American Environmental

December 8, 2016

Ms. Shay Hartley
Indiana Department of Environmental Management
ELTF Section
100 North Senate Avenue; P.O. Box 6015
Indianapolis, Indiana 46206-6015

RE: LUST Quarterly Monitoring Report / Corrective Action Progress Report 3rd Quarter 2016
Mac's Convenience Stores, LLC dba Circle K Midwest
Circle K #8/Former Bigfoot
115 Clifty Drive
Madison, Indiana – Jefferson County
IDEM Incident Number: 200202516, Facility ID Number: 9105
American Environmental Corporation Project Number: 224013

Dear Ms. Hartley:

On behalf of Mac's Convenience Stores, LLC dba Circle K Midwest (Mac's), American Environmental Corporation (American Environmental) is submitting the LUST Quarterly Corrective Action Progress Report (CAPR) for the facility referenced above. This CAPR is being submitted to fulfill guidelines established by the Indiana Department of Environmental Management (IDEM) in the document, The Underground Storage Tank Rule, 329 IAC 9.

In preparing this report, American Environmental has applied generally acceptable professional practices and standards and has exercised its professional judgment, skills and care, in a manner consistent with that of other professionals performing similar work under similar conditions. All information, conclusions and recommendations contained in the report are necessarily governed by the site conditions and the scope of our engagement. American Environmental has made recommendations where it believes additional studies or work is advisable and would bear upon the recommendations and conclusions herein. This warranty is in lieu of all other warranties, express or implied. American Environmental is not responsible for the independent conclusions, opinions or recommendations made by others, based upon the field exploration and laboratory data presented in this report.

If you have any questions or comments, please do not hesitate to contact us at (502) 491-0144.

Sincerely,
AMERICAN ENVIRONMENTAL CORPORATION

Michael A. Hightchew, EIT
Senior Project Engineer

Timothy J. Quinn, LPG
Regional Manager

CAPR SPREADSHEET

LUST QUARTERLY MONITORING

State Form XXXXX(XX-05)
329 IAC 9-5-7
Indiana Department of Environmental Management
Office of Land Quality
Leaking Underground Storage Tank Section

67-18
Indiana Department of Environmental Management
Leaking Underground Storage Tank Section
100 N. Senate Ave., Room 1101
Indianapolis, IN 46204-2251

INSTRUCTIONS:

1. This template is intended assist with the organization of the LUST Quarterly Corrective Action Progress Report (CAPR).

2. Depending on the nature of the project, some of the following sections or appendices may not be applicable. If this is the case do not leave the section blank, or omit or reorder the appendices. Instead enter "Not Applicable" or other explanation to indicate that the section does not apply or that information is not available, and why.

3. Ensure that text boxes are re-sized (as needed) in order to have all entered text visible.

4. Extra rows can be added to data entry tables (as needed) by copying the previous row and pasting it into the blank row beneath. Note, do not use the <Insert Row> function as it does not always maintain the original formatting of the table.

For Reporting Period Beginning **July 1, 2016** and Ending **September 30, 2016**

Facility Name:	Circle K #8/Former Bigfoot
IDEM Project Manager:	Ms. Shay Hartley

Facility ID:	9105
Incident #:	2002-02-516

Guidance	
☐	1994 UST Branch Guidance Manual
☑	RISC Default
☐	RISC Non-default

Reporting Type	
☑	Approved CAP
☐	Per IDEM Project Manager Request

Facility and Responsible Party Information		Consultant Information	
Site Name:	Circle K #8/Former Bigfoot	Company Name:	American Environmental
Site Address:	115 Clifty Drive	Project Manager:	Michael A. Hightchew
City, State, Zip Code:	Madison, IN	Office Address:	9127 Galene Drive
County:	Jefferson	Suite Number:	D
Responsible Party:	Mac's Convenience Stores, LLC	City, State, Zip Code:	Louisville, Kentucky 40299
Contact Person:	Mr. Matt Jordan	Phone Number:	502-491-0144
Phone Number:	(812) 379-9227	Fax Number:	502-491-9271

Contaminants (check all that apply)			
☑	Gasoline	☐	Kerosene
☑	MTBE	☐	Virgin Hydrocarbon Oil
☐	Diesel	☐	Jet Fuel
☐	Waste Oil	☐	Hazardous

Corrective Action (check all that apply)			
☐	Pump and Treat	☐	Plume Stability
☐	Vapor Extraction	☐	MNA
☐	Air Sparging	☐	Excavation
☑	MPE / DPE	☐	Other

Affected Media (check all that apply)			
☑	Soil	☑	Groundwater

Signature

Please note, per 329 IAC 9-5-7, this document must be signed by one of the following professionals registered in the State of Indiana: 1) Professional Engineer, 2) Licensed Professional Geologist, 3) Certified Hazardous Materials Manager, or 4) Professional Soil Scientist.

Timothy J. Quinn

12/8/2016 (signature and date)

Timothy J. Quinn, LPG #1593 (printed name with Indiana professional registration indicated)

2.0 Summary of Quarterly Remediation Activities

2.1 Summary of Engineered Remediation System Operation *(if applicable)*

Indicate the type of system, dates of operation, and state if (and how long) the system was inoperable during the reporting period. Any laboratory analytical data generated during this reporting period related to the operation of the remediation system (i.e., influent/effluent sampling, emissions data) should be included in **APPENDIX A**.

The multi-phase extraction remediation system has been in operation since February 16, 2005. During this quarter, the system ran for approximately 92 days. The total groundwater discharged during this reporting quarter was 109,352 gallons and the cumulative total is approximately 3,803,207 gallons. The influent and effluent water sampling is conducted on a monthly basis. The samples were submitted to ESC Lab Sciences (ESC), located in Mt. Juliet, TN. Influent water samples are analyzed for BTEX/MTBE and effluent water samples are analyzed for benzene. The groundwater laboratory data is included in Appendix A. The air effluent sampling is conducted on a quarterly basis. The air samples were submitted to Microseeps, located in Pittsburgh, PA, for analysis of Volatile Organic Compound (VOC). The air emissions calculations is based on the calculated days of operation and is the estimated amount emitted. The air analytical data and calculation spreadsheet are included in Appendix A.

2.2 Groundwater Recovered *(if applicable)*		Groundwater Treated *(if applicable)*	
Ground Water Recovered During Reporting Period (gallons)	74,441	**Ground Water Treated During Reporting Period (gallons)**	74,441
Cumulative Total of Groundwater Recovered over Lifetime of System Operation (gallons)	3,877,648	**Cumulative Total of Ground Water Treated over Lifetime of System Operation (gallons)**	3,877,648
Final Disposition (i.e., disposal or discharge)	Discharge	**Final Disposition (i.e., disposal or discharge)**	Discharge

2.3 Free Product Recovered *(if applicable)*		2.4 Pounds VOCs Removed *(if applicable)*	
Free Product Recovered During Reporting Period (gallons)	0	**VOCs removed (pounds) During Reporting Period**	6.18
Cumulative Total of Free Product Recovered over Lifetime of System Operation (gallons)	0	**Cumulative Total of VOCs Removed over Lifetime of System Operation (pounds)**	2,330
Final Disposition	Not Applicable	**Indicate whether VOC emissions were treated or discharged directly into the atmosphere**	Discharge

2.5 ORC Application *(if applicable)*			
*All injection point locations should be included on **FIGURE 4***			
Number of Injection Points or Excavation Dimensions	0	**Total Pounds ORC Applied This Reporting Period**	0
Pounds of ORC per Injection Point or per Excavation	0	**Cumulative Total of ORC Applied over Lifetime of Remediation Activity (pounds)**	1,200

2.6 Soil Removal *(if applicable)*

Excavation boundaries should be included on **FIGURE 4**. A table summarizing confirmatory soil sampling should be included (along with supporting laboratory data and chain-of-custody documentation and disposal receipts) in **APPENDIX A**. Please Note: For the purposes of ELTF Reimbursement the conversion factor for cu yds to tons is 1 cu yd = 1.36 tons

Soil in Tons/Cubic Yards Removed During this Reporting Period	Not Applicable	**Date Removed**	Not Applicable
Cumulative Amount of Soil Removed to Date at this Facility as Part of Corrective Actions (tons)	Not Applicable		

2.7 Monitored Natural Attenuation (MNA)/Plume Stability *(if applicable)*

Indicate the length of time that MNA or Plume Stability monitoring has been occurring at this facility. Any data supporting a decreasing contaminant trend should be discussed in this section and included in **APPENDIX A**. All calculations supporting a default or non-default RISC demonstration of Plume Stability should be discussed in this section and included in **APPENDIX A**.

Not Applicable

3.0 Current Site Conditions

3.1 Soil

Provide any soil data collected during the reporting period. Tables have been provided at the end of this form.

Please include the following:
TABLE 1—Soil Analytical Data
FIGURE 1—Most Recent Soil Analytical Data on site map

All soil data should be reported in parts per million (ppm). Laboratory and supporting chain-of-custody documentation should be included in **APPENDIX B**. Historical soil analytical results should be summarized and included in table format in **APPENDIX C**.

Note: MS/MSD samples are not required during corrective action monitoring activities unless otherwise directed by IDEM staff. However, prior to requesting site closure (during confirmatory soil and ground water sampling) an MS/MSD sample (for all affected media) will be required. Exceptions may be made on a site-specific basis for facilities that demonstrated soil concentrations below the applicable IDEM action levels prior to the implementation of IDEM's Minimum Data Documentation Requirements. IDEM requests that, in addition to the required hardcopy reports, all sampling results are submitted electronically to LeakingUST@idem.in.gov. Guidance on formatting sampling results for electronic submittal is posted at www.in.gov/idem/land/lust/electronicreporting.html.

Not Applicable

3.2 Groundwater

Provide the most recent groundwater data available for the subject site. Tables have been provided at the end of this form.

Please include the following:
TABLE 2—Groundwater Elevations
TABLE 3—Groundwater Analytical Results
FIGURE 2—Most Recent Groundwater Analytical Data on site map
FIGURE 3—Groundwater Contour Map indicating groundwater flow direction

All groundwater data should be reported in parts per billion (ppb). Laboratory and supporting chain-of-custody documentation should be included in **APPENDIX B**. Historical groundwater analytical results should be summarized and included in table format in **APPENDIX C**.

Note: MS/MSD samples are not required during corrective action monitoring activities unless otherwise directed by IDEM staff. However, prior to requesting site closure (during confirmatory soil and ground water sampling) an MS/MSD sample (for all affected media) will be required. Exceptions may be made on a site-specific basis for facilities that demonstrated groundwater concentrations below the applicable IDEM action levels prior to the implementation of IDEM's Minimum Data Documentation Requirements. IDEM also requests that, in addition to the required hardcopy reports, all sampling results are submitted electronically to LeakingUST@idem.in.gov. Guidance on formatting sampling results for electronic submittal is posted at www.in.gov/idem/land/lust/electronicreporting.html.

American Environmental collected groundwater samples from 10 monitoring wells on September 21, 2016. All samples were submitted to ESC, located in Mt. Juliet, TN, for analysis of BTEX and MTBE. The laboratory analytical results are included in Appendix B. The most recent groundwater analytical results are summarized in Table 3 and on Figure 2. Static water level measurements were recorded to the nearest 0.01 of a foot with an electronic water level indicator and groundwater elevations were calculated. The groundwater elevations are summarized in Table 2. The groundwater contour map, indicating a flow to the north and west from the tank pit, is shown in Figure 3. Historical groundwater elevation and laboratory analytical results are summarized in Appendix C. Benzene time charts are provided in Appendix D.

The QA/QC evaluation revealed the following:

- The laboratory control samples were within laboratory acceptance limits.
- Surrogate spike recoveries were within the USEPA acceptance limits in all samples.
- No analytes were detected above the laboratory reporting limits in the trip blank.
- RPDs were calculated for analytes detected in both the MW-4 sample and the duplicate sample from MW-4.
  The RPD for benzene was calculated to be 38.01%. This difference is acceptable based on the methodologies employed
- All samples were analyzed within the USEPA holding times.

4.0 Conclusions

Briefly summarize all remediation activities that occurred at this facility during the most recent reporting period. Provide an estimate of the work that will be performed during the upcoming reporting period.

American Environmental collected groundwater samples from 10 monitoring wells on September 21, 2016. All samples were submitted to ESC, located in Mt. Juliet, TN, for analysis of BTEX and MTBE. BTEXM concentrations are below the IDCLs in all wells, except for benzene in MW-4, MW-5 and MW-6. Both samples obtained from the adjacent Circle K 69 (OW-4 and OW-11) were below the IDCLs. QA/QC samples included one trip blank and a duplicate sample from MW-5. New dedicated disposable bailers were used to obtain groundwater samples; therefore, no equipment blank was necessary. The duplicate sample was collected in the field during sampling activites. The duplicate sample and trip blank were delivered to the laboratory in the same cooler used to deliver the groundwater samples. Results for the duplicate sample were similar to the original sample results from MW-4. Quarterly groundwater monitoring will continue in the fourth quarter of 2016. The operation and maintenance of the remediation system will continue in the fourth quarter of 2016.

5.0 Required Table Formats

Table 2. Groundwater Elevations 9/21/2016				
Monitoring Well ID	**Top of Casing Elevation (ft)**	**Depth to Groundwater (ft)***	**Free Product Thickness (ft)**	**Groundwater Elevation (ft)**
MW-1	99.41	4.90	0	94.51
MW-2	98.97	4.15	0	94.82
MW-3	100.45	4.79	0	95.66
MW-4	100.09	9.06	0	91.03
MW-5	100.33	7.97	0	92.36
MW-6	100.43	8.29	0	92.14
MW-8r	100.67	6.00	0	94.67
MW-9r	100.70	5.25	0	95.45
OW-4	100.97	5.35	0	95.62
OW-11	98.99	3.88	0	95.11

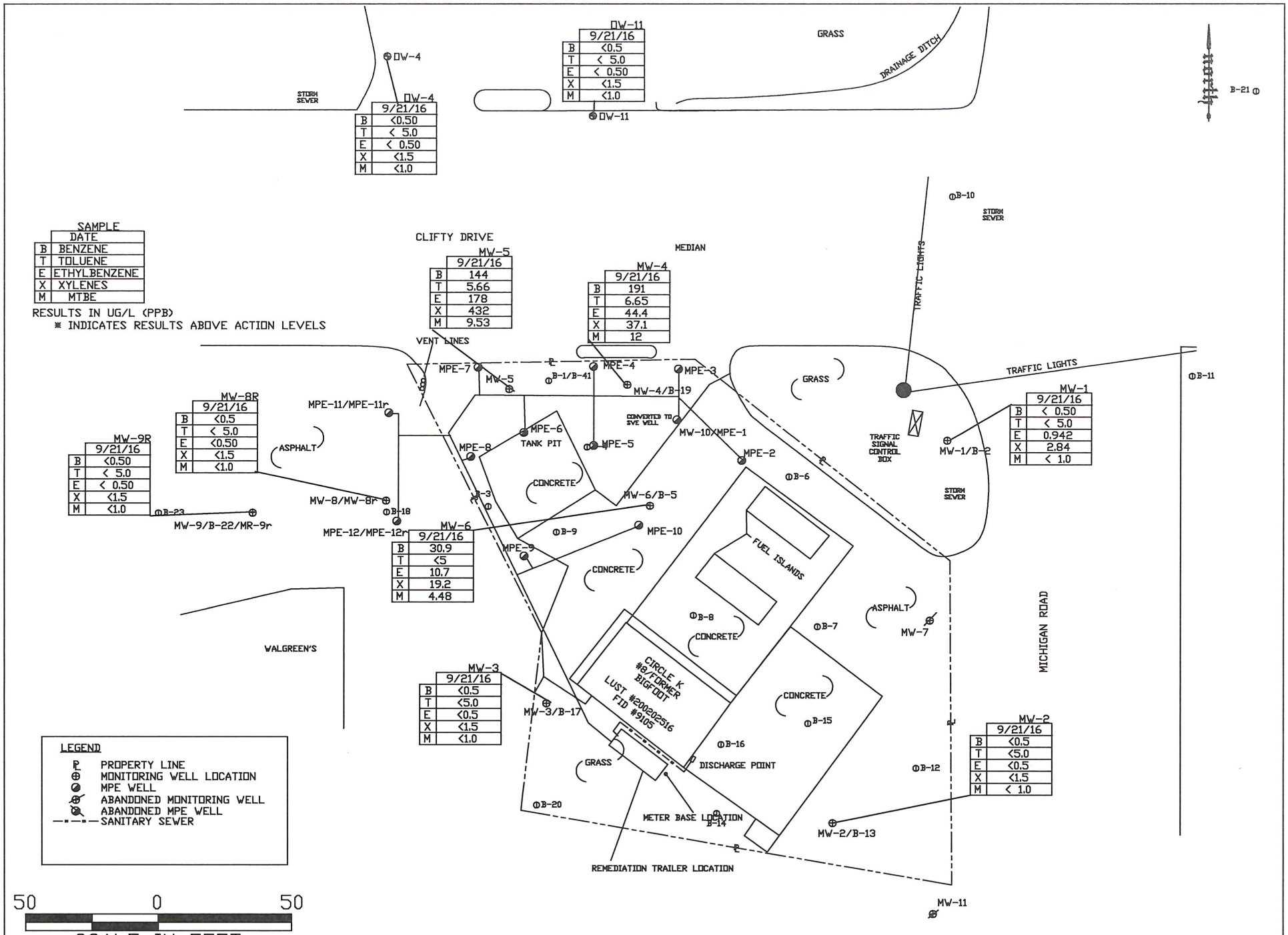
**Measured from top of casing*

Table 3. Groundwater Analytical Results 9/21/2016					
Well ID	**CONTAMINANTS OF CONCERN (COC)** all units in µg/l				
	Benzene	**Toluene**	**Ethylbenzene**	**Xylenes**	**MTBE**
MW-1*	<0.50	<5.0	0.942	2.84	<1.0
MW-2	<0.50	<5.0	<0.50	<1.5	<1.0
MW-3	<0.50	<5.0	<0.50	<1.5	<1.0
MW-4	**191**	6.65	44.4	37.1	12
MW-5	**144**	5.66	178	432	9.53
MW-6	**30.9**	<5	10.7	19.2	4.48
MW-8r*	<0.50	<5.0	<0.50	<1.5	<1.0
MW-9r*	<0.50	<5.0	<0.50	<1.5	<1.0
OW-4*	<0.50	<5.0	<0.50	<1.5	<1.0
OW-11*	<0.50	<5.0	<0.50	<1.5	<1.0
DUP (MW-4)	**130**	10.9	78.9	45.2	14.2
RISC RDCL	*5*	*1,000*	*700*	*10,000*	*40*
RISC IDCL	**52**	**8,200**	**10,000**	**20,000**	**720**

Bold = COC concentration greater than the IDCL
Italics - COC concentration greater than the RDCL
RDCL: Residential Default Closure Level
IDCL: Industrial Default Closure Level
* - offsite wells

FIGURES

FIGURE 1 – MOST RECENT SOIL ANALYTICAL RESULTS
FIGURE 2 – MOST RECENT GROUNDWATER ANALYTICAL RESULTS
FIGURE 3 – GROUNDWATER CONTOUR MAP

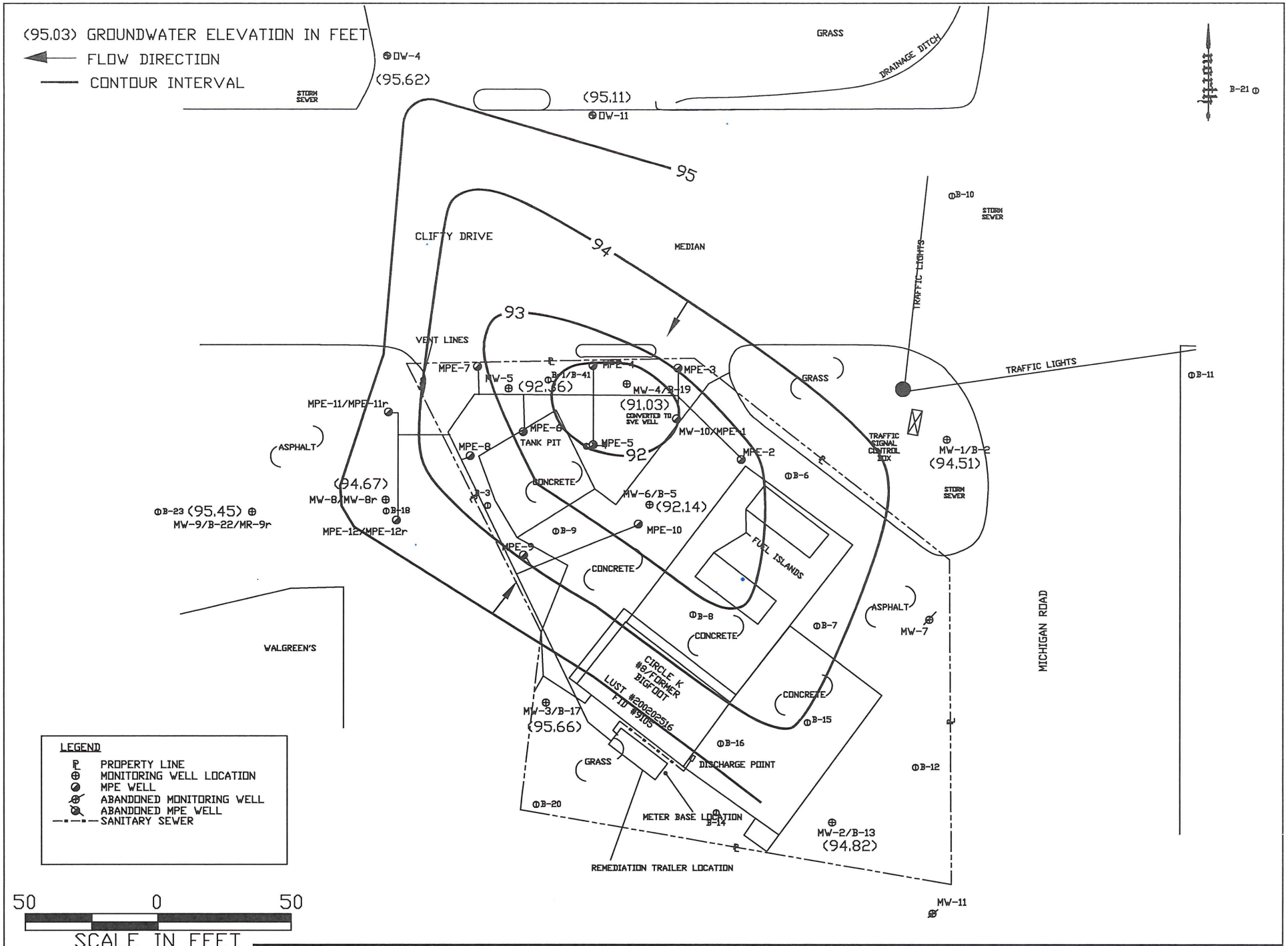


DRAWN BY:	LM
DATE:	4/3/03
REVISED:	11/30/16
JOB NUMBER:	224013
DWG NUMBER:	224013

FIGURE 2
GROUNDWATER ANALYTICAL
(9/21/16)

MAC'S CONVENIENCE STORES, LLC.
CIRCLE K #8/FORMER BIGFOOT
115 CLIFTY DRIVE
MADISON, INDIANA

American Environmental



DRAWN BY: LM	
DATE: 4/3/03	
REVISED: 11/30/16	
JOB NUMBER: 224013	
DWG NUMBER: 224013	

FIGURE 3
GROUNDWATER ELEVATION
(9/21/16)

MAC'S CONVENIENCE STORES, LLC.
CIRCLE K #8/FORMER BIGFOOT
115 CLIFTY DRIVE
MADISON, INDIANA

American Environmental

APPENDIX A

HISTORICAL GROUNDWATER RECOVERED SPREADSHEET
MONTHLY REMEDIATION SYSTEM OPERATION & MAINTENANCE LOGS
EFFLUENT LABORATORY ANALYTICAL RESULTS
AIR LABORATORY ANALYTICAL RESULTS
EMISSIONS CALCULATION SPREADSHEET

Historical Groundwater & VOCs Recovered Through Remediation System Circle K #8/Former Bigfoot		
Time Period	**Total VOCs Recovered for Time Period (lbs)**	**Total Gallons Recovered for Time Period**
First Quarter 2005	76.91	43,496
Second Quarter 2005	69.46	64,607
Third Quarter 2005	132.77	38,276
Fourth Quarter 2005	25.26	7,356
First Quarter 2006	492.91	60,125
Second Quarter 2006	34.06	58,251
Third Quarter 2006	43.41	63,103
Fourth Quarter 2006	34.32	103,795
First Quarter 2007	60.91	63,004
Second Quarter 2007	15.09	47,173
Third Quarter 2007	15.47	13,804
Fourth Quarter 2007	21.11	29,670
First Quarter 2008	8.97	5,516
Second Quarter 2008	13.22	6,351
Third Quarter 2008	9.18	27,378
Fourth Quarter 2008	28.54	88,087
First Quarter 2009	40.95	94,233
Second Quarter 2009	24.40	56,605
Third Quarter 2009	6.15	56,577
Fourth Quarter 2009	10.43	75,604
First Quarter 2010	9.92	106,182
Second Quarter 2010	28.58	115,681
Third Quarter 2010	10.67	57,535
Fourth Quarter 2010	26.66	62,690
First Quarter 2011	47.69	105,864
Second Quarter 2011	29.12	87,817
Third Quarter 2011	67.66	45,522
Fourth Quarter 2011	15.29	82,372
First Quarter 2012	4.26	78,411
Second Quarter 2012	14.28	110,580
Third Quarter 2012	70.21	90,900
Fourth Quarter 2012	388.85	105,440
First Quarter 2013	108.70	182,693
Second Quarter 2013	43.31	124,032
Third Quarter 2013	55.11	133,759
Fourth Quarter 2013	104.83	133,404
First Quarter 2014	18.87	137,564
Second Quarter 2014	9.94	130,843
Third Quarter 2014	4.10	33,869
Fourth Quarter 2014	9.54	144,477
First Quarter 2015	25.60	165,775
Second Quarter 2015	8.79	88,122
Third Quarter 2015	20.14	143,625
Fourth Quarter 2015	7.20	127,655
First Quarter 2016	24.30	96,032
Second Quarter 2016	6.63	109,352
Third Quarter 2016	6.18	74,441
Cumulative Total	2,330	3,877,648

First Quarter - January 1st through March 31st
Second Quarter - April 1st through June 30th
Third Quarter - July 1st through September 31st
Fourth Quarter - October 1st through December 31st
MPE System started February 16, 2005

AMERICAN ENVIRONMENTAL OPERATION AND MAINTENANCE LOG

Facility Name: Circle K # 8
Address: 115 Clifty Drive
Madison, IN
Project Number: 224013

Sampling Parameters		
Influent H2O	Effluent H2O	Air
BTEX / MTBE (monthly)	BTEX / MTBE & pH (monthly)	BTEX, TPH C4-C12, total & speciated
	BOD/TSS/O&G (Quarterly)	MPE & Air Str (Quarterly)
Lab: ESC	ESC	Microseeps

Instructions:
Perform O&M tasks/data collection (in bold) according to the specified frequency.
Put yes, no, or the appropriate data in the column below the date of each visit.
For pressure/vacuum readings, include the units with data (i.e. " Hg, " W/C, psi).
* Indicates that the data will be automatically entered when field data is entered into the spreadsheet.

Description	Frequency	Date 10-28-16	Date 1-6-17	Date 1-24-16	Date 2-19-16	Date 3/27/16
Arrival: Up or down?	each visit	up	up	up	up	up
If down, why?	each visit	—	—	—	—	—
Flow Meter Reading	each visit	1394834	1400270	1408360	1412610	1419311
*Total flow between visits	each visit	3904	5936	8090	4250	6701
MPE Hours	each visit	32164	32354	32546	32668	32862
*MPE run time	each visit	168	192	190	122	194
Flow Rate (gallons per minute)	each visit	.78	.52	.21	.58	
Effluent Water Sample	1/month	—	Yes	N	—	—
If yes, what is the pH?	1/month	—	7.20	—	—	—
Air Sample	1/quarter	—	—	Yes	—	—
Anemometer reading MPE	1/quarter	—	—	1500 1183	—	—
Anemometer reading stripper	1/quarter	—	—	1400 1191	—	—
Vacuum at MPE blower (In Hg)	each visit	20	21	20	22	22
Pressure at TP-1 (psi)	each visit	31	31	30	31	30
Pressure at TP-2 (psi)	each visit	15	15	~~15~~ 15	15	15
Pressure at TP-3 (psi)	each visit	36	32	33	33	32
Pressure at Air Stripper (in H2O)	each visit	10	10	~~15~~ 10	10	10
Pressure at DVT element (psi)	each visit	2 Normal	Normal	Normal	Normal	normal
Temperature at DVT (deg F)	each visit	188	190	201	188	190
Amps at MPE blower (FLA=55.2)	bi-weekly		65.0		65.1	
Amps at MPE blower L-2	bi-weekly		66.1		66.0	
Amps at MPE blower L-3	bi-weekly		65.0		65.2	
Amps at TP-1 L-1 (FLA=5.5)	bi-weekly		3.2		3.1	
Amps at TP-1 L-2	bi-weekly		3.3		3.4	
Amps at TP-1 L-3	bi-weekly		3.2		3.2	
Amps at TP-2 L-1 (FLA=2.6)	bi-weekly		2.3		2.2	
Amps at TP-2 L-2	bi-weekly		2.3		2.3	
Amps at TP-2 L-3	bi-weekly		2.3		2.3	
Amps at TP-3 L-1 (FLA=2.6)	bi-weekly		2.3		2.4	
Amps at TP-3 L-2	bi-weekly		2.2		2.2	
Amps at TP-3 L-3	bi-weekly		2.1		2.1	
Amps at Air Stripper (FLA=8.5)	bi-weekly		5.1		5.2	
Amps at Air Stripper L-2	bi-weekly		4.6		4.5	
Amps at Air Stripper L-3	bi-weekly		4.2		4.1	
Vac. rdg. at MPE-1 (In Hg)	bi-weekly	—		—		
Vac. rdg. at MPE-2 (In Hg)	bi-weekly	—		—		
Vac. rdg. at MPE-3 (In Hg)	bi-weekly	open		open		
Vac. rdg. at MPE-4 (In Hg)	bi-weekly	open		open		
Vac. rdg. at MPE-5 (In Hg)	bi-weekly	—		—		
Vac. rdg. at MPE-6 (In Hg)	bi-weekly	—		—		
Vac. rdg. at MPE-7 (In Hg)	bi-weekly	open		open		
Vac. rdg. at MPE-8 (In Hg)	bi-weekly	—		—		
Vac. rdg. at MPE-9 (In Hg)	bi-weekly	—		—		
Vac. rdg. at MPE-10 (In Hg)	bi-weekly	—		—		
Vac. rdg. at MPE-11 (In Hg)	bi-weekly	—		—		
Vac. rdg. at MPE-12 (In Hg)	bi-weekly	/		—		
Static W.L. at MW-4	each visit			6.70	6.91	6.86
Inches of free product in MW-4	each visit	6.95	6.25	~~6.70~~	~~6.91~~	
Gallons of gw/fp removed	each visit	—	—	—	—	—
Static W.L. at MW-5	each visit	—	—	6.55	6.54	6.54
Inches of free product in MW-5	each visit	6.70	6.19	~~6.55~~	—	—
Gallons of gw/fp removed	each visit	—	—	—	—	—
Clean Y-Strainers	bi-weekly	—	Y	Y	Y	N
Clean Flow Meters	bi-weekly	Y	Y	Y	Y	Y
Check Air Filter	bi-weekly	Y		Y	Y	Y
Rydlime Transfer Pumps	bi-weekly	N	N	N	N	Y
Grease Zerks	1/3000 hrs.	N	N	N	N	N
Clean Air Stripper	as needed	N	N	N	N	N
Clean Oil/Water Separator	as needed	N	N	N	N	N
Clean Knockout Tank	as needed	N	N	N	N	N
Add oil to DVT (amount?)	as needed	Add	N	Yes	N	N
Departure: up or down?		up	up	up	up	up
O&M Tech Initials	each visit	DL	DL	DL	DL	MF

notes:

6.28 - up on arrival
- gauge DTW
- Add oil, clean meter, strainer, tubes
- Adjust Hg up slightly (Hi temp)
- monitor. up on departure

7.6 - up on arrival
- gauge DTW, Amps
- collect 1/4ly samples, pH
- clean tubes, meter, strainer. TP 3 sample port
- up on departure

7.14 - up on arrival
- collect DTW + Air Samples
- adjust Hg up slightly to 22' (Hert)
- clean Tubes, meter, strainer, add oil
- up on departure

7.19 - up on arrival
- gauge Amps + DTW. Install Box Fan (Temp) in Heater blowing on LRP to try to cool.
- clean strainer, meter, switches
- restart + monitor
- up on departure

AMERICAN ENVIRONMENTAL OPERATION AND MAINTENANCE LOG

Facility Name: Circle K # 8
Address: 115 Clifty Drive
Madison, IN
Project Number: 224013

Sampling Parameters		
Influent H2O	Effluent H20	Air
BTEX / MTBE (monthly)	BTEX / MTBE & pH (monthly)	BTEX, TPH C4-C12, total & speciated
	BOD/TSS/O&G (Quarterly)	MPE & Air Str (Quarterly)
Lab: ESC	ESC	Microseeps

Instructions:
Perform O&M tasks/data collection (in bold) according to the specified frequency.
Put yes, no, or the appropriate data in the column below the date of each visit.
For pressure/vacuum readings, include the units with data (i.e. " Hg, " W/C, psi).
* Indicates that the data will be automatically entered when field data is entered into the spreadsheet.

Description	Frequency	Date 8-1-16	Date 8-9-16	Date 8-15-16	Date 8-23-16	Date 8-29-16
Arrival: Up or down?	each visit	UP	UP	UP	UP	UP
If down, why?	each visit	–	–	–	–	–
Flow Meter Reading	each visit	1423420	1430048	1435073	1442170	1446618
*Total flow between visits	each visit	4109	6628	5025	7097	4448
MPE Hours	each visit	32981	33171	33318	33508	33651
*MPE run time	each visit	119	190	147	190	143
Flow Rate (gallons per minute)	each visit	.58	.58	.57	.62	.52
Effluent Water Sample	1/month	yes	–	–	–	–
If yes, what is the pH?	1/month	7.13	–	–	–	–
Air Sample	1/quarter	–	–	–	–	–
Anemometer reading MPE	1/quarter	–	–	–	–	–
Anemometer reading stripper	1/quarter	–	–	–	–	–
Vacuum at MPE blower (In Hg)	each visit	21	21	22	21	21
Pressure at TP-1 (psi)	each visit	30	31	31	31	31
Pressure at TP-2 (psi)	each visit	15	15	15	15	15
Pressure at TP-3 (psi)	each visit	33	34	35	36	37
Pressure at Air Stripper (in H2O)	each visit	10	10	10	10	10
Pressure at DVT element (psi)	each visit	Normal	Normal	Normal	Normal	Normal
Temperature at DVT (deg F)	each visit	190	189	189	182	186
Amps at MPE blower (FLA=55.2)	bi-weekly	65.2		65.0		65.1
Amps at MPE blower L-2	bi-weekly	66.1		66.1		66.1
Amps at MPE blower L-3	bi-weekly	65.0		65.0		65.0
Amps at TP-1 L-1 (FLA=5.5)	bi-weekly	3.2		3.1		3.2
Amps at TP-1 L-2	bi-weekly	3.4		3.4		3.3
Amps at TP-1 L-3	bi-weekly	3.2		3.2		3.2
Amps at TP-2 L-1 (FLA=2.6)	bi-weekly	2.2		2.3		2.2
Amps at TP-2 L-2	bi-weekly	2.2		2.2		2.3
Amps at TP-2 L-3	bi-weekly	2.3		2.3		2.3
Amps at TP-3 L-1 (FLA=2.6)	bi-weekly	2.3		2.4		2.3
Amps at TP-3 L-2	bi-weekly	2.3		2.3		2.3
Amps at TP-3 L-3	bi-weekly	2.1		2.1		2.1
Amps at Air Stripper (FLA=8.5)	bi-weekly	5.1		5.0		4.9
Amps at Air Stripper L-2	bi-weekly	4.6		4.6		4.7
Amps at Air Stripper L-3	bi-weekly	4.0		4.0		4.1
Vac. rdg. at MPE-1 (in Hg)	bi-weekly		–		–	
Vac. rdg. at MPE-2 (in Hg)	bi-weekly		–		–	
Vac. rdg. at MPE-3 (in Hg)	bi-weekly		open		open	
Vac. rdg. at MPE-4 (in Hg)	bi-weekly		open		open	
Vac. rdg. at MPE-5 (in Hg)	bi-weekly		–		–	
Vac. rdg. at MPE-6 (in Hg)	bi-weekly		–		–	
Vac. rdg. at MPE-7 (in Hg)	bi-weekly		open		open	
Vac. rdg. at MPE-8 (in Hg)	bi-weekly		–		–	
Vac. rdg. at MPE-9 (in Hg)	bi-weekly		–		–	
Vac. rdg. at MPE-10 (in Hg)	bi-weekly		–		–	
Vac. rdg. at MPE-11 (in Hg)	bi-weekly		–		–	
Vac. rdg. at MPE-12 (in Hg)	bi-weekly		–		–	
Static W.L. at MW-4	each visit	5.72	6.05	5.21	5.45	6.05
Inches of free product in MW-4	each visit	–	–	–	–	–
Gallons of gw/fp removed	each visit	–	–	–	–	–
Static W.L. at MW-5	each visit	5.60	6.20	4.18	5.04	5.61
Inches of free product in MW-5	each visit	–	–	–	–	
Gallons of gw/fp removed	each visit	–	–	–	–	
Clean Y-Strainers	bi-weekly	Y	Y	Y	Y	Y
Clean Flow Meters	bi-weekly	Y	Y	Y	Y	Y
Check Air Filter	bi-weekly	N	N	Y	Y	Y
Rydlime Transfer Pumps	bi-weekly	N	N	N	N	N
Grease Zerks	1/3000 hrs.	N	N	N	N	N
Clean Air Stripper	as needed	N	N	N	N	N
Clean Oil/Water Separator	as needed	N	N	N	N	N
Clean Knockout Tank	as needed	N	N	N	N	N
Add oil to DVT (amount?)	as needed	N	N	N	N	N
Departure: up or down?		UP	UP	UP	UP	UP
O&M Tech Initials	each visit	RL	DC	DC	DC	DC

notes:

8-1
- up on arrival
- collect monthly samples
- gauge wells + Amp readings
- clean tubes / switches, strainer + meter, monitor
- up on departure

8-9
- up on arrival
- gauge DTW, clean switches, tubes, strainer + flow meter
- clean trailer, monitor system
- up on departure

8-15
- up on arrival
- gauge DTW + Amps
- clean tubes, switches, meter + strainer,
- clean Heat Exchanger + trailer, Exchange abs. pads
- restart + monitor
- up on departure

8-23
- up on arrival
- gauge DTW
- clean tubes / switches, meter, strainer + trailer
- Restart + monitor
- up on departure

8-29
- up on arrival
- gauge Amps + DTW
- clean tubes, switches, strainer, meter heat exchanger
- restart + monitor
- up on departure

AMERICAN ENVIRONMENTAL OPERATION AND MAINTENANCE LOG

Facility Name: Circle K # 8
Address: 115 Clifty Drive
Madison, IN
Project Number: 224013

Sampling Parameters		
Influent H2O	Effluent H20	Air
BTEX / MTBE (monthly)	BTEX / MTBE & pH (monthly)	BTEX, TPH C4-C12, total & speciated
	BOD/TSS/O&G (Quarterly)	MPE & Air Str (Quarterly)
Lab: ESC	ESC	Microseeps

Instructions:
Perform O&M tasks/data collection (in bold) according to the specified frequency.
Put yes, no, or the appropriate data in the column below the date of each visit.
For pressure/vacuum readings, include the units with data (i.e. " Hg, " W/C, psi).
* Indicates that the data will be automatically entered when field data is entered into the spreadsheet.

Description	Frequency	Date 9.7.16	Date 9.13.16	Date 9.19.16	Date 9.22.16	Date 9.29.16
Arrival: Up or down?	each visit	up	up	up	up	DWN
If down, why?	each visit	–	–			FR per KJ.
Flow Meter Reading	each visit	1449820	7918	15650	19455	19455
*Total flow between visits	each visit	3202	7918	7732	3805	–
MPE Hours	each visit	33867	34011	34155	34232	34232
*MPE run time	each visit	216	144	144	77	–
Flow Rate (gallons per minute)	each visit	.25		.90	.93	
Effluent Water Sample	1/month	Yes	–	–		
If yes, what is the pH?	1/month	7.22	–	–		
Air Sample	1/quarter	–	–	–		
Anemometer reading MPE	1/quarter	–	–	–		
Anemometer reading stripper	1/quarter	–	–	–		
Vacuum at MPE blower (in Hg)	each visit	20.5	22	21		
Pressure at TP-1 (psi)	each visit	32	31	28		
Pressure at TP-2 (psi)	each visit	15	15	14		
Pressure at TP-3 (psi)	each visit	42	40	36		
Pressure at Air Stripper (in H2O)	each visit	10	10	19		
Pressure at DVT element (psi)	each visit	Normal	Normal	Normal		
Temperature at DVT (deg F)	each visit	191	180	177		
Amps at MPE blower (FLA=55.2)	bi-weekly		65.2			
Amps at MPE blower L-2	bi-weekly		66.0			
Amps at MPE blower L-3	bi-weekly		65.1			
Amps at TP-1 L-1 (FLA=5.5)	bi-weekly		3.3			
Amps at TP-1 L-2	bi-weekly		3.2			
Amps at TP-1 L-3	bi-weekly		3.2			
Amps at TP-2 L-1 (FLA=2.6)	bi-weekly		2.4			
Amps at TP-2 L-2	bi-weekly		2.3			
Amps at TP-2 L-3	bi-weekly		2.3			
Amps at TP-3 L-1 (FLA=2.6)	bi-weekly		2.3			
Amps at TP-3 L-2	bi-weekly		2.2			
Amps at TP-3 L-3	bi-weekly		2.1			
Amps at Air Stripper (FLA=8.5)	bi-weekly		4.9			
Amps at Air Stripper L-2	bi-weekly		4.8			
Amps at Air Stripper L-3	bi-weekly		4.1			
Vac. rdg. at MPE-1 (in Hg)	bi-weekly	–		–		
Vac. rdg. at MPE-2 (in Hg)	bi-weekly	–		–		
Vac. rdg. at MPE-3 (in Hg)	bi-weekly	open		open	Responded	
Vac. rdg. at MPE-4 (in Hg)	bi-weekly	open		open	to	
Vac. rdg. at MPE-5 (in Hg)	bi-weekly	–		–		
Vac. rdg. at MPE-6 (in Hg)	bi-weekly	–		–		
Vac. rdg. at MPE-7 (in Hg)	bi-weekly	open		open	FR	
Vac. rdg. at MPE-8 (in Hg)	bi-weekly	–		–		
Vac. rdg. at MPE-9 (in Hg)	bi-weekly	–		–		
Vac. rdg. at MPE-10 (in Hg)	bi-weekly	–		–	per J.	
Vac. rdg. at MPE-11 (in Hg)	bi-weekly	–		–	Kim	
Vac. rdg. at MPE-12 (in Hg)	bi-weekly	–		–		
Static W.L. at MW-4	each visit	4.90	7.71	9.09		7.83
Inches of free product in MW-4	each visit	–	–	–		–
Gallons of gw/fp removed	each visit	–	–	–		–
Static W.L. at MW-5	each visit	4.88	7.30	7.71		7.21
Inches of free product in MW-5	each visit	–	–	–		–
Gallons of gw/fp removed	each visit	–	–	–		–
Clean Y-Strainers	bi-weekly	Y	Y	Y		N
Clean Flow Meters	bi-weekly	Y	Y	Y		N
Check Air Filter	bi-weekly	N	N			N
Rydlime Transfer Pumps	bi-weekly	703	N	N		N
Grease Zerks	1/3000 hrs.	N	N	N		N
Clean Air Stripper	as needed	N	N	N		N
Clean Oil/Water Separator	as needed	N	N	N		Yes
Clean Knockout Tank	as needed	N	N	Yes		NO
Add oil to DVT (amount?)	as needed	N	Add	N		N
Departure: up or down?		up	up	up	DWN	DWN
O&M Tech Initials	each visit	RL	RL	R	DL	DL

notes:

9-7 - up on arrival - Flow meter not working
- gauge DTW, collect monthly samples / ph.
- clean strainer, meter, tubes, TPJ
- monitor system, up on departure

9-13 - up on arrival
- gauge DTW, Amps
- clean tubes / switches, meter, strainer
Add oil
- Re start + monitor
- up on departure

9-19 - up on arrival
- gauge DTW
- cleaner trailer, tubes, meter, strainer
- clean KO tank
- remove entrn fan (heat), monitor
- up on departure

9-22 - up on arrival
- shut system down per Kim J - ER
@ CK 69

9-29 - Down on arrival - ER response @ CK 69
per KJ
- gauge MW 4, 5 check for LNAPL
- clean ows / filters
- down on departure

ANALYTICAL REPORT

July 12, 2016

American Environmental - IN CKR

Sample Delivery Group:	L845458
Samples Received:	07/07/2016
Project Number:	224013
Description:	Circle K 8 - Madison, IN
Site:	CK 8
Report To:	Mike Hightchew 9127 Galene Drive, Suite D Louisville, KY 40299

Entire Report Reviewed By:

Jeff Carr
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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INFLUENT L845458-01 GW

Collected by: Barry Luppert
Collected date/time: 07/06/16 10:15
Received date/time: 07/07/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG886890	1	07/08/16 19:26	07/08/16 19:26	BMB

MIDPOINT 1 L845458-02 GW

Collected by: Barry Luppert
Collected date/time: 07/06/16 10:20
Received date/time: 07/07/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG886890	1	07/08/16 19:48	07/08/16 19:48	BMB

EFFLUENT L845458-03 GW

Collected by: Barry Luppert
Collected date/time: 07/06/16 10:50
Received date/time: 07/07/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 D-2011	WG887237	1	07/10/16 18:18	07/10/16 23:02	JM
Volatile Organic Compounds (GC/MS) by Method 602MS	WG886843	1	07/10/16 14:04	07/10/16 14:04	BMB
Wet Chemistry by Method 1664A	WG887545	1	07/11/16 07:02	07/11/16 12:25	SHG
Wet Chemistry by Method 5210 B-2011	WG886591	1	07/07/16 14:31	07/12/16 09:30	RG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Technical Service Representative

Sample Handling and Receiving

Sample quantity was not sufficient to complete analysis per recommended method guidelines for the following samples.

ESC Sample ID	Project Sample ID	Method
L845458-03	EFFLUENT	2540 D-2011

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	9.69		0.500	1	07/08/2016 19:26	WG886890
Toluene	ND		5.00	1	07/08/2016 19:26	WG886890
Ethylbenzene	1.14		0.500	1	07/08/2016 19:26	WG886890
Total Xylene	2.42		1.50	1	07/08/2016 19:26	WG886890
Methyl tert-butyl ether	2.00		1.00	1	07/08/2016 19:26	WG886890
(S) a,a,a-Trifluorotoluene(PID)	*93.7*		*55.0-122*		*07/08/2016 19:26*	WG886890

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	0.506		0.500	1	07/08/2016 19:48	WG886890
Toluene	ND		5.00	1	07/08/2016 19:48	WG886890
Ethylbenzene	ND		0.500	1	07/08/2016 19:48	WG886890
Total Xylene	ND		1.50	1	07/08/2016 19:48	WG886890
Methyl tert-butyl ether	ND		1.00	1	07/08/2016 19:48	WG886890
(S) a,a,a-Trifluorotoluene(PID)	*93.6*		*55.0-122*		*07/08/2016 19:48*	WG886890

Additional Information

Analyte	Result	Units
pH (On Site)	7.2	su

Gravimetric Analysis by Method 2540 D-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Suspended Solids	ND		2500	1	07/10/2016 23:02	WG887237

Wet Chemistry by Method 1664A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Oil & Grease (Hexane Extr)	ND		4760	1	07/11/2016 12:25	WG887545

Wet Chemistry by Method 5210 B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
BOD	ND		3330	1	07/12/2016 09:30	WG886591

Volatile Organic Compounds (GC/MS) by Method 602MS

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		1.00	1	07/10/2016 14:04	WG886843
Toluene	ND		5.00	1	07/10/2016 14:04	WG886843
Ethylbenzene	ND		1.00	1	07/10/2016 14:04	WG886843
Total Xylenes	ND		3.00	1	07/10/2016 14:04	WG886843
Methyl tert-butyl ether	ND		1.00	1	07/10/2016 14:04	WG886843
(S) Toluene-d8	*108*		*90.0-115*		*07/10/2016 14:04*	WG886843
(S) Dibromofluoromethane	*107*		*79.0-121*		*07/10/2016 14:04*	WG886843
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*07/10/2016 14:04*	WG886843

Method Blank (MB)

(MB) R3149006-1 07/10/16 23:02

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Suspended Solids	U		350	2500

L845337-03 Original Sample (OS) • Duplicate (DUP)

(OS) L845337-03 07/10/16 23:02 • (DUP) R3149006-4 07/10/16 23:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Suspended Solids	138000	138000	1	0.000		5

L845440-01 Original Sample (OS) • Duplicate (DUP)

(OS) L845440-01 07/10/16 23:02 • (DUP) R3149006-5 07/10/16 23:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Suspended Solids	55300	57300	1	3.55		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3149006-2 07/10/16 23:02 • (LCSD) R3149006-3 07/10/16 23:02

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Suspended Solids	773000	772000	748000	99.9	96.8	85.0-115			3.16	5

Method Blank (MB)

(MB) R3148803-1 07/11/16 12:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Oil & Grease (Hexane Extr)	U		1160	5000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3148803-2 07/11/16 12:21 • (LCSD) R3148803-3 07/11/16 12:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Oil & Grease (Hexane Extr)	40000	37800	38600	94.5	96.5	78.0-114			2.09	20

Method Blank (MB)

(MB) R3149081-1 07/12/16 11:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
BOD	U		1000	1000

L845403-02 Original Sample (OS) • Duplicate (DUP)

(OS) L845403-02 07/12/16 09:04 • (DUP) R3149081-5 07/12/16 09:05

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	8500	6100	1	33	P1	30

L845454-02 Original Sample (OS) • Duplicate (DUP)

(OS) L845454-02 07/12/16 09:24 • (DUP) R3149081-6 07/12/16 09:24

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	ND	0.000	1	0		30

Laboratory Control Sample (LCS)

(LCS) R3149081-2 07/12/16 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198000	175000	88.2	84.6-115	

Laboratory Control Sample (LCS)

(LCS) R3149081-3 07/12/16 09:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198000	196000	99.2	84.6-115	

Laboratory Control Sample (LCS)

(LCS) R3149081-4 07/12/16 11:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198000	197000	99.5	84.6-115	

Method Blank (MB)

(MB) R3148921-5 07/08/16 13:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.190	0.500
Toluene	U		0.180	5.00
Ethylbenzene	U		0.160	0.500
Total Xylene	U		0.510	1.50
Methyl tert-butyl ether	U		0.340	1.00
(S) a,a,a-Trifluorotoluene(PID)	*93.9*			*55.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3148921-1 07/08/16 12:03 • (LCSD) R3148921-2 07/08/16 12:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	49.9	49.7	99.8	99.4	70.0-130			0.370	20
Toluene	50.0	49.9	49.6	99.8	99.3	70.0-130			0.530	20
Ethylbenzene	50.0	52.3	52.2	105	104	70.0-130			0.270	20
Total Xylene	150	162	160	108	106	70.0-130			1.25	20
Methyl tert-butyl ether	50.0	43.9	45.6	87.9	91.2	70.0-130			3.71	20
(S) a,a,a-Trifluorotoluene(PID)				*102*	*103*	*55.0-122*				

L845649-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L845649-01 07/09/16 01:57 • (MS) R3148921-6 07/08/16 20:31 • (MSD) R3148921-7 07/08/16 20:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	ND	55.2	56.0	110	112	1	57.2-131			1.49	20
Toluene	50.0	ND	54.3	55.1	109	110	1	63.7-134			1.53	20
Ethylbenzene	50.0	ND	55.8	56.7	112	113	1	67.5-135			1.68	20
Total Xylene	150	ND	169	171	113	114	1	65.9-138			1.01	20
Methyl tert-butyl ether	50.0	ND	50.3	50.7	101	101	1	52.4-137			0.780	20
(S) a,a,a-Trifluorotoluene(PID)					*104*	*105*		*55.0-122*				

Method Blank (MB)

(MB) R3148893-3 07/10/16 05:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.780	5.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*108*			*90.0-115*
(S) Dibromofluoromethane	*106*			*79.0-121*
(S) 4-Bromofluorobenzene	*103*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3148893-1 07/10/16 04:05 • (LCSD) R3148893-2 07/10/16 04:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	24.2	24.2	96.9	96.7	73.0-122			0.160	20
Ethylbenzene	25.0	23.8	23.6	95.2	94.6	80.9-121			0.670	20
Methyl tert-butyl ether	25.0	25.7	25.2	103	101	70.1-125			2.18	20
Toluene	25.0	24.2	23.9	96.8	95.5	77.9-116			1.33	20
Xylenes, Total	75.0	72.9	73.0	97.2	97.3	79.2-122			0.0900	20
(S) Toluene-d8				*107*	*106*	*90.0-115*				
(S) Dibromofluoromethane				*110*	*109*	*79.0-121*				
(S) 4-Bromofluorobenzene				*100*	*100*	*80.1-120*				

L845177-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L845177-02 07/10/16 07:53 • (MS) R3148893-4 07/10/16 06:35 • (MSD) R3148893-5 07/10/16 06:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	U	23.1	22.5	92.5	90.2	1	58.6-133			2.52	20
Ethylbenzene	25.0	0.455	22.7	22.4	88.9	87.9	1	62.7-136			1.05	20
Methyl tert-butyl ether	25.0	U	24.4	24.5	97.8	97.8	1	61.4-136			0.0400	20
Toluene	25.0	U	23.1	22.4	92.3	89.4	1	67.8-124			3.23	20
Xylenes, Total	75.0	1.80	69.9	69.0	90.9	89.6	1	65.6-133			1.38	20
(S) Toluene-d8					*107*	*106*		*90.0-115*				
(S) Dibromofluoromethane					*109*	*110*		*79.0-121*				
(S) 4-Bromofluorobenzene					*100*	*101*		*80.1-120*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

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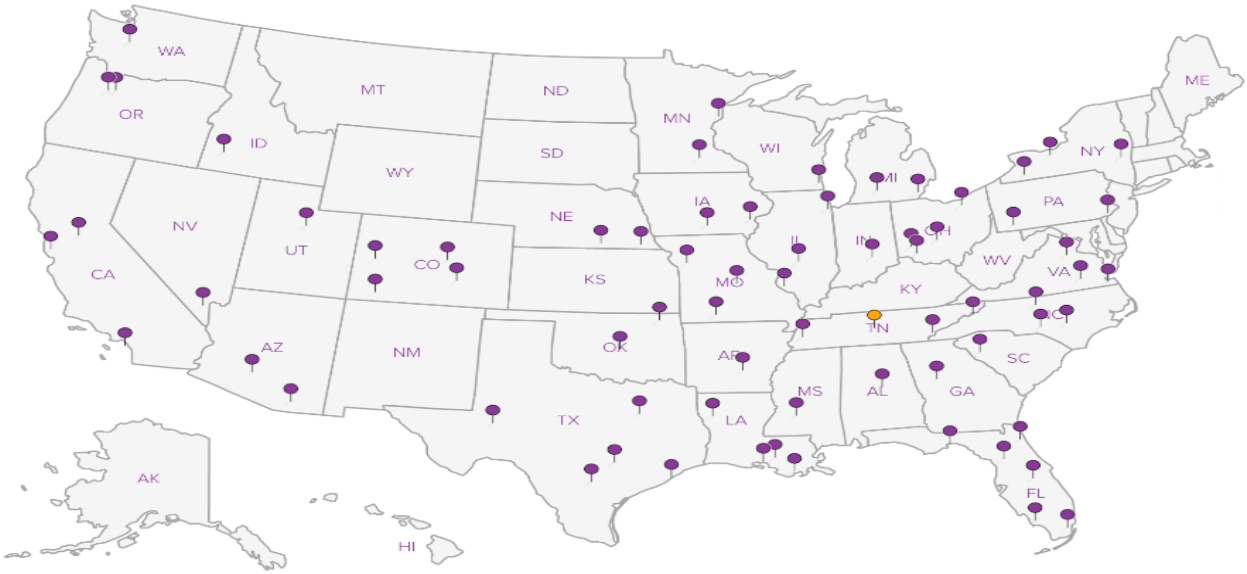

Company Name/Address:
American Environmental
8500 Georgetown Road
Indianapolis, IN 46268

Billing Information:
Stacy Workman
8500 Georgetown Road
Indianapolis, IN 46268

Report to: Mike Hightchew

Email To: mhightchew@aeckentucky.com

Project Description: CK 8 Quarterly Sampling

City/State Collected: Madison, IN

Phone: 502-491-0144
Fax: 502-491-9271

Client Project # 224013

Lab Project #

Collected by (print): **Barry Luppert**

Site/Facility ID # CK 8

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ____ Y ✓

Rush? (Lab MUST Be Notified)
____ Same Day 200%
____ Next Day 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed: standard

Email? ___No ✓Yes
FAX? ✓No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 045450
J066

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX/MTBE 8021	BTEX/MTBE 602	TSS 160.2	Oil and Grease 1664	BOD						Rem./Contaminant	Sample # (lab only)
Influent	Grab	GW		7-6-16	1015	2	X											01
Midpoint 1	Grab	GW		7-6-16	1020	2	X											02
~~Midpoint 2~~	~~Grab~~	~~GW~~				~~2~~	~~X~~	~~DC~~										
Effluent	Grab	GW		7-6-16	1050	5		X	X	X	X							03

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

Remarks:

pH 7.20 Temp _____
Flow _____ Other _____

6361 0193 5429

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	7.6.17	1400	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			[signature]

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____

Temp: 3.2 °C Bottles Received: 9

Date: 7-7-16 Time: 0900

Condition: (lab use only) OK MR

COC Seal Intact: ____Y ____N ____NA

pH Checked: NCF:

ANALYTICAL REPORT

August 10, 2016

American Environmental - IN CKR

Sample Delivery Group:	L850974
Samples Received:	08/03/2016
Project Number:	224013
Description:	Circle K 8 - Madison, IN
Site:	8
Report To:	Mike Hightchew 9127 Galene Drive, Suite D Louisville, KY 40299

Entire Report Reviewed By:

Jeff Carr
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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INFLUENT L850974-01 GW

Collected by: Barry Luppert
Collected date/time: 08/01/16 10:20
Received date/time: 08/03/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG896125	1	08/05/16 22:35	08/05/16 22:35	BMB

MIDPOINT #1 L850974-02 GW

Collected by: Barry Luppert
Collected date/time: 08/01/16 10:26
Received date/time: 08/03/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG896125	1	08/05/16 22:56	08/05/16 22:56	BMB

EFFLUENT L850974-03 GW

Collected by: Barry Luppert
Collected date/time: 08/01/16 10:28
Received date/time: 08/03/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 602MS	WG896246	1	08/07/16 04:52	08/07/16 04:52	BMB

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	2.12		0.500	1	08/05/2016 22:35	WG896125
Toluene	ND		5.00	1	08/05/2016 22:35	WG896125
Ethylbenzene	ND		0.500	1	08/05/2016 22:35	WG896125
Total Xylene	ND		1.50	1	08/05/2016 22:35	WG896125
Methyl tert-butyl ether	ND		1.00	1	08/05/2016 22:35	WG896125
(S) a,a,a-Trifluorotoluene(PID)	*102*		*55.0-122*		*08/05/2016 22:35*	WG896125

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	08/05/2016 22:56	WG896125
Toluene	ND		5.00	1	08/05/2016 22:56	WG896125
Ethylbenzene	ND		0.500	1	08/05/2016 22:56	WG896125
Total Xylene	ND		1.50	1	08/05/2016 22:56	WG896125
Methyl tert-butyl ether	ND		1.00	1	08/05/2016 22:56	WG896125
(S) a,a,a-Trifluorotoluene(PID)	*101*		*55.0-122*		*08/05/2016 22:56*	WG896125

Additional Information

Analyte	Result	Units
pH (On Site)	7.13	su

Volatile Organic Compounds (GC/MS) by Method 602MS

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		1.00	1	08/07/2016 04:52	WG896246
Toluene	ND		5.00	1	08/07/2016 04:52	WG896246
Ethylbenzene	ND		1.00	1	08/07/2016 04:52	WG896246
Total Xylenes	ND		3.00	1	08/07/2016 04:52	WG896246
Methyl tert-butyl ether	ND		1.00	1	08/07/2016 04:52	WG896246
(S) Toluene-d8	*104*		*90.0-115*		*08/07/2016 04:52*	WG896246
(S) Dibromofluoromethane	*98.2*		*79.0-121*		*08/07/2016 04:52*	WG896246
(S) 4-Bromofluorobenzene	*93.2*		*80.1-120*		*08/07/2016 04:52*	WG896246

Method Blank (MB)

(MB) R3155536-5 08/05/16 11:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.190	0.500
Toluene	0.201	J	0.180	5.00
Ethylbenzene	U		0.160	0.500
Total Xylene	U		0.510	1.50
Methyl tert-butyl ether	U		0.340	1.00
(S) a,a,a-Trifluorotoluene(PID)	*98.2*			*55.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3155536-1 08/05/16 10:12 • (LCSD) R3155536-2 08/05/16 10:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	50.8	49.7	102	99.4	70.0-130			2.23	20
Toluene	50.0	51.6	50.4	103	101	70.0-130			2.42	20
Ethylbenzene	50.0	50.4	49.2	101	98.4	70.0-130			2.39	20
Total Xylene	150	157	153	105	102	70.0-130			2.33	20
Methyl tert-butyl ether	50.0	53.9	53.2	108	106	70.0-130			1.21	20
(S) a,a,a-Trifluorotoluene(PID)				*104*	*104*	*55.0-122*				

L851273-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L851273-07 08/05/16 15:43 • (MS) R3155536-6 08/05/16 16:04 • (MSD) R3155536-7 08/05/16 16:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	ND	45.1	48.8	90.1	97.6	1	57.2-131			7.92	20
Toluene	50.0	ND	46.0	49.7	91.9	99.4	1	63.7-134			7.79	20
Ethylbenzene	50.0	ND	45.0	48.7	90.1	97.4	1	67.5-135			7.81	20
Total Xylene	150	ND	140	152	93.4	101	1	65.9-138			7.95	20
Methyl tert-butyl ether	50.0	ND	51.3	54.6	103	109	1	52.4-137			6.29	20
(S) a,a,a-Trifluorotoluene(PID)					*104*	*104*		*55.0-122*				

Method Blank (MB)

(MB) R3155023-3 08/06/16 18:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.780	5.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*103*			*90.0-115*
(S) Dibromofluoromethane	*102*			*79.0-121*
(S) 4-Bromofluorobenzene	*91.1*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3155023-1 08/06/16 12:12 • (LCSD) R3155023-2 08/06/16 12:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	22.7	22.9	90.8	91.6	73.0-122			0.830	20
Ethylbenzene	25.0	24.7	25.3	98.9	101	80.9-121			2.46	20
Methyl tert-butyl ether	25.0	19.6	20.7	78.4	82.9	70.1-125			5.54	20
Toluene	25.0	23.2	24.1	92.8	96.5	77.9-116			3.92	20
Xylenes, Total	75.0	75.1	76.7	100	102	79.2-122			2.10	20
(S) Toluene-d8				*103*	*103*	*90.0-115*				
(S) Dibromofluoromethane				*102*	*101*	*79.0-121*				
(S) 4-Bromofluorobenzene				*95.8*	*95.6*	*80.1-120*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Abbreviations and Definitions

SDG	Sample Delivery Group.
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RDL	Reported Detection Limit.
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U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

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Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA	100789
DOD	1461.01
USDA	S-67674

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

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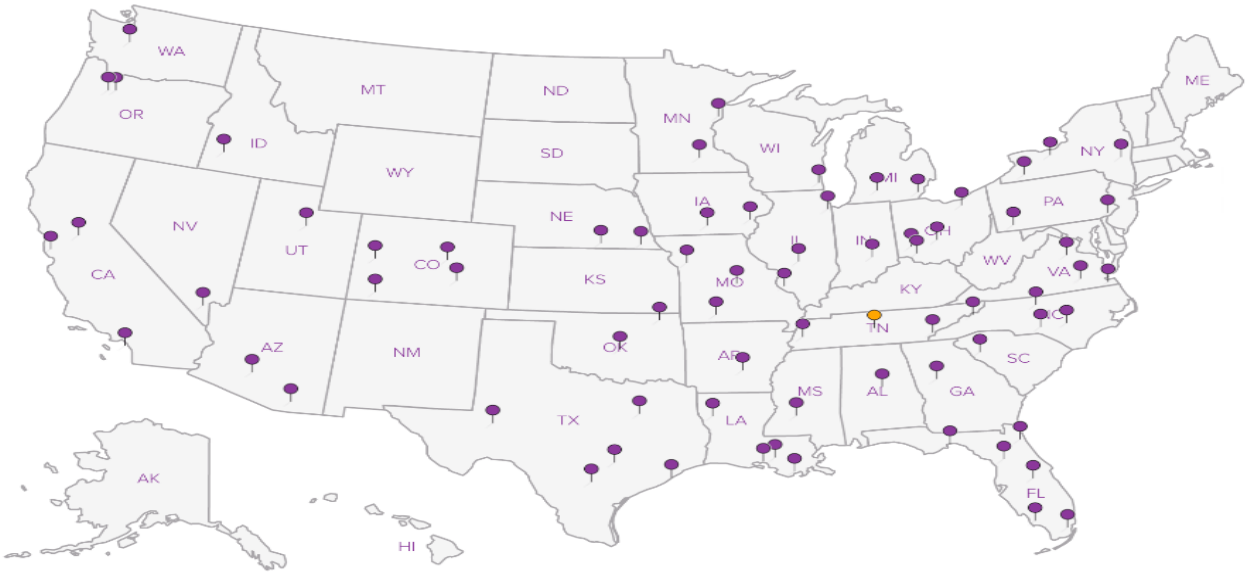

Chain of Custody
Page 1 of 1

ESC LAB SCIENCES
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Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
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H080

AEC - Ky
9127 Galene Dr
Suite D
Louisville, Ky 40299

Billing Information:
Stacey Workman
8500 Georgetown Rd
Indianapolis, In

Report to: Mike Hightchew
Email to: mhightchew@aeckentucky.com

Project Description: CK #8
City/State Collected: Madison, In
Phone: 502-491-0144
FAX: 502-491-9271
Client Project #: 124013
ESC Key:
Collected by: Barry Luppert
Site/Facility ID#:
P.O.#:
Collected by (signature):
Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No __Yes
FAX? __No __Yes

CoCode (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX (MTBE 8021)	BTEX (MTBE 602)	Remarks/Contaminant	Sample # (lab only)
Influent	Grab	GW		8-1-16	1020	2	X			850974-01
Midpoint #1				8-1-16	1026	2	X			02
~~Midpoint #2~~ BC							X	BC		03
Effluent				8-1-16	1028	2		X		

pH 7.13 Temp
Flow Other

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: 6361 0193 5451

Relinquished by: (Signature)	Date: 8-2-16	Time: 1500	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ ____
Temp: 2.4
Bottles Received: 6 VP
Date: 8/3/16
Time: 0900

Condition: NBG (lab use only)
CoC Seals Intact: ____Y ____N ✓ NA
pH Checked:
NCF:

ESC LAB SCIENCES

YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: AMERENVKY SDG# 850974

Cooler Received/Opened On: 8/3/16 By: Caleb Busby

Temperature Upon Receipt: 2.4 °c

Caleb Busby
(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?			X
Were custody papers properly filled out (ink, signed, etc.)?	X		
Did all bottles arrive in good condition?	X		
Were correct bottles used for the analyses requested?	X		
Was sufficient amount of sample sent in each bottle?	X		
Were correct preservatives used?	X		
Were all applicable sample containers checked for preservation? (Any samples not in accepted pH range noted on COC .)			X
If applicable, was an observable VOA headspace present?		X	
Non Conformance Generated? (If yes see attached NCF)			

ANALYTICAL REPORT

September 19, 2016

American Environmental - IN CKR

Sample Delivery Group:	L858617
Samples Received:	09/09/2016
Project Number:	224013
Description:	Circle K 8 - Madison, IN
Site:	8
Report To:	Mike Hightchew 9127 Galene Drive, Suite D Louisville, KY 40299

Entire Report Reviewed By:

Jeff Carr
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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INFLUENT L858617-01 GW

Collected by: Barry Luppert
Collected date/time: 09/07/16 09:00
Received date/time: 09/09/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG906708	1	09/11/16 04:05	09/11/16 04:05	LRL

MIDPOIT #1 L858617-02 GW

Collected by: Barry Luppert
Collected date/time: 09/07/16 09:10
Received date/time: 09/09/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG906708	1	09/11/16 04:28	09/11/16 04:28	LRL

EFFLUENT L858617-03 GW

Collected by: Barry Luppert
Collected date/time: 09/07/16 09:12
Received date/time: 09/09/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 602MS	WG906667	1	09/17/16 01:22	09/17/16 01:22	DAH

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	1.06		0.500	1	09/11/2016 04:05	WG906708
Toluene	ND		5.00	1	09/11/2016 04:05	WG906708
Ethylbenzene	ND		0.500	1	09/11/2016 04:05	WG906708
Total Xylene	ND		1.50	1	09/11/2016 04:05	WG906708
Methyl tert-butyl ether	ND		1.00	1	09/11/2016 04:05	WG906708
(S) a,a,a-Trifluorotoluene(PID)	*103*		*55.0-122*		*09/11/2016 04:05*	WG906708

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/11/2016 04:28	WG906708
Toluene	ND		5.00	1	09/11/2016 04:28	WG906708
Ethylbenzene	ND		0.500	1	09/11/2016 04:28	WG906708
Total Xylene	ND		1.50	1	09/11/2016 04:28	WG906708
Methyl tert-butyl ether	ND		1.00	1	09/11/2016 04:28	WG906708
(S) a,a,a-Trifluorotoluene(PID)	*103*		*55.0-122*		*09/11/2016 04:28*	WG906708

Volatile Organic Compounds (GC/MS) by Method 602MS

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		1.00	1	09/17/2016 01:22	WG906667
Toluene	ND		5.00	1	09/17/2016 01:22	WG906667
Ethylbenzene	ND		1.00	1	09/17/2016 01:22	WG906667
Total Xylenes	ND		3.00	1	09/17/2016 01:22	WG906667
Methyl tert-butyl ether	ND		1.00	1	09/17/2016 01:22	WG906667
(S) Toluene-d8	*103*		*90.0-115*		*09/17/2016 01:22*	WG906667
(S) Dibromofluoromethane	*94.1*		*79.0-121*		*09/17/2016 01:22*	WG906667
(S) 4-Bromofluorobenzene	*99.3*		*80.1-120*		*09/17/2016 01:22*	WG906667

Method Blank (MB)

(MB) R3163840-5 09/10/16 20:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.190	0.500
Toluene	0.388	J	0.180	5.00
Ethylbenzene	0.194	J	0.160	0.500
Total Xylene	U		0.510	1.50
Methyl tert-butyl ether	U		0.340	1.00
(S) a,a,a-Trifluorotoluene(PID)	*103*			*55.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3163840-1 09/10/16 18:44 • (LCSD) R3163840-2 09/10/16 19:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	46.7	46.7	93.5	93.4	70.0-130			0.130	20
Toluene	50.0	47.5	47.3	95.0	94.6	70.0-130			0.410	20
Ethylbenzene	50.0	48.2	48.7	96.5	97.4	70.0-130			0.980	20
Total Xylene	150	144	146	96.3	97.3	70.0-130			1.02	20
Methyl tert-butyl ether	50.0	41.8	43.9	83.7	87.9	70.0-130			4.94	20
(S) a,a,a-Trifluorotoluene(PID)				*102*	*102*	*55.0-122*				

L858373-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L858373-01 09/11/16 00:23 • (MS) R3163840-6 09/10/16 22:32 • (MSD) R3163840-7 09/10/16 22:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	ND	46.4	46.7	92.8	93.4	1	57.2-131			0.730	20
Toluene	50.0	ND	47.0	47.3	92.7	93.3	1	63.7-134			0.600	20
Ethylbenzene	50.0	ND	47.9	48.5	95.4	96.5	1	67.5-135			1.23	20
Total Xylene	150	ND	143	145	94.5	95.8	1	65.9-138			1.36	20
Methyl tert-butyl ether	50.0	ND	41.1	43.9	82.2	87.8	1	52.4-137			6.56	20
(S) a,a,a-Trifluorotoluene(PID)					*101*	*101*		*55.0-122*				

Method Blank (MB)

(MB) R3164524-3 09/16/16 19:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.780	5.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*102*			*90.0-115*
(S) Dibromofluoromethane	*94.0*			*79.0-121*
(S) 4-Bromofluorobenzene	*98.1*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3164524-1 09/16/16 18:01 • (LCSD) R3164524-2 09/16/16 18:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	22.4	22.6	89.7	90.5	73.0-122			0.860	20
Ethylbenzene	25.0	23.5	23.8	93.9	95.1	80.9-121			1.30	20
Methyl tert-butyl ether	25.0	22.4	23.2	89.5	92.9	70.1-125			3.71	20
Toluene	25.0	23.4	23.9	93.8	95.5	77.9-116			1.80	20
Xylenes, Total	75.0	71.1	72.3	94.8	96.4	79.2-122			1.69	20
(S) Toluene-d8				*104*	*104*	*90.0-115*				
(S) Dibromofluoromethane				*95.0*	*94.5*	*79.0-121*				
(S) 4-Bromofluorobenzene				*97.9*	*97.3*	*80.1-120*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

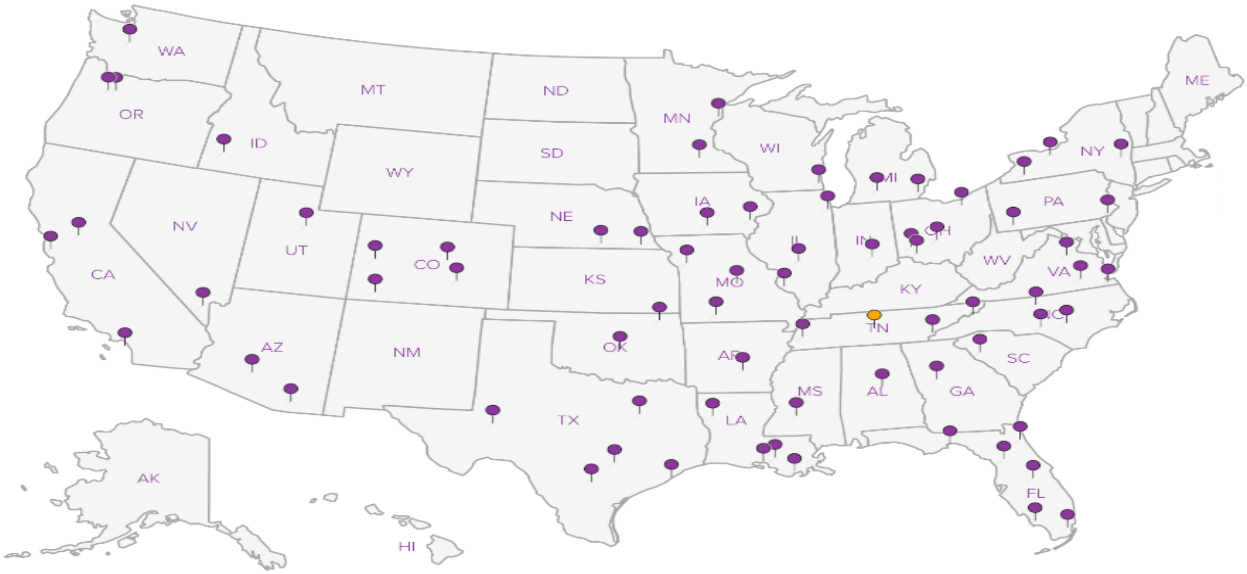
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA	100789
DOD	1461.01
USDA	S-67674

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



AEC - Ky
9127 Galene Dr
Suite D
Louisville, Ky 40299

Billing Information:
Stacey Workman
8500 Georgetown Rd
Indianapolis, In

Report to: Mike Hightchew
Email to: mhightchew@aeckentucky.com

Project Description: CK #8
City/State Collected: Madison, In
Phone: 502-491-0144
FAX: 502-491-9271
Client Project #: 124013
ESC Key:
Collected by: Barry Lupper
Site/Facility ID#:
P.O.#:
Collected by (signature): BL
Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No __Yes
FAX? __No __Yes

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX/MTBE 8021	BTEX/MTBE 602					Remarks/Contaminant	Sample # (lab only)
Influent	Grab	GW		9.7.16	0900	2	X							858617-01
Midpoint #1				9.7.16	0910	2	X							02
BL Midpoint #2							X							
Effluent				9.7.16	0912	2		X						03

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH 7.22 Temp _____
Flow _____ Other _____

Remarks:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
BL	9/8/16	1300	FedEx
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☑ FedEx ☐ Courier ☐ UPS ☐ _____
Temp: 1.3 Bottles Received: 6VP
Date: 9-9-16 Time: 0900

Condition: DDY (lab use only)
CoC Seals Intact: ___Y ___N ___NA
pH Checked: NCF:

Chain of Custody
Page 1 of 1

ESC LABS SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

D111

CoCode (lab use only)
Template/Prelogin
Shipped Via:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Form

Client: AMEENVIR	SDG# 058617
Cooler Received/Opened On: 9/9 /16	Temperature Upon Receipt: 1.8 °c
Received By: Timiesha Scott	
Signature: [signature]	

Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)			✓
If applicable, was an observable VOA headspace present?		✓	
Non Conformance Generated. (If yes see attached NCF)			

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

July 25, 2016

Mike Alexander
American Environmental Corporation
4305 Muhlhauser Road
Suite 3
Fairfield, OH 45014

RE: **CK8 / 224013**

Pace Workorder: 19636

Dear Mike Alexander:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, July 15, 2016. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Ruth Welsh 07/25/2016
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.

Please email info@microseeps.com.

Total Number of Pages ____

CERTIFICATE OF ANALYSIS

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Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 19636 CK8 / 224013

Lab ID	Sample ID	Matrix	Date Collected	Date Received
196360001	MPE	Vapor	7/14/2016 08:10	7/15/2016 16:00
196360002	AIR STRIPPER	Vapor	7/14/2016 08:20	7/15/2016 16:00

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ANALYTICAL RESULTS

Workorder: 19636 CK8 / 224013

Lab ID: **196360001** Date Received: 7/15/2016 16:00 Matrix: Vapor

Sample ID: **MPE** Date Collected: 7/14/2016 08:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM4.02 Vapors			Analytical Method: AM4.02 Vapors					
n-Butane	**0.22**	ppmv	0.20	0.041	1	7/21/2016 04:37	BW	n
Pentane	**<0.10**	ppmv	0.10	0.034	1	7/21/2016 04:37	BW	n
Hexane	**<0.10**	ppmv	0.10	0.042	1	7/21/2016 04:37	BW	n
Heptane	**<0.10**	ppmv	0.10	0.0090	1	7/21/2016 04:37	BW	n
Benzene	**<0.10**	ppmv	0.10	0.014	1	7/21/2016 04:37	BW	n
Octane	**<0.10**	ppmv	0.10	0.016	1	7/21/2016 04:37	BW	n
Toluene	**<0.10**	ppmv	0.10	0.019	1	7/21/2016 04:37	BW	n
Nonane	**<0.10**	ppmv	0.10	0.019	1	7/21/2016 04:37	BW	n
Ethylbenzene	**<0.10**	ppmv	0.10	0.018	1	7/21/2016 04:37	BW	n
m,p-Xylene	**<0.20**	ppmv	0.20	0.033	1	7/21/2016 04:37	BW	n
o-Xylene	**<0.10**	ppmv	0.10	0.027	1	7/21/2016 04:37	BW	n
n-Decane	**<0.10**	ppmv	0.10	0.012	1	7/21/2016 04:37	BW	n
Undecane	**<0.20**	ppmv	0.20	0.028	1	7/21/2016 04:37	BW	n
Dodecane	**<0.20**	ppmv	0.20	0.014	1	7/21/2016 04:37	BW	n
Total TPH C4-C12	**<0.70**	ppmv	0.70	0.10	1	7/21/2016 04:37	BW	n

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Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 19636 CK8 / 224013

Lab ID: **196360002** Date Received: 7/15/2016 16:00 Matrix: Vapor

Sample ID: **AIR STRIPPER** Date Collected: 7/14/2016 08:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM4.02 Vapors			Analytical Method: AM4.02 Vapors					
n-Butane	<0.20	ppmv	0.20	0.041	1	7/21/2016 05:43	BW	n
Pentane	<0.10	ppmv	0.10	0.034	1	7/21/2016 05:43	BW	n
Hexane	<0.10	ppmv	0.10	0.042	1	7/21/2016 05:43	BW	n
Heptane	<0.10	ppmv	0.10	0.0090	1	7/21/2016 05:43	BW	n
Benzene	<0.10	ppmv	0.10	0.014	1	7/21/2016 05:43	BW	n
Octane	<0.10	ppmv	0.10	0.016	1	7/21/2016 05:43	BW	n
Toluene	<0.10	ppmv	0.10	0.019	1	7/21/2016 05:43	BW	n
Nonane	<0.10	ppmv	0.10	0.019	1	7/21/2016 05:43	BW	n
Ethylbenzene	<0.10	ppmv	0.10	0.018	1	7/21/2016 05:43	BW	n
m,p-Xylene	<0.20	ppmv	0.20	0.033	1	7/21/2016 05:43	BW	n
o-Xylene	<0.10	ppmv	0.10	0.027	1	7/21/2016 05:43	BW	n
n-Decane	<0.10	ppmv	0.10	0.012	1	7/21/2016 05:43	BW	n
Undecane	<0.20	ppmv	0.20	0.028	1	7/21/2016 05:43	BW	n
Dodecane	<0.20	ppmv	0.20	0.014	1	7/21/2016 05:43	BW	n
Total TPH C4-C12	<0.70	ppmv	0.70	0.10	1	7/21/2016 05:43	BW	n

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Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS QUALIFIERS

Workorder: 19636 CK8 / 224013

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

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220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA QUALIFIERS

Workorder: 19636 CK8 / 224013

QUALITY CONTROL PARAMETER QUALIFIERS

n The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

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19636

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

006508

Microseeps

Section A Required Client Information:

Company: Am. Env. Corp.
Address: 8500 Georgetown Rd
Indianapolis, In. 46268
Email To: m.hightchew@aec kentucky.com
Phone: 502-491-0144 Fax: 502-491-9271
Requested Due Date/TAT: std

Section B Required Project Information:

Report To: Mike Hightchew
Copy To: @aec kentucky.com
Purchase Order No.:
Project Name: CK 8
Project Number: 224013

Section C Invoice Information:

Attention: Mike Hightchew
Company Name: AEC
Address: 9127 Galene Dr. Louisville Ky 40299
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N	BTEX	TPH C4-C12 Total + Specialty	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MPE	Air	G			7.14.16	0810	*	2	X									X	X		
2	Air Stripper	Air	G			7.14.16	0820	*	2	X									X	X		
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
				KOSP PAES	7.15.16	1600	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Barry Luppert

SIGNATURE of SAMPLER: B. [signature] DATE Signed (MM/DD/YY): 7.14.16

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

VOC EMISSIONS CALCULATIONS			
CLIENT	MAC'S CONVENIENCE STORES LLC		
PROJECT NAME	BIGFOOT #8		
FACILITY LOCATION	115 CLIFTY DRIVE		
	MADISON, INDIANA		
PROJECT NUMBER	224013		
SAMPLE DATES	7/14/2016	7/14/2016	
SAMPLE LOCATION	LRP	Air Stripper	
SAMPLE RESULTS (ppmv)	0.70	0.70	
STACK DIAMETER(IN)	3.0	6.0	
VELOCITY(FPM)	1,500	1,400	
SYSTEM FLOW (ACFM)	74	275	
DISCHARGE TEMP (FAHRENHEIT)	183.0	91.0	
DISCHARGE TEMP (CELSIUS)	84	33	
STACK PRESSURE(absolute IN. Hg)	30	30	
DISCHARGE FLOW (SCFM)	61.65	268.62	
PPMV CONVERTED TO μg/L	2.06	2.40	
Calculation results (based on C4-C12 ppmv results as hexane, MW = 86.18)			
			Total VOC Emissions
VOC EMISSIONS (LB/ 24 hours of operation)	0.01	0.06	**0.07**
Days of Operation	89.0		
TOTAL VOC EMISSIONS (LBs)	1.02	5.17	**6.18**

APPENDIX B

GROUNDWATER ANALYTICAL REPORT

ANALYTICAL REPORT

October 04, 2016

American Environmental - IN CKR

Sample Delivery Group:	L861206
Samples Received:	09/22/2016
Project Number:	224013
Description:	Circle K 8 - Madison, IN
Site:	CK8
Report To:	Mike Hightchew 9127 Galene Drive, Suite D Louisville, KY 40299

Entire Report Reviewed By:

Jeff Carr
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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MW-1 L861206-01 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 10:20
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911216	1	09/30/16 02:12	09/30/16 02:12	DWR

MW-2 L861206-02 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 10:05
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911216	1	09/30/16 02:34	09/30/16 02:34	DWR

MW-3 L861206-03 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 09:50
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911216	1	09/30/16 02:56	09/30/16 02:56	DWR

MW-4 L861206-04 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 10:50
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911216	1	09/30/16 03:19	09/30/16 03:19	DWR

MW-5 L861206-05 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 10:40
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911216	1	09/30/16 03:41	09/30/16 03:41	DWR

MW-6 L861206-06 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 10:30
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911216	1	09/30/16 04:03	09/30/16 04:03	DWR

MW-8R L861206-07 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 09:20
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911216	1	09/30/16 04:25	09/30/16 04:25	DWR

MW-9R L861206-08 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 09:35
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911218	1	09/27/16 14:41	09/27/16 14:41	ACG

OW-4 L861206-09 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 08:25
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911218	1	09/27/16 16:09	09/27/16 16:09	ACG

OW-11 L861206-10 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 09:05
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911218	1	09/27/16 16:31	09/27/16 16:31	ACG

DUPLICATE L861206-11 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 00:00
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911218	1	09/27/16 16:53	09/27/16 16:53	ACG
Volatile Organic Compounds (GC) by Method 8021	WG911218	10	10/03/16 21:29	10/03/16 21:29	LRL

TRIPBLANK L861206-12 GW

Collected by: Mike Fortune
Collected date/time: 09/21/16 00:00
Received date/time: 09/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021	WG911218	1	10/03/16 21:54	10/03/16 21:54	LRL

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/30/2016 02:12	WG911216
Toluene	ND		5.00	1	09/30/2016 02:12	WG911216
Ethylbenzene	0.942		0.500	1	09/30/2016 02:12	WG911216
Total Xylene	2.84	B	1.50	1	09/30/2016 02:12	WG911216
Methyl tert-butyl ether	ND		1.00	1	09/30/2016 02:12	WG911216
(S) a,a,a-Trifluorotoluene(PID)	*103*		*55.0-122*		*09/30/2016 02:12*	WG911216

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/30/2016 02:34	WG911216
Toluene	ND		5.00	1	09/30/2016 02:34	WG911216
Ethylbenzene	ND		0.500	1	09/30/2016 02:34	WG911216
Total Xylene	ND		1.50	1	09/30/2016 02:34	WG911216
Methyl tert-butyl ether	ND		1.00	1	09/30/2016 02:34	WG911216
(S) a,a,a-Trifluorotoluene(PID)	*106*		*55.0-122*		*09/30/2016 02:34*	WG911216

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/30/2016 02:56	WG911216
Toluene	ND		5.00	1	09/30/2016 02:56	WG911216
Ethylbenzene	ND		0.500	1	09/30/2016 02:56	WG911216
Total Xylene	ND		1.50	1	09/30/2016 02:56	WG911216
Methyl tert-butyl ether	ND		1.00	1	09/30/2016 02:56	WG911216
(S) a,a,a-Trifluorotoluene(PID)	*102*		*55.0-122*		*09/30/2016 02:56*	WG911216

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	191		0.500	1	09/30/2016 03:19	WG911216
Toluene	6.65		5.00	1	09/30/2016 03:19	WG911216
Ethylbenzene	44.4		0.500	1	09/30/2016 03:19	WG911216
Total Xylene	37.1		1.50	1	09/30/2016 03:19	WG911216
Methyl tert-butyl ether	12.0		1.00	1	09/30/2016 03:19	WG911216
(S) a,a,a-Trifluorotoluene(PID)	*102*		*55.0-122*		*09/30/2016 03:19*	WG911216

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	144		0.500	1	09/30/2016 03:41	WG911216
Toluene	5.66		5.00	1	09/30/2016 03:41	WG911216
Ethylbenzene	178		0.500	1	09/30/2016 03:41	WG911216
Total Xylene	432		1.50	1	09/30/2016 03:41	WG911216
Methyl tert-butyl ether	9.53		1.00	1	09/30/2016 03:41	WG911216
(S) a,a,a-Trifluorotoluene(PID)	*106*		*55.0-122*		*09/30/2016 03:41*	WG911216

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	30.9		0.500	1	09/30/2016 04:03	WG911216
Toluene	ND		5.00	1	09/30/2016 04:03	WG911216
Ethylbenzene	10.7		0.500	1	09/30/2016 04:03	WG911216
Total Xylene	19.2		1.50	1	09/30/2016 04:03	WG911216
Methyl tert-butyl ether	4.48		1.00	1	09/30/2016 04:03	WG911216
(S) a,a,a-Trifluorotoluene(PID)	*102*		*55.0-122*		*09/30/2016 04:03*	WG911216

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/30/2016 04:25	WG911216
Toluene	ND		5.00	1	09/30/2016 04:25	WG911216
Ethylbenzene	ND		0.500	1	09/30/2016 04:25	WG911216
Total Xylene	ND		1.50	1	09/30/2016 04:25	WG911216
Methyl tert-butyl ether	ND		1.00	1	09/30/2016 04:25	WG911216
(S) a,a,a-Trifluorotoluene(PID)	*108*		*55.0-122*		*09/30/2016 04:25*	WG911216

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/27/2016 14:41	WG911218
Toluene	ND		5.00	1	09/27/2016 14:41	WG911218
Ethylbenzene	ND		0.500	1	09/27/2016 14:41	WG911218
Total Xylene	ND		1.50	1	09/27/2016 14:41	WG911218
Methyl tert-butyl ether	ND		1.00	1	09/27/2016 14:41	WG911218
(S) a,a,a-Trifluorotoluene(PID)	*92.4*		*55.0-122*		*09/27/2016 14:41*	WG911218

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/27/2016 16:09	WG911218
Toluene	ND		5.00	1	09/27/2016 16:09	WG911218
Ethylbenzene	ND		0.500	1	09/27/2016 16:09	WG911218
Total Xylene	ND		1.50	1	09/27/2016 16:09	WG911218
Methyl tert-butyl ether	ND		1.00	1	09/27/2016 16:09	WG911218
(S) a,a,a-Trifluorotoluene(PID)	*93.2*		*55.0-122*		*09/27/2016 16:09*	WG911218

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	09/27/2016 16:31	WG911218
Toluene	ND		5.00	1	09/27/2016 16:31	WG911218
Ethylbenzene	ND		0.500	1	09/27/2016 16:31	WG911218
Total Xylene	ND		1.50	1	09/27/2016 16:31	WG911218
Methyl tert-butyl ether	ND		1.00	1	09/27/2016 16:31	WG911218
(S) a,a,a-Trifluorotoluene(PID)	*91.8*		*55.0-122*		*09/27/2016 16:31*	WG911218

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	130		5.00	10	10/03/2016 21:29	WG911218
Toluene	10.9		5.00	1	09/27/2016 16:53	WG911218
Ethylbenzene	78.9		0.500	1	09/27/2016 16:53	WG911218
Total Xylene	45.2		1.50	1	09/27/2016 16:53	WG911218
Methyl tert-butyl ether	14.2		1.00	1	09/27/2016 16:53	WG911218
(S) a,a,a-Trifluorotoluene(PID)	*115*		*55.0-122*		*09/27/2016 16:53*	WG911218
(S) a,a,a-Trifluorotoluene(PID)	*105*		*55.0-122*		*10/03/2016 21:29*	WG911218

Volatile Organic Compounds (GC) by Method 8021

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.500	1	10/03/2016 21:54	WG911218
Toluene	ND		5.00	1	10/03/2016 21:54	WG911218
Ethylbenzene	ND		0.500	1	10/03/2016 21:54	WG911218
Total Xylene	ND		1.50	1	10/03/2016 21:54	WG911218
Methyl tert-butyl ether	ND		1.00	1	10/03/2016 21:54	WG911218
(S) a,a,a-Trifluorotoluene(PID)	*105*		*55.0-122*		*10/03/2016 21:54*	WG911218

Method Blank (MB)

(MB) R3167308-3 09/29/16 13:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.190	0.500
Toluene	0.343	J	0.180	5.00
Ethylbenzene	U		0.160	0.500
Total Xylene	U		0.510	1.50
Methyl tert-butyl ether	U		0.340	1.00
(S) a,a,a-Trifluorotoluene(PID)	*102*			*55.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3167308-1 09/29/16 12:01 • (LCSD) R3167308-2 09/29/16 12:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	39.7	38.5	79.5	77.0	70.0-130			3.12	20
Toluene	50.0	43.6	41.4	87.1	82.8	70.0-130			5.15	20
Ethylbenzene	50.0	48.9	47.4	97.7	94.7	70.0-130			3.11	20
Total Xylene	150	148	143	98.4	95.5	70.0-130			2.96	20
Methyl tert-butyl ether	50.0	42.3	42.7	84.6	85.4	70.0-130			0.850	20
(S) a,a,a-Trifluorotoluene(PID)				*106*	*103*	*55.0-122*				

Method Blank (MB)

(MB) R3167773-3 09/27/16 11:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.190	0.500
Toluene	0.244	J	0.180	5.00
Ethylbenzene	U		0.160	0.500
Total Xylene	U		0.510	1.50
Methyl tert-butyl ether	U		0.340	1.00
(S) a,a,a-Trifluorotoluene(PID)	*94.7*			*55.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3167773-1 09/27/16 09:34 • (LCSD) R3167773-2 09/27/16 09:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	39.7	38.9	79.3	77.9	70.0-130			1.82	20
Toluene	50.0	40.3	39.8	80.7	79.5	70.0-130			1.41	20
Ethylbenzene	50.0	43.8	43.0	87.6	86.0	70.0-130			1.91	20
Total Xylene	150	137	135	91.6	89.7	70.0-130			2.02	20
Methyl tert-butyl ether	50.0	41.2	40.5	82.4	80.9	70.0-130			1.79	20
(S) a,a,a-Trifluorotoluene(PID)				*99.5*	*101*	*55.0-122*				

L861206-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L861206-08 09/27/16 14:41 • (MS) R3167773-4 09/27/16 15:03 • (MSD) R3167773-5 09/27/16 15:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	50.0	ND	52.1	53.9	104	108	1	57.2-131			3.52	20
Toluene	50.0	ND	51.1	52.8	102	106	1	63.7-134			3.20	20
Ethylbenzene	50.0	ND	52.4	54.3	105	109	1	67.5-135			3.60	20
Total Xylene	150	ND	159	163	106	109	1	65.9-138			2.80	20
Methyl tert-butyl ether	50.0	ND	47.2	50.6	94.4	101	1	52.4-137			7.07	20
(S) a,a,a-Trifluorotoluene(PID)					*104*	*105*		*55.0-122*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

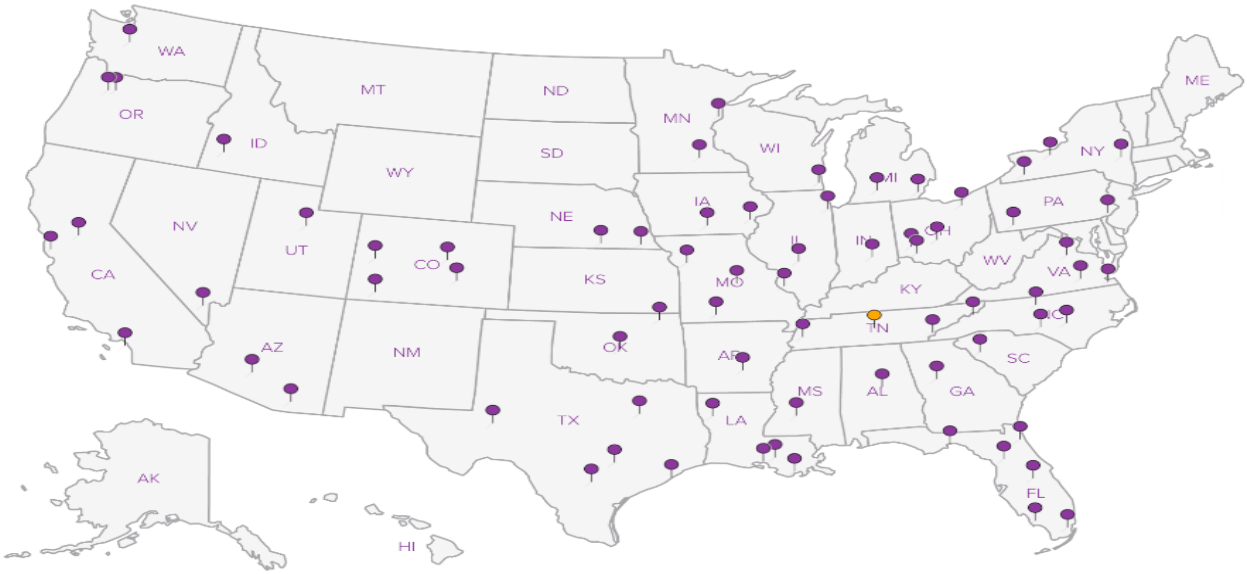
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA	100789
DOD	1461.01
USDA	S-67674

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



AEC
4305 Muhlhauser Rd.
Fairfield, OH 45014

Billing Information: AMECOHCKR

Report to: M.Alexander

Email to: malexander@aecoh.com

Project Description: CK# 8 GWS

City/Sate Collected: Madison, IN

Phone: (513)874-7740
FAX: (513) 874-7756

Client Project #: 224013

ESC Key:

Collected by: Mike Fortune

Site/Facility ID#: CK8

P.O.#:

Collected by (signature):

Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No ✓Yes
FAX? ✓No __Yes

Analysis/Container/Preservative: BTEX/MTBE 8021

Chain of Custody
Page 1 of 2

ESC LAB SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859
G242

CoCode (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX/MTBE 8021	Remarks/Contaminant	Sample # (lab only)
MW-1	Grab	GW	–	9/21/16	1020	2	X		L861206-01
MW-2	Grab	GW	–	9/21/16	1005	2	X		02
MW-3	Grab	GW	–	9/21/16	0950	2	X		03
MW-4	Grab	GW	–	9/21/16	1050	2	X		04
MW-5	Grab	GW	–	9/21/16	1040	2	X		05
MW-6	Grab	GW	–	9/21/16	1030	2	X		06
MW-8r	Grab	GW	–	9/21/16	0920	2	X		07
MW-9r	Grab	GW	–	9/21/16	0935	2	X		08
OW-4	Grab	GW	–	9/21/16	~~0905~~ 0935 (MF)	2	X		09

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
	9/21/16	1300	FedEx		OK
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7 / Bottles Received: 23 Bup+TB	CoC Seals Intact: ___ Y ___ N ✓ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/22/16 / Time: 9:00	pH Checked: / NCF:

AEC
4305 Muhlhauser Rd.
Fairfield, OH 45014

Billing Information: AMECOHCKR

Report to: M.Alexander

Email to: malexander@aecoh.com

Project Description: CK # 8 GWS

City/Sate Collected: Madison, IN

Phone: (513)874-7740
FAX: (513) 874-7756

Client Project #: 224013

ESC Key:

Collected by: Mike Fortune

Site/Facility ID#: CK 8

P.O.#:

Collected by (signature):

Immediately Packed on Ice N

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No ✓Yes
FAX? ✓No __Yes

Analysis/Container/Preservative: BTEX/MTBE 8021

Chain of Custody
Page 2 of 2

ESC LAB SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX/MTBE 8021	Remarks/Contaminant	Sample # (lab only)
OW-11	Grab	GW	–	9/21/16	0905	2	X		L861206-10
Duplicate	–	–	–	–	–	2	X		11
Trip Blank	–	–	–	–	–	1	X		12

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
	9/21/16	1300	FedEx		ok
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7 / Bottles Received: 23=VOA+TB	CoC Seals Intact: ___ Y ___ N ✓ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9-22-16 / Time: 9:00	pH Checked: / NCF:
			Michael Mosley		

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Form

Client: AMECONCKR		SDG#	L861206
Cooler Received/Opened On: **9/22/16** Receipt:		Temperature Upon	2.7 °c
Received By: Rickey Mosley			
Signature: Rickey Mosley			

Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?			✓
Were custody papers properly filled out?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)			✓
If applicable, was an observable VOA headspace present?		✓	
Non Conformance Generated. (If yes see attached NCF)			

APPENDIX C

TABLE 1 – HISTORICAL SOIL ANALYTICAL RESULTS
TABLE 2 – HISTORICAL GROUNDWATER ELEVATIONS
TABLE 3 – HISTORICAL GROUNDWATER ANALYTICAL RESULTS – BTEX/MTBE

TABLE 1
Historical Soil Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Depth	TPH GRO
B-1/B-41	2/14/2002	2-3 ft.	**1,100***
		6-8 ft.	**160***
B-2	4/3/2002	4-6 ft.	<10
		12-14 ft.	<10
B-3	4/3/2002	1-2 ft.	ND
		2-4 ft.	24
		14-15 ft.	<10
B-4	4/3/2002	2-4 ft.	**420***
		8-10 ft.	**290***
		14-15 ft.	<10
B-5	4/3/2002	6-8 ft.	**140***
		14-16 ft.	<10
B-6	4/3/2002	4-6 ft.	<10
		14-15 ft.	<10
B-7	4/3/2002	4-6 ft.	<10
		12-14 ft.	<10
		14-15 ft.	<10
B-8	4/3/2002	4-6 ft.	<10
		12-14 ft.	<10
		14-15 ft.	<10
B-9	4/4/2002	2-4 ft.	11
		6-8 ft.	<10
		14-15 ft.	<10
B-10	4/4/2002	2-4 ft.	<10
		8-10 ft.	<10
		14-15 ft.	<10
B-11	5/1/2002	4-6 ft.	<10
		12-14 ft.	<10
B-12	4/30/2002	2-4 ft.	<10
		8-10 ft.	<10
		14-16 ft.	<10
B-13	4/30/2002	2-4 ft.	<10
		12-14 ft.	<10
		14-15 ft.	<10
B-14	4/30/2002	4-6 ft.	<10
		12-14 ft.	<10
B-15	4/30/2002	2-4 ft.	<10
		6-8 ft.	<10
		12-14 ft.	<10

TABLE 1
Historical Soil Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Depth	TPH GRO
B-16	4/30/2002	2-4 ft.	<10
		12-14 ft.	<10
		14-15 ft.	<10
B-17	4/30/2002	4-6 ft.	<10
		8-10 ft.	<10
		12-14 ft.	<10
B-18	5/1/2002	6-8 ft.	**140***
		10-12 ft.	25
		14-15 ft.	<10
B-19/MW-4	5/1/2002	2-4 ft.	**670***
		8-10 ft.	41
		14-16 ft.	<10
B-20	5/1/2002	2-4 ft.	<10
		8-10 ft.	<10
		12-14 ft.	<10
B-22	6/18/2002	2-4 ft.	<10
		8-10 ft.	<10
		14-15 ft.	<10
B-23	6/18/2002	2-4 ft.	<10
		8-10 ft.	<10
		12-14 ft.	<10
B-24/MW-7	8/21/2002	2-4 ft.	<10
		8-10 ft.	<10
		10-12 ft.	<10
MW-10/MPE-1	4/15/2003	1-3 ft	51
		4-5 ft.	26
		10-11 ft.	<10
MW-11	7/7/2004	2-3 ft.	<10
		10-11 ft.	<9.8
Action Level			**120**

Concentrations in parts per million, ppm
TPH GRO = Total Petroleum Hydrocarbons Gasoline Range Organics
BOLD and * = concentrations above action levels
ND = Non-detect
No soil samples were collected for MW-8 and MW-9 due to their close proximity to borings B-18 and B-22, respectively.

TABLE 1
Historical Soil Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Depth	TPH GRO
B-1/B-41	2/14/2002	2-3 ft.	**1,100***
		6-8 ft.	**160***
B-2	4/3/2002	4-6 ft.	<10
		12-14 ft.	<10
B-3	4/3/2002	1-2 ft.	ND
		2-4 ft.	24
		14-15 ft.	<10
B-4	4/3/2002	2-4 ft.	**420***
		8-10 ft.	**290***
		14-15 ft.	<10
B-5	4/3/2002	6-8 ft.	**140***
		14-16 ft.	<10
B-6	4/3/2002	4-6 ft.	<10
		14-15 ft.	<10
B-7	4/3/2002	4-6 ft.	<10
		12-14 ft.	<10
		14-15 ft.	<10
B-8	4/3/2002	4-6 ft.	<10
		12-14 ft.	<10
		14-15 ft.	<10
B-9	4/4/2002	2-4 ft.	11
		6-8 ft.	<10
		14-15 ft.	<10
B-10	4/4/2002	2-4 ft.	<10
		8-10 ft.	<10
		14-15 ft.	<10
B-11	5/1/2002	4-6 ft.	<10
		12-14 ft.	<10
B-12	4/30/2002	2-4 ft.	<10
		8-10 ft.	<10
		14-16 ft.	<10
B-13	4/30/2002	2-4 ft.	<10
		12-14 ft.	<10
		14-15 ft.	<10
B-14	4/30/2002	4-6 ft.	<10
		12-14 ft.	<10
B-15	4/30/2002	2-4 ft.	<10
		6-8 ft.	<10
		12-14 ft.	<10

TABLE 1
Historical Soil Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Depth	TPH GRO
B-16	4/30/2002	2-4 ft.	<10
		12-14 ft.	<10
		14-15 ft.	<10
B-17	4/30/2002	4-6 ft.	<10
		8-10 ft.	<10
		12-14 ft.	<10
B-18	5/1/2002	6-8 ft.	**140***
		10-12 ft.	25
		14-15 ft.	<10
B-19/MW-4	5/1/2002	2-4 ft.	**670***
		8-10 ft.	41
		14-16 ft.	<10
B-20	5/1/2002	2-4 ft.	<10
		8-10 ft.	<10
		12-14 ft.	<10
B-22	6/18/2002	2-4 ft.	<10
		8-10 ft.	<10
		14-15 ft.	<10
B-23	6/18/2002	2-4 ft.	<10
		8-10 ft.	<10
		12-14 ft.	<10
B-24/MW-7	8/21/2002	2-4 ft.	<10
		8-10 ft.	<10
		10-12 ft.	<10
MW-10/MPE-1	4/15/2003	1-3 ft	51
		4-5 ft.	26
		10-11 ft.	<10
MW-11	7/7/2004	2-3 ft.	<10
		10-11 ft.	<9.8
Action Level			**120**

Concentrations in parts per million, ppm
TPH GRO = Total Petroleum Hydrocarbons Gasoline Range Organics
BOLD and * = concentrations above action levels
ND = Non-detect
No soil samples were collected for MW-8 and MW-9 due to their close proximity to borings B-18 and B-22, respectively.

TABLE 2 Historical Groundwater Elevations Circle K #8/Former Bigfoot					
Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-1 (off-site)	8/8/2002	99.41	4.23	0.00	95.18
	10/10/2002	99.41	4.31	0.00	95.10
	2/13/2003	99.41	3.55	0.00	95.86
	4/3/2003	99.41	2.87	0.00	96.54
	7/9/2003	99.41	3.06	0.00	96.35
	10/30/2003	99.41	3.64	0.00	95.77
	2/19/2004	99.41	2.70	0.00	96.71
	4/14/2004	99.41	2.00	0.00	97.41
	7/20/2004	99.41	3.81	0.00	95.60
	11/10/2004	99.41	3.24	0.00	96.17
	2/1/2005	99.41	2.90	0.00	96.51
	4/21/2005	99.41	3.98	0.00	95.43
	8/25/2005	99.41	5.45	0.00	93.96
	10/11/2005	99.41	5.08	0.00	94.33
	2/16/2006	99.41	4.11	0.00	95.30
	5/18/2006	99.41	3.25	0.00	96.16
	8/28/2006	99.41	3.20	0.00	96.21
	11/16/2006	99.41	3.32	0.00	96.09
	2/21/2007	99.41	3.97	0.00	95.44
	5/31/2007	99.41	4.02	0.00	95.39
	8/17/2007	99.41	3.64	0.00	95.77
	11/9/2007	99.41	4.48	0.00	94.93
	2/6/2008	99.41	2.06	0.00	97.35
	4/29/2008	99.41	2.84	0.00	96.57
	7/22/2008	99.41	3.21	0.00	96.20
	10/17/2008	99.41	5.16	0.00	94.25
	1/21/2009	99.41	4.34	0.00	95.07
	4/10/2009	99.41	4.26	0.00	95.15
	8/21/2009	99.41	3.02	0.00	96.39
	11/6/2009	99.41	2.96	0.00	96.45
	2/4/2010	99.41	3.20	0.00	96.21
	6/7/2010	99.41	3.41	0.00	96.00
	8/18/2010	99.41	4.62	0.00	94.79
	12/13/2010	99.41	4.89	0.00	94.52
	2/16/2011	99.41	3.94	0.00	95.47
	5/13/2011	99.41	2.92	0.00	96.49
	7/26/2011	99.41	3.46	0.00	95.95
	11/30/2011	99.41	2.72	0.00	96.69
	1/31/2012	99.41	3.01	0.00	96.40
	4/26/2012	99.41	3.85	0.00	95.56
	8/7/2012	99.41	6.78	0.00	92.63
	12/5/2012	99.41	5.63	0.00	93.78
	2/7/2013	99.41	3.15	0.00	96.26
	5/23/2013	99.41	5.16	0.00	94.25
	8/30/2013	99.41	5.98	0.00	93.43
	10/25/2013	99.41	6.23	0.00	93.18
	2/11/2014	99.41	4.38	0.00	95.03
	6/23/2014	99.41	5.21	0.00	94.20
	9/16/2014	99.41	3.05	0.00	96.36
	12/9/2014	99.41	2.34	0.00	97.07
	3/20/2015	99.41	3.33	0.00	96.08
	6/22/2015	99.41	2.46	0.00	96.95
	9/19/2015	99.41	5.22	0.00	94.19
	12/17/2016	99.41	4.54	0.00	94.87
	3/18/2016	99.41	2.46	0.00	96.95
	6/7/2016	99.41	3.51	0.00	95.90
	9/21/2016	99.41	4.90	0.00	94.51

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-2	8/8/2002	98.97	4.29	0.00	94.68
	10/10/2002	98.97	3.15	0.00	95.82
	2/13/2003	98.97	2.97	0.00	96.00
	4/3/2003	98.97	2.74	0.00	96.23
	7/9/2003	98.97	1.84	0.00	97.13
	10/30/2003	98.97	2.44	0.00	96.53
	2/19/2004	98.97	2.73	0.00	96.24
	4/14/2004	98.97	1.37	0.00	97.60
	7/20/2004	98.97	3.66	0.00	95.31
	11/10/2004	98.97	2.53	0.00	96.44
	2/1/2005	98.97	2.61	0.00	96.36
	4/21/2005	98.97	3.13	0.00	95.84
	8/25/2005	98.97	4.12	0.00	94.85
	10/11/2005	98.97	3.91	0.00	95.06
	2/16/2006	98.97	2.98	0.00	95.99
	5/18/2006	98.97	1.84	0.00	97.13
	8/28/2006	98.97	0.59	0.00	98.38
	11/16/2006	98.97	1.25	0.00	97.72
	2/21/2007	98.97	2.12	0.00	96.85
	5/31/2007	98.97	3.91	0.00	95.06
	8/17/2007	98.97	2.86	0.00	96.11
	11/9/2007	98.97	3.31	0.00	95.66
	2/6/2008	98.97	1.48	0.00	97.49
	4/29/2008	98.97	2.63	0.00	96.34
	7/22/2008	98.97	2.98	0.00	95.99
	10/17/2008	98.97	3.98	0.00	94.99
	1/21/2009	98.97	3.19	0.00	95.78
	4/10/2009	98.97	4.08	0.00	94.89
	8/21/2009	98.97	2.76	0.00	96.21
	11/6/2009	98.97	2.59	0.00	96.38
	2/4/2010	98.97	2.93	0.00	96.04
	6/7/2010	98.97	3.42	0.00	95.55
	8/11/2010	98.97	4.69	0.00	94.28
	12/13/2010	98.97	5.39	0.00	93.58
	2/16/2011	98.97	3.51	0.00	95.46
	5/13/2011	98.97	2.44	0.00	96.53
	7/26/2011	98.97	1.54	0.00	97.43
	11/30/2011	98.97	1.15	0.00	97.82
	1/31/2012	98.97	2.50	0.00	96.47
	4/26/2012	98.97	3.51	0.00	95.46
	8/7/2012	98.97	6.20	0.00	92.77
	12/5/2012	98.97	4.85	0.00	94.12
	2/7/2013	98.97	2.45	0.00	96.52
	5/23/2013	98.97	3.62	0.00	95.35
	8/30/2013	98.97	5.53	0.00	93.44
	10/25/2013	98.97	5.70	0.00	93.27
	2/11/2014	98.97	2.92	0.00	96.05
	6/23/2014	98.97	3.03	0.00	95.94
	9/16/2014	98.97	1.55	0.00	97.42
	12/9/2014	98.97	1.38	0.00	97.59
	3/20/2015	98.97	2.40	0.00	96.57
	6/22/2015	98.97	1.36	0.00	97.61
	9/19/2015	98.97	4.89	0.00	94.08
	12/17/2015	98.97	3.15	0.00	95.82
	3/18/2016	98.97	2.88	0.00	96.09
	6/7/2016	98.97	2.40	0.00	96.57
	9/21/2016	98.97	4.15	0.00	94.82

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-3	8/8/2002	100.45	3.95	0.00	96.50
	10/10/2002	100.45	3.90	0.00	96.55
	2/13/2003	100.45	3.43	0.00	97.02
	4/3/2003	100.45	3.00	0.00	97.45
	7/9/2003	100.45	2.97	0.00	97.48
	10/30/2003	100.45	3.15	0.00	97.30
	2/19/2004	100.45	2.74	0.00	97.71
	4/14/2004	100.45	2.20	0.00	98.25
	7/20/2004	100.45	3.75	0.00	96.70
	11/10/2004	100.45	2.90	0.00	97.55
	2/1/2005	100.45	3.03	0.00	97.42
	4/21/2005	100.45	4.41	0.00	96.04
	8/25/2005	100.45	5.44	0.00	95.01
	10/11/2005	100.45	4.81	0.00	95.64
	2/16/2006	100.45	4.12	0.00	96.33
	5/18/2006	100.45	3.62	0.00	96.83
	8/28/2006	100.45	3.34	0.00	97.11
	11/16/2006	100.45	4.25	0.00	96.20
	2/21/2007	100.45	3.64	0.00	96.81
	5/31/2007	100.45	3.30	0.00	97.15
	8/17/2007	100.45	3.06	0.00	97.39
	11/9/2007	100.45	4.00	0.00	96.45
	2/6/2008	100.45	2.70	0.00	97.75
	4/29/2008	100.45	2.73	0.00	97.72
	7/22/2008	100.45	3.04	0.00	97.41
	10/17/2008	100.45	4.19	0.00	96.26
	1/21/2009	100.45	4.60	0.00	95.85
	4/10/2009	100.45	3.53	0.00	96.92
	8/21/2009	100.45	3.24	0.00	97.21
	11/6/2009	100.45	3.62	0.00	96.83
	2/4/2010	100.45	4.14	0.00	96.31
	6/7/2010	100.45	3.98	0.00	96.47
	8/11/2010	100.45	4.51	0.00	95.94
	12/13/2010	100.45	4.91	0.00	95.54
	2/16/2011	100.45	4.91	0.00	95.54
	5/13/2011	100.45	2.82	0.00	97.63
	7/26/2011	100.45	2.75	0.00	97.70
	11/30/2011	100.45	3.31	0.00	97.14
	1/31/2012	100.45	3.15	0.00	97.30
	4/26/2012	100.45	3.91	0.00	96.54
	8/7/2012	100.45	6.19	0.00	94.26
	12/5/2012	100.45	5.22	0.00	95.23
	2/7/2013	100.45	4.83	0.00	95.62
	5/23/2013	100.45	4.92	0.00	95.53
	8/30/2013	100.45	5.92	0.00	94.53
	10/25/2013	100.45	5.63	0.00	94.82
	2/11/2014	100.45	4.51	0.00	95.94
	6/23/2014	100.45	4.47	0.00	95.98
	9/16/2014	100.45	2.51	0.00	97.94
	12/9/2014	100.45	0.96	0.00	99.49
	3/20/2015	100.45	3.20	0.00	97.25
	6/22/2015	100.45	2.23	0.00	98.22
	9/19/2015	100.45	4.49	0.00	95.96
	12/17/2015	100.45	2.70	0.00	97.75
	3/18/2016	100.45	3.13	0.00	97.32
	6/7/2016	100.45	3.95	0.00	96.50
	9/21/2016	100.45	4.79	0.00	95.66

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-4	8/8/2002	100.09	3.74	0.00	96.35
	10/10/2002	100.09	3.70	0.00	96.39
	2/13/2003	100.09	3.38	0.00	96.71
	4/3/2003	100.09	2.53	0.00	97.56
	7/9/2003	100.09	2.85	0.00	97.24
	10/30/2003	100.09	3.18	0.00	96.91
	2/19/2004	100.09	2.49	0.00	97.60
	4/14/2004	100.09	1.89	0.00	98.20
	7/20/2004	100.09	3.32	0.00	96.77
	11/10/2004	100.09	4.17	0.00	95.92
	2/1/2005	100.09	2.55	0.00	97.54
	4/21/2005	100.09	7.11	0.00	92.98
	8/25/2005	100.09	6.75	0.00	93.34
	10/11/2005	100.09	4.98	0.00	95.11
	2/16/2006	100.09	5.40	0.00	94.69
	5/18/2006	100.09	3.67	0.00	96.42
	8/28/2006	100.09	5.02	0.00	95.07
	11/16/2006	100.09	11.46	0.00	88.63
	2/21/2007	100.09	4.26	0.00	95.83
	5/31/2007	100.09	4.70	0.00	95.39
	8/17/2007	100.09	2.55	0.00	97.54
	11/9/2007	100.09	5.57	0.00	94.52
	2/6/2008	100.09	1.46	0.00	98.63
	4/29/2008	100.09	2.22	0.00	97.87
	7/22/2008	100.09	2.53	0.00	97.56
	10/17/2008	100.09	6.18	0.00	93.91
	1/21/2009	100.09	7.21	0.00	92.88
	4/10/2009	100.09	4.86	0.00	95.23
	8/21/2009	100.09	3.78	0.00	96.31
	11/6/2009	100.09	5.11	0.00	94.98
	2/4/2010	100.09	8.35	0.00	91.74
	6/7/2010	100.09	5.34	0.00	94.75
	8/18/2010	100.09	7.50	0.00	92.59
	12/13/2010	100.09	6.65	0.00	93.44
	2/16/2011	100.09	4.95	0.00	95.14
	5/13/2011	100.09	3.97	0.00	96.12
	7/26/2011	100.09	3.52	0.00	96.57
	11/30/2011	100.09	9.35	0.00	90.74
	1/31/2012	100.09	5.26	0.00	94.83
	4/26/2012	100.09	4.75	0.00	95.34
	8/7/2010	100.09	8.07	0.00	92.02
	12/5/2012	100.09	5.25	0.00	94.84
	2/7/2013	100.09	9.81	0.00	90.28
	5/23/2013	100.09	9.17	0.00	90.92
	8/30/2013	100.09	10.51	0.00	89.58
	10/25/2013	100.09	10.04	0.00	90.05
	2/11/2014	100.09	8.48	0.00	91.61
	6/23/2014	100.09	4.86	0.00	95.23
	9/16/2014	100.09	2.42	0.00	97.67
	12/9/2014	100.09	1.53	0.00	98.56
	3/20/2015	100.09	8.62	0.00	91.47
	6/22/2015	100.09	1.97	0.00	98.12
	9/19/2015	100.09	4.70	0.00	95.39
	12/17/2016	100.09	9.96	0.00	90.13
	3/18/2016	100.09	7.41	0.00	92.68
	6/7/2016	100.09	6.40	0.00	93.69
	9/21/2016	100.09	9.06	0.00	91.03

TABLE 2 Historical Groundwater Elevations Circle K #8/Former Bigfoot					
Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-5	8/8/2002	100.33	4.05	0.00	96.28
	10/10/2002	100.33	4.17	0.00	96.16
	2/13/2003	100.33	3.54	0.00	96.79
	4/3/2003	100.33	2.76	0.00	97.57
	7/9/2003	100.33	3.07	0.00	97.26
	10/30/2003	100.33	3.24	0.00	97.09
	2/19/2004	100.33	2.62	0.00	97.71
	4/14/2004	100.33	2.01	0.00	98.32
	7/20/2004	100.33	3.67	0.00	96.66
	11/10/2004	100.33	6.33	0.00	94.00
	2/1/2005	100.33	2.87	0.00	97.46
	4/21/2005	100.33	6.11	0.00	94.22
	8/25/2005	100.33	6.68	0.00	93.65
	10/11/2005	100.33	5.71	0.00	94.62
	2/16/2006	100.33	4.87	0.00	95.46
	5/18/2006	100.33	3.48	0.00	96.85
	8/28/2006	100.33	5.28	0.00	95.05
	11/16/2006	100.33	9.24	0.00	91.09
	2/21/2007	100.33	3.01	0.00	97.32
	5/31/2007	100.33	3.74	0.00	96.59
	8/17/2007	100.33	3.63	0.00	96.70
	11/9/2007	100.33	5.20	0.00	95.13
	2/6/2008	100.33	2.97	0.00	97.36
	4/29/2008	100.33	3.32	0.00	97.01
	7/22/2008	100.33	3.79	0.00	96.54
	10/17/2008	100.33	5.13	0.00	95.20
	1/21/2009	100.33	5.96	0.00	94.37
	4/10/2009	100.33	3.96	0.00	96.37
	8/21/2009	100.33	3.76	0.00	96.57
	11/6/2009	100.33	5.62	0.00	94.71
	2/4/2010	100.33	8.22	0.00	92.11
	6/7/2010	100.33	5.68	0.00	94.65
	8/18/2010	100.33	8.27	0.00	92.06
	12/13/2010	100.33	6.40	0.00	93.93
	2/16/2011	100.33	4.71	0.00	95.62
	5/13/2011	100.33	3.60	0.00	96.73
	7/26/2011	100.33	3.32	0.00	97.01
	11/30/2011	100.33	5.28	0.00	95.05
	1/31/2012	100.33	5.15	0.00	95.18
	4/26/2012	100.33	4.40	0.00	95.93
	8/7/2012	100.33	7.65	0.00	92.68
	12/5/2012	100.33	5.35	0.00	94.98
	2/7/2013	100.33	7.92	0.00	92.41
	5/23/2013	100.33	6.45	0.00	93.88
	8/30/2013	100.33	8.21	0.00	92.12
	10/25/2013	100.33	7.72	0.00	92.61
	2/11/2014	100.33	6.94	0.00	93.39
	6/23/2014	100.33	6.95	0.00	93.38
	9/16/2014	100.33	2.52	0.00	97.81
	12/9/2014	100.33	1.50	0.00	98.83
	3/20/2015	100.33	8.17	0.00	92.16
	6/22/2015	100.33	2.94	0.00	97.39
	9/19/2015	100.33	4.69	0.00	95.64
	12/17/2015	100.33	8.50	0.00	91.83
	3/18/2016	100.33	6.50	0.00	93.83
	6/7/2016	100.33	6.10	0.00	94.23
	9/21/2016	100.33	7.97	0.00	92.36

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-6	8/8/2002	100.43	3.72	0.00	96.71
	10/10/2002	100.43	3.68	0.00	96.75
	2/13/2003	100.43	2.80	0.00	97.63
	4/3/2003	100.43	2.77	0.00	97.66
	7/9/2003	100.43	2.82	0.00	97.61
	10/30/2003	100.43	3.01	0.00	97.42
	2/19/2004	100.43	2.36	0.00	98.07
	4/14/2004	100.43	1.83	0.00	98.60
	7/20/2004	100.43	3.49	0.00	96.94
	11/10/2004	100.43	5.61	0.00	94.82
	2/1/2005	100.43	2.71	0.00	97.72
	4/21/2005	100.43	5.63	0.00	94.80
	8/25/2005	100.43	5.99	0.00	94.44
	10/11/2005	100.43	4.74	0.00	95.69
	2/16/2006	100.43	4.26	0.00	96.17
	5/18/2006	100.43	5.53	0.00	94.90
	8/28/2006	100.43	7.00	0.00	93.43
	11/16/2006	100.43	11.49	0.00	88.94
	2/21/2007	100.43	5.22	0.00	95.21
	5/31/2007	100.43	3.36	0.00	97.07
	8/17/2007	100.43	2.58	0.00	97.85
	11/9/2007	100.43	3.19	0.00	97.24
	2/6/2008	100.43	1.81	0.00	98.62
	4/29/2008	100.43	2.66	0.00	97.77
	7/22/2008	100.43	2.97	0.00	97.46
	10/17/2008	100.43	4.61	0.00	95.82
	1/21/2009	100.43	5.38	0.00	95.05
	4/10/2009	100.43	3.54	0.00	96.89
	8/21/2009	100.43	2.48	0.00	97.95
	11/6/2009	100.43	3.71	0.00	96.72
	2/4/2010	100.43	4.41	0.00	96.02
	6/7/2010	100.43	4.32	0.00	96.11
	8/18/2010	100.43	5.19	0.00	95.24
	12/13/2010	100.43	4.89	0.00	95.54
	2/16/2011	100.43	5.21	0.00	95.22
	5/13/2011	100.43	4.82	0.00	95.61
	7/26/2011	100.43	4.11	0.00	96.32
	11/30/2011	100.43	8.62	0.00	91.81
	1/31/2012	100.43	8.49	0.00	91.94
	4/26/2012	100.43	6.39	0.00	94.04
	8/7/2012	100.43	7.72	0.00	92.71
	12/5/2012	100.43	5.35	0.00	95.08
	2/7/2013	100.43	10.57	0.00	89.86
	5/23/2013	100.43	10.27	0.00	90.16
	8/30/2013	100.43	10.18	0.00	90.25
	10/25/2013	100.43	11.49	0.00	88.94
	2/11/2014	100.43	10.42	0.00	90.01
	6/23/2014	100.43	10.32	0.00	90.11
	9/16/2014	100.43	2.20	0.00	98.23
	12/9/2014	100.43	1.08	0.00	99.35
	3/20/2015	100.43	8.88	0.00	91.55
	6/22/2015	100.43	2.18	0.00	98.25
	9/19/2015	100.43	4.91	0.00	95.52
	12/17/2015	100.43	9.59	0.00	90.84
	3/18/2016	100.43	6.91	0.00	93.52
	6/7/2016	100.43	7.56	0.00	92.87
	9/21/2016	100.43	8.29	0.00	92.14

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-7	10/10/2002	99.66	3.67	0.00	95.99
	2/13/2003	99.66	3.56	0.00	96.10
	4/3/2003	99.66	2.97	0.00	96.69
	7/9/2003	99.66	3.16	0.00	96.50
	10/30/2003	99.66	3.04	0.00	96.62
	2/19/2004	99.66	2.88	0.00	96.78
	4/14/2004	99.66	2.78	0.00	96.88
	7/20/2004	99.66	3.57	0.00	96.09
	11/10/2004	99.66	3.33	0.00	96.33
	2/1/2005	99.66	2.97	0.00	96.69
	4/21/2005	99.66	3.84	0.00	95.82
	8/25/2005	99.66	5.02	0.00	94.64
	10/11/2005	99.66	4.59	0.00	95.07
	2/16/2006	99.66	3.87	0.00	95.79
	5/18/2006	99.66	3.42	0.00	96.24
	8/28/2006	99.66	2.97	0.00	96.69
	11/16/2006	99.66	3.25	0.00	96.41
	2/21/2007	99.66	3.99	0.00	95.67
	5/31/2007	99.66	4.38	0.00	95.28
	8/17/2007	99.66	3.61	0.00	96.05
	11/9/2007	99.66	3.73	0.00	95.93
	2/6/2008	99.66	2.12	0.00	97.54
	4/29/2008	99.66	2.73	0.00	96.93
	7/22/2008	99.66	3.11	0.00	96.55
	10/17/2008	99.66	4.45	0.00	95.21
	11/12/2008	Well was abandoned, as approved by IDEM			
MW-8 (off-site)	2/13/2003	100.97	4.17	0.00	96.80
	4/3/2003	100.97	3.50	0.00	97.47
	7/9/2003	100.97	3.71	0.00	97.26
	10/30/2003	100.97	3.76	0.00	97.21
	2/19/2004	100.97	3.18	0.00	97.79
	4/14/2004	100.97	2.66	0.00	98.31
	7/20/2004	100.97	4.33	0.00	96.64
	11/10/2004	100.97	5.54	0.00	95.43
	2/1/2005	100.97	3.60	0.00	97.37
	4/21/2005	100.97	6.07	0.00	94.90
	8/25/2005	100.97	6.70	0.00	94.27
	10/11/2005	100.97	5.90	0.00	95.07
	2/16/2006	100.97	5.18	0.00	95.79
	5/18/2006	100.97	4.08	0.00	96.89
	8/28/2006	100.97	4.71	0.00	96.26
	11/16/2006	100.97	8.42	0.00	92.55
	1/10/2007	Well was abandoned during construction activities			

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-8r (off-site)	9/11/2007	Well was reinstalled in former MW-8 location			
	11/9/2007	100.59	4.76	0.00	95.83
	2/6/2008	100.59	1.80	0.00	98.79
	4/29/2008	100.59	2.94	0.00	97.65
	7/22/2008	100.59	3.29	0.00	97.30
	10/17/2008	100.59	4.81	0.00	95.78
	1/21/2009	100.59	5.25	0.00	95.34
	4/10/2009	100.67	4.70	0.00	95.97
	8/21/2009	100.67	3.68	0.00	96.99
	11/6/2009	100.67	4.55	0.00	96.12
	2/4/2010	100.67	9.81	0.00	90.86
	6/7/2010	100.67	4.82	0.00	95.85
	8/14/2010	100.67	5.51	0.00	95.16
	12/13/2010	100.67	5.91	0.00	94.76
	2/16/2011	100.67	4.89	0.00	95.78
	5/13/2011	100.67	3.27	0.00	97.40
	7/26/2011	100.67	3.19	0.00	97.48
	11/30/2011	100.67	4.29	0.00	96.38
	1/31/2012	100.67	4.21	0.00	96.46
	4/26/2012	100.67	4.30	0.00	96.37
	8/7/2012	100.67	5.69	0.00	94.98
	12/5/2012	100.67	5.58	0.00	95.09
	2/7/2013	100.67	5.98	0.00	94.69
	5/23/2013	100.67	5.69	0.00	94.98
	8/30/2013	100.67	7.18	0.00	93.49
	10/25/2013	100.67	6.55	0.00	94.12
	2/11/2014	100.67	5.40	0.00	95.27
	6/23/2014	100.67	5.29	0.00	95.38
	9/16/2014	100.67	2.65	0.00	98.02
	12/9/2014	100.67	1.48	0.00	99.19
	3/20/2015	100.67	3.64	0.00	97.03
	6/22/2015	100.67	2.18	0.00	98.49
	9/19/2015	100.67	4.75	0.00	95.92
	12/17/2015	100.67	6.03	0.00	94.64
	3/18/2016	100.67	4.05	0.00	96.62
	6/7/2016	100.67	4.64	0.00	96.03
	9/21/2016	100.67	6.00	0.00	94.67
MW-9 (off-site)	7/9/2003	100.78	3.24	0.00	97.54
	10/30/2003	100.78	3.15	0.00	97.63
	2/19/2004	100.78	2.63	0.00	98.15
	4/14/2004	100.78	2.84	0.00	97.94
	7/20/2004	100.78	4.27	0.00	96.51
	11/10/2004	100.78	3.03	0.00	97.75
	2/1/2005	100.78	3.04	0.00	97.74
	4/21/2005	100.78	4.73	0.00	96.05
	8/25/2005	100.78	6.05	0.00	94.73
	10/11/2005	100.78	5.55	0.00	95.23
	2/16/2006	100.78	4.25	0.00	96.53
	5/18/2006	100.78	2.87	0.00	97.91
	8/28/2006	100.78	3.48	0.00	97.30
	11/16/2006	100.78	3.93	0.00	96.85
	1/10/2007	Well was abandoned during construction activities			

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-9r (off-site)	9/11/2007	Well was reinstalled in former MW-9 location			
	11/9/2007	100.50	4.62	0.00	95.88
	2/6/2008	100.50	2.20	0.00	98.30
	4/29/2008	100.50	3.03	0.00	97.47
	7/22/2008	100.50	3.34	0.00	97.16
	10/17/2008	100.50	4.64	0.00	95.86
	1/21/2009	100.50	4.89	0.00	95.61
	4/10/2009	100.70	4.51	0.00	96.19
	8/21/2009	100.70	3.49	0.00	97.21
	11/6/2009	100.70	3.41	0.00	97.29
	2/4/2010	100.70	4.92	0.00	95.78
	6/7/2010	100.70	4.89	0.00	95.81
	8/18/2010	100.70	6.31	0.00	94.39
	12/13/2010	100.70	5.35	0.00	95.35
	2/16/2011	100.70	4.52	0.00	96.18
	5/13/2011	100.70	2.97	0.00	97.73
	7/26/2011	100.70	2.96	0.00	97.74
	11/30/2011	100.70	3.57	0.00	97.13
	1/31/2012	100.70	3.72	0.00	96.98
	4/26/2012	100.70	3.98	0.00	96.72
	8/7/2012	100.70	6.14	0.00	94.56
	12/5/2012	100.70	5.52	0.00	95.18
	2/7/2013	100.70	5.09	0.00	95.61
	5/23/2013	100.70	4.95	0.00	95.75
	8/30/2013	100.70	6.34	0.00	94.36
	10/25/2013	100.70	5.87	0.00	94.83
	2/11/2014	100.70	4.81	0.00	95.89
	6/23/2014	100.70	5.29	0.00	95.41
	9/16/2014	100.70	2.95	0.00	97.75
	12/9/2014	100.70	1.69	0.00	99.01
	3/20/2015	100.70	3.85	0.00	96.85
	6/22/2015	100.70	2.21	0.00	98.49
	9/19/2015	100.70	5.63	0.00	95.07
	12/17/2015	100.70	5.11	0.00	95.59
	3/18/2016	100.70	3.45	0.00	97.25
	6/7/2016	100.70	4.13	0.00	96.57
	9/21/2016	100.70	5.25	0.00	95.45

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
MW-10	7/9/2003	100.16	2.77	0.00	97.39
	10/30/2003	100.16	3.31	0.00	96.85
	12/1/2003	Well was converted to an MPE well			
MW-11 (off-site)	7/20/2004	98.24	3.83	0.00	94.41
	11/10/2004	98.24	3.95	0.00	94.29
	2/1/2005	98.24	Well was inaccessible		
	4/21/2005	98.24	3.88	0.00	94.36
	8/25/2005	98.24	5.03	0.00	93.21
	10/11/2005	98.24	4.81	0.00	93.43
	2/16/2006	98.24	4.19	0.00	94.05
	5/18/2006	98.24	3.81	0.00	94.43
	8/28/2006	98.24	3.56	0.00	94.68
	11/16/2006	98.24	3.19	0.00	95.05
	2/21/2007	98.24	3.31	0.00	94.93
	5/31/2007	98.24	4.14	0.00	94.10
	8/17/2007	Well was destroyed during construction activities			
OW-4 (off-site)	4/7/2009	IDEM directs monitoring of this off-site well			
	4/10/2009	100.97	4.52	0.00	96.45
	8/21/2009	100.97	4.12	0.00	96.85
	11/6/2009	100.97	4.18	0.00	96.79
	2/4/2010	100.97	4.70	0.00	96.27
	6/7/2010	100.97	3.50	0.00	97.47
	8/14/2010	100.97	5.55	0.00	95.42
	12/13/2010	100.97	5.39	0.00	95.58
	2/16/2011	100.97	4.62	0.00	96.35
	5/13/2011	100.97	3.91	0.00	97.06
	7/26/2011	100.97	4.12	0.00	96.85
	11/30/2011	100.97	3.99	0.00	96.98
	1/31/2012	100.97	4.15	0.00	96.82
	4/26/2012	100.97	4.35	0.00	96.62
	8/7/2012	100.97	6.55	0.00	94.42
	12/5/2012	100.97	5.72	0.00	95.25
	2/7/2013	100.97	4.70	0.00	96.27
	5/23/2013	100.97	4.91	0.00	96.06
	8/30/2013	100.97	6.61	0.00	94.36
	10/25/2013	100.97	5.96	0.00	95.01
	2/11/2014	100.97	4.86	0.00	96.11
	6/23/2014	100.97	4.90	0.00	96.07
	9/16/2014	100.97	4.03	0.00	96.94
	12/9/2014	100.97	3.79	0.00	97.18
	3/20/2015	100.97	4.28	0.00	96.69
	6/22/2015	100.97	3.66	0.00	97.31
	9/19/2015	100.97	5.58	0.00	95.39
	12/17/2015	100.97	4.92	0.00	96.05
	3/18/2016	100.97	4.20	0.00	96.77
	6/7/2016	100.97	4.38	0.00	96.59
	9/21/2016	100.97	5.35	0.00	95.62

TABLE 2
Historical Groundwater Elevations
Circle K #8/Former Bigfoot

Location	Date	Top of Casing Elevation (ft)	Depth to Groundwater* (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft)
OW-11 (off-site)	4/7/2009	IDEM directs monitoring of this off-site well			
	4/10/2009	98.99	4.33	0.00	94.66
	8/21/2009	98.99	2.95	0.00	96.04
	11/6/2009	98.99	2.74	0.00	96.25
	2/4/2010	98.99	2.83	0.00	96.16
	6/7/2010	98.99	4.81	0.00	94.18
	8/14/2010	98.99	4.09	0.00	94.90
	12/13/2010	98.99	5.43	0.00	93.56
	2/16/2011	98.99	2.95	0.00	96.04
	5/13/2011	98.99	2.05	0.00	96.94
	7/26/2011	98.99	2.96	0.00	96.03
	11/30/2011	98.99	2.49	0.00	96.50
	1/31/2012	98.99	2.09	0.00	96.90
	4/26/2012	98.99	2.64	0.00	96.35
	8/7/2012	98.99	5.12	0.00	93.87
	12/5/2012	98.99	4.26	0.00	94.73
	2/7/2013	98.99	3.81	0.00	95.18
	5/23/2013	98.99	4.09	0.00	94.90
	8/30/2013	98.99	6.05	0.00	92.94
	10/25/2013	98.99	5.83	0.00	93.16
	2/11/2014	98.99	3.26	0.00	95.73
	6/23/2014	98.99	3.55	0.00	95.44
	9/16/2014	98.99	2.80	0.00	96.19
	12/9/2014	98.99	1.82	0.00	97.17
	3/20/2015	98.99	2.86	0.00	96.13
	6/22/2015	98.99	2.92	0.00	96.07
	9/19/2015	98.99	3.97	0.00	95.02
	12/17/2015	98.99	3.33	0.00	95.66
	3/18/2016	98.99	2.26	0.00	96.73
	6/7/2016	98.99	2.40	0.00	96.59
	9/21/2016	98.99	3.88	0.00	95.11

*measured from top of casing

TABLE 3 Historical BTEX/MTBE Groundwater Analyses Results Circle K #8/Former Bigfoot						
Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
B-1/B-41	2/14/2002	**35,000***	**42,000***	**3,900***	**24,000***	<5.0
B-2	4/4/2002	**68***	18	8.1	30	18
B-3	4/4/2002	**360***	470	93	450	140
B-4	4/4/2002	**20,000***	**12,000***	**2,100***	9,500	180
B-5	4/4/2002	**10,000***	320	480	850	<5.0
B-6	4/4/2002	**830***	15	9.1	34	31
B-7	4/4/2002	**56***	16	<5.0	17	59
B-8	4/4/2002	**30***	12	<5.0	19	16
B-9	4/4/2002	**75***	19	66	180	91
B-10	4/4/2002	**40***	30	7.1	30	480
B-11	5/2/2002	<5.0	<5.0	<5.0	<5.0	<5.0
B-12	5/1/2002	<5.0	<5.0	<5.0	<5.0	<5.0
B-14	4/30/2002	<5.0	<5.0	<5.0	<5.0	<5.0
B-15	4/30/2002	<5.0	<5.0	<5.0	<5.0	17
B-16	4/30/2002	<5.0	<5.0	<5.0	<5.0	<5.0
B-18	4/30/2002	**210***	520	170	810	29
B-19/MW-4	5/3/2002	**30,000***	**17,000***	**3,500***	**14,000***	120
B-20	5/2/2002	<5.0	<5.0	<5.0	<5.0	<5.0
B-21	5/2/2002	<5.0	<5.0	<5.0	<5.0	<5.0
B-22	6/19/2002	**5.9***	<5.0	<5.0	<5.0	<5.0
B-23	6/19/2002	<5.0	<5.0	<5.0	<5.0	<5.0

TABLE 3
Historical BTEX/MTBE Groundwater Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW - 1 (off-site)	5/3/2002	<5.0	<5.0	<5.0	<5.0	10
	8/8/2002	<5.0	<5.0	<5.0	<5.0	15
	10/10/2002	<5.0	<5.0	<5.0	<5.0	14
	2/13/2003	<5.0	<5.0	<5.0	<5.0	16
	4/3/2003	<5.0	<5.0	<5.0	<5.0	20
	7/9/2003	<5.0	<5.0	<5.0	<5.0	17
	10/30/2003	<5.0	<5.0	<5.0	<5.0	15
	2/19/2004	<5.0	<5.0	<5.0	<5.0	14
	4/14/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	7/20/2004	<5.0	<5.0	<5.0	<5.0	7.4
	11/10/2004	<5.0	<5.0	<5.0	<5.0	13
	2/1/2005	<5.0	<5.0	<5.0	<5.0	15
	4/21/2005	<5.0	<5.0	<5.0	<5.0	<5.0
	8/25/2005	<0.5	<5.0	<0.5	<1.5	<1.0
	10/11/2005	<0.5	<5.0	<0.5	<1.5	3
	2/16/2006	<0.5	<5.0	0.5	2.4	2
	5/18/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	8/28/2006	<0.5	<5.0	<0.5	<1.5	1.6
	11/16/2006	<0.5	<5.0	<0.5	<1.5	1.4
	2/21/2007	<1.0	<5.0	<1.0	<3.0	<1.0
	5/31/2007	<0.50	<5.0	<0.50	<1.5	<1.0
	8/17/2007	<0.50	<5.0	<0.50	<1.5	2.2
	11/9/2007	<0.50	<5.0	0.66	3.4	3.3
	2/6/2008	<0.50	<5.0	<0.50	<1.5	1.1
	4/29/2008	<0.50	<5.0	<0.50	<1.5	6.2
	7/22/2008	<0.50	<5.0	<0.50	<1.5	7.4
	10/17/2008	0.92	<5.0	1.5	5.4	2.6
	1/21/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	4/10/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	8/21/2009	<0.50	<5.0	<0.50	<1.5	1.0
	11/6/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	2/4/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	6/7/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	8/18/2010	<0.50	<5.0	<0.50	<1.5	1.1
	12/13/2010	<0.50	<5.0	<0.50	<1.5	1.0
	2/16/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	5/13/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	7/26/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	11/30/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	1/31/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	4/26/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	8/7/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	12/5/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	2/7/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	5/23/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	8/30/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	10/25/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	2/11/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	6/23/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	9/16/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	12/9/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	3/20/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	6/22/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	9/19/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	12/17/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	3/18/2016	<5.0	<5.0	<5.0	<5.0	<5.0
	6/9/2016	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2016	<5.0	<5.0	<5.0	<5.0	<5.0

TABLE 3
Historical BTEX/MTBE Groundwater Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-2	5/3/2002	<5.0	<5.0	<5.0	<5.0	<5.0
	8/8/2002	<5.0	<5.0	<5.0	<5.0	<5.0
	10/10/2002	<5.0	<5.0	<5.0	<5.0	<5.0
	2/13/2003	<5.0	<5.0	<5.0	<5.0	<5.0
	4/3/2003	<5.0	<5.0	<5.0	<5.0	8.7
	7/9/2003	<5.0	<5.0	<5.0	<5.0	**730***
	10/30/2003	<5.0	<5.0	<5.0	<5.0	**1,000***
	2/19/2004	<5.0	<5.0	<5.0	<5.0	420
	4/14/2004	<5.0	<5.0	<5.0	<5.0	**800***
	7/20/2004	<5.0	<5.0	<5.0	<5.0	600
	11/10/2004	<5.0	<5.0	<5.0	<5.0	7.3
	2/1/2005	<5.0	<5.0	<5.0	<5.0	40
	4/21/2005	<5.0	<5.0	<5.0	<5.0	110
	8/25/2005	<0.5	<5.0	<0.5	<1.5	1.7
	10/11/2005	<0.5	<5.0	<0.5	<1.5	<1.0
	2/16/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	5/18/2006	<0.5	<5.0	<0.5	<1.5	2.8
	8/28/2006	<0.5	<5.0	<0.5	<1.5	1.4
	11/16/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	2/21/2007	<1.0	<5.0	<1.0	<3.0	1.4
	5/31/2007	<0.50	<5.0	<0.50	<1.5	1.7
	8/17/2007	<0.50	<5.0	<0.50	<1.5	4.7
	11/9/2007	<0.50	<5.0	<0.50	<1.5	1.0
	2/6/2008	<0.50	<5.0	<0.50	<1.5	<1.0
	4/29/2008	<0.50	<5.0	<0.50	<1.5	1.5
	7/22/2008	<0.50	<5.0	<0.50	<1.5	4.5
	10/17/2008	0.50	<5.0	0.86	3.7	4.2
	1/21/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	4/10/2009	<0.50	<5.0	<0.50	<1.5	1.1
	8/21/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	11/6/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	2/4/2010	3	18	1.5	22	<1.0
	6/7/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	8/18/2010	<0.50	<5.0	<0.50	<1.5	1.8
	12/13/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	2/16/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	5/13/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	7/26/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	11/30/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	1/31/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	4/26/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	8/7/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	12/5/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	2/7/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	5/23/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	8/30/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	10/25/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	2/11/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	6/23/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	9/16/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	12/9/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	3/20/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	6/22/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	9/19/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	12/17/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	3/18/2016	<5.0	<5.0	<5.0	<5.0	<5.0
	6/9/2016	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2016	<5.0	<5.0	<5.0	<5.0	<5.0

TABLE 3
Historical BTEX/MTBE Groundwater Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-3	5/3/2002	<5.0	<5.0	<5.0	<5.0	<5.0
	8/8/2002	<5.0	<5.0	<5.0	<5.0	<5.0
	10/10/2002	<5.0	<5.0	<5.0	<5.0	<5.0
	2/13/2003	<5.0	<5.0	<5.0	<5.0	<5.0
	4/3/2003	<5.0	<5.0	<5.0	<5.0	<5.0
	7/9/2003	<5.0	<5.0	<5.0	<5.0	<5.0
	10/30/2003	<5.0	<5.0	<5.0	<5.0	<5.0
	2/19/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	4/14/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	7/20/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	11/10/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	2/1/2005	<5.0	<5.0	<5.0	<5.0	<5.0
	4/21/2005	<5.0	<5.0	<5.0	<5.0	<5.0
	8/25/2005	<0.5	<5.0	<0.5	<1.5	<1.0
	10/11/2005	<0.5	<5.0	<0.5	<1.5	<1.0
	2/16/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	5/18/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	8/28/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	11/16/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	2/21/2007	<1.0	<5.0	<1.0	<3.0	<1.0
	5/31/2007	<0.50	<5.0	<0.50	<1.5	<1.0
	8/17/2007	<0.50	<5.0	<0.50	<1.5	<1.0
	11/9/2007	0.51	<5.0	<0.50	<1.5	<1.0
	2/6/2008	<0.50	<5.0	<0.50	<1.5	<1.0
	4/29/2008	<0.50	<5.0	<0.50	<1.5	<1.0
	7/22/2008	<0.50	<5.0	<0.50	<1.5	<1.0
	10/17/2008	<0.50	<5.0	0.73	3.2	<1.0
	1/21/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	4/10/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	8/21/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	11/6/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	2/4/2010	**9.5***	55	4.4	64	1.6
	6/7/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	8/18/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	12/13/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	2/16/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	5/13/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	7/26/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	11/30/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	1/31/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	4/26/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	8/7/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	12/5/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	2/7/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	5/23/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	8/30/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	10/25/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	2/11/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	6/23/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	9/16/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	12/9/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	3/20/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	6/22/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	9/19/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	12/17/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	3/18/2016	<0.50	<5.0	<0.50	<1.5	<1.0
	6/9/2016	<0.50	<5.0	<0.50	<1.5	<1.0
	9/21/2016	<0.50	<5.0	<0.50	<1.5	<1.0

TABLE 3
Historical BTEX/MTBE Groundwater Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-4	5/3/2002	**30,000***	**17,000***	3,500	14,000	120
	8/8/2002	**42,000***	**31,000***	3,400	18,000	<500
	10/10/2002	**42,000***	**32,000***	3,700	19,000	200
	2/13/2003	**40,000***	**31,000***	3,800	18,000	130
	4/3/2003	**46,000***	**25,000***	3,700	18,000	<50
	7/9/2003	**40,000***	**26,000***	3,700	18,000	85
	10/30/2003	**42,000***	**31,000***	3,200	16,000	57
	2/19/2004	**41,000***	**24,000***	3,100	17,000	90
	4/14/2004	**36,000***	**21,000***	3,800	**20,000***	76
	7/20/2004	**38,000***	**41,000***	3,400	**20,000***	33
	11/10/2004	**44,000***	**51,000***	3,300	19,000	<50.0
	2/1/2005	**15,000***	**8,500***	310	2,300	33
	4/21/2005	**39,000***	**58,000***	4,300	**27,000***	<50.0
	8/25/2005	**0.02' Free product, no sample taken***				
	10/11/2005	**26,000**	**41,000**	3,300	**21,000**	<250
	2/16/2006	**28,000***	**41,000***	3,200	**21,000***	<500
	5/18/2006	**16,000***	**21,000***	3,000	**21,000***	<100
	8/28/2006	**16,000***	**28,000***	3,700	**23,000***	**<1,000***
	11/16/2006	**Insufficient volume of water - no sample taken***				
	2/21/2007	**Product Globules, no sample taken***				
	5/31/2007	**7,700***	**12,000***	3,400	**27,000***	**<1,000***
	8/17/2007	**5,200***	**8,600***	770	11,000	<250
	11/9/2007	**5,800***	**3,900**	1,700	**21,000***	<250
	2/6/2008	**7,000***	**7,800***	690	7,900	36
	4/29/2008	**8,900***	**10,000***	960	8,800	<250
	7/22/2008	**11,000***	**12,000***	1,200	10,000	<250
	10/17/2008	**1,100***	<1,000	230	6,300	<200
	1/21/2009	**5,600***	<1,200	330	2,100	<250
	4/10/2009	**4,500***	<1,200	<120	1,400	<250
	8/21/2009	**3,000***	400	300	1,800	190
	11/6/2009	**2,200***	300	340	2,000	180
	2/4/2010	**4,700***	730	620	3,300	84
	6/7/2010	**1,000***	<250	230	1,500	<50*
	8/18/2010	**4,100***	450	510	2,500	140
	12/13/2010	**740***	<250	120	330	<50*
	2/16/2011	**2,400***	200	180	530	27
	5/13/2011	**390***	390	370	1,800	17
	7/26/2011	**430***	<250	450	780	<50*
	11/30/2011	**4,600***	160	1,000	1,900	93
	1/31/2012	**5,600***	<250	1,000	1,800	140
	4/26/2012	**1,600***	<250	480	1,100	<50
	8/7/2012	**1,900***	84	440	610	30
	12/5/2012	**500***	5.4	44	42	20
	2/7/2013	**1,800***	<50	160	300	23
	5/23/2013	**1,300***	<50	120	140	20
	8/30/2013	**2,300***	34	360	300	19
	10/25/2013	**140***	<5.0	19	29	1.5
	2/11/2014	**1,500***	10	23	29	18
	6/14/2014	**950***	<25	62	46	5.3
	9/16/2014	**21**	<25	16	18	<5
	12/9/2014	**700**	36	110	110	12
	3/20/2015	**2,800**	41	460	540	31
	6/22/2015	4.91	<5	0.809	17.1	<1
	9/19/2015	**1,070**	<125	22.5	<37.5	<25
	12/17/2015	**2,050**	<125	233	117	<25
	3/18/2016	**384**	7.75	58.9	37.9	6.88
	6/7/2016	**1,300**	17.8	139	144	<1
	9/21/2016	**191**	6.65	44.4	37.1	12

TABLE 3
Historical BTEX/MTBE Groundwater Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-5	6/21/2002	**3,300***	1,400	240	2,200	<500
	8/8/2002	**6,600***	2,200	740	3,700	<500
	10/10/2002	**4,100***	1,400	780	3,200	89
	2/13/2003	**6,300***	3,600	820	3,300	71
	4/3/2003	**4,900***	2,100	830	3,500	<5.0
	7/9/2003	**7,000***	3,800	680	3,000	90
	10/30/2003	**7,800***	6,000	980	4,500	<500
	2/19/2004	**8,500***	4,500	900	4,100	44
	4/14/2004	**8,600***	4,500	750	3,400	43
	7/20/2004	**33,000***	**34,000***	2,400	15,000	<500
	11/10/2004	**32,000***	**28,000***	2,100	12,000	<50.0
	2/1/2005	**11,000***	5,800	210	1,500	61
	4/21/2005	**5,800***	470	670	1,600	<50.0
	8/25/2005	**0.07' Free product, no sample taken**				
	10/11/2005	**0.03' Free product, no sample taken**				
	2/16/2006	**29,000***	**38,000***	2,700	15,000	<250
	5/18/2006	**28,000***	**37,000***	3,000	17,000	360
	8/28/2006	**0.27' Free product, no sample taken***				
	11/16/2006	**0.41' Free product, no sample taken***				
	2/21/2007	**Product Globules, no sample taken***				
	5/31/2007	**21,000***	**27,000***	3,200	18,000	**<1,000***
	8/17/2007	**22,000***	**30,000***	3,200	**20,000***	**<2,000***
	11/9/2007	**30,000***	**40,000***	3,800	**20,000***	**<1,000***
	2/6/2008	**28,000***	**36,000***	2,800	17,000	**<1,000***
	4/29/2008	**24,000***	**30,000***	2,600	14,000	**<2,200***
	7/22/2008	**40,000***	**100,000***	**34,000***	**220,000***	**2,400***
	10/17/2008	**22,000***	**50,000***	**12,000***	**71,000***	**<2,000***
	1/21/2009	**36,000***	**140,000***	**75,000***	**420,000***	**<1,000***
	4/10/2009	**20,000***	**36,000***	5,900	**35,000***	**1,600***
	8/21/2009	**28,000***	**52,000***	8,300	**35,000***	**<1,000***
	11/6/2009	**20,000***	**37,000***	5,000	**30,000***	**<1,000***
	2/4/2010	**36,000***	**63,000***	8,600	**58,000***	**1,200***
	6/7/2010	**8,000***	**25,000***	**10,000***	**100,000***	**<2,500***
	8/18/2010	**6,300***	**14,000***	4,300	**25,000***	**1,400***
	12/13/2010	**13,000***	**93,000***	**130,000***	**670,000***	**6,300***
	2/16/2011	**4,700***	**20,000***	**13,000***	**95,000***	**2,000***
	5/13/2011	**350***	1,700	780	7,700	33.0
	7/26/2011	**1,900***	5,100	1,200	10,000	**<1,000***
	11/30/2011	**4,900***	5,200	1,200	11,000	<50
	1/31/2012	**6,800***	**9,000***	2,600	**21,000***	230
	4/26/2012	**6,300***	6,500	1,600	13,000	190
	8/7/2012	**5,700***	4,900	2,000	14,000	220
	12/5/2012	**350***	250	440	5,200	<50
	2/7/2013	**82***	78	160	1,700	16
	5/23/2013	20	<50	11	260	<10
	8/30/2013	**530***	<25	82	670	34
	10/25/2013	**100***	<50	19	180	<1.0
	2/11/2014	**370***	<5.0	130	260	10
	6/23/2014	**420***	<23	13	50	8
	9/16/2014	**17**	<25	8.6	28	<5
	12/9/2014	**18**	<5	3.5	6.1	<1
	3/20/2015	**920***	<500	320	1900	<100
	6/22/2015	**476***	10.1	50.7	125	12.9
	9/19/2015	**520***	<50	84.5	103	10.3
	12/17/2015	**289***	<50	222	1040	22
	3/18/2016	**422**	8.47	78.8	94.7	25.8
	6/9/2016	**170**	5.42	40.1	42.6	7.66
	9/21/2016	**144**	5.66	178	432	9.53

TABLE 3
Historical BTEX/MTBE Groundwater Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-6	6/21/2002	**15,000***	1,300	<5.0	2,400	**<1,000***
	8/8/2002	**13,000***	**21,000***	2,400	13,000	**<1,000***
	10/10/2002	**14,000***	**19,000***	2,900	12,000	<100
	2/21/2003	**11,000***	**12,000***	3,100	12,000	23
	4/3/2003	**12,000***	**22,000***	4,000	17,000	<5.0
	7/9/2003	**13,000***	7,800	2,700	8,300	<50.0
	10/30/2003	**12,000***	**10,000***	2,900	9,400	<500
	2/19/2004	**10,000***	**13,000***	3,300	13,000	14
	4/14/2004	**12,000***	**10,000***	2,600	9,400	<50.0
	7/20/2004	**8,800***	**18,000***	3,600	19,000	<5.0
	11/10/2004	**11,000***	**25,000***	3,000	16,000	<50.0
	2/1/2005	**5,100***	5,300	580	3,100	8.6
	4/21/2005	**6,700***	**17,000***	3,200	17,000	<50.0
	8/25/2005	**5,900***	**17,000***	2,100	12,000	<500
	10/11/2005	**4,900***	**16,000***	2,600	14,000	<100
	2/16/2006	**5,000***	**18,000***	3,000	16,000	<250
	5/18/2006	**7,600***	**10,000***	2,000	14,000	130
	8/28/2006	**6,200***	**11,000***	2,400	17,000	130
	11/16/2006	**Insufficient volume of water - no sample taken**				
	2/21/2007	**4,700***	**11,000***	1,800	14,000	<250
	5/31/2007	**3,700***	5,900	1,600	12,000	<500
	8/17/2007	**3,200***	4,500	1,400	10,000	<500
	11/9/2007	**4,100***	6,500	1,800	13,000	<250
	2/6/2008	**2,700***	4,100	1,600	10,000	86
	4/29/2008	**3,600***	4,800	1,800	10,000	170
	7/22/2008	**3,800***	2,900	1,600	9,900	200
	10/17/2008	**3,900***	4,000	1,700	9,900	<500
	1/21/2009	**8,200***	**11,000***	2,800	15,000	<500
	4/10/2009	**6,200***	**8,300***	2,500	14,000	<500
	8/21/2009	**6,000***	**8,500***	3,400	17,000	**850***
	11/6/2009	**5,200***	6,400*	2,600	14,000	<500
	2/4/2010	**5,600***	**9,000***	2,600	14,000	180
	6/7/2010	**6,600***	**8,500***	2,500	14,000	<500
	8/18/2010	**8,300***	7,100*	3,900	**20,000***	460
	12/13/2010	**780***	750	280	1,200	34
	2/16/2011	**1,300***	950	300	2,400	14
	5/13/2011	**1,000***	100	450	1,700	<1.0
	7/26/2011	**1,500***	<250	780	540	**<50**
	11/30/2011	**99***	61	240	2,800	<10
	1/31/2012	**2,300***	2,200	780	3,700	<20
	4/26/2012	**690***	130	270	820	<20
	8/7/2012	**400***	<25	250	180	12
	12/5/2012	**270***	280	160	910	<50
	2/7/2013	50	<5.0	5.6	8.7	4.7
	5/23/2013	12	<5.0	5.7	15.0	<1.0
	8/30/2013	33	<5.0	5.1	18.0	4.1
	10/25/2013	47	<5.0	3.0	4.8	7.6
	2/11/2014	**400***	<5.0	15.0	16.0	10
	6/23/2014	*5.9*	<5	0.56	<1.5	<1
	9/16/2014	1.7	<5	0.7	4.0	<1
	12/9/2014	4.1	<5	7.4	18.0	1.1
	3/20/2015	*46*	<5	7	7.4	2.3
	6/22/2015	1.38	<5	<0.5	5.34	<1
	9/19/2015	*8.13*	<5	7.54	2.56	<1
	12/17/2015	0.551	<5	<0.5	<1.5	<1
	3/18/2016	**71.9**	32	46.6	149	3.71
	6/7/2016	**169**	17	76.7	38	2.13
	9/21/2016	**30.9**	<5	10.7	19.2	4.48

TABLE 3 Historical BTEX/MTBE Groundwater Analyses Results Circle K #8/Former Bigfoot						
Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-7	8/22/2002	<5.0	<5.0	<5.0	<5.0	47
	10/10/2002	<5.0	<5.0	<5.0	<5.0	44
	2/13/2003	<5.0	<5.0	<5.0	<5.0	46
	4/3/2003	<5.0	<5.0	<5.0	<5.0	39
	7/9/2003	<5.0	<5.0	<5.0	<5.0	43
	10/30/2003	<5.0	<5.0	<5.0	<5.0	36
	2/19/2004	<5.0	<5.0	<5.0	<5.0	33
	4/14/2004	<5.0	<5.0	<5.0	<5.0	36
	7/20/2004	<5.0	<5.0	<5.0	<5.0	23
	11/10/2004	<5.0	<5.0	<5.0	<5.0	22
	2/1/2005	<5.0	<5.0	<5.0	<5.0	30
	4/21/2005	<5.0	<5.0	<5.0	<5.0	17
	8/25/2005	<0.5	<5.0	<0.5	<1.5	12
	10/11/2005	<0.5	<5.0	<0.5	<1.5	7.1
	2/16/2006	<0.5	<5.0	<0.5	<1.5	11
	5/18/2006	<0.5	<5.0	<0.5	<1.5	6.1
	8/28/2006	<0.5	<5.0	<0.5	<1.5	9.1
	11/16/2006	<0.5	<5.0	<0.5	<1.5	5.5
	2/21/2007	<1.0	<5.0	<1.0	<3.0	6.6
	5/31/2007	<0.50	<5.0	<0.50	<1.5	3.0
	8/17/2007	<0.50	<5.0	<0.50	<1.5	4.8
	11/9/2007	<0.50	<5.0	<0.50	<1.5	3.2
	2/6/2008	<0.50	9.3	4.2	30	1.4
	4/29/2008	<0.50	<5.0	<0.50	<1.5	5.9
	7/22/2008	<0.50	<5.0	<0.50	<1.5	5.7
	10/17/2008	<0.50	<5.0	0.61	3.0	4.5
	11/12/2008	Well was abandoned, as approved by IDEM				

TABLE 3
Historical BTEX/MTBE Groundwater Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-8 (off-site)	11/27/2002	**320***	710	200	850	81
	2/13/2003	**690***	84	88	400	62
	4/3/2003	**350***	18	30	93	52
	7/9/2003	**330***	<5.0	45	6.2	78
	10/30/2003	**150***	7.8	22	5.9	72
	2/19/2004	**300***	5.7	32	9.9	58
	4/14/2004	**900***	<5.0	170	47	57
	7/20/2004	**2,800***	860	560	1,200	59
	11/10/2004	**1,400***	44	120	700	<5.0
	2/1/2005	**800***	40	85	270	57
	4/21/2005	**1,500***	75	320	210	<5.0
	8/25/2005	**730***	60	130	380	44
	10/11/2005	6.1	<5.0	2	2.2	26
	2/16/2006	**300***	<50.0	40	130	29
	5/18/2006	**120***	10	20	25	27
	8/28/2006	23	5.7	3.9	20	20
	11/16/2006	22	21	3.8	14	14
	1/10/2007	Well abandoned during construction activities				
MW-8r (off-site)	9/11/2007	Well was reinstalled in former MW-8 location				
	11/9/2007	**200***	<5.0	79	160	6.8
	2/6/2008	**310***	58	320	510	12
	4/29/2008	**820***	<50	**1,200***	1,200	12
	7/22/2008	**500***	<50	500	4.6	5.8
	10/17/2008	**50***	20	27	28	6.0
	1/21/2009	**31***	11	1.7	7.8	2.6
	4/10/2009	**14***	<5.0	<0.50	<1.5	1.8
	8/21/2009	**41***	<5.0	13	<1.5	2.2
	11/6/2009	1.2	<5.0	<0.50	<1.5	2.1
	2/4/2010	1.2	<5.0	<0.50	5.9	<1.0
	6/7/2010	0.68	<5.0	<0.50	<1.5	0.34
	8/18/2010	1.8	<5.0	1.5	6.9	3.8
	12/13/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	2/16/2011	3.1	<5.0	<0.50	2.4	<1.0
	5/13/2011	8.9	<5.0	0.82	4.0	<1.0
	7/26/2011	11	<5.0	2.80	<1.5	<1.0
	11/30/2011	1.6	<5.0	<0.5	<1.5	<1.0
	1/31/2012	6.2	<5.0	<0.5	2.1	1.2
	4/26/2012	7.2	<5.0	<0.5	<1.5	1.5
	8/7/2012	<0.5	<5.0	<0.5	<1.5	2.1
	12/5/2012	<0.5	<5.0	<0.5	<1.5	2.8
	2/7/2013	<0.5	<5.0	<0.5	<1.5	2.6
	5/23/2013	0.52	<5.0	<0.5	<1.5	2.6
	8/30/2013	<0.5	<5.0	<0.5	<1.5	<1.0
	10/25/2013	<0.5	<5.0	<0.5	<1.5	1.6
	2/11/2014	1.0	<5.0	<0.5	<1.5	1.6
	6/23/2014	<0.5	<5.0	<0.5	<1.5	<1.0
	9/16/2014	0.5	<5.0	<0.5	<1.5	<1.0
	12/9/2014	0.5	<5.0	<0.5	<1.5	<1.0
	3/20/2015	<5	<5.0	<0.5	<1.5	<1.0
	6/22/2015	<5	<5.0	<0.5	<1.5	<1.0
	9/19/2015	<5	<5.0	<0.5	<1.5	<1.0
	12/17/2015	<5	<5.0	<0.5	<1.5	<1.0
	3/18/2016	<5	<5.0	<0.5	<1.5	<1.0
	6/7/2016	0.797	<5	<0.5	<1.5	<1.0
	9/21/2016	<0.5	<5.0	<0.5	<1.5	<1.0

TABLE 3 Historical BTEX/MTBE Groundwater Analyses Results Circle K #8/Former Bigfoot						
Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-9 (off-site)	7/9/2003	<5.0	<5.0	<5.0	<5.0	<5.0
	10/30/2003	<5.0	<5.0	<5.0	<5.0	<5.0
	2/19/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	4/14/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	7/20/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	11/10/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	2/1/2005	<5.0	<5.0	<5.0	<5.0	<5.0
	4/21/2005	25	<5.0	6.8	6	<5.0
	8/25/2005	<0.5	<5.0	<0.5	<1.5	<1.0
	10/11/2005	<0.5	<5.0	<0.5	<1.5	<1.0
	2/16/2006	<0.5	<5.0	<0.5	2.7	<1.0
	5/18/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	8/28/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	11/16/2006	<0.5	<5.0	<0.5	<1.5	<1.0
	1/10/2007	Well abandoned during construction activities				
MW-9r (off-site)	9/11/2007	Well was reinstalled in former MW-9 location				
	11/9/2007	0.53	<5.0	2.1	23	<1.0
	2/6/2008	1.4	<5.0	1.8	3.0	<1.0
	4/29/2008	<0.50	<5.0	<0.50	<1.5	<1.0
	7/22/2008	0.79	<5.0	1.1	1.5	1.3
	10/17/2008	<0.50	<5.0	0.74	3.9	1.8
	1/21/2009	3.2	5.8	0.58	4.5	1.7
	4/10/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	8/21/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	11/6/2009	<0.50	<5.0	<0.50	<1.5	<1.0
	2/4/2010	<0.50	<5.0	<0.50	2.5	<1.0
	6/7/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	8/18/2010	<0.50	<5.0	<0.50	<1.5	1.7
	12/13/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	2/16/2011	<0.50	<5.0	<0.50	1.7	<1.0
	5/13/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	7/26/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	11/30/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	1/31/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	4/26/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	8/7/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	12/5/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	2/7/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	5/23/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	8/30/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	10/25/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	2/11/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	6/23/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	9/16/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	12/9/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	3/20/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	6/22/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	9/19/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	12/17/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	3/18/2016	<0.50	<5.0	<0.50	<1.5	<1.0
	6/7/2016	<0.50	<5.0	<0.50	<1.5	<1.0
	9/21/2016	<0.50	<5.0	<0.50	<1.5	<1.0

TABLE 3 Historical BTEX/MTBE Groundwater Analyses Results Circle K #8/Former Bigfoot						
Location	**Date**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**	**MTBE**
MW-10	7/9/2003	**9,300***	**12,000***	1,900	12,000	<50.0
	10/30/2003	**10,000***	**18,000***	2,500	13,000	12
	12/1/2003	Well converted to MPE well				
MW-11 (off-site)	7/20/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	11/10/2004	<5.0	<5.0	<5.0	<5.0	<5.0
	2/1/2005	Well was inaccessible				
	4/21/2005	<5.0	6.7	<5.0	5.9	<5.0
	8/25/2005	<0.5	<5.0	<0.5	<1.5	<1.0
	10/11/2005	<0.5	<5.0	<0.5	<1.5	1
	2/16/2006	<0.5	<5.0	<0.5	2.5	1.1
	5/18/2006	<0.5	<5.0	<0.5	<1.5	1.4
	8/28/2006	<0.5	<5.0	<0.5	<1.5	1.1
	11/16/2006	<0.5	<5.0	<0.5	<1.5	1.5
	2/21/2007	<1.0	<5.0	<1.0	<3.0	3.3
	5/31/2007	<0.50	<5.0	<0.50	<1.5	15
	8/17/2007	Well was destroyed during construction activities				
OW-4 (off-site)	4/7/2009	IDEM directs monitoring of this off-site well				
	4/10/2009	<0.50	<5.0	<0.50	<1.5	1.4
	8/21/2009	<0.50	<5.0	<0.50	<1.5	2.0
	11/6/2009	<0.50	<5.0	<0.50	<1.5	1.8
	2/4/2010	<0.50	<5.0	<0.50	<1.5	1.7
	6/7/2010	<0.50	<5.0	<0.50	<1.5	1.2
	8/18/2010	<0.50	<5.0	<0.50	<1.5	1.6
	12/13/2010	<0.50	<5.0	<0.50	<1.5	<1.0
	2/16/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	5/13/2011	<0.50	<5.0	<0.50	1.7	1.6
	7/26/2011	<0.50	<5.0	<0.50	<1.5	<1.0
	11/30/2011	<0.50	<5.0	<0.50	<1.5	1.2
	1/31/2012	<0.50	<5.0	<0.50	<1.5	1.0
	4/26/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	8/7/2012	<0.50	<5.0	<0.50	<1.5	1.1
	12/5/2012	<0.50	<5.0	<0.50	<1.5	<1.0
	2/7/2013	<0.50	<5.0	<0.50	<1.5	10
	5/23/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	8/30/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	10/25/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	2/11/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	6/23/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	9/16/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	12/9/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	3/20/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	6/22/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	9/19/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	12/17/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	3/18/2016	<0.50	<5.0	<0.50	<1.5	<1.0
	6/7/2016	<0.50	<5.0	<0.50	<1.5	<1.0
	9/21/2016	<0.50	<5.0	<0.50	<1.5	<1.0

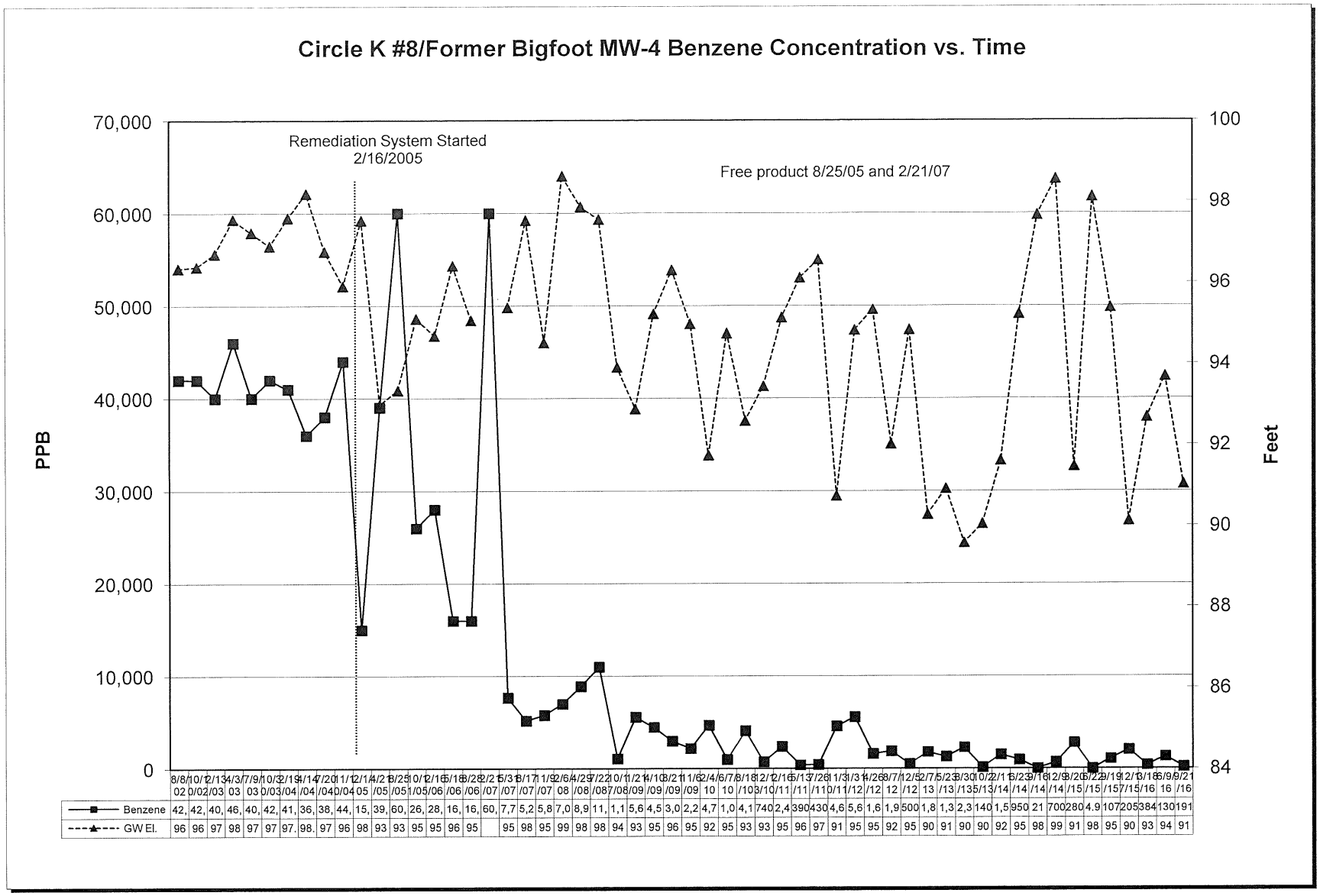
TABLE 3
Historical BTEX/MTBE Groundwater Analyses Results
Circle K #8/Former Bigfoot

Location	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
OW-11 (off-site)	4/7/2009	IDEM directs monitoring of this off-site well				
	4/10/2009	0.73	<5.0	<0.50	<1.5	16
	8/21/2009	<0.50	<5.0	<0.50	<1.5	20
	11/6/2009	<0.50	<5.0	<0.50	<1.5	22
	2/4/2010	<0.50	<5.0	<0.50	3.1	18
	6/7/2010	<0.50	<5.0	<0.50	<1.5	22
	8/18/2010	<0.50	<5.0	<0.50	<1.5	1.6
	12/13/2010	<0.50	<5.0	<0.50	<1.5	14
	2/16/2011	<0.50	<5.0	<0.50	<1.5	13
	5/13/2011	<0.50	<5.0	<0.50	<1.5	18
	7/26/2011	<0.50	<5.0	<0.50	<1.5	14
	11/30/2011	<0.50	<5.0	<0.50	<1.5	10
	1/31/2012	<0.50	<5.0	<0.50	<1.5	12
	4/26/2012	0.53	<5.0	<0.50	<1.5	15
	8/7/2012	<0.50	<5.0	<0.50	<1.5	12
	12/5/2012	<0.50	<5.0	<0.50	<1.5	11
	2/7/2013	<0.50	<5.0	<0.50	<1.5	12
	5/23/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	8/30/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	10/25/2013	<0.50	<5.0	<0.50	<1.5	<1.0
	2/11/2014	<0.50	<5.0	<0.50	<1.5	7.0
	6/23/2014	<0.50	<5.0	<0.50	<1.5	9.2
	9/16/2014	<0.50	<5.0	<0.50	<1.5	5.5
	12/9/2014	<0.50	<5.0	<0.50	<1.5	<1.0
	3/20/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	6/22/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	9/19/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	12/17/2015	<0.50	<5.0	<0.50	<1.5	<1.0
	3/18/2016	<0.50	<5.0	<0.50	<1.5	<1.0
	6/7/2016	<0.50	<5.0	<0.50	<1.5	<1.0
	9/21/2016	<0.50	<5.0	<0.50	<1.5	<1.0
RISC RDCL		5	1,000	700	10,000	40
RISC IDCL*		52	8,200	10,000	20,000	720

BOLD and * = concentrations above allowable levels
Concentrations in parts per billion, ppb
ND = Non-detect
MTBE: Methyl-Tertiary-Butyl-Ether

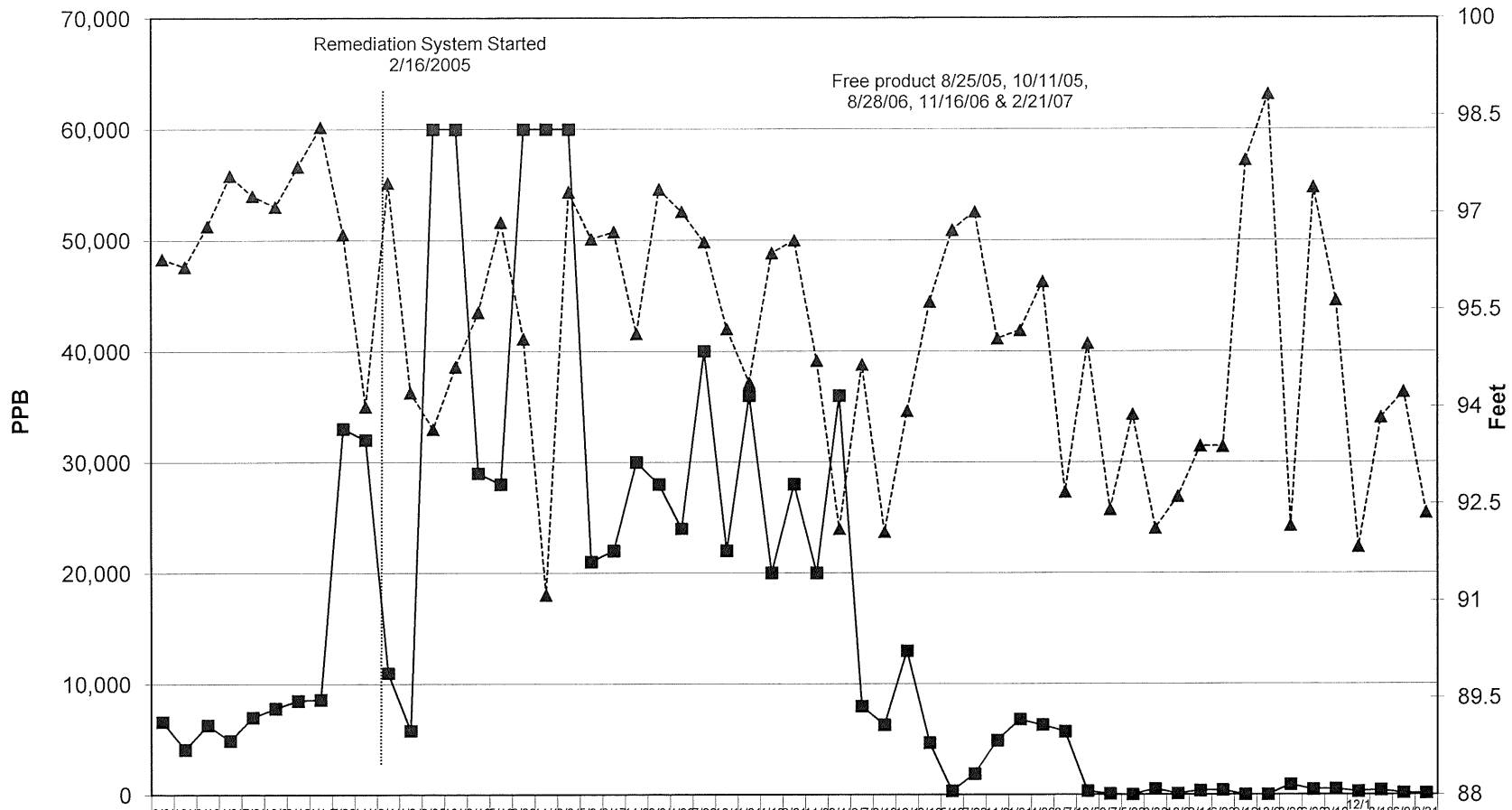
APPENDIX D

BENZENE TIME CHARTS

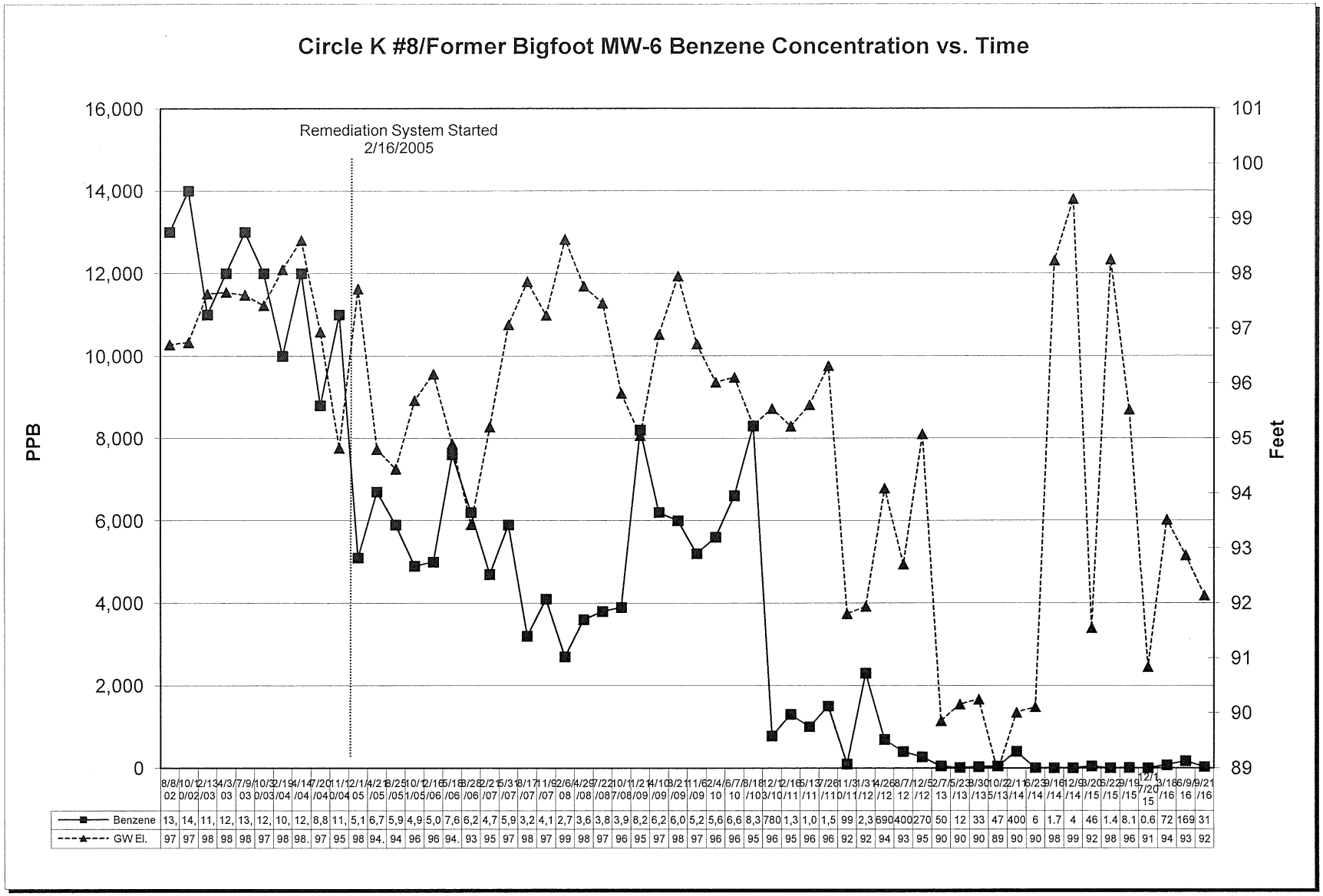


	8/8/02	10/10/02	12/13/03	4/3/03	7/9/03	10/3/03	2/19/04	4/14/04	7/20/04	11/10/04	12/14/05	4/21/05	8/25/05	10/1/05	12/16/05	5/18/06	8/28/06	2/2/07	5/31/07	8/17/07	11/9/07	2/6/08	4/29/08	7/22/08	10/7/08	1/21/09	4/16/09	8/21/09	11/6/09	2/4/10	6/7/10	8/18/10	12/1/10	12/16/11	5/13/11	7/26/11	11/10/11	1/31/12	4/26/12	8/7/12	12/5/12	2/7/13	5/23/13	8/30/13	10/22/13	12/11/14	6/23/14	9/16/14	12/9/14	3/20/15	6/22/15	9/19/15	12/1/15	3/18/16	6/9/16	9/21/16
Benzene	42,000	42,000	40,000	46,000	40,000	42,000	41,000	36,000	38,000	44,000	15,000	39,000	60,000	26,000	28,000	16,000	16,000	60,000	7,700	5,200	5,800	7,000	8,900	11,000	1,100	5,600	4,500	3,000	2,200	4,700	1,000	4,100	740	2,400	390	430	4,600	5,600	1,600	1,900	500	1,800	1,300	2,300	140	1,500	950	21	700	280	4.9	107	205	384	130	191
GW El.	96	96	97	98	97	97	97.9	98.0	97	96	98	93	93	95	95	96	95		95	98	95	99	98	98	94	93	95	96	95	92	95	93	93	95	96	97	91	95	95	92	95	90	91	90	90	92	95	98	99	91	98	95	90	93	94	91

Circle K #8/Former Bigfoot MW-5 Benzene Concentration vs. Time

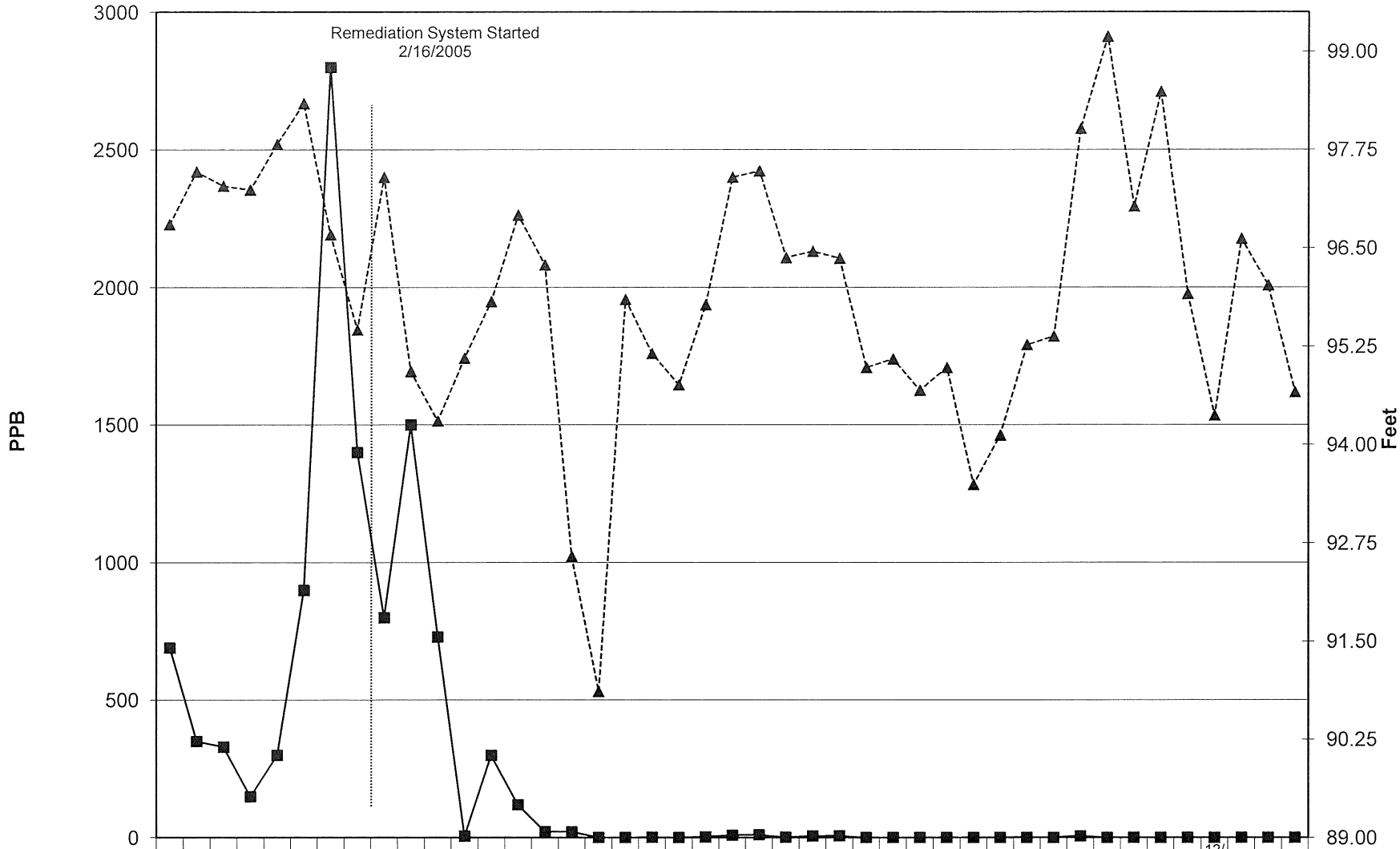


	8/8/02	10/10/02	12/13/03	4/3/03	7/9/03	10/30/03	2/19/04	4/14/04	7/20/04	11/10/04	12/1/05	4/25/05	8/25/05	10/11/05	12/16/05	5/18/06	8/28/06	11/16/06	12/21/07	5/31/07	8/17/07	11/9/07	2/6/08	4/29/08	7/22/08	10/7/08	11/24/09	4/10/09	8/21/09	11/6/09	2/4/10	6/7/10	8/18/10	12/3/10	12/16/11	5/13/11	7/26/11	11/10/11	1/31/12	4/26/12	8/7/12	12/5/12	2/7/13	5/23/13	8/30/13	10/25/13	12/14/14	6/23/14	9/16/14	12/9/14	3/20/15	6/22/15	9/19/15	12/17/2015	3/18/16	6/9/16	9/21/16
Benzene	6,6	4,1	6,3	4,9	7,0	7,8	8,5	8,6	33,	32,	11,	5,8	60,	60,	29,	28,	60,	60,	60,	21,	22,	30,	28,	24,	40,	22,	36,	20,	28,	20,	36,	8,0	6,3	13,	4,7	350	1,9	4,9	6,8	6,3	5,7	350	82	20	530	100	370	420	17	18	920	476	520	289	422	170	144
GW El.	96	96	97	98	97	97	98	98	97	94.	97	94	94	95	95	97	95	91	97	97	96.	95	97	97	97	95.	94	96	97	95	92	95	92	94	96	97	97	95	95	96	93	95	92	94	92	93	93	93	98	99	92	97	96	92	94	94	92



	8/8/02	10/10/02	12/13/03	4/3/03	7/9/03	10/30/03	2/19/04	4/14/04	7/20/04	11/10/04	12/1/05	4/21/05	8/25/05	10/1/05	12/16/06	5/16/06	8/28/06	2/2/07	5/31/07	8/17/07	11/9/07	2/6/08	4/29/08	7/22/08	10/7/08	11/2/09	4/10/09	8/21/09	11/6/09	2/4/10	6/7/10	8/18/10	12/3/10	12/16/11	5/13/11	7/26/11	10/11/11	3/1/12	4/26/12	8/7/12	12/5/12	2/7/13	5/23/13	8/30/13	10/25/13	2/11/14	6/23/14	9/16/14	12/9/14	3/20/15	6/22/15	9/19/15	12/17/2015	3/18/16	6/9/16	9/21/16
Benzene	13,	14,	11,	12,	13,	12,	10,	12,	8,8	11,	5,1	6,7	5,9	4,9	5,0	7,6	6,2	4,7	5,9	3,2	4,1	2,7	3,6	3,8	3,9	8,2	6,2	6,0	5,2	5,6	6,6	8,3	780	1,3	1,0	1,5	99	2,3	690	400	270	50	12	33	47	400	6	1.7	4	46	1.4	8.1	0.6	72	169	31
GW El.	97	97	98	98	98	97	98	98.	97	95	98	94.	94	96	96	94.	93	95	97	98	97	99	98	97	96	95	97	98	97	96	96	95	96	95	96	96	92	92	94	93	95	90	90	90	89	90	90	98	99	92	98	96	91	94	93	92

Circle K #8/Former Bigfoot MW-8R Benzene Concentration vs. Time



	2/13/03	4/3/03	7/9/03	10/30/03	2/19/04	4/14/04	7/20/04	11/10/04	2/1/05	4/21/05	8/25/05	10/11/05	2/16/06	5/18/06	8/28/06	11/16/06	2/4/10	6/7/10	8/18/10	12/13/10	2/16/11	5/13/11	7/26/11	11/30/11	1/31/12	4/26/12	8/7/12	12/5/12	2/7/13	5/23/13	8/30/13	10/25/13	2/11/14	6/23/14	9/16/14	12/9/14	3/20/15	6/22/15	9/19/15	12/17/2015	3/18/16	6/9/16	9/21/16
Benzene	690	350	330	150	300	900	2,8	1,4	800	1,5	730	6.1	300	120	23	22	1.2	0.7	1.8	0.5	3.1	8.9	11	1.6	6.2	7.2	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5	6.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
GW El.	96.	97	97	97	98	98	97	95	97.	95	94.	95.	96	97	96	93	91	96	95	95	96	97	97	96	96	96	95	95	95	95	93	94	95	95	98	99	97	98	96	94	97	96	95