ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

18-3060

Project Bottle Count Summary

Container Type	Preservative	Number of Containers
40mL VOA Vial	MeOH/ICE	3
Glass Jar	NONE	2
	Total	5

Sub Contracted Data

Analytical Report 598806

for

Environmental Testing Laboratories, Inc.

Project Manager: Brad Williams

ETL Master

091118B

26-SEP-18

Xenco Laboratories
1412 Tech Blvd.
Tampa, FL 33619
Ph:(813) 620-2000 Fax:(813) 620-2033

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

26-SEP-18

Project Manager: **Brad Williams**
Environmental Testing Laboratories, Inc.
412 W. Walcott Street
Thomasville, GA 31792

Reference: XENCO Report No(s): **598806**
ETL Master
Project Address:

Brad Williams:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 598806. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 598806 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Derek Rounsley
Project Manager

Sample Cross Reference 598806

Environmental Testing Laboratories, Inc., Thomasville, G

ETL Master

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
234655	S	09-05-18 12:24		598806-001

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3062968 Percent Moisture by SM2540G
Percent Moisture RPD is outside the QC limit. This is most likely due to sample non-homogeneity.
Samples in the analytical batch are: 598806-001.

Hits Summary 598806

Environmental Testing Laboratories, Inc., Thomasville, GA

ETL Master

Below is a summary of the analytes which were found to be present in the samples associated with this work order. This should only be used in conjunction with the included analytical results.

Sample ID: 234655 **Sample ID: 598806-001** **Date/Time Sampled: 09/05/2018 12:24** **Matrix: Solid**

Analyte Name	Method	CAS No.	Dil.	Result	RL/PQL	MDL	Units	Qual
C11 to C22 Aromatics	MA EPH	C11C22	1	359	17.6	8.79	mg/kg	
C19 to C36Aliphatic Hydrocarbons	MA EPH	ALHYDRC19C36	1	301	82.8	41.4	mg/kg	
C9 to C10 Aromatic Hydrocarbons	VPH	HYDC9C10	34	4.34	0.896	0.896	mg/kg	
C9 to C12 Aliphatic Hydrocarbons	VPH	ALHYDRC9C12	34	8.72	7.16	7.16	mg/kg	
C9 to C18 Aliphatic Hydrocarbons	MA EPH	ALHYDRC9C18	1	663	62.1	31.0	mg/kg	
Percent Moisture	SM2540G	MOIST	1	5.05			%	

Certificate of Analytical Results 598806

Environmental Testing Laboratories, Inc., Thomasville, GA

ETL Master

Sample Id: **234655** Matrix: Soil Date Received:09.12.18 12.51

Lab Sample Id: 598806-001 Date Collected: 09.05.18 12.24

Analytical Method: EPH by MADEP Method Prep Method: SW3545

Tech: GEP % Moisture: 5.05

Analyst: BRJ Date Prep: 09.19.18 16.00 Basis: Dry Weight

Seq Number: 3064462

Parameter	Cas Number	Result	RL	MDL	Flag	Units	Analysis Date	Dil
C9 to C18 Aliphatic Hydrocarbons	ALHYDRC9C1	**663**	62.1	31.0		mg/kg	09.26.18 11.12	5
C19 to C36Aliphatic Hydrocarbons	ALHYDRC19C3	**301**	82.8	41.4		mg/kg	09.26.18 11.12	5
C11 to C22 Aromatics	C11C22	**359**	17.6	8.79		mg/kg	09.26.18 14.07	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctadecane	3386-33-2	89	%	40-140	09.25.18 22.46	
o-Terphenyl	84-15-1	115	%	40-140	09.26.18 14.07	
2-Fluorobiphenyl	321-60-8	106	%	40-140	09.26.18 14.07	

Analytical Method: VPH Prep Method: SW5035A

Tech: JNL % Moisture: 5.05

Analyst: JNL Date Prep: 09.14.18 09.44 Basis: Dry Weight

Seq Number: 3063335

Parameter	Cas Number	Result	RL	MDL	Flag	Units	Analysis Date	Dil
C5 to C8 Aliphatic Hydrocarbons	ALHYDRC5C8	U	5.37	5.37	U	mg/kg	09.14.18 21.26	50
C9 to C12 Aliphatic Hydrocarbons	ALHYDRC9C1	**8.72**	7.16	7.16		mg/kg	09.14.18 21.26	50
C9 to C10 Aromatic Hydrocarbons	HYDC9C10	**4.34**	0.896	0.896		mg/kg	09.14.18 21.26	50

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
2,5-Dibromotoluene	615-59-8	88	%	70-130	09.14.18 21.26	
2,5-Dibromotoluene (PID)	615-59-8	102	%	70-130	09.14.18 21.26	

CHRONOLOGY OF HOLDING TIMES

Analytical Method : EPH by MADEP Method
Work Order #: **598806**
Date Received: 09/12/18

Client : Environmental Testing Laboratories, I
Project ID: 091118B

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
234655	598806-001	09/05/18	09/19/18	14	14	09/25/18	40	6	P
234655	598806-001	09/05/18	09/19/18	14	14	09/26/18	40	7	P

CHRONOLOGY OF HOLDING TIMES

Analytical Method : Percent Moisture by SM2540G
Work Order #: **598806**
Date Received: 09/12/18

Client : Environmental Testing Laboratories, I
Project ID: 091118B

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
234655	598806-001	09/05/18				09/12/18	180	7	P

CHRONOLOGY OF HOLDING TIMES

Analytical Method : VPH
Work Order #: **598806**
Date Received: 09/12/18

Client : Environmental Testing Laboratories, I
Project ID: 091118B

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
234655	598806-001	09/05/18				09/14/18	28	9	P

F = These samples were analyzed outside the recommended holding time.
P = Samples analyzed within the recommended holding time.

FLORIDA flagging criteria

Data were reviewed by the
Department Supervisor and QA Director

A Value reported is the mean (average) of two or more determinations.

B Results based upon colony counts outside the acceptable range.

J Estimated value; value not accurate. All results with a "J" qualifier require comment.
- J1: Surrogate Recoveries exceed established QA/QC Limits
- J2: No known QA/QC exists.
- J3: Reported value failed to meet established QA/QC limits or the sample matrix interfered with the ability to make an accurate determination
- J4: The data is questionable due to improper laboratory or field protocols

Q Sample held beyond the accepted holding time

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes, only and shall not be used in statistical analysis.

U Compound was analyzed for but not detected at the MDL Level.

V Analyte was detected in both the sample and the associated method blank.

Y Laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.

I The reported value is between the laboratory MDL and the laboratory PQL.

R Significant rain in the past 48 hours.

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 598806

Environmental Testing Laboratories, Inc.

ETL Master

Analytical Method: **Percent Moisture by SM2540G**

Seq Number: 3062968 Matrix: Soil

Parent Sample Id: 598805-001 MD Sample Id: 598805-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.77	7.24	41	20	%	09.12.18 13:21	J

Analytical Method: **EPH by MADEP Method** Prep Method: SW3545

Seq Number: 3064462 Matrix: Solid Date Prep: 09.19.18

MB Sample Id: 7662646-1-BLK LCS Sample Id: 7662646-1-BKS LCSD Sample Id: 7662646-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C9 to C18 Aliphatic Hydrocarbons	<6.00	30.0	16.6	55	15.8	53	40-140	5	25	mg/kg	09.26.18 14:06	
C19 to C36Aliphatic Hydrocarbons	<8.00	40.0	30.7	77	30.6	77	40-140	0	25	mg/kg	09.26.18 14:06	
C11 to C22 Aromatics	<8.50	85.0	62.3	73	61.0	72	40-140	2	25	mg/kg	09.26.18 14:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctadecane	93		97		86		40-140	%	09.26.18 14:06
o-Terphenyl	99		96		92		40-140	%	09.26.18 14:07
2-Fluorobiphenyl	118		111		112		40-140	%	09.26.18 14:07

Analytical Method: **VPH** Prep Method: SW5035A

Seq Number: 3063335 Matrix: Solid Date Prep: 09.14.18

MB Sample Id: 7662252-1-BLK LCS Sample Id: 7662252-1-BKS LCSD Sample Id: 7662252-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C5 to C8 Aliphatic Hydrocarbons	<0.150	0.300	0.269	90	0.283	94	70-130	5	25	mg/kg	09.14.18 12:06	
C9 to C12 Aliphatic Hydrocarbons	<0.200	0.400	0.329	82	0.370	93	70-130	12	25	mg/kg	09.14.18 12:06	
C9 to C10 Aromatic Hydrocarbons	<0.0250	0.0500	0.0551	110	0.0521	104	70-130	6	25	mg/kg	09.14.18 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
2,5-Dibromotoluene	96		86		102		70-130	%	09.14.18 12:06
2,5-Dibromotoluene (PID)	92		96		103		70-130	%	09.14.18 12:06

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

QC Summary 598806

Environmental Testing Laboratories, Inc.

ETL Master

Analytical Method: **VPH** Prep Method: SW5035A

Seq Number: 3063335 Matrix: Solid Date Prep: 09.14.18

Parent Sample Id: 596673-001 MS Sample Id: 596673-001 S MSD Sample Id: 596673-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C5 to C8 Aliphatic Hydrocarbons	765	16.2	1120	2191	1060	1821	70-130	6	25	mg/kg	09.15.18 00:32	J
C9 to C12 Aliphatic Hydrocarbons	138	21.6	206	315	199	282	70-130	3	25	mg/kg	09.15.18 00:32	J
C9 to C10 Aromatic Hydrocarbons	67.0	2.70	89.5	833	86.4	719	70-130	4	25	mg/kg	09.15.18 00:32	J

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
2,5-Dibromotoluene	114		116		70-130	%	09.15.18 00:32
2,5-Dibromotoluene (PID)	108		108		70-130	%	09.15.18 00:32

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

Chain of Custody Record

598806

Company: Environmental Testing Laboratories, Inc

Address: 412 W. Walcott, Thomasville, GA 31792

Telephone: (229)-228-2592 Telefax: (229)-228-2594

Sampled by [Print Name(s)] / Affiliation

Sampler(s) Signature(s)

Environmental Testing Laboratories, Inc.
ETL 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:

Project Number: 0911188

Project Manager: bwilliams@etl-inc.com

Facility ID Number:

Requested Due Date: STANDARD

Analyses Requested

Item No.	Field ID No.	Sample Date	Sample Time	Grab / Composite	Matrix (See Codes)	Number of Containers	MaVPH (EPA 8015)	MaEPH (EPA 8015)	Remarks	Lab Number
1	234655	9/5/18	12:24	G	Soil	4	3	1		
Total Number of Containers						4	MEOH	NONE	←Preservative (see Codes)	ICE: ☐ Yes ☐ No

Shipment Method

Out: / / Via:

Returned: / / Via:

Item No.	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
	[signature]	9/11/18	15:30	[signature]	9/12/18	12:51

Additional Comments:

Cooler Number(s) / Temperature(s) °C	Sampling Kit Number	Received in Lab By:
3.3		

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 Acid Na = Sodium Hydroxide O = Other (Specify) MS = Methanol / Sodium Bisulfate MD = Methanol / DI Water

ETL Project No.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Environmental Testing Laboratories, Inc.

Date/ Time Received: 09/12/2018 12:51:00 PM

Work Order #: 598806

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-20

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.3
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**Yes**
#18 Water VOC samples have zero headspace?	**Yes**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by: Lourdes Arevalo Date: 09/12/2018

Checklist reviewed by: Derek Rounsley Date: 09/13/2018

FINAL
ANALYTICAL REPORT

ETL PROJECT ID: 17-3399 **10/31/2017 - Revision 0**

ANDRES SANCHEZ
ADVANCED ENVIRONMENTAL TECHNOLOGIES
4265 NEW TAMPA HIGHWAY
LAKELAND, FL 33815
TEL: (863) 619-9708
FAX: (863) 619-7467

CLIENT PROJECT NAME: DADE CNTY SCHOOL BD-TRANSPORTATION
CLIENT PROJECT ID: 26672.00
FACILITY ID: 13/8628726

Enclosed are the analytical results for sample(s) received by Environmental Testing Laboratories on October 24, 2017. 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, 2018.

Authorized for release by:

Table of Contents

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 quantitation limit.
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

E87582 **Analytical Environmental Services Inc.**
3080 Presidential Drive, Atlanta, GA 30340
(770) 457-8177

1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane (EPA 8011)	SW-846 Final Update III

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

ICP (EPA 6010)	SW-846 Final Update III
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
220610	MW-10	AQUEOUS-Groundwater	10/17/2017	12:38	G	
220611	MW-11	AQUEOUS-Groundwater	10/17/2017	13:37	G	
220612	MW-12	AQUEOUS-Groundwater	10/17/2017	14:41	G	
220613	MW-2	AQUEOUS-Groundwater	10/17/2017	15:48	G	
220614	MW-4	AQUEOUS-Groundwater	10/17/2017	17:12	G	
220615	MW-13	AQUEOUS-Groundwater	10/17/2017	17:45	G	
220616	MW-5	AQUEOUS-Groundwater	10/17/2017	18:22	G	
220617	MW-6	AQUEOUS-Groundwater	10/17/2017	19:00	G	
220618	MW-8	AQUEOUS-Groundwater	10/17/2017	19:42	G	
220619	MW-A	AQUEOUS-Groundwater	10/18/2017	8:41	G	
220620	MW-9	AQUEOUS-Groundwater	10/18/2017	9:17	G	
220621	MW-3	AQUEOUS-Groundwater	10/18/2017	10:17	G	
220622	MW-1	AQUEOUS-Groundwater	10/18/2017	11:27	G	
220623	MW-7	AQUEOUS-Groundwater	10/18/2017	12:32	G	

Executive Summary

Analyte	Analytical Method	Result	Units	Qualifiers	Result Comments
MW-10 (220610)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	1.8	ug/L	I	
2-Methylnaphthalene	EPA 8270/PAH Low Level	0.55	ug/L	I	
Acenaphthene	EPA 8270/PAH Low Level	0.69	ug/L	I	
Fluoranthene	EPA 8270/PAH Low Level	0.23	ug/L	I	
Fluorene	EPA 8270/PAH Low Level	1.1	ug/L	I	
Naphthalene	EPA 8270/PAH Low Level	0.49	ug/L	I	
Phenanthrene	EPA 8270/PAH Low Level	0.55	ug/L	I	
Pyrene	EPA 8270/PAH Low Level	0.26	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	780	ug/L		
MW-11 (220611)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	3.1	ug/L		
2-Methylnaphthalene	EPA 8270/PAH Low Level	2.6	ug/L		
Acenaphthene	EPA 8270/PAH Low Level	1.1	ug/L	I	
Acenaphthylene	EPA 8270/PAH Low Level	0.24	ug/L	I	
Fluoranthene	EPA 8270/PAH Low Level	0.19	ug/L	I	
Fluorene	EPA 8270/PAH Low Level	2.1	ug/L		
Naphthalene	EPA 8270/PAH Low Level	0.86	ug/L	I	
Phenanthrene	EPA 8270/PAH Low Level	1.4	ug/L	I	
Pyrene	EPA 8270/PAH Low Level	0.27	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	1600	ug/L		
MW-12 (220612)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	1.1	ug/L	I	
Acenaphthene	EPA 8270/PAH Low Level	0.53	ug/L	I	
Fluorene	EPA 8270/PAH Low Level	0.54	ug/L	I	
Naphthalene	EPA 8270/PAH Low Level	0.48	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	1200	ug/L		
MW-2 (220613)					
Naphthalene	EPA 8270/PAH Low Level	0.15	ug/L	I	
Phenanthrene	EPA 8270/PAH Low Level	0.26	ug/L	I	
Pyrene	EPA 8270/PAH Low Level	0.22	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	2000	ug/L		

Executive Summary

Analyte	Analytical Method	Result	Units	Qualifiers	Result Comments
MW-13 (220615)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	12	ug/L		
2-Methylnaphthalene	EPA 8270/PAH Low Level	7.7	ug/L		
Acenaphthene	EPA 8270/PAH Low Level	0.59	ug/L	I	
Fluorene	EPA 8270/PAH Low Level	0.87	ug/L	I	
Naphthalene	EPA 8270/PAH Low Level	1.2	ug/L	I	
Phenanthrene	EPA 8270/PAH Low Level	0.45	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	1400	ug/L		
MW-6 (220617)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	0.25	ug/L	I	
Acenaphthene	EPA 8270/PAH Low Level	0.57	ug/L	I	
Anthracene	EPA 8270/PAH Low Level	1.5	ug/L	I	
Benzo(a)anthracene	EPA 8270/PAH Low Level	0.66	ug/L		
Benzo(a)pyrene	EPA 8270/PAH Low Level	1.5	ug/L		
Benzo(b)fluoranthene	EPA 8270/PAH Low Level	2.7	ug/L		
Benzo(g,h,i)perylene	EPA 8270/PAH Low Level	1.2	ug/L	I	
Benzo(k)fluoranthene	EPA 8270/PAH Low Level	1.0	ug/L		
Chrysene	EPA 8270/PAH Low Level	2.1	ug/L		
Dibenzo(a,h)anthracene	EPA 8270/PAH Low Level	0.25	ug/L		
Fluoranthene	EPA 8270/PAH Low Level	4.8	ug/L		
Fluorene	EPA 8270/PAH Low Level	1.6	ug/L	I	
Indeno(1,2,3-cd)pyrene	EPA 8270/PAH Low Level	1.3	ug/L		
Phenanthrene	EPA 8270/PAH Low Level	1.9	ug/L	I	
Pyrene	EPA 8270/PAH Low Level	4.7	ug/L		
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	4500	ug/L		
MW-A (220619)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	1.6	ug/L	I	
2-Methylnaphthalene	EPA 8270/PAH Low Level	0.42	ug/L	I	
Acenaphthene	EPA 8270/PAH Low Level	0.40	ug/L	I	
Fluorene	EPA 8270/PAH Low Level	0.28	ug/L	I	
Naphthalene	EPA 8270/PAH Low Level	0.33	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	2000	ug/L		

Executive Summary

Analyte	Analytical Method	Result	Units	Qualifiers	Result Comments
MW-9 (220620)					
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	820	ug/L		
MW-1 (220622)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	0.27	ug/L	I	
Naphthalene	EPA 8270/PAH Low Level	0.18	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	770	ug/L		

Analytical Data

Client Sample ID: MW-10
Sample Location:
Date Collected: 10/17/2017 12:38 PM

Laboratory Sample ID: 220610
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/26/2017 2:34:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/26/2017 2:34:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/26/2017 2:34:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/26/2017 2:34:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/26/2017 2:34:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	103			75% - 117%	10/26/2017 2:34:00 AM
4-Bromofluorobenzene	1.0	104			68% - 118%	10/26/2017 2:34:00 AM
Dibromofluoromethane	1.0	98.7			75% - 113%	10/26/2017 2:34:00 AM
Toluene-d8	1.0	104			76% - 115%	10/26/2017 2:34:00 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	**1.8**	I	ug/L	0.21	2.0	10/25/2017 11:24:00 PM
2-Methylnaphthalene	1.0	**0.55**	I	ug/L	0.21	2.0	10/25/2017 11:24:00 PM
Acenaphthene	1.0	**0.69**	I	ug/L	0.26	2.0	10/25/2017 11:24:00 PM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/25/2017 11:24:00 PM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/25/2017 11:24:00 PM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/25/2017 11:24:00 PM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/25/2017 11:24:00 PM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/25/2017 11:24:00 PM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/25/2017 11:24:00 PM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/25/2017 11:24:00 PM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/25/2017 11:24:00 PM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/25/2017 11:24:00 PM
Fluoranthene	1.0	**0.23**	I	ug/L	0.17	2.0	10/25/2017 11:24:00 PM
Fluorene	1.0	**1.1**	I	ug/L	0.16	2.0	10/25/2017 11:24:00 PM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/25/2017 11:24:00 PM
Naphthalene	1.0	**0.49**	I	ug/L	0.13	2.0	10/25/2017 11:24:00 PM
Phenanthrene	1.0	**0.55**	I	ug/L	0.26	2.0	10/25/2017 11:24:00 PM
Pyrene	1.0	**0.26**	I	ug/L	0.18	2.0	10/25/2017 11:24:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	87.1			31% - 110%	10/25/2017 11:24:00 PM
Nitrobenzene-d5	1.0	90.6			24% - 100%	10/25/2017 11:24:00 PM

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

Analytical Data

p-Terphenyl-d14	1.0	91.0		45% - 125%	10/25/2017 11:24:00 PM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	780		ug/L	76	500	10/25/2017 9:12:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	82.7			42% - 193%	10/25/2017 9:12:00 PM
Ortho-terphenyl	1.0	121			82% - 142%	10/25/2017 9:12:00 PM

Analytical Data

Client Sample ID: MW-11
Sample Location:
Date Collected: 10/17/2017 01:37 PM

Laboratory Sample ID: 220611
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/26/2017 2:59:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/26/2017 2:59:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/26/2017 2:59:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/26/2017 2:59:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/26/2017 2:59:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	102			75% - 117%	10/26/2017 2:59:00 AM
4-Bromofluorobenzene	1.0	105			68% - 118%	10/26/2017 2:59:00 AM
Dibromofluoromethane	1.0	99.3			75% - 113%	10/26/2017 2:59:00 AM
Toluene-d8	1.0	104			76% - 115%	10/26/2017 2:59:00 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	**3.1**		ug/L	0.21	2.0	10/26/2017
2-Methylnaphthalene	1.0	**2.6**		ug/L	0.21	2.0	10/26/2017
Acenaphthene	1.0	**1.1**	I	ug/L	0.26	2.0	10/26/2017
Acenaphthylene	1.0	**0.24**	I	ug/L	0.19	2.0	10/26/2017
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017
Fluoranthene	1.0	**0.19**	I	ug/L	0.17	2.0	10/26/2017
Fluorene	1.0	**2.1**		ug/L	0.16	2.0	10/26/2017
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017
Naphthalene	1.0	**0.86**	I	ug/L	0.13	2.0	10/26/2017
Phenanthrene	1.0	**1.4**	I	ug/L	0.26	2.0	10/26/2017
Pyrene	1.0	**0.27**	I	ug/L	0.18	2.0	10/26/2017

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	86.8			31% - 110%	10/26/2017
Nitrobenzene-d5	1.0	91.4			24% - 100%	10/26/2017

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

Analytical Data

p-Terphenyl-d14	1.0	101		45% - 125%	10/26/2017

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	1600		ug/L	76	500	10/25/2017 9:50:00 PM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
Nonatriacontane(C39)	1.0	82.4			42% - 193%		10/25/2017 9:50:00 PM
Ortho-terphenyl	1.0	129			82% - 142%		10/25/2017 9:50:00 PM

Analytical Data

Client Sample ID: MW-12
Sample Location:
Date Collected: 10/17/2017 02:41 PM

Laboratory Sample ID: 220612
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	2.0	1.0	U	ug/L	1.0	2.0	10/26/2017 8:24:00 PM
Ethylbenzene	2.0	0.68	U	ug/L	0.68	2.0	10/26/2017 8:24:00 PM
Methyl-t-butyl ether	2.0	0.98	U	ug/L	0.98	2.0	10/26/2017 8:24:00 PM
Toluene	2.0	0.82	U	ug/L	0.82	2.0	10/26/2017 8:24:00 PM
Xylenes- Total	2.0	2.8	U	ug/L	2.8	6.0	10/26/2017 8:24:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	2.0	97.8			75% - 117%	10/26/2017 8:24:00 PM
4-Bromofluorobenzene	2.0	107			68% - 118%	10/26/2017 8:24:00 PM
Dibromofluoromethane	2.0	97.8			75% - 113%	10/26/2017 8:24:00 PM
Toluene-d8	2.0	98.7			76% - 115%	10/26/2017 8:24:00 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	**1.1**	I	ug/L	0.21	2.0	10/26/2017 12:37:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 12:37:00 AM
Acenaphthene	1.0	**0.53**	I	ug/L	0.26	2.0	10/26/2017 12:37:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 12:37:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 12:37:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 12:37:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 12:37:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 12:37:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 12:37:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 12:37:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 12:37:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 12:37:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 12:37:00 AM
Fluorene	1.0	**0.54**	I	ug/L	0.16	2.0	10/26/2017 12:37:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 12:37:00 AM
Naphthalene	1.0	**0.48**	I	ug/L	0.13	2.0	10/26/2017 12:37:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 12:37:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 12:37:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	78.5			31% - 110%	10/26/2017 12:37:00 AM
Nitrobenzene-d5	1.0	87.4			24% - 100%	10/26/2017 12:37:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	83.0		45% - 125%	10/26/2017 12:37:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	1200		ug/L	76	500	10/25/2017 11:05:00 PM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
Nonatriacontane(C39)	1.0	79.0			42% - 193%		10/25/2017 11:05:00 PM
Ortho-terphenyl	1.0	123			82% - 142%		10/25/2017 11:05:00 PM

Analytical Data

Client Sample ID: MW-2
Sample Location:
Date Collected: 10/17/2017 03:48 PM

Laboratory Sample ID: 220613
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/26/2017 10:52:00 PM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/26/2017 10:52:00 PM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/26/2017 10:52:00 PM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/26/2017 10:52:00 PM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/26/2017 10:52:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	100			75% - 117%	10/26/2017 10:52:00 PM
4-Bromofluorobenzene	1.0	106			68% - 118%	10/26/2017 10:52:00 PM
Dibromofluoromethane	1.0	96.5			75% - 113%	10/26/2017 10:52:00 PM
Toluene-d8	1.0	104			76% - 115%	10/26/2017 10:52:00 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	0.21	U	ug/L	0.21	2.0	10/26/2017 1:14:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 1:14:00 AM
Acenaphthene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 1:14:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 1:14:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 1:14:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 1:14:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 1:14:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 1:14:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 1:14:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 1:14:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 1:14:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 1:14:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 1:14:00 AM
Fluorene	1.0	0.16	U	ug/L	0.16	2.0	10/26/2017 1:14:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 1:14:00 AM
Naphthalene	1.0	**0.15**	I	ug/L	0.13	2.0	10/26/2017 1:14:00 AM
Phenanthrene	1.0	**0.26**	I	ug/L	0.26	2.0	10/26/2017 1:14:00 AM
Pyrene	1.0	**0.22**	I	ug/L	0.18	2.0	10/26/2017 1:14:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	81.4			31% - 110%	10/26/2017 1:14:00 AM
Nitrobenzene-d5	1.0	92.6			24% - 100%	10/26/2017 1:14:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	97.8		45% - 125%	10/26/2017 1:14:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	2000		ug/L	76	500	10/25/2017 11:42:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	94.8			42% - 193%	10/25/2017 11:42:00 PM
Ortho-terphenyl	1.0	111			82% - 142%	10/25/2017 11:42:00 PM

Analytical Data

Client Sample ID: MW-4
Sample Location:
Date Collected: 10/17/2017 05:12 PM

Laboratory Sample ID: 220614
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/26/2017 11:16:00 PM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/26/2017 11:16:00 PM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/26/2017 11:16:00 PM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/26/2017 11:16:00 PM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/26/2017 11:16:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	102			75% - 117%	10/26/2017 11:16:00 PM
4-Bromofluorobenzene	1.0	106			68% - 118%	10/26/2017 11:16:00 PM
Dibromofluoromethane	1.0	98.0			75% - 113%	10/26/2017 11:16:00 PM
Toluene-d8	1.0	98.3			76% - 115%	10/26/2017 11:16:00 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	0.21	U	ug/L	0.21	2.0	10/26/2017 1:50:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 1:50:00 AM
Acenaphthene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 1:50:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 1:50:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 1:50:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 1:50:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 1:50:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 1:50:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 1:50:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 1:50:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 1:50:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 1:50:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 1:50:00 AM
Fluorene	1.0	0.16	U	ug/L	0.16	2.0	10/26/2017 1:50:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 1:50:00 AM
Naphthalene	1.0	0.13	U	ug/L	0.13	2.0	10/26/2017 1:50:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 1:50:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 1:50:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	77.0			31% - 110%	10/26/2017 1:50:00 AM
Nitrobenzene-d5	1.0	87.1			24% - 100%	10/26/2017 1:50:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	88.9		45% - 125%	10/26/2017 1:50:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	76	U	ug/L	76	500	10/26/2017 12:19:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	67.6			42% - 193%	10/26/2017 12:19:00 AM
Ortho-terphenyl	1.0	106			82% - 142%	10/26/2017 12:19:00 AM

Analytical Data

Client Sample ID: MW-13
Sample Location:
Date Collected: 10/17/2017 05:45 PM

Laboratory Sample ID: 220615
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/26/2017 11:41:00 PM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/26/2017 11:41:00 PM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/26/2017 11:41:00 PM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/26/2017 11:41:00 PM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/26/2017 11:41:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	97.7			75% - 117%	10/26/2017 11:41:00 PM
4-Bromofluorobenzene	1.0	118			68% - 118%	10/26/2017 11:41:00 PM
Dibromofluoromethane	1.0	96.0			75% - 113%	10/26/2017 11:41:00 PM
Toluene-d8	1.0	105			76% - 115%	10/26/2017 11:41:00 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	**12**		ug/L	0.21	2.0	10/26/2017 2:27:00 AM
2-Methylnaphthalene	1.0	**7.7**		ug/L	0.21	2.0	10/26/2017 2:27:00 AM
Acenaphthene	1.0	**0.59**	I	ug/L	0.26	2.0	10/26/2017 2:27:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 2:27:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 2:27:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 2:27:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 2:27:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 2:27:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 2:27:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 2:27:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 2:27:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 2:27:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 2:27:00 AM
Fluorene	1.0	**0.87**	I	ug/L	0.16	2.0	10/26/2017 2:27:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 2:27:00 AM
Naphthalene	1.0	**1.2**	I	ug/L	0.13	2.0	10/26/2017 2:27:00 AM
Phenanthrene	1.0	**0.45**	I	ug/L	0.26	2.0	10/26/2017 2:27:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 2:27:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	73.8			31% - 110%	10/26/2017 2:27:00 AM
Nitrobenzene-d5	1.0	77.8			24% - 100%	10/26/2017 2:27:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	77.3		45% - 125%	10/26/2017 2:27:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	1400		ug/L	76	500	10/26/2017 12:57:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	79.7			42% - 193%	10/26/2017 12:57:00 AM
Ortho-terphenyl	1.0	128			82% - 142%	10/26/2017 12:57:00 AM

Analytical Data

Client Sample ID: MW-5
Sample Location:
Date Collected: 10/17/2017 06:22 PM

Laboratory Sample ID: 220616
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/27/2017 12:06:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/27/2017 12:06:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/27/2017 12:06:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/27/2017 12:06:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/27/2017 12:06:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	99.6			75% - 117%	10/27/2017 12:06:00 AM
4-Bromofluorobenzene	1.0	103			68% - 118%	10/27/2017 12:06:00 AM
Dibromofluoromethane	1.0	99.8			75% - 113%	10/27/2017 12:06:00 AM
Toluene-d8	1.0	100			76% - 115%	10/27/2017 12:06:00 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	0.21	U	ug/L	0.21	2.0	10/26/2017 5:31:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 5:31:00 AM
Acenaphthene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 5:31:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 5:31:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 5:31:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 5:31:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 5:31:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 5:31:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 5:31:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 5:31:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 5:31:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 5:31:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 5:31:00 AM
Fluorene	1.0	0.16	U	ug/L	0.16	2.0	10/26/2017 5:31:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 5:31:00 AM
Naphthalene	1.0	0.13	U	ug/L	0.13	2.0	10/26/2017 5:31:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 5:31:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 5:31:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	82.8			31% - 110%	10/26/2017 5:31:00 AM
Nitrobenzene-d5	1.0	97.9			24% - 100%	10/26/2017 5:31:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	87.6		45% - 125%	10/26/2017 5:31:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	76	U	ug/L	76	500	10/26/2017 1:35:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	95.1			42% - 193%	10/26/2017 1:35:00 AM
Ortho-terphenyl	1.0	101			82% - 142%	10/26/2017 1:35:00 AM

Analytical Data

Client Sample ID: MW-6
Sample Location:
Date Collected: 10/17/2017 07:00 PM

Laboratory Sample ID: 220617
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/27/2017 12:30:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/27/2017 12:30:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/27/2017 12:30:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/27/2017 12:30:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/27/2017 12:30:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	99.5			75% - 117%	10/27/2017 12:30:00 AM
4-Bromofluorobenzene	1.0	103			68% - 118%	10/27/2017 12:30:00 AM
Dibromofluoromethane	1.0	97.1			75% - 113%	10/27/2017 12:30:00 AM
Toluene-d8	1.0	100			76% - 115%	10/27/2017 12:30:00 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	**0.25**	I	ug/L	0.21	2.0	10/26/2017 6:08:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 6:08:00 AM
Acenaphthene	1.0	**0.57**	I	ug/L	0.26	2.0	10/26/2017 6:08:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 6:08:00 AM
Anthracene	1.0	**1.5**	I	ug/L	0.19	2.0	10/26/2017 6:08:00 AM
Benzo(a)anthracene	1.0	**0.66**		ug/L	0.10	0.20	10/26/2017 6:08:00 AM
Benzo(a)pyrene	1.0	**1.5**		ug/L	0.090	0.20	10/26/2017 6:08:00 AM
Benzo(b)fluoranthene	1.0	**2.7**		ug/L	0.088	0.10	10/26/2017 6:08:00 AM
Benzo(g,h,i)perylene	1.0	**1.2**	I	ug/L	0.34	2.0	10/26/2017 6:08:00 AM
Benzo(k)fluoranthene	1.0	**1.0**		ug/L	0.083	0.20	10/26/2017 6:08:00 AM
Chrysene	1.0	**2.1**		ug/L	0.21	2.0	10/26/2017 6:08:00 AM
Dibenzo(a,h)anthracene	1.0	**0.25**		ug/L	0.057	0.20	10/26/2017 6:08:00 AM
Fluoranthene	1.0	**4.8**		ug/L	0.17	2.0	10/26/2017 6:08:00 AM
Fluorene	1.0	**1.6**	I	ug/L	0.16	2.0	10/26/2017 6:08:00 AM
Indeno(1,2,3-cd)pyrene	1.0	**1.3**		ug/L	0.047	0.20	10/26/2017 6:08:00 AM
Naphthalene	1.0	0.13	U	ug/L	0.13	2.0	10/26/2017 6:08:00 AM
Phenanthrene	1.0	**1.9**	I	ug/L	0.26	2.0	10/26/2017 6:08:00 AM
Pyrene	1.0	**4.7**		ug/L	0.18	2.0	10/26/2017 6:08:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	86.8			31% - 110%	10/26/2017 6:08:00 AM
Nitrobenzene-d5	1.0	92.2			24% - 100%	10/26/2017 6:08:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	100		45% - 125%	10/26/2017 6:08:00 AM

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	4500		ug/L	76	500	10/26/2017 2:12:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	176			42% - 193%	10/26/2017 2:12:00 AM
Ortho-terphenyl	1.0	111			82% - 142%	10/26/2017 2:12:00 AM

Analytical Data

Client Sample ID: MW-8
Sample Location:
Date Collected: 10/17/2017 07:42 PM

Laboratory Sample ID: 220618
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/27/2017 12:55:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/27/2017 12:55:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/27/2017 12:55:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/27/2017 12:55:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/27/2017 12:55:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	100			75% - 117%	10/27/2017 12:55:00 AM
4-Bromofluorobenzene	1.0	103			68% - 118%	10/27/2017 12:55:00 AM
Dibromofluoromethane	1.0	98.2			75% - 113%	10/27/2017 12:55:00 AM
Toluene-d8	1.0	103			76% - 115%	10/27/2017 12:55:00 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	0.21	U	ug/L	0.21	2.0	10/26/2017 6:45:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 6:45:00 AM
Acenaphthene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 6:45:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 6:45:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 6:45:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 6:45:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 6:45:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 6:45:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 6:45:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 6:45:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 6:45:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 6:45:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 6:45:00 AM
Fluorene	1.0	0.16	U	ug/L	0.16	2.0	10/26/2017 6:45:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 6:45:00 AM
Naphthalene	1.0	0.13	U	ug/L	0.13	2.0	10/26/2017 6:45:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 6:45:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 6:45:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	71.8			31% - 110%	10/26/2017 6:45:00 AM
Nitrobenzene-d5	1.0	81.0			24% - 100%	10/26/2017 6:45:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	68.6		45% - 125%	10/26/2017 6:45:00 AM

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	76	U	ug/L	76	500	10/26/2017 2:50:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	100			42% - 193%	10/26/2017 2:50:00 AM
Ortho-terphenyl	1.0	103			82% - 142%	10/26/2017 2:50:00 AM

Analytical Data

Client Sample ID: MW-A
Sample Location:
Date Collected: 10/18/2017 08:41 AM

Laboratory Sample ID: 220619
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	2.0	1.0	U	ug/L	1.0	2.0	10/27/2017 7:09:00 PM
Ethylbenzene	2.0	0.68	U	ug/L	0.68	2.0	10/27/2017 7:09:00 PM
Methyl-t-butyl ether	2.0	0.98	U	ug/L	0.98	2.0	10/27/2017 7:09:00 PM
Toluene	2.0	0.82	U	ug/L	0.82	2.0	10/27/2017 7:09:00 PM
Xylenes- Total	2.0	2.8	U	ug/L	2.8	6.0	10/27/2017 7:09:00 PM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	2.0	94.2			75% - 117%	10/27/2017 7:09:00 PM
4-Bromofluorobenzene	2.0	108			68% - 118%	10/27/2017 7:09:00 PM
Dibromofluoromethane	2.0	95.3			75% - 113%	10/27/2017 7:09:00 PM
Toluene-d8	2.0	102			76% - 115%	10/27/2017 7:09:00 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	**1.6**	I	ug/L	0.21	2.0	10/26/2017 7:22:00 AM
2-Methylnaphthalene	1.0	**0.42**	I	ug/L	0.21	2.0	10/26/2017 7:22:00 AM
Acenaphthene	1.0	**0.40**	I	ug/L	0.26	2.0	10/26/2017 7:22:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 7:22:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 7:22:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 7:22:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 7:22:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 7:22:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 7:22:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 7:22:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 7:22:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 7:22:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 7:22:00 AM
Fluorene	1.0	**0.28**	I	ug/L	0.16	2.0	10/26/2017 7:22:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 7:22:00 AM
Naphthalene	1.0	**0.33**	I	ug/L	0.13	2.0	10/26/2017 7:22:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 7:22:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 7:22:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	77.4			31% - 110%	10/26/2017 7:22:00 AM
Nitrobenzene-d5	1.0	84.9			24% - 100%	10/26/2017 7:22:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	87.8		45% - 125%	10/26/2017 7:22:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.1	2000		ug/L	84	550	10/26/2017 3:28:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.1	163			42% - 193%	10/26/2017 3:28:00 AM
Ortho-terphenyl	1.1	104			82% - 142%	10/26/2017 3:28:00 AM

Analytical Data

Client Sample ID: MW-9
Sample Location:
Date Collected: 10/18/2017 09:17 AM

Laboratory Sample ID: 220620
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/27/2017 1:44:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/27/2017 1:44:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/27/2017 1:44:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/27/2017 1:44:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/27/2017 1:44:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
1,2-Dichloroethane-d4	1.0	95.7			75% - 117%	10/27/2017 1:44:00 AM
4-Bromofluorobenzene	1.0	101			68% - 118%	10/27/2017 1:44:00 AM
Dibromofluoromethane	1.0	97.0			75% - 113%	10/27/2017 1:44:00 AM
Toluene-d8	1.0	98.2			76% - 115%	10/27/2017 1:44:00 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	0.21	U	ug/L	0.21	2.0	10/26/2017 7:59:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 7:59:00 AM
Acenaphthene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 7:59:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 7:59:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 7:59:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 7:59:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 7:59:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 7:59:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 7:59:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 7:59:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 7:59:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 7:59:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 7:59:00 AM
Fluorene	1.0	0.16	U	ug/L	0.16	2.0	10/26/2017 7:59:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 7:59:00 AM
Naphthalene	1.0	0.13	U	ug/L	0.13	2.0	10/26/2017 7:59:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 7:59:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 7:59:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	77.6			31% - 110%	10/26/2017 7:59:00 AM
Nitrobenzene-d5	1.0	89.2			24% - 100%	10/26/2017 7:59:00 AM

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

Analytical Data

p-Terphenyl-d14	1.0	88.5		45% - 125%	10/26/2017 7:59:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	820		ug/L	76	500	10/26/2017 4:06:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	124			42% - 193%	10/26/2017 4:06:00 AM
Ortho-terphenyl	1.0	121			82% - 142%	10/26/2017 4:06:00 AM

Analytical Data

Client Sample ID: MW-3
Sample Location:
Date Collected: 10/18/2017 10:17 AM

Laboratory Sample ID: 220621
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 6010
ICP
Total Metals

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Lead	1.0	1.9	U	ug/L	1.9	5.0	10/27/2017 12:42:00 PM

Analytical Method: EPA 8011
1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1,2-Dibromoethane	1.0	0.0040	U	ug/L	0.0040	0.019	10/27/2017 5:20:00 PM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
4-Bromofluorobenzene	1.0	104			% - %		10/27/2017 5:20:00 PM

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1,2-Dichloroethane	1.0	0.90	U	ug/L	0.90	1.0	10/27/2017 2:08:00 AM
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/27/2017 2:08:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/27/2017 2:08:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/27/2017 2:08:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/27/2017 2:08:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/27/2017 2:08:00 AM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
1,2-Dichloroethane-d4	1.0	97.4			75% - 117%		10/27/2017 2:08:00 AM
4-Bromofluorobenzene	1.0	102			68% - 118%		10/27/2017 2:08:00 AM
Dibromofluoromethane	1.0	94.7			75% - 113%		10/27/2017 2:08:00 AM
Toluene-d8	1.0	101			76% - 115%		10/27/2017 2:08:00 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	0.21	U	ug/L	0.21	2.0	10/26/2017 8:35:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 8:35:00 AM

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

Analytical Data

Acenaphthene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 8:35:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 8:35:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 8:35:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 8:35:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 8:35:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 8:35:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 8:35:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 8:35:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 8:35:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 8:35:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 8:35:00 AM
Fluorene	1.0	0.16	U	ug/L	0.16	2.0	10/26/2017 8:35:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 8:35:00 AM
Naphthalene	1.0	0.13	U	ug/L	0.13	2.0	10/26/2017 8:35:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 8:35:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 8:35:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	85.6			31% - 110%	10/26/2017 8:35:00 AM
Nitrobenzene-d5	1.0	93.6			24% - 100%	10/26/2017 8:35:00 AM
p-Terphenyl-d14	1.0	95.4			45% - 125%	10/26/2017 8:35:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	76	U	ug/L	76	500	10/26/2017 4:44:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	95.4			42% - 193%	10/26/2017 4:44:00 AM
Ortho-terphenyl	1.0	107			82% - 142%	10/26/2017 4:44:00 AM

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

Analytical Data

Client Sample ID: MW-1
Sample Location:
Date Collected: 10/18/2017 11:27 AM

Laboratory Sample ID: 220622
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 6010
ICP
Total Metals

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Lead	1.0	1.9	U	ug/L	1.9	5.0	10/27/2017 12:44:00 PM

Analytical Method: EPA 8011
1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1,2-Dibromoethane	1.0	0.0040	U	ug/L	0.0040	0.020	10/27/2017 6:17:00 PM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
4-Bromofluorobenzene	1.0	113			% - %		10/27/2017 6:17:00 PM

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1,2-Dichloroethane	1.0	0.90	U	ug/L	0.90	1.0	10/26/2017 1:45:00 AM
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/26/2017 1:45:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/26/2017 1:45:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/26/2017 1:45:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/26/2017 1:45:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/26/2017 1:45:00 AM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
1,2-Dichloroethane-d4	1.0	102			75% - 117%		10/26/2017 1:45:00 AM
4-Bromofluorobenzene	1.0	104			68% - 118%		10/26/2017 1:45:00 AM
Dibromofluoromethane	1.0	99.9			75% - 113%		10/26/2017 1:45:00 AM
Toluene-d8	1.0	104			76% - 115%		10/26/2017 1:45:00 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	**0.27**	I	ug/L	0.21	2.0	10/26/2017 9:12:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 9:12:00 AM

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

Analytical Data

Acenaphthene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 9:12:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 9:12:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 9:12:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 9:12:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 9:12:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 9:12:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 9:12:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 9:12:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 9:12:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 9:12:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 9:12:00 AM
Fluorene	1.0	0.16	U	ug/L	0.16	2.0	10/26/2017 9:12:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 9:12:00 AM
Naphthalene	1.0	**0.18**	I	ug/L	0.13	2.0	10/26/2017 9:12:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 9:12:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 9:12:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	79.8			31% - 110%	10/26/2017 9:12:00 AM
Nitrobenzene-d5	1.0	90.0			24% - 100%	10/26/2017 9:12:00 AM
p-Terphenyl-d14	1.0	97.6			45% - 125%	10/26/2017 9:12:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.1	**770**		ug/L	84	550	10/26/2017 5:59:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.1	74.7			42% - 193%	10/26/2017 5:59:00 AM
Ortho-terphenyl	1.1	107			82% - 142%	10/26/2017 5:59:00 AM

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

Analytical Data

Client Sample ID: MW-7
Sample Location:
Date Collected: 10/18/2017 12:32 PM

Laboratory Sample ID: 220623
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Analytical Method: EPA 6010
ICP
Total Metals

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Lead	1.0	1.9	U	ug/L	1.9	5.0	10/27/2017 12:47:00 PM

Analytical Method: EPA 8011
1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1,2-Dibromoethane	1.0	0.0040	U	ug/L	0.0040	0.019	10/27/2017 7:14:00 PM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
4-Bromofluorobenzene	1.0	114			% - %		10/27/2017 7:14:00 PM

Analytical Method: EPA 8260
GC/MS

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
1,2-Dichloroethane	1.0	0.90	U	ug/L	0.90	1.0	10/27/2017 2:33:00 AM
Benzene	1.0	0.52	U	ug/L	0.52	1.0	10/27/2017 2:33:00 AM
Ethylbenzene	1.0	0.34	U	ug/L	0.34	1.0	10/27/2017 2:33:00 AM
Methyl-t-butyl ether	1.0	0.49	U	ug/L	0.49	1.0	10/27/2017 2:33:00 AM
Toluene	1.0	0.41	U	ug/L	0.41	1.0	10/27/2017 2:33:00 AM
Xylenes- Total	1.0	1.4	U	ug/L	1.4	3.0	10/27/2017 2:33:00 AM
Surrogate	**DF**	**% Recovery**	**Qualifier**	**Units**	**Limits**		**Analysis Date**
1,2-Dichloroethane-d4	1.0	94.9			75% - 117%		10/27/2017 2:33:00 AM
4-Bromofluorobenzene	1.0	102			68% - 118%		10/27/2017 2:33:00 AM
Dibromofluoromethane	1.0	95.6			75% - 113%		10/27/2017 2:33:00 AM
Toluene-d8	1.0	102			76% - 115%		10/27/2017 2:33:00 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	0.21	U	ug/L	0.21	2.0	10/26/2017 9:48:00 AM
2-Methylnaphthalene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 9:48:00 AM

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

Analytical Data

Acenaphthene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 9:48:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 9:48:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	10/26/2017 9:48:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	10/26/2017 9:48:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	10/26/2017 9:48:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	10/26/2017 9:48:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	10/26/2017 9:48:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	10/26/2017 9:48:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	10/26/2017 9:48:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	10/26/2017 9:48:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	10/26/2017 9:48:00 AM
Fluorene	1.0	0.16	U	ug/L	0.16	2.0	10/26/2017 9:48:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	10/26/2017 9:48:00 AM
Naphthalene	1.0	0.13	U	ug/L	0.13	2.0	10/26/2017 9:48:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	10/26/2017 9:48:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	10/26/2017 9:48:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	83.1			31% - 110%	10/26/2017 9:48:00 AM
Nitrobenzene-d5	1.0	89.8			24% - 100%	10/26/2017 9:48:00 AM
p-Terphenyl-d14	1.0	72.2			45% - 125%	10/26/2017 9:48:00 AM

Analytical Method: FDEP FL-PRO GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	76	U	ug/L	76	500	10/26/2017 6:38:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	75.9			42% - 193%	10/26/2017 6:38:00 AM
Ortho-terphenyl	1.0	104			82% - 142%	10/26/2017 6:38:00 AM

Data Chronicle

Client Sample ID: MW-10
Sample Location:
Date Collected: 10/17/2017 12:38 PM
Laboratory Sample ID: 220610
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/26/2017 2:34:00 AM	10/26/2017 2:34:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/25/2017 11:24:00 PM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/25/2017 9:12:00 PM	BW	E87684

Client Sample ID: MW-11
Sample Location:
Date Collected: 10/17/2017 01:37 PM
Laboratory Sample ID: 220611
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/26/2017 2:59:00 AM	10/26/2017 2:59:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/25/2017 9:50:00 PM	BW	E87684

Client Sample ID: MW-12
Sample Location:
Date Collected: 10/17/2017 02:41 PM
Laboratory Sample ID: 220612
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	2.0	LMSVA102517	10/26/2017 8:24:00 PM	10/26/2017 8:24:00 PM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 12:37:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/25/2017 11:05:00 PM	BW	E87684

Client Sample ID: MW-2
Sample Location:
Date Collected: 10/17/2017 03:48 PM
Laboratory Sample ID: 220613
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/26/2017 10:52:00 PM	10/26/2017 10:52:00 PM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 1:14:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/25/2017 11:42:00 PM	BW	E87684

Client Sample ID: MW-4
Sample Location:
Date Collected: 10/17/2017 05:12 PM
Laboratory Sample ID: 220614
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/26/2017 11:16:00 PM	10/26/2017 11:16:00 PM	MTA	E87684

Data Chronicle

Client Sample ID: MW-4 **Laboratory Sample ID:** 220614
Sample Location: **Matrix:** AQUEOUS-Groundwater
Date Collected: 10/17/2017 05:12 PM **Percent Moisture:**

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 1:50:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 12:19:00 AM	BW	E87684

Client Sample ID: MW-13 **Laboratory Sample ID:** 220615
Sample Location: **Matrix:** AQUEOUS-Groundwater
Date Collected: 10/17/2017 05:45 PM **Percent Moisture:**

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/26/2017 11:41:00 PM	10/26/2017 11:41:00 PM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 2:27:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 12:57:00 AM	BW	E87684

Client Sample ID: MW-5 **Laboratory Sample ID:** 220616
Sample Location: **Matrix:** AQUEOUS-Groundwater
Date Collected: 10/17/2017 06:22 PM **Percent Moisture:**

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/27/2017 12:06:00 AM	10/27/2017 12:06:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 5:31:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 1:35:00 AM	BW	E87684

Client Sample ID: MW-6 **Laboratory Sample ID:** 220617
Sample Location: **Matrix:** AQUEOUS-Groundwater
Date Collected: 10/17/2017 07:00 PM **Percent Moisture:**

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/27/2017 12:30:00 AM	10/27/2017 12:30:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 6:08:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 2:12:00 AM	BW	E87684

Client Sample ID: MW-8 **Laboratory Sample ID:** 220618
Sample Location: **Matrix:** AQUEOUS-Groundwater
Date Collected: 10/17/2017 07:42 PM **Percent Moisture:**

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/27/2017 12:55:00 AM	10/27/2017 12:55:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 6:45:00 AM	BW	E87684

Data Chronicle

Client Sample ID: MW-8
Sample Location:
Date Collected: 10/17/2017 07:42 PM
Laboratory Sample ID: 220618
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 2:50:00 AM	BW	E87684

Client Sample ID: MW-A
Sample Location:
Date Collected: 10/18/2017 08:41 AM
Laboratory Sample ID: 220619
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	2.0	LMSVA102517	10/27/2017 7:09:00 PM	10/27/2017 7:09:00 PM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 7:22:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.1	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 3:28:00 AM	BW	E87684

Client Sample ID: MW-9
Sample Location:
Date Collected: 10/18/2017 09:17 AM
Laboratory Sample ID: 220620
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8260	1.0	LMSVA102517	10/27/2017 1:44:00 AM	10/27/2017 1:44:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 7:59:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 4:06:00 AM	BW	E87684

Client Sample ID: MW-3
Sample Location:
Date Collected: 10/18/2017 10:17 AM
Laboratory Sample ID: 220621
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 6010	1.0	WTMA102617	10/27/2017 9:26:00 AM	10/27/2017 12:42:00 PM	BW	E87684
TOT	RES	EPA 8011	1.0	250582	10/27/2017 11:29:00 AM	10/27/2017 5:20:00 PM	E87582	E87582
TOT	RES	EPA 8260	1.0	LMSVA102517	10/27/2017 2:08:00 AM	10/27/2017 2:08:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 8:35:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 4:44:00 AM	BW	E87684

Client Sample ID: MW-1
Sample Location:
Date Collected: 10/18/2017 11:27 AM
Laboratory Sample ID: 220622
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 6010	1.0	WTMA102617	10/27/2017 9:26:00 AM	10/27/2017 12:44:00 PM	BW	E87684

Data Chronicle

Client Sample ID: MW-1
Sample Location:
Date Collected: 10/18/2017 11:27 AM

Laboratory Sample ID: 220622
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8011	1.0	250582	10/27/2017 11:29:00 AM	10/27/2017 6:17:00 PM	E87582	E87582
TOT	RES	EPA 8260	1.0	LMSVA102517	10/26/2017 1:45:00 AM	10/26/2017 1:45:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 9:12:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.1	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 5:59:00 AM	BW	E87684

Client Sample ID: MW-7
Sample Location:
Date Collected: 10/18/2017 12:32 PM

Laboratory Sample ID: 220623
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 6010	1.0	WTMA102617	10/27/2017 9:26:00 AM	10/27/2017 12:47:00 PM	BW	E87684
TOT	RES	EPA 8011	1.0	250582	10/27/2017 11:29:00 AM	10/27/2017 7:14:00 PM	E87582	E87582
TOT	RES	EPA 8260	1.0	LMSVA102517	10/27/2017 2:33:00 AM	10/27/2017 2:33:00 AM	MTA	E87684
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA102417	10/24/2017 12:35:00 PM	10/26/2017 9:48:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA102417	10/24/2017 12:35:00 PM	10/26/2017 6:38:00 AM	BW	E87684

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: 250582 | Analysis Method: EPA 8011 | Preparation Type: 8011

Method Batch ID: 250582 | Preparation Date: 10/27/2017 11:29:00 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: 250582MB			Client Sample ID: 250582MB				Date Analyzed: 10/27/2017 2:27:00 PM				
4-Bromofluorobenzene			5.6		ug/L	5.00	112		-			
1,2-Dibromoethane	0.0040	0.020	0.0040	U	ug/L							
QA/QC Type: LCS	Lab Sample ID: 250582LCS			Client Sample ID: 250582LCS				Date Analyzed: 10/27/2017 2:56:00 PM				
4-Bromofluorobenzene			5.67		ug/L	5.00	113	70.0	-	137		
1,2-Dibromoethane	0.0040	0.020	0.110		ug/L	0.100	110	30.0	-	170		
QA/QC Type: LCSD	Lab Sample ID: 250582LCSD			Client Sample ID: 250582LCSD				Date Analyzed: 10/27/2017 3:25:00 PM				
4-Bromofluorobenzene			5.60		ug/L	5.00	112	70.0	-	137		
1,2-Dibromoethane	0.0040	0.020	0.111		ug/L	0.100	111	30.0	-	170	0.90	50
QA/QC Type: MS	Lab Sample ID: 250582MS			Client Sample ID: 220621MS				Date Analyzed: 10/27/2017 5:49:00 PM				
1,2-Dibromoethane	0.0040	0.020	0.101		ug/L	0.097	104	60.0	-	140		
4-Bromofluorobenzene			5.29		ug/L	4.87	109	70.0	-	137		

Comments:

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 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: LMSVA102517MB			Client Sample ID: LMSVA102517MB				Date Analyzed: 10/25/2017 9:39:00 PM				
Acetone	6.2	25	6.2	U	ug/L							
Benzene	0.52	1.0	0.52	U	ug/L							
Bromobenzene	0.57	1.0	0.57	U	ug/L							
Bromochloromethane	0.42	1.0	0.42	U	ug/L							
Bromodichloromethane	0.64	1.0	0.64	U	ug/L							
Bromoform	0.40	5.0	0.40	U	ug/L							
Bromomethane	1.8	5.0	1.8	U	ug/L							
2-Butanone	5.8	25	5.8	U	ug/L							
n-Butylbenzene	0.44	1.0	0.44	U	ug/L							
sec-Butylbenzene	0.38	1.0	0.38	U	ug/L							
t-Butylbenzene	0.44	1.0	0.44	U	ug/L							

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 PM

QA/QC Type: MB | Lab Sample ID: LMSVA102517MB | Client Sample ID: LMSVA102517MB | Date Analyzed: 10/25/2017 9:39:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
Carbon tetrachloride	0.52	5.0	0.52	U	ug/L							
Chlorobenzene	0.73	1.0	0.73	U	ug/L							
Chloroethane	0.75	5.0	0.75	U	ug/L							
Chloroform	0.35	1.0	0.35	U	ug/L							
Chloromethane	0.84	5.0	0.84	U	ug/L							
2-Chlorotoluene	0.43	1.0	0.43	U	ug/L							
4-Chlorotoluene	0.45	1.0	0.45	U	ug/L							
1,2-Dibromo-3-chloropropane	0.32	5.0	0.32	U	ug/L							
Dibromochloromethane	0.60	1.0	0.60	U	ug/L							
1,2-Dibromoethane	0.66	1.0	0.66	U	ug/L							
Dibromomethane	0.64	1.0	0.64	U	ug/L							
1,2-Dichlorobenzene	0.41	1.0	0.41	U	ug/L							
1,3-Dichlorobenzene	0.27	1.0	0.27	U	ug/L							
1,4-Dichlorobenzene	0.54	1.0	0.54	U	ug/L							
Dichlorodifluoromethane	0.80	5.0	0.80	U	ug/L							
1,1-Dichloroethane	0.47	1.0	0.47	U	ug/L							
1,2-Dichloroethane	0.90	1.0	0.90	U	ug/L							
1,1-Dichloroethene	0.54	1.0	0.54	U	ug/L							
cis-1,2-Dichloroethene	0.64	1.0	0.64	U	ug/L							
trans-1,2-Dichloroethene	0.69	1.0	0.69	U	ug/L							
1,2-Dichloropropane	0.36	1.0	0.36	U	ug/L							
1,3-Dichloropropane	0.58	1.0	0.58	U	ug/L							
2,2-Dichloropropane	0.49	1.0	0.49	U	ug/L							
1,1-Dichloropropene	0.49	1.0	0.49	U	ug/L							
Isopropylbenzene	0.50	1.0	0.50	U	ug/L							
Ethylbenzene	0.34	1.0	0.34	U	ug/L							
Styrene	0.51	1.0	0.51	U	ug/L							
Hexachlorobutadiene	0.78	5.0	0.78	U	ug/L							
Isopropylether	0.46	1.0	0.46	U	ug/L							
4-Isopropyltoluene	0.53	1.0	0.53	U	ug/L							
Methylene chloride	1.1	5.0	1.1	U	ug/L							
Methyl-t-butyl ether	0.49	1.0	0.49	U	ug/L							
Naphthalene	0.56	5.0	0.56	U	ug/L							
n-Propylbenzene	0.52	1.0	0.52	U	ug/L							
1,1,1,2-Tetrachloroethane	0.57	1.0	0.57	U	ug/L							

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 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: LMSVA102517MB			Client Sample ID: LMSVA102517MB			Date Analyzed: 10/25/2017 9:39:00 PM					
1,1,2,2-Tetrachloroethane	0.41	1.0	0.41	U	ug/L							
Tetrachloroethene	0.82	1.0	0.82	U	ug/L							
Toluene	0.41	1.0	0.41	U	ug/L							
1,2,3-Trichlorobenzene	1.5	5.0	1.5	U	ug/L							
1,2,4-Trichlorobenzene	0.32	5.0	0.32	U	ug/L							
1,1,1-Trichloroethane	0.43	1.0	0.43	U	ug/L							
1,1,2-Trichloroethane	0.37	1.0	0.37	U	ug/L							
Trichloroethene	0.54	1.0	0.54	U	ug/L							
Trichlorofluoromethane	1.0	5.0	1.0	U	ug/L							
1,2,3-Trichloropropane	0.71	5.0	0.71	U	ug/L							
1,2,4-Trimethylbenzene	0.82	1.0	0.82	U	ug/L							
1,3,5-Trimethylbenzene	0.53	1.0	0.53	U	ug/L							
Vinyl chloride	0.74	1.0	0.74	U	ug/L							
Xylenes- Total	1.4	3.0	1.4	U	ug/L							
Toluene-d8			50.9		ug/L	50.0	102	76.0	-	115		
4-Bromofluorobenzene			53.7		ug/L	50.0	107	68.0	-	118		
Dibromofluoromethane			49.7		ug/L	50.0	99.4	75.0	-	113		
1,2-Dichloroethane-d4			52.0		ug/L	50.0	104	75.0	-	117		
QA/QC Type: LCS	Lab Sample ID: LMSVA102517LCS			Client Sample ID: LMSVA102517LCS			Date Analyzed: 10/25/2017 8:01:00 PM					
Acetone	6.2	25	97.4		ug/L	100	97.4	51.0	-	192		
Benzene	0.52	1.0	48.4		ug/L	50.0	96.8	86.0	-	121		
Bromobenzene	0.57	1.0	47.0		ug/L	50.0	94.0	87.0	-	121		
Bromochloromethane	0.42	1.0	51.4		ug/L	50.0	103	85.0	-	129		
Bromodichloromethane	0.64	1.0	47.8		ug/L	50.0	95.6	85.0	-	128		
Bromoform	0.40	5.0	50.9		ug/L	50.0	102	82.0	-	130		
Bromomethane	1.8	5.0	48.4		ug/L	50.0	96.8	34.0	-	144		
2-Butanone	5.8	25	129		ug/L	100	129	71.0	-	148		
n-Butylbenzene	0.44	1.0	50.8		ug/L	50.0	102	71.0	-	120		
sec-Butylbenzene	0.38	1.0	51.4		ug/L	50.0	103	75.0	-	120		
t-Butylbenzene	0.44	1.0	50.5		ug/L	50.0	101	77.0	-	124		
Carbon tetrachloride	0.52	5.0	50.6		ug/L	50.0	101	74.0	-	137		
Chlorobenzene	0.73	1.0	47.8		ug/L	50.0	95.6	88.0	-	118		
Chloroethane	0.75	5.0	53.2		ug/L	50.0	106	62.0	-	133		
Chloroform	0.35	1.0	50.4		ug/L	50.0	101	83.0	-	124		

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 PM

QA/QC Type: LCS | Lab Sample ID: LMSVA102517LCS | Client Sample ID: LMSVA102517LCS | Date Analyzed: 10/25/2017 8:01:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
Chloromethane	0.84	5.0	45.2		ug/L	50.0	90.4	35.0	-	131		
2-Chlorotoluene	0.43	1.0	48.8		ug/L	50.0	97.6	84.0	-	121		
4-Chlorotoluene	0.45	1.0	49.2		ug/L	50.0	98.4	82.0	-	120		
1,2-Dibromo-3-chloropropane	0.32	5.0	50.8		ug/L	50.0	102	65.0	-	129		
Dibromochloromethane	0.60	1.0	52.8		ug/L	50.0	106	87.0	-	125		
1,2-Dibromoethane	0.66	1.0	50.4		ug/L	50.0	101	90.0	-	122		
Dibromomethane	0.64	1.0	48.5		ug/L	50.0	97.0	85.0	-	120		
1,2-Dichlorobenzene	0.41	1.0	48.4		ug/L	50.0	96.8	85.0	-	119		
1,3-Dichlorobenzene	0.27	1.0	47.2		ug/L	50.0	94.4	84.0	-	120		
1,4-Dichlorobenzene	0.54	1.0	47.3		ug/L	50.0	94.6	83.0	-	117		
Dichlorodifluoromethane	0.80	5.0	42.4		ug/L	50.0	84.8	29.0	-	128		
1,1-Dichloroethane	0.47	1.0	49.1		ug/L	50.0	98.2	74.0	-	121		
1,2-Dichloroethane	0.90	1.0	48.4		ug/L	50.0	96.8	82.0	-	126		
1,1-Dichloroethene	0.54	1.0	47.1		ug/L	50.0	94.2	69.0	-	109		
cis-1,2-Dichloroethene	0.64	1.0	48.5		ug/L	50.0	97.0	83.0	-	123		
trans-1,2-Dichloroethene	0.69	1.0	49.9		ug/L	50.0	99.8	79.0	-	119		
1,2-Dichloropropane	0.36	1.0	46.9		ug/L	50.0	93.8	82.0	-	123		
1,3-Dichloropropane	0.58	1.0	51.0		ug/L	50.0	102	90.0	-	120		
2,2-Dichloropropane	0.49	1.0	48.3		ug/L	50.0	96.6	76.0	-	128		
1,1-Dichloropropene	0.49	1.0	50.0		ug/L	50.0	100	78.0	-	139		
Isopropylbenzene	0.50	1.0	51.8		ug/L	50.0	104	78.0	-	122		
Ethylbenzene	0.34	1.0	51.5		ug/L	50.0	103	84.0	-	125		
Hexachlorobutadiene	0.78	5.0	47.0		ug/L	50.0	94.0	60.0	-	125		
Styrene	0.51	1.0	49.6		ug/L	50.0	99.2	79.0	-	125		
Isopropylether	0.46	1.0	102		ug/L	100	102	64.0	-	138		
4-Isopropyltoluene	0.53	1.0	52.6		ug/L	50.0	105	74.0	-	118		
Methylene chloride	1.1	5.0	48.7		ug/L	50.0	97.4	69.0	-	121		
Methyl-t-butyl ether	0.49	1.0	53.6		ug/L	50.0	107	82.0	-	129		
Naphthalene	0.56	5.0	46.7		ug/L	50.0	93.4	64.0	-	130		
n-Propylbenzene	0.52	1.0	51.8		ug/L	50.0	104	79.0	-	125		
1,1,1,2-Tetrachloroethane	0.57	1.0	51.1		ug/L	50.0	102	83.0	-	137		
1,1,2,2-Tetrachloroethane	0.41	1.0	49.5		ug/L	50.0	99.0	79.0	-	128		
Tetrachloroethene	0.82	1.0	48.0		ug/L	50.0	96.0	62.0	-	144		
Toluene	0.41	1.0	47.8		ug/L	50.0	95.6	87.0	-	119		
1,2,3-Trichlorobenzene	1.5	5.0	43.1		ug/L	50.0	86.2	43.0	-	151		

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 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: LMSVA102517LCS			Client Sample ID: LMSVA102517LCS			Date Analyzed: 10/25/2017 8:01:00 PM					
1,2,4-Trichlorobenzene	0.32	5.0	45.8		ug/L	50.0	91.6	73.0	-	118		
1,1,1-Trichloroethane	0.43	1.0	50.6		ug/L	50.0	101	81.0	-	131		
1,1,2-Trichloroethane	0.37	1.0	51.6		ug/L	50.0	103	87.0	-	121		
Trichloroethene	0.54	1.0	47.7		ug/L	50.0	95.4	86.0	-	119		
Trichlorofluoromethane	1.0	5.0	49.3		ug/L	50.0	98.6	68.0	-	134		
1,2,3-Trichloropropane	0.71	5.0	62.9		ug/L	50.0	126	68.0	-	137		
1,2,4-Trimethylbenzene	0.82	1.0	50.3		ug/L	50.0	101	83.0	-	117		
1,3,5-Trimethylbenzene	0.53	1.0	50.8		ug/L	50.0	102	82.0	-	118		
Vinyl chloride	0.74	1.0	50.1		ug/L	50.0	100	60.0	-	127		
Xylenes- Total	1.4	3.0	144		ug/L	150	96.0	84.0	-	121		
Toluene-d8			49.8		ug/L	50.0	99.6	76.0	-	115		
4-Bromofluorobenzene			52.2		ug/L	50.0	104	68.0	-	118		
Dibromofluoromethane			50.6		ug/L	50.0	101	75.0	-	113		
1,2-Dichloroethane-d4			51.4		ug/L	50.0	103	75.0	-	117		
QA/QC Type: LCSD	Lab Sample ID: LMSVA102517LCSD			Client Sample ID: LMSVA102517LCSD			Date Analyzed: 10/25/2017 8:26:00 PM					
Acetone	6.2	25	119		ug/L	100	119	51.0	-	192	20	70.0
Benzene	0.52	1.0	48.0		ug/L	50.0	96.0	86.0	-	121	0.83	17.0
Bromobenzene	0.57	1.0	47.7		ug/L	50.0	95.4	87.0	-	121	1.5	17.0
Bromochloromethane	0.42	1.0	52.2		ug/L	50.0	104	85.0	-	129	1.5	22.0
Bromodichloromethane	0.64	1.0	49.2		ug/L	50.0	98.4	85.0	-	128	2.9	22.0
Bromoform	0.40	5.0	51.2		ug/L	50.0	102	82.0	-	130	0.59	24.0
Bromomethane	1.8	5.0	39.3		ug/L	50.0	78.6	34.0	-	144	21	55.0
2-Butanone	5.8	25	134		ug/L	100	134	71.0	-	148	3.8	39.0
n-Butylbenzene	0.44	1.0	50.4		ug/L	50.0	101	71.0	-	120	0.79	25.0
sec-Butylbenzene	0.38	1.0	51.7		ug/L	50.0	103	75.0	-	120	0.58	22.0
t-Butylbenzene	0.44	1.0	50.5		ug/L	50.0	101	77.0	-	124	0	24.0
Carbon tetrachloride	0.52	5.0	49.1		ug/L	50.0	98.2	74.0	-	137	3.0	32.0
Chlorobenzene	0.73	1.0	47.3		ug/L	50.0	94.6	88.0	-	118	1.1	15.0
Chloroethane	0.75	5.0	51.7		ug/L	50.0	103	62.0	-	133	2.9	36.0
Chloroform	0.35	1.0	50.2		ug/L	50.0	100	83.0	-	124	0.40	20.0
Chloromethane	0.84	5.0	43.3		ug/L	50.0	86.6	35.0	-	131	4.3	48.0
2-Chlorotoluene	0.43	1.0	49.0		ug/L	50.0	98.0	84.0	-	121	0.41	18.0
4-Chlorotoluene	0.45	1.0	49.5		ug/L	50.0	99.0	82.0	-	120	0.61	19.0
1,2-Dibromo-3-chloropropane	0.32	5.0	48.8		ug/L	50.0	97.6	65.0	-	129	4.0	32.0

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 PM

QA/QC Type: LCSD | Lab Sample ID: LMSVA102517LCSD | Client Sample ID: LMSVA102517LCSD | Date Analyzed: 10/25/2017 8:26:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
Dibromochloromethane	0.60	1.0	52.4		ug/L	50.0	105	87.0	-	125	0.76	19.0
1,2-Dibromoethane	0.66	1.0	50.1		ug/L	50.0	100	90.0	-	122	0.60	16.0
Dibromomethane	0.64	1.0	49.7		ug/L	50.0	99.4	85.0	-	120	2.4	18.0
1,2-Dichlorobenzene	0.41	1.0	48.8		ug/L	50.0	97.6	85.0	-	119	0.82	17.0
1,3-Dichlorobenzene	0.27	1.0	46.8		ug/L	50.0	93.6	84.0	-	120	0.85	18.0
1,4-Dichlorobenzene	0.54	1.0	47.6		ug/L	50.0	95.2	83.0	-	117	0.63	17.0
Dichlorodifluoromethane	0.80	5.0	43.5		ug/L	50.0	87.0	29.0	-	128	2.6	50.0
1,1-Dichloroethane	0.47	1.0	48.2		ug/L	50.0	96.4	74.0	-	121	1.8	23.0
1,2-Dichloroethane	0.90	1.0	48.6		ug/L	50.0	97.2	82.0	-	126	0.41	22.0
1,1-Dichloroethene	0.54	1.0	47.3		ug/L	50.0	94.6	69.0	-	109	0.42	20.0
cis-1,2-Dichloroethene	0.64	1.0	47.9		ug/L	50.0	95.8	83.0	-	123	1.2	20.0
trans-1,2-Dichloroethene	0.69	1.0	49.4		ug/L	50.0	98.8	79.0	-	119	1.0	20.0
1,2-Dichloropropane	0.36	1.0	47.7		ug/L	50.0	95.4	82.0	-	123	1.7	21.0
1,3-Dichloropropane	0.58	1.0	51.0		ug/L	50.0	102	90.0	-	120	0	15.0
2,2-Dichloropropane	0.49	1.0	46.8		ug/L	50.0	93.6	76.0	-	128	3.2	26.0
1,1-Dichloropropene	0.49	1.0	48.4		ug/L	50.0	96.8	78.0	-	139	3.3	30.0
Isopropylbenzene	0.50	1.0	52.2		ug/L	50.0	104	78.0	-	122	0.77	22.0
Ethylbenzene	0.34	1.0	50.6		ug/L	50.0	101	84.0	-	125	1.8	21.0
Hexachlorobutadiene	0.78	5.0	47.1		ug/L	50.0	94.2	60.0	-	125	0.21	32.0
Styrene	0.51	1.0	49.5		ug/L	50.0	99.0	79.0	-	125	0.20	23.0
Isopropylether	0.46	1.0	100		ug/L	100	100	64.0	-	138	2.0	37.0
4-Isopropyltoluene	0.53	1.0	52.6		ug/L	50.0	105	74.0	-	118	0	22.0
Methylene chloride	1.1	5.0	48.9		ug/L	50.0	97.8	69.0	-	121	0.41	26.0
Methyl-t-butyl ether	0.49	1.0	53.1		ug/L	50.0	106	82.0	-	129	0.94	24.0
Naphthalene	0.56	5.0	47.4		ug/L	50.0	94.8	64.0	-	130	1.5	33.0
n-Propylbenzene	0.52	1.0	52.0		ug/L	50.0	104	79.0	-	125	0.39	23.0
1,1,1,2-Tetrachloroethane	0.57	1.0	50.3		ug/L	50.0	101	83.0	-	137	1.6	27.0
1,1,2,2-Tetrachloroethane	0.41	1.0	50.5		ug/L	50.0	101	79.0	-	128	2.0	24.0
Tetrachloroethene	0.82	1.0	48.3		ug/L	50.0	96.6	62.0	-	144	0.62	41.0
Toluene	0.41	1.0	47.8		ug/L	50.0	95.6	87.0	-	119	0	16.0
1,2,3-Trichlorobenzene	1.5	5.0	44.4		ug/L	50.0	88.8	43.0	-	151	3.0	54.0
1,2,4-Trichlorobenzene	0.32	5.0	46.5		ug/L	50.0	93.0	73.0	-	118	1.5	22.0
1,1,1-Trichloroethane	0.43	1.0	50.1		ug/L	50.0	100	81.0	-	131	0.99	25.0
1,1,2-Trichloroethane	0.37	1.0	51.4		ug/L	50.0	103	87.0	-	121	0.39	17.0
Trichloroethene	0.54	1.0	49.1		ug/L	50.0	98.2	86.0	-	119	2.9	17.0

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: LCSD	Lab Sample ID: LMSVA102517LCSD			Client Sample ID: LMSVA102517LCSD				Date Analyzed: 10/25/2017 8:26:00 PM				
Trichlorofluoromethane	1.0	5.0	47.5		ug/L	50.0	95.0	68.0	-	134	3.7	33.0
1,2,3-Trichloropropane	0.71	5.0	65.1		ug/L	50.0	130	68.0	-	137	3.4	34.0
1,2,4-Trimethylbenzene	0.82	1.0	50.4		ug/L	50.0	101	83.0	-	117	0.20	17.0
1,3,5-Trimethylbenzene	0.53	1.0	51.0		ug/L	50.0	102	82.0	-	118	0.39	18.0
Vinyl chloride	0.74	1.0	48.9		ug/L	50.0	97.8	60.0	-	127	2.4	33.0
Xylenes- Total	1.4	3.0	144		ug/L	150	96.0	84.0	-	121	0	18.0
Toluene-d8			51.4		ug/L	50.0	103	76.0	-	115		
4-Bromofluorobenzene			53.0		ug/L	50.0	106	68.0	-	118		
Dibromofluoromethane			50.8		ug/L	50.0	102	75.0	-	113		
1,2-Dichloroethane-d4			53.3		ug/L	50.0	107	75.0	-	117		
QA/QC Type: MS	Lab Sample ID: LMSVA102517MS			Client Sample ID: 220578MS				Date Analyzed: 10/26/2017 6:46:00 PM				
Acetone	6.2	25	110		ug/L	100	110	50.0	-	145		
Benzene	0.52	1.0	52.2		ug/L	50.0	104	69.0	-	135		
Bromobenzene	0.57	1.0	52.3		ug/L	50.0	105	78.0	-	130		
Bromochloromethane	0.42	1.0	55.0		ug/L	50.0	110	83.0	-	134		
Bromodichloromethane	0.64	1.0	51.7		ug/L	50.0	103	78.0	-	134		
Bromoform	0.40	5.0	54.8		ug/L	50.0	110	73.0	-	133		
Bromomethane	1.8	5.0	47.5		ug/L	50.0	95.0	14.0	-	137		
2-Butanone	5.8	25	155	S2	ug/L	100	155	61.0	-	130		
n-Butylbenzene	0.44	1.0	54.7		ug/L	50.0	109	64.0	-	129		
sec-Butylbenzene	0.38	1.0	56.6		ug/L	50.0	113	70.0	-	128		
t-Butylbenzene	0.44	1.0	55.6		ug/L	50.0	111	69.0	-	135		
Carbon tetrachloride	0.52	5.0	54.9		ug/L	50.0	110	73.0	-	144		
Chlorobenzene	0.73	1.0	53.3		ug/L	50.0	107	82.0	-	127		
Chloroethane	0.75	5.0	58.6		ug/L	50.0	117	65.0	-	139		
Chloroform	0.35	1.0	51.0		ug/L	50.0	102	83.0	-	128		
Chloromethane	0.84	5.0	43.5		ug/L	50.0	87.0	36.0	-	123		
2-Chlorotoluene	0.43	1.0	51.6		ug/L	50.0	103	80.0	-	131		
4-Chlorotoluene	0.45	1.0	51.6		ug/L	50.0	103	76.0	-	129		
1,2-Dibromo-3-chloropropane	0.32	5.0	52.2		ug/L	50.0	104	62.0	-	128		
Dibromochloromethane	0.60	1.0	57.7		ug/L	50.0	115	81.0	-	128		
1,2-Dibromoethane	0.66	1.0	54.8		ug/L	50.0	110	85.0	-	123		
Dibromomethane	0.64	1.0	52.3		ug/L	50.0	105	81.0	-	121		
1,2-Dichlorobenzene	0.41	1.0	54.0		ug/L	50.0	108	78.0	-	125		

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 PM

QA/QC Type: MS | Lab Sample ID: LMSVA102517MS | Client Sample ID: 220578MS | Date Analyzed: 10/26/2017 6:46:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
1,3-Dichlorobenzene	0.27	1.0	51.1		ug/L	50.0	102	76.0	-	127		
1,4-Dichlorobenzene	0.54	1.0	52.3		ug/L	50.0	105	75.0	-	124		
Dichlorodifluoromethane	0.80	5.0	39.4		ug/L	50.0	78.8	26.0	-	124		
1,1-Dichloroethane	0.47	1.0	48.4		ug/L	50.0	96.8	74.0	-	126		
1,2-Dichloroethane	0.90	1.0	51.3		ug/L	50.0	103	74.0	-	133		
1,1-Dichloroethene	0.54	1.0	48.6		ug/L	50.0	97.2	67.0	-	115		
cis-1,2-Dichloroethene	0.64	1.0	49.6		ug/L	50.0	99.2	83.0	-	127		
trans-1,2-Dichloroethene	0.69	1.0	51.7		ug/L	50.0	103	80.0	-	124		
1,2-Dichloropropane	0.36	1.0	49.3		ug/L	50.0	98.6	82.0	-	126		
1,3-Dichloropropane	0.58	1.0	53.9		ug/L	50.0	108	84.0	-	124		
2,2-Dichloropropane	0.49	1.0	49.2		ug/L	50.0	98.4	62.0	-	133		
1,1-Dichloropropene	0.49	1.0	53.0		ug/L	50.0	106	79.0	-	141		
Isopropylbenzene	0.50	1.0	56.2		ug/L	50.0	112	73.0	-	131		
Ethylbenzene	0.34	1.0	57.6		ug/L	50.0	115	64.0	-	141		
Hexachlorobutadiene	0.78	5.0	53.9		ug/L	50.0	108	52.0	-	125		
Styrene	0.51	1.0	53.7		ug/L	50.0	107	72.0	-	132		
Isopropylether	0.46	1.0	107		ug/L	100	107	58.0	-	151		
4-Isopropyltoluene	0.53	1.0	57.5		ug/L	50.0	115	55.0	-	126		
Methylene chloride	1.1	5.0	48.3		ug/L	50.0	96.6	63.0	-	115		
Methyl-t-butyl ether	0.49	1.0	57.2		ug/L	50.0	105	64.0	-	135		
Naphthalene	0.56	5.0	52.3		ug/L	50.0	105	60.0	-	133		
n-Propylbenzene	0.52	1.0	55.7		ug/L	50.0	111	75.0	-	136		
1,1,1,2-Tetrachloroethane	0.57	1.0	55.9		ug/L	50.0	112	71.0	-	151		
1,1,2,2-Tetrachloroethane	0.41	1.0	51.3		ug/L	50.0	103	73.0	-	131		
Tetrachloroethene	0.82	1.0	55.2		ug/L	50.0	110	64.0	-	112		
Toluene	0.41	1.0	51.9		ug/L	50.0	104	69.0	-	132		
1,2,3-Trichlorobenzene	1.5	5.0	50.3		ug/L	50.0	101	60.0	-	128		
1,2,4-Trichlorobenzene	0.32	5.0	51.5		ug/L	50.0	103	65.0	-	117		
1,1,1-Trichloroethane	0.43	1.0	54.8		ug/L	50.0	110	77.0	-	142		
1,1,2-Trichloroethane	0.37	1.0	55.6		ug/L	50.0	111	80.0	-	128		
Trichloroethene	0.54	1.0	51.5		ug/L	50.0	103	87.0	-	121		
Trichlorofluoromethane	1.0	5.0	52.8		ug/L	50.0	106	57.0	-	152		
1,2,3-Trichloropropane	0.71	5.0	63.6		ug/L	50.0	127	67.0	-	134		
1,2,4-Trimethylbenzene	0.82	1.0	54.6		ug/L	50.0	109	71.0	-	130		
1,3,5-Trimethylbenzene	0.53	1.0	54.7		ug/L	50.0	109	73.0	-	127		

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 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: LMSVA102517MS			Client Sample ID: 220578MS			Date Analyzed: 10/26/2017 6:46:00 PM					
Vinyl chloride	0.74	1.0	53.0		ug/L	50.0	106	61.0	-	134		
Xylenes- Total	1.4	3.0	160		ug/L	150	107	68.0	-	133		
Toluene-d8			50.2		ug/L	50.0	100	76.0	-	115		
4-Bromofluorobenzene			49.4		ug/L	50.0	98.8	68.0	-	118		
Dibromofluoromethane			51.6		ug/L	50.0	103	75.0	-	113		
1,2-Dichloroethane-d4			53.5		ug/L	50.0	107	75.0	-	117		
QA/QC Type: MSD	Lab Sample ID: LMSVA102517MSD			Client Sample ID: 220578MSD			Date Analyzed: 10/26/2017 7:10:00 PM					
Acetone	6.2	25	84.9		ug/L	100	84.9	50.0	-	145	26	47.0
Benzene	0.52	1.0	51.0		ug/L	50.0	102	69.0	-	135	2.3	33.0
Bromobenzene	0.57	1.0	52.0		ug/L	50.0	104	78.0	-	130	0.58	26.0
Bromochloromethane	0.42	1.0	53.2		ug/L	50.0	106	83.0	-	134	3.3	26.0
Bromodichloromethane	0.64	1.0	49.8		ug/L	50.0	99.6	78.0	-	134	3.7	28.0
Bromoform	0.40	5.0	54.5		ug/L	50.0	109	73.0	-	133	0.55	30.0
Bromomethane	1.8	5.0	49.1		ug/L	50.0	98.2	14.0	-	137	3.3	62.0
2-Butanone	5.8	25	124		ug/L	100	124	61.0	-	130	22	34.0
n-Butylbenzene	0.44	1.0	55.1		ug/L	50.0	110	64.0	-	129	0.73	32.0
sec-Butylbenzene	0.38	1.0	56.2		ug/L	50.0	112	70.0	-	128	0.71	29.0
t-Butylbenzene	0.44	1.0	55.0		ug/L	50.0	110	69.0	-	135	1.1	33.0
Carbon tetrachloride	0.52	5.0	53.3		ug/L	50.0	107	73.0	-	144	3.0	35.0
Chlorobenzene	0.73	1.0	51.6		ug/L	50.0	103	82.0	-	127	3.2	22.0
Chloroethane	0.75	5.0	58.3		ug/L	50.0	117	65.0	-	139	0.51	37.0
Chloroform	0.35	1.0	50.4		ug/L	50.0	101	83.0	-	128	1.2	23.0
Chloromethane	0.84	5.0	43.3		ug/L	50.0	86.6	36.0	-	123	0.46	43.0
2-Chlorotoluene	0.43	1.0	51.7		ug/L	50.0	103	80.0	-	131	0.19	25.0
4-Chlorotoluene	0.45	1.0	51.3		ug/L	50.0	103	76.0	-	129	0.58	27.0
1,2-Dibromo-3-chloropropane	0.32	5.0	50.7		ug/L	50.0	101	62.0	-	128	2.9	33.0
Dibromochloromethane	0.60	1.0	56.3		ug/L	50.0	113	81.0	-	128	2.5	23.0
1,2-Dibromoethane	0.66	1.0	52.4		ug/L	50.0	105	85.0	-	123	4.5	19.0
Dibromomethane	0.64	1.0	51.8		ug/L	50.0	104	81.0	-	121	0.96	20.0
1,2-Dichlorobenzene	0.41	1.0	53.3		ug/L	50.0	107	78.0	-	125	1.3	24.0
1,3-Dichlorobenzene	0.27	1.0	51.3		ug/L	50.0	103	76.0	-	127	0.39	25.0
1,4-Dichlorobenzene	0.54	1.0	52.0		ug/L	50.0	104	75.0	-	124	0.58	24.0
Dichlorodifluoromethane	0.80	5.0	41.4		ug/L	50.0	82.8	26.0	-	124	5.0	49.0
1,1-Dichloroethane	0.47	1.0	49.1		ug/L	50.0	98.2	74.0	-	126	1.4	26.0

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: LMSVA102517 | Analysis Method: EPA 8260 | Preparation Type: 5030

Method Batch ID: MLMSVA102517 | Preparation Date: 10/25/2017 9:39:00 PM

QA/QC Type: MSD | Lab Sample ID: LMSVA102517MSD | Client Sample ID: 220578MSD | Date Analyzed: 10/26/2017 7:10:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
1,2-Dichloroethane	0.90	1.0	50.1		ug/L	50.0	100	74.0	-	133	2.4	29.0
1,1-Dichloroethene	0.54	1.0	48.4		ug/L	50.0	96.8	67.0	-	115	0.41	24.0
cis-1,2-Dichloroethene	0.64	1.0	49.3		ug/L	50.0	98.6	83.0	-	127	0.61	22.0
trans-1,2-Dichloroethene	0.69	1.0	51.2		ug/L	50.0	102	80.0	-	124	0.97	22.0
1,2-Dichloropropane	0.36	1.0	48.6		ug/L	50.0	97.2	82.0	-	126	1.4	22.0
1,3-Dichloropropane	0.58	1.0	52.6		ug/L	50.0	105	84.0	-	124	2.4	20.0
2,2-Dichloropropane	0.49	1.0	48.2		ug/L	50.0	96.4	62.0	-	133	2.1	36.0
1,1-Dichloropropene	0.49	1.0	51.1		ug/L	50.0	102	79.0	-	141	3.7	31.0
Isopropylbenzene	0.50	1.0	56.6		ug/L	50.0	113	73.0	-	131	0.71	29.0
Ethylbenzene	0.34	1.0	55.5		ug/L	50.0	111	64.0	-	141	3.7	39.0
Hexachlorobutadiene	0.78	5.0	55.5		ug/L	50.0	111	52.0	-	125	2.9	36.0
Styrene	0.51	1.0	53.3		ug/L	50.0	107	72.0	-	132	0.75	30.0
Isopropylether	0.46	1.0	105		ug/L	100	105	58.0	-	151	1.9	46.0
4-Isopropyltoluene	0.53	1.0	57.6		ug/L	50.0	115	55.0	-	126	0.17	30.0
Methylene chloride	1.1	5.0	49.2		ug/L	50.0	98.4	63.0	-	115	1.8	26.0
Methyl-t-butyl ether	0.49	1.0	58.1		ug/L	50.0	106	64.0	-	135	1.6	36.0
Naphthalene	0.56	5.0	53.6		ug/L	50.0	107	60.0	-	133	2.5	37.0
n-Propylbenzene	0.52	1.0	56.0		ug/L	50.0	112	75.0	-	136	0.54	31.0
1,1,1,2-Tetrachloroethane	0.57	1.0	54.2		ug/L	50.0	108	71.0	-	151	3.1	40.0
1,1,2,2-Tetrachloroethane	0.41	1.0	52.0		ug/L	50.0	104	73.0	-	131	1.4	29.0
Tetrachloroethene	0.82	1.0	53.5		ug/L	50.0	107	64.0	-	112	3.1	24.0
Toluene	0.41	1.0	50.8		ug/L	50.0	102	69.0	-	132	2.1	32.0
1,2,3-Trichlorobenzene	1.5	5.0	53.1		ug/L	50.0	106	60.0	-	128	5.4	34.0
1,2,4-Trichlorobenzene	0.32	5.0	52.9		ug/L	50.0	106	65.0	-	117	2.7	26.0
1,1,1-Trichloroethane	0.43	1.0	53.5		ug/L	50.0	107	77.0	-	142	2.4	33.0
1,1,2-Trichloroethane	0.37	1.0	53.4		ug/L	50.0	107	80.0	-	128	4.0	24.0
Trichloroethene	0.54	1.0	49.8		ug/L	50.0	99.6	87.0	-	121	3.4	17.0
Trichlorofluoromethane	1.0	5.0	52.3		ug/L	50.0	105	57.0	-	152	0.95	48.0
1,2,3-Trichloropropane	0.71	5.0	65.0		ug/L	50.0	130	67.0	-	134	2.2	33.0
1,2,4-Trimethylbenzene	0.82	1.0	53.8		ug/L	50.0	108	71.0	-	130	1.5	30.0
1,3,5-Trimethylbenzene	0.53	1.0	54.6		ug/L	50.0	109	73.0	-	127	0.18	27.0
Vinyl chloride	0.74	1.0	52.9		ug/L	50.0	106	61.0	-	134	0.19	37.0
Xylenes- Total	1.4	3.0	155		ug/L	150	103	68.0	-	133	3.2	33.0
Toluene-d8			50.6		ug/L	50.0	101	76.0	-	115		
4-Bromofluorobenzene			51.4		ug/L	50.0	103	68.0	-	118		

Preparation Batch ID: LMSVA102517 Analysis Method: EPA 8260 Preparation Type: 5030
Method Batch ID: MLMSVA102517 Preparation Date: 10/25/2017 9:39:00 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: LMSVA102517MSD Client Sample ID: 220578MSD Date Analyzed: 10/26/2017 7:10:00 PM												
Dibromofluoromethane			51.3		ug/L	50.0	103	75.0	-	113		
1,2-Dichloroethane-d4			52.8		ug/L	50.0	106	75.0	-	117		

Comments:

Preparation Batch ID: WPAHA102417 Analysis Method: EPA 8270/PAH Low Level Preparation Type: 3510
Method Batch ID: MWPAHA102417 Preparation Date: 10/24/2017 12:35:00 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: WPAHA102417MB Client Sample ID: WPAHA102417MB Date Analyzed: 10/25/2017 7:44:00 PM												
Naphthalene	0.13	2.0	0.13	U	ug/L							
Acenaphthylene	0.19	2.0	0.19	U	ug/L							
Acenaphthene	0.26	2.0	0.26	U	ug/L							
Fluorene	0.16	2.0	0.16	U	ug/L							
Phenanthrene	0.26	2.0	0.26	U	ug/L							
Anthracene	0.19	2.0	0.19	U	ug/L							
Fluoranthene	0.17	2.0	0.17	U	ug/L							
1-Methylnaphthalene	0.21	2.0	0.21	U	ug/L							
2-Methylnaphthalene	0.21	2.0	0.21	U	ug/L							
Pyrene	0.18	2.0	0.18	U	ug/L							
Benzo(a)anthracene	0.10	0.20	0.10	U	ug/L							
Chrysene	0.21	2.0	0.21	U	ug/L							
Benzo(b)fluoranthene	0.088	0.10	0.088	U	ug/L							
Benzo(k)fluoranthene	0.083	0.20	0.083	U	ug/L							
Benzo(a)pyrene	0.090	0.20	0.090	U	ug/L							
Indeno(1,2,3-cd)pyrene	0.047	0.20	0.047	U	ug/L							
Dibenzo(a,h)anthracene	0.057	0.20	0.057	U	ug/L							
Benzo(g,h,i)perylene	0.34	2.0	0.34	U	ug/L							
Nitrobenzene-d5			91.3		%	100	91.3	24.0	-	100		
2-Fluorobiphenyl			78.7		%	100	78.7	31.0	-	110		
p-Terphenyl-d14			85.6		%	100	85.6	45.0	-	125		
QA/QC Type: LCS Lab Sample ID: WPAHA102417LCS Client Sample ID: WPAHA102417LCS Date Analyzed: 10/25/2017 5:55:00 PM												

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: WPAHA102417 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3510

Method Batch ID: MWPAHA102417 | Preparation Date: 10/24/2017 12:35:00 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: WPAHA102417LCS			Client Sample ID: WPAHA102417LCS			Date Analyzed: 10/25/2017 5:55:00 PM					
Naphthalene	0.13	2.0	39.4		ug/L	50.0	78.8	40.0	-	105		
Acenaphthylene	0.19	2.0	41.0		ug/L	50.0	82.0	38.0	-	115		
Acenaphthene	0.26	2.0	41.5		ug/L	50.0	83.0	46.0	-	121		
Fluorene	0.16	2.0	40.2		ug/L	50.0	80.4	47.0	-	122		
Phenanthrene	0.26	2.0	42.9		ug/L	50.0	85.8	51.0	-	130		
Anthracene	0.19	2.0	43.2		ug/L	50.0	86.4	47.0	-	124		
Fluoranthene	0.17	2.0	46.2		ug/L	50.0	92.4	45.0	-	126		
1-Methylnaphthalene	0.21	2.0	41.7		ug/L	50.0	83.4	40.0	-	111		
2-Methylnaphthalene	0.21	2.0	38.7		ug/L	50.0	77.4	39.0	-	108		
Pyrene	0.18	2.0	47.6		ug/L	50.0	95.2	47.0	-	131		
Benzo(a)anthracene	0.10	0.20	47.5		ug/L	50.0	95.0	45.0	-	131		
Chrysene	0.21	2.0	45.9		ug/L	50.0	91.8	45.0	-	128		
Benzo(b)fluoranthene	0.088	0.10	48.8		ug/L	50.0	97.6	44.0	-	124		
Benzo(k)fluoranthene	0.083	0.20	47.6		ug/L	50.0	95.2	44.0	-	124		
Benzo(a)pyrene	0.090	0.20	48.6		ug/L	50.0	97.2	39.0	-	116		
Indeno(1,2,3-cd)pyrene	0.047	0.20	42.1		ug/L	50.0	84.2	42.0	-	126		
Dibenzo(a,h)anthracene	0.057	0.20	37.7		ug/L	50.0	75.4	42.0	-	126		
Benzo(g,h,i)perylene	0.34	2.0	40.8		ug/L	50.0	81.6	35.0	-	123		
Nitrobenzene-d5			100		%	100	100	24.0	-	100		
2-Fluorobiphenyl			81.3		%	100	81.3	31.0	-	110		
p-Terphenyl-d14			95.3		%	100	95.3	45.0	-	125		
QA/QC Type: LCSD	Lab Sample ID: WPAHA102417LCSD			Client Sample ID: WPAHA102417LCSD			Date Analyzed: 10/25/2017 6:31:00 PM					
Naphthalene	0.13	2.0	44.4		ug/L	50.0	88.8	40.0	-	105	12	32.0
Acenaphthylene	0.19	2.0	45.0		ug/L	50.0	90.0	38.0	-	115	9.3	38.0
Acenaphthene	0.26	2.0	45.7		ug/L	50.0	91.4	46.0	-	121	9.6	37.0
Fluorene	0.16	2.0	46.3		ug/L	50.0	92.6	47.0	-	122	14	38.0
Phenanthrene	0.26	2.0	46.7		ug/L	50.0	93.4	51.0	-	130	8.5	39.0
Anthracene	0.19	2.0	46.7		ug/L	50.0	93.4	47.0	-	124	7.8	39.0
Fluoranthene	0.17	2.0	46.6		ug/L	50.0	93.2	45.0	-	126	0.86	41.0
1-Methylnaphthalene	0.21	2.0	46.8		ug/L	50.0	93.6	40.0	-	111	12	36.0
2-Methylnaphthalene	0.21	2.0	43.4		ug/L	50.0	86.8	39.0	-	108	11	35.0
Pyrene	0.18	2.0	50.2		ug/L	50.0	100	47.0	-	131	5.3	42.0
Benzo(a)anthracene	0.10	0.20	50.5		ug/L	50.0	101	45.0	-	131	6.1	43.0
Chrysene	0.21	2.0	51.0		ug/L	50.0	102	45.0	-	128	11	41.0

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: WPAHA102417 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3510

Method Batch ID: MWPAHA102417 | Preparation Date: 10/24/2017 12:35:00 PM

Analyte	MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: LCSD	**Lab Sample ID: WPAHA102417LCSD**			**Client Sample ID: WPAHA102417LCSD**				**Date Analyzed: 10/25/2017 6:31:00 PM**				
Benzo(b)fluoranthene	0.088	0.10	55.1		ug/L	50.0	110	44.0	-	124	12	40.0
Benzo(k)fluoranthene	0.083	0.20	52.4		ug/L	50.0	105	44.0	-	124	9.6	40.0
Benzo(a)pyrene	0.090	0.20	54.6		ug/L	50.0	109	39.0	-	116	12	39.0
Indeno(1,2,3-cd)pyrene	0.047	0.20	45.8		ug/L	50.0	91.6	42.0	-	126	8.4	42.0
Dibenzo(a,h)anthracene	0.057	0.20	43.0		ug/L	50.0	86.0	42.0	-	126	13	42.0
Benzo(g,h,i)perylene	0.34	2.0	45.9		ug/L	50.0	91.8	35.0	-	123	12	44.0
Nitrobenzene-d5			98.0		%	100	98.0	24.0	-	100		
2-Fluorobiphenyl			88.8		%	100	88.8	31.0	-	110		
p-Terphenyl-d14			103		%	100	103	45.0	-	125		
QA/QC Type: MS	**Lab Sample ID: WPAHA102417MS**			**Client Sample ID: 220605MS**				**Date Analyzed: 10/26/2017 11:02:00 AM**				
Naphthalene	0.13	2.0	42.5		ug/L	50.0	85.0	14.0	-	115		
Acenaphthylene	0.19	2.0	45.3		ug/L	50.0	90.6	26.0	-	115		
Acenaphthene	0.26	2.0	43.6		ug/L	50.0	87.2	30.0	-	118		
Fluorene	0.16	2.0	41.1		ug/L	50.0	82.2	33.0	-	119		
Phenanthrene	0.26	2.0	46.0		ug/L	50.0	92.0	39.0	-	126		
Anthracene	0.19	2.0	46.1		ug/L	50.0	92.2	37.0	-	119		
Fluoranthene	0.17	2.0	49.6		ug/L	50.0	99.2	37.0	-	123		
1-Methylnaphthalene	0.21	2.0	46.4		ug/L	50.0	92.8	22.0	-	109		
2-Methylnaphthalene	0.21	2.0	42.7		ug/L	50.0	85.4	17.0	-	111		
Pyrene	0.18	2.0	50.4		ug/L	50.0	101	38.0	-	126		
Benzo(a)anthracene	0.10	0.20	49.2		ug/L	50.0	98.4	36.0	-	121		
Chrysene	0.21	2.0	41.9		ug/L	50.0	83.8	31.0	-	126		
Benzo(b)fluoranthene	0.088	0.10	50.8		ug/L	50.0	102	34.0	-	120		
Benzo(k)fluoranthene	0.083	0.20	48.7		ug/L	50.0	97.4	34.0	-	120		
Benzo(a)pyrene	0.090	0.20	50.2		ug/L	50.0	100	31.0	-	113		
Indeno(1,2,3-cd)pyrene	0.047	0.20	41.8		ug/L	50.0	83.6	30.0	-	120		
Dibenzo(a,h)anthracene	0.057	0.20	38.9		ug/L	50.0	77.8	30.0	-	121		
Benzo(g,h,i)perylene	0.34	2.0	40.6		ug/L	50.0	81.2	24.0	-	115		
Nitrobenzene-d5			89.1		%	100	89.1	24.0	-	100		
2-Fluorobiphenyl			82.1		%	100	82.1	31.0	-	110		
p-Terphenyl-d14			94.0		%	100	94.0	45.0	-	125		
QA/QC Type: DUP	**Lab Sample ID: WPAHA102417DUP**			**Client Sample ID: 220611DUP**				**Date Analyzed: 10/26/2017 10:25:00 AM**				
Naphthalene	0.13	2.0	0.82	I	ug/L						4.8	51.0

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: WPAHA102417 Analysis Method: EPA 8270/PAH Low Level Preparation Type: 3510

Method Batch ID: MWPAHA102417 Preparation Date: 10/24/2017 12:35:00 PM

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: WPAHA102417DUP			Client Sample ID: 220611DUP						Date Analyzed: 10/26/2017 10:25:00 AM		
Acenaphthylene	0.19	2.0	0.26	I	ug/L						8.0	44.0
Acenaphthene	0.26	2.0	1.1	I	ug/L						0	44.0
Fluorene	0.16	2.0	1.9	I	ug/L						10	43.0
Phenanthrene	0.26	2.0	0.26	US3	ug/L						140	44.0
Anthracene	0.19	2.0	1.2	I	ug/L						0	41.0
Fluoranthene	0.17	2.0	0.21	I	ug/L						10	43.0
1-Methylnaphthalene	0.21	2.0	2.9		ug/L						6.7	44.0
2-Methylnaphthalene	0.21	2.0	2.5		ug/L						3.9	47.0
Pyrene	0.18	2.0	0.18	U	ug/L						40	44.0
Benzo(a)anthracene	0.10	0.20	0.10	U	ug/L						0	42.0
Chrysene	0.21	2.0	0.21	U	ug/L						0	47.0
Benzo(b)fluoranthene	0.088	0.10	0.14		ug/L						0	43.0
Benzo(k)fluoranthene	0.083	0.20	0.13	I	ug/L						0	43.0
Benzo(a)pyrene	0.090	0.20	0.12	I	ug/L						0	41.0
Indeno(1,2,3-cd)pyrene	0.047	0.20	0.11	I	ug/L						0	45.0
Dibenzo(a,h)anthracene	0.057	0.20	0.070	I	ug/L						0	45.0
Benzo(g,h,i)perylene	0.34	2.0	0.34	U	ug/L						0	46.0
Nitrobenzene-d5			86.0		%	100	86.0	24.0	-	100		
2-Fluorobiphenyl			86.3		%	100	86.3	31.0	-	110		
p-Terphenyl-d14			99.7		%	100	99.7	45.0	-	125		

Comments:

Preparation Batch ID: WPROA102417 Analysis Method: FDEP FL-PRO Preparation Type: 3510

Method Batch ID: MWPROA102417 Preparation Date: 10/24/2017 12:35:00 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: WPROA102417MB			Client Sample ID: WPROA102417MB						Date Analyzed: 10/25/2017 5:31:00 PM		
Total Recoverable Pet. Hydrocarbons	76	500	76	U	ug/L							
Ortho-terphenyl			113		%	100	113	82.0	-	142		
Nonatriacontane(C39)			44.1		%	100	44.1	42.0	-	193		
QA/QC Type: LCS	Lab Sample ID: WPROA102417LCS			Client Sample ID: WPROA102417LCS						Date Analyzed: 10/25/2017 4:18:00 PM		

QUALITY ASSURANCE / QUALITY CONTROL DATA

J

Preparation Batch ID: WPROA102417 Analysis Method: FDEP FL-PRO Preparation Type: 3510

Method Batch ID: MWPROA102417 Preparation Date: 10/24/2017 12:35:00 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: WPROA102417LCS			Client Sample ID: WPROA102417LCS				Date Analyzed: 10/25/2017 4:18:00 PM				
Total Recoverable Pet. Hydrocarbons	76	500	832		ug/L	850	97.9	55.0	-	118		
Ortho-terphenyl			108		%	100	108	82.0	-	142		
Nonatriacontane(C39)			64.6		%	100	64.6	42.0	-	193		
QA/QC Type: LCSD	Lab Sample ID: WPROA102417LCSD			Client Sample ID: WPROA102417LCSD				Date Analyzed: 10/25/2017 4:55:00 PM				
Total Recoverable Pet. Hydrocarbons	76	500	790		ug/L	850	92.9	55.0	-	118	5.2	20.0
Ortho-terphenyl			110		%	100	110	82.0	-	142		
Nonatriacontane(C39)			107		%	100	107	42.0	-	193		
QA/QC Type: MS	Lab Sample ID: WPROA102417MS			Client Sample ID: 220605MS				Date Analyzed: 10/26/2017 7:53:00 AM				
Total Recoverable Pet. Hydrocarbons	84	550	758		ug/L	935	81.1	41.0	-	101		
Ortho-terphenyl			102		%	100	102	82.0	-	142		
Nonatriacontane(C39)			141		%	100	141	42.0	-	193		
QA/QC Type: DUP	Lab Sample ID: WPROA102417DUP			Client Sample ID: 220611DUP				Date Analyzed: 10/26/2017 7:15:00 AM				
Total Recoverable Pet. Hydrocarbons	76	500	1500		ug/L						6.5	20.0
Ortho-terphenyl			128		%	100	128	82.0	-	142		
Nonatriacontane(C39)			83.9		%	100	83.9	42.0	-	193		

Comments:

Preparation Batch ID: WTMA102617 Analysis Method: EPA 6010 Preparation Type: Digestion

Method Batch ID: MWTMA102617 Preparation Date: 10/27/2017 9:26:00 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: WTMA102617MB			Client Sample ID: WTMA102617MB				Date Analyzed: 10/27/2017 12:19:00 PM				
Lead	1.9	5.0	1.9	U	ug/L							
QA/QC Type: LCS	Lab Sample ID: WTMA102617LCS			Client Sample ID: WTMA102617LCS				Date Analyzed: 10/27/2017 12:21:00 PM				
Lead	1.9	5.0	392		ug/L	400	98.0	80.0	-	120		
QA/QC Type: LCSD	Lab Sample ID: WTMA102617LCSD			Client Sample ID: WTMA102617LCSD				Date Analyzed: 10/27/2017 12:23:00 PM				

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: WTMA102617 Analysis Method: EPA 6010 Preparation Type: Digestion

Method Batch ID: MWTMA102617 Preparation Date: 10/27/2017 9:26:00 AM

Analyte		MDL	PQL	Result	Qual	Units	Spike Amount	% REC	% REC Low Limit	-	% REC High Limit	%RPD	% RPD Limit
QA/QC Type: LCSD	Lab Sample ID:	WTMA102617LCSD		Client Sample ID:	WTMA102617LCSD			Date Analyzed: 10/27/2017 12:23:00 PM					
	Lead	1.9	5.0	391		ug/L	400	97.8	80.0	-	120	0.26	20.0
QA/QC Type: DUP	Lab Sample ID:	WTMA102617DUP		Client Sample ID:	220601DUP			Date Analyzed: 10/27/2017 12:27:00 PM					
	Lead	1.9	5.0	2.5	I	ug/L							20.0

Comments:

South Rates

Chain of Custody Record

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

Company: AET, LLC — L
Address: 4265 New Tampa Hwy
Telephone Number: Telefax Number:
Sampled by [Print Name(s)] / Affiliation: J. Marquez III, 6IT
Sampler(s) Signature(s): J. Marquez

Page 1 of 2
Project Name: Dade County School Trans
Project Number: 26672.00 (E02)
Project Manager: A. Sanchez
Facility ID Number: 13/8628726
REQUESTED DUE DATE: STD / TAT

Analyses Requested

Item No.	Field ID No.	Sample Date	Sample Time	Grab or Composite	Matrix (see Codes)	Number of Containers	EDB 8011	EDC 8260	Pb 6010	BTEXM 8021	PAH 8270	TRPH FLPRO				Remarks	Lab Number
	MW-10	10/17	1238	G	GW	5				X	X	X					220610
	MW-11	"	1337	"	"	5				"	"	"					611
	MW-12	"	1441	"	"	5				"	"	"					612
	MW-2	"	1548	"	"	5				"	"	"					613
	MW-4	"	1712	"	"	5				"	"	"					614
	MW-13	"	1745	"	"	5				"	"	"					615
	MW-5	"	1822	"	"	5				"	"	"					616
	MW-6	"	1900	"	"	5				"	"	"					617
	MW-8	"	1942	"	"	5				"	"	"					618

Shipment Method — Total Number of Containers: — ← Preservatives (see Codes) — ICE: ☐ Yes ☐ No

Out: / / Via:
Returned: / / Via:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	J. Marquez III, 6IT / AET	10/24/17	0730	[signature]	10/24/17	0720
	[signature]	10/24/17	1020	R. [signature]	10/24/17	1020
	R. [signature]	10/24/17	12:35			

Additional Comments:

Cooler Number(s) / Temperature(s) (°C): 3 or ize @ 3.5/4.6/5.5
Sampling Kit Number:
Received in Lab By: [signature] 10/24/17 12:35

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. 17-3399

South Rates

Chain of Custody Record

Company: AET, LLC - L

Address: 4265 New Tampa Hwy

Telephone Number: Telefax Number:

Sampled by [Print Name(s)] / Affiliation: J. Marquez III, EIT

Sampler(s) Signature(s): J. Marquez III

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: Dade City School Board Ta

Project Number: 26672.00 (002)

Project Manager: A. Sanchez

Facility ID Number: 13/8698726

REQUESTED DUE DATE: STD (TAT)

Item No.	Field ID No.	Sample Date	Sample Time	Grab or Composite	Matrix (see Codes)	Number of Containers	EDB 8011	EDC 8260	PB 6010	BTEX/MTBE 8021	PAH 8270	TRPH FLPC				Remarks	Lab Number
	MW-A	10/18/17	0841	G	GW	5				X	X	X					220619
	MW-9	"	0917	"	"	"				"	"	"					620
	MW-3	"	1017	"	"	11	X	X	X	X	X	X					621
	MW-1	"	1127	"	"	"	"	"	"	"	"	"					622
	MW-7	"	1232	"	"	"	"	"	"	"	"	"					623

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
	J. Marquez III, EIT / AET	10/24/17	0730		10/24/17	0730
		10/24/17	1020	R. White / ETL	10/24/17	1020
		10/24/17	1235			

Cooler Number(s) / Temperature(s) (°C): 3 / 1.2 / 3.5/4.6/5.5

Sampling Kit Number:

Received in Lab By: [signature] 10/24/17 1235

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. 17-3399

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

17-3399

Project Details

Client: ADVANCED ENVIRONMENTAL TECHNOLOGIES

Project Name: DADE CNTY SCHOOL BD-TRANSPORTATION

Shipping and Receiving

Date/Time Received: 10/24/2017 12:35:00 PM

Sampling Personnel: J MARQUEZ

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: 3

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

Cooler Temperatures: 3.5/4.6/5.5

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 Lot: HC689794

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.

Brad Williams

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

17-3399

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
220610	**MW-10**	**AQUEOUS-Groundwater**	☐	☐	☐
220610-A1 (BTEXM)					
220610-A2 (BTEXM)					
220610-A3 (BTEXM)					
220610-B1 (PAH)					
220610-B2 (TRPH)					
220611	**MW-11**	**AQUEOUS-Groundwater**	☐	☐	☐
220611-A1 (BTEXM)					
220611-A2 (BTEXM)					
220611-A3 (BTEXM)					
220611-B3 (PAH)					
220611-B4 (PAH) [Dup]					
220611-B5 (TRPH)					
220611-B6 (TRPH) [Dup]					
220612	**MW-12**	**AQUEOUS-Groundwater**	☐	☐	☐
220612-A1 (BTEXM)					
220612-A2 (BTEXM)					
220612-A3 (BTEXM)					
220612-B1 (PAH)					
220612-B2 (TRPH)					
220613	**MW-2**	**AQUEOUS-Groundwater**	☐	☐	☐
220613-A1 (BTEXM)					
220613-A2 (BTEXM)					
220613-A3 (BTEXM)					
220613-B1 (PAH)					
220613-B2 (TRPH)					
220614	**MW-4**	**AQUEOUS-Groundwater**	☐	☐	☐
220614-A1 (BTEXM)					
220614-A2 (BTEXM)					
220614-A3 (BTEXM)					
220614-B1 (PAH)					
220614-B2 (TRPH)					
220615	**MW-13**	**AQUEOUS-Groundwater**	☐	☐	☐
220615-A1 (BTEXM)					
220615-A2 (BTEXM)					
220615-A3 (BTEXM)					

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
220615-B1 (PAH) 220615-B2 (TRPH)					
220616 220616-A1 (BTEXM) 220616-A2 (BTEXM) 220616-A3 (BTEXM) 220616-B1 (PAH) 220616-B2 (TRPH)	**MW-5**	**AQUEOUS-Groundwater**	☐	☐	☐
220617 220617-A1 (BTEXM) 220617-A2 (BTEXM) 220617-A3 (BTEXM) 220617-B1 (PAH) 220617-B2 (TRPH)	**MW-6**	**AQUEOUS-Groundwater**	☐	☐	☐
220618 220618-A1 (BTEXM) 220618-A2 (BTEXM) 220618-A3 (BTEXM) 220618-B1 (PAH) 220618-B2 (TRPH)	**MW-8**	**AQUEOUS-Groundwater**	☐	☐	☐
220619 220619-A1 (BTEXM) 220619-A2 (BTEXM) 220619-A3 (BTEXM) 220619-B1 (PAH) 220619-B2 (TRPH)	**MW-A**	**AQUEOUS-Groundwater**	☐	☐	☐
220620 220620-A1 (BTEXM) 220620-A2 (BTEXM) 220620-A3 (BTEXM) 220620-B1 (PAH) 220620-B2 (TRPH)	**MW-9**	**AQUEOUS-Groundwater**	☐	☐	☐
220621 220621-A1 (BTEXM) 220621-A2 (BTEXM)	**MW-3**	**AQUEOUS-Groundwater**	☐	☐	☐

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
220621-A3 (BTEXM)					
220621-A4 (EDB)					
220621-A5 (EDB)					
220621-A6 (EDC)					
220621-A7 (EDC)					
220621-A8 (EDC)					
220621-B1 (PAH)					
220621-B2 (TRPH)					
220621-C1 (Pb)					
220622	**MW-1**	**AQUEOUS-Groundwater**	☐	☐	☐
220622-A1 (BTEXM)					
220622-A2 (BTEXM)					
220622-A3 (BTEXM)					
220622-A4 (EDB)					
220622-A5 (EDB)					
220622-A6 (EDC)					
220622-A7 (EDC)					
220622-A8 (EDC)					
220622-B1 (PAH)					
220622-B2 (TRPH)					
220622-C1 (Pb)					
220623	**MW-7**	**AQUEOUS-Groundwater**	☐	☐	☐
220623-A1 (BTEXM)					
220623-A2 (BTEXM)					
220623-A3 (BTEXM)					
220623-A4 (EDB)					
220623-A5 (EDB)					
220623-A6 (EDC)					
220623-A7 (EDC)					
220623-A8 (EDC)					
220623-B1 (PAH)					
220623-B2 (TRPH)					
220623-C1 (Pb)					

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

17-3399

Project Bottle Count Summary

Container Type	Preservative	Number of Containers
1-L Amber Glass	H2SO4	15
1-L Amber Glass	NONE	15
40mL VOA Vial	HCL	51
40mL VOA Vial	NONE	6
HDPE Plastic	HNO3	3
	Total	90

FINAL
ANALYTICAL REPORT

ETL PROJECT ID: 17-3517 11/7/2017 - Revision 0

ANDRES SANCHEZ
ADVANCED ENVIRONMENTAL TECHNOLOGIES
4265 NEW TAMPA HIGHWAY
LAKELAND, FL 33815
TEL: (863) 619-9708
FAX: (863) 619-7467

CLIENT PROJECT NAME: DADE CNTY SCHOOL BD-TRANSPORTATION
CLIENT PROJECT ID: 26672
FACILITY ID: 13/8628726

Enclosed are the analytical results for sample(s) received by Environmental Testing Laboratories on November 02, 2017. 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, 2018.

Authorized for release by:

Table of Contents

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 quantitation limit.
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

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
221063	MW-10	AQUEOUS-Groundwater	10/31/2017 12:24	G	
221064	MW-12	AQUEOUS-Groundwater	10/31/2017 12:51	G	
221065	MW-11	AQUEOUS-Groundwater	10/31/2017 13:37	G	

Executive Summary

Analyte	Analytical Method	Result	Units	Qualifiers	Result Comments
MW-10 (221063)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	2.3	ug/L		
2-Methylnaphthalene	EPA 8270/PAH Low Level	0.89	ug/L	I	
Acenaphthene	EPA 8270/PAH Low Level	0.60	ug/L	I	
Fluorene	EPA 8270/PAH Low Level	1.3	ug/L	I	
Naphthalene	EPA 8270/PAH Low Level	0.57	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	1100	ug/L		
MW-12 (221064)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	1.8	ug/L	I	
2-Methylnaphthalene	EPA 8270/PAH Low Level	0.93	ug/L	I	
Acenaphthene	EPA 8270/PAH Low Level	0.60	ug/L	I	
Fluorene	EPA 8270/PAH Low Level	1.2	ug/L	I	
Naphthalene	EPA 8270/PAH Low Level	0.58	ug/L	I	
Phenanthrene	EPA 8270/PAH Low Level	0.74	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	1100	ug/L		
MW-11 (221065)					
1-Methylnaphthalene	EPA 8270/PAH Low Level	2.9	ug/L		
2-Methylnaphthalene	EPA 8270/PAH Low Level	2.8	ug/L		
Acenaphthene	EPA 8270/PAH Low Level	1.1	ug/L	I	
Acenaphthylene	EPA 8270/PAH Low Level	0.24	ug/L	I	
Fluorene	EPA 8270/PAH Low Level	2.3	ug/L		
Naphthalene	EPA 8270/PAH Low Level	1.1	ug/L	I	
Phenanthrene	EPA 8270/PAH Low Level	1.3	ug/L	I	
Pyrene	EPA 8270/PAH Low Level	0.25	ug/L	I	
Total Recoverable Pet. Hydrocarbons	FDEP FL-PRO	8300	ug/L		

Analytical Data

Client Sample ID: MW-10
Sample Location:
Date Collected: 10/31/2017 12:24 PM

Laboratory Sample ID: 221063
Matrix: AQUEOUS-Groundwater
Percent Moisture:

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	**2.3**		ug/L	0.21	2.0	11/7/2017 12:19:00 AM
2-Methylnaphthalene	1.0	**0.89**	I	ug/L	0.21	2.0	11/7/2017 12:19:00 AM
Acenaphthene	1.0	**0.60**	I	ug/L	0.26	2.0	11/7/2017 12:19:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	11/7/2017 12:19:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	11/7/2017 12:19:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	11/7/2017 12:19:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	11/7/2017 12:19:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	11/7/2017 12:19:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	11/7/2017 12:19:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	11/7/2017 12:19:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	11/7/2017 12:19:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	11/7/2017 12:19:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	11/7/2017 12:19:00 AM
Fluorene	1.0	**1.3**	I	ug/L	0.16	2.0	11/7/2017 12:19:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	11/7/2017 12:19:00 AM
Naphthalene	1.0	**0.57**	I	ug/L	0.13	2.0	11/7/2017 12:19:00 AM
Phenanthrene	1.0	0.26	U	ug/L	0.26	2.0	11/7/2017 12:19:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	11/7/2017 12:19:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	102			31% - 110%	11/7/2017 12:19:00 AM
Nitrobenzene-d5	1.0	87.5			24% - 100%	11/7/2017 12:19:00 AM
p-Terphenyl-d14	1.0	75.6			45% - 125%	11/7/2017 12:19:00 AM

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.1	**1100**		ug/L	84	550	11/7/2017 8:54:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.1	69.5			42% - 193%	11/7/2017 8:54:00 AM
Ortho-terphenyl	1.1	109			82% - 142%	11/7/2017 8:54:00 AM

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

Analytical Data

Client Sample ID: MW-12
Sample Location:
Date Collected: 10/31/2017 12:51 PM

Laboratory Sample ID: 221064
Matrix: AQUEOUS-Groundwater
Percent Moisture:

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	**1.8**	I	ug/L	0.21	2.0	11/7/2017 3:21:00 AM
2-Methylnaphthalene	1.0	**0.93**	I	ug/L	0.21	2.0	11/7/2017 3:21:00 AM
Acenaphthene	1.0	**0.60**	I	ug/L	0.26	2.0	11/7/2017 3:21:00 AM
Acenaphthylene	1.0	0.19	U	ug/L	0.19	2.0	11/7/2017 3:21:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	11/7/2017 3:21:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	11/7/2017 3:21:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	11/7/2017 3:21:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	11/7/2017 3:21:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	11/7/2017 3:21:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	11/7/2017 3:21:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	11/7/2017 3:21:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	11/7/2017 3:21:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	11/7/2017 3:21:00 AM
Fluorene	1.0	**1.2**	I	ug/L	0.16	2.0	11/7/2017 3:21:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	11/7/2017 3:21:00 AM
Naphthalene	1.0	**0.58**	I	ug/L	0.13	2.0	11/7/2017 3:21:00 AM
Phenanthrene	1.0	**0.74**	I	ug/L	0.26	2.0	11/7/2017 3:21:00 AM
Pyrene	1.0	0.18	U	ug/L	0.18	2.0	11/7/2017 3:21:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	101			31% - 110%	11/7/2017 3:21:00 AM
Nitrobenzene-d5	1.0	89.3			24% - 100%	11/7/2017 3:21:00 AM
p-Terphenyl-d14	1.0	94.4			45% - 125%	11/7/2017 3:21:00 AM

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.1	**1100**		ug/L	84	550	11/7/2017 9:32:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.1	76.4			42% - 193%	11/7/2017 9:32:00 AM
Ortho-terphenyl	1.1	115			82% - 142%	11/7/2017 9:32:00 AM

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

Analytical Data

Client Sample ID: MW-11
Sample Location:
Date Collected: 10/31/2017 01:37 PM

Laboratory Sample ID: 221065
Matrix: AQUEOUS-Groundwater
Percent Moisture:

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	**2.9**		ug/L	0.21	2.0	11/7/2017 3:58:00 AM
2-Methylnaphthalene	1.0	**2.8**		ug/L	0.21	2.0	11/7/2017 3:58:00 AM
Acenaphthene	1.0	**1.1**	I	ug/L	0.26	2.0	11/7/2017 3:58:00 AM
Acenaphthylene	1.0	**0.24**	I	ug/L	0.19	2.0	11/7/2017 3:58:00 AM
Anthracene	1.0	0.19	U	ug/L	0.19	2.0	11/7/2017 3:58:00 AM
Benzo(a)anthracene	1.0	0.10	U	ug/L	0.10	0.20	11/7/2017 3:58:00 AM
Benzo(a)pyrene	1.0	0.090	U	ug/L	0.090	0.20	11/7/2017 3:58:00 AM
Benzo(b)fluoranthene	1.0	0.088	U	ug/L	0.088	0.10	11/7/2017 3:58:00 AM
Benzo(g,h,i)perylene	1.0	0.34	U	ug/L	0.34	2.0	11/7/2017 3:58:00 AM
Benzo(k)fluoranthene	1.0	0.083	U	ug/L	0.083	0.20	11/7/2017 3:58:00 AM
Chrysene	1.0	0.21	U	ug/L	0.21	2.0	11/7/2017 3:58:00 AM
Dibenzo(a,h)anthracene	1.0	0.057	U	ug/L	0.057	0.20	11/7/2017 3:58:00 AM
Fluoranthene	1.0	0.17	U	ug/L	0.17	2.0	11/7/2017 3:58:00 AM
Fluorene	1.0	**2.3**		ug/L	0.16	2.0	11/7/2017 3:58:00 AM
Indeno(1,2,3-cd)pyrene	1.0	0.047	U	ug/L	0.047	0.20	11/7/2017 3:58:00 AM
Naphthalene	1.0	**1.1**	I	ug/L	0.13	2.0	11/7/2017 3:58:00 AM
Phenanthrene	1.0	**1.3**	I	ug/L	0.26	2.0	11/7/2017 3:58:00 AM
Pyrene	1.0	**0.25**	I	ug/L	0.18	2.0	11/7/2017 3:58:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
2-Fluorobiphenyl	1.0	100			31% - 110%	11/7/2017 3:58:00 AM
Nitrobenzene-d5	1.0	90.1			24% - 100%	11/7/2017 3:58:00 AM
p-Terphenyl-d14	1.0	98.6			45% - 125%	11/7/2017 3:58:00 AM

Analytical Method: FDEP FL-PRO
GC/FID

Analyte	DF	Result	Qualifier	Units	MDL	PQL	Analysis Date
Total Recoverable Pet. Hydrocarbons	1.0	**8300**		ug/L	76	500	11/7/2017 10:12:00 AM

Surrogate	DF	% Recovery	Qualifier	Units	Limits	Analysis Date
Nonatriacontane(C39)	1.0	120			42% - 193%	11/7/2017 10:12:00 AM
Ortho-terphenyl	1.0	112			82% - 142%	11/7/2017 10:12:00 AM

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

Data Chronicle

Client Sample ID: MW-10
Sample Location:
Date Collected: 10/31/2017 12:24 PM

Laboratory Sample ID: 221063
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA110617	11/6/2017 8:30:00 AM	11/7/2017 12:19:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.1	WPROA110617	11/6/2017 10:00:00 AM	11/7/2017 8:54:00 AM	BW	E87684

Client Sample ID: MW-12
Sample Location:
Date Collected: 10/31/2017 12:51 PM

Laboratory Sample ID: 221064
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA110617	11/6/2017 8:30:00 AM	11/7/2017 3:21:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.1	WPROA110617	11/6/2017 10:00:00 AM	11/7/2017 9:32:00 AM	BW	E87684

Client Sample ID: MW-11
Sample Location:
Date Collected: 10/31/2017 01:37 PM

Laboratory Sample ID: 221065
Matrix: AQUEOUS-Groundwater
Percent Moisture:

Prep	Analysis	Analytical Method	Dilution	Batch	Prepared	Analyzed	Analyst	Lab
TOT	RES	EPA 8270/PAH Low Level	1.0	WPAHA110617	11/6/2017 8:30:00 AM	11/7/2017 3:58:00 AM	BW	E87684
TOT	RES	FDEP FL-PRO	1.0	WPROA110617	11/6/2017 10:00:00 AM	11/7/2017 10:12:00 AM	BW	E87684

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: WPAHA110617 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3510

Method Batch ID: MWPAHA110617 | Preparation Date: 11/6/2017 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: WPAHA110617MB			Client Sample ID: WPAHA110617MB			Date Analyzed: 11/6/2017 5:33:00 PM					
Naphthalene	0.13	2.0	0.13	U	ug/L							
Acenaphthylene	0.19	2.0	0.19	U	ug/L							
Acenaphthene	0.26	2.0	0.26	U	ug/L							
Fluorene	0.16	2.0	0.16	U	ug/L							
Phenanthrene	0.26	2.0	0.26	U	ug/L							
Anthracene	0.19	2.0	0.19	U	ug/L							
Fluoranthene	0.17	2.0	0.17	U	ug/L							
1-Methylnaphthalene	0.21	2.0	0.21	U	ug/L							
2-Methylnaphthalene	0.21	2.0	0.21	U	ug/L							
Pyrene	0.18	2.0	0.18	U	ug/L							
Benzo(a)anthracene	0.10	0.20	0.10	U	ug/L							
Chrysene	0.21	2.0	0.21	U	ug/L							
Benzo(b)fluoranthene	0.088	0.10	0.088	U	ug/L							
Benzo(k)fluoranthene	0.083	0.20	0.083	U	ug/L							
Benzo(a)pyrene	0.090	0.20	0.090	U	ug/L							
Indeno(1,2,3-cd)pyrene	0.047	0.20	0.047	U	ug/L							
Dibenzo(a,h)anthracene	0.057	0.20	0.057	U	ug/L							
Benzo(g,h,i)perylene	0.34	2.0	0.34	U	ug/L							
Nitrobenzene-d5			81.3		%	100	81.3	24.0	-	100		
2-Fluorobiphenyl			91.1		%	100	91.1	31.0	-	110		
p-Terphenyl-d14			55.4		%	100	55.4	45.0	-	125		
QA/QC Type: LCS	Lab Sample ID: WPAHA110617LCS			Client Sample ID: WPAHA110617LCS			Date Analyzed: 11/6/2017 3:40:00 PM					
Naphthalene	0.13	2.0	39.2		ug/L	50.0	78.4	40.0	-	105		
Acenaphthylene	0.19	2.0	40.6		ug/L	50.0	81.2	38.0	-	115		
Acenaphthene	0.26	2.0	40.3		ug/L	50.0	80.6	46.0	-	121		
Fluorene	0.16	2.0	41.0		ug/L	50.0	82.0	47.0	-	122		
Phenanthrene	0.26	2.0	40.9		ug/L	50.0	81.8	51.0	-	130		
Anthracene	0.19	2.0	41.2		ug/L	50.0	82.4	47.0	-	124		
Fluoranthene	0.17	2.0	44.2		ug/L	50.0	88.4	45.0	-	126		
1-Methylnaphthalene	0.21	2.0	40.1		ug/L	50.0	80.2	40.0	-	111		
2-Methylnaphthalene	0.21	2.0	37.7		ug/L	50.0	75.4	39.0	-	108		
Pyrene	0.18	2.0	44.9		ug/L	50.0	89.8	47.0	-	131		
Benzo(a)anthracene	0.10	0.20	45.3		ug/L	50.0	90.6	45.0	-	131		
Chrysene	0.21	2.0	38.3		ug/L	50.0	76.6	45.0	-	128		

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: WPAHA110617 | Analysis Method: EPA 8270/PAH Low Level | Preparation Type: 3510

Method Batch ID: MWPAHA110617 | Preparation Date: 11/6/2017 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: WPAHA110617LCS**				**Client Sample ID: WPAHA110617LCS**					**Date Analyzed: 11/6/2017 3:40:00 PM**		
Benzo(b)fluoranthene	0.088	0.10	45.8		ug/L	50.0	91.6	44.0	-	124		
Benzo(k)fluoranthene	0.083	0.20	42.5		ug/L	50.0	85.0	44.0	-	124		
Benzo(a)pyrene	0.090	0.20	44.0		ug/L	50.0	88.0	39.0	-	116		
Indeno(1,2,3-cd)pyrene	0.047	0.20	41.2		ug/L	50.0	82.4	42.0	-	126		
Dibenzo(a,h)anthracene	0.057	0.20	38.7		ug/L	50.0	77.4	42.0	-	126		
Benzo(g,h,i)perylene	0.34	2.0	40.2		ug/L	50.0	80.4	35.0	-	123		
Nitrobenzene-d5			90.9		%	100	90.9	24.0	-	100		
2-Fluorobiphenyl			102		%	100	102	31.0	-	110		
p-Terphenyl-d14			74.5		%	100	74.5	45.0	-	125		
QA/QC Type: LCSD	**Lab Sample ID: WPAHA110617LCSD**				**Client Sample ID: WPAHA110617LCSD**					**Date Analyzed: 11/6/2017 4:18:00 PM**		
Naphthalene	0.13	2.0	50.8		ug/L	50.0	102	40.0	-	105	26	32.0
Acenaphthylene	0.19	2.0	54.6		ug/L	50.0	109	38.0	-	115	29	38.0
Acenaphthene	0.26	2.0	52.6		ug/L	50.0	105	46.0	-	121	26	37.0
Fluorene	0.16	2.0	54.1		ug/L	50.0	108	47.0	-	122	28	38.0
Phenanthrene	0.26	2.0	54.2		ug/L	50.0	108	51.0	-	130	28	39.0
Anthracene	0.19	2.0	54.9		ug/L	50.0	110	47.0	-	124	29	39.0
Fluoranthene	0.17	2.0	58.4		ug/L	50.0	117	45.0	-	126	28	41.0
1-Methylnaphthalene	0.21	2.0	52.5		ug/L	50.0	105	40.0	-	111	27	36.0
2-Methylnaphthalene	0.21	2.0	49.1		ug/L	50.0	98.2	39.0	-	108	26	35.0
Pyrene	0.18	2.0	58.8		ug/L	50.0	118	47.0	-	131	27	42.0
Benzo(a)anthracene	0.10	0.20	60.8		ug/L	50.0	122	45.0	-	131	29	43.0
Chrysene	0.21	2.0	54.3		ug/L	50.0	109	45.0	-	128	35	41.0
Benzo(b)fluoranthene	0.088	0.10	62.5	S2	ug/L	50.0	125	44.0	-	124	31	40.0
Benzo(k)fluoranthene	0.083	0.20	60.1		ug/L	50.0	120	44.0	-	124	34	40.0
Benzo(a)pyrene	0.090	0.20	63.5	S2	ug/L	50.0	127	39.0	-	116	36	39.0
Indeno(1,2,3-cd)pyrene	0.047	0.20	58.6		ug/L	50.0	117	42.0	-	126	35	42.0
Dibenzo(a,h)anthracene	0.057	0.20	57.2		ug/L	50.0	114	42.0	-	126	39	42.0
Benzo(g,h,i)perylene	0.34	2.0	58.3		ug/L	50.0	117	35.0	-	123	37	44.0
Nitrobenzene-d5			95.3		%	100	95.3	24.0	-	100		
2-Fluorobiphenyl			105		%	100	105	31.0	-	110		
p-Terphenyl-d14			120		%	100	120	45.0	-	125		
QA/QC Type: DUP	**Lab Sample ID: WPAHA110617DUP**				**Client Sample ID: 221059DUP**					**Date Analyzed: 11/7/2017 4:35:00 AM**		
Naphthalene	0.13	2.0	7.3		ug/L						5.6	51.0

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: WPAHA110617 Analysis Method: EPA 8270/PAH Low Level Preparation Type: 3510

Method Batch ID: MWPAHA110617 Preparation Date: 11/6/2017 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: DUP	Lab Sample ID: WPAHA110617DUP			Client Sample ID: 221059DUP						Date Analyzed: 11/7/2017 4:35:00 AM		
Acenaphthylene	0.19	2.0	0.19	U	ug/L						0	44.0
Acenaphthene	0.26	2.0	0.26	U	ug/L						0	44.0
Fluorene	0.16	2.0	0.19	I	ug/L						5.4	43.0
Phenanthrene	0.26	2.0	0.26	U	ug/L						0	44.0
Anthracene	0.19	2.0	0.19	U	ug/L						0	41.0
Fluoranthene	0.17	2.0	0.17	U	ug/L						0	43.0
1-Methylnaphthalene	0.21	2.0	20		ug/L						5.1	44.0
2-Methylnaphthalene	0.21	2.0	33		ug/L						3.1	47.0
Pyrene	0.18	2.0	0.18	U	ug/L						0	44.0
Benzo(a)anthracene	0.10	0.20	0.10	U	ug/L						0	42.0
Chrysene	0.21	2.0	0.21	U	ug/L						0	47.0
Benzo(b)fluoranthene	0.088	0.10	0.088	U	ug/L						0	43.0
Benzo(k)fluoranthene	0.083	0.20	0.083	U	ug/L						0	43.0
Benzo(a)pyrene	0.090	0.20	0.090	U	ug/L						0	41.0
Indeno(1,2,3-cd)pyrene	0.047	0.20	0.047	U	ug/L						0	45.0
Dibenzo(a,h)anthracene	0.057	0.20	0.057	U	ug/L						0	45.0
Benzo(g,h,i)perylene	0.34	2.0	0.34	U	ug/L						0	46.0
Nitrobenzene-d5			91.7		%	100	91.7	24.0	-	100		
2-Fluorobiphenyl			103		%	100	103	31.0	-	110		
p-Terphenyl-d14			110		%	100	110	45.0	-	125		

Comments:

Preparation Batch ID: WPROA110617 Analysis Method: FDEP FL-PRO Preparation Type: 3510

Method Batch ID: MWPROA110617 Preparation Date: 11/6/2017 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: WPROA110617MB			Client Sample ID: WPROA110617MB						Date Analyzed: 11/7/2017 12:42:00 AM		
Total Recoverable Pet. Hydrocarbons	76	500	76	U	ug/L							
Ortho-terphenyl			107		%	100	107	82.0	-	142		
Nonatriacontane(C39)			48.0		%	100	48.0	42.0	-	193		
QA/QC Type: LCS	Lab Sample ID: WPROA110617LCS			Client Sample ID: WPROA110617LCS						Date Analyzed: 11/6/2017 11:27:00 PM		

QUALITY ASSURANCE / QUALITY CONTROL DATA

Preparation Batch ID: WPROA110617 Analysis Method: FDEP FL-PRO Preparation Type: 3510

Method Batch ID: MWPROA110617 Preparation Date: 11/6/2017 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: LCS	Lab Sample ID: WPROA110617LCS			Client Sample ID: WPROA110617LCS				Date Analyzed: 11/6/2017 11:27:00 PM				
Total Recoverable Pet. Hydrocarbons	76	500	861		ug/L	850	101	55.0	-	118		
Ortho-terphenyl			108		%	100	108	82.0	-	142		
Nonatriacontane(C39)			79.7		%	100	79.7	42.0	-	193		
QA/QC Type: LCSD	Lab Sample ID: WPROA110617LCSD			Client Sample ID: WPROA110617LCSD				Date Analyzed: 11/7/2017 12:05:00 AM				
Total Recoverable Pet. Hydrocarbons	76	500	822		ug/L	850	96.7	55.0	-	118	4.6	20.0
Ortho-terphenyl			116		%	100	116	82.0	-	142		
Nonatriacontane(C39)			101		%	100	101	42.0	-	193		
QA/QC Type: DUP	Lab Sample ID: WPROA110617DUP			Client Sample ID: 221059DUP				Date Analyzed: 11/7/2017 10:51:00 AM				
Total Recoverable Pet. Hydrocarbons	76	500	1200		ug/L						8.0	20.0
Ortho-terphenyl			108		%	100	108	82.0	-	142		
Nonatriacontane(C39)			66.2		%	100	66.2	42.0	-	193		

Comments:

* DEP South Rule

Chain of Custody Record

Company:	AET, IIC - L
Address:	4265 New Tampa Hwy
Telephone Number:	(813) 263 - 3046 Telefax Number:
Sampled by [Print Name(s)] / Affiliation	J. Marquez III, GIT
Sampler(s) Signature(s)	J. Marquez III

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

Page 1 of 1

Project Name: Dade Cnty School board
Project Number: 26672 (E07)
Project Manager: A. Sanchez
Facility ID Number: 13/8628726

REQUESTED DUE DATE
STD (TAT)

Item No.	Field ID No.	Sample Date	Sample Time	Grab or Composite	Matrix (see Codes)	Number of Containers	PAH 8270	TRPH FLA90	Remarks	Lab Number
	MW-10	10/31/17	1224	G	GW	2	X	X		22 1063
	MW-12	"	1251	"	"	"	X	X		064
	MW-11	"	1337	"	"	"	X	X		065

Shipment Method | Total Number of Containers: 6 | ← Preservatives (see Codes) | ICE: ☒ Yes ☐ No

Out: / / Via:
Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	J. Marquez III, GIT/AET	11/2/17	0700		11-2-17	0700
		11-2-17	1000		11-2-17	10:00
		11/2/17	1200			

Cooler Number(s) / Temperature(s) (*C): 122 / 4.2
Sampling Kit Number:
Received in Lab By: | 11/2/17 | 1200

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. 17-3517

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

17-3517

Project Details

Client: ADVANCED ENVIRONMENTAL TECHNOLOGIES

Project Name: DADE CNTY SCHOOL BOARD

Shipping and Receiving

Date/Time Received: 11/2/2017 12:00:00 PM

Sampling Personnel: J MARQUEZ

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: 4.2

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: HC689794

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.

Kevin Moran

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

17-3517

Project Sample Detail

Lab Sample ID	Client Sample ID	Matrix	SPLP	TRPH Speciation	MaVPH MaEPH
221063	**MW-10**	**AQUEOUS-Groundwater**	☐	☐	☐
221063-B1 (PAH) 221063-B2 (TRPH)					
221064	**MW-12**	**AQUEOUS-Groundwater**	☐	☐	☐
221064-B1 (PAH) 221064-B2 (TRPH)					
221065	**MW-11**	**AQUEOUS-Groundwater**	☐	☐	☐
221065-B1 (PAH) 221065-B2 (TRPH)					

ENVIRONMENTAL TESTING LABORATORIES INC

Project Receipt Summary

17-3517

Project Bottle Count Summary

Container Type	Preservative	Number of Containers
1-L Amber Glass	H2SO4	3
1-L Amber Glass	NONE	3
	Total	6

APPENDIX F

PURCHASE ORDER/ATTACHMENT A SOW/SCS SUMMARY WORKSHEET

Order No. AF4CB5

Version Number: 1
Internal Version: false
Issued on Fri, 24 Jun, 2016
Created on Fri, 24 Jun, 2016 by Ariba System

Supplier:
Advanced Environmental Technologies, LLC
4265 New Tampa Highway
Lakeland, FL 33815
United States
Phone: 1863-808-5796
Fax: 1850-208-3210
Contact: Keith Townsel

Ship To:
DEP-PETROLEUM RESTORATION PROGRAM
BMC RM 420 MS 4575
2600 BLAIR STONE RD
TALLAHASSEE, FL 32399
United States

Deliver To:
David T Jacobs (Contracts)

Bill To:
DEP-PETROLEUM RESTORATION PROGRAM
BMC RM 420 MS 4575
2600 BLAIR STONE RD
TALLAHASSEE, FL 32399
United States

Entity Description: Department of Environmental Protection
Organization Code: 37450404555
Object Code: 000000-139900
Expansion Option: JG
Exemption Status: No
Exemption Reason?:

Item	Description	Part Number	Unit	Qty	Need By	Unit Price	Extended Amount
1	**Contractor has been selected to perform a Low...**		Dollar	71,339.38	None	$1.00000 USD	$71,339.38000 USD

Contractor has been selected to perform a Low Score Assessment (LSA) at the Dade Cnty School Bd-Transportation, 7011 SW 4th St, Miami, Miami-Dade County, Florida, FAC ID 138628726. Attachment A, Scope of Work, attached to the purchase order (PO) describes the work to be completed by the Contractor. All work shall be performed in accordance with the terms of the Agency Term Contract (ATC). The PRP reference number for this project is 833-021A.

Attache
d hereto and made a part of this PO is Attachment B - Schedule of Pay Items and Other Related Documents. Pay Items are at or below the negotiated maximum rates included in the ATC. Contractor must submit the appropriate completed documents from Attachment B to the Site Manager with each deliverable, as instructed. Upon completion and approval of all work under this PO, Contractor shall submit a signed Release of Claims document, along with the final invoice. Contractor must include Subcontractor Utilization Report form, included as a tab on Attachment B, with each invoice.

The Department will retain 10% of the total amount of each payment made. Contractor may submit a request for release of retainage upon completion, and DEP approval of, all work performed under this PO.

The Department will evaluate the Contractor as specified in the Agency Term Contract.

The Contractor agrees to perform the services described in the PO in accordance with the terms of its ATC (as those terms may have been amended) which are in effect on date of issuance of the PO. The applicable ATC terms are available at the following URL:
https://facts.fldfs.
com/Search/ContractD
etail.aspx?AgencyId=
370000&ContractId=GC
833

Distributors?: N
Requester: David T Jacobs (Contracts)
Ship To Code: DEP305S
State Contract ID:
Contract ID:

Requester Phone:
PR No.: PR9534013
MyGreenFlorida Content: N
Method of Procurement:: J - Agency ITN [s 287.057(1) (c), F.S.]
Shipping Method: Best Way
FOB Code: INC-Dest
FOB Code Description: Destination freight paid by vendor and included in price. Title passes upon receipt. Vendor files any claims.
Encumber Funds: Yes
PO Start Date: Fri, 24 Jun, 2016
PO End Date: Tue, 21 Mar, 2017
Fiscal Year Indicator: 2016
PUI#: 3701
Site Code: 370000-12
Terms and Conditions: http://dms.myflorida.com/mfmp_PO_TC
P Card Order?: No

	Total	$71,339.38000 USD

Comments

- Jonathan Labie (Contracts), 06/17/2016:
  The following attachments are attached hereto and made a part of this Purchase Order.
  Attachment A – Scope of Work
  Attachment B – Schedule of Pay Items and Other Related Documents (Jonathan Labie (Contracts), Fri, 17 Jun, 2016)
- Lauren Mackey (Contracts), 06/24/2016:
  PRP ref # 833-021A (Lauren Mackey (Contracts), Fri, 24 Jun, 2016)
- COMMENT by **Vicki Chatelain (Contracts)** on *06/24/2016*
  Note: Attachment B language appearing in upper right-hand corner titled "Less Surcharge" is used by the program to identify the total cost less the 6% handling and MFMP fee on reimbursable items. This information is only used as a check point for PRP staff. The total PO amount for the project is the amount appearing in the "Total Extended Cost" section in the upper right-hand side of the spreadsheet. (Vicki Chatelain (Contracts), Fri, 24 Jun, 2016)

Attachments

- ATTACHMENT by **Jonathan Labie (Contracts)** on *Friday, June 17, 2016 at 7:30 AM*
  Attachment A - LSA Scope of Work - 138628726.pdf (229637 bytes)

- ATTACHMENT by **Jonathan Labie (Contracts)** on *Friday, June 17, 2016 at 7:30 AM*

  Attachment B - Schedule of Pay Items & Other Rrelated Documents - 138628726.xlsm (1385223 bytes)

Attachment A
Petroleum Restoration Program
Scope of Work

9-Digit Facility ID Number:	138628726
STCM Facility Name:	Dade Cnty School Bd-Transportation

SubPhase(s): LSA

Specifications

All work must be performed in accordance with this Scope of Work (SOW) and any attachments, Chapters 62-160, 62-532, 62-777 and 62-780, F.A.C., all applicable FDEP and Water Management District guidance memoranda, standard industry procedures and as described in the Agency Term Contract (ATC).

Copies of all referenced guidelines are available at:
http://www.dep.state.fl.us/waste/categories/pcp/default.htm

Reports must be submitted using the appropriate FDEP forms found at:
http://www.dep.state.fl.us/waste/categories/pcp/pages/pg_documents.htm

Task 1 Description:	Conduct File Review and prepare Historical Summary Worksheet and Health & Safety Plan (HASP). Conduct site reconnaissance/field measurement visit including measuring top of casing (TOC) elevations of existing monitoring wells and gauging depth to water in the existing monitoring wells according to the attached Water Sampling Table; prepare a Modified Site Assessment Proposal. Please note that per the DEP site access agreement, a separate site access agreement between the owner and the ATC has been requested by the property owner or tenant. Submit an email or letter (copying the owner or tenant) indicating either that this separate site access agreement has been executed or that the owner no longer wants such an agreement with the contractor (the owner is content with the current DEP site access agreement). The DEP does not need a copy of this agreement.
Task 1 Deliverable:	HASP, Historical Summary Worksheet; Modified Site Assessment Proposal including a summary of the site reconnaissance/field measurement visit, field notes, well TOC elevations, well gauging results and groundwater flow direction determined from the well TOC elevations and well gauging results. Email/letter confirming the ATC/Owner site access agreement is executed or that the Owner has retracted its request for a separate agreement with the ATC.
Task 1 Deliverable Due Days:	60
Task 2 Description:	Contingent upon written approval from FDEP. Obtain off-site access agreement(s). Perform Receptor Survey and Exposure Pathway identification. Perform supplemental site assessment activities including soil boring/monitoring well installation and soil/groundwater sampling in accordance with the attached Water Sampling, Soil and Air Sampling, Soil Boring and Well Installation Tables. After completion of all Task 2 field activities, prepare an Interim Assessment Report.
Task 2 Deliverable:	Interim Assessment Report including updated tables and figures, boring logs, field notes, groundwater sampling logs, well construction logs, receptor survey/exposure pathway ID, offsite access agreement(s), laboratory reports, and recommendations.
Task 2 Deliverable Due Days:	120

Attachment A
Petroleum Restoration Program
Scope of Work

9-Digit Facility ID Number:	138628726
STCM Facility Name:	Dade Cnty School Bd-Transportation

Task 3 Description:	Contingent upon written approval from FDEP. Prepare and submit a General Site Assessment Report in TSAR format, including the Site Screening Information tab of the Site Screening Workbook (located at http://www.dep.state.fl.us/waste/categories/pcp/pages/screening.htm). Prepare the Initial Notice of Discovery of Contamination Package if contamination is discovered beyond the property boundaries.
Task 3 Deliverable:	General Site Assessment Report; Initial Notice of Discovery of Contamination Package.
Task 3 Deliverable Due Days:	210
PO End Days:	**270**

Schedule of Pay Items (SPI)
All unit rates and extended prices for all line item costs associated with this project are provided in the SPI [Attachment B to this Purchase Order (PO)] and shall not exceed the rates established in the ATC.

Requests for Change (RFC)
All requests for changes to the SOW must be submitted in writing and be approved in writing by the FDEP/LP using the RFC form in accordance with paragraphs 2.A and 26 of the ATC and can be found at:

http://www.dep.state.fl.us/waste/categories/pcp/pages/templates.htm

Any change which results in an extension of the PO end date, or a change in quantities or costs, requires that a PO Change Order be formally issued prior to performance of the revised SOW. Any change to deliverable due dates only, that does not result in the extension of the PO end date, submitted on an RFC and accepted by the FDEP/LP Site Manager will not require the issuance of a PO Change Order. A copy of the signed RFC must be submitted with any invoice for payment.

Performance Measures
The FDEP/LP Site Manager will review the submitted documentation to confirm that all work was performed in accordance with the Specifications referenced above. The FDEP/LP Site Manager will notify the Contractor of acceptance or any deficiencies in the work and/or deliverables. The Contractor will be given an opportunity to remedy deficiencies at no additional cost to the FDEP.

The FDEP/LP Site Manager will review the work and/or deliverables within the timeframes established in FDEP guidance documents. The Contractor will respond to any comments to complete the work and/or deliverables within the timeframe established in the comment letter or email correspondence.

Invoicing, Payments and Financial Consequences
The Contractor may submit an invoice for a Task upon written notification of acceptance of the work/deliverables by the FDEP/LP Site Manager. Upon receipt of FDEP/LP written approval of the required documentation for completed portions of each task, the Contractor must submit an invoice. Invoices for completed work may be submitted no more frequently than every thirty (30) days, or upon completion of the individual tasks as specified. Each invoice request must contain all documentation of performance as specified in the ATC, this Purchase Order (PO), and its attachments.

Failure to provide all deliverables, failure to provide deliverables which are satisfactory or failure to meet the specified deliverable timetables, shall result in non-payment, loss of retainage, or other financial consequences, and/or termination of the PO, as specified in the ATC. If the deliverable due day occurs on a weekend, state holiday, or federal holiday the deliverable will be due the following business day.

Attachment A
Petroleum Restoration Program
Scope of Work

9-Digit Facility ID Number: 138628726
STCM Facility Name: Dade Cnty School Bd-Transportation

Retainage shall be withheld in the amount of 10%, unless otherwise noted in the SPI, from each payment by the FDEP/LP until completion and approval of all Tasks. The Contractor shall submit a Release of Claims and request for retainage payment with the final invoice. Payment of retainage will be reduced by the amount of any assessed financial consequences.

Notice of Field Activities

The Contractor must provide written notification (emails are acceptable) of field activities at least seven (7) calendar days prior to the commencement of work to all applicable parties including the PRP site manager, PRP Inspector (PRP_Inspector@dep.state.fl.us), site operator, site owner, RP and affected off-site property owners.

FDEP Facility ID#: 138628726 **STCM Facility Name:** Dade Cnty School Bd-Transportation

Any blank fields are not applicable to the scope of work.

WATER SAMPLING TABLE

Task #	Well #(s) or Water Sample Location	Frequency (if applicable)	Expedited Turnaround (TA)	Water Level/FP Gauging Only	(9-27.) BTEX + MTBE	(9-30.) PAHs	(9-36.) TRPH (FL-PRO)	(9-41.) Lead, Total	(9-31.a.) EDB (via 8260)	(9-79.) EDC	(9-44.a.) Dissolved Iron	(9-53.) Nitrate [as N]	(9-57.) Orthophosphate [as P]	(9-60.) Sulfate	(9-80.) Methane	(9-26.) Used Oil/Unknown Product Group-Table D			
1	Gauge 12 existing wells			12															
2	Sample 10 existing shallow wells (EDB, EDC, Pb & NAM wells TBD)				10	10	10	3	3	3	3	3	3	3	3				
2	Sample 1 existing deep well				1	1	1												
2	Sample 12 newly installed shallow wells (Table D - well TBD)			12	12	12	12									1			
2	Sample 1 newly installed deep well				1	1	1												
2	Gauge wells during newly installed deep well sampling			24															
2	SPLP Leachate				4	4													
2	TCLP Leachate							1											
Task 1 Subtotal				12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 2 Subtotal				36	28	28	24	4	3	3	3	3	3	3	3	1	0	0	0
GRAND TOTALS				48	28	28	24	4	3	3	3	3	3	3	3	1	0	0	0

FDEP Facility ID#: 138628726 **STCM Facility Name:** Dade Cnty School Bd-Transportation

Any blank fields are not applicable to the scope of work.

SOIL and AIR SAMPLING TABLE

Task #	Soil /Air Sample Locations	Frequency (if applicable)	Expedited Turnaround (TA)	Depth Interval (if applicable)	(9-2.) BTEX + MTBE	(9-5.) PAHs	(9-8.) TRPH (FL-PRO)	(9-15.) TCLP-Extraction Only	(9-16.) SPLP-Extraction Only	(9-11.) Arsenic	(9-12.) Cadmium	(9-13.) Chromium	(9-14.) Lead	(9-8.a.) TRPH Fractionation	(9-1.) Table D Used Oil				(8-14.) Encore Sampler
2	High Vadose				8	8	8		8					4					4
2	Waste Oil UST Area														2				
2	Pre-burn							1		1	1	1	1						
2	Contingent Encores																		4
Task 2 Subtotal					8	8	8	1	8	1	1	1	1	4	2	0	0	0	8
GRAND TOTALS					8	8	8	1	8	1	1	1	1	4	2	0	0	0	8

FDEP Facility ID#: 138628726 **STCM Facility Name:** Dade Cnty School Bd-Transportation

Any blank fields are not applicable to the scope of work.

SOIL BORING (SB) and WELL INSTALLATION TABLE

SOIL BORING DETAILS					Screening/Split Spoon Intervals			WELL INSTALLATION DETAILS									
TASK #	Installation Method	Quantity	Depth (ft bls)	Total Boring Footage (ft)	Screening Depth Interval 1 & Spacing	Screening Depth Interval 2 & Spacing	Screening Depth Interval 3 & Spacing	Quantity	Well Type	Well Diameter (in)	Depth (ft bls)	Screen Interval (ft bls)	Total Well Footage (ft)	Surface Casing Diameter (in)	Surface Casing Depth (ft)	Total Casing Footage (ft)	Well Completion Type
2	DPT	24	14	336	0-4'@1'	4-14'@2'							0			0	
2	HSA/MR	12	20	240	0-4'@1'	4-20'@2'		12	MW	2	20	10-20	240			0	8" MH
2	HSA/MR	1	40	40	0-4'@1'	4-20'@2'	>20'@5'	1	DW	2	40	35-40	40	6	30	30	12" MH
TOTALS				**616**									**280**			**30**	

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

ATC Amended and Restated Contract Line Items

9-Digit Facility ID #: 138628726
Facility Name: DADE COUNTY SCHOOL BD - TRANSPORTATION
Site Manager Name: DAVID JACOBS
Site Manager Phone: (561) 793-3849
Site Manager Email: djacobs@ene.com

Contract #: GC833
Contractor: AET
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 1
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

Due to correspondence from the Dade County School Board on 8/10/16 noting that the Board will be passing a referendum during a meeting on 9/7/16 to streamline the site access agreement request procedure, AET requests a change order to extend the due dates to the Task 1-3 event deliverables.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
1	HASP, FILE REVIEW, SITE RECON	8/23/2016	10/31/2016	$ -
2	INTERIM ASSESSMENT REPORT	10/24/2016	12/30/2016	$ -
3	TSAR	1/20/2017	3/30/2017 ~~3/31/2017~~	$ -
	Period of Service:	3/21/2017	5/29/2017	$ -

Request for Change - Authorization for Change in Scope of Work

ATC Amended and Restated Contract Line Items

9-Digit Facility ID #: 138628726 **Contract #:** GC833 **PO #:** AF4CB5

Facility Name: DADE COUNTY SCHOOL BD - TRANSPORTATION **Contractor:** AET **CO #:** 1

		Previous End Date	New End Date	Total Authorized Cost (FDEP Share: 100%)
Contractor Representative:	ANDRES SANCHEZ (Print Name)	(Signature)		8/19/2016 (Date)
FDEP Site Manager:	DAVID JACOBS (Print Name)	(Signature)		8/19/2016 (Date)
Team Leader/Co. Manager:	(Print Name)	(Signature)		(Date)

Reviewer (optional): _____

Technical Approval (optional): _____

PA Approval (optional): _____

Accounting Use Only: 3CO

Contingent Funding Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOLS BD - TRANSP
Site Manager Name: DAVID JACOBS
Site Manager Phone: 561-793-3849
Site Manager Email: DJACOBS@ENE.COM

Contract #: GC728
Contractor: AET, LLC
Contractor Phone: 863-614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 2
Ref #: 833-021A

This is an authorization for the costs associated with adding Contingent Funding to an existing Purchase Order in MFMP. Contingent Funding is only allowed to be used to offset the cost for pay items associated with a Field Request for Change.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE
3	23-1.	Contingent Funding - Allowance only to be used as offset for field change orders	NOT BILLABLE	$1.00	7000.00	$ 7,000.00

Task	Change Order Subtotals
3	$ 7,000.00
	$ 7,000.00

Total Authorized Cost
(FDEP Share: 100%)

Contractor Representative: ANDRES SANCHEZ (Print Name) _____ (Signature) 8/31/2016 (Date)

FDEP Site Manager: DAVID JACOBS (Print Name) _____ (Signature) 8/31/2016 (Date)

Other (If applicable): _____ (Print Name) _____ (Signature) _____ (Date)

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

ATC Amended and Restated Contract Line Items

9-Digit Facility ID #: 138628726
Facility Name: DADE COUNTY SCHOOL BD - TRANSPORTATION
Site Manager Name: DAVID JACOBS
Site Manager Phone: (561) 793-3849
Site Manager Email: djacobs@ene.com

Contract #: GC833
Contractor: AET LLC sr
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 3
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

Due to correspondence from the Dade County School Board on 10/25/16 noting that the site access agreement is being finalized, AET requests a change order to extend the due dates to the Task 1-3 event deliverables.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
1	HASP, FILE REVIEW, SITE RECON	10/31/2016	12/30/2016	$ -
2	INTERIM ASSESSMENT REPORT	12/30/2016	2/28/2017	$ -
3	TSAR	3/30/2017	5/31/2017	$ -
	Period of Service:	5/29/2017	7/31/2017	$ -

Request for Change - Authorization for Change in Scope of Work

ATC Amended and Restated Contract Line Items

9-Digit Facility ID #: 138628726
Facility Name: DADE COUNTY SCHOOL BD - TRANSPORTATION

Contract #: GC833
Contractor: AET LLC sr

PO #: AF4CB5
CO #: 3

		Previous End Date	New End Date	Total Authorized Cost (FDEP Share: 100%)
Contractor Representative:	ANDRES SANCHEZ (Print Name)	(Signature)		10/25/2016 (Date)
FDEP Site Manager:	DAVID JACOBS (Print Name)	(Signature)		10/25/2016 (Date)
Team Leader/Co. Manager:	(Print Name)	(Signature)		(Date)

Reviewer (optional): _____

Technical Approval (optional): _____

PA Approval (optional): _____

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

ATC Amended and Restated Contract Line Items

9-Digit Facility ID #: 138628726
Facility Name: DADE COUNTY SCHOOL BD - TRANSPORTATION
Site Manager Name: DAVID JACOBS
Site Manager Phone: (561) 793-3849
Site Manager Email: djacobs@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 4
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

Due to correspondence from the Dade County School Board on 12/12/16 noting that the site access agreement is being finalized, AET requests a change order to extend the due dates to the Task 1-3 event deliverables.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
1	HASP, FILE REVIEW, SITE RECON	12/30/2016	1/30/2017	$ -
2	INTERIM ASSESSMENT REPORT	2/28/2017	3/30/2017	$ -
3	TSAR	5/31/2017	6/30/2017	$ -
	Period of Service:	7/31/2017	8/30/2017	$ -

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

ATC Amended and Restated Contract Line Items

9-Digit Facility ID #: 138628726 **Contract #:** GC833 **PO #:** AF4CB5

Facility Name: DADE COUNTY SCHOOL BD - TRANSPORTATION **Contractor:** AET **CO #:** 4

		Previous End Date	New End Date	Total Authorized Cost (FDEP Share: 100%)
Contractor Representative:	ANDRES SANCHEZ (Print Name)	(Signature)		12/27/2016 (Date)
FDEP Site Manager:	DAVID JACOBS (Print Name)	(Signature)		12/28/2016 (Date)
Team Leader/Co. Manager:	(Print Name)	(Signature)		(Date)

Reviewer (optional): _____

Technical Approval (optional): _____

PA Approval (optional): _____

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

ATC Amended and Restated Contract Line Items

9-Digit Facility ID #: 138628726
Facility Name: DADE COUNTY SCHOOL BD - TRANSPORTATION
Site Manager Name: DAVID JACOBS
Site Manager Phone: (561) 793-3649
Site Manager Email: djacobs@ene.com

Contract #: GC833
Contractor: AET
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 5
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

AET has not received the site access agreement from Dade County School Board, AET requests a change order to extend the due dates to the Task 1-3 event deliverables.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
1	HASP, FILE REVIEW, SITE RECON	1/30/2017	3/31/2017	$ -
2	INTERIM ASSESSMENT REPORT	3/30/2017	5/29/2017	$ -
3	TSAR	6/30/2017	8/29/2017	$ -
	Period of Service:	8/30/2017	10/30/2017	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost (FDEP Share: 100%)**

Contractor Representative: ANDRES SANCHEZ (Print Name) _____ (Signature) 1/26/2017 (Date)

FDEP Site Manager: DAVID JACOBS (Print Name) _____ (Signature) 1/30/2017 (Date)

Team Leader/Co. Manager: _____ _____ _____

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 6
CO Type: Date Extension Only
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

AET submitted the site access agreement to Dade County School Board on 3/15/17 for final approval. AET has not received the final copy of the agreement; therefore, AET requests a time extension for the deliverable due date for Task 1-3.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
1	HASP, FILE REVIEW, SITE RECON	3/31/2017	5/29/2017	$ -
2	INTERIM ASSESSMENT REPORT	5/29/2017	7/31/2017	$ -
3	TSAR	8/29/2017	10/31/2017	$ -
	Period of Service:	10/30/2017	12/29/2017	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost** (FDEP Share: 100%)

Contractor Representative: Andres Sanchez (Print Name) _____ (Signature) 3/30/2017 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) Keith Perry on behalf of Rafael Maldonado (Signature) 3/31/17 (Date)

Administrative Reviewer: _____ _____ _____

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726

Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
(Print Name)

Contract #: GC833

Contractor: Advanced Environmental Technologies, LLC
(Signature)

PO #: AF4CB5

CO #: 6
(Date)

Reviewer (optional): _____

Technical Approval (optional): _____

Cost Center Approval (optional): _____

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 7
CO Type: Date Extension Only
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

AET submitted the site access agreement to Dade County School Board on 3/15/17 for final approval. AET has not received the final copy of the agreement; therefore, AET requests a time extension for the deliverable due date for Task 1-3.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes Please refer to the Scope of Work for additional description of these items

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
1	HASP, FILE REVIEW, SITE RECON	5/29/2017	7/31/2017	$ -
2	INTERIM ASSESSMENT REPORT	7/31/2017	9/29/2017	$ -
3	TSAR	10/31/2017	12/29/2017	$ -
	Period of Service:	12/29/2017	2/28/2018	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost** (FDEP Share: 100%)

Contractor Representative: Andres Sanchez (Print Name) — (Signature) — 5/27/2017 (Date)

FDEP Site Manager: Elizabeth Rogers for Rafael Maldonado (Print Name) — Elizabeth Rogers (Signature) — 5/30/17 (Date)

Administrative Reviewer: _____ (Print Name) — _____ (Signature) — _____ (Date)

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726

Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
(Print Name)

Contract #: GC833

Contractor: Advanced Environmental Technologies, LLC
(Signature)

PO #: AF4CB5

CO #: 7
(Date)

Reviewer (optional): _____

Technical Approval (optional): _____

Cost Center Approval (optional): _____

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #:	138628726	**Contract #:**	GC833	**PO #:**	AF4CB5
Facility Name:	DADE CNTY SCHOOL BD-TRANSPORTATION	**Contractor:**	Advanced Environmental Technologies, LLC	**CO #:**	8
Site Manager Name:	Rafael Maldonado	**Contractor Phone:**	(863) 614-0692	**CO Type:**	Regular
Site Manager Phone:	(561)793-3849 Ext 3904	**FDEP Cost Share %:**	100.00%	**Ref #:**	833-021A
Site Manager Email:	rmaldonado@ene.com				

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

According to Dade County Schools Transportation Department there are no as-built drawings available documenting the location of, but not limited to abandoned USTs, electric lines, communication lines, fiber optic lines, sewage piping, water piping within the area of investigation. The site has been in operation since 1956 and has undergone numerous renovations. AET requests funds for Ground Penetrating Radar (GPR) services to aid in locating potentially critical utilities within the assessment area. A mobilization and 4hrs of field tech labor are requested to oversee the GPR survey. AET also requests a time extension for the Task 2-3 deliverables and POS date.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE
2	1-7.	6% Handling Fee for Cost Reimbursable Items	% Surcharge	$0.06	950	$ 57.00
2	22-1.	GPR	Reimbursable*	$1.00	950	$ 950.00
2	20-6.	Scientist/Technical Specialist (Key)	Per Hour	$90.00	4	$ 360.00
2	3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	$452.48	1	$ 452.48

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726

Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION

Contract #: GC833

Contractor: Advanced Environmental Technologies, LLC

PO #: AF4CB5

CO #: 8

2	INTERIM ASSESSMENT REPORT ✓	9/29/2017 ✓	11/28/2017	$ 1,819.48
3	TSAR ✓	12/29/2017 ✓	2/27/2018	$ -
	Period of Service:	2/28/2018 ✓	4/30/2018 ✓	**$ 1,819.48**
		Previous End Date	**New End Date**	**Total Authorized Cost** (FDEP Share: 100%)

Contractor Representative: Andres Sanchez (Print Name) _____ (Signature) 9/18/2017 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) _____ (Signature) 9/19/2017 (Date)

Administrative Reviewer: Blake Miller (Print Name) _____ (Signature) 9-20-17 (Date)

Reviewer (optional): 9/20/17

Technical Approval (optional): Dan T. Arcale

Cost Center Approval (optional):

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 9
CO Type: Date Extension Only
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

AET conducted groundwater sampling activities at the site on 10/17/2017. Samples from MW-10 thru MW-12 were out of hold. AET remobilized and resampled MW-10 thru MW-12 (at its own expense) on 10/31/2017. Laboratory results were received on 11/7/2017. AET requests a time extension for Task 2-3 deliverables and POS date in order to schedule/coordinate and complete soil assessment at the subject site.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
2	INTERIM ASSESSMENT REPORT	11/28/2017	12/28/2017	$ -
3	TSAR	2/27/2018	3/29/2018	$ -
	Period of Service:	4/30/2018	5/30/2018	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost** (FDEP Share: 100%)

Contractor Representative: Andres Sanchez (Print Name) _____ (Signature) 11/8/2017 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) _____ (Signature) 11/9/2017 (Date)

Administrative Reviewer: _____ (Print Name) _____ (Signature) _____ (Date)

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 10
CO Type: Date Extension Only
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

Due to schedule conflicts with Dade County School Transportation, AET requests a time extension for Task 2-3 deliverables and POS date in order to complete the soil assessment activities currently scheduled to be performed on 12/18/2017 and 12/19/2017 at the subject site.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
2	INTERIM ASSESSMENT REPORT	12/28/2017	1/29/2018	$ -
3	TSAR	3/29/2018	4/30/2018	$ -
	Period of Service:	5/30/2018	6/29/2018	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost (FDEP Share: 100%)**

Contractor Representative: Andres Sanchez (Print Name) _____ (Signature) 11/27/2017 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) _____ (Signature) 11/27/2017 (Date)

Administrative Reviewer: _____ (Print Name) _____ (Signature) _____ (Date)

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 11
CO Type: Date Extension Only
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

AET requests a time extension for Task 3 deliverables and POS date in order to complete soil assessment at the subject site.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount Fees will be reimbursed for the pay item based on the actual invoice Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes Please refer to the Scope of Work for additional description of these items

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
3	TSAR	4/30/2018	6/29/2018	$ -
	Period of Service:	6/29/2018	8/28/2018	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost** (FDEP Share: 100%)

Contractor Representative: Andres Sanchez (Print Name) _____ (Signature) 4/24/2018 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) _____ (Signature) 4/24/2018 (Date)

Administrative Reviewer: _____ (Print Name) _____ (Signature) _____ (Date)

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 12
CO Type: Regular
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

Per conversation with FDEP, AET requests funds to collect three confirmatory soil samples from two soil borings at the subject site. Soil samples will be collected from SB-32 at 1-2ft and 4ft intervals for EPA 8270 (PAH). Soil samples will also be collected from SB-31 at 4ft interval for FL-PRO (TRPH) and fractionation, if applicable and after FDEP approval. One unit of electronic data deliverable is requested. AET will submit field notes, lab reports, updated tables, and updated figures as deliverable prior to the TSAR. One mobilization to the site is requested to conduct the above mentioned field activities. BORINGS WILL BE ADVANCED VIA HAND AUGE

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE
3	3-1.	Mobilization, Light Duty Vehicle (car or 1/2 ton truck) - ≤ 100 miles each way	Per Round Trip	$452.48	1	$ 452.48
3	5-2.	Hand Auger Boring ≤ 10 foot total depth	Per Boring	$133.51	2	$ 267.02
3	8-6.	Soil/Sediment Sample Collection	Per Sample	$116.56	3	$ 349.68
3	9-5.	Soil, Polycyclic Aromatic Hydrocarbons (EPA 8270 or EPA 8310)	Per Sample	$87.77	2	$ 175.54
3	9-8.	Soil, Total Recoverable Petroleum Hydrocarbons (FL-PRO)	Per Sample	$72.22	1	$ 72.22

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726 **Contract #:** GC833 **PO #:** AF4CB5

Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION **Contractor:** Advanced Environmental Technologies, LLC **CO #:** 12

3	9-8.A.	Soil, TRPH Fractionation (MADEP-EPH/VPH Method or TPHCWG Direct Method)	Per Sample	$261.00	1	$ 261.00
3	8-11.	Electronic Data Deliverables (EDD)	Per Sampling Event	$100.00	1	$ 100.00

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
3	TSAR	6/29/2018	-	$ 1,677.94
	Period of Service:	8/28/2018	-	**$ 1,677.94**
		Previous End Date	**New End Date**	**Total Authorized Cost** (FDEP Share: 100%)

Contractor Representative: Andres Sanchez (Print Name) _____ (Signature) 5/2/2018 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) _____ (Signature) 5/2/2018 (Date)

Administrative Reviewer: Joel Johnson (Print Name) _____ (Signature) 5/7/18 (Date)

Reviewer (optional): 5/4/18

Technical Approval (optional):

Cost Center Approval (optional):

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 13
CO Type: Date Extension Only
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

Due to a lab error, AET requests a time extension in order to remobilize to the site, collect confirmatory soil samples, and submit the Task 3: TSAR deliverable. AET will be onsite on 6/25/18 to collect confirmatory soil samples.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
3	TSAR	6/29/2018	8/28/2018	$ -
	Period of Service:	8/28/2018	10/27/2018	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost (FDEP Share: 100%)**

Contractor Representative: Andres Sanchez (Print Name) _____ (Signature) 6/4/2018 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) _____ (Signature) 6/4/2018 (Date)

Administrative Reviewer: _____ (Print Name) _____ (Signature) _____ (Date)

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 14
CO Type: Date Extension Only
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

Due to sample kit shipment delay from the primary lab to the secondary lab, AET requests a time extension in order to remobilize to the site, collect confirmatory soil samples, and submit the Task 3: TSAR deliverable. AET will be onsite on 9/5/18 to collect confirmatory soil samples.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
3	TSAR	8/28/2018	10/26/2018	$ -
	Period of Service:	~~10/27/2018~~ 10/29/2018 sr	12/26/2018	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost (FDEP Share: 100%)**

Contractor Representative: Andres Sanchez (Print Name) _____ (Signature) 7/31/2018 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) _____ (Signature) 8/1/2018 (Date)

Administrative Reviewer: _____ (Print Name) _____ (Signature) _____ (Date)

Florida Department of Environmental Protection-Division of Waste Management-Petroleum Restoration Program

Request for Change - Authorization for Change in Scope of Work

9-Digit Facility ID #: 138628726
Facility Name: DADE CNTY SCHOOL BD-TRANSPORTATION
Site Manager Name: Rafael Maldonado
Site Manager Phone: (561)793-3849 Ext 3904
Site Manager Email: rmaldonado@ene.com

Contract #: GC833
Contractor: Advanced Environmental Technologies, LLC
Contractor Phone: (863) 614-0692
FDEP Cost Share %: 100.00%

PO #: AF4CB5
CO #: 15
CO Type: Date Extension Only
Ref #: 833-021A

This is an authorization for the costs associated with the change in quantities of services being provided and/or deliverable due dates. In order for these costs to be paid, these changes must be processed through a change order to the purchase requisition and a revised Purchase Order issued by MFMP prior to initiating work.

Description of Change and Justification: Include complete description of who, what, where, when, how and why.

Due to time delays to resample and recieve analytical results from laboratory, AET requests a time extension in order to complete the TSAR. AET is requesting a 30 day time extension for the Task 3 TSAR and the Period Of Service.

TASK	PAY ITEM	DESCRIPTION	UNIT OF MEASURE	PAY ITEM PRICE	QUANTITY	EXTENDED PRICE

*For reimbursable pay items the cost listed is a "not to exceed" amount. Fees will be reimbursed for the pay item based on the actual invoice. Please note, the unit of measure for these items will be displayed as dollars for invoicing purposes. Please refer to the Scope of Work for additional description of these items.

Task	Deliverable Name	Previous Due Date	New Due Date	Change Order Subtotals
3	TSAR	10/26/2018	11/26/2018	$ -
	Period of Service:	12/26/2018	1/25/2019	$ -
		Previous End Date	**New End Date**	**Total Authorized Cost** (FDEP Share: 100%)

Contractor Representative: Daniel Warmke (Print Name) — (Signature) — 10/12/2018 (Date)

FDEP Site Manager: Rafael Maldonado (Print Name) — (Signature) — 10/12/2018 (Date)

Administrative Reviewer: (Print Name) — (Signature) — (Date)

Medium Risk Site - 3
Farina's Radiators

FIRST QUARTER SAMPLING REPORT

Submitted For:

FORMER FARINA RADIATOR
918 SW 69TH AVENUE
MIAMI, FLORIDA

Submitted To:

DADE COUNTY DEPARTMENT OF
ENVIRONMENTAL RESOURCES MANAGEMENT
33 SW 2ND AVENUE
MIAMI, FL 33130-1540

Submitted By:

Environmental Site Assessments, Inc.
8390 NW 53rd Street, Suite 200
Miami, Florida 33166

July 19, 1996

QSR PREPARED BY:

ERIC M. LAMBERT
ENVIRONMENTAL GEOLOGIST

QSR REVIEWED BY:

VIRGINIA M. WALSH
SENIOR GEOLOGIST

B. RAFAEL BARBA 7/24/96
PROFESSIONAL GEOLOGIST # 168

STATE OF FLORIDA PROFESSIONAL GEOLOGIST

All ESA's reports are produced in an environmental conservative format.

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1.0 INTRODUCTION

This report has been prepared to summarize the methodology and results of the first Quarter Sampling Report (QSR), conducted at the former Farina Radiator Shop, located at 918 SW 69th Avenue, Miami, Dade County, Florida. A location map is provided as **Figure 1, Appendix A**. Environmental Site Assessments, Inc. (CompQAP #940263G) was retained by Mr. Sergio Pino, president of Century Plumbing Wholesale, to conduct a Monitoring Only Plan (MOP) for a period of one (1) year. The Contamination Assessment Report Addendum/Monitoring Only Plan (CARA/MOP), submitted by Environmental Site Assessments, Inc. (ESA) on April 2, 1996, was approved by the Dade County Department of Environmental Resources Management (DERM), in an April 17, 1996 correspondence. A copy of the DERM correspondence, approving the MOP, is provided as **Appendix B**.

2.0 GROUNDWATER SAMPLING AND RESULTS

The MOP required the sampling of MW-A, MW-4, and MW-5, and analysis for Oil and Grease, using EPA Method 413.1, and Volatile Organic Aromatics (VOA's), using EPA Method 602. The locations and identifications of MW-A, MW-4, and MW-5 are illustrated in a site map, provided as **Figure 2, Appendix A**.

The MW-A, MW-4, and MW-5 groundwater samples were collected on July 19, 1996, by Precision Environmental Laboratory, Inc. in accordance with their FDEP approved CompQAP #920323G. The MW-A groundwater sample contained 3.16 mg/L of Oil & Grease, 1.98 ug/L of Benzene, and 19.21 ug/L of Total BTEX. The MW-4 groundwater sample revealed 1.4 mg/L of Oil & Grease, and MW-5 indicated all levels were Below Detectable Limits (BDL). The results of the First QSR groundwater sampling event are summarized in **Table 1 - Appendix C**.

A copy of the laboratory analytical results and chain of custody is provided in **Appendix D**.

3.0 SITE-SPECIFIC GROUNDWATER FLOW

In accordance with the April 17, 1996, DERM correspondence, ESA conducted a groundwater elevation survey on July 17, 1996, to determine the direction of site-specific groundwater flow. The groundwater elevations were surveyed from four (4) of the five (5) on-site monitoring wells, including MW-A, MW-4, MW-5, and MW-6. ESA has determined the site-specific groundwater flow to be at a steady state, as there appears to be no significant gradient. The water table elevation measurements are summarized as **Table 2-Appendix C.** A site map, also providing survey results, is included as **Figure 3, Appendix A**.

4.0 CONCLUSIONS AND RECOMMENDATIONS

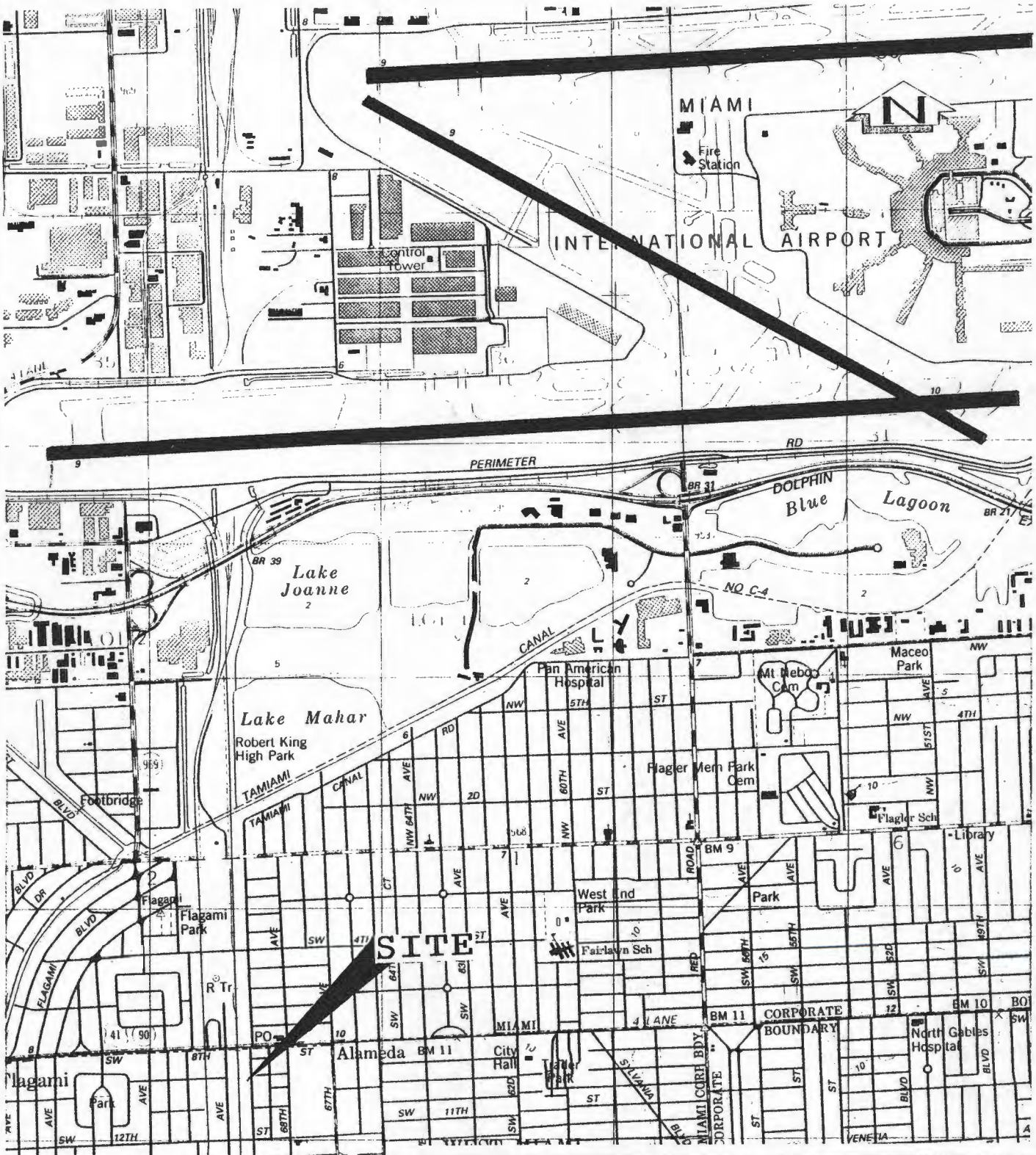
4.1 Conclusions

Based on the first QSR laboratory analytical results, the groundwater samples from MW-A, MW-4, and MW-5 revealed concentrations of Oil & Grease and VOA's which are BDL, or below the MCL's, with the exception of 1.98 ug/L of Benzene in MW-A.

4.2 Recommendations

Environmental Site Assessments, Inc. (ESA) recommends that the second quarterly groundwater sampling event, for the former Farina Radiator Shop facility, be performed on or around October 19, 1996, as approved in the April 17, 1996 DERM correspondence. DERM will be properly notified and the results will be submitted in the second QSR.

APPENDIX A

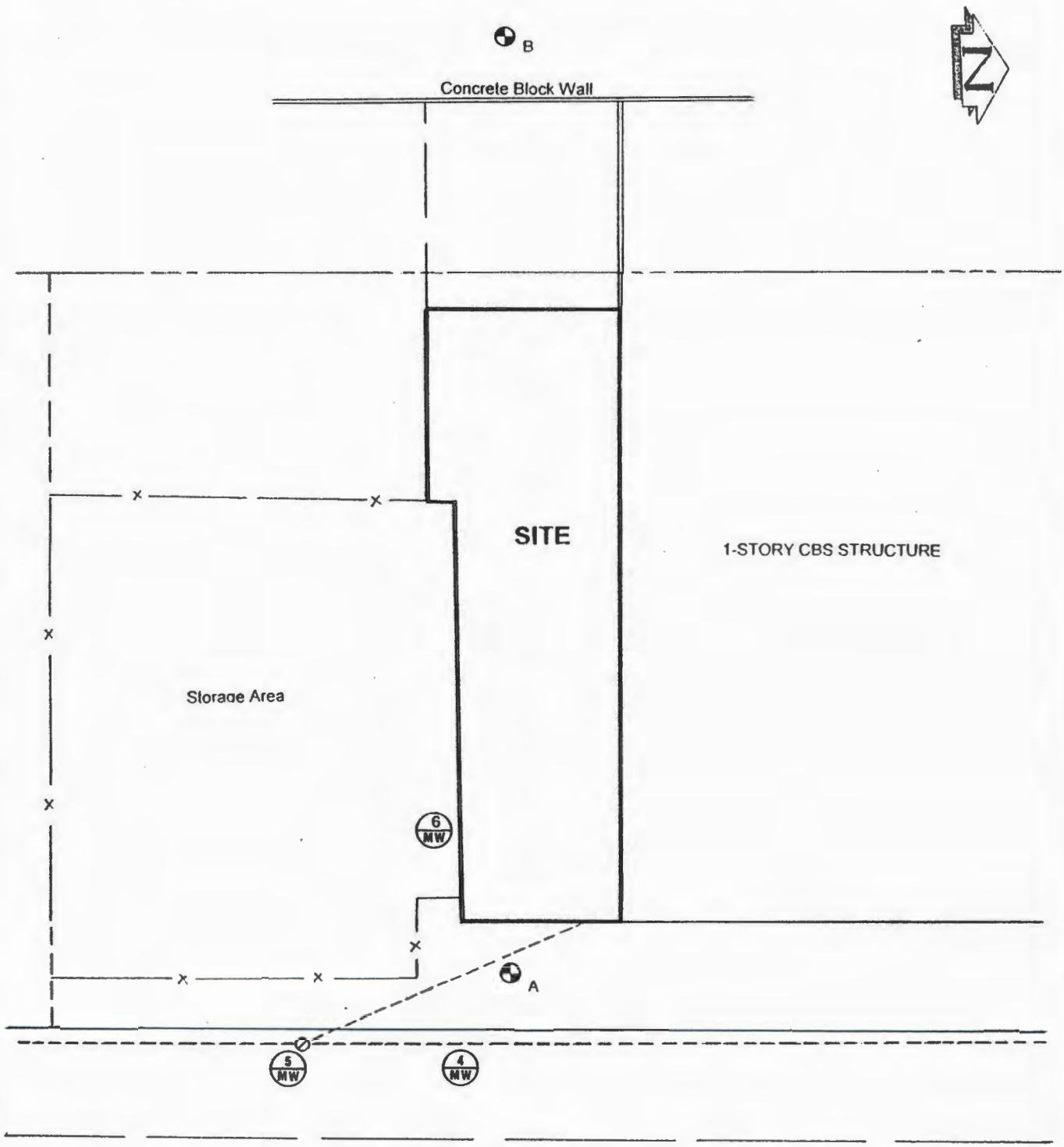


ENVIRONMENTAL SITE ASSESSMENTS, INC.
999 Ponce de Leon Boulevard, Coral Gables, Florida

LOCATION MAP

FARIÑA RADIATOR SHOP
918 S.W. 69th Avenue, Miami, FL

SCALE: AS SHOWN	PROJECT # 96M241	FIG. # 1



EXISTING MONITORING WELL

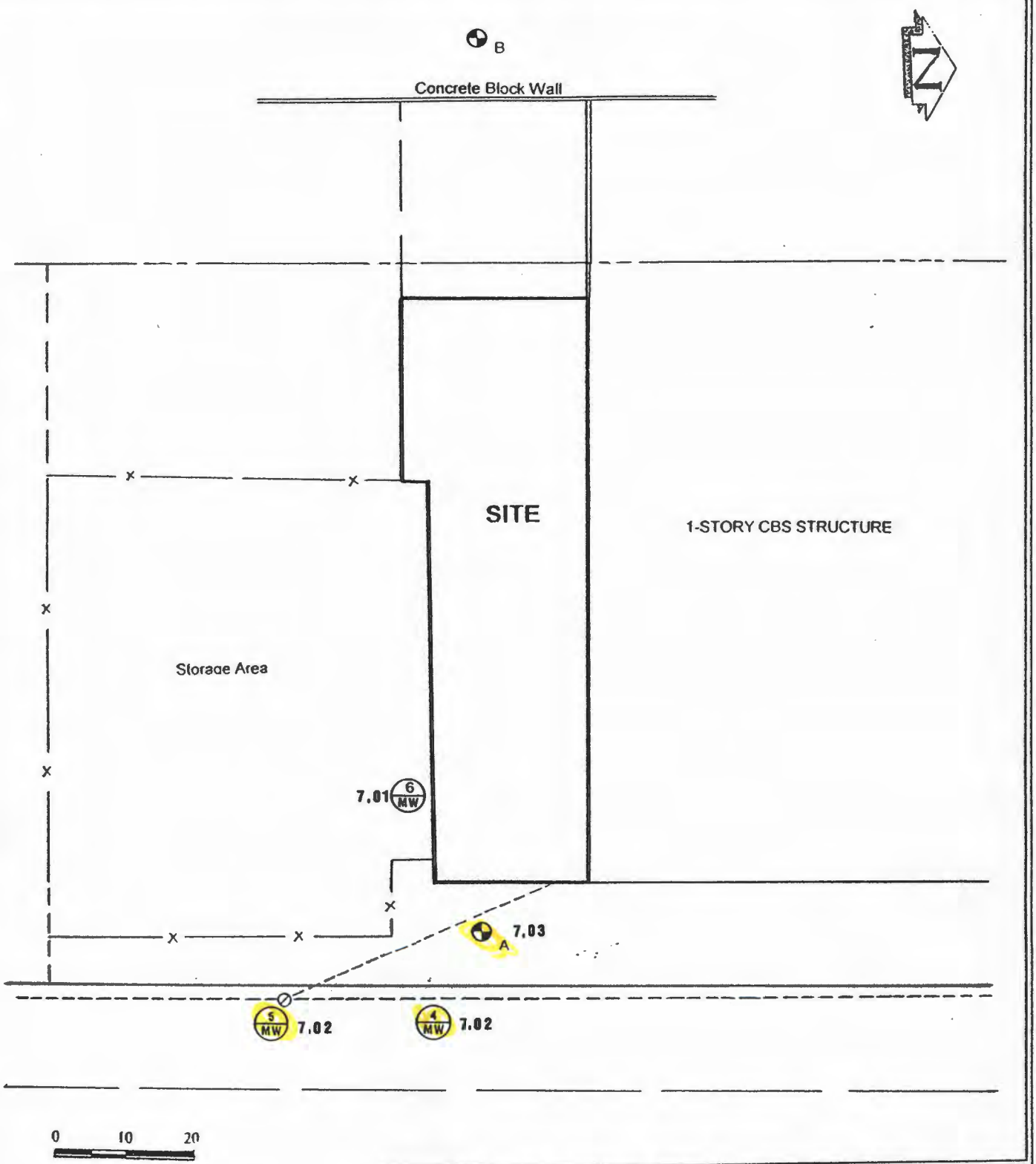
NEW MONITORING WELL

ENVIRONMENTAL SITE ASSESSMENTS, INC.
999 Ponce de Leon Boulevard, Coral Gables, Florida

MONITORING WELL LOCATION

FARIÑA RADIATOR SHOP
918 S.W. 69th Avenue, Miami, FL

SCALE: AS SHOWN	PROJECT # 96M241	FIG. # 2



ENVIRONMENTAL SITE ASSESSMENTS, INC.
999 Ponce de Leon Boulevard, Coral Gables, Florida

SITE-SPECIFIC GROUNDWATER FLOW

FARIÑA RADIATOR SHOP
918 S.W. 69th Avenue, Miami, FL

SCALE: AS SHOWN	PROJECT # 96M241	FIG. # 3

APPENDIX B

METROPOLITAN DADE COUNTY, FLORIDA

METRO-DADE

DERM

ENVIRONMENTAL RESOURCES MANAGEMENT
POLLUTION PREVENTION DIVISION
SUITE 800
33 S.W. 2nd AVENUE
MIAMI, FLORIDA 33130-1540
(305) 372-6817

April 17, 1996

Mr. Sergio Pino, President
Century Plumbing Wholesale, Inc.
901 S.W. 69 Avenue
Miami, Florida 33144

CERTIFIED MAIL NO. Z-146 645 774
RETURN RECEIPT REQUESTED

RE: Contamination Assessment Report Addendum and Monitoring Only Plan (CARA/MOP) dated April 2, 1996, and submitted by Environmental Site Assessments (ESA), Inc. for the former Farina's Radiator Shop located at 918 S.W. 69 Avenue, Miami, Dade County, Florida.

Dear Mr. Pino:

The Hazardous Waste Section of the Department of Environmental Resources Management (DERM) has reviewed the referenced submittal, received April 2, 1996, and hereby approves the MOP as follows:

You are required to complete the monitoring program for a minimum of one (1) year and as outlined below:

Monitoring Wells	Parameters	Sampling Frequency
MW-A, 4, and 5	EPA Method 602 and Oil/grease	Quarterly

If contaminant levels increase significantly during the monitoring period, then the appropriate wells must be resampled within fourteen (14) days of the initial sampling date to confirm levels. If the resampling results indicate that plume migration or new discharges have occurred, then further contamination assessment and/or remediation may be required.

In addition, if contaminant concentrations do not decrease below applicable groundwater standards after the duration of the monitoring period, then additional monitoring, supplemental contamination assessment, and/or remediation may be required.

Groundwater elevations must be surveyed from a minimum of three (3) monitoring wells during each quarterly sampling event to determine the site specific groundwater flow direction. The groundwater flow direction is required to predict potential migration trends for the dissolved contaminant plume(s). Survey data and contour maps illustrating groundwater elevations must be provided with all quarterly reports to confirm the flow direction.

A complete round of samples is required from all existing wells (i.e., MW-A, B, 4, 5, and 6) during the fourth quarterly sampling event. Said samples shall be analyzed by EPA Method 602, oil and grease, and total lead. Be advised that the DERM Project Engineer hereby requests to be notified verbally and in writing at least seven (7) working days prior to the implementation of the referenced sampling event in order to split samples for possible case closure.

Additionally, DERM requests the option to split samples during all quarterly monitoring event at the subject site. Therefore, the HWS Engineer must be notified verbally and in writing at least seven (7) working days prior to conducting any field activities. If the data subsequently submitted varies substantially from DERM's split sample analytical results, a complete resampling using two independent certified laboratories will be required.

Therefore, within ninety (90) days of receipt of this letter, you are hereby required to submit to this Department for review the first Quarterly Monitoring Report (QMR #1). Each QMR shall include all analytical results and corresponding chain of custody records, groundwater elevation data, a plan for further action as warranted by the data (i.e., additional monitoring, supplemental assessment, remediation, and/or no further action), and the appropriate review fee (i.e., $100). Subsequent quarterly reports must be submitted every ninety (90) days thereafter.

Failure to adhere to the items and time frames stipulated above shall result in your case being forwarded to DERM's Code Enforcement Section for further enforcement action. Be advised that an additional late fee of $100.00 will be applied to documents received after the required due date.

If you have any questions regarding this letter, please contact Alex Montalvo, Engineer, of the Hazardous Waste Section at (305) 372-6887.

Sincerely,

Robert E. Johns, P.E., Chief
Hazardous Waste Section
POLLUTION PREVENTION DIVISION

AM:vx:2916
pc: Mark J. Pettit, DERM
Roberto Abrahante, DERM (IW5-640, File #601)
Paul Wierzbicki, P.G., FDEP-West Palm Beach
Craig C. Clevenger, ESA, Inc.

APPENDIX C

TABLE I

FORMER FARINA RADIATOR SHOP - FIRST QSR 07/19/96

LABORATORY ANALYTICAL RESULTS Project # 96-M241

PARAMETER	DERM MCL	Units	1/30/95 MW-A		MW-4	MW-5
			LAK			
Oil & Grease (water)	5-15	mg/kg	1 mg/l	3.16	1.40	BDL
VOA	-	ug/l				BDL
MTBE	50.00	ug/L	1.1	BDL	BDL	BDL
BTEX*	50.00	ug/L	70.6	19.21	BDL	BDL
Benzene*	1	ug/L	2.6	1.98	BDL	BDL
Toluene*	50.00	ug/L	9.8	1.30	BDL	BDL
Ethylbenzene*	50.00	ug/L	4.0	6.13	BDL	BDL
m & p Xylene*	50.00	ug/L	} 54.2	3.67	BDL	BDL
0-Xylene*	50.00	ug/L	}	6.13	BDL	BDL

* Total = Total BTEX Concentration
VOA - Volatile Organic Aromatics - EPA 8021 (602)
mg/l - milligrams per liter (approx. = ppm)
ug/l - micrograms/liter (approx. = ppb)
BDL - Below Detectable Levels
MCL - Maximum Concentration Levels

Pb 0.7 mg/l
Zn 0.65
Cu BDL

TABLE 2
FORMER FARINA RADIATOR SHOP
WATER TABLE ELEVATIONS - July 17, 1996

MONITORING WELL #	TOP OF CASING (feet)	DEPTH TO WATER (feet)	WATER TABLE ELEVATION (feet)
A	13.81	6.78	7.03
4	13.13	6.11	7.02
5	13.37	6.35	7.02
6	13.34	6.33	7.01

APPENDIX D

PRECISION ENVIRONMENTAL LABORATORY, INC.

first in quality • first in service

ESAINC000012
Eric Lambert
Environmental Site Assess(ESA)
8390 NW 53rd Street, #200 Kroger Center
Miami, FL 33166

July 22, 1996
Submission # 9607000611
Order # 164172
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
Farina Radiator Shop 918 SW 69Th Avenue Miami,Fl
Farina Radiator Shop

Sample I.D.: MW-A
Collected: 07/19/96 09:30
Received: 07/19/96 17:00
Collected by: W.M.Duffield

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
Oil and Grease	3.16 < 15	mg/L	413.1	1.0	07/20/96	07/20/96	LT
8021 VOA {602} Compounds in Water by GC			MEDF	1			
Methyl-tert-butyl-ether	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Benzene	1.98 >/	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Toluene	1.30	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Chlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Ethylbenzene	6.13	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
m & p Xylene	3.67	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
o- Xylene	6.13	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,3-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,4-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,2-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

ESAINC000012
Eric Lambert
Environmental Site Assess(ESA)
8390 NW 53rd Street, #200 Kroger Center
Miami, FL 33166

July 22, 1996
Submission # 9607000611
Order # 164173
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
Farina Radiator Shop 918 SW 69Th Avenue Miami,Fl
Farina Radiator Shop

Sample I.D.: MW-4
Collected: 07/19/96 10:00
Received: 07/19/96 17:00
Collected by: W.M.Duffield

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
Oil and Grease	1.4 <1.5	mg/L	413.1	1.0	07/20/96	07/20/96	LT
8021 VOA {602} Compounds in Water by GC			MEDF	1			
Methyl-tert-butyl-ether	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Benzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Toluene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Chlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Ethylbenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
m & p Xylene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
o- Xylene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,3-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,4-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,2-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

ESAINC000012
Eric Lambert
Environmental Site Assess(ESA)
8390 NW 53rd Street, #200 Kroger Center
Miami, FL 33166

July 22, 1996
Submission # 9607000611
Order # 164174
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
Farina Radiator Shop 918 SW 69Th Avenue Miami,Fl
Farina Radiator Shop

Sample I.D.: MW-5
Collected: 07/19/96 10:30
Received: 07/19/96 17:00
Collected by: W.M.Duffield

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
Oil and Grease	BDL	mg/L	413.1	1.0	07/20/96	07/20/96	LT
8021 VOA {602} Compounds in Water by GC			MEDF	1			
Methyl-tert-butyl-ether	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Benzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Toluene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Chlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
Ethylbenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
m & p Xylene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
o- Xylene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,3-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,4-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD
1,2-Dichlorobenzene	BDL	ug/L	5030/8021	1.000	07/20/96	07/20/96	MD

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

Submission Code: 96/07-611 Orders: 164172-164174 Entered to lims: (EC)	**PRECISION ENVIRONMENTAL LABORATORY** **CHAIN OF CUSTODY RECORD (DEP 62-770.900 (modified form))** 10200 USA TODAY WAY, MIRAMAR, FLORIDA 33025 (305) 431-4550 • NATL WATS (800) LAB-8550 • FAX (305) 431-1959 Original - Return w/Report Yellow - Lab Copy Pink - Sampler Copy	FDEP Facility No.____ Page ____ of ____ Sampling CompQAP NO.____ Approval Date:____

Report To: [illegible]		Report To Address: [illegible]	
Bill To: Environmental Site Assess(ESA)		Billing Address: 8390 NW 53rd Street, #200 Kroger Center Miami, FL [illegible]	
Project Number/Name: AS NEEDED	DAY: 34 RT: 12 GRID: STOP: 0		Site Location: Fanna Radiator Shop
Project Contact: [illegible]	Phone: [illegible]	FAX: [illegible]	916 SW 59th Avenue
Alternate Contact:	Phone:	FAX:	Miami
Sampled By (print): W. M. DUFFIELD		Sampler's Signature: W. M. Duffield	

ITEM	SAMPLE ID	DATE COLLECTED	TIME COLLECTED	pH ..... FLD	TEMP °C ..... FLD	COND ..... FLD	MATRIX DW SW GW SED S EFF HW BIO SA	SAMPLE LOCATION/ JOB DESCRIPTION (optional if needed when samples are from different site locations)	# CONTAINERS	ANALYSIS REQUIRED PLACE NAME OR METHOD NUMBER OF TESTS NEEDED IN LARGE BOXES BELOW. (✓) CHECK OFF WHICH SAMPLE ITEMS NEED EACH TEST PERFORMED						Sample Condition as Received: Temp 4 C Sealed (Yes) No / Lot Number of Sampling Containers Used
										PROFE 999 [illegible]						
1	[illegible]	2/14/96	0930				[illegible]	164172	3	✓						
2	[illegible]		1000					164173	3	✓						
3	[illegible]	↓	1030					164174	3	✓						
4																
5																
6																
7																
8																
9																
10																

Special Comments: Total # of Containers:

QA/QC Report Needed?: Yes No (See price guide for applicable fees)

Report Format: Standard Other (specify)

(1) Relinquished by Signature: W. M. Duffield	2/19/96	(2) Relinquished by Signature:	Date:	DUE DATE REQUESTED: 2-Hour Confirmation #
Company: PEA	Time:	Company:	Time:	Costing Code: ____ / D
(1) Received by Signature: Ernest	Date: 7/19/96	(2) Received by Signature:	Date:	Misc. Charges: Field Service
Company: PEL	Time: 17:00	Company:	Time:	SHADED AREAS ARE FOR LAB USE ONLY

ENVIRONMENTAL SITE ASSESSMENTS, INC.
ENVIRONMENTAL & ENGINEERING CONSULTANTS

REMEDIAL ACTION REPORT ADDENDUM

FOR

FORMER FARINA RADIATORS
918 SW 69th AVENUE
MIAMI, FLORIDA

SUBMITTED ON BEHALF OF

MR. SERGIO PINO
CENTURY PLUMBING

SUBMITTED TO

DADE COUNTY DEPARTMENT OF
ENVIRONMENTAL RESOURCES MANAGEMENT
33 S.W. 2ND AVENUE
MIAMI, FL 33130-1540

SUBMITTED BY:

Environmental Site Assessments, Inc.

April 2, 1996

PREPARED BY:

ARIEL H. CINTRON
CIVIL ENGINEER

REVIEWED BY:

CRAIG CLEVENGER, P.G.
PROFESSIONAL GEOLOGIST #1666

999 PONCE DE LEON BLVD. • SUITE 510 • CORAL GABLES, FL 33134
PHONE: (305) 442-2300 • 1-800-834-2786 • FAX: (305) 445-2110

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LIST OF APPENDICES

1.0 INTRODUCTION

The following Remedial Action Report Addendum (RARA) summarizes the activities at the Former Farina's Radiator facility, located at 918 S.W. 69th Avenue, Miami, Florida. A location map is included as **Figure 1.** The information provided in this report is to be used as an Addendum to the RAR, which was submitted on November 28, 1995. The RAR was found to be incomplete by Dade County Department of Environmental Resources Management (DERM), in a correspondence dated December 15, 1995 (see **Appendix A**).

Pursuant to the DERM correspondence, the following additional post-remediation assessment was required:

- Install soil boring outside the edges of the east, west, and north walls of the excavation #1 and the north, south, and west walls of excavation #2.
- Soil samples from the borings are to be retrieved at two (2) foot intervals from the surface down to and including the soil/groundwater interface and screened with an organic vapor analyzer (OVA).
- Composite soil samples from each wall have to be analyzed for TCLP Cu.
- A new sample from MW-B is required and should be analyzed for total lead.

Items 1 and 2:

DERM acknowledges that soil verification samples from the walls and bottom of excavations 1 and 2 indicated that all hazardous and non-hazardous material impacted by lead (Pb) or oil/grease was removed during the remedial activities. However, no analysis confirming the removal of soil impacted by copper (Cu) and volatile organic aromatics (VOA's) were provided with the RAR. Be advised that the referenced analytical results are required prior to considering a groundwater monitoring plan as per item #7 of the RAP approval granted on May 17, 1995. Therefore, soil borings shall be installed outside the edges of the east, west, and north walls of excavation #1 and the north, south, and west walls of excavation #2 for verification purposes.

Split spoon soil samples from the borings required above must be retrieved at two (2) foot intervals from the surface down to and including the soil/groundwater interface, screened with an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID), and analyzed for TCLP Cu.

ESA Response:

On March 21, 1996, Environmental Site Assessments, Inc. (ESA), supervised the advancement of six soil borings (SB 1 - 6) outside the edges of the two (2) former excavations. **Figure 2** illustrates the excavation areas and the SB location. Soil borings in Excavation #1 were advanced with a truck-mounted drilling rig, and the soil borings in Excavation #2 were advanced with a tripod-mounted drilling rig. Soil samples from all the soil borings were collected using the split-spoon method, to a depth of six (6) feet Below Grade Surface (BGS). Location of the soil borings were determined by the DERM. SB-1, 2, and 3 were located about one foot south, west and north, respectively, of Excavation #2 at the back of the building, while SB-4, 5, and 6 were located west, north and east of

Excavation #1 at the front of the building.

In accordance with the DERM requirements, verified during a telephone conversation, the soil samples were collected at every two (2) foot intervals from the surface down to the water table, six feet below the ground surface. Samples were analyzed in the field using a Foxboro organic vapor analyzer equipped with a flame ionization detector (OVA-FID). The soil samples were individually collected in 16 ounce mason jars and allowed to equilibrate, so results would be comparable from one soil sample to another. Screening soil samples for petroleum vapors was conducted as specified in Rule 62-770.200 (2), of the Florida Administrative Code (FAC). During the headspace test, fifty (50) percent of the mason jar was filled with the soil. The sample was allowed to equilibrate for approximately five (5) minutes and then screened with the OVA-FID. Results have been summarized in **Table 1.**

TABLE 1
ORGANIC VAPOR ANALYZER RESULTS
MARCH 21, 1996

EXCAVATION #1 AREA				
WALL	INTERVAL	UNFILTER	FILTER	NET
EAST	0-2	1.23	0.00	1.23
	2-4	1.90	0.00	1.90
	4-6	1.40	0.00	1.40
WEST	0-2	1.60	0.00	1.60
	2-4	1.00	0.00	1.00
	4-6	1.20	0.00	1.20
NORTH	0-2	1.00	0.00	1.00
	2-4	1.00	0.00	1.00
	4-6	1.00	0.00	1.00

EXCAVATION #2 AREA				
WALL	INTERVAL	UNFILTER	FILTER	NET
NORTH	0-2	0.80	0.00	0.80
	2-4	0.85	0.00	0.85
	4-6	0.70	0.00	0.70
SOUTH	0-2	1.00	0.00	1.00
	2-4	0.90	0.00	0.90
	4-6	0.80	0.00	0.80
WEST	0-2	0.65	0.00	0.65
	2-4	0.50	0.00	0.50
	4-6	0.60	0.00	0.60

In addition, as requested by DERM, ESA collected soil verification samples from the walls of both excavations, in order to provide evidence that the copper contaminated soils have been removed. Composite soil samples from the three intervals from the outside edges of the former excavations were collected and sent to Precision Environmental Laboratory to be analyzed for TCLP copper. **Table 2** summarize the analytical results. The laboratory reports and associated sample chain of custody form are provided in **Appendix B**

TABLE 2
SOIL ANALYSIS RESULTS
FARINA RADIATORS

AREA	PARAMETER	UNITS	RESULT
Excavation #1			
West Wall	Copper, TCLP	mg/L	BDL
North Wall	Copper, TCLP	mg/L	BDL
East Wall	Copper, TCLP	mg/L	BDL
Excavation #2			
North Wall	Copper, TCLP	mg/L	BDL
South Wall	Copper, TCLP	mg/L	BDL
West Wall	Copper, TCLP	mg/L	BDL

Item 3:

The HWS suspects that the 0.1 ppm level of Pb in MW-B may have been caused by excessive turbidity in the groundwater sample. Furthermore, DERM split sample results from MW-B (32.1 ppb) were within the 50 ppb allowable standard for total Pb. Therefore, a new sample is required from MW-B for analysis by total Pb. However, a low flow rate peristaltic pump shall be used for purging and actual groundwater sampling to minimize turbidity. In addition, temperature, conductivity, and pH must be measured until stabilized to ensure adequate purging.

ESA Response:

A groundwater sample, from monitoring well B, was collected on March 21, 1996 by Precision Environmental laboratory (CompQAP #920323G). The sample was analyzed for Total Lead. In accordance with FDEP QA/QC sampling protocol, pre-cleaned bailers were transported to the site. In order to collect a representative groundwater sample, a low flow rate peristaltic pump was used to purge approximate five (5) volumes of water before sampling. Conductivity, temperature and pH measurements were recorded to verify collection of representative groundwater samples. Analysis resulted in 0.009 mg/L for total lead. The laboratory report and associated sample chain of custody form are provided in **Appendix C.**

3.0 MONITORING ONLY PLAN (MOP)

Considering there is no longer a source for on-site contamination, and all the excessively contaminated soils have been removed, ESA is recommending a Monitoring Only Plan (MOP) as the final phase of this project. ESA is proposing a quarterly sampling of three (3) monitoring wells, including MW-5 (down gradient), and MW-A (source) and MW-B (upgradient) (see **Figure 2**). Groundwater samples will be analyzed for Volatile Organic Aromatics, Oil and Grease, and Total Lead.

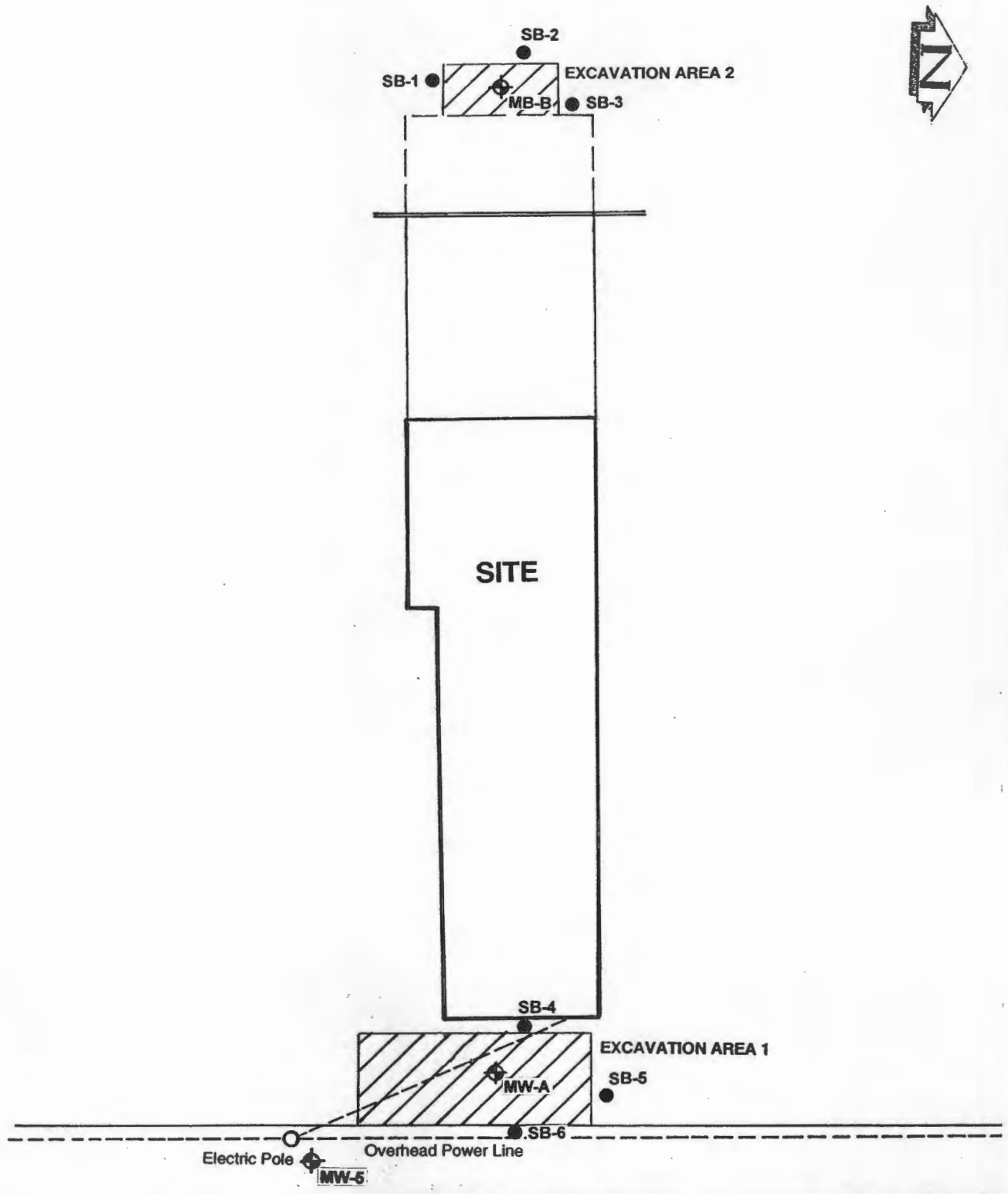
Quarterly MOP Summary Reports will be submitted within one (1) month of each sampling event. At the completion of one (1) year, an annual MOP Summary Report will be submitted, including a summary of all monitoring results, and based on the results, a recommendation of either 1) No Further Action (NFA), 2) Extended MOP, or 3) Additional Assessment.

ENVIRONMENTAL SITE ASSESSMENTS, INC.
999 Ponce de Leon Boulevard, Coral Gables, Florida

LOCATION MAP

FARINA RADIATOR SHOP
918 S.W. 69th Avenue, Miami, FL

SCALE: 1" = 2,000 '	PROJECT # 96-M141	FIG. # 1



ENVIRONMENTAL SITE ASSESSMENTS, INC.
999 Ponce de Leon Boulevard, Coral Gables, Florida

SB/MW LOCATION

FARINA RADIATOR SHOP
918 S.W. 69th Avenue, Miami, FL

SCALE: AS SHOWN	PROJECT # 96-M141	FIG. # 2

APPENDIX A

METROPOLITAN DADE COUNTY, FLORIDA

METRO-DADE

DERM

ENVIRONMENTAL RESOURCES MANAGEMENT
POLLUTION PREVENTION DIVISION
SUITE 800
33 S.W. 2nd AVENUE
MIAMI, FLORIDA 33130-1540
(305) 372-6817

December 15, 1995

Mr. Sergio Pino, President
Century Plumbing Wholesale, Inc.
901 S.W. 69 Avenue
Miami, Florida 33144

CERTIFIED MAIL NO. Z-137 241 143
RETURN RECEIPT REQUESTED

RE: Remedial Action Report and Monitoring Only Plan (RAR/MOP) dated November 20, 1995, and submitted by Environmental Site Assessments (ESA), Inc. for the former Farina's Radiator Shop located at 918 S.W. 69 Avenue, Miami, Dade County, Florida.

Dear Mr. Pino:

The Hazardous Waste Section (HWS) of the Department of Environmental Resources Management (DERM) has reviewed the referenced submittal, received November 28, 1995, and hereby finds it incomplete due to the following:

1. DERM acknowledges that soil verification samples from the walls and bottom of excavations 1 and 2 indicated that all hazardous and non-hazardous material impacted by lead (Pb) or oil/grease was removed during the remedial activities. However, no analysis confirming removal of soil impacted by copper (Cu) and volatile organic aromatics (VOA's) were provided with the RAR. Be advised that the referenced analytical results are required prior to considering a groundwater monitoring plan as per item #7 of the RAP approval granted on May 17, 1995. Therefore, soil borings shall be installed outside the edges of the east, west, and north walls of excavation #1 and the north, south, and west walls of excavation #2 for verification purposes.

2. Split spoon soil samples from the borings required above must be retrieved at two (2) foot intervals from the surface down to and including the soil/groundwater interface, screened with an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID), and analyzed for TCLP Cu.

3. The HWS suspects that the 0.1 ppm level of Pb in MW-B may have been caused by excessive turbidity in the groundwater sample. Furthermore, DERM split sample results from MW-B (32.1 ppb) were within the 50 ppb allowable standard for total Pb. Therefore, a new sample is required from MW-B for analysis by total Pb. However, a low flow rate peristaltic pump shall be used for purging and actual groundwater sampling to minimize turbidity. In addition, temperature, conductivity, and pH must be measured until stabilized to insure adequate purging.

4. Be advised that DERM's review fee schedule changed as of October 1, 1995. Therefore, future submittals shall include the appropriate fee as indicated below:

Document submitted	Fee
Contamination Assessment Report (CAR)	$500
CAR/Monitoring Only Plan (CAR/MOP)	$500
CAR/No Further Action Plan (NFAP)	$500
CAR/Soil Remedial Action Plan (RAP)	$500
CAR/Groundwater RAP	$1,800
CAR/Risk Assessment (RA)	$1,300
Revised Documents or Addendum	**50% original fee**

DERM requests the option to split samples with the consultant at the site. Therefore, the HWS Engineer must be notified verbally and in writing at least seven (7) days prior to collecting any samples. If the data submitted varies substantially from the DERM split sample results, a complete resampling using two (2) independent certified laboratories will be required.

Therefore, within forty five (45) days of receipt of this letter, you are hereby required to submit to this Department for review a Contamination Assessment Report Addendum (CARA) including all analytical results, a plan for further action as warranted by the data (i.e. supplemental assessment, further remediation, or monitoring only), and the appropriate review fee as per item #4.

Failure to adhere to the items and time frames stipulated above shall result in your case being forwarded to DERM's Code Enforcement Section for further enforcement action. **Be advised that an additional late fee of $100.00 will be applied to documents received after the required due date.**

If you have any questions regarding this letter, please contact Alex Montalvo, Engineer, of the Hazardous Waste Section at (305) 372-6887.

Sincerely,

Robert E. Johns, P.E., Chief
Hazardous Waste Section
POLLUTION PREVENTION DIVISION

AM:vx:2414
pc: Mark J. Pettit, DERM
Roberto Abrahante, DERM (IW5-640, File #601)
Paul Wierzbicki, P.G., FDEP-West Palm Beach
Craig C. Clevenger, ESA, Inc.

APPENDIX B

Submission Code: 9603-604
Orders: 140547-140555
Entered to lims: E.C

PRECISION ENVIRONMENTAL LABORATORY
CHAIN OF CUSTODY RECORD (DEP 62-770.900 (modified form))

10200 USA TODAY WAY, MIRAMAR, FLORIDA 33025
(305) 431-4550 • NATL WATS (800) LAB-8550 • FAX (305) 431-1959

Original - Return w/Report | Yellow - Lab Copy | Pink - Sampler Copy

FDEP Facility No.:
Page ____ of ____
Sampling CompQAP NO.:
Approval Date:

Report To: ESA
Report To Address: 999 Ponce de Leon Blvd. Suite 510
Invoice To: ESA
Billing Address: Coral Gables, FL 33134
Project Number/Name: Farina Radiator
Site Location:
Project Contact: Ariel Cintron
Phone: 442-2300
FAX: 445-2110
Alternate Contact: Craig Cleveraz
Phone:
FAX:
Sampled By (print): Ariel Cintron
Sampler's Signature:

ITEM	SAMPLE ID	DATE COLLECTED	TIME COLLECTED	pH FLD	TEMP °C FLD	COND FLD	MATRIX (DW SW GW SED S EFF HW BIO SA)	SAMPLE LOCATION/ JOB DESCRIPTION (optional if needed when samples are from different site locations)	# CONTAINERS	ANALYSIS REQUIRED: TCLP Cu.						Lot Number of Sampling Containers Used
1	Exc. 1 - West wall	3/21/96	11:05					140547		1						
2	Exc 1 North wall	3/21/96	11:39					140548		1						
3	Exc 1 East wall	3/21/96	10:30					140549		1						
4	Exc 2 North wall	3/21/96	12:54					140550		1						
5	Exc 2 West wall	3/21/96	1:15					140551		1						
6	Exc 2 South	3/21/96	12:35					140555		1						
7																
8																
9																
10																

ANALYSIS REQUIRED
PLACE NAME OR METHOD NUMBER OF TESTS NEEDED IN LARGE BOXES BELOW.
(✓) CHECK OFF WHICH SAMPLE ITEMS NEED EACH TEST PERFORMED

Sample Condition as Received:
Temp 4 °C
Sealed Yes No

Special Comments:
Total # of Containers: 6
QA/QC Report Needed?: Yes No (See price guide for applicable fees)
Report Format: Standard Other (specify)

(1) Relinquished by Signature:	Date: 3/21/96	(2) Relinquished by Signature:	Date:	DUE DATE REQUESTED: Confirmation #
Company: ESA	Time: 3:00	Company:	Time:	Costing Code: ____ Q / L / D
(1) Received by Signature:	Date: 3/21/96	(2) Received by Signature:	Date:	Misc. Charges:
Company:	Time: 16:55	Company:	Time:	SHADED AREAS ARE FOR LAB USE ONLY

PRECISION ENVIRONMENTAL LABORATORY, INC.

first in quality • first in service

ESAINC000012
Ariel
Environmental Site Assess. Inc
999 Ponce De Leon Blvd Suite 510
Coral Gables, Fl 33134

March 25, 1996
Submission # 9603000604
Order # 140547
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
West Wall
Farina Radiator

Sample I.D.: Exc.1 West Wall
Collected: 03/21/96 11:05
Received: 03/21/96 16:55
Collected by: Ariel Cintron

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
TCLP Extraction Procedure	DONE		1311 Extraction		03/21/96		LW
Copper, TCLP	BDL	mg/L	1311/7210	0.1	03/21/96	03/22/96	JHW

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

ESAINC000012
Ariel
Environmental Site Assess. Inc
999 Ponce De Leon Blvd Suite 510
Coral Gables, Fl 33134

March 25, 1996
Submission # 9603000604
Order # 140548
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
North Wall
Farina Radiator

Sample I.D.: Exc.1 North Wall
Collected: 03/21/96 11:39
Received: 03/21/96 16:55
Collected by: Ariel Cintron

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
TCLP Extraction Procedure	DONE		1311 Extraction		03/21/96	03/22/96	LW
Copper, TCLP	BDL	mg/L	1311/7210	0.1	03/21/96	03/22/96	JHW

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

ESAINC000012
Ariel
Environmental Site Assess. Inc
999 Ponce De Leon Blvd Suite 510
Coral Gables, Fl 33134

March 25, 1996
Submission # 9603000604
Order # 140549
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
East Wall
Farina Radiator

Sample I.D.: Exc.1 East Wall
Collected: 03/21/96 10:30
Received: 03/21/96 16:55
Collected by: Ariel Cintron

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
TCLP Extraction Procedure	DONE		1311 Extraction		03/21/96	03/22/96	LW
Copper, TCLP	BDL	mg/L	1311/7210	0.1	03/21/96	03/22/96	JHW

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

ESAINC000012
Ariel
Environmental Site Assess. Inc
999 Ponce De Leon Blvd Suite 510
Coral Gables, Fl 33134

March 25, 1996
Submission # 9603000604
Order # 140550
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
North Wall
Farina Radiator

Sample I.D.: Exc.2 North Wall
Collected: 03/21/96 12:54
Received: 03/21/96 16:55
Collected by: Ariel Cintron

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
TCLP Extraction Procedure	DONE		1311 Extraction		03/21/96	03/22/96	LW
Copper, TCLP	BDL	mg/L	1311/7210	0.1	03/21/96	03/22/96	JHW

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

ESAINC000012
Ariel
Environmental Site Assess. Inc
999 Ponce De Leon Blvd Suite 510
Coral Gables, Fl 33134

March 25, 1996
Submission # 9603000604
Order # 140551
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
West Wall
Farina Radiator

Sample I.D.: Exc.2 West Wall
Collected: 03/21/96 13:15
Received: 03/21/96 16:55
Collected by: Ariel Cintron

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
TCLP Extraction Procedure	DONE		1311 Extraction		03/21/96	03/22/96	LW
Copper, TCLP	BDL	mg/L	1311/7210	0.1	03/21/96	03/22/96	JHW

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

ESAINC000012
Ariel
Environmental Site Assess. Inc
999 Ponce De Leon Blvd Suite 510
Coral Gables, Fl 33134

March 25, 1996
Submission # 9603000604
Order # 140555
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
South Wall
Farina Radiator

Sample I.D.: Exc.2 South Wall
Collected: 03/21/96 12:35
Received: 03/21/96 16:55
Collected by: Ariel Cintron

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
TCLP Extraction Procedure	DONE		1311 Extraction		03/21/96	03/22/96	LW
Copper, TCLP	BDL	mg/L	1311/7210	0.1	03/21/96	03/22/96	JHW

BDL: Indicates Analyte is Below Detection Limit
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

APPENDIX C

Submission Code: 9603-596
Orders: 140504
Entered to lims: ZW

PRECISION ENVIRONMENTAL LABORATORY
CHAIN OF CUSTODY RECORD (DEP 62-770.900 (modified form))

10200 USA TODAY WAY, MIRAMAR, FLORIDA 33025
(305) 431-4550 • NATL WATS (800) LAB-8550 • FAX (305) 431-1959

Original - Return w/Report Yellow - Lab Copy Pink - Sampler Copy

FDEP Facility No.
Page ____ of ____
Sampling CompQAP NO.
Approval Date:

Report To: ESA.
Report To Address: ESA
Invoice To:
Billing Address: 999 PONCE DE LEON Suite 510 Miami FL
Project Number/Name: 918 SW 69th Ave, Miami, FL.
Site Location: FARINA'S RADIATOR.
Project Contact: ARIEL CINTRON.
Phone:
FAX:
918 SW 69th Ave.
Alternate Contact:
Phone:
FAX:
Miami FL
Sampled By (print): GREGSON RAMNATH
Sampler's Signature:

ITEM	SAMPLE ID	DATE COLLECTED	TIME COLLECTED	pH — FLD	TEMP °C — FLD	COND — FLD	MATRIX (DW SW GW SED S EFF HW BIO SA)	SAMPLE LOCATION/ JOB DESCRIPTION (optional if needed when samples are from different site locations)	# CONTAINERS	ANALYSIS REQUIRED — Total Pb.						Sample Condition as Received: Temp ____ C, Sealed Yes No — Lot Number of Sampling Containers Used
1	MW-D	032196	14:24				GW		1	X						
2																
3																
4																
5																
6																
7																
8																
9																
10																

Special Comments:
Total # of Containers:

QA/QC Report Needed?: Yes No (See price guide for applicable fees)
Report Format: Standard Other (specify)

(1) Relinquished by Signature:	Date: 032196	(2) Relinquished by Signature:	Date:	DUE DATE REQUESTED: Confirmation #
Company: DEL	Time: 15:34	Company:	Time:	Costing Code: ____ Q / L / D
(1) Received by Signature:	Date: 3/21/96	(2) Received by Signature:	Date:	Misc. Charges: 1 hr Field Time
Company: DEL	Time: 15:34	Company:	Time:	SHADED AREAS ARE FOR LAB USE ONLY

PRECISION ENVIRONMENTAL LABORATORY, INC.

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ESAINC000012
Ariel
Environmental Site Assess. Inc
999 Ponce De Leon Blvd Suite 510
Coral Gables, Fl 33134

March 25, 1996
Submission # 9603000596
Order # 140506
FDER CompQAP# 920323G
HRS Certification# E86349, 86413

Site Location/Project
Farina's Radiator 918 SW 69th Ave.Miami,Fl.
601 Analysis

Sample I.D.: MW-D
Collected: 03/21/96 14:24
Received: 03/21/96 15:34
Collected by: Greyson Ramnath

PARAMETER	RESULT	UNITS	METHOD	DETECTION LIMIT	DATE EXT.	DATE ANALY.	ANALYST
Lead	0.009	mg/L	SM3113B (239.2)	0.005	03/22/96	03/24/96	JSM

BDL: Indicates Analyte is Below Detection Limit.
Work Subcontracted to Outside Labs Denoted by HRS Cert ID in Analyst Field
Qualifier following result conforms to FAC 62-160 Table 7
Unless otherwise noted, mg/Kg denotes wet weight
MEDF: Matrix Effected Dilution Factor

Michael A. Spitzer, Laboratory Director

Medium Risk Site - 4
Braman Honda

1.0 INTRODUCTION

1.1 SITE DESCRIPTION AND HISTORY

The 7000 Coral Way Site is located at 7000 Coral Way, Miami, southeast of the intersection of Coral Way and Southwest 70th Avenue near Coral Gables, in Dade County, Florida. The site occupies approximately 18 acres within the western one-half of the northeast quarter of Section 14, Township 54 South, Range 40 East. Figure 1-1 presents a site location map.

Wood preserving operations began in 1942 when the facility operated primarily as a creosote treating plant using only a small percentage of pressure salt treatment. Available information suggests that, from 1968 to 1981, chromated copper arsenate (CCA) was the main treating compound. In addition to smaller quantities of wolmanizing salts, a mixture of chlorinated arsenate and phenols in an aqueous base were used.

Wood was treated at the facility by first placing untreated lumber on small tram cars located on tracks leading into large pressure-treating cylinders. The lumber was sealed in the cylinders which were initially subjected to a vacuum to remove interstitial water and were then filled with wood treating solution and pressurized. Once pressure treatment was complete, a vacuum was applied to the cylinders to remove the excess wood treating solution for reuse. The wood was then removed and placed in designated drying areas (Figure 1-2). Wood treating operations at the facility were terminated on December 10, 1981. The facility was dismantled in 1982. Interim remedial measures were conducted in 1982 to remove the contents of tanks which stored treating compounds and sump pits which collected treating compound drainage.

1.2 PREVIOUS INVESTIGATIONS

During the 1982 dismantling of the facility, a variety of samples were collected and analyzed by the Dade County Department of Environmental

Resource Management (DERM). The first round of sampling occurred on May 10, 1982, and included collection of four samples in the immediate plant vicinity. On July 1, 1982, three samples of liquid were taken from railroad tank cars which were to be drained. On July 2, 1982, samples were collected from a "puddle" of liquid which had been pumped from the concrete pits under the pressure tanks onto the ground. On August 20, 1982, five additional water and sludge samples were collected. Table 1-1 summarizes the results of the sampling and analyses performed by DERM.

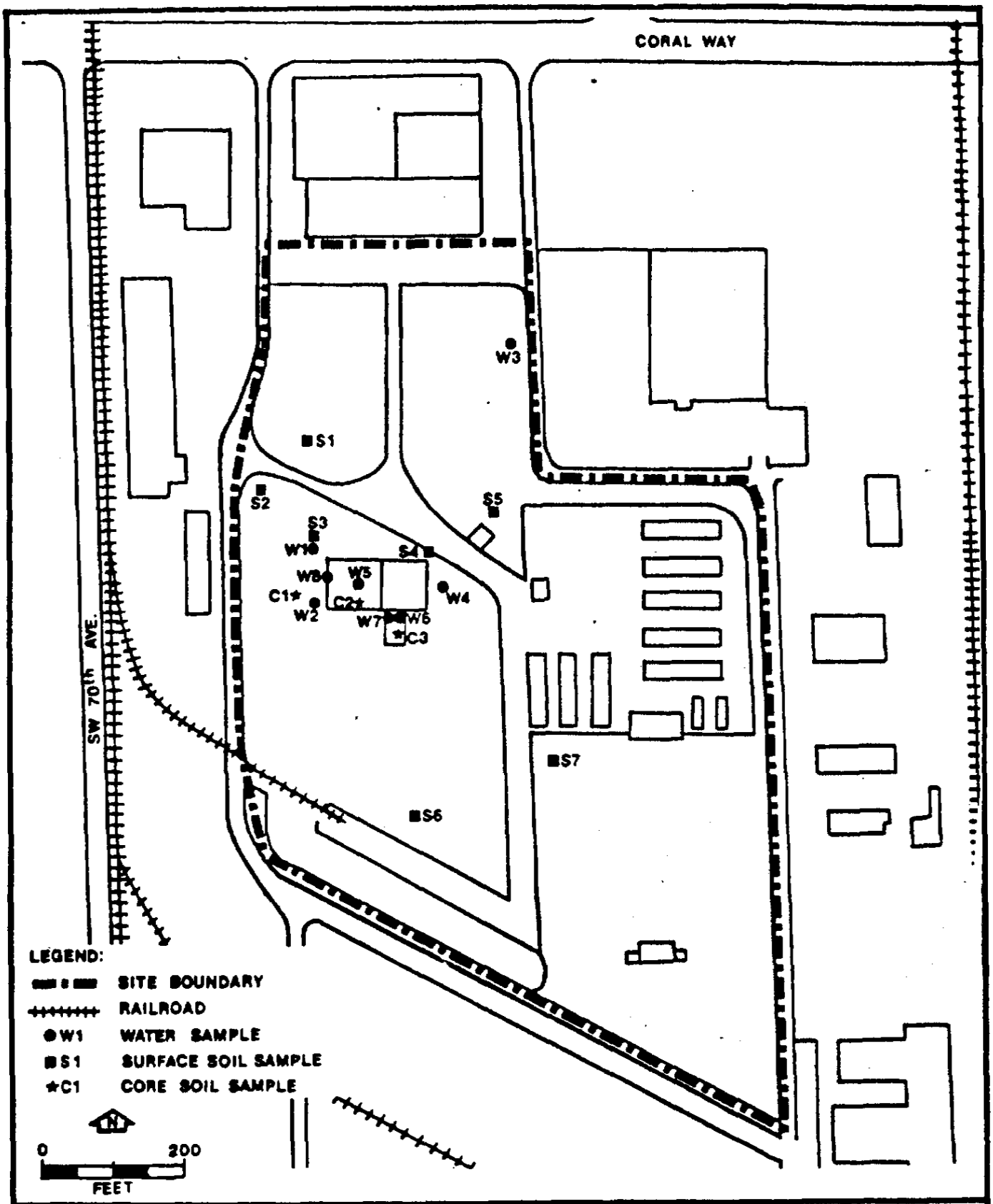
In October 1982, Futura Realty retained Connell Associates to perform an assessment of the contamination at the site. Connell collected eight water samples, seven soil samples, and three "core" samples in the vicinity of the plant. The results of the Connell analyses are summarized in Table 1-2; Figure 1-3 presents a map of approximate sample locations.

Following the Connell Associates study, soil sampling and analysis were performed by B. W. Services, Inc. The analytical results are not dated, and sampling and analytical methods are not described. Therefore, these results are not included in this report.

In September 1983, Enviropact Inc. submitted a site contamination assessment which had been prepared for Davidson Lumber. Enviropact constructed five soil borings to a depth of 15 feet and collected samples at 5-foot intervals. Two "surface scrapings" were also collected and analyzed, and 11 monitor wells were constructed and sampled. Table 1-3 provides the results of the Enviropact analyses; a map of sample locations is shown in Figure 1-4.

In February 1984, Enviropact performed another site assessment which included construction of 65 soil borings and 5 new monitor wells. Based on their review of site operations and a site reconnaissance, Enviropact divided the site into three areas to reflect the anticipated degree of contamination. The areas defined by Enviropact (1983) are listed below.

- Red Zone - The red zone of the property was that area thought to be most heavily contaminated because of its use as the actual wood treatment and main storage area.



CAMP DRESSER & McKEE INC.

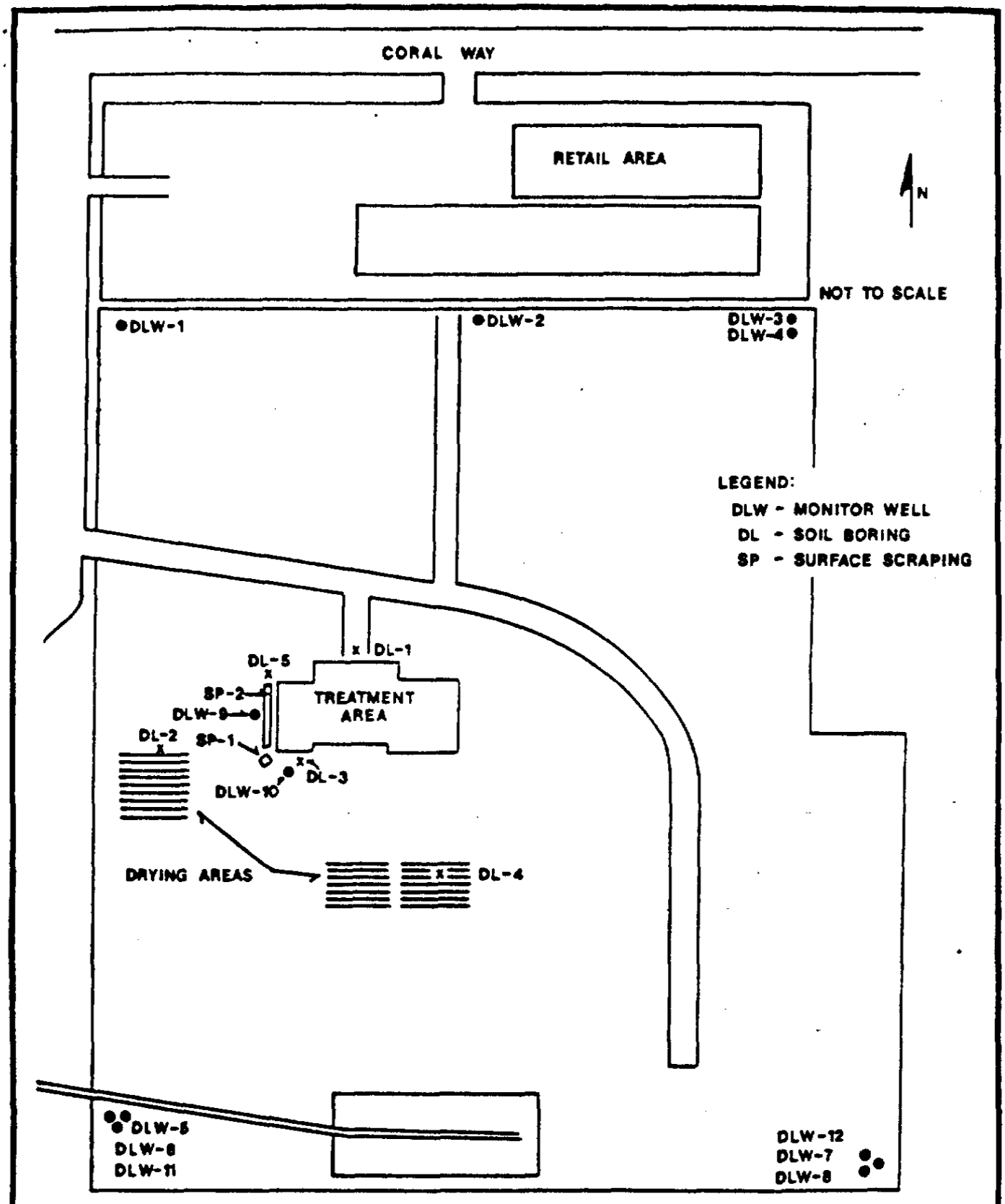
PREVIOUS SAMPLE LOCATIONS CONNELL ASSOCIATES, 1982

7000 CORAL WAY SITE

MIAMI, FLORIDA

FIGURE NO.

1-3



CAMP DRESSER & McKEE INC.

PREVIOUS SAMPLE LOCATIONS
ENVIROPACT, 1983

7000 CORAL WAY SITE
MIAMI, FLORIDA

FIGURE NO.

1-4

- o Yellow Zone - The yellow zone area of the property appeared, from review of an historical series of aerial photos, to be used for product storage and vehicle access to Coral Way.

- o Green Zone - The green zone of the property appears to have been used less routinely as a wood treating/storage operation than the rest of the facility. It was reported that a steel fabrication/storage facility was operated in the southwest corner of the property, and a railroad spur enters the property at the southwest corner.

Figure 1-5 presents a map outlining these areas, along with Enviropact's monitor well and soil boring locations. Soil borings showing Extraction Procedure (EP) Toxicity concentrations of chromium and/or arsenic in excess of 5.0 ppm are also highlighted.

1.3 OBJECTIVES

Listed below are the objectives of the contamination assessment conducted by Camp Dresser & McKee Inc. (CDM). CDM's contamination assessment is designed to:

- o Provide additional soils and groundwater data to better define the nature and extent of contaminant distribution.

- o Utilize these data to define the risk to human health and the environment associated with the site under existing conditions and under various remedial alternatives.

- o Determine the cleanup goals necessary as objectives for remedial response.

- o Provide the basis for selecting a remedial action.

1.4 CONSISTENCY WITH CERCLA

This contamination assessment is designed to satisfy requirements of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), 40 CFR Part 300, also known as the National Contingency Plan (NCP). To the extent practical and appropriate for a non-Superfund site, applicable remedial investigation guidance documents promulgated by

TABLE 3-3

POOR ORIGINAL

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED
JUNE 11 AND 12, 1987, AND AUGUST 13, 1987 RESAMPLING
7000 CORAL WAY SITE
MIAMI, FLORIDA

Parameters	Monitor Well No. (See Figure for Locations)									
	MW-1	MW-2	MW-3 (Dup)*	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	Equipment Blank
Water Temp (°C)	27.1	28.0	26.6	26.6	27.3	26.8	26.2	27.2	27.2	NA
pH Field (Std. Units)	7.20	7.30	7.10	7.10	7.20	7.40	7.60	7.10	7.00	NA
Sp. Cond. Field @25C (umhos/cm)	545	498	562	562	539	329	351	750	907	NA
Purgeable Aromatics										
Benzene (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chlorobenzene (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Dichlorobenzene tot (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Ethylbenzene (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Toluene (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Xylenes, total (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Polynuclear Aromatic Hydrocarbons										
Acenaphthene (ug/l)	<0.363	<0.363	<0.363	<0.363	<0.363	0.725	<0.363	535	1,000	<0.30
Acenaphthylene (ug/l)	<0.202	<0.202	<0.202	<0.202	<0.202	1.57	<0.202	<40.4	655	0.40
Anthracene (ug/l)	0.024	0.038	<0.023	<0.023	<0.023	0.321	<0.023	124	1,020	<0.02
Benzo(a)anthracene (ug/l)	<0.027	0.029	<0.017	<0.017	<0.017	<0.017	<0.017	5.75	53.9	<0.01
Benzo(a)pyrene (ug/l)	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<2.89	<2.89	<0.01
Benzo(b)fluoranthene (ug/l)	0.025	0.030	<0.017	<0.017	<0.017	0.020	<0.017	<3.36	<3.36	<0.01
Benzo(ghi)perylene (ug/l)	<0.050	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<11.9	<11.9	<0.05
Benzo(k)fluoranthene (ug/l)	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<3.60	<3.60	<0.01
Chrysene (ug/l)	0.016	0.020	0.038	<0.012	0.367	<0.012	<0.012	<2.46	59.2	<0.01
Dibenzo(a,h)anthracene (ug/l)	<0.072	<0.072	<0.072	<0.072	<0.072	<0.072	<0.072	<14.3	<14.3	0.38
Fluoranthene (ug/l)	0.095	0.271	<0.049	<0.049	0.199	0.103	0.068	185	926	<0.04
Fluorene (ug/l)	<0.043	0.069	<0.043	<0.043	<0.043	0.070	<0.043	461	819	<0.04
Indeno(1,2,3-cd)pyrene (ug/l)	<0.044	<0.044	<0.044	<0.044	<0.044	<0.044	<0.044	<8.88	<8.88	<0.04
Naphthalene (ug/l)	<0.156	<0.156	<0.156	<0.156	<0.156	<0.156	<0.156	845	18,998	1.98
Phenanthrene (ug/l)	<0.110	<0.110	<0.110	<0.110	<0.110	0.125	<0.110	6,140	18,700	0.34
Pyrene (ug/l)	0.077	0.128	0.052	<0.048	0.433	0.114	<0.048	105	901	<0.04
Total PAHs (ug/l)	0.24	0.58	0.09	ND	1.0	3.05	.07	8,261	35,132	3.11
Phenols and Cyanide										
Phenols (ug/l)	<2	2	<2	**	28	2	<2	9	2,000	**
Cyanide (mg/l)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004*	<0.004			

578/25

TABLE 3-3

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED
JUNE 11 AND 12, 1987, AND AUGUST 13, 1987 RESAMPLING
7000 CORAL WAY SITE
MIAMI, FLORIDA

Parameters	Monitor Well No. (See Figure for Locations)									
	MW-1	MW-2	MW-3 (Dup)*	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	Equipment Blank
Water Temp (°C)	27.1	28.0	26.6	26.6	27.3	26.8	26.2	27.2	27.2	NA
pH Field (Std. Units)	7.20	7.30	7.10	7.10	7.20	7.40	7.60	7.10	7.00	NA
Sp. Cond. Field @25C (umhos/cm)	545	498	562	562	539	329	351	750	907	NA
Purgeable Aromatics										
Benzene (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chlorobenzene (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Dichlorobenzene tot (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Ethylbenzene (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Toluene (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Xylenes, total (ug/l)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Polynuclear Aromatic Hydrocarbons										
Acenaphthene (ug/l)	<0.363	<0.363	<0.363	<0.363	<0.363	0.725	<0.363	535	1,000	<0.30
Acenaphthylene (ug/l)	<0.202	<0.202	<0.202	<0.202	<0.202	1.57	<0.202	<40.4	655	0.40
Anthracene (ug/l)	0.024	0.038	<0.023	<0.023	<0.023	0.321	<0.023	124	1,020	<0.02
Benzo(a)anthracene (ug/l)	<0.027	0.029	<0.017	<0.017	<0.017	<0.017	<0.017	5.75	53.9	<0.01
Benzo(a)pyrene (ug/l)	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<2.89	<2.89	<0.01
Benzo(b)fluoranthene (ug/l)	0.025	0.030	<0.017	<0.017	<0.017	0.020	<0.017	<3.36	<3.36	<0.01
Benzo(ghi)perylene (ug/l)	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<11.9	<11.9	<0.05
Benzo(k)fluoranthene (ug/l)	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<3.60	<3.60	<0.01
Chrysene (ug/l)	0.016	0.020	0.038	<0.012	0.367	<0.012	<0.012	<2.46	59.2	<0.01
Dibenzo(a,h)anthracene (ug/l)	<0.072	<0.072	<0.072	<0.072	<0.072	<0.072	<0.072	<14.3	<14.3	0.30
Fluoranthene (ug/l)	0.095	0.271	<0.049	<0.049	0.199	0.103	0.068	105	926	<0.04
Fluorene (ug/l)	<0.043	0.069	<0.043	<0.043	<0.043	0.070	<0.043	401	819	<0.04
Indeno(1,2,3-cd)pyrene (ug/l)	<0.044	<0.044	<0.044	<0.044	<0.044	<0.044	<0.044	<8.80	<8.80	<0.04
Naphthalene (ug/l)	<0.156	<0.156	<0.156	<0.156	<0.156	0.125	<0.156	845	10,998	1.98
Phenanthrene (ug/l)	<0.110	<0.110	<0.110	<0.110	0.433	0.114	<0.110	6,140	18,700	0.34
Pyrene (ug/l)	0.077	0.128	0.052	<0.048	1.0	3.05	<0.048	105	901	<0.04
Total PAHs (ug/l)	0.24	0.58	0.09	ND			.07	8,261	35,132	3.11
Phenols and Cyanide										
Phenols (ug/l)	<2	2	<2	**	28	2	<2	9	2,000*	**
Cyanide (mg/l)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004*	<0.004	<0.004	<0.004	<0.002

TABLE 3-3
(Continued)

Parameters	Monitor Well No. (See Figure for Locations)									
	MW-1	MW-2	MW-3 (Dup)*	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	Equipment Blank
Metals										
Arsenic, total (ug/l)	19.8	7.7	<2.1	5.5	5.3	5.6	126	952	2,320	<2.1
Chromium, total (ug/l)	<9.8	<9.8	<9.8	14.0	14.2	13.0	64.3	45.2	83.8	<9.8
Copper, total (ug/l)	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	13.5	<2.1

* Analytical results for August 13, 1987 resampling.
Monitor Well MW-3 duplicate analysis.
** Data not available due to equipment malfunction.

ND = Not detected
NA = Not analyzed

Source: ESE, 1987

TABLE 3-4

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED
OCTOBER 20, 1987
7000 CORAL WAY SITE
MIAMI, FLORIDA

Parameters	Monitor Well No. (See Figure for Locations)									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-6 (Dup)	MW-7	MW-8	Equipment Blank
Water Temp (°C)	28.0	28.0	*	27.0	27.0	27.0	27.0	27.0	28.0	NA
pH Field (Std. Units)	7.70	7.70	*	7.00	7.70	7.90	7.90	7.10	6.80	NA
Sp. Cond. Field @25C (umhos/cm)	338	460	*	490	268	330	330	760	1,000	NA
Purgeable Aromatics										
Benzene (ug/l)	<1.00	<1.00	*	<1.00	<1.00	<1.00	<1.00	<1.00	1.37	<1.00
Chlorobenzene (ug/l)	<1.00	<1.00	*	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Dichlorobenzene tot (ug/l)	<1.00	<1.00	*	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Ethylbenzene (ug/l)	<1.00	<1.00	*	<1.00	<1.00	<1.00	<1.00	<1.00	18.9	<1.00
Toluene (ug/l)	<1.00	<1.00	*	<1.00	<1.00	<1.00	<1.00	<1.00	12.0	<1.00
Xylenes, total (ug/l)	<1.00	<1.00	*	<1.00	<1.00	<1.00	<1.00	<1.00	38.9	<1.00
Polynuclear Aromatic Hydrocarbons										
Acenaphthene (ug/l)	<0.363	<0.363	*	<0.363	2.89	<0.363	<0.363	574	976	<0.363
Acenaphthylene (ug/l)	0.352	<0.202	*	<0.202	<0.202	<0.202	<0.202	92.2	809	0.386
Anthracene (ug/l)	<0.066	0.032	*	<0.023	0.473	0.029	1.30	108	786	<0.023
Benzo(a)anthracene (ug/l)	<0.034	<0.034	*	<0.034	<0.034	<0.034	<0.034	1.98	47.1	<0.034
Benzo(a)pyrene (ug/l)	<0.029	<0.029	*	<0.029	0.033	<0.029	<0.029	0.51	14.4	<0.029
Benzo(b)fluoranthene (ug/l)	<0.017	<0.017	*	<0.017	0.074	<0.017	<0.017	0.455	13.9	<0.017
Benzo(ghi)perylene (ug/l)	0.073	<0.059	*	<0.059	<0.059	<0.059	<0.059	0.226	5.56	<0.059
Benzo(k)fluoranthene (ug/l)	<0.018	<0.018	*	<0.018	0.040	<0.018	<0.018	0.34	8.86	<0.018
Chrysene (ug/l)	<0.025	<0.025	*	<0.025	0.055	<0.025	<0.025	1.29	35.4	<0.025
Dibenzo(a,h)anthracene (ug/l)	<0.143	<0.143	*	<0.143	<0.143	<0.143	<0.143	<0.143	<1.43	<0.143
Fluoranthene (ug/l)	0.200	0.128	*	<0.049	0.059	<0.049	0.313	69.7	490	<0.049
Fluorene (ug/l)	<0.043	0.066	*	<0.043	0.150	<0.043	0.284	284	614	<0.043
Indeno(1,2,3-cd)pyrene (ug/l)	0.032	<0.022	*	<0.022	0.036	<0.022	<0.022	0.129	3.30	<0.022
Naphthalene (ug/l)	1.74	0.555	*	<0.156	6.86	0.190	0.387	326	7,390	<0.156
Phenanthrene (ug/l)	1.62	1.19	*	0.150	0.489	0.134	9.56	4,220	14,000	<0.110
Pyrene (ug/l)	0.162	0.120	*	<0.048	0.186	<0.048	0.318	69.5	477	<0.040
Total PAHs (ug/l)	4.25	2.09	*	0.15	11.35	0.35	12.16	5,748	25,671	0.39
Phenols and Cyanide										
Phenols (ug/l)	4	1	*	<1	2	1	3	4	900	<1
Cyanide (mg/l)	<0.004	<0.004	*	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004

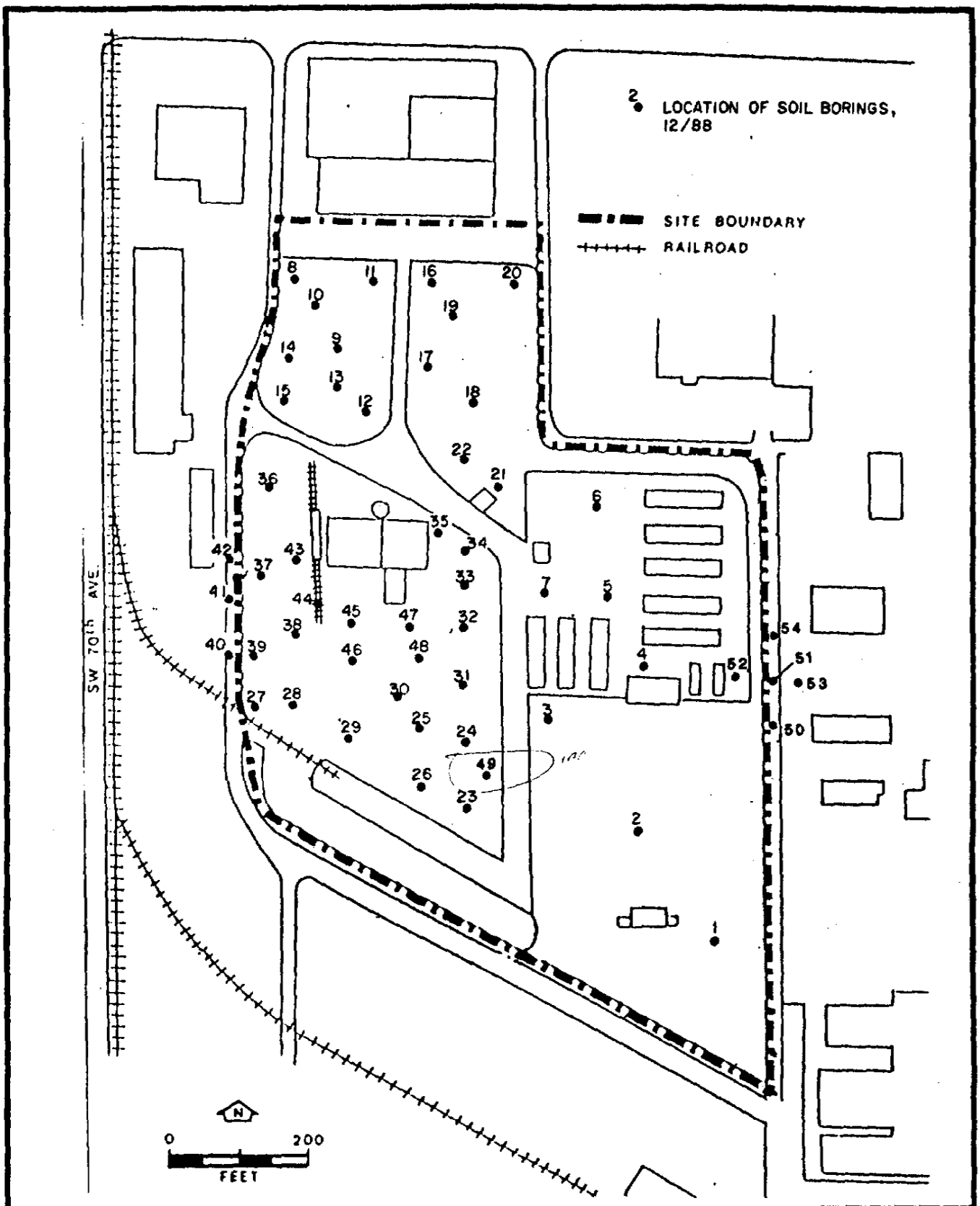
TABLE 3-4
(Continued)

Parameters	Monitor Well No. (See Figure for Locations)									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-6 (Dup)	MW-7	MW-8	Equipment Blank
Metals										
Arsenic, total (ug/l)	271	11.8	*	3.9	5.5	137	124	1,650	6,440	<6.4
Chromium, total (ug/l)	14.6	27.5	*	137	17.2	50.4	50.3	26	332	<3.3
Copper, total (ug/l)	16.2	<2.8	*	<2.8	<2.8	<2.8	<2.8	<2.8	145	4.8

* Well destroyed.
Monitor Well MW-6 field duplicate analysis

NA = Not analyzed

Source: ESE, 1987



CAMP DRESSER & McKEE INC.

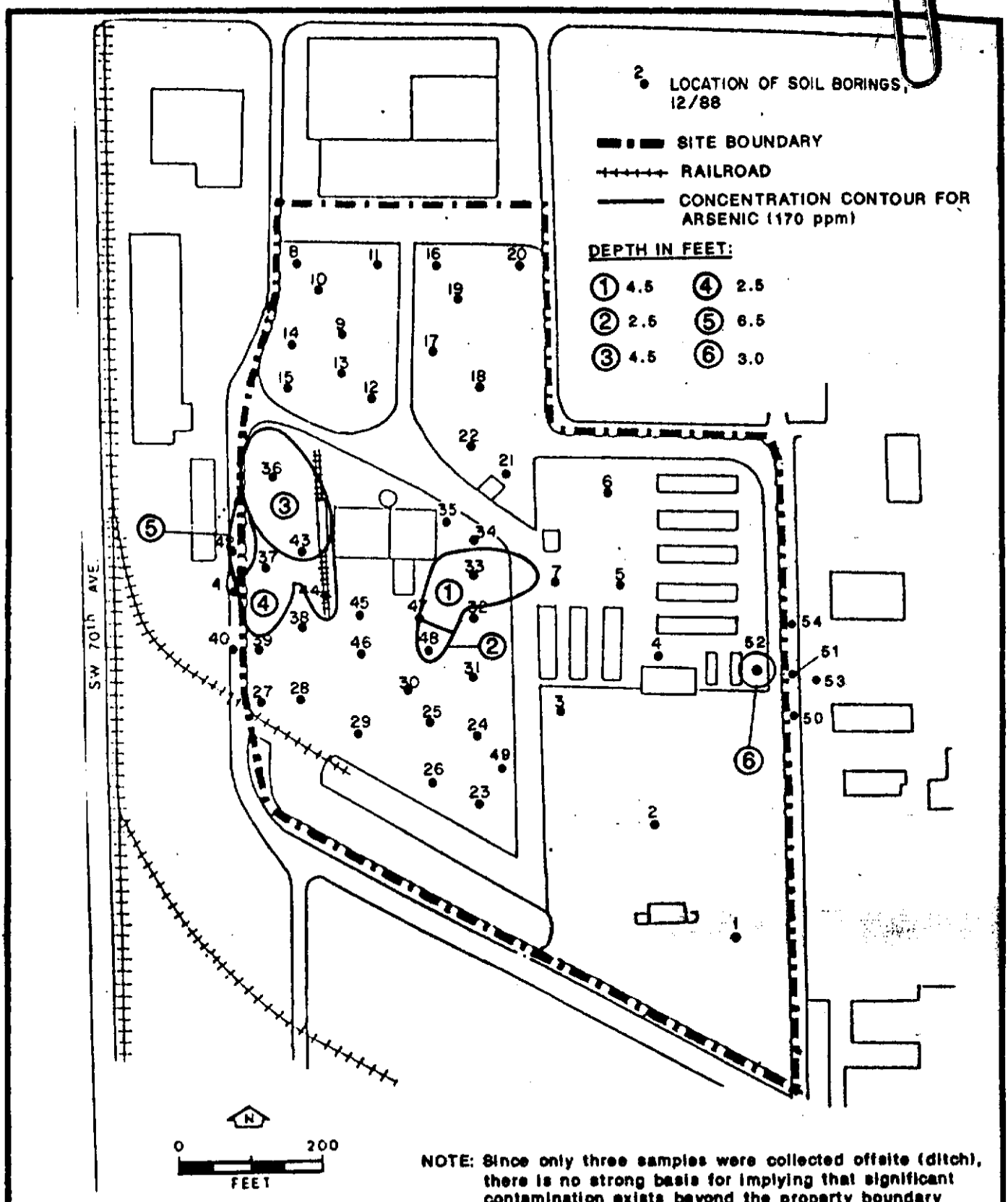
SOIL BORING LOCATIONS

7000 CORAL WAY SITE

MIAMI, FLORIDA

FIGURE NO.

3-12



CAMP DRESSER & McKEE INC.

EXTENT OF SOIL CONTAMINATION EXCEEDING ARSENIC CLEANUP GOAL

7000 CORAL WAY SITE

MIAMI, FLORIDA

FIGURE NO. 4-1

GROUND-WATER MOVEMENT

Ground-water flow direction varies in response to variations in the water-table configuration. Ground-water flow at the site is generally toward the Coral Gables Canal during wet periods when the water table is high while little or no ground-water movement may occur at the site during dry periods (Schroeder, 1958). Ground-water flow appeared to be radially away from the site in December, 1983. There was essentially no ground-water flow occurring at the site in May, 1984. Ground water flow was westerly in June, 1984 about three weeks after a rainfall in excess of 10 inches in the Miami area.

Ground-water flow directions at the site in December, 1983, May, 1984 and June 1984 were determined from the shape of the water table at those times (Figures 3.2, 3.3 and 3.4). Water-table contours were drawn using the elevation of water levels in the monitoring wells. Ground water flows at approximately right angles to these contours from areas of higher head to areas of lower head.

Downward flow of ground water occurs at the site after periods of heavy rainfall. The water-level elevations in wells W-1, W-2 and W-8 were 3.58 feet, 3.62 feet and 3.71 feet, respectively, on June 7, 1984 indicating that ground-water level elevations at the site were decreasing with depth at that time. Well W-1 is screened at a depth of 105 to 110 feet below land surface. Well W-2 is screened at a depth of 40 to 45 feet below land surface. Well W-8 is screened at a depth of 6 to 12 feet below land surface.

NATURE AND EXTENT OF SOIL CONTAMINATION

Organic compounds were detected in soil samples collected by BCM Eastern personnel in August, 1983 (see Table 2.5). This sampling was done approximately one year after the voluntary surface cleanup by the Seaboard System Railroad.

The level of organic compounds varied with depth and with location. Relatively high levels of organics were detected at the soil surface at soil sampling sites S-3, S-5 and S-8 (see Figure 2.3 for soil sampling locations). The highest levels of organics in the subsurface soil were detected at sites S-1 and S-8. A layer of organic compounds was detected at a depth of three feet at site S-1.

There is a cause for concern about the mobility of heavy metals in the contaminated soils. Increasing levels of some metal have been observed in water from the on-site supply well even though soil samples collected at the site do not exhibit the characteristics of EP toxicity for metals.

NATURE AND EXTENT OF GROUND-WATER CONTAMINATION

Ground water at the site has been contaminated. The contaminants are predominantly volatile organic compounds. These compounds were detected in water from most of the monitoring wells. The greatest concentration of these compounds appears in the northeast corner of the site.

A ground resistivity survey conducted in December, 1981 by Ecology and Environment (written comm., Ecology and Environment, 1981) identified contaminated ground water in the northeast corner of the site. The nature of the contamination was not identified at that time.

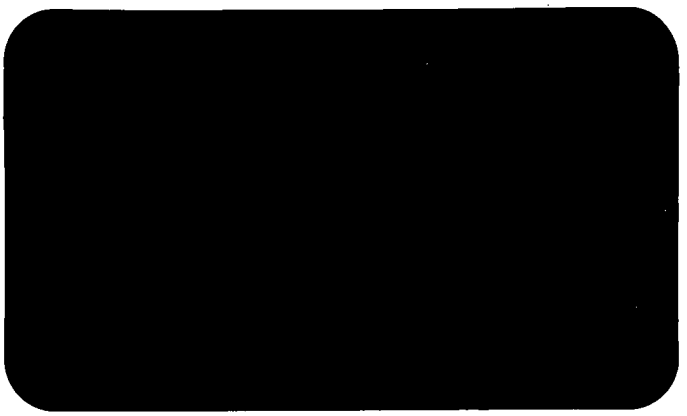
Contamination extends downward to a depth of 40 feet or more in the aquifer system. Monitoring well W-2, that withdraws water from the Biscayne Aquifer between depths of 40 and 45 feet, showed elevated levels of purgeable organic compounds in the water in 1983. The ground resistivity survey conducted in 1981 indicated that ground-water contamination existed to a depth of 30 feet or more in the area of well W-2 at that time.

Increasing concentrations of heavy metals have been observed in water from the supply well. Zinc, cadmium and lead concentrations in the water were generally below EPA drinking water regulation requirements in 1980 and 1981. The concentration of these metals in the water exceeded the EPA requirements in the July, 1983 sampling conducted by BCM Eastern. The concentration of these metals in the water was even higher in the December, 1983 sampling by BCM Eastern.

Additional ground-water monitoring is needed to verify the apparent trend of increased heavy metal concentrations at the supply well. Split samples should be taken to ensure that the data are accurate and representative.

Split 1980 through 1983 (3 yrs) Analysis adequate?

Medium Risk Site - 5
Gold Coast Oil Corp



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SEMI ANNUAL SAMPLING REPORT
JULY - DECEMBER 2010
SHERWOOD MEDICAL INDUSTRIES
NPL SITE
DELAND, FLORIDA

Universal Project No. 0140.0506736
Report No. 698128-v7
Date: January, 2011

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APPENDIX D

This Semi-annual Monitoring Report (June - December, 2010) for the Sherwood Medical Industries NPL site in Deland, Florida, has been prepared under the supervision of, and reviewed by Michael J. Geden of Universal Engineering Sciences, Inc. in Orlando, Florida.

As a Qualified Registered Professional Geologist as authorized by Chapters 492 or 471, Florida Statutes, I certify that I am a qualified groundwater professional, with knowledge and experience in groundwater contamination assessment and cleanup. I hereby certify that I have supervised the field work as summarized in this document, and the preparation of this report, in accordance with Florida Rules and Regulations. To the best of my knowledge, the information and laboratory data summarized in the "Analytical Results" section (including the applicable tables and figures) are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Michael J. Geden, P.G. #408 Date:
Senior Project Manager
Universal Engineering Sciences

1.0 OVERVIEW

Universal Engineering Sciences, Inc. (Universal), under contract to Pfizer has completed sampling and analysis of the groundwater monitoring wells at the NPL site known as Sherwood Medical Industries located in Deland Florida (**Figure A-1**). This sampling and reporting is being completed in accordance with the approved Records of Decision (RODs) for Operable Units 1 and 3 of the NPL site. This document also presents a summary of the Operations and Maintenance of the remedy for the semi-annual monitoring period. This monitoring period began on July 1, 2010 and continued through January 5, 2011.

1.1 Groundwater

A total of 70 groundwater samples were collected during this sampling event from the following sources:

- Twenty three 100-series monitoring wells (surficial aquifer), access to one well was denied;
- Ten IW-series wells (lower surficial aquifer);
- Three FA-series monitoring wells and two 200-series monitoring wells completed into the upper Floridan Aquifer, access to one well was denied and one well was inaccessible;
- Three 200-series monitoring wells and three facility supply wells (SMWS, SMFW and SMSR), each completed into the lower Floridan Aquifer.
- Nine groundwater extraction wells completed into the surficial aquifer.
- Five private domestic supply wells located on property adjacent (east) to the site. One homeowner has denied access to the property.
- The influent and effluent of the on-site air stripper which receives water from the groundwater extraction system.
- Ten monitoring wells within the HRC Basin Source Area Pilot Study.

Thirteen quality assurance samples were collected and analyzed. These samples included:

- Six duplicate groundwater samples. These samples were split samples prepared at the sampled well.
- Two duplicate surface water samples
- Two duplicate sediment samples
- Three trip blanks which accompanied samples transported to the laboratory

All samples were shipped to ENCO laboratories in Orlando Florida for analysis utilizing EPA Method 8260 for volatile compounds. Samples from wells completed within the

Retention Basin Pilot Study Area were analyzed specific to the evaluation of the pilot test effectiveness.

Groundwater monitor well and domestic potable well locations are presented on the Site Map (**Figure A-2**).

Samples are no longer collected from the DOT well (out of service, facility demolished), the Tavern (structure burned down), the Fire Station (converted to municipal supply), the Lang property (converted to municipal supply), the Tuma property (converted to municipal supply) and the Sanford property (converted to municipal supply). Access to the Wilcutt well has been denied by the homeowner. The Bourgeois house was empty. There is a water softener attached to the Brown well and there is no sample point prior to the softener. Universal was previously approached by Janet Byard and a sample was collected from her well. This well, located at San Antonio Street and Calle Buena Vista is being evaluated for inclusion in future sampling.

The Mills residence was purchased and a manufacturing structure was constructed on the site in 2002. During the construction, well MW-201 was incorporated into the floor slab of the new building. Both wells on the property (MW-201 and MW-202) are still in the monitoring program.

1.2 Surface Water and Sediments

Surface water and sediment samples were collected from Lake Miller and from the reference lake (North Lake Talmadge). Surface water and sediment sampling locations are shown on **Figures A-3 and A-4**.

A total of 18 surface water samples and 18 sediment samples were collected during the this sampling event from the following sources:

- Eight surface water samples from North Lake Talmadge, the reference lake;
- Eight sediment samples from North Lake Talmadge;
- Eight surface water samples from Lake Miller;
- Eight sediment samples from Lake Miller;
- Two duplicate sediment samples, one from each lake and two duplicate surface water samples, one from each lake.

All samples were shipped to ENCO laboratories in Orlando Florida for analysis.

Surface water samples were analyzed for volatile compounds (EPA Method 8260), chromium (filtered and unfiltered), alkalinity, hardness, total dissolved solids and total suspended solids. All sediment samples were analyzed for volatile compounds, chromium and Total Organic Carbon.

1.3 Basin Source Area HRC Pilot Study

During the Supplemental RI, a membrane interface probe (MIP) investigation confirmed high concentrations of chemicals of concern (CoCs) in the surficial aquifer at the inlet to an on-site retention basin. As a pilot study (August, 2005), Hydrogen Release Compound [eXtended release formula] (HRC-X™) was injected on a grid pattern at this location to enhance natural attenuation of the CoCs found below the source areas. Four monitoring clusters, each with a shallow and deep well, were installed as monitoring points and one additional downgradient cluster was installed in December 2009.

Post injection sampling occurred monthly for four months after the injection and then quarterly for the remainder of the first year after injection. Continued monitoring was been be incorporated into the semi-annual sampling at the site. While a draft Pilot Study Implementation Report was issued in December, 2008 the monitoring was continued during this sampling event.

Each sample is analyzed for the following parameters:

Analyte	Method	Field/Lab
Chlorinated VOCs	EPA 8260	Lab
Chloride	EPA Method 9250	Lab
pH, DO, ORP, Temp, conductivity	Field meters with flow through cell	Field
Total Organic Carbon	EPA 415.1 or 9060	Lab
Metabolic acids: lactic, pyruvic, acetic, propionic & butyric (HRC generated)	HPLC/UV	Lab
Total & dissolved iron and manganese	EPA 6000	Lab
Nitrate	EPA 353.1 or 9056	Lab
Sulfide	EPA 376.2	Lab
Sulfate	EPA 375.3 or 9056	Lab
Carbon dioxide, methane, ethane, ethene	ASTM D1945	Lab

All samples were shipped to ENCO laboratories in Orlando Florida for analysis.

2.0 FIELD INVESTIGATION

Sampling for this semi-annual monitoring period began on December 13, 2010 and continued through December 29, 2010.

2.1 Water Elevation Measurements

Water level measurements obtained from the surficial and lower surficial aquifer monitoring wells were used to determine the potentiometric surface of the surficial aquifer. Depth-to-water was measured to the nearest 0.01 foot using an electronic water level indicator. One round of water level measurements were made for development of the maps. A presentation of current water elevation data and a summary of historic water elevation measurements is attached as **Table 1**.

2.2 Groundwater Sampling

Upon arrival at each well, the field sampling team documented the condition of the well casing, lock, and the depth to water was measured and recorded. The volume of water in each well was calculated using the measured depth-to-water and tabulated depth-to-well bottom and casing diameter information. The depth to mid-screen in the well was then established by referencing the well construction log.

Wells were purged utilizing either a decontaminated Grundfos pump or a peristaltic pump. Surficial aquifer wells were purged utilizing the low-flow purging technique while deeper wells were purged using conventional purge techniques.

During low flow purging, the Grundfos® submersible pump or peristaltic tubing was lowered into the well and set at the mid-screen depth and a pump rate was established that did not excessively exceed the recharge capacity of the well. This was accomplished by monitoring the drawdown of the water table using the electric water level probe. Minimizing the amount of drawdown in the well provides a water sample that reflects water quality in the aquifer rather than water that was trapped in the well casing. Purge water was monitored in the field for temperature, pH, conductivity, DO and turbidity. Following the removal of one equipment volume of water, stabilization readings were taken at intervals, with 3 minutes being a minimum interval. Purging was deemed complete when the DO was less than 20% of saturation, the turbidity was <20 NTUs, and the remaining parameters had stabilized.

Floridan aquifer groundwater monitor wells were purged using standard methods utilizing the Grundfos pump. The pump was placed near the top of the water column in the well and the pump was turned on. Purge stabilization readings were obtained after removal of

one well volume and continued at 1/4 volume intervals until stabilization parameters were met.

Extraction wells and on-site water supply wells were allowed to purge until sufficient volume was removed to flush stagnant water from the sample port and tap line. Residential wells were sampled at the spigot closest to the well head. The spigot was opened and allowed to purge until sufficient volume was removed to flush stagnant water from the spigot and tap line.

All purge water, with the exception of water from potable sources, was collected during well purging. Potable well purge water is not contained as no CoC concentrations have exceeded groundwater cleanup criteria. Contained purge water is transported to the on-site treatment system where it was fed into the air-stripper.

All pumps and tubing were decontaminated prior to use in each monitoring well in accordance with FDEP and EPA Standard Operating Procedures. New tubing was used at each well.

Groundwater samples were obtained from each well immediately after the well purging was complete. Samples collected from the monitor wells were obtained using high density polyethylene (HDPE) tubing. Samples collected from wells with permanent pumps (potable wells, plant water supply wells and extraction wells) were collected from the sample port provided at the well or from a spigot located closest to the well head. Flow was reduced in the sample port or spigot at the time of sampling to allow for a minimum of aeration of the sample.

All samples collected were placed directly in laboratory-supplied containers. Samples submitted for volatile organics analysis were placed in 40 milliliter (ml) glass vials with zero headspace. These sample containers were pre-preserved with hydrochloric acid at the laboratory. Samples that are annually submitted for inorganics (i.e., metals) analysis were placed in one liter containers pre-preserved to a pH <2 with nitric acid.

Filled sample containers were placed in coolers with ice immediately after collection. Chain-of-custody forms were completed, signed, and placed in the coolers with the samples and the cooler was sealed with custody tape when the days sampling was completed. Sample coolers were transported by the field team to the ENCO Laboratory in Orlando, Florida.

2.3 Sediment/Surface Water Sampling

Eight sediment grab samples were collected from Lake Miller and from the reference lake, North Lake Talmadge. Sampling sites are depicted in **Figures A-3** and **A-4**.

Each discrete sediment sample was collected using a 4-inch diameter stainless steel sampler which was advanced into the sediment to a depth of 8-inches, or until refusal. Upon slow retrieval from the sediment, the sampler was hoisted just below the lake surface and capped underwater at the bottom while maintaining a vertical position. After capping the bottom, the sample was brought into the boat and placed into sample containers. All samples were labeled (sample ID and date), packed in coolers on wet ice and transferred to shore for packaging and shipment.

Surface water samples and water quality measurements were collected prior to sediment sample collection. Eight surface water grab samples were collected each from Lake Talmadge and from Lake Miller. Each discrete sample was collected using a peristaltic pump and weighted Teflon™ tubing. All surface water samples were collected at the midpoint of the water column for waters less than 5-ft deep, and at 2.5-ft from the lake bottom in waters deeper than 5 ft. For VOC analyses, pre-labeled (sample ID and date [recorded on-site]) and cleaned 40 ml glass vials, containing hydrochloric acid preservative, were filled immediately and secured with a Teflon™-lined cap. For chromium analyses, pre-labeled (sample ID and date [recorded on-site]) and cleaned 500 ml plastic bottles, containing nitric acid preservative, were filled immediately and secured with a cap.

Water quality parameters, including temperature, hydrogen ion activity (pH), specific conductivity and dissolved oxygen (DO) were measured in the field at each paired sediment-surface water sampling location. All water quality measurements were collected using a digital automatic temperature compensating multimeter that contains sensors for temperature, pH, specific conductance, and DO in a single probe. Measurements were recorded from a flow cell attached to the purge water tubing.

3.0 DATA INTERPRETATION

The following sections provide an overview of the data collected during this monitoring period and a narrative of observed trends, when appropriate.

3.1 Groundwater Flow

A summary of water level measurements is attached as **Table 1**. Potentiometric surface contour maps were prepared for wells constructed within the surficial aquifer (100-series groundwater monitoring wells and extraction wells), the lower surficial aquifer (IW-wells). Water elevations collected from the Floridan wells were not utilized for map preparation.

3.1.1 Surficial Aquifer

Depth-to-water measurements in the groundwater monitor wells, the groundwater extraction wells and piezometers completed in the surficial aquifer ranged from 3.86 to 29.72 feet below top of casing while the extraction system was in operation. These depth to water elevations translate to groundwater elevations above mean sea level (MSL) within the surficial aquifer ranging from 32.83 feet MSL (operating extraction well EW-4) to a high point of 64.24 feet MSL measured at well MW-113. Overall, water elevations were lower across the site to measurements made during the June, 2010 sampling event.

Groundwater flow in the surficial aquifer during groundwater extraction is directed to the two areas of the property where extraction wells are operational. As shown in **Figure A-5**, an elongated cone of depression within the surficial aquifer is present in the vicinity of the groundwater recovery system near Lake Miller. A second depression is noted around the recovery wells at the southeast portion of the property.

3.1.2 Lower Surficial Aquifer

Depth-to-water measurements in the groundwater monitor wells completed in the lower surficial aquifer (IW wells) ranged from 19.92 to 36.36 feet below top of casing. These depth to water elevations translate to groundwater elevations above mean sea level (MSL) within the lower surficial aquifer ranging from 35.31 feet MSL (well IW-30) to a high point of 41.99 feet MSL measured at well IW-12. Overall, water elevations were lower across the site when compared to measurements made during the June, 2010 sampling event. Groundwater flow in the lower surficial aquifer is to the north/northeast as depicted in **Figure A-6**.

3.1.3 Upper Floridan Aquifer

Depth-to-water measurements in the groundwater monitor wells completed in the upper Floridan aquifer ranged from 28.24 to 37.23 feet below top of casing. These depth to water elevations translate to groundwater elevations above mean sea level (MSL) within the upper Floridan aquifer ranging from 33.85 feet MSL to a high point of 35.85 feet MSL

measured at well SMFA-1. Overall, water elevations were lower across the site when compared to measurements made during the June, 2010 sampling event.

3.1.4 Lower Floridan Aquifer

While the water supply wells are screened across the Floridan aquifer, only 3 monitoring wells have been completed into the lower Floridan aquifer. These wells (MW-202, MW-203 and MW-205) are completed to approximately 520 feet. Depth-to-water measurements in the groundwater monitor wells completed in the lower Floridan aquifer ranged from 27.18 to 33.59 feet below top of casing. These depth to water elevations translate to groundwater elevations above mean sea level (MSL) within the lower Floridan aquifer ranging from 29.97 feet MSL (well MW-205) to a high point of 31.83 feet MSL measured at well MW-203. Overall, water elevations were lower across the site to measurements made during the June, 2010 sampling event.

3.2 Groundwater Monitoring Analytical Results

A total of 70 groundwater samples were collected including the groundwater treatment system air stripper influent and effluent and the HRC Pilot Study monitoring points. All samples were analyzed for VOCs by EPA Method 8260.

A summary of current as well as historic analytical results which are reportable in accordance with the site ROD is presented in **Table 2**. This table also highlights those analytical results which exceed the site restoration levels established in the ROD. Laboratory analytical result data sheets are included in this submittal in **Appendix B**.

The site CoCs, based on the site ROD are tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2 and Trans-1,2 dichloroethene (DCE), vinyl chloride and acetone. Samples collected from the surficial aquifer monitoring wells had previously been analyzed for the site CoC chromium. During the period between June, 1995 and June 2004, the chromium standard of 100 parts per billion was exceeded in only 7 of the samples analyzed.

The criteria had been exceeded once since December, 1999 and had not been exceeded since December, 2002. In a letter dated December 17, 2004, the EPA concurred with a request to eliminate chromium as a CoC.

In the same letter the EPA requested that manganese and arsenic be added to the analyte suite for the shallow wells on an annual basis, however these compounds would not be considered CoCs. Concentrations of these metals can be affected by the natural attenuation of chlorinated organics. The following is a brief narrative of the analytical results from this monitoring period for each COC.

PCE

PCE has a history of usage at the facility and has been the remedial driver at the NPL site as the concentrations of this compound have been consistently higher than those of any other CoC. No PCE is currently used at the facility. The ROD has established a remedial goal of 3 ppb for this compound which is also the level established as the Florida groundwater cleanup target level in F.A.C. 62-777. During this sampling period, the following was noted:

- PCE was detected in samples collected from 13 of the 23 groundwater monitoring wells within the upper surficial aquifer, and 9 of the 13 detected concentrations exceeded the remedial goal. The highest concentration detected (190 ug/l) occurred in well MW-104.
- PCE was detected in three (3) of the 10 lower surficial aquifer wells sampled. These wells are completed to a depth of 75-feet and monitor the surficial aquifer between the bottom of the clay layer and the top of the limestone. The highest concentration detected (95 ug/l) occurred in well IW-12.
- PCE was detected in samples collected from all nine (9) extraction wells sampled. The highest concentration detected (640 ug/l) occurred in well EW-3.
- PCE was not detected in any sample collected from a upper Floridan aquifer wells.
- PCE was not detected in any lower Floridan aquifer monitoring well sample.
- PCE was not detected in any of the domestic potable supply well samples.

TCE

TCE has a history of usage at the facility and is a CoC at the site. TCE is no longer used at the facility. ROD has established a cleanup goal of 3 ppb for this compound which is also the level established as the Florida groundwater cleanup target level in F.A.C. 62-777. During this sampling period, the following was noted:

- TCE was detected in samples collected from 16 of the 23 groundwater monitoring wells within the surficial aquifer, and 12 of the 16 detected concentrations exceeded the groundwater cleanup target level. The highest concentration detected (240 ug/l) occurred in well MW-105.
- TCE was detected in the three (3) of the 10 lower surficial aquifer wells sampled with the highest concentration detected (170 ug/l) occurring in well IW-12.
- TCE was detected in samples collected from all nine (9) extraction wells. The highest detected concentration (110 ug/l) occurred in well EW-3.
- TCE was detected in two (2) on-site upper Floridan wells with neither detected concentration exceeding the groundwater cleanup target level.
- TCE was not detected in any lower Floridan aquifer monitoring well, however it was detected in the Water Supply well at an estimated concentration of 0.61 µg/l and in the fire supply well at a concentration of 1.7 ug/l.
- TCE was not detected in any of the domestic potable supply well samples.

DCE

DCE was not a compound with a record of usage at the plant. The ROD did not differentiate between cis-1,2-DCE and trans-1,2-DCE which have cleanup criteria of 70 ug/l and 100 ug/l respectively. **Table 2** of this submittal is formatted to break out the two compounds for trend analysis as cis-1,2-DCE typically reflects the biological degradation of TCE and PCE during the natural attenuation of the plume. The detection of cis-1,2-DCE along the leading edge of the plume, in some of the site's most historically impacted wells, and its detection in areas where it was not previously detected is an indicator that the primary site CoCs (PCE and TCE) are biodegrading both as the plume matures and in areas where bioaugmentation pilot studies are underway. During this sampling period, the following was noted:

- cis-1,2-DCE was detected in samples collected from 14 of the 23 groundwater monitoring wells sampled within the surficial aquifer and 2 of the 14 detected concentrations exceeded the groundwater cleanup target level. The highest concentration detected (1,000 ug/l) occurred in well MW-106.
- cis-1,2-DCE was detected in five (5) of the 10 lower surficial aquifer wells sampled with the highest concentration detected (95 ug/l) occurring in well IW-1.
- cis-1,2-DCE was detected in samples collected from all nine (9) extraction wells at concentrations ranging from 0.42 ug/l (estimated) to 37 ug/l with all detections being below the groundwater cleanup target level.
- cis-1,2-DCE was detected in two (2) on-site upper Floridan aquifer monitor wells with neither detected concentration exceeding the groundwater cleanup target level.
- cis-1,2-DCE was detected in the Water Supply Well (70 ug/l) and the Fire Supply Well (25 ug/l) It was also detected in monitoring wells MW-202 (1.1 ug/l) and MW-203 (3.8 ug/l). No detected concentration exceeded the groundwater cleanup target level.
- cis-1,2-DCE was detected in two (2) of the samples collected from the domestic potable supply wells at concentrations of 1.1 ug/l and 1.0 ug/l. These concentrations are below groundwater cleanup target level.

Vinyl Chloride

Vinyl chloride is compound which has no record of usage at the plant and is thought to be a degradation product of TCE and PCE. The ROD has established a cleanup goal of 1 ppb for this compound which is also the level established as the Florida groundwater cleanup target level in F.A.C. 62-777. During this sampling period, the following was noted:

- Vinyl Chloride was only detected in the samples collected from three (3) of the 23 groundwater monitoring wells sampled within the surficial aquifer, with all three concentrations exceeding the groundwater cleanup target level. The highest concentration detected (11 ug/l) occurred in well MW-105.

- Vinyl chloride was detected in two (2) lower surficial aquifer wells sampled with the highest concentration detected (5.7 ug/l) occurring in well IW-8.
- Vinyl chloride was detected in a sample collected from one (1) of the nine (9) extraction wells at a concentration equal to the groundwater cleanup target level.
- Vinyl Chloride was detected in one on-site upper Floridan aquifer monitoring well (FA-1) at an estimated concentration of 0.77 ug/l.
- Vinyl Chloride was not detected in any lower Floridan aquifer monitoring well but it was detected in the Water Supply well (1.3 ug/l) and the Fire Water Supply well (40 ug/l) with both concentrations exceeding the groundwater cleanup target level.
- Vinyl Chloride was not detected in any of the domestic potable supply wells.

Acetone

Acetone was not identified as a compound used in any operations at the NPL site and releases of the compound may be associated with a former boat manufacturer which originally occupied the property. The ROD sets a cleanup goal of 700 ppb for this compound which is also the level established as the Florida groundwater cleanup target level in F.A.C. 62-777. During this sampling period, the following was noted:

- Acetone was detected in 12 of the 23 groundwater monitoring wells sampled within the surficial aquifer, however no concentration detected exceeded the remedial goal. The highest concentration detected (18 ug/l) occurred in well MW-112.
- Acetone was detected in one (1) of the samples collected from the lower surficial aquifer, however the detected concentration did not exceed the groundwater cleanup target level.
- Acetone was not detected in any extraction well sample.
- Acetone was not detected in one (1) of the upper Floridan wells and the concentration was below the groundwater cleanup target level.
- Acetone was detected one (1) in sample collected from a lower Floridan monitoring wells MW-205) at a concentration below the groundwater cleanup target level.
- Acetone was not detected in any domestic potable well samples.

Chromium

During the remedial investigation, chromium was detected above criteria only in the surficial aquifer. Therefore the ROD listed chromium as a CoC in the surficial aquifer only and had established a cleanup goal of 100 ppb.

During the period between June, 1995 and June 2004, the chromium standard of 100 parts per billion was exceeded in only 7 of the samples analyzed. The criteria had been exceeded once since December, 1999 and had not been exceeded since December, 2002. In a letter to the EPA dated October 29, 2004, Wyeth requested that the monitoring of chromium be discontinued as the cleanup had met the criteria specified in the ROD. In a

letter dated December 17, 2004, the EPA concurred with the request to eliminate chromium as a CoC.

Arsenic and Manganese

In the same letter which discontinued the monitoring of chromium, the EPA requested that manganese and arsenic be added to the analyte suite for the shallow wells on an annual basis. It is reported that concentrations of these metals can be affected by the natural attenuation of chlorinated organics.

Arsenic

No samples were analyzed for the presence of arsenic during this sampling event.

Manganese

No samples were analyzed for the presence of manganese during this sampling event.

3.3 CoC Distribution

CoC concentrations detected within the surficial and lower surficial aquifer have been plotted to present the estimated extent of impact within the two hydrologic units.

3.3.1 Surficial Aquifer

PCE concentrations in the surficial aquifer have been plotted and contoured, and are presented in **Figure A-7**. The extent of identified CoC distribution as defined by the 3 ug/l isoconcentration contour extends east and south of the property. Concentrations within the plume vary from sampling period to sampling period and the highest PCE concentration areas remain centered at the former retention basin.

The detection distribution of TCE centers at the retention basin and trends towards the recovery wells encompassing monitoring wells MW-106 and MW-105. DCE is situated at the retention basin and extends through wells MW-106 and MW-105. This area of impact is being drawn back from under the lake by extraction wells EW-4 and EW-5. The extent of TCE in the surficial aquifer is depicted in **Figure A-8** and cis 1,2-DCE is depicted in **Figure A-9**.

3.3.2 Lower Surficial Aquifer

CoC impacts within the lower surficial aquifer have primarily been contained within the property boundaries although there is some uncertainty as to the southern extent of PCE and TCE as depicted on **Figure A-10**. PCE and TCE are detected at their highest concentrations in the vicinity of wells IW-6 and IW-12 with the concentrations diminishing as the groundwater moves towards the northeast. DCE concentrations are the highest in well IW-1. Vinyl chloride is only detected in the sample from well IW-8.

3.4 Residential/Facility Well Sample Analysis

Detailed analytical results for these samples is presented in the text above (**Section 3.2**). It should be noted that no volatile compounds in excess of FDEP guidelines were detected in any of the private potable wells sampled or in any of the off-site Floridan aquifer wells. Residential well owners have been provided with copies of the analytical results for the samples collected from their well.

While volatile compounds have been detected in the facility water supply well the facility is connected to the municipal water supply for potable uses. The three production wells onsite are used only for fire fighting needs and as process water supply for production. Water from the process water well passes through an air stripper in accordance with the ROD, prior to use within the plant.

3.5 Treatment System Sample Analysis

In conjunction with the sampling of all groundwater monitoring wells, samples were collected from the treatment system influent and effluent streams. During this sampling event no chemicals of concern were detected in the air stripper effluent.

Analytical results are summarized in **Table 3** and laboratory analytical reports are presented in **Appendix B**.

3.6 Surface Water

Surface water laboratory analytical results for Lake Miller and North Lake Talmadge are summarized in **Tables 4** and **5** and include results for hardness, alkalinity, total dissolved solids (TDS), and total suspended solids (TSS). Laboratory analytical reports are presented in **Appendix C**.

Hardness

The hardness of North Lake Talmadge waters ranged from 33 to 43 mg/l and Lake Miller waters ranged from 24 to 36 mg/l. Waters from both lakes are soft and potentially possess low amounts of calcium and magnesium minerals as described in the Lake Miller baseline report.

Alkalinity

The alkalinity of North Lake Talmadge waters ranged from 22 to 25 mg/l while Lake Miller waters ranged from 21 to 27 mg/l.

Total Dissolved Solids

Levels of total dissolved solids (TDS) ranged from 110 to 130 mg/l in North Lake Talmadge while Lake Miller waters ranged from 130 to 150 mg/l.

Total Suspended Solids

Levels of total suspended solids (TSS) in North Lake Talmadge were at or below the detection limit (2 mg/l) to 6 mg/l while Lake Miller waters ranged from an estimated concentration of 1.42 mg/l to 28 mg/l.

Chromium

Chromium was not detected in any of total or dissolved samples from North Lake Talmadge. Chromium was detected in all eight of the Lake Miller samples, however all detections were estimated values.

Volatile Organic Compounds

No volatile CoCs were detected in any North Lake Talmadge samples or in any Lake Miller surface water samples.

3.7 Sediment Analytical Results

Laboratory analytical results for Lake Miller and North Lake Talmadge sediments are summarized in **Table 6** and **Table 7**. Laboratory analytical reports are presented in **Appendix C**.

Percent Solids

Unlike surface waters, sediment characteristics among Lake Miller and North Lake Talmadge have historically differed. Sediment percent solid (%S) has been lower in Lake Miller substrate than in reference Lake Talmadge sediments as demonstrated in the baseline analysis. This likely represents the high organic content from decaying surface vegetation and slow sediment filling of Lake Miller reflecting this lake to be a stagnant point at the end of the chain of lakes. The lower %S also raises the perceived concentrations of volatile organics when detected in the sediments.

Total Organic Carbon

The TOC content of Lake Miller sediments has historically been greater than that of North Lake Talmadge due to several factors including: size differences and that Lake Miller is the terminal lake in a lake chain where water levels are maintained by a weir at the outlet of Lake Miller. The weir serves as a dam which slows water flow and promotes settling in Lake Miller. Lake Miller is also often covered with aquatic growth which when it dies settles to the bottom of the lake where it decays. The TOC results for North Lake Talmadge ranged from 5,400 to 19,000 mg/kg while the concentrations in Lake Miller ranged from 3,200 to 140,000 mg/kg.

Chromium

Chromium was detected in all Lake Talmadge sediment sample locations at concentrations ranging from 0.271 (estimated) to 5.64 mg/kg. Chromium was detected in all eight Lake

Miller sediment sample locations at concentrations ranging from 0.195 mg/kg (estimated) to 4.59 mg/kg.

None of the chromium detections exceeded the FDEP and USEPA Region IV toxic effects level (TEL) for chromium (52.3 mg/kg).

Volatile Organic Compounds

Acetone was detected in seven of the eight sediment samples and the duplicate sample collected from Lake Talmadge at concentrations ranging from 11 ug/kg to 40 ug/kg and in seven of eight Lake Miller sample locations (and the duplicate) at concentrations ranging from 9.5 ug/kg to 80 ug/kg.

No other volatile compounds were detected in the Lake Talmadge sediment samples. In Lake Miller sediments cis 1,2-DCE was detected in three samples (SED-05, SED-06 and SED-07) at estimated concentrations of 0.9 ug/kg, 0.6 ug/kg and 1.6 ug/kg respectively.

3.8 Quality Assurance Sample Analysis

Ten duplicate samples were collected from lake sediment, surface water and well samples. Data collected from duplicate samples generally matched up well. Duplicate data is presented by sample in their respective tables and are summarized in **Table 8**.

Three trip blanks were prepared and analyzed. No volatile compounds were detected in any of the trip blanks.

4.0 SITE O & M MONITORING

4.1 Groundwater Extraction and Treatment System

Universal maintains the groundwater pump and treat system in accordance with the approved site O&M Plan. This plan establishes a schedule of activities to be performed at weekly, monthly and quarterly intervals. These activities are intended to be preventative in nature to keep the system operating at design efficiency.

Weekly tasks include a check of system operations and an overall inspection of site conditions in respect to the institutional controls established in the Record of Decision. These controls include restrictions on site excavations and the maintenance of site warning signs and perimeter security. Universal also verifies that the air stripper associated with the water supply well (SMWS) is operational. Monthly tasks revolve around a closer inspection of the air stripper and cleaning of the stripper media. Quarterly tasks revolve around the inspection and maintenance of the extraction well pumps and include removal and cleaning of the pump components.

4.2 Basin Source Area Pilot Testing

During the Supplemental RI, a membrane interface probe (MIP) investigation confirmed high concentrations of CoCs in the surficial aquifer at the inlet to an on-site retention basin. As a pilot study Hydrogen Release Compound [eXtended release formula] (HRC-X™) was injected on a grid pattern at this location to determine the feasibility of enhancing natural attenuation of the CoCs found below the source areas. Four monitoring clusters, each with a shallow and deep well, were originally installed as monitoring points and a fifth cluster was added in December, 2009 to monitor downgradient effects of the pilot test (**Figure A-11**). Universal prepared a report titled HRC-X™ Injection Pilot Test, Basin Source Area, Draft Implementation Report which was submitted to the EPA and the FDEP in December, 2008.

The upgradient cluster contains wells MC-1S and MC-1D while the source area wells are labeled MC-2s and MC-2D. Three downgradient clusters were installed, cluster MC-3S and MC-3D, cluster MC-4S and MC-4D and cluster MC-5S and MC-5D.

Post injection sampling occurred monthly for five months after the injection and then quarterly for the remainder of the first year after injection. Continued monitoring has been incorporated into the semi-annual sampling at the site.

Analytical data obtained during post injection monitoring of the dechlorination process can be grouped for discussion as follows: oxidation-reduction potential (ORP), metabolic acids, alternate electron acceptors (DO, nitrate, iron, sulfate, carbon dioxide (CO_2)), metabolic by-

products and the Chemicals of Concern. The following text provides a narrative of some changes within these groups observed during this enhanced anaerobic bioremediation test.

The ORP of water within an aquifer is a measure of electron activity and is an indicator of the ability of a chemical or compound to accept (reduction) or donate (oxidation) electrons. A negative ORP occurs within an anaerobic aquifer and indicates that the aquifer is capable of supporting an anaerobic microbe population. An ORP between -110 and -300 MV has been shown to be the optimal range for reductive dechlorination. As the dechlorination process accelerates following the HRC-X™ application, the measured ORP typically will decrease further.

In the aquifer, HRC-X™ breaks down and releases lactic acid which is a nutrient source for anaerobic microbes that metabolize the lactic acid to acetic acid and other fatty acids (propionic acid, pyruvic acid and butyric acid). This results in the increase of fatty acid concentrations in the aquifer following HRC-X™ application. Hydrogen is produced during lactic acid metabolism, so increased concentrations of lactic acid and "daughter acids" indicates microbial activity relating to hydrogen production is occurring. The hydrogen molecules serve as electron donors for the reductive dechlorination of chlorinated compounds. The increase in the metabolic acids can be accompanied by a corresponding drop in the pH of the groundwater. An increase in the microbial population is also reflected in an increase in Total Organic Carbon (TOC).

Naturally occurring compounds that can act as alternate electron acceptors (DO, nitrate, iron, sulfate, CO_2) are typically also found in aquifers. High concentrations of alternate electron acceptors can interfere with reductive dechlorination by competing for the available hydrogen. The predominant (preferred) electron acceptor in an aquifer is typically DO, however anaerobic microbes can not survive when DO is above 1 mg/l so an aerobic aquifer would not be suitable for this remedial action alternative. After the depletion of available DO in an anaerobic environment, the hydrogen has a propensity to bind, in order of preference, to nitrate, ferric iron and sulfate as alternate electron acceptors to the dechlorination process. Sulfate reduction occurs within the same ORP range which is optimal for reductive dechlorination, so generally, when the aquifer reaches a state of sulfate reduction then conditions are correct for the reductive dechlorination process. High concentrations of sulfate (> 50 mg/l) may interfere with the dechlorination of DCE and VC.

The goal of this process in a remedial action setting is the in-situ reduction of the chlorinated CoCs in the aquifer. Concentrations of highly chlorinated solvents (PCE and TCE) should decrease although there may be a spike in concentration reflecting a phase of desorption of the CoC from the aquifer matrix. Correspondingly DCE and VC may increase as PCE and TCE are dechlorinated but should inevitably decrease as well. The historic detection of low concentrations of daughter products (DCE and VC), which have no history

of usage at the site, indicates slow natural dechlorination of the parent compounds has been occurring at the site prior to the pilot test.

Increased microbial activity may result in an increase of CO_2 in the aquifer. In the presence of elevated CO_2 concentrations, the CO_2 may become a preferred electron acceptor resulting in the generation of methane (methanogenesis), a reaction which occurs within the same ORP range as reductive dechlorination. An excess of methane (CH_4) may indicate a decrease in the efficiency of dechlorination as the CO_2 becomes the terminal electron acceptor instead of the chlorinated COC.

The equation that describes this process is shown below:

$$CO_2 + 4H_2 \rightarrow CH_4 + 2\,H_2O \text{ or } CO_2 + 8H^+ + 8e^- \rightarrow CH_4 + 2\,H_2O$$

Therefore, the eight hydrogen atoms that are generated by the metabolism of the injected lactic acid are being utilized to generate methane instead of being use to complete the dechlorination of the chlorinated CoCs to ethene. Methanogenic conditions prevail in many plumes after all other electron acceptors (O_2, NO_3, Fe+3,and SO4) have been used up by other members of the subsurface microbial community (USGS).

The following text provides some interpretation of the ongoing reductive dechlorination in the pilot test area. The analytical results are summarized in **Tables 9** (shallow) and **Table 10** (deep) and laboratory analytical reports are presented in **Appendix D**.

ORP

- ORP indicates the predominant terminal electron accepting process. ORP decreased following HRC application as noted in the source and downgradient wells.
- The negative ORP indicates the reducing conditions required for dechlorination.
- The ORP remains negative in seven of eight source and downgradient wells and remains less than -100 (an indicator of active dechlorination) in four of the eight source or downgradient wells.

Metabolic Acids

- HRC breaks down into lactic acid which breaks down to metabolic byproducts (acetic, propionic, and butyric acid) and metabolic acid levels typically increase following HRC application. Hydrogen is produced during lactic acid metabolism, so levels of lactic acid and "daughter acids" indicate microbial activity relating to hydrogen production. Metabolic acid concentrations have almost been depleted in the source wells but concentrations persist in an immediate downgradient cluster (MC-3). No metabolic acids were detected in either well in the new downgradient cluster (MC-5)

- Total Organic Carbon (TOC) concentrations continued to decrease in the source cluster but remained elevated in one downgradient cluster. This is the same cluster (MC-3S and MC-3D) with elevated concentrations of the metabolic acids

Alternate Electron Acceptors

- Nitrate, ferric iron, and sulfate are reduced to nitrogen gas, sulfide, and ferrous iron (aqueous) following HRC application. Specifically, when the aquifer reaches sulfate reducing conditions reductive dechlorination conditions are also optimal. Sulfate concentrations were high at the start of the pilot test and the concentrations have dropped during the monitoring period since injection. During this monitoring event the sulfate concentrations decreased slightly in the source wells. Sulfate remains low in three of the four immediate downgradient wells but rose in the fourth (MC-4D and remains low in the others. Sulfate concentrations in the new downgradient cluster do not appear to have been affected by the upgradient injection.
- High concentrations of alternative TEAs can interfere with dechlorination by providing alternate biochemical pathways. These conditions have not developed in the treatment area. Dissolved oxygen remained steady or rose slightly in all source and downgradient wells and overall the aquifer remains anaerobic.

Volatile Organic Compounds

- The PCE concentration have dropped in the six source and downgradient wells. The PCE concentration in the new deep downgradient well (MC-5D) has also dropped but this may be natural aquifer variation.
- TCE concentrations dropped slightly in one of the four shallow wells and one of the four deep wells.
- DCE concentrations initially increased as the PCE and TCE dechlorinated. The concentrations have been dropping but remain above the baseline concentrations as the dechlorination continues.
- Vinyl chloride concentrations also rose in two of the deep wells after injection and remain elevated.

Gases

- Both carbon dioxide and methane have increased after the HRC application. The excess of methane may suggest methanogenesis which could decrease the efficiency of dechlorination and this parameter is being monitored.
- Ethene is the end product of degradation and its rise indicates the effectiveness of the complete dechlorination. Concentrations of ethene remain elevated in the deep source well and one deep downgradient well.

Overall Trend Summary

- Site related CoCs continue to trend downward in the source and downgradient wells.
- CH4 initially increased and is being monitored.
- Lactic acid and metabolic byproducts indicate the product appears to remain active in the downgradient clusters.
- ORP remains negative in many sampling points.
- Alternative TEA concentrations, primarily sulfate, remain decreased.

The dechlorination remains active in the pilot test area and has migrated downgradient. This monitoring will continue in the next sampling effort.

4.3 Soil Excavation Monitoring

The ROD for the site included a list of institutional controls including a requirement that the FDEP and EPA be notified of plans to excavate soils, demolish buildings, or remove pavement. Soils exposed as a result of these activities would be required to meet TCLP criteria or contain less than 520 mg/kg of chromium to remain on-site untreated.

This requirement was implemented with the acceptance of the ROD and the implementation requirement was shifted to the O&M Contractor (Universal) when the facility was sold. Universal observes the site for signs of excavation during the weekly O&M of the groundwater recovery and treatment system. The plant environmental coordinator also notifies Universal of any planned excavations at the site. This notification includes the proposed location and depth of the excavation.

Upon identification of an on-site excavation or upon receipt of notification of a proposed excavation, soil samples are collected from those soils proposed to be excavated. If samples are to be collected prior to the initiation of an excavation, samples from the maximum proposed depth of the excavation are collected. Each soil sample is analyzed for total chromium utilizing EPA Method 6010.

If the sample analysis indicates that the chromium concentration in the sample exceeds the limit established in the ROD (520 mg/kg) the laboratory is instructed to perform a TCLP test on the sample for chromium. Initially, upon receipt of the soil sampling analysis, the designated Superfund Project Coordinator notified the EPA and the FDEP of the sample results. The letter was accompanied by a map showing the sample collection locations and copies of the laboratory analytical report. This reporting has been incorporated into the semi-annual report, however the FDEP and EPA would be notified immediately if a sample exceeds the ROD criteria for chromium (520 mg/kg) or fails to pass TCLP criteria. At that time, preventative or corrective action would be taken. If the sample was collected from an existing excavation, the excavated soils would considered a waste and shipped off-site for disposal. If the sample was collected from the area of a proposed excavation, the plant

environmental coordinator would be notified and the location of the proposed excavation is moved if possible. If it is not possible to move the location of the excavation, Universal works with the plant environmental coordinator to limit the amount of soil which must be excavated. No soil samples were collected this monitoring period.

5.0 NEXT SAMPLING

It is anticipated that all wells, surface water and sediment locations at the site will be sampled in June, 2011 in accordance with the ROD. This data will be available in a report to be generated in July, 2011.

TABLES

Table 1.
HISTORIC WATER ELEVATIONS
SHERWOOD MEDICAL INDUSTRIES NPL SITE-OPERABLE UNIT 1
DELAND FLORIDA

Surficial Aquifer												
	MW-101	MW-102	MW-103	MW-104	MW-105	MW-106	MW-107	MW-108	MW-109	MW-110	MW-111	MW-112
Jun 95	53.71	55.03	53.18	51.71	54.05	54.98	63.35	64.27	65.86	60.05	61.41	53.16
Dec 95	54.18	55.64	54.08	52.40	54.75	55.50	63.27	65.84	67.71	61.44	61.28	53.99
Jun 96	54.09	55.87	54.17	52.77	54.84	56.01	63.65	65.64	67.50	61.45	61.55	53.97
Dec 96	54.50	56.11	54.44	53.08	55.47	56.30	63.02	66.26	68.08	61.81	60.90	54.87
Jun 97	53.55	54.39	51.44	50.28	53.64	52.91	58.32	62.40	65.03	59.40	55.48	53.16
Dec 97	54.84	56.19	52.63	51.74	52.75	54.92	61.09	65.51	67.86	61.60	59.0	54.69
Jun 5 - 98 System on	54.30	56.04	51.80	51.74	54.54	53.62	60.43	64.99	67.26	61.09	57.67	53.49
Jun 11 - 98 Sys Off	54.62	56.66	54.53	54.31	55.98	54.67	60.05	64.80	67.05	61.03	57.67	53.49
Nov 98	54.71	56.03	54.25	53.39	55.18	54.88	61.10	64.72	66.82	61.0	58.57	53.64
Jun 99	52.70	53.74	52.38	50.23	52.81	52.95	58.72	61.85	63.96	58.84	56.35	52.14
Dec 99	54.14	55.46	52.78	52.63	55.32	56.53	63.41	65.87	68.23	61.52	60.68	54.59
Jun 00	52.24	53.11	50.65	49.89	52.58	53.34	59.69	62.57	64.42	58.78	57.09	51.79
Nov 00	53.67	55.40	53.34	54.37	55.93	56.08	60.93	63.10	64.81	60.06	58.61	53.67
Jun 01	53.34	54.37	52.26	50.47	54.20	53.02	60.45	62.66	64.66	58.99	57.23	52.68
Dec 01	56.06	58.47	56.45	57.01	58.07	58.09	62.98	66.97	69.09	63.01	61.03	55.71
Jun 02	55.30	56.53	52.68	51.69	56.14	55.45	61.57	64.66	66.83	60.74	59.69	55.09
Dec 16 - 02 System on	53.89	55.12	52.82	51.09	51.90	53.70	60.51	65.16	67.45	60.18	58.24	53.18
Dec 30 - 02 Sys off	56.04	57.81	55.36	55.56	55.71	57.52	62.89	66.32	68.78	61.20	60.88	56.31
Jun 03	56.08	58.28	56.28	56.82	58.42	58.17	63.00	66.18	68.35	62.44	60.85	56.64
Jan 04	53.50	54.96	52.22	49.87	49.46	53.57	60.71	64.48	66.57	59.80	57.71	52.45
Jun 04	53.48	54.27	51.56	52.49	51.55	53.90	60.26	62.64	64.81	57.98	57.94	53.54
Dec 04	55.75	57.74	54.01	53.35	52.32	54.61	61.23	66.19	68.52	61.73	59.44	52.35
Jun 05	57.13	59.16	56.87	55.86	56.51	59.10	64.58	65.90	67.92	61.85	62.49	57.02
Dec 05	55.04	57.04	53.34	51.56	51.94	53.90	59.68	65.68	68.58	61.61	57.17	53.86
Jun 06	53.36	54.40	51.43	49.09	49.74	51.09	56.31	61.52	64.84	58.41	53.88	51.50
Dec 06	53.51	53.82	51.63	49.09	50.11	50.06	54.61	59.49	62.57	56.53	52.71	51.81
Jun 07	53.12	53.61	51.01	48.94	49.92	51.27	55.74	58.87	61.38	56.40	53.48	51.77
Dec 07	54.38	55.36	53.64	55.05	54.40	55.57	58.09	60.75	62.76	58.03	56.56	53.76
Jun 08	51.89	52.16	48.67	49.52	49.01	50.23	55.77	58.57	61.04	55.62	52.77	51.59
Dec 08	53.62	54.47	51.50	51.36	51.55	53.59	59.43	63.59	66.00	59.29	57.38	53.44
Jun 09	54.16	55.28	51.48	50.59	51.73	54.46	60.62	64.35	67.04	59.93	58.04	53.96
Dec 09	53.56	54.30	52.49	50.66	51.42	53.40	57.27	61.80	64.96	58.47	55.46	52.82
Jun 10	54.76	55.65	51.79	49.88	51.27	53.38	58.32	62.57	65.57	58.93	56.04	53.97
Dec 10	52.28	52.68	50.61	47.33	48.48	49.86	54.57	59.50	62.49	56.43	52.51	50.77

NM - Water elevation not measured

Source: UES, 2010

Table 1.
HISTORIC WATER ELEVATIONS
SHERWOOD MEDICAL INDUSTRIES NPL SITE-OPERABLE UNIT 1
DELAND FLORIDA

Surficial Aquifer												
	MW-113	MW-114	MW-115	MW-116	MW-117	MW-118	MW-119	MW-120	MW-121	MW-122	MW-123	MW-124
Jun 95	66.71	61.93	Wells Installed July 2002				Wells Installed April, 2005		Wells Installed May, 2007			
Dec 95	68.47	61.37										
Jun 96	68.33	62.08										
Dec 96	69.05	64.77										
Jun 97	66.16	56.38										
Dec 97	68.68	62.51										
Jun 5 - 98 System on	67.98	61.31										
Jun 11 - 98 Sys Off	67.98	61.31										
Dec 98	67.70	61.79										
Jun 99	64.81	59.24										
Dec 99	68.49	62.92										
Jun 00	65.49	59.75										
Dec 00	65.58	60.32										
Jun 01	65.39	60.02										
Dec 01	69.95	63.83										
Jun 02	67.65	62.58										
Dec 16-02 System On	68.64	62.15	61.79	56.20	ND	67.15						
Dec 30-02 Sys Off	70.01	63.82	63.33	58.46	ND	66.16						
Jun 03	69.23	63.33	62.85	58.25	55.09	66.58						
Jan 04	67.53	62.05	61.42	56.39	NM	64.71						
Jun 04	65.93	60.72	60.58	55.97	51.10	63.34						
Dec 04	63.76	63.09	62.83	56.92	66.60	68.68						
Jun 05	69.49	64.63	63.44	59.38	55.53	66.96	63.79	72.30				
Dec 05	69.97	58.13	59.61	55.74	55.00	65.81	62.41	70.40				
Jun 06	66.46	54.57	57.83	53.10	51.13	62.36	59.07	67.90				
Dec 06	64.18	53.16	56.18	53.03	50.32	59.81	57.80	66.32				
Jun 07	59.80	53.18	57.55	52.87	49.03	58.81	57.00	55.09*	51.37	55.09	52.12	58.65
Dec 07	64.03	56.38	57.99	51.48	50.97	No access, Not Measured	58.91	Not Measured	54.48	56.71	53.84	60.12
Jun 08	62.41	53.15	55.15	51.99	48.69		56.59	55.15	51.13	54.26	51.48	58.17
Dec 08	67.34	58.52	60.61	56.19	54.19		61.89	60.64	54.9	59.68	55.29	62.78
Jun 09	68.61	58.82	60.90	56.45	54.01		62.20	58.97	56.31	61.07	55.86	63.84
Dec 09	66.86	56.77	59.28	55.29	52.65		60.39	NM	55.7	50.78	55.79	61.93
Jun 10	67.26	56.43	59.06	55.10	52.73		60.70	NM	54.01	56.16	54.96	60.45
Dec 10	64.24	52.96	55.72	52.19	50.05		57.27	NM	52.8	56.46	52.14	60.3

Note: *Top of casing elevation corrected for well MW-120 in May 2007

NM - Water elevation not measured

Source: UES, 2010

Table 1.
HISTORIC WATER ELEVATIONS
SHERWOOD MEDICAL INDUSTRIES NPL SITE-OPERABLE UNIT 1
DELAND FLORIDA

Surficial Aquifer												
	PZ-1	PZ-2	PZ-3	PZ-4	PZ-5	PZ-6	PZ-7	PZ-8	PZ-9	PZ-10	PZ-11	PZ-12	PZ-13
Jun 07	60.83	61.99	59.73	62.95	53.11	54.53	53.99	55.88	55.79	57.04	55.94	NM	Installed October, 2010
Dec 07	62.46	64.88	60.84	62.79	56.42	57.46	57.14	58.45	58.20	58.54	58.54	57.59	
Jun 08	dry	61.77	59.21	62.83	52.72	54.23	53.84	55.61	55.41	58.63	56.70	55.36	
Dec 08	dry	66.32	not measured	62.74	58.01	59.70	58.74	61.03	60.93	not measured	61.54	59.32	
Jun 09	dry	67.63	64.74	62.82	58.03	59.91	59.07	61.26	61.16	62.62	62.79	59.95	
Dec 09	dry	65.51	NM	NM	56.08	57.73	57.14	59.40	59.09	67.94	60.59	66.83	
Jun 10	dry	66.15	63.52	blocked	56.36	57.89	57.07	59.50	60.15	61.37	62.10	blocked	
Dec 10	dry	blocked	blocked	62.67	53.72	54.35	blocked	56.27	55.66	blocked	blocked	52.95	50.75

Surface Water											
	Jun 07	Dec 07	Jun 08	Dec 08	Jun 09	Dec 09	Jun 10	Dec 10			
Lake Miller	52.95	53.59	52.94	55.27	56.01	53.89	54.47	53.61			
Cypress Lake	60.71	61.03	57.11	63.11	62.91	62.52	62.49	61.79			

Lower Surficial Aquifer										
	IW-1	IW-2	IW-6	IW-8	IW-10	IW-12	IW-18	IW-13	IW-30	IW-40
Jun 03	41.04	Wells Installed February, 2005						Wells Installed May, 2007		
Jan 04	39.73									
Jun 04	39.18									
Dec 04	42.60									
Jun 05	42.20	41.70	44.05		42.68	46.55	43.58			
Dec 05	42.49	42.54	44.26	42.65	42.28	46.04	44.02			
Jun 06	38.36	39.27	39.92	37.06	38.61	42.56	39.71			
Dec 06	38.69	38.32	40.42	38.49	38.59	42.76	39.65			
Jun 07	37.49	36.58	38.90	36.33	36.73	41.81	37.87	36.23	36.48	36.14
Dec 07	38.75	38.59	40.20	37.75	38.73	43.50	37.70	38.41	37.83	37.78
Jun 08	36.17	36.08	37.97	35.95	36.00	41.03	37.46	33.65	36.38	35.81
Dec 08	40.08	39.64	41.84	39.95	40.03	44.47	41.55	39.63	40.37	39.50
Jun 09	40.78	40.57	42.59	40.80	40.46	45.11	42.24	40.54	41.14	40.92
Dec 09	40.31	40.17	42.02	40.09	39.91	44.62	NM	40.11	40.49	40.55
Jun 10	39.85	39.70	41.70	39.61	39.43	44.79	39.92	39.08	39.92	38.92
Dec 10	38.12	37.42	39.85	37.34	37.53	41.99	37.28	38.90	35.31	38.19

NM - Water elevation not measured

Source: UES, 2010

Table 1.
HISTORIC WATER ELEVATIONS
SHERWOOD MEDICAL INDUSTRIES NPL SITE-OPERABLE UNIT 1
DELAND FLORIDA

	Extraction Wells								
	EW-1	EW-2	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9
Jun 95	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec 95	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun 96	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec 96	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun 97	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec 97	46.92	36.60	46.21	37.54	49.86	54.85	61.05	62.47	63.23
Jun 5 - 98 System on	51.17	39.25	ND	35.51	52.66	53.30	ND	ND	ND
Jun 11 - 98 Sys Off	55.35	54.25	ND	53.98	53.86	53.70	59.70	61.17	61.90
Dec 98	52.20	40.89	46.87	40.33	44.35	45.97	60.44	61.82	62.60
Jun 99	47.15	40.95	52.46	36.19	ND	48.15	58.01	59.22	59.90
Dec 99	44.99	38.46	44.71	41.20	45.16	52.23	58.76	62.99	63.81
Jun 00	45.19	39.09	44.44	41.04	44.43	46.24	58.62	59.91	60.32
Dec 00	50.07	49.67	47.67	51.74	50.73	50.62	59.36	60.32	60.99
June-01	47.33	40.90	49.50	37.57	41.67	45.24	58.93	58.86	60.39
Dec-01	ND	ND	ND	ND	ND	ND	61.75	63.93	64.75
June-02	ND	ND	ND	ND	51.86	ND	61.19	62.49	63.03
Dec-02 System On	41.55	34.85	50.34	39.03	44.66	46.40	60.43	62.12	62.91
Dec-02 System Off	56.76	55.35	55.79	55.90	under water	under water	62.36	63.86	64.62
Jun 03	44.15	39.55	46.78	38.78	42.47	43.35	61.21	63.04	63.39
Jan 04	39.19	33.65	49.46	38.07	42.05	45.89	59.81	61.79	62.37
Jun 04	39.45	40.77	44.42	36.94	41.62	43.86	60.97	60.69	60.56
Dec 04	57.38	45.50	45.39	38.11	41.77	43.67	61.37	63.10	63.91
Jun 05	54.14	NM	NM	40.38	45.56	48.02	63.11	64.54	65.01
Dec 05	50.03	31.09	47.94	36.26	40.48	42.51	41.65	54.15	51.23
Jun 06	50.83	40.51	46.54	32.58	38.54	40.04	43.35	50.17	34.36
Dec 06	49.80	40.93	47.81	33.03	37.92	41.60	43.30	47.98	48.94
Jun 07	49.48	31.31	47.44	32.46	39.08	39.81	43.30	47.42	54.76
Dec 07	50.06	55.10	50.50	54.84	54.55	40.63	44.00	52.07	57.96
Jun 08	44.74	50.48	47.46	33.17	38.61	38.26	49.95	50.95	54.47
Dec 08	42.07	39.44	44.94	38.15	42.19	41.73	43.43	54.60	54.00
Jun 09	46.28	41.41	44.11	35.51	40.33	41.41	37.55	50.32	54.96
Dec 09	45.82	40.79	32.12	34.91	38.16	53.60	43.09	49.52	54.24
Jun 10	55.83	39.04	43.22	36.17	37.19	53.73	39.01	51.02	56.02
Dec 10	34.56	36.49	50.08	32.83	36.61	34.74	42.54	46.54	52.32

NM - Water elevation not measured

Source: UES, 2010

Table 1.
HISTORIC WATER ELEVATIONS
SHERWOOD MEDICAL INDUSTRIES NPL SITE-OPERABLE UNIT 1
DELAND FLORIDA

Floridian Aquifer										
Date	Upper Floridan							Lower Floridan		
	MW-201	MW-204	MW-206	MW-207	FA-1	FA-2	FA-3	MW-202	MW-203	MW-205
Jun 95	36.73	34.83	Wells Installed July 2002		ND	34.09	34.69	ND	31.52	32.79
Dec 95	39.51	39.99			ND	35.97	36.26	ND	34.88	35.10
Jun 96	38.37	35.92			ND	35.01	35.51	ND	32.83	33.84
Dec 96	39.77	37.20			ND	36.30	38.84	ND	34.22	35.12
Jun 97	37.84	35.79			ND	34.89	35.53	ND	32.69	33.30
Dec 97	39.72	37.54			ND	38.56	ND	ND	33.45	34.95
Jun 5 - 98 System on	ND	ND			ND	ND	ND	ND	ND	ND
Jun 11 - 98 Sys Off	36.55	34.52			ND	33.78	33.75	ND	31.74	32.68
Dec 98	39.04	36.94			ND	36.04	36.36	ND	34.04	34.39
Jun 99	36.0	33.31			ND	32.42	33.05	ND	29.98	ND
Dec 99	39.01	35.99			36.79	36.28	36.48	ND	32.72	34.14
Jun 00	35.01	32.42			34.20	31.67	32.01	ND	28.42	31.59
Dec 00	36.40	33.77			35.88	33.0	33.84	ND	30.13	31.16
June-01	36.09	33.84			35.69	32.80	34.08	ND	30.29	31.0
Dec-01	ND	38.27			40.06	37.84	ND	ND	35.47	35.80
June-02	ND	ND			ND	ND	ND	ND	ND	ND
Dec-02 System On	40.94	38.25	39.52	39.05	39.98	37.72	38.35	34.94	34.78	35.54
Dec-02 System Off	ND	41.11	40.59	40.17	ND	ND	ND	36.41	36.81	38.27
Jun 03	40.18	37.68	36.86	38.59	39.36	36.75	37.42	27.39	34.20	35.27
Jan 04	35.95	33.15	34.82	35.60	34.12	32.15	33.36	31.00	29.58	30.20
Jun 04	38.63	36.32	37.39	36.96	37.78	38.97	38.28	33.00	33.06	33.92
Dec 04	41.71	39.18	40.34	39.83	40.53	38.62	39.07	36.79	36.63	37.26
Jun 05	21.00	23.79	28.44	36.12	30.76	33.37	29.74	29.15	23.64	25.88
Dec 05	42.26	ND	41.56	41.31	41.23	39.41	38.00	37.11	37.32	38.11
Jun 06	38.23	36.42	36.94	35.97	36.94	35.97	ND	32.76	32.79	33.47
Dec 06	38.56	41.46	36.47	35.89	37.28	37.11	34.55	33.01	32.71	33.28
Jun 07 *	35.49	32.77	33.89	33.05	34.18	31.96	32.25	29.81	30.18	30.95
Dec 07	38.45	35.87	39.65	No access, Not Measured	37.44	35.30	35.48	32.63	32.81	33.47
Jun 08	34.83	32.54	31.01		42.90	35.38	39.11	29.42	29.97	30.38
Dec 08	39.74	36.94	36.11		38.36	38.25	38.48	34.70	34.75	35.07
Jun 09	40.19	38.63	39.54		39.83	37.85	37.73	34.93	35.40	35.84
Dec 09	ND	37.26	38.74		38.93	37.42	37.22	34.76	34.98	35.77
Jun 10	38.96	36.57	37.57		38.01	35.83	36.07	33.89	33.21	34.78
Dec 10	ND	34.22	35.20		35.85	33.94	33.85	31.62	31.83	29.97

Note: * Comprehensive set of Floridan Aquifer water elevations (within 8-hr period) not completed. Elevations derived from well sampling logs.

NM - Water elevation not measured

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

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Surficial Aquifer Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
MW-101	PCE	<3.0	<3.0	<3.0	**4.1/5.2**	<1.0	<1.0	<3.0	<3.0	<3.0/<3.0	<3.0	<3	<3/<3	0.8 I	1.4	<0.65	1.9	**11**	0.69 I	0.89 I	0.73 I	0.59 I	<0.43
	TCE	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	1.1	<1	<1/<1	1	1.1	<0.71	1.2	1.9	0.50 I	0.48 I	<0.39	0.41 I	<0.39
	Acetone	<50	<50	<50	<50/<50	<50	<50	<50	<50	<50/<50	<50	<50	<50/<50	<3	<2.6	<2.6	<0.74	NA	<1.5	<1.0	<1.0	7.4	10
	cis 1,2-DCE	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1	<1/<1	<0.3	<0.75	<0.75	0.92 I	0.43 I	<0.22	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1	<1/<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1	<1/<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium	<10	<10	<10	<10/<10	<10	<10	<10	<10	10/<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	14	11/<10	Sampled	5.2 I	1.71 I	Sampled	2.29 I	Sampled	<4.0	Sampled	<6.7	Sampled
	Manganese										<50	<50	<50/<50	annually	<0.320	6.89 I	annually	7.92 I	annually	5.74 I	annually	5.85 I	annually
MW-102	PCE	**170/220**	**12**	**160**	**55**	**65/60**	**47**	**50**	<3.0	**64**	<3.0	**51**	<3	**27**	<0.65	**13**	1.4	**14**	**3.3**	**13**	2.2	**14**	0.83 I
	TCE	**9.4I/12**	1.1	**12**	**4.6**	**6.5/6.3**	**4.8**	**6.5**	<1.0	**9.6**	<1.0	**11**	<1	**8**	<0.71	**6.6**	0.75 I	**5**	0.63 I	**4.6**	<0.39	**7.9**	0.83 I
	Acetone	<250/<50	<50	< 50	<50	<50/<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	<1.5	<1.0	<1.0	<1.0	9.2
	cis 1,2-DCE	<5.0/2.7I	<1.0	2.4	<1.0	2.0/2.0	1.2	1.3	<1.0	1.6	<1.0	1	<1	1	<0.75	7.4	0.49 I	1.4	0.50 I	0.93 I	<0.41	2.5	0.66 I
	trans 1,2-DCE	<5.0/<1.0	<1.0	5.3	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<5.0/<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium	<10/<10	<10	< 10	<10	<10/<10	<10	<10	<10	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	<0.980	<0.980	Sampled	<1.1	Sampled	<4.0	Sampled	na	Sampled
	Manganese										<50	<50	<50	annually	<0.320	9.82 I	annually	7.04 I	annually	5.45 I	annually	na	annually
MW-103	PCE	**300**	**1,300**	**1,200**	**910/760**	**1200/1200**	**820**	**700**	**760**	**610**	**430**	**73**	**42**	**8**	**200**	**34**	**23**	**1200/1100**	**13**	<0.43	<0.43	<0.43	<0.43
	TCE	**22I**	**34**	**46**	**38/36**	**35/39**	**28**	**30**	**12**	<50	**8.6**	**8**	**4**	**150**	**130**	**160**	**65**	**120/130**	**86**	**29**	**3.4**	3	**5.2**
	Acetone	<1000	<1,000	< 50	<1,000	<750/<750	<1000	<500	<500	<2,500	<250	<50	<50	<3	<2.6	<2.6	<0.74	NA	5.7	<1.0	3.7 I	6.8	8.2
	cis 1,2-DCE	<20	<20	24	<20/9.3	19/17	<20	20	21	<50	11	8	7	**168**	**72**	**180**	**120**	38/42	22	45	18	22	16
	trans 1,2-DCE	<20	<20	1.3	<20<1.0	<15/<15	<20	<10	<10	<50	<5.0	1	<1	2	1.8	24	2.5	0.93 I/1.4	0.50 I	<0.47	<0.47	<0.47	<0.47
	VC	<20	<20	**2.6**	<20/<1.0	<15/<15	<20	<10	<10	<50	<5.0	<1	<1	<0.5	**1.1**	**2.3**	**3.1**	0.62 I/0.43 I	0.23 I	**2.3**	**1.4**	**1.2**	**3.5**
	Chromium	<10	<10	< 10	<10/10	<10/<10	<10	<10	<10	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	**51.1**	**24.7**	Sampled	**18.1/18.5**	Sampled	**22.4**	Sampled	**19.8**	Sampled
	Manganese										<50	<50	<50	annually	<0.320	3.51 I	annually	<3.9/<3.9	annually	3.42 I	annually	2.18 I	annually
MW-104	PCE	**250**	**190**	**77**	**95**	**49**	**90**	**230**	**71**	**85**	**370**	**140**	**70**	**86**	**43**	**14**	**42**	**180**	**640**	**950**	**270**	**330**	**190**
	TCE	**24**	**21**	**8.0**	<1.0	**9.6**	**15**	**53**	**17**	**21**	**60**	**43**	**24**	**41**	**45**	**45**	**140**	**370**	**240**	**99**	**80**	**88**	**28**
	Acetone	<250	<50	< 50	<50	<50	<50	<50	<50	<250	<250	<50	<50	<3	<2.6	<2.6	<0.74	NA	7.5	<1.0	<5.0	6.3	16
	cis 1,2-DCE	<5.0	8.6	7.4	3.0	4	3	10	3.5	6.2	7.8	11	4	10	20	17	31	30	18	26	13	26	5.4
	trans 1,2-DCE	<5.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1	<1	0.9 I	<0.83	3.3	3	2.3	0.99 I	2.5	<2.4	2.9	0.66 I
	VC	<5.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1	<1	0.6 I	**2.3**	**1.9**	**1.6**	**2.0**	1.0	0.93 I	<2.4	**1.3**	<0.48
	Chromium	<10	12	< 10	<10	NA	<10	<10	<10	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									13	24	<10	Sampled	8.54 I	3.89 I	Sampled	**24**	Sampled	5.54 I	Sampled	8.28 I	Sampled
	Manganese										<50	<50	<50	annually	<0.320	0.329 I	annually	<3.9	annually	<2.0	annually	5.71 I	annually
MW-105	PCE	**94/86**	**97**	**39**	**14**	**4.8**	**22**	<3.0	<3.0	**23**	<15	<3	<3	2	**35**	1.1/<0.65	**<4.7/5.4 I**	<0.20	<0.20	0.65 I	<4.3	3	<2.2
	TCE	**250/250**	**320**	**240**	**40**	**22**	**62**	**77**	**18**	**190**	**150**	**110**	**58**	**521**	**940**	**550/150**	**470/450**	**110**	0.65 i	**780**	**390**	**190**	**240**
	Acetone	<500/<500	<500	< 250	<50	<50	<50	<50	<50	<250	<250	<50	<50	<3	<2.6	<2.6/26	<7.4/<7.4	NA	<1.5	<1.0	<10	5.1	<10
	cis 1,2-DCE	**90/100**	**120**	**130**	13	19	23	69	60	**150**	**200**	**250**	**86**	**198**	**390**	**250/110**	**700/730**	**76**	0.76 I	**770**	**630**	**660**	**470**
	trans 1,2-DCE	<10<10	<10	< 5.0	<1.0	<1.0	<1.0	<1.0	2.1	<5.0	<5.0	3	11	5	4.7	34/7.3	15/15	<0.43	<0.43	6.3	6.2 I	4.5	2.8 I
	VC	**23/25I**	<10	**7.4**	<1.0	<1.0	<1.0	**1.6**	**2.6**	**20**	**22**	**14**	**3**	**20**	**24**	**21/4.1**	**25/29**	<0.22	<0.71	**12**	**19**	**14**	**11**
	Chromium	<10/<10	<10	< 10	<10	NA	<10	<10	<10	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	1.35 I	<0.980/<0.980	Sampled	<1.1	Sampled	<4.0	Sampled	<6.7	Sampled
	Manganese										<50	<50	<50	annually	<0.320	<0.320/<0.320	annually	**57.8**	annually	<2.0	annually	1.78 I	annually

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Arsenic 10 µg/l, Manganese 50 ug/l. Results in bold exceed criteria.

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

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Surficial Aquifer Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
MW-106	PCE	2,700	3400/3500	1,400	2400/2600	610	430	1200/880	490	1,400	2100/610	1100/1200	870	949	2900/1900	2000	1800	970	200	950	460	360	<2.2
	TCE	190	230/240	120	<20/<20	54	49	110/93	57	130	150/160	180/210	160	170	160/150	240	410	170	520	130	200	160	94
	Acetone	<1000	<1000	< 1000	<1,000	<500	<250	<1000/<500	<1000	<5,000	<500/<50	<1000/<50	<500	<30	<2.6/<2.6	<2.6	<18	NA	5.6	<1.0	<20	13	<10
	cis 1,2-DCE	81	82/81	60	36/45	22	24	49/45	34	<100	34/53	130/210	970	1830	140/140	140	1000	480	540	370	490	390	1000
	trans 1,2-DCE	<20	<20	< 20	<20/<20	<10	<5.0	<20/<10	<20	<100	<10/<1.0	<20/1	49	<8	<0.83/<0.83	9.4	<14	<2.2	1.7	1.4	<9.4	0.58 I	<2.4
	VC	<20	<20	< 20	<20/<20	<10	<5.0	<20/<10	<20	<100	<10/<1.0	<20/<1	25	52	2.2/2.5	0.91 I	<23	1.9	0.85 I	7	<9.6	1.8	2.8 I
	Chromium	<10	25/24	< 10	<10/<10	<10	<10	<10/ NA	<10	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10/<10	<10/<10	<10	Sampled	1.25 I	<0.980	Sampled	<1.1	Sampled	5.91 I	Sampled	<6.7	Sampled
	Manganese										<50/<50	<50/<50	<50	annually	<0.320	6.49 I	annually	19.9	annually	230	annually	28.3	annually
MW-107	PCE	<3.0	44	10	6.2/5.1	4.3	12/5.2	14	7.5/9.7	4.6	4.2	4	4	8	11	4.9	1.4	1.2	0.26 I	4.0	<0.43	2.2	<0.43
	TCE	1.4I	6.6	2.6	<1.0/<1.0	6.3	6.6/3.4	6.9	4.9/4.9	3.2	6.1	5	5	7	3.3	3.6	5.8	3.5	3.0	3.3	3.4	1.9	1.8
	Acetone	<50	<50	< 50	<50/<50	<50	<50/<50	<50	<50/<50	<50	<50	<50	<50	<3	<2.6	2.9 I	2.3 I	NA	4.7	4.3	<1.0	<1.0	8.1
	cis 1,2-DCE	<1.0	1.2	< 1.0	<1.0/<1.0	1.0	<1.0/<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1	<1	<0.3	1.4	0.92 I	2.6	2.3	2.8	2.8	1.9	3	0.67 I
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0/<1.0	<1.0	<1.0/<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	< 1.0	<1.0/<1.0	<1.0	<1.0<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium	22	83	10	36/37	NA	37/39	11	<10/<10	18	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	3.88 I	2.28 I	Sampled	3.56 I	Sampled	4.96 I	Sampled	8.78 I	Sampled
	Manganese										<50	<50	<50	annually	<0.320	2.49 I	annually	<3.9	annually	4.10 I	annually	6.25 I	annually
MW-108	PCE	70	42	230	30	110	26	230	210	260	120	200	170	311	160	77	190	84	13	68/140	14	56	110
	TCE	3.2	2.6	19	<1.0	7.5	1.6	17	10	15	9.4	14	12	18	6.7	3.4	11	4.8	0.97 I	5.2/7.8	1.5	3.4	6.9
	Acetone	<50	<50	< 50	<50	<50	<50	<50	<250	<250	<50	<50	<50	<15	<2.6	<2.6	<0.74	NA	2.9 I	<1.0/<1.0	<1.0	5.4	<2.1
	cis 1,2-DCE	<1.0	<1.0	2.3	<1.0	<1.0	<1.0	1.8	<5.0	<5.0	<1.0	<1	<1	<2	<0.75	<0.75	1.6	0.39 I	<0.22	0.55 I/0.79 I	1.8	0.41 I	0.45 I
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1	<1	<4	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47/<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1	<1	<2	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48/<0.48	<0.48	<0.48	<0.48
	Chromium	<10	<10	<10	41	<10	370	<10	15	14	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	2.09 I	2.85 I	Sampled	1.79 I	Sampled	<4.0/<4.0	Sampled	<6.7	Sampled
	Manganese										<50	<50	<50	annually	<0.320	18.1	annually	28.1	annually	116/117	annually	81.6	annually
MW-109	PCE	31	34	25	21	6.8/6.4	17	22	26	18	15	17	19	11	7.2	3.6	12	2.7	7.8	6.8	3.2	4	6.6
	TCE	<1.0	1.0	< 1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1	<0.3	<0.71	<0.71	0.32 I	<0.26	<0.26	0.39 I	<0.39	<0.39	<0.39
	Acetone	<50	<50	< 50	<50	<50/<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	2.3 I	<1.0	<1.0	3.7 I	<2.1
	cis 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.75	<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	< 1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<048	<0.48	<0.48	<0.48
	Chromium	<10	13	< 10	<10	<10/<10	71	<10	22	16	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	1.26 I	<0.980	Sampled	<1.1	Sampled	<4.0	Sampled	<6.7	Sampled
	Manganese										<50	68	<50	annually	<0.320	18	annually	14.8	annually	13.5	annually	17.3	annually
MW-110	PCE	8.6	5.8	4.4	4.2	4.1	<3.0	<3.0	3.5	<3.0	<3.0	<3.0	<3.0	1	9.4	1.1	1.2	1.1	0.81 I	0.50 I	<0.43	0.94 I	0.53 I
	TCE	1.0I	<1.0	4.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	1.1	<0.71	0.30 I	0.31 I	0.28 I	<0.39	<0.39	<0.39	<0.39
	Acetone	<50	<50	< 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	2.5 I	<1.0	<1.0	5.1	<2.1
	cis 1,2-DCE	<1.0	<1.0	6.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	0.75 I	<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium	<10	<10	< 10	<10	<10	<10	<10	<10	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	NA	Sampled	<0.980	<0.980	Sampled	<1.1	Sampled	<4.0	Sampled	<6.7	Sampled
	Manganese										<50	<50	NA	annually	2.75 I	28.7	annually	12.1	annually	3.10 I	annually	8.61 I	annually

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Arsenic 10 µg/l, Manganese 50 ug/l. Results in bold exceed criteria.

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

Surficial Aquifer Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
MW-111	PCE	<15	<15	**7.9**	**3.6**	<3.0/<3.0	<5.0	**4.2**	**5.3**	<3.0	<3.0	<3	<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE	**12J**	**16**	**9**	**14**	**5.0/5.0**	**13**	**27**	**19**	**16**	**22**	**15**	<1	2	<0.71	<0.71	0.39 J	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
	Acetone	<250	<250	< 50	<50	<50/<50	<250	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	2.3	3.3	<1.0	<1.0	8
	cis 1,2-DCE	10J	10	15	<1.0	10/9.0	14	11	10	13	19	16	24	24	6	3.8	8.8	1.6	3.7	2.7	1.8	2.8	1.7
	trans 1,2-DCE	<5.0	<5.0	< 5.0	<1.0	<1.0/<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1	4	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<5.0	<5.0	< 1.0	<1.0	<1.0/<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium	16	18	15	<10	10/<10	14	<10	11	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	4.12 J	2.10 J	Sampled	4.56 J	Sampled	<4.0	Sampled	<6.7	Sampled
	Manganese										<50	<50	<50	annually	<0.320	17.1	annually	<3.9	annually	<2.0	annually	0.84 J	annually
MW-112	PCE	<3.0	**5.4**	**4.6**	<3.0	<3.0	<3.0/<3.0	<3.0	<3.0	<3.0/<3.0	<3.0/<3.0	<3	<3	<0.6	<0.65	<0.65	<0.47	0.37 J	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE	<1.0	<1.0	2.2	<1.0	1.9	<1.0/<1.0	<1.0	1.1	<1.0/<1.0	<1.0/1.0	2	<1	<0.3	<0.71	1.5	**3.2**	1.3	<0.26	2.2	<0.39	**4.2**	<0.39
	Acetone	<50	<50	<50	<50	120	<50/<50	<50	<50	<50/<50	<50/<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	<1.5	<1.0	<1.0	6.6	18
	cis 1,2-DCE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	2.5	<1.0	<1.0/<1.0	<1.0/<1.0	<1	<1	<0.3	<0.75	<0.75	1.1	<0.22	0.69 J	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0/<1.0	<1.0/<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0/<1.0	<1.0/<1.0	<1	<1	<0.5	<0.52	<0.52	0.98 J	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium	56	39	23	20	21	48/42	<10	<10	10/<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10/<10	<10	<10	Sampled	<0.980	<0.980	Sampled	<1.1	Sampled	<4.0	Sampled	<6.7	Sampled
	Manganese										<50/<50	<50	<50	annually	<0.320	<0.320	annually	<3.9	annually	<2.0	annually	1.51 J	annually
MW-113	PCE	<3.0	<3.0<3.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE	<1.0	<1.0/<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.71	<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
	Acetone	<50	<50/<50	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	2.4 J	<1.0	<1.0	<1.0	<2.1
	cis 1,2-DCE	<1.0	<1.0/<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.6	<0.75	<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE	<1.0	<1.0/<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0/<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium	<10	<10/<10	< 10	<10	<10	<10	<10	<10	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	1.62 J	<0.980	Sampled	<1.1	Sampled	<4.0	Sampled	<6.7	Sampled
	Manganese										<50	<50	<50	annually	<0.32	5.28 J	annually	5.25 J	annually	4.13 J	annually	6.3 J	annually
MW-114	PCE	**50/47**	**28**	**56**	**30**	**44**	**29**	**85**	**97**	**44**	**83**	**52**	**200**	**282**	**110**	**220**	**200**	**240**	**16**	**96**	<0.43	**160**	**45**
	TCE	**11/10**	**5.3**	**6.9**	2.0	**6.3**	**5.8**	**11**	**14**	**6.5**	**8.8**	**8**	**14**	**19**	**5.8**	**23**	**11**	**15**	**3.3**	**9.6**	<0.39	**13**	**5.1**
	Acetone	<50/<50	<5.0	< 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<15	<2.6	<2.6	<0.74	NA	2.4	<1.0	<1.0	4.5 J	<2.1
	cis 1,2-DCE	4.2/4.1	1	6.5	<1.0	3.0	1.6	1.2	1.1	<1.0	<1.0	1	<1	4 J	0.96 J	6.2	2.4	4.8	0.35 J	3.2	40	1.2	<0.41
	trans 1,2-DCE	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<4	<0.83	<0.83	<0.58	<2.2	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0/<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<2	<0.52	<0.52	<0.91	<1.1	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium	<10/<10	<10	< 10	<1.0	<10	<10	<10	<10	<10	No longer analyzed												
	Arsenic	Compounds not tracked until 12/04									<10	<10	<10	Sampled	2.62 J	<0.980	Sampled	<1.1	Sampled	<4.0	Sampled	<6.7	Sampled
	Manganese										<50	<50	<50	annually	<0.320	3.6 J	annually	5.15 J	annually	<2.0	annually	3.3 J	annually
MW-115	PCE	Well Installed July, 2002					**30**	**190**	**240/280**	**230 J**	**130/120**	**200**	**180**	**193**	**93**	**150**	**170**	**120**	**84**	**54**	**42**	**65**	**63**
	TCE						2.0	**9.3**	**7.6/9.0**	**7.7**	**7.2/6.9**	**10**	**8**	**8**	**4.6**	**6.3**	**8.2**	**5.3**	**6.0**	2.2	**3**	**3.7**	**3.8**
	Acetone						<50	<50	<100/<250	<50	<50/<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	<1.5	<1.0	<1.0	4.2 J	<2.1
	cis 1,2-DCE						<50	3.5	2.2/<5	3.0	2.4/2.4	3	2	2	1.2	0.95 J	1.6	0.60 J	0.81 J	<0.41	0.50 J	0.69 J	0.53 J
	trans 1,2-DCE						<1.0	<1.0	<2/<5	<1.0	<1.0/<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC						<1.0	<1.0	<2/<5	<1.0	<1.0/<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Chromium						NA	<10	<10/<10	<10	No longer analyzed												
	Arsenic						Compounds not tracked until 12/04				<10/<10	<10	<10	Sampled	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese										<50/<50	<50	<50	annually	NA	NA	NA	NA	NA	NA	NA	NA	NA

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Arsenic 10 µg/l, Manganese 50 ug/l. Results in bold exceed criteria.

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

Surficial Aquifer Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
MW-116	PCE	Well Installed July, 2002					**77**	**6.6**	**12/12**	**6.8**	**7.5**	**10**	**9**	**13**	**9.2**	**4.4**	**12**	**6.4**	**7.2**	**4.2**	**3.8/1.8**	**4**	**4.8**
	TCE						**5.7**	**3.1**	**4.2/4.2**	**6.0**	**7.4**	**8**	**7**	**9**	**5.3**	**4.1**	**7.2**	**6.1**	**5.4**	**4.2**	**5.6/3.4**	**5.3**	**6.4**
	Acetone						<50	<50	<50/<50	<50	<50	<50	<50	4 I	<2.6	<2.6	<0.74	NA	3.6 I	<1.0	6.2/<1	8.8	12
	cis 1,2-DCE						1.6	2.6	2.6/2.6	4.2	3.2	5	6	8	4.8	2.7	7.4	4.2	3.2	4.3	4.1/2.6	4.1	2.7
	trans 1,2-DCE						<1.0	<1.0	<1/<1	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.83	1.2	<0.43	<0.43	<0.47	<0.47/<0.47	<0.47	<0.47
	VC						<1.0	<1.0	<1/<1	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48/<0.48	<0.48	<0.48
	Chromium						NA	NA	<10/<10	<10	No longer analyzed												
	Arsenic						Compounds not tracked until 12/04				<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese										<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-117	PCE	Well Installed July, 2002					<3.0	<3.0	<3.0	<3.0/<3.0	<3.0	**3**	**7**	**6**	**6.8**	**14**	**12**	**10**	**12**	**16**	**8.8**	**4.4**	**29**
	TCE						<1.0	<1.0	1.2	1.4/1.2	2.5	**3**	**4**	**4**	2.7	**5.5**	**5**	**4.4**	**5.1**	**5.2**	**6.2**	**3.9**	**7.2**
	Acetone						<50	<50	<50	<50/<50	<50	<50	<50	<3	<2.6	<2.0	<0.74	NA	<1.5	<1.0	<1.0	8.5	6.8
	cis 1,2-DCE						<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	1	<1	1	0.75 I	1.1	1.6	0.67 I	1.0	0.98 I	1.2	0.64 I	0.94 I
	trans 1,2-DCE						<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1	<1	<0.8	<0.83	<0.20	<0.58	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC						<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1	<1	<0.5	<0.52	<0.40	<0.91	<0.22	<0.22	<0.48	<0.48	<0.083	<0.48
	Chromium						NA	<10	<10	<10/<10	No longer analyzed												
	Arsenic						Compounds not tracked until 12/04				<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese										<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-118	PCE	Well Installed July, 2002					<3.0	**23/28**	**33**	**14**	**16**	No access to well	**7**	**15**	**3.9**	**3.3**	Access Denied						
	TCE						<1.0	2.6/3.0	**5.8**	1.4	1.5		2	**4**	1.1	1.0							
	Acetone						<50	<50/<50	<50	<50	<50		<50	<3	<2.6	<2.0							
	cis 1,2-DCE						<1.0	1.1/1.2	3.0	<1.0	<1.0		<1	1	<0.75	<0.20							
	trans 1,2-DCE						<1.0	<1.0/<1.0	<1.0	<1.0	<1.0		<1	<0.8	<0.83	<0.20							
	VC						<1.0	<1.0/<10	<1.0	<1.0	<1.0		<1	<0.5	<0.52	<0.40							
	Chromium						NA	<10/<10	<10	<10	NA		No longer analyzed										
	Arsenic						Compounds not tracked until 12/04				NA		NA	NA	NA	NA							
	Manganese										NA		NA	NA	NA	NA							
MW-119	PCE	Well Installed March, 2005									**71**		**56**	**48**	**20**	**20**	**25**	**9.6**	**6.4**	**3.8**	2.6	1.1	0.88 I
	TCE										**3**		2	2	1.1	1.5	1.3	0.85 I	1.2	0.90 I	**3.2**	2.8	0.59 I
	Acetone										<50		<50	<3	<2.6	<2.6	4.1	NA	<1.5	<1.0	<1.0	<1.0	9.6
	cis 1,2-DCE										<1		<1	<0.3	<0.75	<0.75	0.55 I	<0.22	0.41 I	9.8	0.83 I	1.1	<0.41
	trans 1,2-DCE										<1		<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC										<1		<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Arsenic										14		<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese										<50		<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-120	PCE	Well Installed March, 2005									**170**		**180**	**150**	**110**	**89**	**120**	**85**	**5.5**	**35**	Well access blocked		**38/37**
	TCE										**10**		**8**	**7**	**5.2**	**5**	**6.8**	**5.2**	0.70 I	1.7			2.7/2.7
	Acetone										<50		<50	<3	<2.6	<2.6	<0.74	NA	<1.5	<1.0			<2.1/<2.1
	cis 1,2-DCE										2		2	2	1.1	0.94 I	1.1	0.57 I	<0.22	<0.41			<0.41/<0.41
	trans 1,2-DCE										<1		<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47			<0.47/<0.47
	VC										<1		<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48			<0.48/<0.48
	Arsenic										<10		<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Manganese										<50		<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Chromium-100 µg/l. Results in bold exceed criteria.

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

(Page 5 of 11)
Surficial Aquifer Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
MW-121	PCE	Well Installed May, 2007														**51**	**48**	**34**	**22**	**34/28**	1.8	**3.5**	**31**
	TCE															**5.2**	**6.3**	**4.3**	**3.6**	**4.5/4.1**	<0.39	<0.39	**4.6**
	Acetone															<2.0	<0.74	NA	<1.5	<1.0/<1.0	<1.0	5.3	<2.1
	cis 1,2-DCE															1.1	0.90 I	0.57 I	0.71 I	1.1/0.94 I	<0.41	<0.41	0.93 I
	trans 1,2-DCE															<0.20	<0.58	<0.43	<0.43	<0.47<0.47	<0.47	<0.47	<0.47
	VC															<0.40	<0.91	<0.22	<0.22	<0.48/<0.48	<0.48	<0.48	<0.48
	Arsenic															NA	NA	NA	NA	NA	NA	NA	NA
	Manganese															NA	NA	NA	NA	NA	NA	NA	NA
MW-122	PCE	Well Installed May, 2007														**11**	**16**	0.23 I	**5.8**	**7.9**	1.8	3	0.43 I
	TCE															1.6	**4.3**	2.2	**3.5**	**13**	**20**	**12**	**12**
	Acetone															<2.0	<0.74	NA	<1.5	<1.0	<1.0	17	<2.1
	cis 1,2-DCE															0.35 I	3.4	2.3	4.6	5.7	27	3.1	36
	trans 1,2-DCE															<0.20	1.5	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC															<0.40	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
	Arsenic															NA	NA	NA	NA	NA	NA	NA	NA
	Manganese															NA	NA	NA	NA	NA	NA	NA	NA
MW-123	PCE	Well Installed May, 2007														**5.7**	12/11	**6.9/6.5**	**5.4**	**12**	**3.9/3.0**	**23**	<0.43
	TCE															1.1	3.8/3.4	2.6/2.6	**6.9**	2.3	**6.8/6.4**	**3.7**	**12**
	Acetone															<2.0	<0.74/<0.74	na	<1.5	<1.0	<1.0/<1.0	<1.0	13
	cis 1,2-DCE															<0.20	0.39 I/0.83 I	0.66 I/0.67 I	0.55 I	0.84 I	18/17	0.81 I	14
	trans 1,2-DCE															<0.20	<0.58/<0.58	<0.43/<0.43	<0.43	<0.47	<0.47/<0.47	<0.47	<0.47
	VC															<0.40	<0.91/<0.91	<0.22/<0.22	<0.22	<0.48	<0.48/<0.48	<0.48	<0.48
	Arsenic															NA	NA	NA	NA	NA	NA	NA	NA
	Manganese															NA	NA	NA	NA	NA	NA	NA	NA
MW-124	PCE	Well Installed May, 2007														<0.65	0.53 I	<0.20	<0.20	<0.43	<0.43	<0.099	<0.43
	TCE															<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.13	<0.39
	Acetone															<2.6	<0.74	NA	<1.5	8.9	<1.0	<1.5	9
	cis 1,2-DCE															<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.075	<0.41
	trans 1,2-DCE															<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC															<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.083	<0.48
	Arsenic															NA	NA	NA	NA	NA	NA	NA	NA
	Manganese															NA	NA	NA	NA	NA	NA	NA	NA

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Chromium-100 µg/l. Results in bold exceed criteria.

Note: All concentrations ug/l
"I" indicates estimated value
123/321 represents results of QA duplicate sample

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

Lower Surficial Aquifer Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
IW-1	PCE	Well Installed December, 2001			Not Sampled	Not Sampled	Not Sampled	**22**	<30	<3.0	<3.0	<3	**80**	**5.8**	**4.5 I**	**6**	0.26 I	1.1	<0.43	<0.43	<0.43	0.55 I
	TCE							**180**	**190**	**28**	**140**	**70**	**242**	**26**	**20**	**190**	**8.4**	0.44 I	**4.6**	<0.39	**8.1**	1.5
	Acetone							<250	<500	<50	<50	<50	<3	<2.6	<13	<0.74	NA	<1.5	<1.0	<1.0	3.7 I	<2.1
	cis 1,2-DCE							**140**	**160**	**93**	**180**	**180**	**138**	**140**	**160**	**190**	**140**	**120**	59	**190**	**240**	**95**
	trans 1,2-DCE							<5.0	<10	<1.0	1.9	1	1	<0.83	<4.2	3.3	<0.43	0.98 I	<0.47	<0.47	2.4	<0.47
	VC							<5.0	<10	<1.0	<1.0	<1	0.7 I	<0.52	<2.6	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
IW-2	PCE	Well Installed February, 2005										<3	<0.6	<0.65	<0.65	0.70 I	<0.20	<0.20	<0.43	<0.43/<0.43	<0.099	<0.43
	TCE											<1	<0.3	<0.71	<0.71	<0.30	<0.26	<0.26	<0.39	<0.39/<0.39	<0.13	<0.39
	Acetone											<50	<3	<2.6	<2.6	<0.74	NA	<1.5	18	<1.0/<1.0	11	<2.1
	cis 1,2-DCE											<1	0.6 I	0.95 I	0.80 I	0.81 I	1.4	1.9	1.5	1.2/1.2	2.6	2.6
	trans 1,2-DCE											<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47/<0.47	<0.11	<0.47
	VC											<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	0.85 I/0.83 I	0.77 I	0.60 I
IW-6	PCE	Well Installed February, 2005										**180**	**279**	**140**	**24/30**	**100**	**36/33**	**9.8**	**5.7/2.9**	**4.8**	**10**	**4.5**
	TCE											**84**	**81**	**41**	**180/190**	**170**	**150/130**	**59**	**200/150**	**9.7**	**150**	**120**
	Acetone											<50	<3	<2.6	<13/<13	<3.7	NA	7.4	<1.0/<1.0	6.8	4.2 I	<2.1
	cis 1,2-DCE											23	29	14	29/29	32	21/18	23	28/22	8	25	24
	trans 1,2-DCE											<1	0.8 I	<0.83	<4.2/<4.2	<2.9	0.63 I/<0.43	<0.43	0.68 I/<0.47	<0.47	0.54 I	<0.47
	VC											<1	<0.5	<0.52	<2.6/<2.6	<4.6	**4.3/5.0**	**1.2**	<0.48/<0.48	0.57 I	<0.48	<0.48
IW-8	PCE	Well Installed February, 2005										**7**	<0.6/<0.6	<0.65/<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.099	<0.43
	TCE											**28**	**6/7**	**4/4.8**	**5.2**	**8.2**	**10**	0.93 I	<0.39	<0.39	<0.13	<0.39
	Acetone											<50	<3/<3	2.9 I/3.3 I	3.0 I	<0.74	NA	<1.5	29	3.6 I	<1.5	<2.1
	cis 1,2-DCE											30	24/25	28/24	30	39	67	5.1	7.7	17	6.4	6.8
	trans 1,2-DCE											<1	<0.8/<0.8	<0.83/<0.83	<0.83	10	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC											<1	<0.5/<0.5	<0.52/<0.52	**7.1**	**22**	0.38	**2.2**	**2.4**	**17**	**3.4**	**5.7**
IW-10	PCE	Well Installed February, 2005										<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.099	<0.43
	TCE											<1	<0.3	<0.71	<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.13	<0.39
	Acetone											<50	<3	4.8 I	<2.6	<0.74	NA	1.5 I	26	<1.0	<1.5	<2.1
	cis 1,2-DCE											<1	<0.3	<0.75	<0.75	0.77 I	<0.22	<0.22	<0.41	<0.41	<0.075	<0.41
	trans 1,2-DCE											<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC											<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.083	<0.48

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Chromium-100 µg/l. Results in **bold** exceed criteria.

Note: All concentrations ug/l

"I" indicates estimated value

123/321 represents results of QA duplicate sample

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

Lower Surficial Aquifer Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
IW-12	PCE	Well Installed February, 2005										**97**	**25**	**33**	**26**	**68**	**38**	**28**	**130**	**67**	**97**	**95**
	TCE											**60**	**322**	**180**	**130**	**270**	**180**	**180**	**370**	**210**	**240**	**170**
	Acetone											<50	<3	<2.6	2.8 I	<0.74	NA	<1.5	<1.0	<5.0	<3.0	9.6
	cis 1,2-DCE											32	46	35	18	59	28	24	50	31	37	33
	trans 1,2-DCE											2	3	1.9	1.2	4.2	1.6	1.6	3.2	2.4 I	2.3	1.9
	VC											<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<2.4	<0.17	<0.48
IW-13	PCE	Well Installed May, 2007													<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE														<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
	Acetone														<2.6	<0.74	NA	<1.5	40	4.4	<1.0	<2.1
	cis 1,2-DCE														<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE														<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC														<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
IW-18	PCE	Well Installed February, 2005										<3/<3	<0.6	<0.65	Not Sampled		<0.20	<0.20	<0.43	<0.43	<0.099	<0.43
	TCE											<1/<1	<0.3	<0.71			<0.26	<0.26	<0.39	<0.39	<0.13	<0.39
	Acetone											<50/<50	<3	<2.6			NA	<1.5	55	<1.0	<1.5	<1.0
	cis 1,2-DCE											<1/<1	<0.3	<0.75			<0.22	<0.22	<0.41	<0.41	<0.075	<0.41
	trans 1,2-DCE											<1/<1	<0.8	<0.83			<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC											<1/<1	<0.5	<0.52			<0.22	<0.22	<0.48	<0.48	<0.083	<0.48
IW-30	PCE	Well Installed May, 2007													<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.099	<0.43
	TCE														<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.13	<0.39
	Acetone														8.6	7.9	NA	<1.5	18	18	5.6	<2.1
	cis 1,2-DCE														<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.075	<0.41
	trans 1,2-DCE														<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC														<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.083	<0.48
IW-40	PCE	Well Installed May, 2007													<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.099	<0.43
	TCE														<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.13	<0.39
	Acetone														<2.6	<0.74	NA	<1.5	4.4	3.2	<1.5	<2.1
	cis 1,2-DCE														<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.075	<0.41
	trans 1,2-DCE														<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC														<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.083	<0.48

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Chromium-100 µg/l. Results in **bold** exceed criteria.

Note: All concentrations ug/l

"I" indicates estimated value

123/321 represents results of QA duplicate sample

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

Upper Floridan Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
MW-201	PCE	<3.0	<3.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43		<0.43	
	TCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.3	<0.71	<0.71	<0.30	<0.26	<0.26	<0.39		<0.39	
	Acetone	<50	<50	230	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	4.9 I	<2.6	<0.74	NA	<1.5	3.2 I	Well not available	55	Well not available
	cis 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.3	<0.75	<0.75	<0.34	<0.22	<0.22	<0.41		<0.41	
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47		<0.47	
	VC	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48		<0.48	
MW-204	PCE	<3.0	<3.0	< 3.0/<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43/<0.43
	TCE	<1.0	<1.0	< 1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.71	<0.71	<0.30	<0.26	<0.26	<0.37	<0.37	<0.39	<0.39/<0.39
	Acetone	<50	<50	< 50/<50	97	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	<1.5	<1.0	<1.0	14	<2.1/<2.1
	cis 1,2-DCE	<1.0	<1.0	< 1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.75	<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.41	<0.41/<0.41
	trans 1,2-DCE	<1.0	<1.0	< 1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47/<0.47
	VC	<1.0	<1.0	< 1.0/<1.0	<.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48/<0.48
MW-206	PCE	Well Installed July, 2002					<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<0.6	<0.65	<0.30	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.71	<0.30	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
	Acetone						<50	<50	<50	<50	<50	<50	<50	<3	4.9 I	<2.0	<0.74	NA	<1.5	22	<1.0	<1.0	<2.1
	cis 1,2-DCE						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.75	<0.20	0.46	<0.22	<0.22	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.8	<0.83	<0.20	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC						<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.5	<0.52	<0.40	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
MW-207	PCE	Well Installed July, 2002					<3.0	<3.0/<3.0	<3.0	<3.0	<3.0	<3.0	<3	<0.6	<0.65	<0.65	Access Denied						
	TCE						<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.71	<0.71							
	Acetone						<50	<50/<50	<50	<50	<50	<50	<50	<3	<2.6	2.8 I							
	cis 1,2-DCE						<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	1	0.7 I	<0.75	0.79 I							
	trans 1,2-DCE						<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.8	<0.83	<0.83							
	VC						<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.5	<0.52	<0.52							
FA-1	PCE	<3.0	<3.0/<3.0	< 3.0	<3.0	<3.0	<3.0/<3.0	<3.0	<3.0	<3.0	<3.0	<3	<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43/<0.43	<0.43	<0.43
	TCE	**26**	**41/37**	2.2	<1.0	**18**	**18/16**	**22**	**19**	**19**	**15**	**17**	**15**	**16**	**8.9**	**8.8**	**9.3**	**5.9**	**3.8**	2.1	2.3/1.9	1	0.72 I
	Acetone	<50	64/<50	< 50	<50	<50	<50/<50	<50	<50	<50	<50	<50	<50	<3	3.2 I	<2.6	<0.74	NA	<1.5	<1.0	<1.0/<1.0	7.4	5.3
	cis 1,2-DCE	28	37/33	14	24	42	32/28	45	34	39	41	35	35	45	30	29	**71**	36	30	48	52/43	47	43
	trans 1,2-DCE	<1.0	2.2/2.0	< 1.0	2.2	2	1.5/1.2	2.6	1.9	2.2	1.6	2	5	2	1.1	1.2	2.4	1.3	0.73 I	1.6	1.2/1.1	1	0.90 I
	VC	<1.0	<1.0/<1.0	**5.3**	**7.0**	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	0.81 I	0.90 I	**1.3**	0.22 I	0.27 I	<0.48	0.53 I/<0.48	0.59 I	0.77 I
FA-2	PCE	<3.0	<3.0	< 3.0/<3.0	<3.0	<3.0/<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<3	<0.6	<0.65/<0.65	<0.65/<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE	<1.0	<1.0	< 1.0/>1.0	<1.0	<1.0/<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1	1	2	1.2/1.6	<0.71/<0.71	1.6	1.2	1.6	**5.1**	1.2	1.5	2.5
	Acetone	110	100	440/440	<50	130/63	<50	<50	<50	<50	<50	<50	<50	<3	<2.6/<2.6	<2.6/<2.6	<0.74	NA	2.1	<1.0	<1.0	7.5	<2.1
	cis 1,2-DCE	1.3I	1.7	1.6/1.6	2.2	2.0/1.0	2.2	3.0	2.9	3.0	2.0	2	2	5	3.9/5.3	2.7/2.6	7.6	2.4	4.7	16	3.2	6.5	9.5
	trans 1,2-DCE	<1.0	<1.0	< 1.0/<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83/<0.83	<0.83/<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	< 1.0/<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52/<0.52	<0.52/<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
FA-3	PCE	<3.0	<3.0	< 3.0	<3.0	<3.0	**46**	<3.0	<3.0	<3.0	<3.0/<3.0	<3	<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE	<1.0	<1.0	< 1.0	<1.0	<1.0	**5.9**	<1.0	<1.0	<1.0	<1.0/<1.0	<1	<1	<0.3	1.1	<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
	Acetone	<50	<50	< 50	<50	<50	<50	<50	<50	<50	<50/<50	<50	<50	<3	2.8 I	<2.6	<0.74	NA	<1.5	<1.0	<1.0	10	<2.1
	cis 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	<1.0/<1.0	<1	<1	<0.3	<0.75	<0.75	<0.34	<0.22	<0.22	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Chromium-100 µg/l. Results in bold exceed criteria.

Note: All concentrations ug/l

"I" indicates estimated value

123/321 represents results of QA duplicate sample

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

Lower Floridan Aquifer

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
MW-202	PCE	<3.0	<3.0	<3.0	Not Sampled Pump Out	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<3/<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43/<0.43
	TCE	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1/<1	<0.3	<0.71	<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39/<0.39
	Acetone	<50	<50	<50		<50	<50	<50	<50	<50	<50	<50	<50/<50	<3	<2.6	<2.6	<0.74	NA	<1.5	4.0	<1.0	<1.0	<2.1/<2.1
	cis 1,2-DCE	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1/<1	0.7 I	<0.75	<0.75	0.75 I	0.35 I	0.49 I	0.64 I	0.48 I	0.76 I	0.91 I/1.1
	trans 1,2-DCE	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1/<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47/<0.47
	VC	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1/<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48/<0.48
MW-203	PCE	<3.0	<3.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.3	<0.71	<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
	Acetone	<50	<50	81	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	<0.74	NA	<1.5	<1.0	<1.0	27	<2.1
	cis 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	0.6 I	<0.75	<0.75	2	1.1	1.2	2.4	3.9	4.7	3.8
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
MW-205	PCE	<3.0	<3.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<3	<0.6	<0.65	<0.30	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
	TCE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.3	<0.71	<0.30	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
	Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.0	<0.74	NA	<1.5	9.6	<1.0	<1.0	3.3 I
	cis 1,2-DCE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.3	<0.75	<0.20	<0.34	<0.22	<0.22	<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.20	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
	VC	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.40	<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
SMWS	PCE	<3.0	<3.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	16	<0.6	<0.65	<0.65	<0.47	0.83 I	<0.20	<0.43	<0.43	<0.099	<0.43
	TCE	**55**	**53**	**57**	**46**	**32**	**25**	**29**	**16**	**13**	**18**	**23**	**19**	**13**	**16**	2.9	2.4	2.7	1.3	<0.39	0.93 I	0.78 I	0.61 I
	Acetone	<50	<50	< 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	NA	NA	<1.5	<1.0	<1.0	<1.5	<2.1
	cis 1,2-DCE	51	57	**73**	**70**	**70**	51	**77**	60	55	68	66	68	61	55	66	**120**	62	66	**88**	**110**	**78**	70
	trans 1,2-DCE	<1.0	2.2	3.2	2.2	1.6	1.1	2.1	3.5	1.1	1.4	2	1	0.8 I	11	0.89 I	2.6	1.2	1.1	1.2	1.4	1	0.96 I
	VC	1.2I	**1.3**	**1.4**	**1.6**	<1.0	**1.0**	**1.6**	1.0	<1.0	<1.0	1	<1	1	**1.3**	**1.3**	**1.9**	**1.3**	0.68 I	0.99 I	**2.2**	**1.6**	**1.3**
SMFW	PCE	<3.0	<3.0	Well not available for sampling	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	Well not available for sampling	<0.6	<0.65	Well not available for sampling	<0.47	<0.20	Well not available for sampling	<0.43	Well not available for sampling	<0.099	<0.43
	TCE	2.8I	1.1		<1.0	**1.1**	**2.2**	<1.0	2.1	<1.0	**4.4**	**6**		**20**	<0.71		<0.30	2.1		0.51 I		<0.13	1.7
	Acetone	<50	<50		<50	<50	<50	<50	<50	<50	<50	<50		<3	<2.6		NA	NA		5.3		<1.5	<2.1
	cis 1,2-DCE	8.4	3.3		1.0	2.0	3.3	4.3	5.1	1.2	9.4	14		25	7.7		<0.34	44		22		27	25
	trans 1,2-DCE	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1		<0.8	<0.83		<0.58	<0.43		0.53 I		0.61 I	1.3
	VC	**7.0**	<1.0		<1.0	<1.0	<1.0	<1.0	**1.7**	<1.0	**1.9**	**2**		1	**5.1**		<0.91	<0.22		**5.9**		**9**	**40**
SMSR	PCE	**Supply well not in service until fall 2007**															<0.47	<0.20		<0.43	<0.43	<0.43	<0.43
	TCE																<0.30	<0.26		<0.39	<0.39	<0.39	<0.39
	Acetone																NA	NA		<1.0	5.8	<1.0	<2.1
	cis 1,2-DCE																<0.34	<0.22		<0.41	<0.41	<0.41	<0.41
	trans 1,2-DCE																<0.58	<0.43		<0.47	<0.47	<0.47	<0.47
	VC																<0.91	<0.22		<0.48	<0.48	<0.48	<0.48

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Chromium-100 µg/l. Results in bold exceed criteria.

Note: All concentrations ug/l

"I" indicates estimated value

123/321 represents results of QA duplicate sample

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

(Page 10 of 11)
Extraction Wells

Well ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
EW-1	PCE	450	150	300	54	<3.0	94	54	59	470	<3.0	27	77	68	61	37	40/32	71	45	38	41	53	53
	TCE	13I	12	14	10	<1.0	25/7.9	21	27	34	<1.0	20	22	27	24	16	20/17	19	21	12	24	26	29
	Acetone	<250	<50	< 100	<50	<50	<100/<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.0	<0.74<0.74	NA	<1.5	<1.0	<1.0	<1.5	<2.1
	cis 1,2-DCE	<5.0	1.8	2.0	1.2	<1.0	15/<1.0	5.5	2.4	21	<1.0	2	2	1	1	1.8	1.8/1.5	1.5	1.2	1	2	2.6	2.0
	trans 1,2-DCE	<5.0	<1.0	< 2.0	<1.0	<1.0	<2.0/<1.0	<1.0	<1.0	5.4	<1.0	<1	<1	<0.8	<0.83	<0.20	<0.58/<0.58	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC	<5.0	<1.0	< 2.0	<1.0	<1.0	<2.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.40	<0.91/<0.91	<0.22	<0.22	<0.48	<0.48	<0.083	<0.48
EW-2	PCE	770	180	760	370	540	560	920	1,400	710	2,000	1,600	1,200	901/672	520	230			720	390	300	270	200
	TCE	22I	16	14	29	19	24	50	50	44	85	94	94	80/75	49	23			87	43	59	39	50
	Acetone	<500	<500	<250	<500	<250	<500	<500	<500	<50	<2500	<50	<50	<30/<3	<26	<10	Pump	off	<1.5	<1.0	<1.0	<7.5	<2.1
	cis 1,2-DCE	12I	<10	14	<10	9.0	12	32	19	26	<50	26	28	27/31	10	7.6			28	14	23	21	27
	trans 1,2-DCE	<10	<10	< 5.0	<10	<5.0	<10	<10	<10	1.1	<50	2	2	<8/2	<8.3	<1.0			1.2	1.2	1.2	<0.55	1.2
	VC	<10	<10	< 5.0	<10	<5.0	<10	<10	<10	2.0	<50	3	1	<5/2	<5.2	<2.0			0.80 I	0.61 I	1.2	<0.42	<0.48
EW-3	PCE	900	840	1700/1600	330	1,600	790	410	380	880	1,300	Well Damaged	2,100	868	1,100	190		730	880	1,200	740	840	640
	TCE	36	52	50/51	39	48	23	30	28	48	33		69	50	51	15		50	36	26	34	32	110
	Acetone	<500	<500	< 500/<2500	<1000	<750	<1000	<1000	<250	<50	<1200		<50	<3	<26	<20	Pump	NA	<1.5	<1.0	<1.0	<15	<2.1
	cis 1,2-DCE	24I	55	34/<50	34	25	<20	22	15	24	<25		20	19	12	6.9 I	off	20	13	10	8.6	8.4 I	22
	trans 1,2-DCE	<10	<10	10<50	<20	<15	<20	<20	<5.0	3.3	<25		6	5	<8.3	<2.0		<0.43	1.4	<0.47	<0.47	<0.11	1.3
	VC	<10	<10	< 10/<50	<20	<15	<20	<20	<5.0	<1.0	<25		<1	<0.5	<5.2	<4.0		<2.2	<0.22	<0.48	<0.48	<0.83	<0.48
EW-4	PCE	40	31	20	22	20	43	20	26	23	19	29	170	32	17	12/14		42	59	20		12	9.6
	TCE	8	6.5	7.5	18	6.6	16	8.8	11	8.8	10	15	22	20	14	12/12		20	25	7.8		8.7	9.9
	Acetone	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.0/<2.0	Pump	NA	<1.5	<1.0	Pump	<1.5	<2.1
	cis 1,2-DCE	7.4	6.4	14	18	8.0	15	15	21	18	17	16	26	19	21	26/26	off	15	19	9.4	off	18	13
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	3	<0.20/<0.20		<0.43	0.47 I	<0.47		<0.11	<0.47
	VC	<1.0	<1.0	< 1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1	<1	0.7 I	0.90 I	<0.40/0.60 I		0.63 I	0.34 I	<0.48		0.40 I	<0.48
EW-5	PCE	190	84	100	200	8.1	78	150	150	56	58	77	32	14	21	23		28	23	17	11	14	10
	TCE	43	26	23	86	<1.0	17	83	63	23	25	81	15	14	53	57		38	32	23	30	25	23
	Acetone	<50	<50	<50	<50	<50	<50	<250	<100	<50	<50	<50	<50	<3	<2.6	<2.0	Pump	NA	<1.5	<1.0	<1.0	<1.5	<2.1
	cis 1,2-DCE	29	23	17	36	10	5.9	35	23	25	22	60	10	31	45	49	off	30	33	32	42	38	37
	trans 1,2-DCE	<1.0	<1.0	< 1.0	1.6	<1.0	<1.0	<5.0	<2.0	<1.0	<1.0	2	<1	<0.8	11	1.2		<0.43	0.64 I	0.55 I	0.63 I	0.48 I	0.48 I
	VC	2.4I	<1.0	< 1.0	<1.0	<1.0	<1.0	<5.0	<2.0	1.9	<1.0	<1	<1	1	4.8	2.9		1.7	0.33 I	0.78 I	1.8	0.74 I	1.0
EW-6	PCE	<3.0	<3.0	3.5			3.6	<3.0	<3.0	4.9	<3.0	<3	3	3	1.7	1.2	3.2	1.7	1.7	1.6	0.67 I	4.2	1.3
	TCE	<1.0	<1.0	<1.0			<1.0	1.1	1.7	1.7	1.7	2	2	2	1.9	1.9	3.6	2.6	9.2	2.2	1.5	3.3	2.3
	Acetone	<50	<50	<50	Not sampled		<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.0	<0.74	NA	<1.5	<1.0	210	1.5	<2.1
	cis 1,2-DCE	<1.0	<1.0	<1.0	Out of Service		<1.0	<1.0	2.0	1.4	<1.0	2.0	2	1	<0.75	0.91 I	0.88 I	<0.22	1.3	0.99 I	<0.41	0.62 I	0.42 I
	trans 1,2-DCE	<1.0	<1.0	<1.0			<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.20	<0.58	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC	<1.0	<1.0	< 1.0			< 1.0	<1.0	<1.0	<10	<1.0	<1	<1	<0.5	<0.52	<0.40	<0.91	<0.22	<0.22	<0.48	<0.48	<0.083	<0.48
EW-7	PCE	<3.0	<15/<3.0	< 3.0	<3.0	<3.0/<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	14	13	18	7.2	16	21	9.2/8.5	9.4	6	6	2.8
	TCE	6.3	<5.0/<1.0	<1.0	<1.0	<1.0/<1.0	1.4	<1.0	<1.0	1.2	1.4	<1	4	6	3.3	4.2	8.7	3.8	9.4/9.3	6.6	7.5	6.3	3.7
	Acetone	<50	<250/<50	< 50	<50	<50/<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.0	<0.74	NA	<1.5/<1.5	<1.0	<1.0	<1.5	<2.1
	cis 1,2-DCE	6.5	<5.0/3.7	10	2.4	5.0/5.0	4.3	8.3	4.6	12	4.4	11	5	5	<0.75	3.3	5.9	1.2	8.5/8.7	4.9	6.5	5.4	3.5
	trans 1,2-DCE	<1.0	<5.0/<1.0	< 5.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	0.39 I	<0.58	<0.43	<0.43/<0.43	<0.47	<0.47	<0.11	<0.47
	VC	<1.0	<5.0/<1.0	< 1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.40	<0.91	<0.22	<0.22/<0.22	<0.48	<0.48	<0.083	<0.48
EW-8	PCE	<3.0	<3.0	14	19	<3.0	7.3/8.4	11	20	9.2	5.2	7	10	17	15	14	30	6.8	17	7.7	11	13	12
	TCE	6.1	1.1	23	<1.0	1.0	4.7/5.0	9.7	16	8.4	15	8	2	3	2.2	2.8	10	5.5	4.1	1.4	3.7	3.3	4.5
	Acetone	<50	<50	< 50	<50	<50	<50/<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.0	<0.74	NA	<1.5	<1.0	<1.0	<1.5	<2.1
	cis 1,2-DCE	34	3.3	10	5.0	<1.0	6.3/6.0	9.8	3.8	7.3	<1.0	8	1	0.8	<0.75	1.3	3.2	3.4	1.6	0.70 I	<0.41	1.5	1.2
	trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.20	<0.58	<0.43	<0.43	<0.47	<0.47	<0.11	<0.47
	VC	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.40	<0.91	<0.22	<0.22	<0.48	<0.48	<0.083	<0.48
EW-9	PCE	<3.0	<3.0	< 3.0/<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	46	35	9	<0.65	30		11	8.6/7.3	7.4	8.2	9.3
	TCE	4.3	2.5	6.2/6.4	5.5	1.7	5.5	1.6	1.1	<1.0	1.5	2	6	6	4.7	1.6	8		3.9	2.8/2.2	4.9	3.9	4.1
	Acetone	<50	<50	< 50/<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	<0.74	Pump	<1.5	<1.0/<1.0	<1.0	<1.5	<2.1
	cis 1,2-DCE	9.0	8.4	14/14	8.8	7.0	4.2	5.8	3.4	3.6	1.7	3	4	2	2	2.8	2.6	off	2.4	1.2/0.92 I	2.4	<0.073	1.4
	trans 1,2-DCE	<1.0	<1.0	< 1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58		<0.43	<0.47/<0.47	<0.47	<0.11	<0.47
	VC	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91		<0.22	<0.48/<0.48	<0.48	<0.083	<0.48

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Results in bold exceed criteria.

Note: All concentrations ug/l

"I" indicates estimated value

123/321 represents results of QA duplicate sample

Source: UES, 2010

Table 2. ANALYTICAL RESULTS
SHERWOOD MEDICAL INDUSTRIES NPL SITE

(Page 11 of 11)
Residential Potable Wells

Well ID	Map ID	Parameter	6/00	12/00	6/01	12/01	6/02	12/02	6/03	12/03	6/04	12/04	6/05	12/05	6/06	12/06	6/07	12/07	6/08	12/08	6/09	12/09	6/10	12/10
Florist	R-2	PCE	<3.0	<3.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<0.6	<0.65	<0.65	<0.47	<0.20	Well being repaired	<0.43	<0.43	<0.43	<0.43
		TCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.71	<0.71	<0.30	<0.26		<0.39	<0.39	<0.39	<0.39
		Acetone	<50	<50	< 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	3.6 I	NA	NA		<1.0	<1.0	3.4 I	<2.1
		cis 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	0.5 I	<0.75	<0.75	1	<0.22		<0.41	<0.41	1	1
		trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.8	<0.83	<0.83	<0.58	<0.43		<0.47	<0.47	<0.47	<0.47
		VC	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.5	<0.52	<0.52	<0.91	<0.22		<0.48	<0.48	<0.48	<0.48
Stossel	R-7	PCE	Well Added to Sampling Plan December, 2003							<3.0	<3.0	<3.0	<3	<3	<0.6	<0.65	<0.65	<0.47	<0.20	<0.20	<0.43	Out of Service - Connected to municipal supply		
		TCE								<1.0	<1.0	<1.0	<1	<1	<0.3	<0.71	<0.71	<0.30	<0.26	<0.26	<0.39			
		Acetone								<50	<50	<50	<50	<50	<3	<2.6	<2.6	NA	NA	<1.5	<1.0			
		cis 1,2-DCE								<1.0	1.2	1.0	1	<1	2	1.2	1.9	3.5	1.9	1.5	1.1			
		trans 1,2-DCE								<1.0	<1.0	<1.0	<1	<1	<0.8	<0.83	<0.83	<0.58	<0.43	<0.43	<0.47			
		VC								<1.0	<1.0	<1.0	<1	<1	<0.5	<0.52	<0.52	<0.91	<0.22	<0.22	<0.48			
Brown (Woods)	R-1	PCE	<3.0	<3.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3	<0.6	<0.65	<0.65	<0.47	<0.20	No sample port prior to water treatment system				
		TCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.71	<0.71	<0.30	<0.26					
		Acetone	<50	<50	< 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<3	<2.6	<2.6	NA	NA					
		cis 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.3	<0.75	<0.75	<0.34	<0.22					
		trans 1,2-DCE	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.8	<0.83	<0.83	<0.58	<0.43					
		VC	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<0.5	<0.52	<0.52	<0.91	<0.22					
Tuma	OS-7	PCE	Well Added to Sampling Plan December, 2003							<3.0	<3.0	<3.0	<3.0	<3	<0.6	Well out of service - Connected to municipal supply		Byard	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
		TCE								<1.0	<1.0	<1.0	<1.0	<1	<0.3				<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
		Acetone								<50	<50	<50	<50	<50	<3				NA	<1.5	<1.0	<1.0	4.5 I	<2.1
		cis 1,2-DCE								<1.0	<1.0	<1.0	<1.0	<1	<0.3				<0.22	<0.22	<0.41	<0.41	<0.41	<0.41
		trans 1,2-DCE								<1.0	<1.0	<1.0	<1.0	<1	<0.8				<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
		VC								<1.0	<1.0	<1.0	<1.0	<1	<0.5				<0.22	<0.22	<0.48	<0.48	<0.48	<0.48
Wilcutt	R-8	PCE	Well Added to Sampling Plan May, 2003						<3.0/<3.0	<3.0/<3.0	<3.0	<3.0	<3.0	<3	<0.6<0.6	Well being repaired	<0.65	<0.47	Well not available by owner request					
		TCE							<1.0/<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1	0.6 I/0.7 I		<0.71	0.90 I						
		Acetone							<50/<50	<50/<50	<50	<50	<50	<50	<3/<3		<2.6	NA						
		cis 1,2-DCE							2.5/2.3	2.0/1.7	1.9	<1.0	2	<1	2/2		<0.75	5						
		trans 1,2-DCE							<1.0/<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1	<0.8/<0.8		<0.83	<0.58						
		VC							<1.0/<1.0	<1.0/<1.0	<1.0	<1.0	<1.0	<1	<0.5/<0.5		<0.52	<0.91						
Bourgeois	R-3	PCE	Well Added to Sampling Plan June, 2007														<0.65	<0.47	Well not available - House empty		New owner - Well replaced with deep well			
		TCE															<0.71	<0.30						
		Acetone															<2.6	NA						
		cis 1,2-DCE															<0.75	0.41 I						
		trans 1,2-DCE															<0.83	<0.58						
		VC															<0.52	<0.91						
Duchesneau	R-5	PCE	Well Added to Sampling Plan June, 2007														<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
		TCE															<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
		Acetone															<2.6	NA	NA	<1.5	<1.0	<1.0	<1.0	<2.1
		cis 1,2-DCE															<0.75	0.47 I	<0.22	0.54 I	<0.41	<0.41	0.54 I	<0.41
		trans 1,2-DCE															<0.83	<0.58	<0.43	<0.43	<047	<0.47	<0.47	<0.47
		VC															<0.52	<0.91	<0.22	<0.20	<0.48	<0.48	<0.48	<0.48
Takash	R-4	PCE	Well Added to Sampling Plan June, 2007														<0.65	<0.47	<0.20	<0.20	<0.43	<0.43	<0.43/<0.43	<0.43/0.44 I
		TCE															<0.71	<0.30	<0.26	<0.26	<0.39	<0.39	<0.39/<0.39	<0.39/<0.39
		Acetone															4.0 I	NA	NA	<1.5	<1.0	<1.0	4.1 I/4.3 I	<2.1/<2.1
		cis 1,2-DCE															<0.75	0.55 I	<0.22	1.0	0.50 I	<0.41	0.63 I/0.59 I	1.1/0.94 I
		trans 1,2-DCE															<0.83	<0.58	<0.43	<0.43	<0.47	<0.47	<0.47/<0.47	<0.47/<0.47
		VC															<0.52	<0.91	<0.22	<0.20	<0.48	<0.48	<0.48/<0.48	<0.48/<0.48
Mobley	R-9	PCE	Well Added to Sampling Plan June, 2007															<0.47	<0.20	<0.20	<0.43	<0.43	<0.43	<0.43
		TCE																<0.30	<0.26	<0.26	<0.39	<0.39	<0.39	<0.39
		Acetone															Well Not Available	NA	NA	<1.5	<1.0	<1.0	5	<2.1
		cis 1,2-DCE																<0.34	0.27 I	<0.22	<0.41	<0.41	<0.41	<0.41
		trans 1,2-DCE																<0.58	<0.43	<0.43	<0.47	<0.47	<0.47	<0.47
		VC																<0.91	<0.22	<0.22	<0.48	<0.48	<0.48	<0.48

Cleanup Criteria: PCE-3 µg/l, TCE-3 µg/l, Cis-1,2-DCE-70 µg/l,Trans-1,2-DCE - 100 µg/l, DCE Mixture - 63 µg/l, Acetone-700 µg/l, VC-1 µg/l, Chromium-100 µg/l. Results in bold exceed criteria.

Note:
All concentrations ug/l
"I" indicates estimated value
123/321 represents results of QA duplicate sample

Source: UES, 2010