00 PM
Anthracene	1.0	0.047	U	mg/Kg	0.047	0.070	10/11/2019 6:26:00 PM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.070	10/11/2019 6:26:00 PM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.070	10/11/2019 6:26:00 PM
Benzo(b)fluoranthene	1.0	0.040	U	mg/Kg	0.040	0.070	10/11/2019 6:26:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.070	10/11/2019 6:26:00 PM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 6:26:00 PM
Chrysene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 6:26:00 PM
Dibenzo(a,h)anthracene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 6:26:00 PM
Fluoranthene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 6:26:00 PM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 6:26:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 6:26:00 PM
Naphthalene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 6:26:00 PM
Phenanthrene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 6:26:00 PM
Pyrene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 6:26:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	91.7			26% - 110%	10/11/2019 6:26:00 PM
Nitrobenzene-d5	1.0	87.6			12% - 104%	10/11/2019 6:26:00 PM
p-Terphenyl-d14	1.0	94.8			39% - 120%	10/11/2019 6:26:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/11/2019 1:35:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	109			60% - 118%	10/11/2019 1:35:00 AM
Ortho-terphenyl	1.0	88.0			62% - 109%	10/11/2019 1:35:00 AM

Analytical Data

Client Sample ID: SB-DISP 7/8 @ 2'
Sample Location:
Date Collected: 10/07/2019 04:25 PM

Laboratory Sample ID: 252516
Matrix: SOILS
Percent Moisture: 6.12

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00075	U	mg/Kg	0.00075	0.0039	10/9/2019 1:09:00 AM
Ethylbenzene	1.0	0.00056	U	mg/Kg	0.00056	0.0039	10/9/2019 1:09:00 AM
Methyl-t-butyl ether	1.0	0.00086	U	mg/Kg	0.00086	0.0039	10/9/2019 1:09:00 AM
Toluene	1.0	0.0022	U	mg/Kg	0.0022	0.0039	10/9/2019 1:09:00 AM
Xylenes- Total	1.0	0.0024	U	mg/Kg	0.0024	0.012	10/9/2019 1:09:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	99.9			80% - 136%	10/9/2019 1:09:00 AM
4-Bromofluorobenzene	1.0	91.8			51% - 145%	10/9/2019 1:09:00 AM
Dibromofluoromethane	1.0	95.7			70% - 130%	10/9/2019 1:09:00 AM
Toluene-d8	1.0	92.7			76% - 120%	10/9/2019 1:09:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.071	10/11/2019 7:02:00 PM
2-Methylnaphthalene	1.0	0.028	U	mg/Kg	0.028	0.071	10/11/2019 7:02:00 PM
Acenaphthene	1.0	0.044	U	mg/Kg	0.044	0.071	10/11/2019 7:02:00 PM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.071	10/11/2019 7:02:00 PM
Anthracene	1.0	0.048	U	mg/Kg	0.048	0.071	10/11/2019 7:02:00 PM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.071	10/11/2019 7:02:00 PM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.071	10/11/2019 7:02:00 PM
Benzo(b)fluoranthene	1.0	0.040	U	mg/Kg	0.040	0.071	10/11/2019 7:02:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.071	10/11/2019 7:02:00 PM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.071	10/11/2019 7:02:00 PM
Chrysene	1.0	0.030	U	mg/Kg	0.030	0.071	10/11/2019 7:02:00 PM
Dibenzo(a,h)anthracene	1.0	0.024	U	mg/Kg	0.024	0.071	10/11/2019 7:02:00 PM
Fluoranthene	1.0	0.043	U	mg/Kg	0.043	0.071	10/11/2019 7:02:00 PM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.071	10/11/2019 7:02:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.030	U	mg/Kg	0.030	0.071	10/11/2019 7:02:00 PM
Naphthalene	1.0	0.024	U	mg/Kg	0.024	0.071	10/11/2019 7:02:00 PM
Phenanthrene	1.0	0.044	U	mg/Kg	0.044	0.071	10/11/2019 7:02:00 PM
Pyrene	1.0	0.043	U	mg/Kg	0.043	0.071	10/11/2019 7:02:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	92.6			26% - 110%	10/11/2019 7:02:00 PM
Nitrobenzene-d5	1.0	85.6			12% - 104%	10/11/2019 7:02:00 PM
p-Terphenyl-d14	1.0	97.1			39% - 120%	10/11/2019 7:02:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/11/2019 8:55:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	75.4			60% - 118%	10/11/2019 8:55:00 AM
Ortho-terphenyl	1.0	77.0			62% - 109%	10/11/2019 8:55:00 AM

Analytical Data

Client Sample ID: SB-DISP 5/6 @ 2'
Sample Location:
Date Collected: 10/07/2019 04:47 PM

Laboratory Sample ID: 252517
Matrix: SOILS
Percent Moisture: 4.75

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00070	U	mg/Kg	0.00070	0.0038	10/9/2019 1:34:00 AM
Ethylbenzene	1.0	0.00054	U	mg/Kg	0.00054	0.0038	10/9/2019 1:34:00 AM
Methyl-t-butyl ether	1.0	0.00082	U	mg/Kg	0.00082	0.0038	10/9/2019 1:34:00 AM
Toluene	1.0	0.0021	U	mg/Kg	0.0021	0.0038	10/9/2019 1:34:00 AM
Xylenes- Total	1.0	0.0024	U	mg/Kg	0.0024	0.012	10/9/2019 1:34:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	102			80% - 136%	10/9/2019 1:34:00 AM
4-Bromofluorobenzene	1.0	90.8			51% - 145%	10/9/2019 1:34:00 AM
Dibromofluoromethane	1.0	97.2			70% - 130%	10/9/2019 1:34:00 AM
Toluene-d8	1.0	92.6			76% - 120%	10/9/2019 1:34:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.026	U	mg/Kg	0.026	0.070	10/11/2019 7:39:00 PM
2-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.070	10/11/2019 7:39:00 PM
Acenaphthene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 7:39:00 PM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.070	10/11/2019 7:39:00 PM
Anthracene	1.0	0.047	U	mg/Kg	0.047	0.070	10/11/2019 7:39:00 PM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.070	10/11/2019 7:39:00 PM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.070	10/11/2019 7:39:00 PM
Benzo(b)fluoranthene	1.0	0.040	U	mg/Kg	0.040	0.070	10/11/2019 7:39:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.070	10/11/2019 7:39:00 PM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 7:39:00 PM
Chrysene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 7:39:00 PM
Dibenzo(a,h)anthracene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 7:39:00 PM
Fluoranthene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 7:39:00 PM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 7:39:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 7:39:00 PM
Naphthalene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 7:39:00 PM
Phenanthrene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 7:39:00 PM
Pyrene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 7:39:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	97.2			26% - 110%	10/11/2019 7:39:00 PM
Nitrobenzene-d5	1.0	92.7			12% - 104%	10/11/2019 7:39:00 PM
p-Terphenyl-d14	1.0	99.9			39% - 120%	10/11/2019 7:39:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/11/2019 2:14:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	64.8			60% - 118%	10/11/2019 2:14:00 AM
Ortho-terphenyl	1.0	102			62% - 109%	10/11/2019 2:14:00 AM

PQL: Practical Quantitation Limit RL: Report Limit MDL: Method Detection Limit DF: Dilution Factor

Analytical Data

Client Sample ID: SB-DISP 1/2 @ 2'
Sample Location:
Date Collected: 10/07/2019 05:13 PM

Laboratory Sample ID: 252518
Matrix: SOILS
Percent Moisture: 4.65

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00069	U	mg/Kg	0.00069	0.0037	10/9/2019 1:59:00 AM
Ethylbenzene	1.0	0.00052	U	mg/Kg	0.00052	0.0037	10/9/2019 1:59:00 AM
Methyl-t-butyl ether	1.0	0.00081	U	mg/Kg	0.00081	0.0037	10/9/2019 1:59:00 AM
Toluene	1.0	0.0021	U	mg/Kg	0.0021	0.0037	10/9/2019 1:59:00 AM
Xylenes- Total	1.0	0.0023	U	mg/Kg	0.0023	0.010	10/9/2019 1:59:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	103			80% - 136%	10/9/2019 1:59:00 AM
4-Bromofluorobenzene	1.0	92.4			51% - 145%	10/9/2019 1:59:00 AM
Dibromofluoromethane	1.0	99.3			70% - 130%	10/9/2019 1:59:00 AM
Toluene-d8	1.0	93.3			76% - 120%	10/9/2019 1:59:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.026	U	mg/Kg	0.026	0.070	10/11/2019 8:16:00 PM
2-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.070	10/11/2019 8:16:00 PM
Acenaphthene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 8:16:00 PM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.070	10/11/2019 8:16:00 PM
Anthracene	1.0	0.047	U	mg/Kg	0.047	0.070	10/11/2019 8:16:00 PM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.070	10/11/2019 8:16:00 PM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.070	10/11/2019 8:16:00 PM
Benzo(b)fluoranthene	1.0	0.040	U	mg/Kg	0.040	0.070	10/11/2019 8:16:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.070	10/11/2019 8:16:00 PM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 8:16:00 PM
Chrysene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 8:16:00 PM
Dibenzo(a,h)anthracene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 8:16:00 PM
Fluoranthene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 8:16:00 PM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 8:16:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 8:16:00 PM
Naphthalene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 8:16:00 PM
Phenanthrene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 8:16:00 PM
Pyrene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 8:16:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	87.4			26% - 110%	10/11/2019 8:16:00 PM
Nitrobenzene-d5	1.0	82.5			12% - 104%	10/11/2019 8:16:00 PM
p-Terphenyl-d14	1.0	87.3			39% - 120%	10/11/2019 8:16:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/11/2019 2:54:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	109			60% - 118%	10/11/2019 2:54:00 AM
Ortho-terphenyl	1.0	105			62% - 109%	10/11/2019 2:54:00 AM

PQL: Practical Quantitation Limit RL: Report Limit MDL: Method Detection Limit DF: Dilution Factor

Analytical Data

Client Sample ID: SB-DISP 3/4 @ 2'
Sample Location:
Date Collected: 10/07/2019 05:31 PM

Laboratory Sample ID: 252519
Matrix: SOILS
Percent Moisture: 4.91

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.00068	U	mg/Kg	0.00068	0.0036	10/9/2019 2:23:00 AM
Ethylbenzene	1.0	0.00052	U	mg/Kg	0.00052	0.0036	10/9/2019 2:23:00 AM
Methyl-t-butyl ether	1.0	0.00079	U	mg/Kg	0.00079	0.0036	10/9/2019 2:23:00 AM
Toluene	1.0	0.0020	U	mg/Kg	0.0020	0.0036	10/9/2019 2:23:00 AM
Xylenes- Total	1.0	0.0023	U	mg/Kg	0.0023	0.011	10/9/2019 2:23:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	103			80% - 136%	10/9/2019 2:23:00 AM
4-Bromofluorobenzene	1.0	95.7			51% - 145%	10/9/2019 2:23:00 AM
Dibromofluoromethane	1.0	99.8			70% - 130%	10/9/2019 2:23:00 AM
Toluene-d8	1.0	95.0			76% - 120%	10/9/2019 2:23:00 AM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.026	U	mg/Kg	0.026	0.070	10/11/2019 8:53:00 PM
2-Methylnaphthalene	1.0	0.027	U	mg/Kg	0.027	0.070	10/11/2019 8:53:00 PM
Acenaphthene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 8:53:00 PM
Acenaphthylene	1.0	0.033	U	mg/Kg	0.033	0.070	10/11/2019 8:53:00 PM
Anthracene	1.0	0.047	U	mg/Kg	0.047	0.070	10/11/2019 8:53:00 PM
Benzo(a)anthracene	1.0	0.033	U	mg/Kg	0.033	0.070	10/11/2019 8:53:00 PM
Benzo(a)pyrene	1.0	0.037	U	mg/Kg	0.037	0.070	10/11/2019 8:53:00 PM
Benzo(b)fluoranthene	1.0	0.040	U	mg/Kg	0.040	0.070	10/11/2019 8:53:00 PM
Benzo(g,h,i)perylene	1.0	0.021	U	mg/Kg	0.021	0.070	10/11/2019 8:53:00 PM
Benzo(k)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 8:53:00 PM
Chrysene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 8:53:00 PM
Dibenzo(a,h)anthracene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 8:53:00 PM
Fluoranthene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 8:53:00 PM
Fluorene	1.0	0.036	U	mg/Kg	0.036	0.070	10/11/2019 8:53:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.029	U	mg/Kg	0.029	0.070	10/11/2019 8:53:00 PM
Naphthalene	1.0	0.024	U	mg/Kg	0.024	0.070	10/11/2019 8:53:00 PM
Phenanthrene	1.0	0.043	U	mg/Kg	0.043	0.070	10/11/2019 8:53:00 PM
Pyrene	1.0	0.042	U	mg/Kg	0.042	0.070	10/11/2019 8:53:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	93.0			26% - 110%	10/11/2019 8:53:00 PM
Nitrobenzene-d5	1.0	90.0			12% - 104%	10/11/2019 8:53:00 PM
p-Terphenyl-d14	1.0	95.9			39% - 120%	10/11/2019 8:53:00 PM

PQL: Practical Quantitation Limit | RL: Report Limit | MDL: Method Detection Limit | DF: Dilution Factor

Analytical Data

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	3.5	U	mg/Kg	3.5	18	10/11/2019 3:34:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	66.8			60% - 118%	10/11/2019 3:34:00 AM
Ortho-terphenyl	1.0	102			62% - 109%	10/11/2019 3:34:00 AM

Data Chronicle

Client Sample ID: SB-DSL SUMP @ 2' **Laboratory Sample ID:** 252507
Sample Location: **Matrix:** SOILS
Date Collected: 10/08/2019 10:25 AM **Percent Moisture:** 6.59

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/8/2019 9:27:00 PM	10/8/2019 9:27:00 PM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 11:04:00 AM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/10/2019 7:41:00 PM	BW	E87684

Client Sample ID: SB-PRM SUMP @ 4' **Laboratory Sample ID:** 252508
Sample Location: **Matrix:** SOILS
Date Collected: 10/08/2019 11:21 AM **Percent Moisture:** 8.87

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/8/2019 9:52:00 PM	10/8/2019 9:52:00 PM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 11:41:00 AM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/10/2019 8:20:00 PM	BW	E87684

Client Sample ID: SB-PRM SPILL BUCKET @ 2' **Laboratory Sample ID:** 252509
Sample Location: **Matrix:** SOILS
Date Collected: 10/08/2019 11:39 AM **Percent Moisture:** 6.39

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/8/2019 10:17:00 PM	10/8/2019 10:17:00 PM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 2:46:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/10/2019 8:58:00 PM	BW	E87684

Client Sample ID: SB-PRM/W @ 4' **Laboratory Sample ID:** 252510
Sample Location: **Matrix:** SOILS
Date Collected: 10/08/2019 12:10 PM **Percent Moisture:** 8.38

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/8/2019 10:41:00 PM	10/8/2019 10:41:00 PM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 3:22:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/10/2019 9:37:00 PM	BW	E87684

Client Sample ID: SB-RU1/W @ 4' **Laboratory Sample ID:** 252511
Sample Location: **Matrix:** SOILS
Date Collected: 10/08/2019 12:13 PM **Percent Moisture:** 11.4

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/8/2019 11:06:00 PM	10/8/2019 11:06:00 PM	VJG	E87684

Data Chronicle

Client Sample ID: SB-RU1/W @ 4' **Laboratory Sample ID:** 252511
Sample Location: **Matrix:** SOILS
Date Collected: 10/08/2019 12:13 PM **Percent Moisture:** 11.4

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 3:59:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/10/2019 10:16:00 PM	BW	E87684

Client Sample ID: SB-DISP 15/16 @ 2' **Laboratory Sample ID:** 252512
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 01:30 PM **Percent Moisture:** 6.87

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/8/2019 11:31:00 PM	10/8/2019 11:31:00 PM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 4:36:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/10/2019 10:56:00 PM	BW	E87684

Client Sample ID: SB-DISP 13/14 @ 2' **Laboratory Sample ID:** 252513
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 02:00 PM **Percent Moisture:** 4.47

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/8/2019 11:55:00 PM	10/8/2019 11:55:00 PM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 5:12:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/10/2019 11:35:00 PM	BW	E87684

Client Sample ID: SB-DISP 11/12 @ 2' **Laboratory Sample ID:** 252514
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 02:53 PM **Percent Moisture:** 5.26

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/9/2019 12:20:00 AM	10/9/2019 12:20:00 AM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 5:49:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/11/2019 12:55:00 AM	BW	E87684

Client Sample ID: SB-DISP 9/10 @ 2' **Laboratory Sample ID:** 252515
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 03:11 PM **Percent Moisture:** 4.87

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/9/2019 12:45:00 AM	10/9/2019 12:45:00 AM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 6:26:00 PM	BW	E87684

Data Chronicle

Client Sample ID: SB-DISP 9/10 @ 2' **Laboratory Sample ID:** 252515
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 03:11 PM **Percent Moisture:** 4.87

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/11/2019 1:35:00 AM	BW	E87684

Client Sample ID: SB-DISP 7/8 @ 2' **Laboratory Sample ID:** 252516
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 04:25 PM **Percent Moisture:** 6.12

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/9/2019 1:09:00 AM	10/9/2019 1:09:00 AM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 7:02:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/11/2019 8:55:00 AM	BW	E87684

Client Sample ID: SB-DISP 5/6 @ 2' **Laboratory Sample ID:** 252517
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 04:47 PM **Percent Moisture:** 4.75

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/9/2019 1:34:00 AM	10/9/2019 1:34:00 AM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 7:39:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/11/2019 2:14:00 AM	BW	E87684

Client Sample ID: SB-DISP 1/2 @ 2' **Laboratory Sample ID:** 252518
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 05:13 PM **Percent Moisture:** 4.65

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/9/2019 1:59:00 AM	10/9/2019 1:59:00 AM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 8:16:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/11/2019 2:54:00 AM	BW	E87684

Client Sample ID: SB-DISP 3/4 @ 2' **Laboratory Sample ID:** 252519
Sample Location: **Matrix:** SOILS
Date Collected: 10/07/2019 05:31 PM **Percent Moisture:** 4.91

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA100819	10/9/2019 2:23:00 AM	10/9/2019 2:23:00 AM	VJG	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA101019	10/10/2019 1:00:00 PM	10/11/2019 8:53:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA100919	10/9/2019 11:00:00 AM	10/11/2019 3:34:00 AM	BW	E87684

Data Chronicle

Client Sample ID: SB-DISP 3/4 @ 2'
Sample Location:
Date Collected: 10/07/2019 05:31 PM

Laboratory Sample ID: 252519
Matrix: SOILS
Percent Moisture: 4.91

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SMSVA100819 | Analysis Method: EPA 8260 | Preparation Type: 5035 (Low)

Method Batch ID: MSMSVA100819 | Preparation Date: 10/8/2019 9:03:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SMSVA100819MB				Client Sample ID: SMSVA100819MB			Date Analyzed: 10/8/2019 9:03:00 PM				
Benzene	0.00095	0.0050	0.00095	U	mg/Kg							
Ethylbenzene	0.00072	0.0050	0.00072	U	mg/Kg							
Methyl-t-butyl ether	0.0011	0.0050	0.0011	U	mg/Kg							
Toluene	0.0028	0.0050	0.0028	U	mg/Kg							
Xylenes- Total	0.0032	0.015	0.0032	U	mg/Kg							
Toluene-d8			49.1		ug/kg	50.0	98.2	76.0	-	120		
4-Bromofluorobenzene			47.5		ug/kg	50.0	95.0	51.0	-	145		
Dibromofluoromethane			51.8		ug/kg	50.0	104	70.0	-	130		
1,2-Dichloroethane-d4			52.1		ug/kg	50.0	104	80.0	-	136		
QA/QC Type: LCS	Lab Sample ID: SMSVA100819LCS				Client Sample ID: SMSVA100819LCS			Date Analyzed: 10/8/2019 7:24:00 PM				
Benzene	0.00095	0.0050	0.064		mg/Kg	0.060	107	82.0	-	121		
Ethylbenzene	0.00072	0.0050	0.066		mg/Kg	0.060	110	82.0	-	119		
Methyl-t-butyl ether	0.0011	0.0050	0.066		mg/Kg	0.060	110	80.0	-	126		
Toluene	0.0028	0.0050	0.064		mg/Kg	0.060	107	83.0	-	118		
Xylenes- Total	0.0032	0.015	0.198		mg/Kg	0.180	110	83.0	-	119		
Toluene-d8			51.4		ug/kg	50.0	103	76.0	-	120		
4-Bromofluorobenzene			52.3		ug/kg	50.0	105	51.0	-	145		
Dibromofluoromethane			52.4		ug/kg	50.0	105	70.0	-	130		
1,2-Dichloroethane-d4			52.3		ug/kg	50.0	105	80.0	-	136		
QA/QC Type: LCSD	Lab Sample ID: SMSVA100819LCSD				Client Sample ID: SMSVA100819LCSD			Date Analyzed: 10/8/2019 7:49:00 PM				
Benzene	0.00095	0.0050	0.063		mg/Kg	0.060	105	82.0	-	121	1.6	20.0
Ethylbenzene	0.00072	0.0050	0.067		mg/Kg	0.060	112	82.0	-	119	1.5	19.0
Methyl-t-butyl ether	0.0011	0.0050	0.062		mg/Kg	0.060	103	80.0	-	126	6.2	23.0
Toluene	0.0028	0.0050	0.064		mg/Kg	0.060	107	83.0	-	118	0	18.0
Xylenes- Total	0.0032	0.015	0.200		mg/Kg	0.180	111	83.0	-	119	1.0	18.0
Toluene-d8			54.9		ug/kg	50.0	110	76.0	-	120		
4-Bromofluorobenzene			52.7		ug/kg	50.0	105	51.0	-	145		
Dibromofluoromethane			49.2		ug/kg	50.0	98.4	70.0	-	130		
1,2-Dichloroethane-d4			48.6		ug/kg	50.0	97.2	80.0	-	136		
QA/QC Type: MS	Lab Sample ID: SMSVA100819MS				Client Sample ID: 252515MS			Date Analyzed: 10/9/2019 11:09:00 AM				
Benzene	0.00068	0.0036	0.044		mg/Kg	0.043	102	52.0	-	120		
Ethylbenzene	0.00052	0.0036	0.046		mg/Kg	0.043	107	38.0	-	130		

Preparation Batch ID: SMSVA100819 | Analysis Method: EPA 8260 | Preparation Type: 5035 (Low)

Method Batch ID: MSMSVA100819 | Preparation Date: 10/8/2019 9:03:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MS	Lab Sample ID: SMSVA100819MS				Client Sample ID: 252515MS						Date Analyzed: 10/9/2019 11:09:00 AM	
Methyl-t-butyl ether	0.00079	0.0036	0.038		mg/Kg	0.043	88.4	54.0	-	128		
Toluene	0.0020	0.0036	0.045		mg/Kg	0.043	105	55.0	-	113		
Xylenes- Total	0.0023	0.011	0.139		mg/Kg	0.128	109	46.0	-	121		
Toluene-d8			50.1		ug/kg	50.0	100	76.0	-	120		
4-Bromofluorobenzene			50.2		ug/kg	50.0	100	51.0	-	145		
Dibromofluoromethane			50.0		ug/kg	50.0	100	70.0	-	130		
1,2-Dichloroethane-d4			44.5		ug/kg	50.0	89.0	80.0	-	136		
QA/QC Type: DUP	Lab Sample ID: SMSVA100819DUP				Client Sample ID: 252510DUP						Date Analyzed: 10/9/2019 10:45:00 AM	
Benzene	0.00075	0.0039	0.0076	S3	mg/Kg						39	34.0
Ethylbenzene	0.00057	0.0039	0.0023	I	mg/Kg						30	46.0
Methyl-t-butyl ether	0.00086	0.0039	0.00086	U	mg/Kg						0	37.0
Toluene	0.0022	0.0039	0.0022	U	mg/Kg						0	29.0
Xylenes- Total	0.0025	0.012	0.0025	U	mg/Kg						0	37.0
Toluene-d8			49.3		ug/kg	50.0	98.6	76.0	-	120		
4-Bromofluorobenzene			51.4		ug/kg	50.0	103	51.0	-	145		
Dibromofluoromethane			49.6		ug/kg	50.0	99.2	70.0	-	130		
1,2-Dichloroethane-d4			52.2		ug/kg	50.0	104	80.0	-	136		

Comments:

Preparation Batch ID: SPAHA101019 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA101019 | Preparation Date: 10/10/2019 1:00:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPAHA101019MB				Client Sample ID: SPAHA101019MB						Date Analyzed: 10/11/2019 9:51:00 AM	
Naphthalene	0.023	0.067	0.023	U	mg/Kg							
Acenaphthylene	0.031	0.067	0.031	U	mg/Kg							
Acenaphthene	0.041	0.067	0.041	U	mg/Kg							
Fluorene	0.034	0.067	0.034	U	mg/Kg							
Phenanthrene	0.041	0.067	0.041	U	mg/Kg							
Anthracene	0.045	0.067	0.045	U	mg/Kg							
Fluoranthene	0.040	0.067	0.040	U	mg/Kg							

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SPAHA101019 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA101019 | Preparation Date: 10/10/2019 1:00:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPAHA101019MB				Client Sample ID: SPAHA101019MB					Date Analyzed: 10/11/2019 9:51:00 AM		
1-Methylnaphthalene	0.025	0.067	0.025	U	mg/Kg							
2-Methylnaphthalene	0.026	0.067	0.026	U	mg/Kg							
Pyrene	0.040	0.067	0.040	U	mg/Kg							
Benzo(a)anthracene	0.031	0.067	0.031	U	mg/Kg							
Chrysene	0.028	0.067	0.028	U	mg/Kg							
Benzo(b)fluoranthene	0.038	0.067	0.038	U	mg/Kg							
Benzo(k)fluoranthene	0.034	0.067	0.034	U	mg/Kg							
Benzo(a)pyrene	0.035	0.067	0.035	U	mg/Kg							
Indeno(1,2,3-cd)pyrene	0.028	0.067	0.028	U	mg/Kg							
Dibenzo(a,h)anthracene	0.023	0.067	0.023	U	mg/Kg							
Benzo(g,h,i)perylene	0.020	0.067	0.020	U	mg/Kg							
Nitrobenzene-d5			72.5		%	100	72.5	12.0	-	104		
2-Fluorobiphenyl			78.0		%	100	78.0	26.0	-	110		
p-Terphenyl-d14			90.6		%	100	90.6	39.0	-	120		
QA/QC Type: LCS	Lab Sample ID: SPAHA101019LCS				Client Sample ID: SPAHA101019LCS					Date Analyzed: 10/11/2019 8:37:00 AM		
Naphthalene	0.023	0.067	1.50		mg/Kg	1.67	89.8	40.0	-	106		
Acenaphthylene	0.031	0.067	1.60		mg/Kg	1.67	95.8	38.0	-	115		
Acenaphthene	0.041	0.067	1.51		mg/Kg	1.67	90.4	46.0	-	121		
Fluorene	0.034	0.067	1.47		mg/Kg	1.67	88.0	46.0	-	123		
Phenanthrene	0.041	0.067	1.50		mg/Kg	1.67	89.8	52.0	-	129		
Anthracene	0.045	0.067	1.52		mg/Kg	1.67	91.0	47.0	-	124		
Fluoranthene	0.040	0.067	1.46		mg/Kg	1.67	87.4	45.0	-	125		
1-Methylnaphthalene	0.025	0.067	1.45		mg/Kg	1.67	86.8	39.0	-	113		
2-Methylnaphthalene	0.026	0.067	1.49		mg/Kg	1.67	89.2	39.0	-	110		
Pyrene	0.040	0.067	1.45		mg/Kg	1.67	86.8	47.0	-	129		
Benzo(a)anthracene	0.031	0.067	1.39		mg/Kg	1.67	83.2	45.0	-	129		
Chrysene	0.028	0.067	1.48		mg/Kg	1.67	88.6	44.0	-	129		
Benzo(b)fluoranthene	0.038	0.067	1.40		mg/Kg	1.67	83.8	45.0	-	122		
Benzo(k)fluoranthene	0.034	0.067	1.46		mg/Kg	1.67	87.4	43.0	-	124		
Benzo(a)pyrene	0.035	0.067	1.34		mg/Kg	1.67	80.2	39.0	-	116		
Indeno(1,2,3-cd)pyrene	0.028	0.067	1.21		mg/Kg	1.67	72.5	41.0	-	125		
Dibenzo(a,h)anthracene	0.023	0.067	1.46		mg/Kg	1.67	87.4	40.0	-	123		
Benzo(g,h,i)perylene	0.020	0.067	1.31		mg/Kg	1.67	78.4	34.0	-	120		
Nitrobenzene-d5			92.0		%	100	92.0	12.0	-	104		

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SPAHA101019 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA101019 | Preparation Date: 10/10/2019 1:00:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: LCS	Lab Sample ID: SPAHA101019LCS				Client Sample ID: SPAHA101019LCS					Date Analyzed: 10/11/2019 8:37:00 AM		
2-Fluorobiphenyl			95.2		%	100	95.2	26.0	-	110		
p-Terphenyl-d14			94.5		%	100	94.5	39.0	-	120		
QA/QC Type: LCSD	Lab Sample ID: SPAHA101019LCSD				Client Sample ID: SPAHA101019LCSD					Date Analyzed: 10/11/2019 9:14:00 AM		
Naphthalene	0.023	0.067	1.49		mg/Kg	1.67	89.2	40.0	-	106	0.67	33.0
Acenaphthylene	0.031	0.067	1.64		mg/Kg	1.67	98.2	38.0	-	115	2.5	38.0
Acenaphthene	0.041	0.067	1.53		mg/Kg	1.67	91.6	46.0	-	121	1.3	38.0
Fluorene	0.034	0.067	1.59		mg/Kg	1.67	95.2	46.0	-	123	7.8	38.0
Phenanthrene	0.041	0.067	1.66		mg/Kg	1.67	99.4	52.0	-	129	10	39.0
Anthracene	0.045	0.067	1.68		mg/Kg	1.67	101	47.0	-	124	10	38.0
Fluoranthene	0.040	0.067	1.62		mg/Kg	1.67	97.0	45.0	-	125	10	40.0
1-Methylnaphthalene	0.025	0.067	1.46		mg/Kg	1.67	87.4	39.0	-	113	0.69	37.0
2-Methylnaphthalene	0.026	0.067	1.49		mg/Kg	1.67	89.2	39.0	-	110	0	36.0
Pyrene	0.040	0.067	1.59		mg/Kg	1.67	95.2	47.0	-	129	9.2	41.0
Benzo(a)anthracene	0.031	0.067	1.52		mg/Kg	1.67	91.0	45.0	-	129	8.9	42.0
Chrysene	0.028	0.067	1.62		mg/Kg	1.67	97.0	44.0	-	129	9.0	42.0
Benzo(b)fluoranthene	0.038	0.067	1.56		mg/Kg	1.67	93.4	45.0	-	122	11	39.0
Benzo(k)fluoranthene	0.034	0.067	1.63		mg/Kg	1.67	97.6	43.0	-	124	11	40.0
Benzo(a)pyrene	0.035	0.067	1.49		mg/Kg	1.67	89.2	39.0	-	116	11	39.0
Indeno(1,2,3-cd)pyrene	0.028	0.067	1.42		mg/Kg	1.67	85.0	41.0	-	125	16	42.0
Dibenzo(a,h)anthracene	0.023	0.067	1.64		mg/Kg	1.67	98.2	40.0	-	123	12	42.0
Benzo(g,h,i)perylene	0.020	0.067	1.48		mg/Kg	1.67	88.6	34.0	-	120	12	43.0
Nitrobenzene-d5			93.2		%	100	93.2	12.0	-	104		
2-Fluorobiphenyl			97.6		%	100	97.6	26.0	-	110		
p-Terphenyl-d14			105		%	100	105	39.0	-	120		
QA/QC Type: MS	Lab Sample ID: SPAHA101019MS				Client Sample ID: 252548MS					Date Analyzed: 10/12/2019 4:19:00 AM		
Naphthalene	0.027	0.078	1.63		mg/Kg	1.95	83.6	6.70	-	125		
Acenaphthylene	0.036	0.078	1.79		mg/Kg	1.95	91.8	28.0	-	111		
Acenaphthene	0.048	0.078	1.63		mg/Kg	1.95	83.6	35.0	-	115		
Fluorene	0.040	0.078	1.67		mg/Kg	1.95	85.6	35.0	-	117		
Phenanthrene	0.048	0.078	1.74		mg/Kg	1.95	89.2	39.0	-	125		
Anthracene	0.053	0.078	1.75		mg/Kg	1.95	89.7	37.0	-	118		
Fluoranthene	0.047	0.078	1.67		mg/Kg	1.95	85.6	34.0	-	122		
1-Methylnaphthalene	0.029	0.078	1.58		mg/Kg	1.95	81.0	27.0	-	110		

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SPAHA101019
Method Batch ID: MSPAHA101019
Analysis Method: EPA 8270/PAH Low Level
Preparation Type: 3550
Preparation Date: 10/10/2019 1:00:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MS	Lab Sample ID: SPAHA101019MS			Client Sample ID: 252548MS				Date Analyzed: 10/12/2019 4:19:00 AM				
2-Methylnaphthalene	0.030	0.078	1.60		mg/Kg	1.95	82.1	30.0	-	103		
Pyrene	0.047	0.078	1.64		mg/Kg	1.95	84.1	35.0	-	126		
Benzo(a)anthracene	0.036	0.078	1.52		mg/Kg	1.95	77.9	33.0	-	123		
Chrysene	0.033	0.078	1.72		mg/Kg	1.95	88.2	31.0	-	125		
Benzo(b)fluoranthene	0.044	0.078	1.64		mg/Kg	1.95	84.1	30.0	-	121		
Benzo(k)fluoranthene	0.040	0.078	1.70		mg/Kg	1.95	87.2	30.0	-	121		
Benzo(a)pyrene	0.041	0.078	1.56		mg/Kg	1.95	80.0	27.0	-	109		
Indeno(1,2,3-cd)pyrene	0.033	0.078	1.58		mg/Kg	1.95	81.0	30.0	-	117		
Dibenzo(a,h)anthracene	0.027	0.078	1.72		mg/Kg	1.95	88.2	30.0	-	115		
Benzo(g,h,i)perylene	0.023	0.078	1.50		mg/Kg	1.95	76.9	22.0	-	111		
Nitrobenzene-d5			83.3		%	100	83.3	12.0	-	104		
2-Fluorobiphenyl			89.9		%	100	89.9	26.0	-	110		
p-Terphenyl-d14			92.7		%	100	92.7	39.0	-	120		
QA/QC Type: MSD	Lab Sample ID: SPAHA101019MSD			Client Sample ID: 252548MSD				Date Analyzed: 10/12/2019 4:56:00 AM				
Naphthalene	0.027	0.078	1.54		mg/Kg	1.95	79.0	6.70	-	125	5.7	59.0
Acenaphthylene	0.036	0.078	1.70		mg/Kg	1.95	87.2	28.0	-	111	5.2	41.0
Acenaphthene	0.048	0.078	1.58		mg/Kg	1.95	81.0	35.0	-	115	3.1	40.0
Fluorene	0.040	0.078	1.59		mg/Kg	1.95	81.5	35.0	-	117	4.9	41.0
Phenanthrene	0.048	0.078	1.64		mg/Kg	1.95	84.1	39.0	-	125	5.9	43.0
Anthracene	0.053	0.078	1.66		mg/Kg	1.95	85.1	37.0	-	118	5.3	40.0
Fluoranthene	0.047	0.078	1.59		mg/Kg	1.95	81.5	34.0	-	122	4.9	44.0
1-Methylnaphthalene	0.029	0.078	1.51		mg/Kg	1.95	77.4	27.0	-	110	4.5	42.0
2-Methylnaphthalene	0.030	0.078	1.54		mg/Kg	1.95	79.0	30.0	-	103	3.8	36.0
Pyrene	0.047	0.078	1.57		mg/Kg	1.95	80.5	35.0	-	126	4.4	46.0
Benzo(a)anthracene	0.036	0.078	1.47		mg/Kg	1.95	75.4	33.0	-	123	3.3	45.0
Chrysene	0.033	0.078	1.66		mg/Kg	1.95	85.1	31.0	-	125	3.6	47.0
Benzo(b)fluoranthene	0.044	0.078	1.58		mg/Kg	1.95	81.0	30.0	-	121	3.7	46.0
Benzo(k)fluoranthene	0.040	0.078	1.59		mg/Kg	1.95	81.5	30.0	-	121	6.7	46.0
Benzo(a)pyrene	0.041	0.078	1.49		mg/Kg	1.95	76.4	27.0	-	109	4.6	41.0
Indeno(1,2,3-cd)pyrene	0.033	0.078	1.51		mg/Kg	1.95	77.4	30.0	-	117	4.5	44.0
Dibenzo(a,h)anthracene	0.027	0.078	1.63		mg/Kg	1.95	83.6	30.0	-	115	5.4	42.0
Benzo(g,h,i)perylene	0.023	0.078	1.43		mg/Kg	1.95	73.3	22.0	-	111	4.8	44.0
Nitrobenzene-d5			79.1		%	100	79.1	12.0	-	104		
2-Fluorobiphenyl			84.0		%	100	84.0	26.0	-	110		

Preparation Batch ID: SPAHA101019 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA101019 | Preparation Date: 10/10/2019 1:00:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MSD	Lab Sample ID: SPAHA101019MSD				Client Sample ID: 252548MSD						Date Analyzed: 10/12/2019 4:56:00 AM	
p-Terphenyl-d14			88.6		%	100	88.6	39.0	-	120		
QA/QC Type: DUP	Lab Sample ID: SPAHA101019DUP				Client Sample ID: 252328DUP						Date Analyzed: 10/12/2019 3:41:00 AM	
Naphthalene	0.025	0.071	0.025	U	mg/Kg						0	59.0
Acenaphthylene	0.033	0.071	0.033	U	mg/Kg						0	41.0
Acenaphthene	0.044	0.071	0.044	U	mg/Kg						0	40.0
Fluorene	0.036	0.071	0.036	U	mg/Kg						0	41.0
Phenanthrene	0.044	0.071	0.53		mg/Kg						28	43.0
Anthracene	0.048	0.071	0.15		mg/Kg						31	40.0
Fluoranthene	0.043	0.071	2.1		mg/Kg						27	44.0
1-Methylnaphthalene	0.027	0.071	0.027	U	mg/Kg						0	42.0
2-Methylnaphthalene	0.028	0.071	0.028	U	mg/Kg						0	36.0
Pyrene	0.043	0.071	1.7		mg/Kg						27	46.0
Benzo(a)anthracene	0.033	0.071	1.0		mg/Kg						22	45.0
Chrysene	0.030	0.071	1.5		mg/Kg						22	47.0
Benzo(b)fluoranthene	0.040	0.071	2.1		mg/Kg						21	46.0
Benzo(k)fluoranthene	0.036	0.071	0.69		mg/Kg						14	46.0
Benzo(a)pyrene	0.037	0.071	1.5		mg/Kg						22	41.0
Indeno(1,2,3-cd)pyrene	0.030	0.071	1.5		mg/Kg						14	44.0
Dibenzo(a,h)anthracene	0.025	0.071	0.27		mg/Kg						20	42.0
Benzo(g,h,i)perylene	0.021	0.071	1.3		mg/Kg						8.0	44.0
Nitrobenzene-d5			91.2		%	100	91.2	12.0	-	104		
2-Fluorobiphenyl			98.5		%	100	98.5	26.0	-	110		
p-Terphenyl-d14			95.6		%	100	95.6	39.0	-	120		

Comments:

Preparation Batch ID: SPROA100919 | Analysis Method: FDEP FL-PRO | Preparation Type: 3550

Method Batch ID: MSPROA100919 | Preparation Date: 10/9/2019 11:00:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPROA100919MB				Client Sample ID: SPROA100919MB						Date Analyzed: 10/10/2019 7:03:00 PM	
Total Recoverable Pet. Hydrocarbons	3.3	17	3.3	U	mg/Kg							

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SPROA100919 | Analysis Method: FDEP FL-PRO | Preparation Type: 3550

Method Batch ID: MSPROA100919 | Preparation Date: 10/9/2019 11:00:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPROA100919MB				Client Sample ID: SPROA100919MB						Date Analyzed: 10/10/2019 7:03:00 PM	
Ortho-terphenyl			107		%	100	107	62.0	-	109		
Nonatriacontane(C39)			70.6		%	100	70.6	60.0	-	118		
QA/QC Type: LCS	Lab Sample ID: SPROA100919LCS				Client Sample ID: SPROA100919LCS						Date Analyzed: 10/10/2019 5:46:00 PM	
Total Recoverable Pet. Hydrocarbons	3.3	17	21.5		mg/Kg	28.3	76.0	63.0	-	153		
Ortho-terphenyl			101		%	100	101	62.0	-	109		
Nonatriacontane(C39)			107		%	100	107	60.0	-	118		
QA/QC Type: LCSD	Lab Sample ID: SPROA100919LCSD				Client Sample ID: SPROA100919LCSD						Date Analyzed: 10/10/2019 6:25:00 PM	
Total Recoverable Pet. Hydrocarbons	3.3	17	22.7		mg/Kg	28.3	80.2	63.0	-	153	5.4	25.0
Ortho-terphenyl			100		%	100	100	62.0	-	109		
Nonatriacontane(C39)			67.7		%	100	67.7	60.0	-	118		
QA/QC Type: DUP	Lab Sample ID: SPROA100919DUP				Client Sample ID: 252547DUP						Date Analyzed: 10/17/2019 10:37:00 AM	
Total Recoverable Pet. Hydrocarbons	40	200	4000		mg/Kg						13	25.0

Comments:

Chain of Custody Record

Closure

Company:	AET-L
Address:	4265 New Tampa Hwy Lakeland FL
Telephone Number:	Telefax Number:
Sampled by [Print Name(s)] / Affiliation	Val Popeca / H. Popeca / AET
Sampler(s) Signature(s)	

Environmental Testing Laboratories, Inc.
412 W. Walcott Street
Thomasville, GA 31792-4359
229/228-2592 (telephone)
229/228-2594 (telefax)
www.etl-inc.com

Page	2 of 2
Project Name:	CK# 2721430
Project Number:	27473.01
Project Manager:	A. Sanchez
Facility ID Number:	980997716
REQUESTED DUE DATE	/ /

Item No.	Field ID No.	Sample Date	Sample Time	Grab or Composite	Matrix (see Codes)	Number of Containers	SPLP VOC 1312/8260	BTEX M 8260	MADEP MA VPH 8015	MADEP MA EPH 8015	PHENANTHRENE/1-MN 8270/FL-PRO	SVOC Bulk 8270	Remarks	Lab Number
	SB-DISP 15/16	10/7/14	1:30 pm	2'	SO	10	X	X	X	X	X	X		252512
	SB DISP 13/14		2:00 pm											513
	SB DISP 11/12		2:53 pm											514
	SB DISP 9/10		3:11 pm											515
	SB DISP 7/8		4:25 pm											516
	SB DISP 5/6		4:41 pm											517
	SB DISP 1/2		5:13 pm											518
	SB DISP 3/4		5:31 pm											519

Shipment Method | Total Number of Containers: 90 | ← Preservatives (see Codes) | ICE: ☑ Yes ☐ No

			Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
Out:	/ /	Via:							
Returned:	/ /	Via:		AET	10-8-14	12:30	R. WHIDDON	10-8-14	12:30
Additional Comments:				R. Whidden	10-8-15	16:05			

Cooler Number(s) / Temperature(s) (*C)	Sampling Kit Number	Received in Lab By:	Date	Time
2/ice/4.3, 4.8		BER	10-8-14	16:05

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

PRESERVATIVE CODES: H = Hydrochloric acid S = Sulfuric acid N = Nitric Na = Sodium Hydroxide O = Other (specify)

PRESERVATIVE CODES: SOIL VOCS MS = Methanol / Sodium Bisulfate MD = Methanol / DI Water

ETL PROJECT NO. 14-3661

closure

Chain of Custody Record

Company: AET-L	**Environmental Testing Laboratories, Inc.**
Address: 4265 New Tampa Hwy Lakeland	412 W. Walcott Street, Thomasville, GA 31792-4359
Telephone Number: Telefax Number:	229/228-2592 (telephone) 229/228-2594 (telefax)
Sampled by [Print Name(s)] / Affiliation: Vu / Popoca / H. Popoca / AET	www.etl-inc.com
Sampler(s) Signature(s):	

ENVIRONMENTAL TESTING LABORATORIES, INC.

Page	1 of 2
Project Name:	CK# 272-1430
Project Number:	27473.01
Project Manager:	A. Sanchez
Facility ID Number:	9809776
REQUESTED DUE DATE	/ /

Item No.	Field ID No.	Sample Date	Sample Time	Grab or Composite	Matrix (see Codes)	Number of Containers	SPLP VOC 1312/8260	BTEXN 8260	Mod PH 8015	Mod EPH 8015	PHTRPH-DRO 8270/FL-PRO	SPLP Boilr 8270	Remarks	Lab Number
	SB-DSL Sump	10/8/19	10:25	2Ft	SO	10	X	X	X	X	X	X		252507
	SB-PRM Sump		11:21	4Ft		10								508
	SB-Spill bucket SD-PRM		11:39	2Ft		10								509
	SB-PRM/W		12:10	4Ft		10								510
	SB-RW1/W		12:13	4Ft		10								511

Analyses Requested

Shipment Method	Total Number of Containers	~~11~~ 50	← Preservatives (see Codes)	ICE: ☑ Yes ☐ No

		Via:	Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
Out:	/ /								
Returned:	/ /			AET	10-8-19	12:30	R. Whidden	10-8-19	12:30
Additional Comments:				R Whidden	10-8-19	16:45			
			Cooler Number(s) / Temperature(s) (°C)		Sampling Kit Number		Received in Lab By:		
				2/Ice/4.3, 4.8			BR	10-8-19	16:05

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

PRESERVATIVE CODES: H = Hydrochloric acid S = Sulfuric acid N = Nitric Na = Sodium Hydroxide O = Other (specify)

PRESERVATIVE CODES: SOIL VOCS MS = Methanol / Sodium Bisulfate MD = Methanol / DI Water

ETL PROJECT NO. 19-3661

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

19-3661

Project Details

Client: ADVANCED ENVIRONMENTAL TECHNOLOGIES

Project Name: CK #2721430

Shipping and Receiving

Date/Time Received: 10/8/2019 4:05:00 PM

Sampling Personnel: VP,HP

Shipping Method: Laboratory Courier

Shipping Tracking Number:

If present, were cooler custody seals intact?

○ Yes ○ No ◉ N/A

If present, were sample bottle custody seals intact

○ Yes ○ No ◉ N/A

Thermal Preservation

Cooler Temp Method: Sample Temperature

Thermometer ID: 16032413

Number of Coolers: 2

Were cooler temperatues in compliance? (0.1-6.0C)

◉ Yes ○ No ○ N/A

Cooler Temperatures: 4.3/4.8

Chain of Custody

Was the chain-of-custody received in coolers?	◉ Yes	○ No	○ N/A
Was the chain-of-custody signed and properly relinquished?	◉ Yes	○ No	○ N/A
Does the chain-of-custody agree with samples and analyses?	◉ Yes	○ No	○ N/A

Container Receipt

Were samples received in appropriate bottleware for analyses?	◉ Yes	○ No	○ N/A
Was sufficient volume submitted for analyses requested?	◉ Yes	○ No	○ N/A
Were samples received within method holding times?	◉ Yes	○ No	○ N/A
Were VOA vials received with zero headspace?	◉ Yes	○ No	○ N/A
Were aqeuous samples received at an acceptable pH?	◉ Yes	○ No	○ N/A

pH Test Strip Lot: HC989495

Comments

ONE MAVPH SAMPLE (SB-DISP 15/16) DRY

I certify I have answered the questions contained herein to the best of my knowledge and have affixed labels with unique IDs onto each sample container received. I certify any discrepancies regarding the samples as received by the laboratory have been documented completely in the comments section of this form.

Brandon Ray

ENVIRONMENTAL TESTING LABORATORIES Inc

Project Receipt Summary

19-3661

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
252507	**SB-DSL SUMP**	**SOILS**	☐	☐	☐
252507-A1 (BTEXM)					
252507-A2 (BTEXM)					
252507-A3 (BTEXM)					
252507-A4 (MaVPH)					
252507-A5 (MaVPH)					
252507-A6 (MaVPH)					
252507-B1 (MaEPH)					
252507-B2 (PAH/TRPH-FL-PR/%M)					
252507-D1 (SPLP VOC)					
252507-D2 (SPLP Bulk)					
252508	**SB-PRM SUMP**	**SOILS**	☐	☐	☐
252508-A1 (MaVPH)					
252508-A2 (MaVPH)					
252508-A3 (MaVPH)					
252508-A4 (BTEXM)					
252508-A5 (BTEXM)					
252508-A6 (BTEXM)					
252508-B1 (MaEPH)					
252508-B2 (PAH/TRPH-FL-PR/%M)					
252508-D1 (SPLP VOC)					
252508-D2 (SPLP Bulk)					
252509	**SB-PRM SPILL BUCKET**	**SOILS**	☐	☐	☐
252509-A1 (BTEXM)					
252509-A2 (BTEXM)					
252509-A3 (BTEXM)					
252509-A4 (MaVPH)					
252509-A5 (MaVPH)					
252509-A6 (MaVPH)					
252509-B1 (MaEPH)					
252509-B2 (PAH/TRPH-FL-PR/%M)					
252509-D1 (SPLP VOC)					
252509-D2 (SPLP Bulk)					
252510	**SB-PRM/W**	**SOILS**	☐	☐	☐
252510-A1 (BTEXM)					
252510-A2 (BTEXM)					
252510-A3 (BTEXM)					
252510-A4 (MaVPH)					

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
252510-A5 (MaVPH)					
252510-A6 (MaVPH)					
252510-B1 (MaEPH)					
252510-B2 (PAH/TRPH-FL-PR/%M)					
252510-D1 (SPLP VOC)					
252510-D2 (SPLP Bulk)					
252511	**SB-RU1/W**	**SOILS**	☐	☐	☐
252511-A1 (MaVPH)					
252511-A2 (MaVPH)					
252511-A3 (MaVPH)					
252511-A4 (BTEXM)					
252511-A5 (BTEXM)					
252511-A6 (BTEXM)					
252511-B1 (MaEPH)					
252511-B2 (PAH/TRPH-FL-PR/%M)					
252511-D1 (SPLP VOC)					
252511-D2 (SPLP Bulk)					
252512	**SB-DISP 15/16**	**SOILS**	☐	☐	☐
252512-A1 (BTEXM)					
252512-A2 (BTEXM)					
252512-A3 (BTEXM)					
252512-A4 (MaVPH)					
252512-A5 (MaVPH)					
252512-A6 (MaVPH)					
252512-B1 (PAH/TRPH-FL-PR/%M)					
252512-B2 (MaEPH)					
252512-D1 (SPLP VOC)					
252512-D2 (SPLP Bulk)					
252513	**SB-DISP 13/14**	**SOILS**	☐	☐	☐
252513-A1 (BTEXM)					
252513-A2 (BTEXM)					
252513-A3 (BTEXM)					
252513-A4 (MaVPH)					
252513-A5 (MaVPH)					
252513-A6 (MaVPH)					
252513-B1 (MaEPH)					
252513-B2 (PAH/TRPH-FL-PR/%M)					
252513-D1 (SPLP VOC)					

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
252513-D2 (SPLP Bulk)					
252514	**SB-DISP 11/12**	**SOILS**	☐	☐	☐
252514-A1 (BTEXM)					
252514-A2 (BTEXM)					
252514-A3 (BTEXM)					
252514-A4 (MaVPH)					
252514-A5 (MaVPH)					
252514-A6 (MaVPH)					
252514-B1 (MaEPH)					
252514-B2 (PAH/TRPH-FL-PR/%M)					
252514-D1 (SPLP VOC)					
252514-D2 (SPLP Bulk)					
252515	**SB-DISP 9/10**	**SOILS**	☐	☐	☐
252515-A1 (BTEXM)					
252515-A2 (BTEXM)					
252515-A3 (BTEXM)					
252515-A4 (MaVPH)					
252515-A5 (MaVPH)					
252515-A6 (MaVPH)					
252515-B1 (MaEPH)					
252515-B2 (PAH/TRPH-FL-PR/%M)					
252515-D1 (SPLP VOC)					
252515-D2 (SPLP Bulk)					
252516	**SB-DISP 7/8**	**SOILS**	☐	☐	☐
252516-A1 (BTEXM)					
252516-A2 (BTEXM)					
252516-A3 (BTEXM)					
252516-A4 (MaVPH)					
252516-A5 (MaVPH)					
252516-A6 (MaVPH)					
252516-B1 (MaEPH)					
252516-B2 (PAH/TRPH-FL-PR/%M)					
252516-D1 (SPLP VOC)					
252516-D2 (SPLP Bulk)					
252517	**SB-DISP 5/6**	**SOILS**	☐	☐	☐
252517-A1 (BTEXM)					
252517-A2 (BTEXM)					

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
252517-A3 (BTEXM)					
252517-A4 (MaVPH)					
252517-A5 (MaVPH)					
252517-A6 (MaVPH)					
252517-B1 (MaEPH)					
252517-B2 (PAH/TRPH-FL-PR/%M)					
252517-D1 (SPLP VOC)					
252517-D2 (SPLP Bulk)					
252518	**SB-DISP 1/2**	**SOILS**	☐	☐	☐
252518-A1 (BTEXM)					
252518-A2 (BTEXM)					
252518-A3 (BTEXM)					
252518-A4 (MaVPH)					
252518-A5 (MaVPH)					
252518-A6 (MaVPH)					
252518-B1 (PAH/TRPH-FL-PR/%M)					
252518-B2 (MaEPH)					
252518-D1 (SPLP VOC)					
252518-D2 (SPLP Bulk)					
252519	**SB-DISP 3/4**	**SOILS**	☐	☐	☐
252519-A1 (BTEXM)					
252519-A2 (BTEXM)					
252519-A3 (BTEXM)					
252519-A4 (MaVPH)					
252519-A5 (MaVPH)					
252519-A6 (MaVPH)					
252519-B1 (MaEPH)					
252519-B2 (PAH/TRPH-FL-PR/%M)					
252519-D1 (SPLP VOC)					
252519-D2 (SPLP Bulk)					

ENVIRONMENTAL TESTING LABORATORIES inc

Project Receipt Summary

19-3661

Project Bottle Count Summary

Container Type	Preservative	Number of Containers
25g Encore Sampler	NONE	13
40mL VOA Vial	MeOH/ICE	52
40mL VOA Vial w/ Stirbar	DiH2O/ICE	26
Glass Jar	NONE	39
	Total	130

March 31, 2021

Ms. Jean Richards
Duval County / City of Jacksonville
Environmental Quality Division (EQD)
214 North Hogan Street, 5th Floor
Jacksonville, Florida 32202
VIA EMAIL ONLY: JeanR@coj.net

RE: **STP Sump Closure Assessment Report**
Circle K #2721430
13957 Main Street North
Jacksonville, Duval County, Florida
FDEP Facility ID # 16/9809776
AET Project # 27473.00

Dear Ms. Richards:

Advanced Environmental Technologies, LLC (AET) is pleased to provide this report detailing the recent closure soil sampling activities performed at the referenced facility. AET performed soil sampling activities on March 23, 2021, which included the collection of soil samples for organic vapor analysis (OVA) and the collection of soil samples for laboratory analysis. All work was performed in general accordance with Chapter 62-761, Florida Administrative Code (F.A.C.) and Florida Department of Environmental Protection's (FDEP) *Instructions for Conducting Sampling During Underground Storage Tank Closure* dated July 2019. The following attachments are included with this report:

Figure 1	Site Map with Soil Analytical Data
Table 1	Soil Screening Summary
Table 2A	Soil Analytical Summary – VOAs, TRPHs and Metals
Table 2B	Soil Analytical Summary – Non-Carcinogenic PAHs
Table 2C	Soil Analytical Summary – Carcinogenic PAHs
Appendix A	Closure Sampling Field Notes
Appendix B	Soil Laboratory Analytical Reports

Site Location

The subject site is an active gasoline service station located at 13957 Main Street North, in Jacksonville, Duval County, Florida. **Figure 1** illustrates the general site configuration including the tanks, dispenser islands, and the soil boring locations.

Site History

The subject facility has had a documented history of petroleum storage in underground storage tanks (USTs) since September 2007, when one 21,000-gallon and one 20,000-gallon USTs containing unleaded gasoline and diesel were installed. These tanks are currently being utilized on site.

The subject facility has had three Incident Notification Forms (INFs) filed; however, no discharges have been reported. Annual inspection reports for the UST system were available to review since 2009.

Soil Sampling and Laboratory Analytical Results

On March 23, 2021, AET personnel conducted soil sampling adjacent to the premium STP sump 2 and the diesel STP sump. Soil samples were collected at two and four feet below land surface (bls) for OVA screening with a MiniRAE 3000 Photoionization Device (PID). OVA screening results reported all readings below ten parts per million (**Table 1**). Groundwater was not encountered during the soil sampling activities. A copy of the closure sampling field notes is provided in **Appendix A**.

To confirm the OVA screening results, a soil sample was collected for laboratory analysis adjacent to the premium STP sump 2 and the diesel STP sump at two to four feet bls. The collected samples were placed into laboratory-provided containers, labeled, packed on ice in a cooler, and shipped under chain-of-custody protocol to a State of Florida approved, NELAC certified laboratory (Environmental Testing Laboratories, Inc.), for analysis according to US Environmental Protection Agency (EPA) Method 8260 for benzene, toluene, ethylbenzene, total xylenes, and methyl tert-butyl ether (BTEX/MTBE), EPA Method 8270 for polycyclic aromatic hydrocarbons (PAHs), and the FL-PRO Method for total recoverable petroleum hydrocarbons (TRPHs). A copy of the laboratory analytical reports and chain-of-custody record is provided in **Appendix B**.

Soil analytical results indicated that all the analyte concentrations were below their respective Chapter 62-777 FAC soil cleanup target levels (SCTLs) for leachability based on groundwater exposure and direct exposure (**Tables 2A through 2C**).

Quality Assurance and Quality Control

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

Conclusions

- Field OVA screening yielded a maximum response of zero parts per million (reference **Table 1**).
- Groundwater was not encountered during this investigation.
- A soil sample was collected for laboratory analysis adjacent to the premium STP sump 2 and the

diesel STP sump and analyzed for petroleum constituents.

- Laboratory analytical results indicated that all analyte concentrations were below their respective Ch. 62-777 FAC SCTLs (reference **Table 2A** through **2C**).
- Based on the data collected, a petroleum release related to the premium STP sump 2 and the diesel STP sump has not occurred.

Recommendations

Based on the March 2021 soil laboratory analytical results, AET recommends that no further assessment is warranted at this time.

Should you have any questions regarding this Closure Assessment Report or require additional information, please contact the undersigned at (850) 270-6153 or jblanton@aetllc.com.

Sincerely,
Advanced Environmental Technologies, LLC



Jay Blanton, P.E.
Project Manager

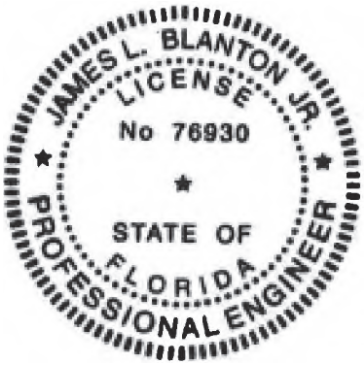
Statement of Professional Review

STP Sump Closure Assessment Report
Circle K #2721430
13957 Main Street North
Jacksonville, Duval County, Florida
FDEP Facility ID #: 16/9809776
AET Project #: 27473.03

I, J. Blanton, PE # 76930, certify that I currently hold an active license in the state of Florida and am competent through education and experience to provide the engineering service contained in this report. I further certify that, in my professional judgment, the components of this report satisfy the requirements set forth in Chapter 62-761, Florida Administrative Code (FAC) and was prepared by me or under my responsible charge. Moreover, I certify that AET holds an active Certificate of Authorization # 8215 to provide this engineering service. No warranties are implied or intended.

_____ I personally prepared this document

__X__ This document was prepared by ____Gabrielle Brooks, Staff Engineer____ working under my direct supervision



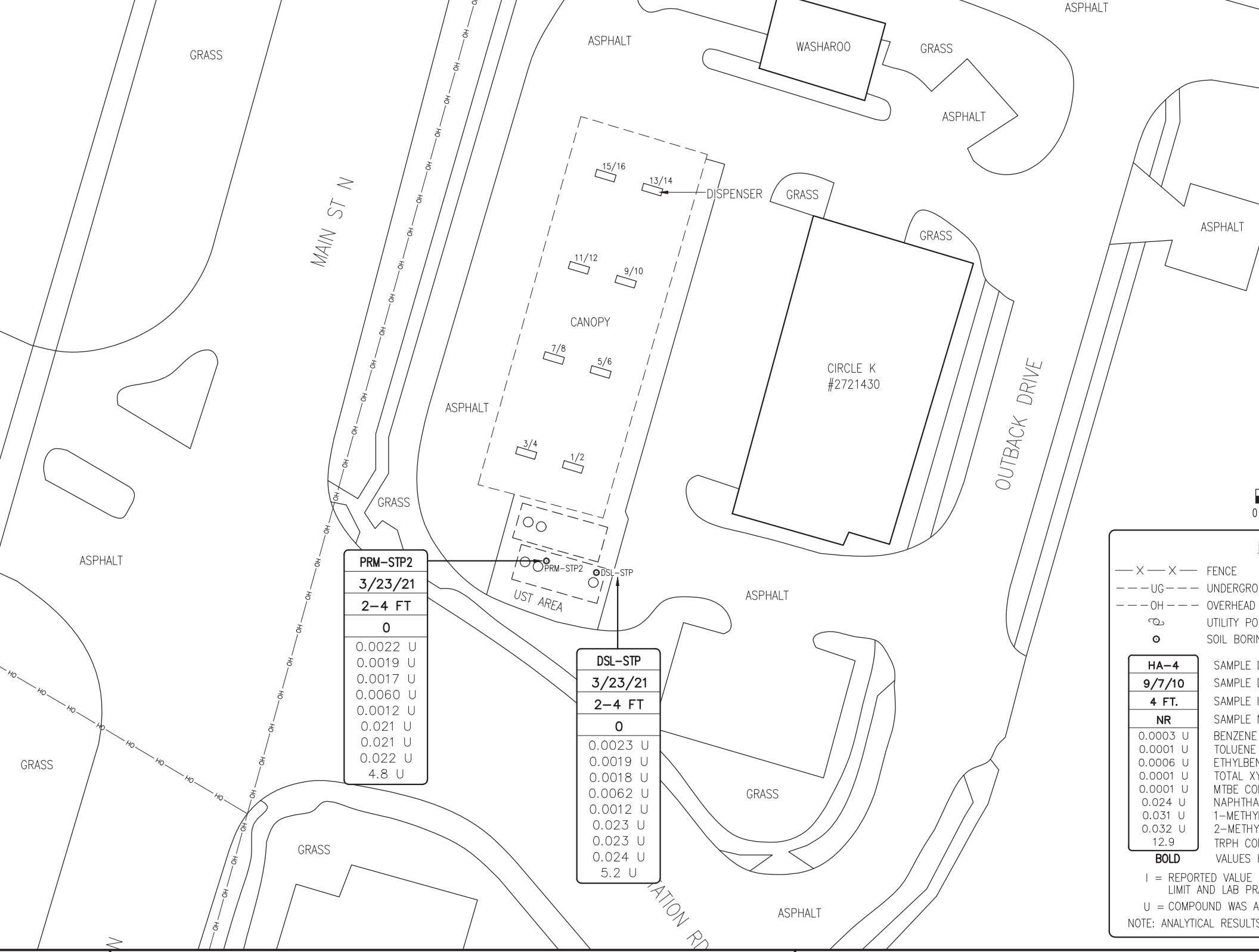
Digitally signed by: J. Blanton
Date: 2021.03.31 16:03:19 -04'00'

J. L. Blanton Jr., P.E.
Florida License No. 76930
Advanced Environmental Technologies, LLC
CA# 8215

This item has been electronically signed and sealed by J. L. Blanton Jr., P.E. on March 31, 2021 using a SHA-1 authentication code.

Printed copies of this document are not considered signed and sealed and all SHA-1 authentication codes must be verified on any electronic copies.

FIGURES


GRASS
ASPHALT
WASHAROO
GRASS
ASPHALT
ASPHALT
MAIN ST N
15/16
13/14
DISPENSER
GRASS
GRASS
ASPHALT
11/12
9/10
CANOPY
7/8
5/6
CIRCLE K
#2721430
OUTBACK DRIVE
ASPHALT
3/4
1/2
GRASS
ASPHALT
PRM-STP2
DSL-STP
UST AREA
ASPHALT
PRM-STP2
3/23/21
2-4 FT
0
0.0022 U
0.0019 U
0.0017 U
0.0060 U
0.0012 U
0.021 U
0.021 U
0.022 U
4.8 U
DSL-STP
3/23/21
2-4 FT
0
0.0023 U
0.0019 U
0.0018 U
0.0062 U
0.0012 U
0.023 U
0.023 U
0.024 U
5.2 U
GRASS
GRASS
ASPHALT
— X — X — FENCE
— — — UG — — — UNDERGRO
— — — OH — — — OVERHEAD
UTILITY PO
SOIL BORIN
HA-4
9/7/10
4 FT.
NR
0.0003 U BENZENE
0.0001 U TOLUENE
0.0006 U ETHYLBEN
0.0001 U TOTAL XY
0.0001 U MTBE CO
0.024 U NAPHTHA
0.031 U 1-METHY
0.032 U 2-METHY
12.9 TRPH CO
BOLD VALUES
I = REPORTED VALUE
LIMIT AND LAB PR
U = COMPOUND WAS A
NOTE: ANALYTICAL RESULTS

TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility ID#: 16/9809776 **Facility Name: CK #2721430** **See notes at end of table.**

SAMPLE				OVA SCREENING RESULTS			COMMENTS
BORING NO.	DATE COLLECTED	Depth to Water (ft bls)	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	
DSP -STP	3/23/2021		0-2	--	--	0	
			2-4	--	--	0	Lab Sample Collected
PRM-STP 2	3/23/2021		0-2	--	--	0	
			2-4	--	--	0	Lab Sample Collected

FBLS = Feet Below Land Surface
ppm = Parts Per Million

TABLE 2A: SOIL ANALYTICAL SUMMARY - VOAs, TRPHs and Metals

Facility ID#: 16/9809776 **Facility Name: CK #2721430**

See notes at end of table.

Sample				OVA	Laboratory Analyses										
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (mg/kg)	Ethyl-benzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)	Arsenic (mg/kg)	Cad-mium (mg/kg)	Chro-mium (mg/kg)	Lead (mg/kg)	Comments
DSL-STP @ 2-4'	3/23/2021		2-4	0	0.0023 U	0.0018 U	0.0019 U	0.0062 U	0.0012 U	5.2 U					
PRM-STP2 @ 2-4'	3/23/2021		2-4	0	0.0022 U	0.0017 U	0.0019 U	0.0060 U	0.0012 U	4.8 U					
Leachability Based on Groundwater Criteria (mg/kg)					0.007	0.6	0.5	0.2	0.09	340	*	7.5	38	*	
Direct Exposure Residential (mg/kg)					1.2	1,500	7,500	130	4,400	460	2.1	82	210	400	

Notes: NA = Not Available.

NS = Not Sampled.

* = Leachability value may be determined using TCLP.

TABLE 2B: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility ID#: 16/9809776 **Facility Name: CK #2721430**

See notes at end of table.

Sample				OVA	Laboratory Analyses											
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph-thalene (mg/kg)	1-Methyl-naph-thalene (mg/kg)	2-Methyl-naph-thalene (mg/kg)	Acen-aph-thene (mg/kg)	Acen-aph-thylene (mg/kg)	Anthra-cene (mg/kg)	Benzo (g,h,i) pery-lene (mg/kg)	Fluoran-thene (mg/kg)	Fluor-ene (mg/kg)	Phenan-threne (mg/kg)	Pyrene (mg/kg)	Comments
DSL-STP @ 2-4'	3/23/2021		2-4	0	0.023 U	0.023 U	0.024 U	0.036 U	0.028 U	0.036 U	0.025 U	0.031 U	0.032 U	0.034 U	0.031 U	
PRM-STP2 @ 2-4'	3/23/2021		2-4	0	0.021 U	0.021 U	0.022 U	0.033 U	0.026 U	0.033 U	0.023 U	0.028 U	0.029 U	0.032 U	0.028 U	
Leachability Based on Groundwater Criteria (mg/kg)					1.2	3.1	8.5	2.1	27	2,500	32,000	1,200	160	250	880	
Direct Exposure Residential (mg/kg)					55	200	210	2,400	1,800	21,000	2,500	3,200	2,600	2,200	2,400	

Notes: NA = Not Available.
NS = Not Sampled.

TABLE 2C: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs

Facility ID#: 16/9809776 **Facility Name: CK #2721430** **See notes at end of table.**

Sample				OVA	Laboratory Analyses								
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthra-cene (mg/kg)	Benzo (b) fluoran-thene (mg/kg)	Benzo (k) fluoran-thene (mg/kg)	Chry-sene (mg/kg)	Dibenz (a,h) anthra-cene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	Comments
DSL-STP @ 2-4'	3/23/2021		2-4	0	0.031 U	0.026 U	0.036 U	0.027 U	0.024 U	0.021 U	0.026 U		
PRM-STP2 @ 2-4'	3/23/2021		2-4	0	0.028 U	0.024 U	0.033 U	0.025 U	0.022 U	0.020 U	0.024 U		
Leachability Based on Groundwater Criteria (mg/kg)					8	0.8	2.4	24	77	0.7	6.6	**	
Direct Exposure Residential (mg/kg)					0.1	#	#	#	#	#	#	0.1	

Notes: NA = Not Available.
NS = Not Sampled.
** = Leachability value not applicable.
# = Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent.

APPENDIX B
SOIL LABORATORY ANALYTICAL REPORTS

FINAL
ANALYTICAL REPORT

ETL PROJECT ID: 21-1131 **3/31/2021 - Revision 0**

JAY BLANTON
ADVANCED ENVIRONMENTAL TECHNOLOGIES
4864 CORLETT STREET
TALLAHASSEE, FL 32303-
TEL: (850) 385-2010
FAX: (850) 385-2423

CLIENT PROJECT NAME: CK #2721430
CLIENT PROJECT ID: 27473.03
FACILITY ID: 16-9809776

Enclosed are the analytical results for sample(s) received by Environmental Testing Laboratories on March 24, 2021. Results reported herein are reported on an as received basis and conform to current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Sample analyses performed by Environmental Testing Laboratories, Inc. (ETL) unless otherwise noted. ETL is accredited through NELAC and the Florida Department of Health, Certification #E87684. Scope of analyses: RCRA/CERCLA Metals, General Chemistry, Extractable Organics, and Volatile Organics. Effective Dates: February 14, 2002 through June 30, 2021.

This report shall not be reproduced, except in full, without the written consent of Environmental Testing Laboratories, Inc. This report has been signed and authorized by the signatory using an electronic signature and is intended to be the legally binding equivalent of a traditionally handwritten signature.

Authorized for release by:

ENVIRONMENTAL TESTING LABORATORIES INC

412 W. Walcott Street | Thomasville, GA 31792 | Phone: (229)-228-2592 | Fax: (229)-228-2594

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Laboratory Qualifiers

!	Data deviate from historically established concentration ranges.
#	Surrogate compound inadvertently omitted.
$	Due to dilution, surrogate compound was not detected.
*****	Not reported due to interference
?	Data are rejected as should not be used.
A	Value reported is the arithmetic mean (average) of two or more determinations.
B	Results based upon colony counts outside the acceptable range.
D	Measurement made in the field.
E	Extra samples were taken at composite stations.
F	When reporting species, F indicates the female sex.
H	Value based on fied kit determination; results may not be accurate.
I	The reported value is between the laboratory method detection limit and the laboratory practical
J	Estimated value.
K	Off-scale low. Actual value is known to be less than the value given.
L	Off-scale high. Actual value is known to be greater than the value given.
M	Presence of material is verified but not quantified; the actual value is less than the value given.
N	Presumptive evidence of presence of material.
O	Sampled, but analysis lost or not performed.
Q	Sample held beyond the accepted holding time.
R	Significant rain in the past 48 hours.
S1	Surrogate recovery reported is outside of laboratory established QA/QC Limits
S2	Analyte recovery reported is outside of laboratory established QA/QC Limits
S3	Analyte precision reported is outside of laboratory established QA/QC Limits
T	Value reported is less than the laboratory method detection limit.
U	Compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	Laboratory analysis was from an improperly preserved sample. Data may not be accurate.
Z	Too many colonies were present; numeric value represents the filtration volume.

Project Narrative

#E87684

Environmental Testing Laboratories, Inc. is accredited through NELAC and the Florida Department of Health.

Solid samples are reported on a dry weight basis unless otherwise noted.

Please refer to Section 4.0 of the ETL Quality Assurance Manual for a measure of uncertainty.

All analyses are performed using EPA or FL-DEP methods and certified to meet NELAC requirements, except where noted.

Analytical Method Summary

E87684 **Environmental Testing Laboratories Inc.**
412 W. Walcott Street, Thomasville, GA 31792
(229) 228-2592

GC/MS (EPA 8260)	SW-846 Final Update III
Semivolatiles low level for PAH only (EPA 8270/PAH Low Level)	
GC/FID (FDEP FL-PRO)	Florida Department of Environmental Protection

Sample Summary

Laboratory Sample ID	Client Sample ID	Matrix	End Date / Time Sampled		Grab / Composite	Percent Moisture
276091	DSL-STP @ 2-4'	SOILS	3/23/2021	13:00	G	15.7
276092	PRM-STP2 @ 2-4'	SOILS	3/23/2021	13:20	G	8.47

Analytical Data

Client Sample ID: DSL-STP @ 2-4'
Sample Location:
Date Collected: 03/23/2021 01:00 PM

Laboratory Sample ID: 276091
Matrix: SOILS
Percent Moisture: 15.7

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.0023	U	mg/Kg	0.0023	0.0051	3/25/2021 4:43:00 PM
Ethylbenzene	1.0	0.0018	U	mg/Kg	0.0018	0.0051	3/25/2021 4:43:00 PM
Methyl-t-butyl ether	1.0	0.0012	U	mg/Kg	0.0012	0.0051	3/25/2021 4:43:00 PM
Toluene	1.0	0.0019	U	mg/Kg	0.0019	0.0051	3/25/2021 4:43:00 PM
Xylenes- Total	1.0	0.0062	U	mg/Kg	0.0062	0.015	3/25/2021 4:43:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	121	U		80% - 136%	3/25/2021 4:43:00 PM
4-Bromofluorobenzene	1.0	96.9	U		51% - 145%	3/25/2021 4:43:00 PM
Dibromofluoromethane	1.0	105	U		70% - 130%	3/25/2021 4:43:00 PM
Toluene-d8	1.0	99.0	U		76% - 120%	3/25/2021 4:43:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.023	U	mg/Kg	0.023	0.079	3/30/2021 7:01:00 PM
2-Methylnaphthalene	1.0	0.024	U	mg/Kg	0.024	0.079	3/30/2021 7:01:00 PM
Acenaphthene	1.0	0.036	U	mg/Kg	0.036	0.079	3/30/2021 7:01:00 PM
Acenaphthylene	1.0	0.028	U	mg/Kg	0.028	0.079	3/30/2021 7:01:00 PM
Anthracene	1.0	0.036	U	mg/Kg	0.036	0.079	3/30/2021 7:01:00 PM
Benzo(a)anthracene	1.0	0.026	U	mg/Kg	0.026	0.079	3/30/2021 7:01:00 PM
Benzo(a)pyrene	1.0	0.031	U	mg/Kg	0.031	0.079	3/30/2021 7:01:00 PM
Benzo(b)fluoranthene	1.0	0.036	U	mg/Kg	0.036	0.079	3/30/2021 7:01:00 PM
Benzo(g,h,i)perylene	1.0	0.025	U	mg/Kg	0.025	0.079	3/30/2021 7:01:00 PM
Benzo(k)fluoranthene	1.0	0.027	U	mg/Kg	0.027	0.079	3/30/2021 7:01:00 PM
Chrysene	1.0	0.024	U	mg/Kg	0.024	0.079	3/30/2021 7:01:00 PM
Dibenzo(a,h)anthracene	1.0	0.021	U	mg/Kg	0.021	0.079	3/30/2021 7:01:00 PM
Fluoranthene	1.0	0.031	U	mg/Kg	0.031	0.079	3/30/2021 7:01:00 PM
Fluorene	1.0	0.032	U	mg/Kg	0.032	0.079	3/30/2021 7:01:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.026	U	mg/Kg	0.026	0.079	3/30/2021 7:01:00 PM
Naphthalene	1.0	0.023	U	mg/Kg	0.023	0.079	3/30/2021 7:01:00 PM
Phenanthrene	1.0	0.034	U	mg/Kg	0.034	0.079	3/30/2021 7:01:00 PM
Pyrene	1.0	0.031	U	mg/Kg	0.031	0.079	3/30/2021 7:01:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	79.4	U		26% - 110%	3/30/2021 7:01:00 PM
Nitrobenzene-d5	1.0	76.0	U		12% - 104%	3/30/2021 7:01:00 PM
p-Terphenyl-d14	1.0	97.6	U		39% - 120%	3/30/2021 7:01:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	5.2	U	mg/Kg	5.2	20	3/29/2021 11:46:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	80.6	U		60% - 118%	3/29/2021 11:46:00 PM
Ortho-terphenyl	1.0	89.3	U		62% - 109%	3/29/2021 11:46:00 PM

Analytical Data

Client Sample ID: PRM-STP2 @ 2-4'
Sample Location:
Date Collected: 03/23/2021 01:20 PM

Laboratory Sample ID: 276092
Matrix: SOILS
Percent Moisture: 8.47

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.0022	U	mg/Kg	0.0022	0.0050	3/25/2021 5:08:00 PM
Ethylbenzene	1.0	0.0017	U	mg/Kg	0.0017	0.0050	3/25/2021 5:08:00 PM
Methyl-t-butyl ether	1.0	0.0012	U	mg/Kg	0.0012	0.0050	3/25/2021 5:08:00 PM
Toluene	1.0	0.0019	U	mg/Kg	0.0019	0.0050	3/25/2021 5:08:00 PM
Xylenes- Total	1.0	0.0060	U	mg/Kg	0.0060	0.015	3/25/2021 5:08:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	124	U		80% - 136%	3/25/2021 5:08:00 PM
4-Bromofluorobenzene	1.0	97.4	U		51% - 145%	3/25/2021 5:08:00 PM
Dibromofluoromethane	1.0	105	U		70% - 130%	3/25/2021 5:08:00 PM
Toluene-d8	1.0	98.2	U		76% - 120%	3/25/2021 5:08:00 PM

Analytical Method: EPA 8270/PAH Low Level
Semivolatiles low level for PAH only

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1-Methylnaphthalene	1.0	0.021	U	mg/Kg	0.021	0.073	3/30/2021 10:07:00 PM
2-Methylnaphthalene	1.0	0.022	U	mg/Kg	0.022	0.073	3/30/2021 10:07:00 PM
Acenaphthene	1.0	0.033	U	mg/Kg	0.033	0.073	3/30/2021 10:07:00 PM
Acenaphthylene	1.0	0.026	U	mg/Kg	0.026	0.073	3/30/2021 10:07:00 PM
Anthracene	1.0	0.033	U	mg/Kg	0.033	0.073	3/30/2021 10:07:00 PM
Benzo(a)anthracene	1.0	0.024	U	mg/Kg	0.024	0.073	3/30/2021 10:07:00 PM
Benzo(a)pyrene	1.0	0.028	U	mg/Kg	0.028	0.073	3/30/2021 10:07:00 PM
Benzo(b)fluoranthene	1.0	0.033	U	mg/Kg	0.033	0.073	3/30/2021 10:07:00 PM
Benzo(g,h,i)perylene	1.0	0.023	U	mg/Kg	0.023	0.073	3/30/2021 10:07:00 PM
Benzo(k)fluoranthene	1.0	0.025	U	mg/Kg	0.025	0.073	3/30/2021 10:07:00 PM
Chrysene	1.0	0.022	U	mg/Kg	0.022	0.073	3/30/2021 10:07:00 PM
Dibenzo(a,h)anthracene	1.0	0.020	U	mg/Kg	0.020	0.073	3/30/2021 10:07:00 PM
Fluoranthene	1.0	0.028	U	mg/Kg	0.028	0.073	3/30/2021 10:07:00 PM
Fluorene	1.0	0.029	U	mg/Kg	0.029	0.073	3/30/2021 10:07:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.024	U	mg/Kg	0.024	0.073	3/30/2021 10:07:00 PM
Naphthalene	1.0	0.021	U	mg/Kg	0.021	0.073	3/30/2021 10:07:00 PM
Phenanthrene	1.0	0.032	U	mg/Kg	0.032	0.073	3/30/2021 10:07:00 PM
Pyrene	1.0	0.028	U	mg/Kg	0.028	0.073	3/30/2021 10:07:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	72.6	U		26% - 110%	3/30/2021 10:07:00 PM
Nitrobenzene-d5	1.0	67.7	U		12% - 104%	3/30/2021 10:07:00 PM
p-Terphenyl-d14	1.0	97.0	U		39% - 120%	3/30/2021 10:07:00 PM

PQL: Practical Quantitation Limit **RL: Report Limit** **MDL: Method Detection Limit** **DF: Dilution Factor**

Analytical Data

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	4.8	U	mg/Kg	4.8	19	3/30/2021 12:24:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	99.0	U		60% - 118%	3/30/2021 12:24:00 AM
Ortho-terphenyl	1.0	83.3	U		62% - 109%	3/30/2021 12:24:00 AM

PQL: Practical Quantitation Limit RL: Report Limit MDL: Method Detection Limit DF: Dilution Factor

Data Chronicle

Client Sample ID: DSL-STP @ 2-4'
Sample Location:
Date Collected: 03/23/2021 01:00 PM

Laboratory Sample ID: 276091
Matrix: SOILS
Percent Moisture: 15.7

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA032521	3/25/2021 4:43:00 PM	3/25/2021 4:43:00 PM	THD	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA032921	3/29/2021 9:00:00 AM	3/30/2021 7:01:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA032921	3/29/2021 2:00:00 PM	3/29/2021 11:46:00 PM	BW	E87684

Client Sample ID: PRM-STP2 @ 2-4'
Sample Location:
Date Collected: 03/23/2021 01:20 PM

Laboratory Sample ID: 276092
Matrix: SOILS
Percent Moisture: 8.47

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
N/A	RES	EPA 8260	1.0	SMSVA032521	3/25/2021 5:08:00 PM	3/25/2021 5:08:00 PM	THD	E87684
N/A	RES	EPA 8270/PAH Low Level	1.0	SPAHA032921	3/29/2021 9:00:00 AM	3/30/2021 10:07:00 PM	BW	E87684
N/A	RES	FDEP FL-PRO	1.0	SPROA032921	3/29/2021 2:00:00 PM	3/30/2021 12:24:00 AM	BW	E87684

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: SMSVA032521 | Analysis Method: EPA 8260 | Preparation Type: 5035 (Low)

Method Batch ID: MSMSVA032521 | Preparation Date: 3/25/2021 4:17:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SMSVA032521MB				Client Sample ID: SMSVA032521MB			Date Analyzed: 3/25/2021 4:17:00 PM				
Benzene	0.0022	0.0050	0.0022	U	mg/Kg							
Ethylbenzene	0.0017	0.0050	0.0017	U	mg/Kg							
Methyl-t-butyl ether	0.0012	0.0050	0.0012	U	mg/Kg							
Toluene	0.0019	0.0050	0.0019	U	mg/Kg							
Xylenes- Total	0.0060	0.015	0.0060	U	mg/Kg							
Toluene-d8			48.8		ug/kg	50.0	97.6	76.0	-	120		
4-Bromofluorobenzene			47.8		ug/kg	50.0	95.6	51.0	-	145		
Dibromofluoromethane			50.5		ug/kg	50.0	101	70.0	-	130		
1,2-Dichloroethane-d4			53.8		ug/kg	50.0	108	80.0	-	136		
QA/QC Type: LCS	Lab Sample ID: SMSVA032521LCS				Client Sample ID: SMSVA032521LCS			Date Analyzed: 3/25/2021 2:10:00 PM				
Benzene	0.0022	0.0050	0.064		mg/Kg	0.060	107	82.0	-	121		
Ethylbenzene	0.0017	0.0050	0.065		mg/Kg	0.060	108	82.0	-	119		
Methyl-t-butyl ether	0.0012	0.0050	0.065		mg/Kg	0.060	108	80.0	-	126		
Toluene	0.0019	0.0050	0.065		mg/Kg	0.060	108	83.0	-	118		
Xylenes- Total	0.0060	0.015	0.194		mg/Kg	0.180	108	83.0	-	119		
Toluene-d8			50.1		ug/kg	50.0	100	76.0	-	120		
4-Bromofluorobenzene			52.0		ug/kg	50.0	104	51.0	-	145		
Dibromofluoromethane			50.0		ug/kg	50.0	100	70.0	-	130		
1,2-Dichloroethane-d4			50.3		ug/kg	50.0	101	80.0	-	136		
QA/QC Type: LCSD	Lab Sample ID: SMSVA032521LCSD				Client Sample ID: SMSVA032521LCSD			Date Analyzed: 3/25/2021 3:27:00 PM				
Benzene	0.0022	0.0050	0.065		mg/Kg	0.060	108	82.0	-	121	1.6	20.0
Ethylbenzene	0.0017	0.0050	0.062		mg/Kg	0.060	103	82.0	-	119	4.7	19.0
Methyl-t-butyl ether	0.0012	0.0050	0.069		mg/Kg	0.060	115	80.0	-	126	6.0	23.0
Toluene	0.0019	0.0050	0.063		mg/Kg	0.060	105	83.0	-	118	3.1	18.0
Xylenes- Total	0.0060	0.015	0.186		mg/Kg	0.180	103	83.0	-	119	4.2	18.0
Toluene-d8			50.4		ug/kg	50.0	101	76.0	-	120		
4-Bromofluorobenzene			52.3		ug/kg	50.0	105	51.0	-	145		
Dibromofluoromethane			51.5		ug/kg	50.0	103	70.0	-	130		
1,2-Dichloroethane-d4			53.0		ug/kg	50.0	106	80.0	-	136		

Comments:

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: SPAHA032921 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA032921 | Preparation Date: 3/29/2021 9:00:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPAHA032921MB				Client Sample ID: SPAHA032921MB					Date Analyzed: 3/30/2021 6:24:00 PM		
Naphthalene	0.019	0.067	0.019	U	mg/Kg							
Acenaphthylene	0.024	0.067	0.024	U	mg/Kg							
Acenaphthene	0.030	0.067	0.030	U	mg/Kg							
Fluorene	0.027	0.067	0.027	U	mg/Kg							
Phenanthrene	0.029	0.067	0.029	U	mg/Kg							
Anthracene	0.030	0.067	0.030	U	mg/Kg							
Fluoranthene	0.026	0.067	0.026	U	mg/Kg							
1-Methylnaphthalene	0.019	0.067	0.019	U	mg/Kg							
2-Methylnaphthalene	0.020	0.067	0.020	U	mg/Kg							
Pyrene	0.026	0.067	0.026	U	mg/Kg							
Benzo(a)anthracene	0.022	0.067	0.022	U	mg/Kg							
Chrysene	0.020	0.067	0.020	U	mg/Kg							
Benzo(b)fluoranthene	0.030	0.067	0.030	U	mg/Kg							
Benzo(k)fluoranthene	0.023	0.067	0.023	U	mg/Kg							
Benzo(a)pyrene	0.026	0.067	0.026	U	mg/Kg							
Indeno(1,2,3-cd)pyrene	0.022	0.067	0.022	U	mg/Kg							
Dibenzo(a,h)anthracene	0.018	0.067	0.018	U	mg/Kg							
Benzo(g,h,i)perylene	0.021	0.067	0.021	U	mg/Kg							
Nitrobenzene-d5			66.6		%	100	66.6	12.0	-	104		
2-Fluorobiphenyl			69.5		%	100	69.5	26.0	-	110		
p-Terphenyl-d14			93.3		%	100	93.3	39.0	-	120		
QA/QC Type: LCS	Lab Sample ID: SPAHA032921LCS				Client Sample ID: SPAHA032921LCS					Date Analyzed: 3/30/2021 5:09:00 PM		
Naphthalene	0.019	0.067	1.24		mg/Kg	1.67	74.3	40.0	-	106		
Acenaphthylene	0.024	0.067	1.47		mg/Kg	1.67	88.0	38.0	-	115		
Acenaphthene	0.030	0.067	1.31		mg/Kg	1.67	78.4	46.0	-	121		
Fluorene	0.027	0.067	1.37		mg/Kg	1.67	82.0	46.0	-	123		
Phenanthrene	0.029	0.067	1.50		mg/Kg	1.67	89.8	52.0	-	129		
Anthracene	0.030	0.067	1.49		mg/Kg	1.67	89.2	47.0	-	124		
Fluoranthene	0.026	0.067	1.56		mg/Kg	1.67	93.4	45.0	-	125		
1-Methylnaphthalene	0.019	0.067	1.28		mg/Kg	1.67	76.6	39.0	-	113		
2-Methylnaphthalene	0.020	0.067	1.23		mg/Kg	1.67	73.7	39.0	-	110		
Pyrene	0.026	0.067	1.67		mg/Kg	1.67	100	47.0	-	129		
Benzo(a)anthracene	0.022	0.067	1.64		mg/Kg	1.67	98.2	45.0	-	129		
Chrysene	0.020	0.067	1.55		mg/Kg	1.67	92.8	44.0	-	129		

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SPAHA032921 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA032921 | Preparation Date: 3/29/2021 9:00:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: LCS	Lab Sample ID: SPAHA032921LCS				Client Sample ID: SPAHA032921LCS					Date Analyzed: 3/30/2021 5:09:00 PM		
Benzo(b)fluoranthene	0.030	0.067	1.46		mg/Kg	1.67	87.4	45.0	-	122		
Benzo(k)fluoranthene	0.023	0.067	1.60		mg/Kg	1.67	95.8	43.0	-	124		
Benzo(a)pyrene	0.026	0.067	1.65		mg/Kg	1.67	98.8	39.0	-	116		
Indeno(1,2,3-cd)pyrene	0.022	0.067	1.67		mg/Kg	1.67	100	41.0	-	125		
Dibenzo(a,h)anthracene	0.018	0.067	1.60		mg/Kg	1.67	95.8	40.0	-	123		
Benzo(g,h,i)perylene	0.021	0.067	1.52		mg/Kg	1.67	91.0	34.0	-	120		
Nitrobenzene-d5			75.1		%	100	75.1	12.0	-	104		
2-Fluorobiphenyl			76.7		%	100	76.7	26.0	-	110		
p-Terphenyl-d14			109		%	100	109	39.0	-	120		
QA/QC Type: LCSD	Lab Sample ID: SPAHA032921LCSD				Client Sample ID: SPAHA032921LCSD					Date Analyzed: 3/30/2021 5:46:00 PM		
Naphthalene	0.019	0.067	1.27		mg/Kg	1.67	76.0	40.0	-	106	2.4	33.0
Acenaphthylene	0.024	0.067	1.51		mg/Kg	1.67	90.4	38.0	-	115	2.7	38.0
Acenaphthene	0.030	0.067	1.35		mg/Kg	1.67	80.8	46.0	-	121	3.0	38.0
Fluorene	0.027	0.067	1.36		mg/Kg	1.67	81.4	46.0	-	123	0.73	38.0
Phenanthrene	0.029	0.067	1.43		mg/Kg	1.67	85.6	52.0	-	129	4.8	39.0
Anthracene	0.030	0.067	1.41		mg/Kg	1.67	84.4	47.0	-	124	5.5	38.0
Fluoranthene	0.026	0.067	1.49		mg/Kg	1.67	89.2	45.0	-	125	4.6	40.0
1-Methylnaphthalene	0.019	0.067	1.35		mg/Kg	1.67	80.8	39.0	-	113	5.3	37.0
2-Methylnaphthalene	0.020	0.067	1.28		mg/Kg	1.67	76.6	39.0	-	110	4.0	36.0
Pyrene	0.026	0.067	1.58		mg/Kg	1.67	94.6	47.0	-	129	5.5	41.0
Benzo(a)anthracene	0.022	0.067	1.50		mg/Kg	1.67	89.8	45.0	-	129	8.9	42.0
Chrysene	0.020	0.067	1.48		mg/Kg	1.67	88.6	44.0	-	129	4.6	42.0
Benzo(b)fluoranthene	0.030	0.067	1.39		mg/Kg	1.67	83.2	45.0	-	122	4.9	39.0
Benzo(k)fluoranthene	0.023	0.067	1.51		mg/Kg	1.67	90.4	43.0	-	124	5.8	40.0
Benzo(a)pyrene	0.026	0.067	1.56		mg/Kg	1.67	93.4	39.0	-	116	5.6	39.0
Indeno(1,2,3-cd)pyrene	0.022	0.067	1.47		mg/Kg	1.67	88.0	41.0	-	125	13	42.0
Dibenzo(a,h)anthracene	0.018	0.067	1.46		mg/Kg	1.67	87.4	40.0	-	123	9.2	42.0
Benzo(g,h,i)perylene	0.021	0.067	1.40		mg/Kg	1.67	83.8	34.0	-	120	8.2	43.0
Nitrobenzene-d5			81.0		%	100	81.0	12.0	-	104		
2-Fluorobiphenyl			83.0		%	100	83.0	26.0	-	110		
p-Terphenyl-d14			100		%	100	100	39.0	-	120		
QA/QC Type: MS	Lab Sample ID: SPAHA032921MS				Client Sample ID: 276092MS					Date Analyzed: 3/31/2021 1:13:00 AM		
Naphthalene	0.021	0.073	1.21		mg/Kg	1.82	66.5	6.70	-	125		

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SPAHA032921 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA032921 | Preparation Date: 3/29/2021 9:00:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MS	Lab Sample ID: SPAHA032921MS			Client Sample ID: 276092MS			Date Analyzed: 3/31/2021 1:13:00 AM					
Acenaphthylene	0.026	0.073	1.49		mg/Kg	1.82	81.9	28.0	-	111		
Acenaphthene	0.033	0.073	1.29		mg/Kg	1.82	70.9	35.0	-	115		
Fluorene	0.029	0.073	1.34		mg/Kg	1.82	73.6	35.0	-	117		
Phenanthrene	0.032	0.073	1.37		mg/Kg	1.82	75.3	39.0	-	125		
Anthracene	0.033	0.073	1.33		mg/Kg	1.82	73.1	37.0	-	118		
Fluoranthene	0.028	0.073	1.45		mg/Kg	1.82	79.7	34.0	-	122		
1-Methylnaphthalene	0.021	0.073	1.29		mg/Kg	1.82	70.9	27.0	-	110		
2-Methylnaphthalene	0.022	0.073	1.23		mg/Kg	1.82	67.6	30.0	-	103		
Pyrene	0.028	0.073	1.54		mg/Kg	1.82	84.6	35.0	-	126		
Benzo(a)anthracene	0.024	0.073	1.47		mg/Kg	1.82	80.8	33.0	-	123		
Chrysene	0.022	0.073	1.43		mg/Kg	1.82	78.6	31.0	-	125		
Benzo(b)fluoranthene	0.033	0.073	1.37		mg/Kg	1.82	75.3	30.0	-	121		
Benzo(k)fluoranthene	0.025	0.073	1.42		mg/Kg	1.82	78.0	30.0	-	121		
Benzo(a)pyrene	0.028	0.073	1.50		mg/Kg	1.82	82.4	27.0	-	109		
Indeno(1,2,3-cd)pyrene	0.024	0.073	1.44		mg/Kg	1.82	79.1	30.0	-	117		
Dibenzo(a,h)anthracene	0.020	0.073	1.53		mg/Kg	1.82	84.1	30.0	-	115		
Benzo(g,h,i)perylene	0.023	0.073	1.43		mg/Kg	1.82	78.6	22.0	-	111		
Nitrobenzene-d5			69.5		%	100	69.5	12.0	-	104		
2-Fluorobiphenyl			68.7		%	100	68.7	26.0	-	110		
p-Terphenyl-d14			83.6		%	100	83.6	39.0	-	120		
QA/QC Type: MSD	Lab Sample ID: SPAHA032921MSD			Client Sample ID: 276092MSD			Date Analyzed: 3/31/2021 1:50:00 AM					
Naphthalene	0.021	0.073	1.31		mg/Kg	1.82	72.0	6.70	-	125	7.9	59.0
Acenaphthylene	0.026	0.073	1.65		mg/Kg	1.82	90.7	28.0	-	111	10	41.0
Acenaphthene	0.033	0.073	1.38		mg/Kg	1.82	75.8	35.0	-	115	6.7	40.0
Fluorene	0.029	0.073	1.45		mg/Kg	1.82	79.7	35.0	-	117	7.9	41.0
Phenanthrene	0.032	0.073	1.54		mg/Kg	1.82	84.6	39.0	-	125	12	43.0
Anthracene	0.033	0.073	1.49		mg/Kg	1.82	81.9	37.0	-	118	11	40.0
Fluoranthene	0.028	0.073	1.65		mg/Kg	1.82	90.7	34.0	-	122	13	44.0
1-Methylnaphthalene	0.021	0.073	1.44		mg/Kg	1.82	79.1	27.0	-	110	11	42.0
2-Methylnaphthalene	0.022	0.073	1.37		mg/Kg	1.82	75.3	30.0	-	103	11	36.0
Pyrene	0.028	0.073	1.77		mg/Kg	1.82	97.3	35.0	-	126	14	46.0
Benzo(a)anthracene	0.024	0.073	1.65		mg/Kg	1.82	90.7	33.0	-	123	12	45.0
Chrysene	0.022	0.073	1.60		mg/Kg	1.82	87.9	31.0	-	125	11	47.0
Benzo(b)fluoranthene	0.033	0.073	1.54		mg/Kg	1.82	84.6	30.0	-	121	12	46.0

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: SPAHA032921 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3550

Method Batch ID: MSPAHA032921 | Preparation Date: 3/29/2021 9:00:00 AM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MSD	Lab Sample ID: SPAHA032921MSD				Client Sample ID: 276092MSD						Date Analyzed: 3/31/2021 1:50:00 AM	
Benzo(k)fluoranthene	0.025	0.073	1.56		mg/Kg	1.82	85.7	30.0	-	121	9.4	46.0
Benzo(a)pyrene	0.028	0.073	1.67		mg/Kg	1.82	91.8	27.0	-	109	11	41.0
Indeno(1,2,3-cd)pyrene	0.024	0.073	1.62		mg/Kg	1.82	89.0	30.0	-	117	12	44.0
Dibenzo(a,h)anthracene	0.020	0.073	1.70		mg/Kg	1.82	93.4	30.0	-	115	11	42.0
Benzo(g,h,i)perylene	0.023	0.073	1.61		mg/Kg	1.82	88.5	22.0	-	111	12	44.0
Nitrobenzene-d5			77.2		%	100	77.2	12.0	-	104		
2-Fluorobiphenyl			81.2		%	100	81.2	26.0	-	110		
p-Terphenyl-d14			105		%	100	105	39.0	-	120		
QA/QC Type: DUP	Lab Sample ID: SPAHA032921DUP				Client Sample ID: 276148DUP						Date Analyzed: 3/31/2021 12:36:00 AM	
Naphthalene	0.023	0.080	0.023	U	mg/Kg						0	59.0
Acenaphthylene	0.029	0.080	0.029	U	mg/Kg						0	41.0
Acenaphthene	0.036	0.080	0.036	U	mg/Kg						0	40.0
Fluorene	0.032	0.080	0.032	U	mg/Kg						0	41.0
Phenanthrene	0.034	0.080	0.034	U	mg/Kg						0	43.0
Anthracene	0.036	0.080	0.036	U	mg/Kg						0	40.0
Fluoranthene	0.031	0.080	0.031	U	mg/Kg						0	44.0
1-Methylnaphthalene	0.023	0.080	0.023	U	mg/Kg						0	42.0
2-Methylnaphthalene	0.024	0.080	0.024	U	mg/Kg						0	36.0
Pyrene	0.031	0.080	0.031	U	mg/Kg						0	46.0
Benzo(a)anthracene	0.026	0.080	0.026	U	mg/Kg						0	45.0
Chrysene	0.024	0.080	0.024	U	mg/Kg						0	47.0
Benzo(b)fluoranthene	0.036	0.080	0.036	U	mg/Kg						0	46.0
Benzo(k)fluoranthene	0.027	0.080	0.027	U	mg/Kg						0	46.0
Benzo(a)pyrene	0.031	0.080	0.031	U	mg/Kg						0	41.0
Indeno(1,2,3-cd)pyrene	0.026	0.080	0.026	U	mg/Kg						0	44.0
Dibenzo(a,h)anthracene	0.021	0.080	0.021	U	mg/Kg						0	42.0
Benzo(g,h,i)perylene	0.025	0.080	0.025	U	mg/Kg						0	44.0
Nitrobenzene-d5			77.3		%	100	77.3	12.0	-	104		
2-Fluorobiphenyl			76.3		%	100	76.3	26.0	-	110		
p-Terphenyl-d14			99.6		%	100	99.6	39.0	-	120		

Comments:

QUALITY ASSURANCE / QUALITY CONTROL DATA

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Preparation Batch ID: SPROA032921 | Analysis Method: FDEP FL-PRO | Preparation Type: 3550

Method Batch ID: MSPROA032921 | Preparation Date: 3/29/2021 2:00:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: MB	Lab Sample ID: SPROA032921MB				Client Sample ID: SPROA032921MB						Date Analyzed: 3/29/2021 9:09:00 PM	
Total Recoverable Pet. Hydrocarbons	4.4	17	4.4	U	mg/Kg							
Ortho-terphenyl			78.8		%	100	78.8	62.0	-	109		
Nonatriacontane(C39)			66.8		%	100	66.8	60.0	-	118		
QA/QC Type: LCS	Lab Sample ID: SPROA032921LCS				Client Sample ID: SPROA032921LCS						Date Analyzed: 3/29/2021 7:51:00 PM	
Total Recoverable Pet. Hydrocarbons	4.4	17	18.3		mg/Kg	28.3	64.7	63.0	-	153		
Ortho-terphenyl			90.6		%	100	90.6	62.0	-	109		
Nonatriacontane(C39)			65.5		%	100	65.5	60.0	-	118		
QA/QC Type: LCSD	Lab Sample ID: SPROA032921LCSD				Client Sample ID: SPROA032921LCSD						Date Analyzed: 3/29/2021 8:29:00 PM	
Total Recoverable Pet. Hydrocarbons	4.4	17	18.9		mg/Kg	28.3	66.8	63.0	-	153	3.2	25.0
Ortho-terphenyl			91.4		%	100	91.4	62.0	-	109		
Nonatriacontane(C39)			64.9		%	100	64.9	60.0	-	118		
QA/QC Type: MS	Lab Sample ID: SPROA032921MS				Client Sample ID: 276092MS						Date Analyzed: 3/30/2021 1:05:00 AM	
Total Recoverable Pet. Hydrocarbons	4.8	19	16.5	S2	mg/Kg	30.9	53.4	62.0	-	204		
Ortho-terphenyl			82.5		%	100	82.5	62.0	-	109		
Nonatriacontane(C39)			74.9		%	100	74.9	60.0	-	118		
QA/QC Type: MSD	Lab Sample ID: SPROA032921MSD				Client Sample ID: 276092MSD						Date Analyzed: 3/30/2021 1:43:00 AM	
Total Recoverable Pet. Hydrocarbons	4.8	19	18.4	S2	mg/Kg	30.9	59.5	62.0	-	204	11	25.0
Ortho-terphenyl			73.9		%	100	73.9	62.0	-	109		
Nonatriacontane(C39)			75.8		%	100	75.8	60.0	-	118		
QA/QC Type: DUP	Lab Sample ID: SPROA032921DUP				Client Sample ID: 276148DUP						Date Analyzed: 3/29/2021 11:07:00 PM	
Total Recoverable Pet. Hydrocarbons	5.2	20	5.2	U	mg/Kg						0	25.0
Ortho-terphenyl			80.2		%	100	80.2	62.0	-	109		
Nonatriacontane(C39)			74.4		%	100	74.4	60.0	-	118		

Comments:

Chain of Custody Record

Company: AET

Address: TALLAHASSEE

Telephone Number: Telefax Number:

Sampled by [Print Name(s)] / Affiliation: Matt Schreck/AET

Sampler(s) Signature(s):

Environmental Testing Laboratories, Inc.
412 W. Walcott Street
Thomasville, GA 31792-4359
229/228-2592 (telephone)
229/228-2594 (telefax)
www.etl-inc.com

Page 1 of 1

Project Name: CK #2721430

Project Number: 27473.03

Project Manager: JAY

Facility ID Number:

REQUESTED DUE DATE: NIT 1A

Item No.	Field ID No.	Sample Date	Sample Time	Grab or Composite	Matrix (see Codes)	Number of Containers	BTEX/M	PAH/TRPH/%M	MADPH/EPH	SPLP Bulk	SPLP VOC				Remarks	Lab Number
1	DSL-STP @2-4'	3/23/21	1300	G	SO	10	X	X	X	X	X					276091
2	PRM-STP2 @2-4'	3/23/21	1320	G	SO	10	X	X	X	X	X					092

Shipment Method: Total Number of Containers: 20

← Preservatives (see Codes) ICE: ☒ Yes ☐ No

Out: 3/23/21 Via: COURIER

Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
1-2	Matt Schreck/AET	3/23/21	1710	Daniel Myers ETL	3-24-21	14:10
	Daniel Myers	3-24-21	15:00			

Cooler Number(s) / Temperature(s) (°C): Ice/4.7

Sampling Kit Number:

Received in Lab By: BCR 3-24-21 15:00

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

PRESERVATIVE CODES: H = Hydrochloric acid S = Sulfuric acid N = Nitric Na = Sodium Hydroxide O = Other (specify)

PRESERVATIVE CODES: SOIL VOCS MS = Methanol / Sodium Bisulfate MD = Methanol / DI Water

ETL PROJECT NO. 21-1131

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

21-1131

Project Details

Client: ADVANCED ENVIRONMENTAL TECHNOLOGIES

Project Name: CK #2721430

Shipping and Receiving

Date/Time Received: 3/24/2021 3:00:00 PM

Sampling Personnel: SCHRECK

Shipping Method: Laboratory Courier

Shipping Tracking Number:

If present, were cooler custody seals intact?
○ Yes ○ No ◉ N/A

If present, were sample bottle custody seals intact
○ Yes ○ No ◉ N/A

Thermal Preservation

Cooler Temp Method: Sample Temperature

Thermometer ID: 16032413

Number of Coolers: 1

Were cooler temperatues in compliance? (0.1-6.0C)
◉ Yes ○ No ○ N/A

Cooler Temperatures: 4.7

Chain of Custody

Was the chain-of-custody received in coolers?	◉ Yes	○ No	○ N/A
Was the chain-of-custody signed and properly relinquished?	◉ Yes	○ No	○ N/A
Does the chain-of-custody agree with samples and analyses?	◉ Yes	○ No	○ N/A

Container Receipt

Were samples received in appropriate bottleware for analyses?	◉ Yes	○ No	○ N/A
Was sufficient volume submitted for analyses requested?	◉ Yes	○ No	○ N/A
Were samples received within method holding times?	◉ Yes	○ No	○ N/A
Were VOA vials received with zero headspace?	○ Yes	○ No	◉ N/A
Were aqeuous samples received at an acceptable pH?	◉ Yes	○ No	○ N/A

pH Test Strip Lot: MQUANT-HC989495

Comments

I certify I have answered the questions contained herein to the best of my knowledge and have affixed labels with unique IDs onto each sample container received. I certify any discrepancies regarding the samples as received by the laboratory have been documented completely in the comments section of this form.

Brandon Ray

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

21-1131

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
276091	**DSL-STP @ 2-4'**	**SOILS**	☐	☐	☐
276091-A1 (BTEXM)					
276091-A2 (BTEXM)					
276091-A3 (BTEXM)					
276091-A4 (MaVPH)					
276091-A5 (MaVPH)					
276091-A6 (MaVPH)					
276091-B1 (MaEPH)					
276091-B2 (PAH/TRPH-FL-PR/%M)					
276091-D1 (SPLP VOC)					
276091-D2 (SPLP Bulk)					
276092	**PRM-STP @ 2-4'**	**SOILS**	☐	☐	☐
276092-A1 (MaVPH)					
276092-A2 (MaVPH)					
276092-A3 (MaVPH)					
276092-A4 (BTEXM)					
276092-A5 (BTEXM)					
276092-A6 (BTEXM)					
276092-B1 (MaEPH)					
276092-B2 (PAH/TRPH-FL-PR/%M)					
276092-D1 (SPLP VOC)					
276092-D2 (SPLP Bulk)					

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

21-1131

Project Bottle Count Summary

Container Type	Preservative	Number of Containers
25g Encore Sampler	NONE	2
40mL VOA Vial	MeOH/ICE	8
40mL VOA Vial w/ Stirbar	DiH2O/ICE	4
Glass Jar	NONE	6
	Total	20

SITE 41 – Bennetts Paint Body Garage

No assessment information available

SITE 42 – Peeples Family Funeral Homes

No assessment information available

SITE 43 – 14230 Gossett Street

No assessment information available

SITE 44 – Main Street Auto Parts

No assessment information available

Proposed Pond Site Alternate 1A

No assessment information available

Proposed Pond Site Alternate 1B

No assessment information available

APPENDIX E

CUSTOM SOIL RESOURCE REPORT FOR DUVAL COUNTY, FLORIDA

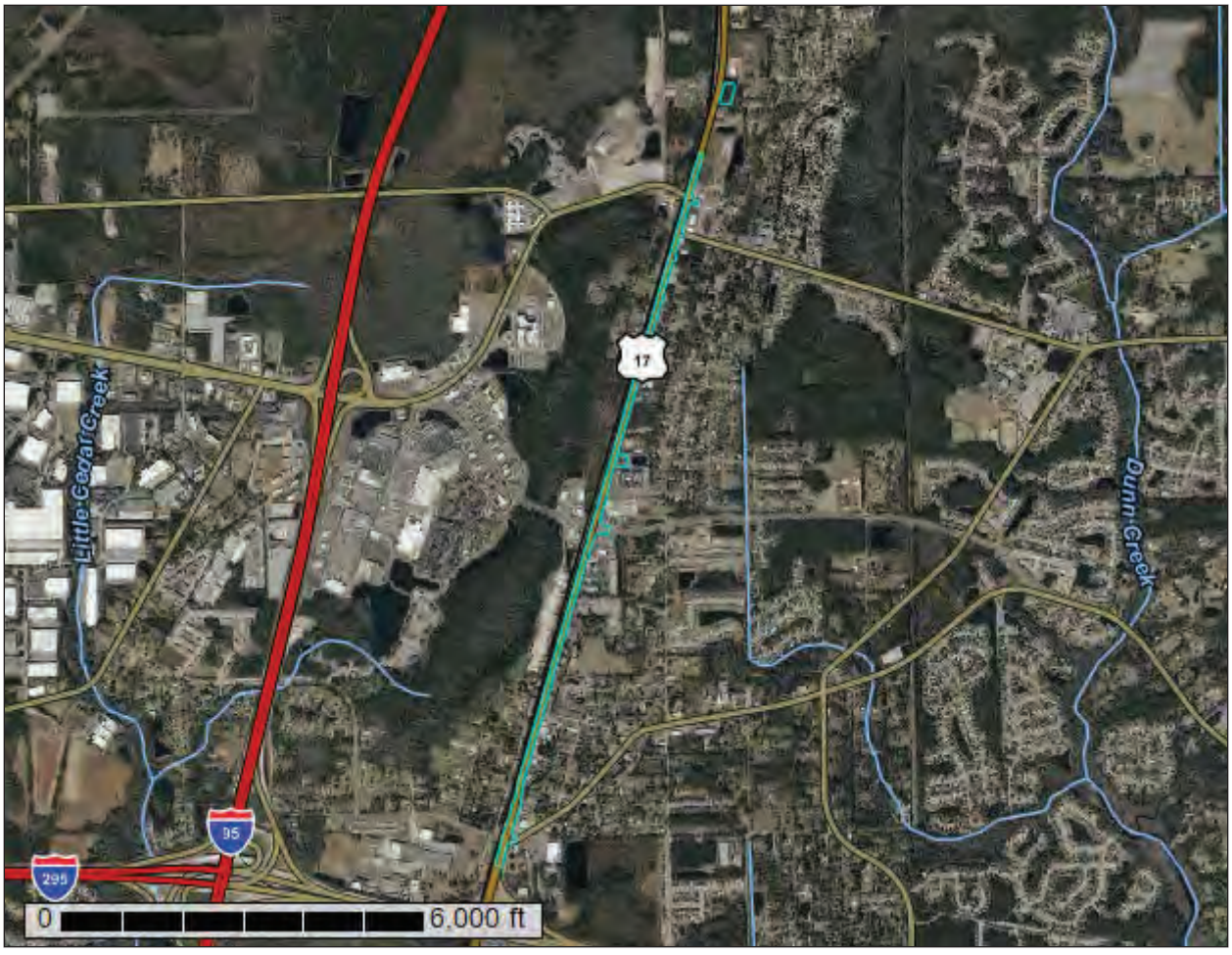
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Duval County, Florida



November 15, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

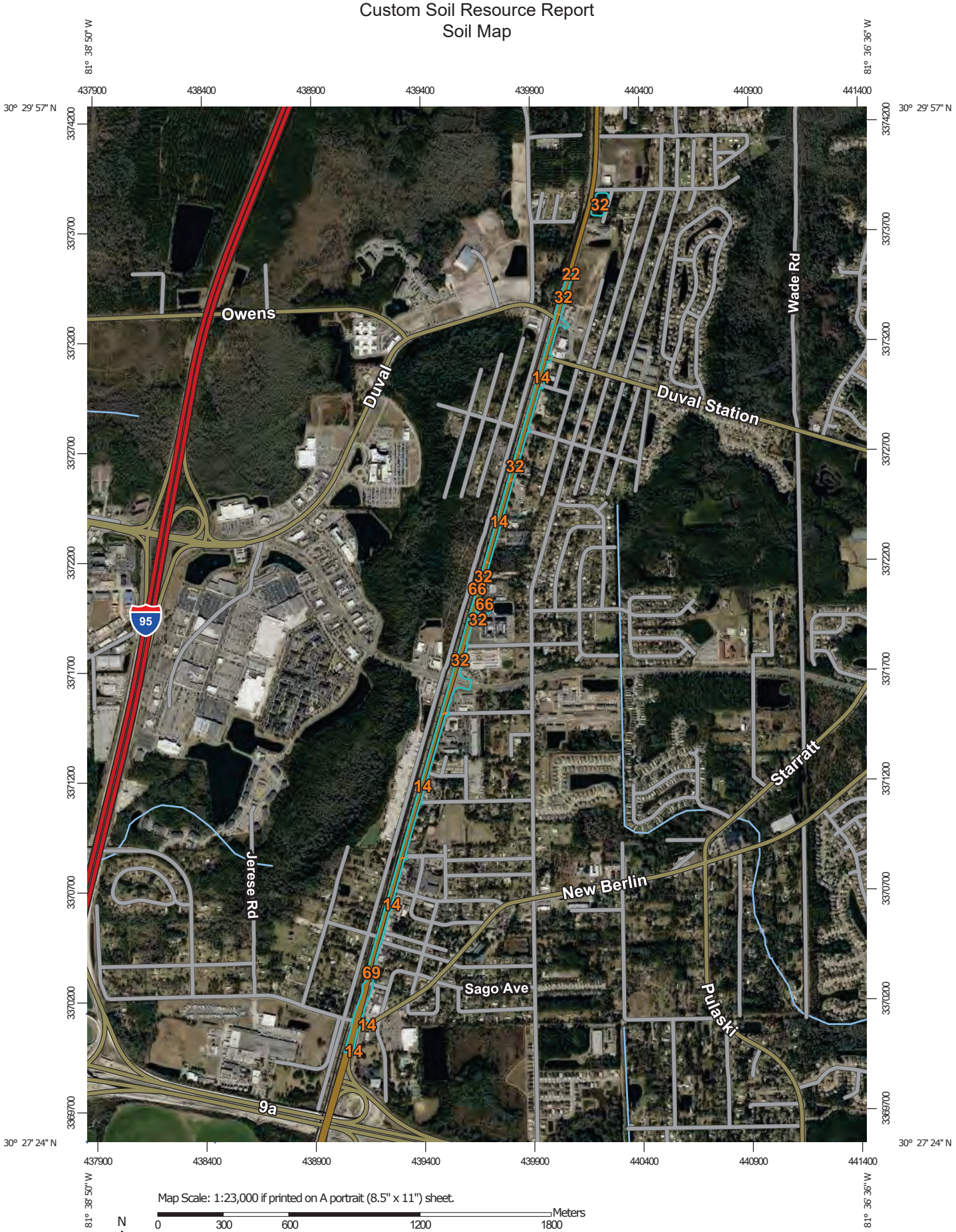
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



Map Scale: 1:23,000 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 300 600 1200 1800

Feet
0 1000 2000 4000 6000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Duval County, Florida
Survey Area Data: Version 18, Sep 1, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 7, 2022—Feb 14, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
14	Boulogne fine sand, 0 to 2 percent slopes	10.6	38.6%
22	Evergreen-Wesconnett complex, depressional, 0 to 2 percent slopes	0.1	0.5%
32	Leon fine sand, 0 to 2 percent slopes	8.6	31.2%
35	Lynn Haven fine sand, 0 to 2 percent slopes	0.4	1.5%
66	Surrency loamy fine sand, depressional, 0 to 2 percent slopes	0.7	2.7%
69	Urban land	7.0	25.6%
Totals for Area of Interest		**27.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not

mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Duval County, Florida

14—Boulogne fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: sst3
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Boulogne and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boulogne

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand
Bh - 6 to 16 inches: fine sand
E - 16 to 31 inches: fine sand
B'h1 - 31 to 39 inches: fine sand
B'h2 - 39 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Minor Components

Lynn haven
Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

Pottsburg, high
Percent of map unit: 2 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Wesconnett
Percent of map unit: 1 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

22—Evergreen-Wesconnett complex, depressional, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: sstc
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Evergreen and similar soils: 63 percent
Wesconnett and similar soils: 33 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Evergreen

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Organic material over sandy marine deposits

Typical profile

Oa - 0 to 11 inches: muck
A - 11 to 17 inches: fine sand
E - 17 to 26 inches: fine sand
Bh - 26 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (0.20 to 20.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Forage suitability group: Organic soils in depressions and on flood plains (G153AA645FL)
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Description of Wesconnett

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 2 inches: fine sand
Bh - 2 to 32 inches: fine sand
E/Bh - 32 to 44 inches: fine sand
B'h - 44 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

Minor Components

Leon

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Lynn haven

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

Pamlico

Percent of map unit: 1 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY100NC - Flooded Organic Soil Floodplains and Terraces
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Pottsburg

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

32—Leon fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2sxqv
Elevation: 0 to 250 feet
Mean annual precipitation: 47 to 61 inches
Mean annual air temperature: 55 to 81 degrees F
Frost-free period: 267 to 347 days
Farmland classification: Not prime farmland

Map Unit Composition

Leon, non-hydric, and similar soils: 89 percent
Minor components: 11 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Leon, Non-hydric

Setting

Landform: Flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 8 inches: fine sand
E - 8 to 18 inches: fine sand

Bh - 18 to 37 inches: fine sand
E' - 37 to 45 inches: fine sand
B'h - 45 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Minor Components

Leon, hydric

Percent of map unit: 5 percent
Landform: Flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Mascotte

Percent of map unit: 3 percent
Landform: Flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Mandarin

Percent of map unit: 3 percent
Landform: Rises
Landform position (three-dimensional): Rise, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

35—Lynn Haven fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: ssts
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Lynn haven and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lynn Haven

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 13 inches: fine sand
E - 13 to 21 inches: fine sand
Bh - 21 to 62 inches: fine sand
B/C - 62 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

Minor Components

Wesconnett
Percent of map unit: 2 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

Evergreen
Percent of map unit: 2 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Boulogne
Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Leon
Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

66—Surrency loamy fine sand, depressional, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: ssvs
Elevation: 0 to 190 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Surrency and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Surrency

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 14 inches: loamy fine sand
E - 14 to 26 inches: fine sand
Btg - 26 to 70 inches: fine sandy loam
Cg - 70 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B/D
Ecological site: F153AY060NC - Wet Loamy Flats and Depressions

Forage suitability group: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G153AA245FL)
Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G153AA245FL)
Hydric soil rating: Yes

Minor Components

Pelham, hydric
Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY060NC - Wet Loamy Flats and Depressions
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G153AA241FL)
Hydric soil rating: Yes

Lynn haven
Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

Pamlico
Percent of map unit: 2 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY100NC - Flooded Organic Soil Floodplains and Terraces
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Yonges
Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY060NC - Wet Loamy Flats and Depressions
Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic lowlands (G153AA341FL)
Hydric soil rating: Yes

Stockade
Percent of map unit: 1 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave

Across-slope shape: Concave
Ecological site: F153AY090NC - Flooded Mineral Soil Floodplains and Terraces
Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G153AA345FL)
Hydric soil rating: Yes

69—Urban land

Map Unit Setting

National map unit symbol: ssvw
Elevation: 0 to 190 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: No parent material

Interpretive groups

Land capability classification (irrigated): None specified
Forage suitability group: Forage suitability group not assigned (G153AA999FL)
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Unranked

Minor Components

Pelham, hydric

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Yes

Leon

Percent of map unit: 1 percent

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

Ortega

Percent of map unit: 1 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

Albany

Percent of map unit: 1 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

Hurricane

Percent of map unit: 1 percent
Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

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APPENDIX F

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Kevin Ashman, PG, Geologist

Aerostar SES LLC

Years With Company
13 Years

Total Years of Experience
13 Years

Office
Jacksonville, FL

Academic Background
- BA, Geology, Georgia Southern University, 2009
- Minor, Geographic Information Systems (GIS), Georgia Southern University, 2009

Registrations/Certifications
- Registered Professional Geologist:
  Florida #PG2948
  Georgia #PG002225
  Mississippi #0977

Professional Training
- Occupational Safety and Health Administration (OSHA) 40-hr. Hazardous Waste Operations and Emergency Response (HAZWOPER)
- Operations Security (OPSEC) Awareness for Military Members, Department of Defense (DoD) Employees and Contractors
- OSHA Permit-Required Confined Spaces Radiation Safety and Operation of Portable X-ray fluorescence (XRF) Analyzers
- Transport of Lithium Ion Batteries
- Transport of Radioactive Sealed Sources in XRF Analyzers
- Cardiopulmonary Resuscitation (CPR)/First Aid/Automated External Defibrillators (AED)
- Bloodborne Pathogens

Mr. Ashman has more than 12 years of experience in the environmental industry. He has actively participated in a wide range of environmental applications, including Phase I/II Environmental Site Assessments (ESAs), Transaction Screen Process (TSPs), contamination screening evaluations (CSEs) for corridor studies along right-of-ways, environmental reviews for neighborhood stabilization program areas, Environmental Compliance Evaluations (ECEs), and Emergency Planning and Community Right-to-Know Act (EPCRA) Section 311/312/313 compliance. Mr. Ashman's responsibilities have included site inspections, field sampling, and report writing as part of environmental due diligence projects. Mr. Ashman also has experience in collecting, analyzing, and compiling field data and has prepared technical reports, including Phase I/II ESAs. As part of Phase I ESAs, he has performed preliminary asbestos-containing material, lead-based paint, mold, and wetland evaluations. As part of Phase II ESAs, he has experience performing soil boring completion, soil screening using an organic vapor analyzer, soil sampling, groundwater well installation, groundwater monitoring, groundwater sampling, and sediment sampling.

Experience Highlights

CSE, Interstate 10 (I-10) Capacity Improvements from I-295 to I-95, FDOT District 2, Jacksonville, FL – Project Scientist and GIS Technician for a Level 1 CSE along a five-mile stretch of I-10 between I-295 and I-95. The proposed construction activities for the subject corridor consisted of the widening and reconstruction of I-10 by adding two general-purpose lanes in each travel direction. We identified a total of 74 sites as having the potential to impact the subject corridor and evaluated multiple proposed pond sites along the subject corridor. The assessment was completed in accordance with the Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual.

CSE, I-95 from SR 202 (J. Turner Butler Boulevard) to Atlantic Boulevard, FDOT District 2, Jacksonville, FL – Project Scientist and GIS Technician for a Level 1 CSE along a 5.5-mile stretch of I-95 between SR 202 and Atlantic Boulevard. The proposed construction activities for the subject corridor consisted of the widening and reconstruction of I-95 in order to provide express lanes. A total of 38 pond sites were proposed along the subject corridor. We evaluated the proposed pond sites and identified and ranked a total of 59 potential contaminated sites as part of the Level 1 CSE.

Limited Desktop CSE, I-95 Widening from I-10 to SR 115 (US 1) MLK, FDOT District 2, Jacksonville, FL – Environmental Specialist and GIS Technician for a Limited Desktop CSE along an approximate 3-mile stretch of I-95 between I-10 and US 1. The purpose of this limited study was to widen and reconstruct I-95 by adding general-purpose lanes in each travel direction. We identified a total of 68 potential contaminated sites within 200 feet of the existing FDOT right-of-way.

CSE, Interstate 95 (I-95) Widening from I-295 to International Golf Parkway, FDOT District 2, Duval and St. Johns Counties, Florida – Project Scientist and GIS Technician for a Level 1 CSE along an approximate 15-mile corridor of I-95 between I-295 and International Golf Parkway. The proposed construction activities for the subject corridor consisted of the widening and reconstruction of I-95 in order to provide express lanes. A total of 27 pond sites were proposed along the subject corridor as part of the construction activities. Aerostar identified several sites as having the potential to impact the subject corridor.

CSE, SR 99 (Beulah Road) and SR 8 (I-10), FDOT District 3, Escambia County, Florida – Project Manager and GIS Technician for a Level 1 CSE along Beulah Road and I-10. The purpose of this study was to widen and extend Beulah Road, widen I-10, and construct a new interchange at the intersection of the Beulah Beltway and I-10. A total of 19 proposed pond sites and 10 potential contaminated sites were evaluated as part of this study.

CSE, SR 115 (Lem Turner Road) over Trout River Bridge #720033, FDOT District 2, Jacksonville, Florida – Project Manager and GIS Technician for a Level 1 CSE along Lem Turner Road. The purpose of this study was to replace the Lem Turner Road bridge over the Trout River. Two alternatives were evaluated as part of this Level 1 CSE. A total of nine sites were identified in the vicinity of the subject corridor.

CSE, Rehabilitation Study, Along SR 5A/A1A/US 1 from the Bridge of Lions to Charlotte Street, FDOT District 2, St. Johns County, Florida – Project Scientist and GIS Technician for a Level 1 CSE along the seawall from the Bridge of Lions to Charlotte Street in St. Augustine. The proposed construction activities included repairing and/or replacing the existing seawall. Aerostar identified several sites in the vicinity of the seawall with the potential to impact rehabilitation activities. Aerostar conducted a thorough review of historical documentation as part of the CSE due to its proximity to historical downtown St. Augustine.

Miscellaneous Phase I ESAs and TSPs, Southeastern US – Geologist for multiple Phase I ESAs and TSPs on vacant land, managed forests, residential, commercial, and industrial properties in Alabama, Florida, Georgia, Mississippi, and Tennessee with property sizes ranging up to 6,500 acres.

EPCRA Sections 311/312/313 Compliance Support, United States Army Corps of Engineers (USACE), Fort Belvoir, VA – Project Manager on EPCRA compliance projects at Fort Belvoir. Conducted site inspections and interviews, developed inventory summaries, and prepared and reviewed necessary reporting forms, submittals, and compliance documentation.

ECEs, Headquarters United States Marine Corps (USMC), CH2M Hill, Various Marine Corps Installations – Evaluator II for the USMC ECE Program at the following installations: Marine Corps Air Ground Combat Center (MCAGCC) 29 Palms, Marine Corps Air Station (MCAS) Beaufort, MCAS Camp Pendleton, MCAS Cherry Point, MCAS Iwakuni, MCAS Miramar, MCAS New River, MCAS Yuma, Marine Corps Base Camp (MCB) Camp Lejeune, MCB Camp Pendleton, MCB Hawaii, MCB Quantico, Marine Corps Logistics Base (MCLB) Albany, MCLB Barstow, Marine Corps Recruit Depot (MCRD) Parris Island, and Marine Corps Support Facility (MCSF) Blount Island. Project responsibilities included evaluating USMC installation and unit environmental compliance and assessing risks. Findings were input into the USMC Web Compliance Assessment & Sustainment Systems (WEBCASS) application.

Frank Redway, Senior Program Manager

Aerostar SES LLC

Years With Company
20 Years

Total Years of Experience
30 Years

Office
Jacksonville, FL

Academic Background
- MS, Environmental Engineering Science, University of Florida, 1993
- BS, Geography, University of Florida, 1989

Registrations/Certifications
- Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Agency (AHERA)-Certified Asbestos Inspector
- EPA AHERA-Certified Asbestos Management Planner
- Florida Department of Health (FDOH)-Certified Radon Measurement Technician

Professional Training
- Occupational Safety and Health Administration (OSHA) 30-hr. Construction Safety and Health
- OSHA 40-hr. Hazardous Waste Operations and Emergency Response (HAZWOPER) and 8-hr. Refreshers
- United States Army Corps of Engineers (USACE)/Naval Facilities (NAVFAC) Construction Quality Management
- Operations and Security (OPSEC) Awareness for Military Members, Department of Defense (DoD) Employees and Contractors
- OSHA Permit-Required Confined Spaces
- First Aid/Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillators (AED)
- Bloodborne Pathogens
- Lead Awareness

Mr. Redway has more than 30 years of experience as an environmental scientist for all aspects of environmental projects including environmental compliance/risk management, Phase I/II Environmental Site Assessments (ESAs), United States Department of Housing and Urban Development (HUD) assessments, FDOT contamination screening evaluations (CSEs), contamination assessments, remedial action plans, asbestos and lead-based paint (LBP) assessments, indoor air quality, and Quality Assurance/Quality Control (QA/QC) for environmental and construction projects. Mr. Redway has extensive experience in contract management, proposal preparation, client/regulatory interaction, technical oversight, supervision and collection of field data, and report preparation.

Experience Highlights

Environmental Site Assessment (ESA) Services Contract, FDEP – Program Manager (2005-present) for a contract to provide ESA services throughout Florida for the acquisition of conservation and recreation lands under the Florida Forever Act. Services provided under this contract include: Phase I and II ESAs; and asbestos, LBP, mold and radon surveys.

City of Jacksonville Contamination Assessment and Remediation (CAR) Contract, Jacksonville, Florida – Program Manager (2003-2006, 2010-2013, 2020-present) for a contract providing environmental services to the City of Jacksonville. Services provided include - Phase I and II ESAs; asbestos, LBP, mold and radon surveys; contaminated soil source removals; contamination assessment and remedial action services; emergency response actions; SPCC plans; and SWPPPs; incinerator ash management and remediation; and hazardous materials management.

Environmental Services Contract, St. Johns River Water Management District (SJRWMD) – Program Manager (2005-2023) for a contract providing environmental services throughout their 18-county footprint for the acquisition of conservation and recreation lands. Services provided under these contracts include: Phase I and II ESAs; asbestos, LBP, mold and radon surveys; contaminated soil source removals; contamination assessment and remedial action services.

Environmental Services Contract, Jacksonville Electric Authority (JEA) – Program Manager (2018-present) for a contract providing environmental services throughout their footprint of responsibility in northeast Florida. Services provided include: Phase I and II ESAs; asbestos, LBP, mold and radon surveys; contaminated soil source removals; contamination assessment and remedial action services; emergency response actions; natural resource surveys (threatened and endangered species surveys, gopher tortoise relocation, wetland delineations); spill pollution control and countermeasures (SPCC) plans; and stormwater pollution prevention plans (SWPPPs).

Neighborhood Stabilization Program, City of Jacksonville (COJ), FL – Program Manager for over 200 HUD Environmental Assessments (EAs), asbestos, mold, and LBP surveys for the COJ's Neighborhood Stabilization Program. Checklist evaluations include: historic preservation, noise, coastal zone management, floodplain management, and hazardous materials.

QC/Independent Technical Review Team (ITRT) Leader, Various DoD Projects – Quality Control/ITRT Leader for numerous DoD projects, responsible for independent technical review of work plans and technical reports that are appropriate to the level of risk and complexity inherent in the project, as defined in the Quality Control Plan. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, is verified. This includes review of assumptions; methods, procedures and material used in analyses; the appropriateness of data used and level of data obtained; and reasonableness of the results including whether the product meets the customer's needs consistent with laws and existing federal policies. Projects include Preliminary Assessments for Formerly Used Defense (FUDS) sites, a Remedial Investigation/Feasibility Study (RI/FS) for a former NIKE Missile site, development and long-term monitoring of an Oyster Castle Habitat, and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) five-year reviews for various DoD facilities.

Level II Contamination Impact Assessment (CIA), Wekiva Parkway/State Road (SR) 46 Realignment Corridor, FDOT District 5, Orange and Lake Counties, FL – Project Director for soil and groundwater sampling activities along a 4.79-mile roadway corridor in Lake and Orange counties. Prior to initiation of field activities, a Sampling and Analysis Plan was prepared documenting sampling procedures and laboratory analyses for the various types of properties along the corridor. Field activities included the advancement of 48 soil borings, collection and laboratory analysis of 14 soil samples, installation of 6 temporary wellpoints, and the collection and laboratory analysis of 6 groundwater samples. The results of the investigation were presented in a CIA Report.

Asbestos-Containing Materials (ACM), LBP, and Hazardous Materials (HM) Surveys, Wekiva Parkway Improvements, CH2M Hill, Orange, Lake, and Seminole Counties, FL – Project Director for ACM, LBP, and HM Surveys for demolition of structures which would be impacted by improvements to the Wekiva Parkway in Lake, Orange, and Seminole counties. Surveys were conducted on 80 buildings to evaluate for the presence of ACM, LBP, and HMs in the structures by AHERA- and EPA-certified inspectors under the direction of a Licensed Asbestos Consultant (LAC).

Remedial Services, Fort Jefferson, National Park Service, Dry Tortugas, FL – Project Director for maintenance dredging and shoreline stabilization activities at historic Ft. Jefferson National Park, an 11-acre fort located within the Dry Tortugas National Park. The project consisted of dredging approximately 4,000 cubic yards from the moat and along the existing docks, and using the dredged sand to stabilize the existing shoreline. The project required preparation and submittal of permits, and coordination with the National Park Service (NPS), Florida Department of Environmental Protection (FDEP), the USACE, and the National Marine Fisheries (NMF). The project also required extensive coordination for delivery of heavy equipment and supplies to enable field crews to live on the island for extended periods of time. Field activities included dredging and placement of sand, erection of measures to protect natural (fish and wildlife) and architectural resources.

Soil and Groundwater Investigation, Operating Golf Course, Northeast FL – Project Director for a soil and groundwater investigation at an operating golf course in northeast Florida. The assessment focused on impacts

to the soil and groundwater in historic possible mix/load pesticide areas. Assessment activities included the collection and laboratory analysis of over 100 soil samples, the installation of over 30 monitor wells, the collection and laboratory analysis of groundwater samples, the collection and laboratory analysis of surface water and irrigation well samples, and an evaluation of potential off-site receptors.