



August 6, 2013

Mr. Michael Pennington
Florida Department of Environmental Protection
Petroleum Cleanup Section 3
Bureau of Petroleum Storage Systems
2600 Blair Stone Road, MS 4530
Tallahassee, Florida 32399

**RE: Operation and Maintenance Report, Quarters 17 and 18
Waco Food Store #11 (Former Hess Station No. 09274)
2410 Highway 19 South, Perry
FDEP Facility ID #62/8517044**

Dear Mr. Pennington:

This report summarizes the quarters 17 and 18 of operation, monitoring, and maintenance (O&M) of the air sparging (AS) and soil vapor extraction (SVE) systems at the referenced site. SVE system startup was conducted in October 2008. The AS system was not completely started until March 2010 due to the presence of free product in monitoring wells. This report summarizes the remedial operations from January 23, 2013 through July 18, 2013. O&M tables, adopted from the Remedial Action Initiative (RAI) program, are provided in **Appendix A**.

SITE ASSESSMENT HIGHLIGHTS

Site assessment activities were initiated in 1989 in response to a discharge reported in August 1988. The 1990 *Contamination Assessment Report Addendum*, which recommended No Further Action, was approved in January 1991. In February 1995, an incident was reported due to a failed tightness test of a gasoline product line. In December 1996, petroleum-impacted groundwater was detected in the former underground storage tank (UST) area. The discovery of the petroleum-impacted groundwater was attributed to the 1995 release.

Between 1999 and 2003, site assessment activities were performed by Advanced Environmental Technologies. Between 2004 and 2006, Earth Systems performed additional site assessment activities. The following is a summary of the site assessments results:

- Numerous private wells were identified within ¼-mile of the site and one public supply well was identified approximately ½-mile northwest of the site.
- Sediments encountered in the upper 40 feet beneath the site consist of fine-grained sand, silty/clayey sand, and limestone. The lithology can generally be described as follows: from zero to 10 feet below land surface (bls), light brown silty sand was



encountered. From 10 to 20 feet bls, clayey sand was encountered. Below 20 feet bls, the clayey sand transitions into a weathered limestone to at least 40 feet bls. Voids were encountered near the interface between the clayey sand and limestone layers.

- The vertical and horizontal extent of petroleum-impacted soil in the vadose zone was assessed through soil vapor screening and laboratory analysis. A measurement of 110 ppm or greater, measured using an organic vapor analyzer equipped with a flame-ionization detector (OVA-FID), correlated to a laboratory analytical result for Benzene that exceeded its Soil Cleanup Target Level (SCTL) based upon leachability.
- The depth to groundwater varied from 8.19 to 14.20 feet bls, with an average depth of about 11.0 feet bls. The water table is nearly flat, with a slight gradient (0.001 feet per foot) to the south and southwest.
- Dissolved petroleum hydrocarbon compounds were detected in excess of FDEP Groundwater Cleanup Target Levels (GCTLs). The area of maximum hydrocarbon impact is located near the former USTs and pump islands.
- The vertical extent of dissolved hydrocarbons is monitored by wells DW-1 (screened from 35 to 40 feet bls), DW-2 (screened from 31 to 36 feet bls), and DW-3 (screened from 32 to 37 feet bls). The direction of groundwater flow in the deeper portion of the surficial aquifer is to the west.
- Petroleum hydrocarbon compounds in excess of GCTLs have been detected in wells DW-1, DW-2, and DW-3.
- Free product was observed in wells M-1, M-2, M-6, M-7, M-9, and MW-19.

SYSTEM DESCRIPTION

The remediation system design incorporates AS with SVE to remove hydrocarbons from the groundwater and soil. The air sparge system consists of 24 sparge wells (AS-1 through AS-24) divided into 2 zones. Well locations are shown in **Figure 1**. Each sparge well is constructed of 2-inch diameter PVC with 3 to 5 feet of 20-slot screen, installed to depths ranging from 20 to 30 feet bls (the depths were adjusted based upon the depth of the limestone layer). Initially, the Zone 1 AS wells (AS-2, AS-3, AS-6, AS-7, AS-11, AS-12, AS-17 through AS-19, and AS-22 through AS-24), located along the perimeter of the site were installed. The Zone 2 wells (AS-1, AS-4, AS-5, AS-8 through AS-10, AS-13 through AS-16, AS-20, and AS-21) located in the source area were not installed because FDEP was concerned that free product might be dispersed in the aquifer during the well installation activities. After the product was eliminated, Zone 2 AS wells were installed in September 2009.

Between October 2008 and October 2009, the air sparging system used a Becker DTLF-250 rotary-vane compressor equipped with a 20 horsepower (Hp) motor. In November 2009, a remediation trailer formerly used at FDEP Facility ID 16/8506784 was transferred to the site to replace the original remediation trailer because the bearings of the rotary-vane compressor were failing. The replacement remediation trailer was equipped with a 20 Hp, Rietschle DLR 300 rotary-claw compressor capable



of delivering 200 standard cubic feet per minute (scfm) at a pressure of 15 pounds per square inch (psi). The compressor was connected to each AS well by 1 1/2-inch diameter Schedule 40 PVC horizontal underground piping. The AS wells were connected to the trailer in the configuration shown in **Table 9 and Table 9A of Appendix A.**

Soil remediation is performed by extracting air from 11 SVE wells (VE-1 through VE-11). The SVE wells were constructed of 4-inch diameter PVC and installed to a depth of 12 feet bls. Each SVE well contains ten feet of 0.01 inch-slot screen. On March 16 and 17, 2009, well MW-19 was retrofitted to function as a twelfth vacuum extraction well to remove free product that was present in the well. The piping from well VE-10 was connected to the wellhead of well MW-19. A ball valve was installed in the wellhead of MW-19 to allow isolation.

Between October 2008 and October 2009, vapor extraction was achieved using a Roots 47 URAI-J positive-displacement blower equipped with a 10-Hp motor. The replacement remediation trailer installed in November 2009 was equipped with a 15 Hp Rotron EN 909 regenerative blower. The SVE blower is capable of achieving an airflow rate of 300 scfm at a vacuum of 85 inches of water (in-water). The SVE blower is connected to each extraction well by 2-inch diameter Schedule 40 PVC horizontal underground piping. Moisture that collects in the SVE vapor stream is removed prior to entering the blower using a Bisco moisture separator. The recovered water is pumped through a bag filter and then through a Tetrasolv Model HPP-100 carbon vessel. The treated water is then pumped into a 10 ft x 4 ft x 2 ft deep infiltration gallery. The SVE wells were connected to the trailer in the configuration shown in **Table 8A of Appendix A.**

SVE air treatment was originally accomplished using a Catalytic Combustion thermal oxidizer Model VGTO-350. Due to reliability issues, the thermal oxidizer was replaced with a Catalytic Combustion catalytic oxidizer Model 300E in November 2009. Based on the April 2010 and May 2010 samples, recovered hydrocarbons had decreased below the FDEP limit of 13.7 pounds per day. On May 26, 2010, the catalytic oxidizer was disconnected from the system.

Due to the falling water table, the concentrations of recovered hydrocarbons increased and the system was shut off on September 1, 2011 until a 2000-pound carbon adsorber was installed on September 22, 2011. On November 4, 2011, after hydrocarbons above the FDEP limit were detected in the effluent sample, the system was shut off. A catalytic oxidizer (Falmouth Product Model Falco 300) was installed on January 20, 2012 and the system was restarted afterward. Due to high hydrocarbon concentrations recovered (caused by the re-appearance of free product), only the SVE system could be restarted. The AS system was restarted on March 1, 2012 with AS wells near the free product plume (AS-8, AS-9, AS-13/AS-14, AS-15, AS-16, and AS20/AS-21) valved off. After the free product was remediated in May 2012, most of the AS wells were operational. Vapor treatment was discontinued in August 2012 after the results of the July 2012 influent sample indicated that the emission rate was below the FDEP limit.



The AS and SVE units are housed inside a portable trailer to keep the equipment out of the elements and to prevent tampering. The trailer is located on the eastern part of the property, within a fenced enclosure. Details of the previous and current remediation system components are summarized in a **System Description** table in **Appendix A**.

DISCUSSION OF REMEDIAL OPERATIONS / PERFORMANCE

Air Sparge System

The AS system operated 97 percent of the time during the reporting period. The downtime was caused by a high level condition in the moisture separator tank in July (the heavy rains limited infiltration of recovered groundwater).

Sparge wells AS-11/AS-12 and AS-17/AS-18 were shut off since they are located in areas that have been remediated. Airflow rates to each active wells ranged from 2.6 scfm to 10.0 scfm in Zone 1 wells. Airflow rates to each leg ranged from 2.0 scfm to 12.2 scfm in Zone 2 wells. Data pertaining to the AS portion of the remediation system is provided in **Table 3**, **Table 9**, and **Table 9A** of **Appendix A**.

Soil Vapor Extraction System

The SVE system operated 97 percent of the time during the reporting period. The downtime was caused by shutdowns described for the AS system.

Vapor wells VE-2, VE-6, VE-7, and VE-11 were shut off because they are located in areas that have been remediated. Vapor flow rates from each SVE well ranged from 31 actual cubic feet per minute (acfm) to 78 acfm. The total system flow averaged about 380 acfm. Data pertaining to the SVE portion of the remediation system is provided in **Table 3** and **Table 8A** of **Appendix A**.

Air samples were collected on April 9, 2013 and July 18, 2013 to determine the emission rates. The samples were analyzed for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), Methyl Tert-Butyl Ether (MTBE) and Total Petroleum Hydrocarbons (TPH) using EPA Method TO-3. No tested compounds were detected in the April 2013 sample. TPH was detected at a concentration 174 milligrams per kilogram (mg/kg) in the July 2013 sample. The emission rate was calculated to be 5.0 pounds per day, which was less than the FDEP limit of 13.7 pounds per day. Emission calculations are included in **Table 7**. Laboratory reports are provided in **Appendix B**.

GROUNDWATER MONITORING

Earth Systems gauged free product and/or water levels in select monitoring wells under system operating conditions during each O&M visit. No free product was observed. Water levels ranged from 2.17 to 12.34 feet bls during the reporting period. The water level data is provided in **Table 4A** of **Appendix A**. A groundwater contour map under system operating conditions on July 18, 2013 is shown in **Figure 2**. The groundwater appeared to mound in the vicinity of well M-8.



Pressure readings were recorded in the monitoring wells during the monthly site visits. Pressures ranged from -44.3 in-water to +69.6 in-water. The pressure readings are compiled in **Table 10 of Appendix A**. The pressure readings recorded on July 18, 2013 are depicted in **Figure 3**.

Dissolved oxygen (DO) concentrations were measured in select wells during operation of the AS system. Compared to the baseline levels, DO concentrations generally increased due to air sparging. Baseline DO concentrations ranged from 0.63 milligrams per liter (mg/L) to 7.06 mg/L. During the reporting period, DO concentrations increased up to 10.83 mg/L. The increase in DO concentrations indicate that the AS system is effectively delivering oxygen to the groundwater. DO concentrations are summarized in **Table 11 of Appendix A**. DO concentrations measured on July 18, 2013 are depicted in **Figure 4**.

APRIL 2013 AND JULY 2013 GROUNDWATER SAMPLING

Earth Systems collected groundwater samples from seven monitoring wells (M-1, M-6, M-7, M-8, M-9, M-17, and M-19) on April 9, 2013 and July 18, 2013. Prior to sample collection, the wells were checked for the presence of free product and then purged in accordance with the FDEP's Standard Operating Procedure. Samples were then collected, placed on ice, and delivered to Accutest Laboratories in Orlando, Florida. At the laboratory, all samples were analyzed for BTEX and MTBE. Samples from select wells were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs) and/or Total Recoverable Petroleum Hydrocarbons (TRPH).

The April 2013 analytical results indicated a general decrease in hydrocarbon concentrations in wells M-1, M-7, M-9, and MW-19 when compared to the January 2013 analytical results. The July 2013 analytical results indicated a general increase in hydrocarbon concentrations in wells M-1, M-8, M-9, and MW-19 and a decrease in hydrocarbon concentrations in well M-7 when compared to the April 2013 analytical results. No tested compounds were detected in wells M-6 and M-17 during the April 2013 and July 2013 sampling events. The April 2013 and July 2013 analytical results are summarized in **Table 6 of Appendix A** and depicted in **Figure 5**. Copies of the laboratory analytical reports and groundwater sampling logs for the April 2013 and July 2013 sampling events are provided in **Appendix B**.

CONCLUSIONS and RECOMMENDATIONS

Based on the quarter 17 and quarter 18 O&M activities, Earth Systems offers the following conclusions and recommendations regarding remedial efforts at the site:

- No free product was observed during the reporting period.
- The hydrocarbon concentrations appeared to be fluctuating in the impacted wells. Although the hydrocarbons concentrations in the monitored wells have



decreased when compared to the baseline concentrations, the hydrocarbon concentrations in source well M-9 continues to fluctuate. Earth Systems is planning to add one or two air sparge wells near well M-9 to reduce the hydrocarbon concentrations in this area.

If you have any questions or comments regarding the information provided in this report, please contact the undersigned at (904) 247-0740.

Sincerely,
EARTH SYSTEMS

A handwritten signature in blue ink, appearing to read "Noel Manarang".

Noel Manarang, P.E.
Project Manager



CERTIFICATION:

I, Noel Manarang, P.E. No. 54828, certify that I currently hold an active license in the State of Florida and am competent through education or experience to provide the engineering service contained in this report. I further certify that in my professional judgment this report meets the requirements of Section 62-770.700 for Active Remediation, and was prepared by me or under my responsible charge. Moreover, I certify that Earth Systems, Inc. holds an active Certificate of Authorization #8369 to provide engineering services.

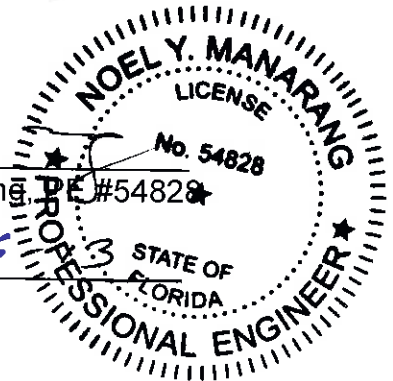
Consultant Name:
Earth Systems, Inc.

Signature: _____

Man
Noel Manarang, P.E. #54828

Date: _____

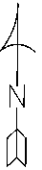
8-6-3



GRAPHIC SCALE

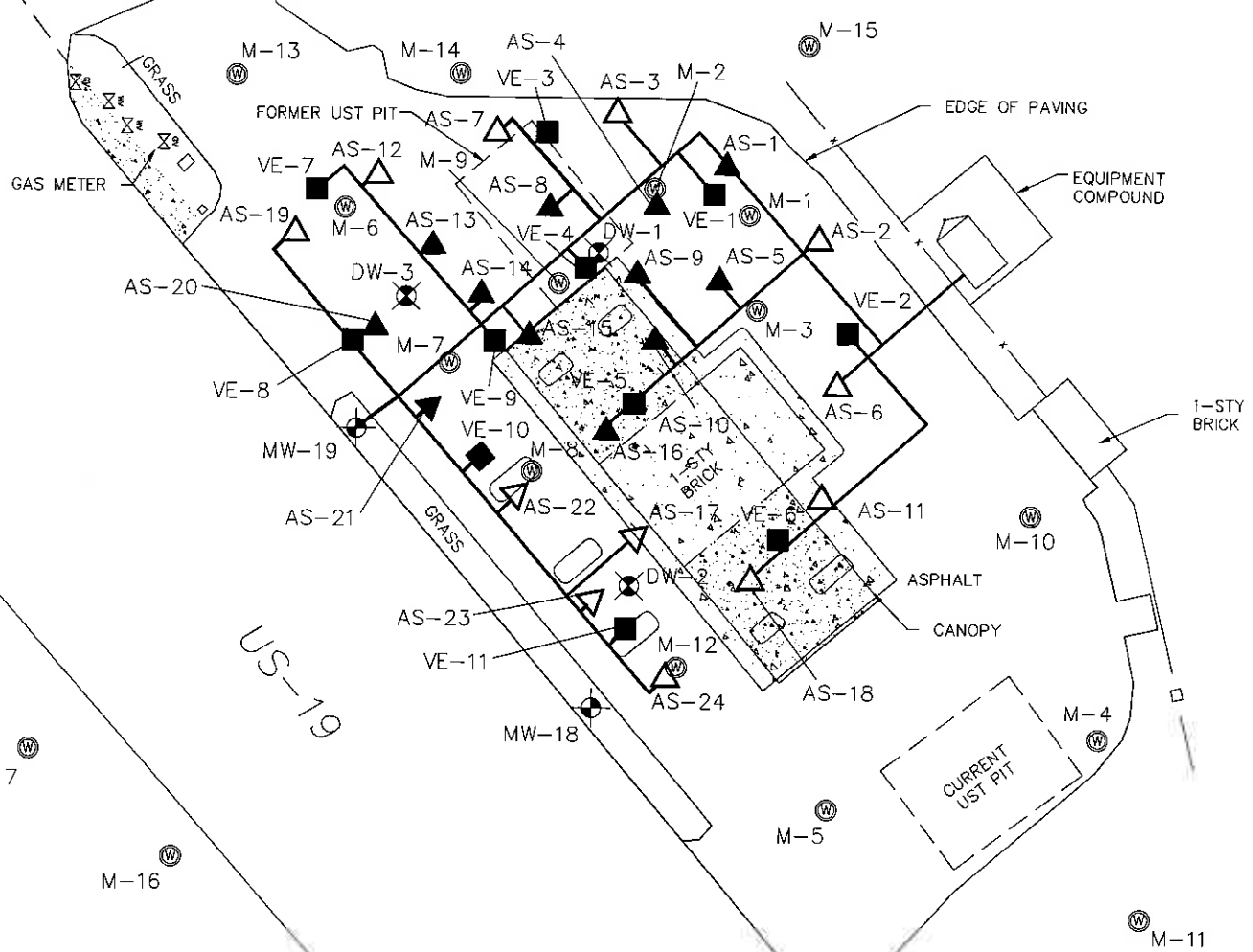


(IN FEET)
1 inch = 50 ft.



PLANTATION ROAD

APPROXIMATE E.L.W.



LEGEND

- ⊙ MICRO WELL LOCATION
- ⊕ MONITORING WELL LOCATION
- ⊗ DEEP MONITORING WELL LOCATION
- △ AIR SPARGE ZONE 1 WELL LOCATION
- ▲ AIR SPARGE ZONE 2 WELL LOCATION
- VAPOR EXTRACTION WELL LOCATION
- PIPING TRENCH

SITE PLAN

WACO #11 (Former Hess Station No. 09274)
2410 Highway 19 South, Perry, Florida

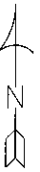
Earth Systems

Figure 1

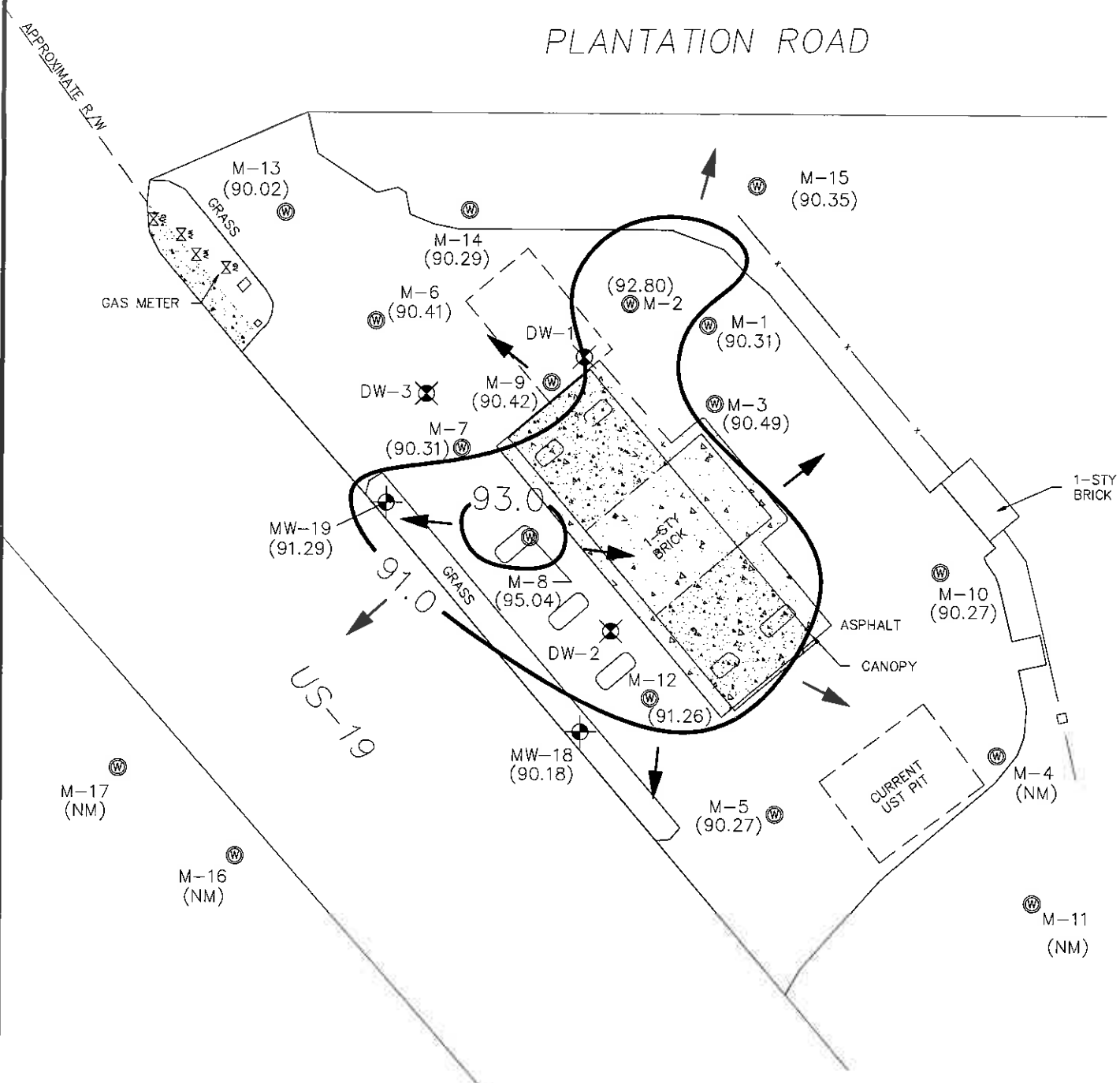
GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.



PLANTATION ROAD



LEGEND

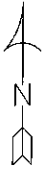
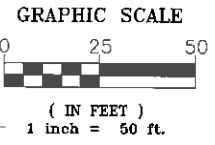
- MICRO WELL LOCATION
- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- (90.27) GROUNDWATER ELEVATION (FT.)
- (NM) NOT MEASURED
- 93.0 — GROUNDWATER CONTOUR (FT.)
- DIRECTION OF GROUNDWATER FLOW

GROUNDWATER
FLOW MAP
(JULY 18, 2013)

WACO #11 (Former Hess Station No. 09274)
2410 Highway 19 South, Perry, Florida

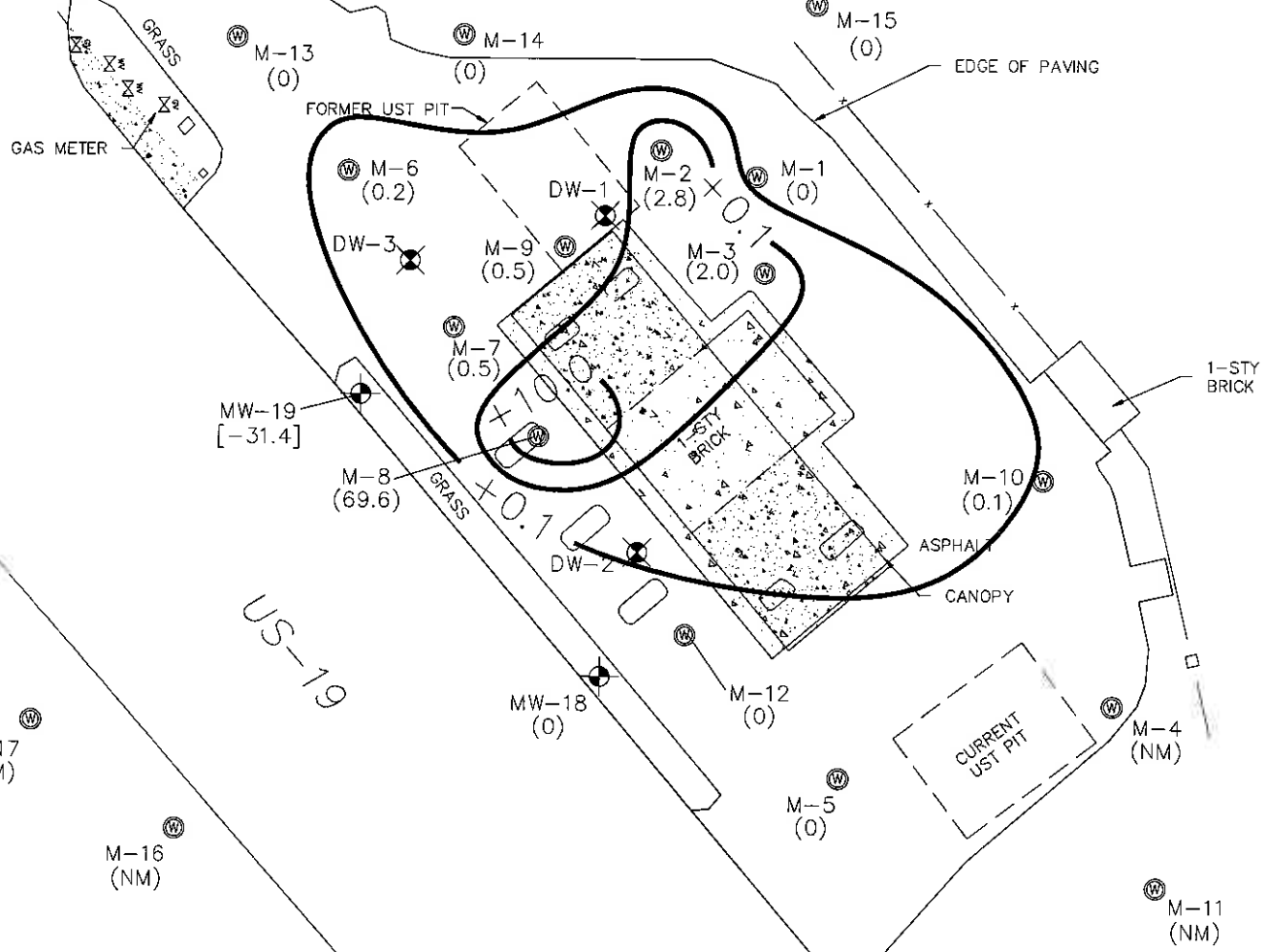
Earth Systems

Figure 2



PLANTATION ROAD

APPROXIMATE R/L/W



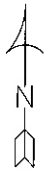
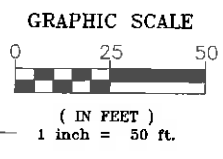
LEGEND

	MICRO WELL LOCATION
	MONITORING WELL LOCATION
	DEEP MONITORING WELL LOCATION
(+1.0)	PRESS/VAC READING (IN-WATER)
[-31.4]	DATUM NOT USED IN CONTOUR
(NM)	NOT MEASURED
+0.1	PRESS/VAC CONTOUR (IN-WATER)

PRESSURE/VACUUM INFLUENCE (JULY 18, 2013)

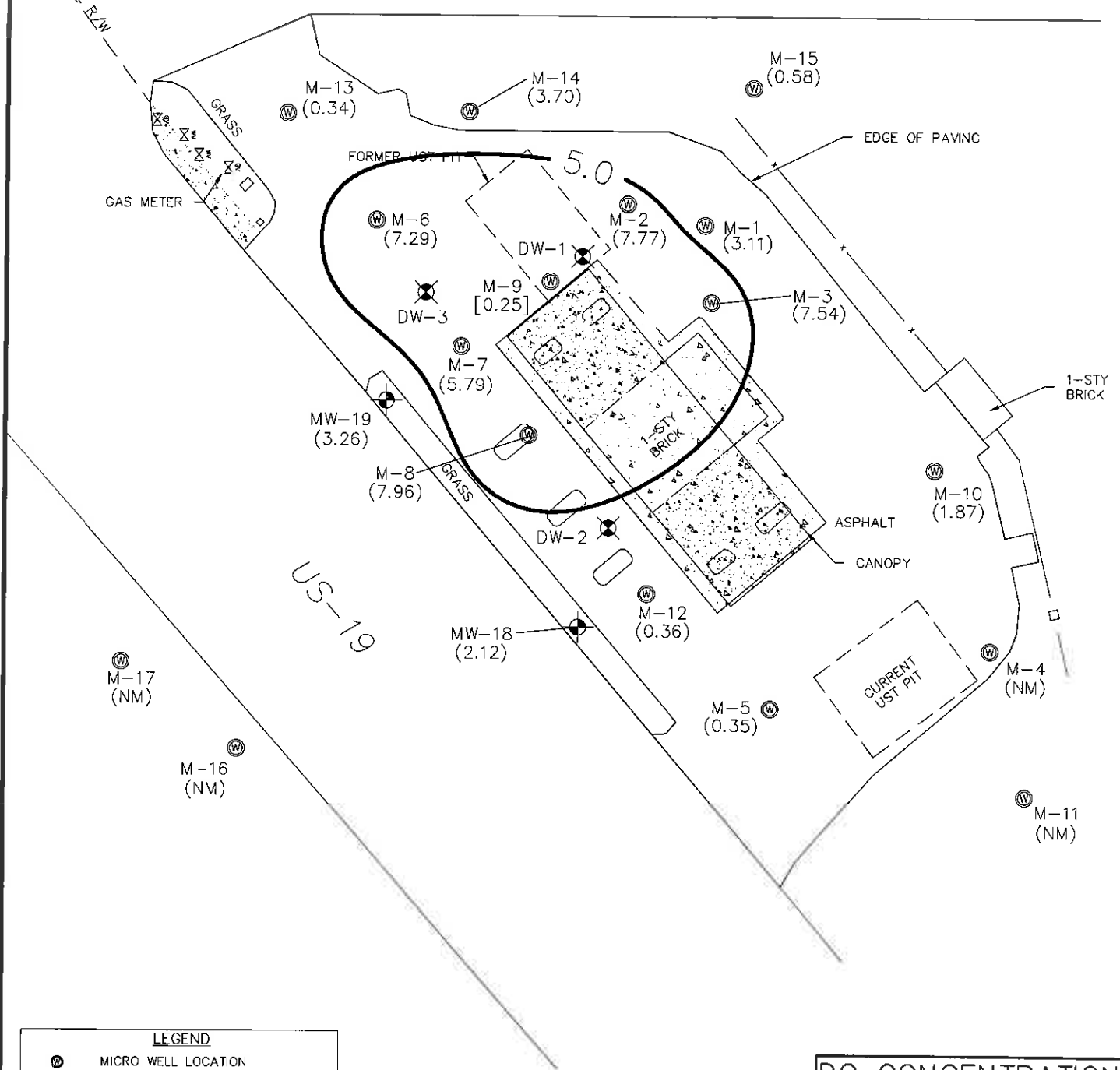
WACO #11 (Former Hess Station No. 09274)
2410 Highway 19 South, Perry, Florida

Earth Systems Figure 3



PLANTATION ROAD

APPROXIMATE R/W



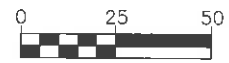
LEGEND

- ⊙ MICRO WELL LOCATION
- ⊕ MONITORING WELL LOCATION
- ⊗ DEEP MONITORING WELL LOCATION
- (7.54) DO CONCENTRATIONS (MG/L)
- [0.25] DATUM NOT USED IN CONTOUR
- (NM) NOT MEASURED
- 5.0 — DO CONC. CONTOUR (MG/L)

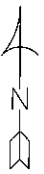
**DO CONCENTRATIONS
(JULY 18, 2013)**

WACO #11 (Former Hess Station No. 09274)
 2410 Highway 19 South, Perry, Florida

GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.



	4/19/13	7/18/13
B	0.21 U	0.21 U
T	NCD	NCD
M	0.21 U	0.21 U
N	NA	0.77 U
TR	NA	140 U

	4/9/13	7/18/13
B	6570	17400
T	16943	60080
M	8360	13400
N	NA	NA
TR	NA	NA

	4/9/13	7/18/13
B	187	179
T	844.1	964.1
M	114	94.9
N	NA	61
TR	NA	NA

	4/9/13	7/18/13
B	0.21 U	0.21 U
T	NCD	NCD
M	0.21 U	0.21 U
N	NA	NA
TR	NA	NA

	4/9/13	7/18/13
B	261	543
T	976.6	2212
M	81.9	111
N	NA	122
TR	NA	5330

	4/9/13	7/18/13
B	157	113
T	1825	565.1
M	46.2	24.1
N	NA	NA
TR	NA	NA

	4/9/13	7/18/13
B	0.21 U	5.9
T	NCD	8.09
M	1.8	4.7
N	NA	0.77 U
TR	NA	NA

LEGEND

- ⊙ MICRO WELL LOCATION
- ⊕ MONITORING WELL LOCATION
- ⊗ DEEP MONITORING WELL LOCATION
- B BENZENE (ug/L)
- T TOTAL BTEX (ug/L)
- M MTBE (ug/L)
- N NAPHTHALENE (ug/L)
- TR TRPH (ug/L)
- NA NOT ANALYZED
- NCD NO COMPOUNDS DETECTED
- U BELOW DETECTION LIMIT
- ⤴ HYDROCARBONS > GCTLs OR NADcS

NOTE: DATA IN BOLD ITALICS EXCEED GCTLs

DISSOLVED
HYDROCARBON MAP
(APRIL & JULY,
2013)

WACO #11 (Former Hess Station No. 09274)
2410 Highway 19 South, Perry, Florida

Earth Systems

Figure 5

APPENDIX A

Remedial Action Initiative Tables

SYSTEM DESCRIPTION

System Type: AS/SVE System ID: Waco # 11 System Start Date: 10/7/2008

Design Flow Rate:	379	scfm
Design Pressure:	55	in H2O

Measured Flow Rate:	120	scfm
Measured Pressure:	50	in H2O

Design Flow Rate:	102	acfm
Design Pressure:	12.5	psi

Measured Flow Rate:	48	scfm
Measured Pressure:	7	psi

Comments: The AS system is divided into Zone 1 and Zone 2

INDIVIDUAL WELL INFORMATION										
Well Number	Well 9	Well 10	Well 11	Well 12	Well 13	Well 14	Well 15	Well 16	Well 17	Well 18
Well ID #	AS-9	AS-10	AS-11	AS-12	AS-13	AS-14	AS-15	AS-16	AS-17	AS-18
Diameter (in)	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch
Well Depth (ft)	30	30	30	30	30	25	25	23	30	30
TOC (ft)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Top of Screen (ft below TOC)	25 ft bls	25 ft bls	25 ft bls	25 ft bls	25 ft bls	20 ft bls	20 ft bls	20 ft bls	25 ft bls	25 ft bls
Bottom of Screen (ft below TOC)	30 ft bls	30 ft bls	30 ft bls	30 ft bls	30 ft bls	25 ft bls	25 ft bls	23 ft bls	30 ft bls	30 ft bls
Screen Interval	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft
Draw Down	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Design Flow Rate (gpm,cfs)	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm
Measured Flow Rate (gpm,cfs)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Design Total Pressure	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi
Measured Total Pressure	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Relief hole location (ft below TOC)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pickup Pipe Length (ft from TOC)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDIVIDUAL WELL INFORMATION										
Well Number	Well 19	Well 20	Well 21	Well 22	Well 23	Well 24				
Well ID #	AS-19	AS-20	AS-21	AS-22	AS-23	AS-24				
Diameter (in)	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch				
Well Depth (ft)	30	20	27	30	30	30				
TOC (ft)	NM	NM	NM	NM	NM	NM				
Top of Screen (ft below TOC)	25 ft bls	17 ft bls	22 ft bls	25 ft bls	25 ft bls	25 ft bls				
Bottom of Screen (ft below TOC)	30 ft bls	20 ft bls	27 ft bls	30 ft bls	30 ft bls	30 ft bls				
Screen Interval	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft				
Draw Down	NA	NA	NA	NA	NA	NA				
Design Flow Rate	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm				
Measured Flow Rate	NA	NA	NA	NA	NA	NA				
Design Total Pressure	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi				
Measured Total Pressure	NA	NA	NA	NA	NA	NA				
Relief hole location (ft below TOC)	NA	NA	NA	NA	NA	NA				
Pickup Pipe Length (ft from TOC)	NA	NA	NA	NA	NA	NA				

SYSTEM DESCRIPTION

System Type: AS/SVE System ID: Waco # 11 System Start Date: 10/7/2008

SVE	Design Flow Rate: 379 scfm
	Design Pressure: 55 in H2O
AS	Design Flow Rate: 102 acfm
	Design Pressure: 12.5 psi

Measured Flow Rate:	120 scfm
Measured Pressure:	50 in H2O
Measured Flow Rate:	48 scfm
Measured Pressure:	7 psi

Comments: The AS system is divided into Zone 1 and Zone 2

INDIVIDUAL WELL INFORMATION

Well Number	Well 25	Well 26	Well 27	Well 28	Well 29	Well 30	Well 31	Well 32
Well ID #	VE-1	VE-2	VE-3	VE-4	VE-5	VE-6	VE-7	VE-8
Diameter (in)	4-inch	4-inch	4-inch	4-inch	4-inch	4-inch	4-inch	4-inch
Well Depth (ft)	12	12	12	12	12	12	12	12
TOC (ft)	NM	NM	NM	NM	NM	NM	NM	NM
Top of Screen (ft below TOC)	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls
Bottom of Screen (ft below TOC)	12 ft bls	12 ft bls	12 ft bls	12 ft bls	12 ft bls	12 ft bls	12 ft bls	12 ft bls
Screen Interval	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
Draw Down	NA	NA	NA	NA	NA	NA	NA	NA
Design Flow Rate	40 acfm	40 acfm	40 acfm	40 acfm	40 acfm	40 acfm	40 acfm	40 acfm
Measured Flow Rate	26 acfm	26 acfm	26 acfm	22 acfm	22 acfm	26 acfm	18 acfm	18 acfm
Design Total Pressure	30 in H2O	30 in H2O	30 in H2O	30 in H2O	30 in H2O	30 in H2O	30 in H2O	30 in H2O
Measured Total Pressure	29 in H2O	35 in H2O	29 in H2O	37 in H2O	28 in H2O	35 in H2O	32 in H2O	32 in H2O
Relief hole location (ft below TOC)	NA	NA	NA	NA	NA	NA	NA	NA
Pickup Pipe Length (ft from TOC)	NA	NA	NA	NA	NA	NA	NA	NA

INDIVIDUAL WELL INFORMATION

Well Number	Well 33	Well 34	Well 35	Well 36
Well ID #	VE-9	VE-10	VE-11	MW-19
Diameter (in)	4-inch	4-inch	4-inch	2
Well Depth (ft)	12	12	12	16
TOC (ft)	NM	NM	NM	NM
Top of Screen (ft below TOC)	2 ft bls	2 ft bls	2 ft bls	6 ft bls
Bottom of Screen (ft below TOC)	12 ft bls	12 ft bls	12 ft bls	16 ft bls
Screen Interval	10 ft	10 ft	10 ft	10
Draw Down	NA	NA	NA	NA
Design Flow Rate (gpm, cfs)	40 acfm	40 acfm	40 acfm	NA
Measured Flow Rate (gpm, cfs)	26 acfm	35 acfm	35 acfm	NA
Design Total Pressure	30 in H2O	30 in H2O	30 in H2O	NA
Measured Total Pressure	30 in H2O	35 in H2O	35 in H2O	NA
Relief hole location (ft below TOC)	NA	NA	NA	NA
Pickup Pipe Length (ft from TOC)	NA	NA	NA	NA

SYSTEM DESCRIPTION

System Type: AS/SVE System ID: Waco # 11 System Start Date: 10/7/2008

Design Flow Rate:	379	scfm
Design Pressure:	55	in H2O

Measured Flow Rate:	120	scfm
Measured Pressure:	50	in H2O

Design Flow Rate:	102	acfm
Design Pressure:	12.5	psi

Measured Flow Rate:	48	scfm
Measured Pressure:	7	psi

Comments: The AS system is divided into Zone 1 and Zone 2

PRIMARY COMPONENT(S) DESCRIPTION (October 2008 - October 2009)

Component Number	Component 1	Component 2	Component 3	Component 4
Component Name	Sparge Header	Vapor Liquid Separator (Zone 1)	Heat Exchanger (Zone 1)	Sparge compressor
Decal Number	123305	123307	123308	none
Item Subtype				
Make (Manufacturer of Item)	Bisco	Bisco	American Industrial	Becker
Model Number	2004	2004	AIHITI ACA3302	DTLF-250
Part Number			2004	2004
Serial Number	SO11693 MF	NA	111428	BT855390
Rating (UL, NEMA, etc.)			XP	XP
Design Flow (gpm, cfs, other)				units
Maximum Capacity (Weight)				
Maximum Capacity (Cubic Feet)				
Fitting Size (Input/Output)			1 1/2"	
Horse Power			0.25	20
Voltage Rating (S)			230-volt	230-volt
Design Maximum Current Requirement				
Design Maximum Wattage Requirement				
Phase Requirement			3-phase	3-phase
Fuel Type				
Required Fuel Flow				
Dimensions				
Warranty Duration				
Warranty Expiration Date	9/30/2005	9/30/2005	9/30/2005	9/30/2005
Maintenance Cycle				
Maintenance Event				

SYSTEM DESCRIPTION

System Type: **AS/SVE** System ID: **Waco # 11** System Start Date: **10/7/2008**

Design Flow Rate:	379	scfm
Design Pressure:	55	in H2O

Measured Flow Rate:	120	scfm
Measured Pressure:	50	in H2O

Design Flow Rate:	102	acfm
Design Pressure:	12.5	psi

Measured Flow Rate:	48	scfm
Measured Pressure:	7	psi

Comments: The AS system is divided into Zone 1 and Zone 2

ADDITIONAL COMPONENT(S) DESCRIPTION (October 2008 - October 2009)

Component Number	Component 5	Component 6	Component 7	Component 8
Component Name	Discharge Pump	Vapor Inlet Header	SVE Blower	Control Panel
Decal Number	123304	123311	123312	123313
Item Subtype	centrifugal		Positive Displacement	
Make (Manufacturer of Item)	Goulds	Bisco	ROOTS	Bisco
Model Number	NPE1ST 1C7F4	8 two-inch lines	47 URAI-J	11693ETS-1
Model Year	2004	2004	2004	2004
Part Number				
Serial Number	SO11693 MD	SO11693MF	408980827	SO11693CP
Rating (UL, NEMA, etc.)	XP		XP	UL
Design Flow (gpm, cfs, other)				
Maximum Capacity (Weight)				
Maximum Capacity (Cubic Feet)				
Fitting Size (Input/Output)			4" / 4"	
Horse Power	1/2-Hp		10-Hp	
Voltage Rating (S)	230-volt		230-volt	
Design Maximum Current Requirement			24-amp	
Design Maximum Wattage Requirement				
Phase Requirement	3-phase		3-phase	3-phase
Fuel Type				
Required Fuel Flow				
Dimensions				
Warranty Duration				
Warranty Expiration Date	9/30/2005	9/30/2005	9/30/2005	9/30/2005
Maintenance Cycle				
Maintenance Event				

SYSTEM DESCRIPTION

System Type: AS/SVE System ID: Waco # 11 System Start Date: 10/7/2008

Design Flow Rate:	379
Design Pressure:	55

Measured Flow Rate:	120
Measured Pressure:	50

Design Flow Rate:	102
Design Pressure:	12.5

Measured Flow Rate:	48
Measured Pressure:	7

Comments: The AS system is divided into Zone 1 and Zone 2

ADDITIONAL COMPONENT(S) DESCRIPTION (October 2008 - October 2009)

Component Number	Component 9	Component 10	Component 11	Component 12
Component Name	Trailer	Thermal Oxidizer	Trailer	Control Panel
Decal Number	123314	128477	128478	128479
Item Subtype				
Make (Manufacturer of Item)	Haulmark	Catalytic Combustion		Catalytic Combustion
Model Number	GR85X16WT2	VGTO-350		
Model Year	2004	2001		
Part Number				
Serial Number	16HGB1624	J-00-0560	NA	J-00-0560-C
Rating (UL, NEMA, etc.)	8x16 DOUBLE AXLE			
Design Flow (gpm, cfs, other)	units	350	units	units
Maximum Capacity (Weight)				
Maximum Capacity (Cubic Feet)				
Fitting Size (Input/Output)				
Horse Power				
Voltage Rating (S)		208V, 3ph		
Design Maximum Current Requirement				
Design Maximum Wattage Requirement				
Phase Requirement				
Fuel Type		LP gas		
Required Fuel Flow		575,000 BTU/hr @ 5 psi		
Dimensions				
Warranty Duration				
Warranty Expiration Date				
Maintenance Cycle		2002		
Maintenance Event				

SYSTEM DESCRIPTION

System Type: AS/SVE System ID: Waco # 11 System Start Date: 10/7/2008

Design Flow Rate:	379	Measured Flow Rate:	120
Design Pressure:	55	Measured Pressure:	50
			scfm in H2O

Design Flow Rate:	102	Measured Flow Rate:	48
Design Pressure:	12.5	Measured Pressure:	7
			scfm psi

Comments: The AS system is divided into Zone 1 and Zone 2

PRIMARY COMPONENT(S) DESCRIPTION (November 2009 to present)			
Component Number	Component 1	Component 2	Component 3
Component Name	Manifold Assy, VE	Blower	Moisture Separator
Decal Number	122196	122197	122198
Item Subtype			
Make (Manufacturer of Item)	Bisco	Rotron	Bisco
Model Number	11765	EN 909BG72WL	11765
Model Year	2004	2004	2004
Part Number			
Serial Number	ENG0388	Z040713006	ENG0388
Rating (UL, NEMA, etc.)		XP	
Design Flow (gpm, cfs, other)		units	units
Maximum Capacity (Weight)			
Maximum Capacity (Cubic Feet)			
Fitting Size (Input/Output)			
Horse Power		15	
Voltage Rating (S)		230-volt	
Design Maximum Current Requirement			
Design Maximum Wattage Requirement			
Phase Requirement		3-phase	
Fuel Type			
Required Fuel Flow			
Dimensions			30"D x 46"H
Warranty Duration			
Warranty Expiration Date	10/1/2005	10/1/2005	10/1/2005
Maintenance Cycle			
Maintenance Event			

SYSTEM DESCRIPTION

System Type: **AS/SVE** System ID: **Waco # 11** System Start Date: **10/7/2008**

Design Flow Rate:	379	Measured Flow Rate:	120
Design Pressure:	55	Measured Pressure:	50
			scfm in H2O

Design Flow Rate:	102	Measured Flow Rate:	48
Design Pressure:	12.5	Measured Pressure:	7
			scfm psi

Comments: The AS system is divided into Zone 1 and Zone 2

ADDITIONAL COMPONENT(S) DESCRIPTION (November 2009 to present)			
Component Number	Component 5	Component 6	Component 7
Component Name	Heat Exchanger	Trailer	Control Panel
Decal Number	122200	122201	122202
Item Subtype			
Make (Manufacturer of Item)		Haulmark	Bisco
Model Number	2004	2004	11765
Part Number			2004
Serial Number	116457	16HGB1422	11765
Rating (UL, NEMA, etc.)			2410120179
Design Flow (gpm, cfs, other)			
Maximum Capacity (Weight)			
Maximum Capacity (Cubic Feet)			
Fitting Size (Input/Output)			
Horse Power	1/2		
Voltage Rating (S)	230-volt		20
Design Maximum Current Requirement			230
Design Maximum Wattage Requirement			
Phase Requirement	3-phase		
Fuel Type			3-phase
Required Fuel Flow			
Dimensions		8' x 14'	
Warranty Duration			
Warranty Expiration Date	10/1/2005	10/1/2005	10/1/2005
Maintenance Cycle			
Maintenance Event			

SYSTEM DESCRIPTION

System Type: AS/SVE System ID: Waco # 11 System Start Date: 10/7/2008

Design Flow Rate:	379	scfm
Design Pressure:	55	in H2O

Measured Flow Rate:	120	scfm
Measured Pressure:	50	in H2O

Design Flow Rate:	102	acfm
Design Pressure:	12.5	psi

Measured Flow Rate:	48	scfm
Measured Pressure:	7	psi

Comments: The AS system is divided into Zone 1 and Zone 2

ADDITIONAL COMPONENT(S) DESCRIPTION (November 2009 to present)		
Component Number	Component 9	Component 10
Component Name	AS Manifold	Transfer Pump
Decal Number	122204	122205
Item Subtype		
Make (Manufacturer of Item)	Belco	Gould
Model Number	11765	1ST1C7F4
Model Year	2004	2001
Part Number		
Serial Number	ENG0388	none
Rating (UL, NEMA, etc.)		XP
Design Flow (gpm, cfs, other)	units	
Maximum Capacity (Weight)		
Maximum Capacity (Cubic Feet)		
Fitting Size (Input/Output)		1/2
Horse Power		230
Voltage Rating (S)		
Design Maximum Current Requirement		
Design Maximum Wattage Requirement		
Phase Requirement		3-phase
Fuel Type		
Required Fuel Flow		
Dimensions		3500 rpm
Warranty Duration		
Warranty Expiration Date	10/1/2005	10/1/2005
Maintenance Cycle		
Maintenance Event		

ATTACHMENT 1 - WELL AND COMPONENT DETAILS

WELL DETAILS								
	AS-1	AS-2	AS-3	AS-4	AS-5	AS-6	AS-7	AS-8
Diameter (in)	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch	2-inch
Well Depth (ft)	30	30	30	25	26	30	30	30
TOC (ft)	NM	NM	NM	NM	NM	NM	NM	NM
Top of Screen (ft below TOC)	25 ft bls	25 ft bls	25 ft bls	20 ft bls	21 ft bls	25 ft bls	25 ft bls	25 ft bls
Bottom of Screen (ft below TOC)	30 ft bls	30 ft bls	30 ft bls	25 ft bls	26 ft bls	30 ft bls	30 ft bls	30 ft bls
Screen Interval (ft)	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft	5 ft
Draw Down	NA	NA	NA	NA	NA	NA	NA	NA
Design Flow Rate (gpm,cfs)	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm	8.5 acfm
Actual Flow Rate (gpm,cfs)	NA	NA	NA	NA	NA	NA	NA	NA
Design Pressure	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi	12.5 psi
Actual Pressure	NA	NA	NA	NA	NA	NA	NA	NA
Relief Hole (ft below TOC)	NA	NA	NA	NA	NA	NA	NA	NA
Pickup Pipe Length (ft from TOC)	NA	NA	NA	NA	NA	NA	NA	NA

COMPONENT DETAILS

Spurge Header

Make (Manufacturer of Item)..... Bisco
 Model Number.....
 Model Year..... 2004
 Part Number.....
 Serial Number..... SO11693 MF
 Rating (UL, NEMA, etc.)
 Design Flow..... units
 Maximum Capacity (Weight).....
 Maximum Capacity (Cubic Feet).....
 Fitting Size (Input/Output).....
 Horse Power
 Voltage Rating (S)
 Design Maximum Current Requirement.....
 Design Maximum Wattage Requirement.....
 Phase Requirement.....
 Fuel Type.....
 Required Fuel Flow.....
 Dimensions.....
 Warranty Duration.....
 Warranty Expiration Date..... 9/30/2005
 Maintenance Cycle.....
 Maintenance Event.....

Vapor Liquid Separator (Zone 1)

Make (Manufacturer of Item)..... Bisco
Model Number.....
Model Year..... 2004
Part Number.....
Serial Number..... NA
Rating (UL,NEMA,etc.)
Design Flow..... units
Maximum Capacity (Weight).....
Maximum Capacity (Cubic Feet).....
Fitting Size (Input/Output).....
Horse Power
Voltage Rating (S)
Design Maximum Current Requiremen
Design Maximum Wattage Requireme
Phase Requirement.....
Fuel Type.....
Required Fuel Flow.....
Dimensions.....
Warranty Duration.....
Waranty Expiration Date..... 9/30/2005
Maintenance Cycle.....
Maintenance Event.....

Heat Exchanger (Zone 1)

Make (Manufacturer of Item)..... American Industrial
Model Number..... AIHITI ACA3302
Model Year..... 2004
Part Number.....
Serial Number..... 111428
Rating (UL,NEMA,etc.) XP
Design Flow..... units
Maximum Capacity (Weight).....
Maximum Capacity (Cubic Feet).....
Fitting Size (Input/Output)..... 1.5"
Horse Power 0.25
Voltage Rating (S) 230-volt
Design Maximum Current Requiremen
Design Maximum Wattage Requireme
Phase Requirement..... 3-phase
Fuel Type.....
Required Fuel Flow.....
Dimensions.....
Warranty Duration.....
Waranty Expiration Date..... 9/30/2005
Maintenance Cycle.....
Maintenance Event.....

Sparge compressor

Make (Manufacturer of Item)..... Becker
Model Number..... DTLF-250
Model Year..... 2004
Part Number.....
Serial Number..... BT855390
Rating (UL,NEMA,etc.) XP
Design Flow..... units
Maximum Capacity (Weight).....
Maximum Capacity (Cubic Feet).....
Fitting Size (Input/Output).....
Horse Power 20
Voltage Rating (S) 230-volt
Design Maximum Current Requiremen
Design Maximum Wattage Requireme
Phase Requirement..... 3-phase
Fuel Type.....
Required Fuel Flow.....
Dimensions.....
Warranty Duration.....
Waranty Expiration Date..... 9/30/2005
Maintenance Cycle.....
Maintenance Event.....

Discharge Pump

Make (Manufacturer of Item)..... Goulds
Model Number..... NPE1ST 1C7F4
Model Year..... 2004
Part Number.....
Serial Number..... SO11693 MD
Rating (UL,NEMA,etc.) XP
Design Flow..... units
Maximum Capacity (Weight).....
Maximum Capacity (Cubic Feet).....
Fitting Size (Input/Output).....
Horse Power 1/2-Hp
Voltage Rating (S) 230-volt
Design Maximum Current Requiremen
Design Maximum Wattage Requireme
Phase Requirement..... 3-phase
Fuel Type.....
Required Fuel Flow.....
Dimensions.....
Warranty Duration.....
Waranty Expiration Date..... 9/30/2005
Maintenance Cycle.....
Maintenance Event.....

Vapor Inlet Header

Make (Manufacturer of Item)..... Bisco
Model Number..... 8 two-inch lines
Model Year..... 2004
Part Number.....
Serial Number..... SO11693MF
Rating (UL,NEMA,etc.)
Design Flow..... units
Maximum Capacity (Weight).....
Maximum Capacity (Cubic Feet).....
Fitting Size (Input/Output).....
Horse Power
Voltage Rating (S)
Design Maximum Current Requiremen
Design Maximum Wattage Requireme
Phase Requirement.....
Fuel Type.....
Required Fuel Flow.....
Dimensions.....
Warranty Duration.....
Waranty Expiration Date..... 9/30/2005
Maintenance Cycle.....
Maintenance Event.....

SVE Blower

Make (Manufacturer of Item)..... ROOTS
Model Number..... 47 URAI-J
Model Year..... 2004
Part Number.....
Serial Number..... 408980827
Rating (UL,NEMA,etc.) XP
Design Flow..... units
Maximum Capacity (Weight).....
Maximum Capacity (Cubic Feet).....
Fitting Size (Input/Output)..... 4" / 4"
Horse Power 10-Hp
Voltage Rating (S) 230-volt
Design Maximum Current Requiremen 24-amp
Design Maximum Wattage Requireme
Phase Requirement..... 3-phase
Fuel Type.....
Required Fuel Flow.....
Dimensions.....
Warranty Duration.....
Waranty Expiration Date..... 9/30/2005
Maintenance Cycle.....
Maintenance Event.....

Control Panel

Make (Manufacturer of Item)..... Bisco
Model Number..... 11693ETS-1
Model Year..... 2004
Part Number.....
Serial Number..... SO11693CP
Rating (UL,NEMA,etc.) UL
Design Flow..... units
Maximum Capacity (Weight).....
Maximum Capacity (Cubic Feet).....
Fitting Size (Input/Output).....
Horse Power 10-Hp
Voltage Rating (S) 230-volt
Design Maximum Current Requiremen
Design Maximum Wattage Requireme
Phase Requirement..... 3-phase
Fuel Type.....
Required Fuel Flow.....
Dimensions.....
Warranty Duration.....
Waranty Expiration Date..... 9/30/2005
Maintenance Cycle.....
Maintenance Event.....

Trailer

Make (Manufacturer of Item)..... Haulmark
Model Number..... GR85X16WT2
Model Year..... 2004
Part Number.....
Serial Number..... 16HGB1624
Rating (UL,NEMA,etc.) 8x16 DOUBLE AXLE
Design Flow..... units
Maximum Capacity (Weight).....
Maximum Capacity (Cubic Feet).....
Fitting Size (Input/Output).....
Horse Power
Voltage Rating (S)
Design Maximum Current Requiremen
Design Maximum Wattage Requireme
Phase Requirement.....
Fuel Type.....
Required Fuel Flow.....
Dimensions.....
Warranty Duration.....
Waranty Expiration Date.....
Maintenance Cycle.....
Maintenance Event.....

TABLE 3: AIR SPARGE/SVE PERFORMANCE SUMMARY

Facility Name: Waco #11 (Former Hess Station No. 09274)
 Facility ID#: 62/8517044

Treatment System Status Codes:

Code	Arrive	Depart
1	on	on
2	off	on
3	off	off
4	on	off

Site Visit Date	Days Between Site Visits	Days Since Startup	Hour Meter Reading	AS #1			SVE #1			System Status					
				Hours of Operation (period)	Total Hours of Operation (cumulative)	Percent Run Time (period)	Hours of Operation (period)	Total Hours of Operation (cumulative)	Percent Run Time (period)	AS#1	SVE#1	Other			
10/07/08			24,103												
10/08/08	1	1	24,101				24	24	100.0%	100.0%	3	2			
10/09/08	1	2	24,101				23	47	95.8%	95.8%	3	1			
10/10/08	1	3	24,101				23	70	97.2%	97.2%	3	1			
10/17/08	7	10	24,101				24,292	189	70.8%	78.8%	3	2			
10/24/08	7	17	24,101				24,315	212	13.7%	52.0%	3	2			
11/02/08	9	26	24,101				24,483	380	77.8%	60.9%	3	1			
11/17/08	15	41	24,101				24,601	498	32.8%	50.6%	3	2			
12/15/08	28	69	24,101				24,677	76	11.3%	34.7%	3	2			
01/12/09	28	97	24,101				24,963	286	42.6%	36.9%	3	2			
02/02/09	21	118	24,101				25,323	360	71.4%	43.1%	3	2			
02/12/09	10	128	24,101				25,541	218	90.8%	46.8%	3	1			
02/20/09	8	136	24,101				25,697	156	81.3%	48.8%	3	2			
03/16/09	24	160	24,101				26,039	342	59.4%	50.4%	3	2			
03/23/09	7	167	24,101				26,135	96	57.1%	50.7%	3	2			
03/29/09	6	173	24,101				26,218	83	57.6%	50.9%	3	2			
04/14/09	16	189	24,101				26,446	228	59.4%	51.7%	3	1			
04/17/09	3	192	24,101				26,449	3	4.2%	50.9%	3	2			
04/30/09	13	205	24,101				26,720	271	86.9%	53.2%	3	2			
05/14/09	14	219	24,101				26,988	268	79.8%	54.9%	3	2			
06/24/09	41	260	24,101				27,014	26	2.6%	46.7%	2	2			
06/29/09	5	265	24,150	49	AS startup	40.8%	49	40.8%			2	2			
07/06/09	7	272	24,227	77	126	45.8%	126	43.8%			2	2			
07/16/09	10	282	24,418	191	317	79.6%	317	60.0%			2	2			
07/20/09	4	286	24,468	50	367	52.1%	367	58.8%			2	2			
				51	3,276	53.1%	3,276	47.7%			2	2			

TABLE 3: AIR SPARGE/SVE PERFORMANCE SUMMARY

Facility Name: Waco #11 (Former Hess Station No. 09274)
 Facility ID#: 62/8517044

Treatment System Status Codes:

Code	Arrive	Depart
1	on	on
2	off	on
3	off	off
4	on	off

Site Visit Date	Days Between Site Visits	Days Since Startup	Hour Meter Reading	AS #1			SVE #1			AS#1	SVE#1	Other
				Hours of Operation (period)	Total Hours of Operation (cumulative)	Percent Run Time (period)	Hours of Operation (period)	Total Hours of Operation (cumulative)	Percent Run Time (period)			
11/25/09			17,051									
12/01/09	6	6	17,051									
12/22/09	21	27	17,051									
01/19/10	28	55	17,051									
01/22/10	3	58	17,051									
01/29/10	7	65	17,051									
02/05/10	7	72	17,051									
02/12/10	7	79	17,051									
03/03/10	19	98	17,051									
03/08/10	5	103	17,051									
03/15/10	7	110	17,051									
03/23/10	8	118	17,051									
04/14/10	22	140	17,579	528	528	100.0%	AS restart	2,003	2,003	90.6%	2	2
04/26/10	12	152	17,799	220	748	76.4%		2,531	2,531	100.0%	1	1
04/30/10	4	156	17,887	88	836	91.7%		2,761	2,761	76.4%	2	2
05/20/10	20	176	18,368	481	1,317	100.2%		3,320	3,320	100.2%	1	1
05/21/10	1	177	18,375	7	1,324	29.2%		3,327	3,327	29.2%	2	2
06/07/10	17	194	18,780	405	1,729	99.3%		3,732	3,732	99.3%	1	1
06/25/10	18	212	19,213	433	2,162	100.2%		4,165	4,165	100.2%	1	1
07/2/10	26	238	19,840	627	2,789	100.5%		4,792	4,792	100.5%	1	1
07/29/10	8	246	20,030	190	2,979	99.0%		5,459	5,459	99.4%	1	1
08/18/10	20	266	20,509	479	3,458	99.8%		6,057	6,057	99.8%	1	1
09/08/10	21	287	21,016	507	3,965	100.6%		6,512	6,512	100.6%	1	1
10/28/10	50	337	22,210	1,194	5,159	99.5%		7,706	7,706	99.5%	1	1
11/23/10	26	363	22,488	288	5,447	46.2%		8,005	8,005	46.2%	1	1
12/22/10	29	392	22,855	357	5,804	51.3%		8,363	8,363	51.3%	1	1
01/12/11	21	413	23,107	252	6,056	50.0%		8,610	8,610	50.0%	1	1
02/21/11	40	453	23,561	454	6,510	47.3%		8,805	8,805	47.3%	1	1
03/16/11	23	476	23,856	295	6,805	53.4%		9,100	9,100	53.4%	1	1
04/15/11	30	506	24,216	390	7,165	50.0%		9,492	9,492	50.0%	1	1
05/26/11	41	547	24,715	499	7,664	50.7%		9,991	9,991	50.7%	1	1
06/08/11	13	560	24,859	144	7,808	46.2%		10,204	10,204	46.2%	1	1
07/12/11	34	594	25,253	394	8,202	48.3%		10,729	10,729	48.3%	1	1
08/24/11	43	637	25,570	317	8,519	30.7%		11,046	11,046	30.7%	3	3
09/22/11	29	666	25,619	49	8,568	7.0%		11,675	11,675	7.0%	2	2
10/27/11	35	701	26,007	388	8,956	48.2%		12,063	12,063	48.2%	1	1
01/20/12	65	766	26,093	86	9,042	4.2%		12,551	12,551	4.2%	3	3
01/25/12	5	791	26,093		9,042			12,836	12,836		3	3
02/21/12	27	818	26,093		9,042			13,221	13,221		3	3
03/01/12	9	827	26,095	2	9,044	0.9%		13,710	13,710	0.9%	2	2
04/03/12	33	860	26,884	789	9,833	99.6%		14,223	14,223	99.6%	1	1
05/02/12	29	889	27,581	697	10,530	100.1%		14,924	14,924	100.1%	1	1
05/07/12	5	894	27,612	31	10,561	25.6%		15,235	15,235	25.6%	2	2
05/24/12	17	911	27,622	10	10,571	2.5%		15,741	15,741	2.5%	2	2
06/14/12	21	932	28,120	498	11,069	98.8%		16,249	16,249	98.8%	2	2
07/18/12	34	966	28,865	745	11,814	91.3%		16,994	16,994	91.3%	2	2

TABLE 3: AIR SPARGE/SVE PERFORMANCE SUMMARY

Treatment System Status Codes:

Code	Arrive	Depart
1	on	on
2	off	on
3	off	off
4	on	off

Facility Name: Waco #11 (Former Hess Station No. 09274)
 Facility ID#: 62/8517044

Site Visit Date	Days Between Site Visits	Days Since Startup	AS #1					SVE #1					System Status		
			Hour Meter Reading	Hours of Operation (period)	Total Hours of Operation (cumulative)	Percent Run Time (period)	Percent Run Time (cumulative)	Hour Meter Reading	Hours of Operation (period)	Total Hours of Operation (cumulative)	Percent Run Time (period)	Percent Run Time (cumulative)	AS#1	SVE#1	Other
08/08/12	21	987	29,127	282	12,076	52.0%	57.9%	31,217	263	15,257	52.2%	64.4%	2	2	
09/19/12	42	1,029	30,134	1,007	13,083	99.9%	59.8%	32,223	1,006	16,263	99.8%	65.9%	1	1	
10/29/12	40	1,069	31,093	959	14,042	99.9%	61.5%	33,182	959	17,222	99.9%	67.1%	1	1	
11/20/12	22	1,091	31,622	529	14,571	100.2%	62.4%	33,711	529	17,751	100.2%	67.8%	1	1	
12/12/12	22	1,113	32,149	527	15,098	99.8%	63.2%	34,238	527	18,278	99.8%	68.4%	4	4	
12/19/12	29	1,120	32,149	527	15,098	75.7%	62.8%	34,238	527	18,278	75.7%	68.0%	2	2	
01/22/13	34	1,154	32,954	805	15,903	98.7%	64.0%	35,043	805	19,083	98.7%	68.9%	1	1	
02/11/13	20	1,174	33,434	480	16,383	100.0%	64.6%	35,523	480	19,563	100.0%	69.4%	1	1	
03/13/13	30	1,204	34,153	719	17,102	99.9%	65.6%	36,242	719	20,282	99.9%	70.2%	1	1	
04/09/13	27	1,231	34,799	646	17,748	99.7%	66.4%	36,889	647	20,929	99.8%	70.8%	1	1	
05/07/13	28	1,259	35,472	673	18,421	100.1%	67.3%	37,561	672	21,601	100.0%	71.5%	1	1	
06/11/13	35	1,294	36,312	840	19,261	100.0%	68.2%	38,402	841	22,442	100.1%	72.3%	1	1	
07/18/13	37	1,331	37,073	761	20,022	85.7%	68.8%	39,163	761	23,203	85.7%	72.6%	2	2	

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

WELL NO.	M-1 1 inch DTW	M-2 1 inch DTW	M-3 1 inch DTW	M-4 1 inch DTW	M-5 1 inch DTW	M-6 1 inch DTW	M-7 1 inch DTW
9/18/2000	87.24 12.60	85.85 13.41	87.24 12.24	87.42 11.80	87.32 10.60	87.36 10.00	87.30 10.80
10/10/2001	NM	NM	NM	NM	NM	NM	NM
12/12/2002	87.59 12.25	sheen	87.61 11.87	87.74 11.48	87.58 10.34	87.61 9.75	NM
5/4/2004	88.44 11.40	88.18 11.08	88.48 11.00	NM	NM	NM	sheen
12/20/2004	sheen	sheen	NM	NM	NM	NM	NM
10/11/2006	86.08 13.76	free product	86.08 13.40	86.25 12.97	86.09 11.83	89.17 8.19	sheen
8/14/2008	87.56 12.28	free product	87.59 11.89	87.65 11.57	87.48 10.44	86.08 11.28	free product
10/7/2008	90.88 8.96	free product	90.90 8.58	NM	90.85 7.07	86.60 10.76	free product
10/6/2008	90.79 9.05	free product	90.77 8.71	NM	90.81 7.11	90.84 6.52	90.79 7.31
10/9/2008	90.85 8.99	free product	90.77 8.71	NM	90.81 7.11	90.81 6.55	90.77 7.33
10/10/2008	NM	free product	NM	NM	90.77 7.15	90.79 6.57	90.78 7.32
10/17/2008	90.28 9.56	free product	90.23 9.25	NM	NM	NM	NM
10/24/2008	89.86 9.98	free product	89.76 9.72	NM	NM	90.24 7.12	90.18 7.92
10/31/2008	89.37 10.47	free product	89.33 10.15	NM	89.85 8.07	89.82 7.54	89.80 8.30
11/17/2008	88.66 11.18	free product	88.58 10.90	NM	89.32 8.60	89.32 8.04	89.28 8.82
12/16/2008	88.03 11.81	free product	87.95 11.53	NM	88.65 9.27	88.64 8.72	88.55 9.55
1/12/2009	87.40 12.44	12.04	87.43 12.05	NM	87.98 9.94	88.07 9.29	87.94 10.16
2/12/2009	87.87 11.97	11.49	87.81 11.67	NM	87.36 10.56	87.51 9.85	87.32 10.78
3/18/2009	87.19 12.65	-0.68	87.11 12.37	NM	87.77 10.15	87.92 9.44	87.78 10.32
4/14/2009	90.36 9.48	3.17	90.35 9.13	NM	87.11 10.81	87.23 10.13	87.09 11.01
5/14/2009	88.58 11.26	-1.78	88.43 10.83	NM	90.27 7.65	90.38 6.98	90.35 7.75
6/25/2009	87.71 12.13	-0.87	88.52 10.96	NM	88.54 9.38	88.56 8.80	88.47 9.63
7/20/2009	87.75 12.09	0.04	87.69 11.79	NM	88.70 11.56	87.79 9.57	87.67 10.43
12/1/2009	87.37 12.47	-0.38	87.23 12.15	NM	87.72 10.20	87.88 9.48	87.75 10.35
12/22/2009	88.76 11.08	1.39	88.73 10.75	NM	87.35 10.57	87.45 9.91	87.31 10.79
1/22/2010	92.07 7.77	3.31	91.33 8.15	NM	88.68 9.24	88.81 8.55	88.80 9.30
2/17/2010	92.36 7.48	0.29	92.30 7.18	NM	91.44 6.48	88.75 8.61	91.60 6.50
3/23/2010	91.75 8.08	-0.61	91.69 7.79	NM	92.33 5.59	92.33 5.03	92.32 5.78
4/14/2010	90.76 9.08	-0.99	90.74 8.74	NM	91.52 6.40	91.55 5.81	91.56 6.54
5/20/2010	91.18 8.66	0.42	91.24 8.27	NM	90.69 7.23	90.71 6.65	90.69 7.41
6/25/2010	89.78 10.06	-1.40	89.79 9.69	NM	89.11 6.81	89.77 6.41	91.08 7.02
7/21/2010	89.98 9.86	0.20	89.51 9.97	NM	89.74 8.13	89.79 7.59	89.79 8.31
7/29/2010	89.46 10.38	-0.52	88.89 10.49	NM	89.79 8.18	89.85 7.51	89.84 8.28
8/18/2010	88.95 10.89	-0.51	88.85 10.41	NM	89.50 8.42	89.49 7.87	89.51 8.59
9/8/2010	89.48 10.36	0.53	89.32 9.94	NM	88.07 9.85	89.00 8.36	88.97 9.13
10/28/2010	88.47 11.37	-1.01	88.50 10.96	NM	89.45 8.47	89.43 7.93	89.39 8.71
				NM	88.95 9.57	88.46 8.90	free product

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

WELL NO. DIAMETER WELL DEPTH SCREEN INTERVAL TOC ELEVATION	M-1		M-2		M-3		M-4		M-5		M-6		M-7					
	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.			
11/23/2010	87.70	12.14	-0.77	87.57	11.69	-1.75	87.72	11.76	-0.78	87.70	10.22	-0.65	87.71	9.65	-0.75	87.72	10.38	-10.38
12/22/2010	87.20	12.64	-0.50	90.10	9.16	2.11	87.29	12.19	-0.43	87.63	10.29	-0.07	87.31	10.05	-0.40	87.16	10.94	-0.56
1/12/2011	87.89	11.95	0.69	92.61	6.65	5.04	93.66	5.82	6.37	87.82	10.10	0.19	87.87	9.49	0.56	87.84	10.26	0.68
2/21/2011	90.40	9.44	2.51	92.51	6.75	2.41	bubbling over			90.31	7.61	2.49	90.32	7.04	2.45	90.24	7.86	2.40
3/16/2011	89.80	10.04	-0.60	89.83	9.43	-2.78	91.07	8.41	-	89.75	8.17	-0.56	89.77	7.59	-0.55	89.73	8.37	-0.51
4/15/2011	89.82	10.02	0.02	91.48	7.78	-1.03	91.54	7.94	0.47	89.69	8.23	-0.06	89.70	7.66	-0.07	89.74	8.36	0.01
5/28/2011	88.06	11.78	-1.76	88.72	10.54	-1.11	87.89	11.59	-3.65	88.07	9.85	-1.62	88.08	9.28	-1.62	88.03	10.07	-1.71
6/8/2011	87.41	12.43	-0.65	87.19	12.07	-4.29	87.37	12.11	-0.52	87.42	10.50	-0.65	87.66	9.70	-0.42	87.38	10.72	-0.65
7/12/2011	86.49	13.35	-0.92	86.35	12.91	-2.37	86.72	12.76	-0.65	86.49	11.43	-0.93	silted			86.45	11.65	-0.93
8/24/2011	86.53	13.31	0.04	87.23	12.03	0.04	86.69	12.79	-0.03	86.52	11.40	0.03	86.64	10.72	-	86.59	11.51	0.14
9/22/2011	85.92	13.92	-0.61	87.63	11.63	1.28	87.55	11.93	0.86	85.83	12.09	-0.69	85.74	11.62	-0.90	85.77	12.33	-0.82
10/27/2011	85.32	14.52	-0.60	87.70	11.56	0.47	89.33	10.15	1.78	85.22	12.70	-0.61	85.28	12.08	-0.46	85.18	12.92	-0.59
1/25/2012	84.53	15.31	-0.79	84.55	14.71	-3.08	84.65	14.83	-4.68	84.45	13.47	-0.77	84.49	12.87	-0.79	free product		
2/21/2012	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	free product		
3/1/2012	84.53	15.31	-	85.48	13.78	-	87.76	11.72	-	84.50	13.42	-	84.57	12.79	-	free product		
4/3/2012	85.66	14.18	1.13	85.75	13.51	0.27	85.65	13.83	-2.11	85.64	12.28	1.14	85.69	11.67	1.12	free product		
5/2/2012	84.52	15.32	-1.14	84.73	14.53	-1.02	84.79	14.69	-0.86	84.46	13.46	-1.18	84.61	12.75	-1.08	84.56	13.54	-
6/14/2012	86.21	13.63	1.69	86.08	13.18	1.35	86.43	13.05	1.64	86.30	11.62	1.84	86.40	10.96	1.79	86.47	11.63	1.91
7/19/2012	91.86	7.98	5.65	92.04	7.22	5.96	91.80	7.68	5.37	91.70	6.22	5.40	91.85	5.51	5.45	91.90	6.20	5.43
8/8/2012	91.57	8.27	-0.29	bubbling over			93.03	6.45	1.23	91.35	6.57	-0.35	bubbling over			91.54	6.56	-0.36
9/19/2012	93.10	6.74	1.53	94.52	4.74	-	93.24	6.24	0.21	92.93	4.99	1.58	bubbling over			93.15	4.95	1.61
10/29/2012	91.82	8.02	-1.28	91.16	8.10	2.48	91.61	7.87	-1.63	91.49	6.43	-1.44	91.68	5.68	-0.17	91.73	6.37	-1.42
11/20/2012	90.27	9.57	-1.55	90.24	9.02	-8.10	93.87	5.61	2.26	90.14	7.78	-1.35	90.30	7.06	-1.38	90.23	7.87	-1.50
12/19/2012	89.17	10.67	-1.10	90.89	8.37	-4.28	89.06	10.42	-4.81	88.98	8.94	-1.16	88.97	8.39	-1.33	89.05	9.05	-1.18
1/22/2013	88.19	11.65	-0.98	88.14	11.12	-0.27	88.52	10.96	-0.54	88.12	9.80	-0.86	88.18	9.18	-0.79	88.13	9.97	-0.92
2/11/2013	88.62	11.22	0.43	88.16	11.10	-2.10	87.32	12.16	-1.20	87.62	10.30	-0.50	87.67	9.69	-0.51	87.67	10.43	-0.46
3/13/2013	89.94	9.90	1.32	91.65	7.61	-2.73	91.24	8.24	3.92	89.82	8.10	2.20	90.20	7.16	2.53	93.27	4.83	5.60
4/9/2013	89.93	9.91	-0.01	92.06	7.20	3.51	90.07	9.41	-1.17	89.89	8.03	0.07	91.21	6.15	1.01	89.98	8.12	-3.29
5/7/2013	89.10	10.74	-0.83	90.13	9.13	3.90	89.07	10.41	-1.00	87.09	10.83	-2.80	90.24	7.12	-0.97	89.18	8.92	-0.80
6/11/2013	88.17	11.67	-0.93	88.54	10.72	-1.52	88.59	10.89	-0.48	87.14	10.78	0.05	89.32	8.04	-0.92	88.19	9.91	-0.99
7/18/2013	90.31	9.53	2.14	92.80	6.46	-3.52	90.49	8.99	1.90	90.27	7.65	3.13	90.41	6.95	1.09	90.31	7.79	2.12

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

WELL NO.	M-8		M-9		M-10		M-11		M-12		M-13		M-14		
	DIA	DEPTH	DIA	DEPTH	DIA	DEPTH	DIA	DEPTH	DIA	DEPTH	DIA	DEPTH	DIA	DEPTH	
	1 inch	20	1 inch	20	1 inch	19	1 inch	19	1 inch	19	1 inch	19	1 inch	19	
	5 - 20 ft	98.78	5 - 20 ft	98.70	9 - 19 ft	99.83	9 - 19 ft	98.67	9 - 19 ft	98.53	9 - 19 ft	97.51	9 - 19 ft	99.13	
	SCREEN INTERVAL														
	TOC ELEVATION														
DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
9/18/2000	87.31	11.47	-	87.07	11.63	-	87.38	12.45	-	87.41	11.12	-	87.39	10.12	-
10/10/2001	NM	NM	NM	NM	NM	NM	87.60	12.23	0.22	87.59	10.94	0.18	87.61	9.90	0.22
12/12/2002	87.59	11.19	-	sheen	sheen	-	NM	NM	NM	NM	NM	NM	NM	NM	NM
5/4/2004	NM	NM	NM	88.21	10.49	-	NM	NM	NM	NM	NM	NM	NM	NM	NM
12/20/2004	89.13	9.65	-	sheen	sheen	-	NM	NM	NM	89.14	9.39	-	89.10	8.41	-
10/11/2006	86.08	12.70	-3.05	free product	free product	-	86.04	12.63	-	86.10	12.43	-3.04	86.07	11.44	-3.03
8/14/2008	87.56	11.22	1.45	free product	free product	1.38	87.55	11.12	1.51	87.53	11.00	1.43	87.54	9.97	1.47
10/7/2008	90.76	8.02	3.20	free product	free product	3.37	NM	NM	NM	90.72	7.81	3.19	90.78	6.73	3.24
10/8/2008	90.77	8.01	0.01	free product	free product	-0.02	NM	NM	NM	90.81	7.72	0.08	90.75	6.76	-0.03
10/9/2008	90.75	8.03	-0.02	free product	free product	-0.04	NM	NM	NM	90.75	7.78	-0.06	90.72	6.79	-0.03
10/10/2008	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
10/17/2008	90.21	8.57	-	free product	free product	-	NM	NM	NM	NM	NM	NM	NM	NM	NM
10/24/2008	89.80	8.98	-0.41	89.91	8.79	-	89.82	10.01	-0.44	89.73	8.80	-0.49	89.78	7.73	-0.42
10/31/2008	89.31	9.47	-0.49	free product	free product	-0.50	NM	NM	NM	89.36	9.17	-0.37	89.29	8.22	-0.49
11/17/2008	88.61	10.17	-0.70	88.69	10.01	-	88.58	11.25	-0.74	88.65	9.88	-0.71	88.58	8.93	-0.71
12/16/2008	87.96	10.82	-0.65	88.20	10.50	-0.49	87.94	11.89	-0.64	88.04	10.49	-0.61	87.86	9.65	-0.72
1/12/2009	87.35	11.43	-0.61	87.47	11.23	-0.73	87.35	12.48	-0.59	87.45	11.08	-0.59	87.36	10.15	-0.50
3/18/2009	87.05	10.99	0.44	88.01	10.89	0.54	87.05	12.06	-0.68	87.87	10.66	0.42	87.79	9.72	0.43
4/14/2009	90.36	8.42	3.31	87.36	11.34	-0.65	87.07	12.76	-0.68	87.20	11.33	-0.67	87.12	10.39	-0.67
5/14/2009	88.51	10.27	-1.85	90.70	8.00	3.34	90.26	9.57	3.19	90.25	8.28	3.05	90.27	7.24	3.15
6/25/2009	88.60	10.18	0.09	88.54	10.16	-2.16	88.51	11.32	-1.75	88.52	10.01	-1.73	88.47	9.04	-1.80
7/20/2009	bubbling over			88.03	10.67	-0.51	87.63	12.20	-0.88	88.20	10.33	-0.32	87.68	9.83	-0.79
12/11/2009	87.51	11.27	-	87.95	10.75	-0.08	87.72	12.11	0.09	87.80	10.73	-0.40	87.73	9.78	0.05
12/22/2009	88.83	9.95	1.32	87.37	11.33	-0.58	87.34	12.49	-0.38	87.41	11.12	-0.39	87.37	10.14	-0.36
1/22/2010	91.68	7.10	2.85	88.76	9.94	1.39	88.70	11.13	1.36	88.76	9.77	1.35	88.71	8.90	1.34
2/17/2010	92.44	6.34	0.76	91.15	7.55	2.39	91.11	8.72	2.41	90.98	7.55	2.22	88.53	8.98	-0.18
3/23/2010	bubbling over			free product	free product	-	92.38	7.45	1.27	92.25	6.28	1.27	92.34	5.17	3.81
4/14/2010	bubbling over			free product	free product	-	91.56	8.27	-0.82	NM	NM	NM	91.31	6.20	-1.03
5/20/2010	96.04	2.74	-	91.18	7.52	-	90.76	9.07	-0.80	90.95	7.58	-	90.68	6.83	-0.63
6/25/2010	90.93	7.85	-5.11	89.85	8.85	-1.33	89.71	10.12	-0.40	91.15	7.38	0.20	91.27	6.24	0.59
7/21/2010	bubbling over			90.01	8.69	0.16	89.80	10.03	0.09	89.71	8.82	-1.44	89.74	7.80	-1.56
7/29/2010	95.62	3.16	-	89.49	9.21	-0.52	89.52	10.31	-0.28	89.79	8.74	0.08	89.74	7.77	0.03
8/18/2010	95.58	3.20	-0.04	88.97	9.73	-0.52	89.01	10.82	-0.51	89.51	9.02	-0.28	89.47	8.04	-0.27
9/8/2010	89.33	9.45	-6.25	89.39	9.31	0.42	89.45	10.38	0.44	89.01	9.52	-0.50	89.00	8.51	-0.47
10/28/2010	92.23	6.55	2.90	88.47	10.23	-0.92	88.47	11.36	-0.98	89.44	9.09	0.43	89.41	8.10	0.41
										88.48	10.05	-0.96	88.44	9.07	-0.97
													88.42	10.71	-1.03

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: **Waco #11 (Former Hess Station No. 09274)**

Facility ID#: **628517044**

WELL NO.	M-8		M-9		M-10		M-11		M-12		M-13		M-14		
	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
11/23/2010	90.48	8.30	-1.75	87.70	11.00	-0.77	87.68	12.15	-0.79	87.72	10.81	-0.76	87.70	11.43	-0.72
12/22/2010	91.63	7.15	1.15	87.36	11.34	-0.34	87.21	12.62	-0.47	87.22	11.31	-0.50	87.18	10.33	-0.53
1/12/2011	88.21	10.57	-3.42	88.10	10.60	0.74	87.81	12.02	0.60	87.91	10.62	0.69	87.83	9.68	0.65
2/21/2011	91.21	7.57	3.00	90.52	8.18	2.42	90.35	9.48	2.54	90.32	8.21	2.41	90.32	7.19	2.49
3/16/2011	95.22	3.56	4.01	88.94	9.76	-1.58	89.76	10.07	-0.59	89.74	8.79	-0.58	89.76	7.75	-0.56
4/15/2011	93.61	5.17	-1.61	90.34	8.36	1.40	89.70	10.13	-0.06	89.72	8.81	-0.02	89.70	7.81	-0.06
5/26/2011	88.06	10.72	-5.55	88.19	10.51	-2.15	88.05	11.78	-1.65	89.07	9.46	-0.65	88.09	9.42	-1.61
6/8/2011	94.13	4.65	6.07	87.49	11.21	-0.70	87.38	12.45	-0.67	87.44	11.09	-1.63	87.35	10.16	-0.74
7/12/2011	95.63	3.15	1.50	86.56	12.14	-0.93	86.45	13.38	-0.93	86.52	12.01	-0.92	86.46	11.05	-0.89
8/24/2011	86.67	12.11	-8.95	86.81	11.89	0.25	86.46	13.37	0.01	86.55	11.98	0.03	86.50	11.01	0.04
9/22/2011	93.03	5.75	6.36	85.98	12.72	-0.83	85.81	14.02	-0.65	85.87	12.66	-0.68	85.83	11.68	-0.67
10/27/2011	92.14	6.64	-0.89	85.41	13.29	-0.57	85.24	14.59	-0.57	85.26	13.27	-0.61	85.18	12.33	-0.65
1/25/2012	84.58	14.20	-7.56	free product			84.45	15.38	-0.79	84.50	14.03	-0.76	84.42	13.09	-0.76
2/21/2012	NM	NM	NM	free product			NM	NM	NM	NM	NM	NM	NM	NM	NM
3/1/2012	89.31	9.47	-	free product			84.50	15.33	-	84.55	13.98	-	84.48	13.03	-
4/3/2012	85.65	13.13	-3.66	free product			85.62	14.21	1.12	85.66	12.87	1.11	85.65	11.86	1.17
5/2/2012	85.83	12.95	0.18	84.47	14.23	-	84.48	15.35	-1.14	84.52	14.01	-1.14	84.44	13.07	-1.21
6/14/2012	88.63	10.15	2.80	86.43	12.27	1.96	86.15	13.68	1.67	86.36	12.17	1.84	86.30	11.21	1.86
7/19/2012	91.67	7.11	3.04	91.93	6.77	5.50	91.79	8.04	5.64	91.80	6.73	5.44	91.78	5.73	5.48
8/8/2012	bubbling over			91.66	7.04	-0.27	91.40	8.43	-0.39	91.43	7.10	-0.37	91.39	6.12	-0.39
9/19/2012	93.76	5.02	-	93.01	5.69	1.35	93.09	6.74	1.69	93.09	5.44	1.66	93.10	4.41	1.71
10/29/2012	96.48	2.30	2.72	92.13	6.57	-0.88	91.49	8.34	-1.60	91.56	6.97	-1.53	91.50	6.01	-1.60
11/20/2012	bubbling over			90.31	8.39	-1.82	90.16	9.67	-1.33	90.17	8.36	-1.39	90.14	7.37	-1.36
12/19/2012	90.46	8.32	-	89.34	9.36	-0.97	88.97	10.86	-1.19	89.01	9.52	-1.16	88.99	8.52	-1.15
1/22/2013	90.60	8.18	0.14	88.26	10.44	-1.08	88.10	11.73	-0.87	88.15	10.38	-0.86	88.07	9.44	-0.92
2/11/2013	88.44	9.34	-1.16	87.73	10.97	-0.53	89.66	10.17	1.56	87.62	10.91	-0.53	87.60	9.91	-0.47
3/13/2013	91.22	7.56	1.78	89.97	8.73	2.24	89.87	9.96	0.21	89.85	8.68	2.23	89.87	7.64	2.27
4/9/2013	96.61	2.17	5.39	90.05	8.65	0.08	89.89	9.94	0.02	89.89	8.64	0.04	89.91	7.60	0.04
5/7/2013	89.22	9.56	-7.39	89.20	9.50	-0.85	89.51	10.32	-0.38	88.40	10.13	-1.49	89.08	8.43	-0.83
6/11/2013	94.72	4.06	5.50	86.36	12.34	-2.84	89.40	10.43	-0.11	88.85	9.68	0.45	88.08	9.43	-1.00
7/18/2013	95.04	3.74	0.32	90.42	8.28	4.06	90.27	9.56	0.87	91.26	7.27	2.41	90.02	7.49	1.94

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

WELL NO.	M-15	M-16	M-17	MW-18	MW-19	DW-1	DW-2								
DIAMETER	1 inch	1 inch	1 inch	2 inch	2 inch	2 inch	2-inch								
WELL DEPTH	19	19	19	16	16	40	36								
SCREEN INTERVAL	9-19 ft	9-19 ft	9-19 ft	6-16 ft	6-16 ft	35-40 ft	31-36 ft								
TOC ELEVATION	99.34	97.51	97.21	98.19	97.93/97.51	98.75	98.92								
DATE	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.	ELEV	DTW	Diff.
9/18/2000	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
10/10/2001	87.43	11.91	-	86.38	10.83	-	87.35	11.40	-	87.35	11.40	-	87.35	11.40	NI
12/12/2002	NM	NM	NM	NM	NM	NM	NI	NI	NI	87.59	11.16	0.24	NI	NI	NI
5/4/2004	88.52	10.82	-	NM	NM	NM	NI	NI	NI	88.46	10.29	0.87	NI	NI	NI
12/20/2004	89.16	10.18	0.64	NM	NM	NM	NI	NI	NI	89.12	9.63	0.66	NI	NI	NI
10/11/2006	86.11	13.23	-3.05	86.18	11.03	-	85.97	12.22	-	86.05	12.70	-3.07	86.07	12.85	-
8/14/2008	NM	NM	NM	87.57	9.64	1.39	87.41	10.78	1.44	87.58	11.17	1.53	87.62	11.30	1.55
10/7/2008	90.87	8.47	-	NM	NM	NM	90.72	7.47	3.31	NM	NM	NM	NM	NM	NM
10/6/2008	90.83	8.51	-0.04	NM	NM	NM	90.61	7.58	-0.11	NM	NM	NM	NM	NM	NM
10/9/2008	90.82	8.52	-0.01	NM	NM	NM	90.66	7.53	0.05	NM	NM	NM	NM	NM	NM
10/10/2008	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
10/17/2008	90.29	9.05	-	NM	NM	NM	90.16	8.03	-	NM	NM	NM	NM	NM	NM
10/24/2008	89.83	9.51	-0.46	NM	NM	NM	89.78	8.41	-0.38	NM	NM	NM	NM	NM	NM
10/31/2008	89.37	9.97	-0.46	NM	NM	NM	89.21	8.98	-0.57	NM	NM	NM	NM	NM	NM
11/17/2008	88.56	10.78	-0.81	NM	NM	NM	88.50	9.69	-0.71	NM	NM	NM	NM	NM	NM
12/16/2008	86.03	11.31	-0.53	87.85	9.35	-	87.87	10.32	-0.63	NM	NM	NM	NM	NM	NM
1/12/2009	87.36	11.98	-0.67	NM	NM	NM	87.22	10.97	-0.65	NM	NM	NM	NM	NM	NM
2/12/2009	87.81	11.53	0.45	NM	NM	NM	87.66	10.53	0.44	87.64	9.99	-	NM	NM	NM
3/18/2009	87.14	12.20	-0.67	86.72	10.49	-	87.70	10.49	0.04	NM	NM	NM	NM	NM	NM
4/14/2009	90.19	9.15	3.05	NM	NM	NM	90.14	8.05	2.44	NM	NM	NM	NM	NM	NM
5/14/2009	88.57	10.77	-1.62	NM	NM	NM	88.39	9.80	-1.75	NM	NM	NM	NM	NM	NM
6/25/2008	87.66	11.68	-0.91	NM	NM	NM	87.56	10.63	-0.83	88.41	9.10	-	NM	NM	NM
7/20/2009	87.72	11.62	0.06	NM	NM	NM	87.62	10.57	0.06	86.44	9.07	0.03	NM	NM	NM
12/1/2009	87.35	11.98	-0.36	NM	NM	NM	87.23	10.96	-0.39	87.26	10.25	-1.18	NM	NM	NM
12/22/2009	88.76	10.58	1.40	NM	NM	NM	88.59	9.60	1.36	88.56	8.95	1.30	NM	NM	NM
1/22/2010	91.19	8.15	2.43	NM	NM	NM	90.99	7.20	2.40	91.81	5.70	3.25	NM	NM	NM
2/17/2010	92.32	7.02	1.13	NM	NM	NM	92.21	5.98	1.22	92.41	5.10	0.60	NM	NM	NM
3/23/2010	91.74	7.60	-0.58	NM	NM	NM	91.49	6.70	-0.72	88.43	9.08	-3.98	NM	NM	NM
4/14/2010	90.76	8.58	-0.98	90.64	6.57	-	90.60	7.59	-0.89	90.63	6.88	2.20	NM	NM	NM
5/20/2010	91.16	8.18	0.40	NM	NM	NM	91.02	7.17	0.42	91.64	5.87	1.01	NM	NM	NM
6/25/2010	89.74	9.60	-1.42	NM	NM	NM	89.60	8.59	-1.42	90.74	6.77	-0.90	NM	NM	NM
7/21/2010	89.82	9.52	0.08	-	89.72	7.49	-	89.67	8.52	0.07	90.66	6.85	-0.08	NM	NM
7/29/2010	89.50	9.84	-0.32	NM	NM	NM	89.42	8.77	-0.25	90.05	7.46	-0.61	NM	NM	NM
8/18/2010	89.01	10.33	-0.49	NM	NM	NM	88.98	9.31	-0.54	89.77	7.74	-0.28	NM	NM	NM
9/8/2010	89.49	9.85	0.48	NM	NM	NM	89.41	8.78	0.53	89.86	7.65	0.09	NM	NM	NM
10/28/2010	88.50	10.84	-0.99	88.39	8.92	-	88.35	9.84	-1.06	88.86	8.65	-1.00	NM	NM	NM

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: **Waco #11 (Former Hess Station No. 09274)**

Facility ID#: **628517044**

WELL NO.	M-15		M-16		M-17		MW-18		MW-19		DW-1		DW-2	
	Diameter	DTW	Diameter	DTW	Diameter	DTW	Diameter	DTW	Diameter	DTW	Diameter	DTW	Diameter	DTW
	1 inch	11.62	1 inch	11.93	1 inch	11.61	2 inch	10.60	2 inch	9.10	2 inch	40	2-inch	36
	19	12.12	19	11.93	19	11.61	16	11.09	16	10.15	40	31 - 36 ft	98.92	
	9-19 ft	11.48	9-19 ft	11.93	9-19 ft	11.61	6-16 ft	10.46	6-16 ft	8.90	35-40 ft			
	99.34	9.02	97.51	84.37	97.21	84.42	98.19	87.73	97.63/97.51	96.75				
	89.81	9.53	89.69	84.37	89.81	84.42	89.66	87.73	97.63/97.51	96.75				
	89.69	9.65	89.69	84.37	89.69	84.42	89.66	87.73	97.63/97.51	96.75				
	88.09	11.25	88.09	84.37	88.09	84.42	89.19	87.73	97.63/97.51	96.75				
	87.42	11.92	87.42	84.37	87.42	84.42	87.96	87.73	97.63/97.51	96.75				
	86.49	12.85	86.49	84.37	86.49	84.42	87.32	87.73	97.63/97.51	96.75				
	86.52	12.82	86.52	84.37	86.52	84.42	86.40	87.73	97.63/97.51	96.75				
	85.87	13.47	85.87	84.37	85.87	84.42	86.41	87.73	97.63/97.51	96.75				
	85.27	14.07	85.27	84.37	85.27	84.42	85.76	87.73	97.63/97.51	96.75				
	84.49	14.85	84.49	84.37	84.49	84.42	85.16	87.73	97.63/97.51	96.75				
	NM	NM	NM	84.37	NM	84.42	84.35	87.73	97.63/97.51	96.75				
	84.54	14.80	84.54	84.37	84.54	84.42	84.41	87.73	97.63/97.51	96.75				
	85.67	13.67	85.67	84.37	85.67	84.42	85.55	87.73	97.63/97.51	96.75				
	84.50	14.84	84.50	84.37	84.50	84.42	84.38	87.73	97.63/97.51	96.75				
	86.30	13.04	86.30	84.37	86.30	84.42	86.18	87.73	97.63/97.51	96.75				
	91.73	7.61	91.73	84.37	91.73	84.42	91.68	87.73	97.63/97.51	96.75				
	91.38	7.96	91.38	84.37	91.38	84.42	91.39	87.73	97.63/97.51	96.75				
	93.08	6.26	93.08	84.37	93.08	84.42	93.00	87.73	97.63/97.51	96.75				
	91.53	7.81	91.53	84.37	91.53	84.42	91.44	87.73	97.63/97.51	96.75				
	90.18	9.16	90.18	84.37	90.18	84.42	90.07	87.73	97.63/97.51	96.75				
	88.99	10.35	88.99	84.37	88.99	84.42	88.87	87.73	97.63/97.51	96.75				
	88.16	11.18	88.16	84.37	88.16	84.42	88.02	87.73	97.63/97.51	96.75				
	87.63	11.71	87.63	84.37	87.63	84.42	87.52	87.73	97.63/97.51	96.75				
	89.87	9.47	89.87	84.37	89.87	84.42	89.75	87.73	97.63/97.51	96.75				
	89.92	9.42	89.92	84.37	89.92	84.42	89.80	87.73	97.63/97.51	96.75				
	89.07	10.27	89.07	84.37	89.07	84.42	88.96	87.73	97.63/97.51	96.75				
	88.13	11.21	88.13	84.37	88.13	84.42	87.98	87.73	97.63/97.51	96.75				
	90.35	8.99	90.35	84.37	90.35	84.42	90.18	87.73	97.63/97.51	96.75				

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

WELL NO.		DW-3														
DIAMETER		2-inch														
WELL DEPTH		37														
SCREEN INTERVAL		32 - 37 ft														
TOC ELEVATION		97.64														
DATE	ELEV	DTW	FP													
9/18/2000	NI	NI	NI													
10/10/2001	NI	NI	NI													
12/12/2002	NI	NI	NI													
5/4/2004	NI	NI	NI													
12/20/2004	NI	NI	NI													
10/11/2006	86.00	11.64	0.00													
8/14/2008	NM	NM	NM													
10/7/2008	NM	NM	NM													
10/8/2008	NM	NM	NM													
10/9/2008	NM	NM	NM													
10/10/2008	NM	NM	NM													
10/17/2008	NM	NM	NM													
10/24/2008	NM	NM	NM													
10/31/2008	NM	NM	NM													
11/17/2008	NM	NM	NM													
12/16/2008	NM	NM	NM													
1/12/2009	NM	NM	NM													
2/12/2009	NM	NM	NM													
3/18/2009	NM	NM	NM													
4/14/2009	NM	NM	NM													
5/14/2009	NM	NM	NM													
6/25/2008	NM	NM	NM													
7/20/2009	NM	NM	NM													
12/1/2009	NM	NM	NM													
12/22/2009	NM	NM	NM													
1/22/2010	NM	NM	NM													
2/17/2010	NM	NM	NM													
3/23/2010	NM	NM	NM													
4/14/2010	NM	NM	NM													
5/20/2010	NM	NM	NM													
6/25/2010	NM	NM	NM													
7/21/2010	NM	NM	NM													
7/29/2010	NM	NM	NM													
7/29/2010	NM	NM	NM													
7/29/2010	NM	NM	NM													
8/18/2010	NM	NM	NM													

TABLE 4A: GROUNDWATER ELEVATION TABLE (No FP)

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

WELL NO.	DW-3	Diameter	2-inch	Screen Interval	32 - 37 ft	TOC Elevation	97.64												
DATE	ELEV	DTW	FP																
9/8/2010	NM	NM	NM																
10/28/2010	NM	NM	NM																
11/23/2010	NM	NM	NM																
12/22/2010	NM	NM	NM																
1/12/2011	NM	NM	NM																
2/21/2011	NM	NM	NM																
3/16/2011	NM	NM	NM																
4/15/2011	NM	NM	NM																
5/26/2011	NM	NM	NM																
6/8/2011	NM	NM	NM																
7/12/2011	NM	NM	NM																
8/24/2011	NM	NM	NM																
9/22/2011	NM	NM	NM																
10/27/2011	NM	NM	NM																
1/25/2012	84.61	13.03	-																
2/21/2012	NM	NM	NM																
3/1/2012	NM	NM	NM																
4/3/2012	NM	NM	NM																
5/2/2012	NM	NM	NM																
6/14/2012	NM	NM	NM																
7/29/2012	NM	NM	NM																
8/8/2012	NM	NM	NM																
9/19/2012	NM	NM	NM																
10/29/2012	NM	NM	NM																
11/20/2012	NM	NM	NM																
12/19/2012	NM	NM	NM																
1/22/2013	NM	NM	NM																

NM - not measured
 NI - not installed
 NS- not surveyed since wellhead modification

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

U = Below Detection Limit
 NCD = No Compounds Detected
 Not Analyzed = NA
 Analytical Results = ug/L

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

Location	Screen Int.	Date	DTW	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total VOA	MTBE	EDB	Total Lead	Naphthalene	methyl nap, 1	methyl nap, 2	TRPH		
M-1	5-20 ft	09/18/00	12.60	490	1400	130	590	2610	500 U	NA	NA	NA	NA	NA	NA		
		12/12/02	12.25	3270	1280	694	2468	7712	4580	NA	NA	NA	10 U	NA	NA	NA	
		12/20/04	10.69	5600	1400	560	1300	8860	2000	NA	NA	NA	380	NA	NA	NA	
		10/12/06	13.76	1900	660	360	1030	3950	550	NA	NA	NA	120	14	20	11000	
		08/15/08	12.28	740	130	150	230	1250	81	NA	NA	NA	79	15	20	2700	
		12/16/08	11.81	2700	510	580	920	4710	340	NA	NA	NA	270	36	60	NA	NA
		03/18/09	12.65	1200	570 V	380 I	570 I	2720	360 I	NA	NA	NA	270	37	64	NA	NA
		06/24/09	12.15	1400	600	430	990	3420	210	NA	NA	NA	200	31	51	NA	NA
		01/20/10	10.22	180	48	95	120	443	21	NA	NA	NA	35	16	25	2400 V	NA
		04/15/10	9.08	180	14.9	107	98.9	400.8	93.7	NA	NA	NA	21.5	7.2	8.3	NA	NA
		07/22/10	9.98	304	90.1	154	281	829.1	37	NA	NA	NA	40.1	10.4	14.7	NA	NA
		10/28/10	11.37	1060	460	600	1400	3520	222	NA	NA	NA	176	22.1	45.1	NA	NA
		01/11/11	12.04	459	241	293	749	1742	242	NA	NA	NA	213	30.7	68	7160	NA
		04/15/11	10.11	210	51.9	216	159	636.9	191	NA	NA	NA	NA	NA	NA	NA	NA
		07/12/11	13.31	1800	3530	1620	4340	11290	634	NA	NA	NA	400	44.9	168	NA	NA
		10/27/11	14.68	744	190	374	399	1707	200	NA	NA	NA	NA	NA	NA	NA	NA
		01/25/12	15.31	329	235	236	384	1184	156	NA	NA	NA	175	15.3	24.2	5440	NA
		04/03/12	14.18	89.9	19.1	63.4	54.3	226.7	40.4	NA	NA	NA	NA	NA	NA	NA	NA
07/18/12	8.28	76.5	22.7	71.3	131	301.5	30.9	NA	NA	NA	36.6	13	16.7	NA	NA		
10/29/12	8.02	40.3	9.2	66.2	88.1	203.8	49.1	NA	NA	NA	NA	NA	NA	NA	NA		
01/22/13	11.65	289	123	282	1540	2234	157	NA	NA	NA	77.4	16.9	27.5	8910	NA		
04/09/13	9.91	187	25.1	185	447	844.1	114	NA	NA	NA	NA	NA	NA	NA	NA		
07/18/13	9.58	179	33.1	201	551	964.1	94.9	NA	NA	NA	61	17	24	NA	NA		
12/12/02	11.66	21900	36500	1930	13400	73730	129000	NA	NA	NA	159	NA	NA	NA	NA		
12/20/04	10.22	16000	24000	1900	9000	50900	42000	NA	NA	NA	1000 U	NA	NA	NA	NA		
10/11/06	14.20	Not sampled - Free Product Present (1.21 feet)															
08/14/08	12.20	Not sampled - Free Product Present (0.26 feet)															
01/20/10	9.65	3000	5000	790	3500	12290	2200	NA	NA	NA	420	48	84	16000 V	NA		
01/11/11	9.87	4.1	29.7	9.2	100	143.0	29.2	NA	NA	NA	0.94 I	0.38 U	0.38 U	265	NA		
01/25/12	14.71	0.67 I	0.37 I	2.1	1.41	4.5	1.7	NA	NA	NA	0.76 U	0.38 U	0.38 U	282	NA		
01/22/13	11.12	0.21 U	0.33 I	0.29 U	0.50 U	0.33	0.21 U	NA	NA	NA	0.79 U	0.40 U	0.40 U	140 U	NA		

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

U = Below Detection Limit
 NCD = No Compounds Detected
 Not Analyzed = NA
 Analytical Results = ug/L

Facility Name: Waco #11 (Former Hess Station No. 09274)
 Facility ID#: 62/8517044

Location	Screen Int.	Date	Benzene		Toluene		Ethyl benzene		Total Xylenes		Total VOA		MTBE		EDB		Total Lead		Naphthalene		methyl nap, 1		methyl nap, 2		TRPH		
			100	400	300	200	200	NA	200	20	20	20	20	20	20	20	20	20	20	280	28	280	28	280	28	5000	50000
M-3	5-20 ft	09/18/00	12.24	78	18	20	216	100 U	NA	NA	150	140	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		12/12/02	11.87	3830	262	1285	5462.8	15800	NA	NA	15	14	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		10/12/06	13.40	1000	170	120	1320	300	NA	NA	NA	25	6.3	11	7900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		08/15/08	11.89	65	0.70 I	3.5	71	3.3	NA	NA	NA	3.9	2.9	3.5	810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/20/10	9.86	0.28 U	0.25 U	0.68 U	NCD	4.7	NA	NA	NA	350	44	86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/11/11	11.62	0.25 I	0.20 U	0.52 U	0.25	12	NA	NA	NA	NA	0.76 U	0.38 U	0.38 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/25/12	14.83	0.20 U	0.20 U	0.52 U	NCD	0.84 I	NA	NA	NA	NA	0.78 U	0.39 U	0.39 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/22/13	10.96	0.21 U	0.20 U	0.50 U	NCD	0.21 I	NA	NA	NA	NA	0.78 U	0.39 U	0.39 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		09/18/00	11.80	280	360	48	79	767	250 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		12/12/02	11.48	24.3	2.06	1.6	4.03	31.99	230	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/11/06	12.97	230	42	30	12	314	14	NA	NA	NA	0.22	0.044 U	0.077 U	150 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
08/14/08	11.57	21	0.42 I	3.4	5.5	29.9	5.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/19/10	9.59	0.62 I	0.24 U	0.72 I	0.68 U	1.34	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/11/11	11.28	14.9	0.41 I	0.40 I	0.84 I	16.55	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/25/12	14.62	0.42 I	0.20 U	0.52 U	0.42	0.81 I	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/22/13	10.94	0.93 I	1.5	0.29 U	0.50 U	2.43	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
09/18/00	10.60	56	52	3.2	3	114.2	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
12/12/02	10.34	34.1	1 U	1 U	2 U	34.1	123	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
10/11/06	11.83	110	1.2	4.4	1.36	116.96	84	NA	NA	NA	0.036	0.045 U	0.079 U	150 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
08/14/08	10.44	360	3.7	33	9.7	406.4	58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/19/10	8.46	14	0.24 U	1.2	0.68 U	15.2	54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/11/11	10.15	0.58 I	0.20 U	0.29 I	0.52 U	0.87	54.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/25/12	13.47	12.3	0.38 I	0.20 U	0.52 U	12.68	29.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/22/13	9.80	3.7	0.30 I	0.50 U	0.50 U	3.7	17.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
09/18/00	10.00	7400	8500	1000	2200	19100	5000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
12/12/02	9.75	9880	6140	2520	9700	28240	2240	NA	NA	NA	346	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
12/20/04	8.19	8200	350	910	1400	10860	1500	NA	NA	NA	380	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
10/11/06	11.28	5200	140	520	424	6284	260	NA	NA	NA	100	19	33	3900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
08/14/08	10.76	4500	1700	1600	5800	13600	2300	NA	NA	NA	330	69	130	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
12/16/08	9.29	4800	240	1500	2800	9340	1300	NA	NA	NA	310	47	88	9500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

U = Below Detection Limit
 MCD = No Compounds Detected
 Not Analyzed = NA
 Analytical Results = ug/L

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

Location	Screen Int.	Date	NADC										Total Lead	Naphthalene	methyl nap, 1	methyl nap, 2	TRPH	
			100	400	300	200	NA	200	2	150	140	280						280
			DTW	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total VOA	MTBE	EDB								
M-6 baseline	5-20 ft	03/18/09	10.13	2500	190 U	950 I	1100 I	4740	1300	NA	NA	150	140	280	280	100	11000	
		06/24/09	9.69	1100	74 I	760	890	2750	580	NA	NA	14	260	54	28	110	5100	
		01/20/10	7.68	150	5.7 I	170	200	525.7	83	NA	NA	24	62	24	44	44	3500 V	
		04/15/10	6.65	143	8.1	159	197	507.1	87.9	NA	NA	19.9	65.1	19.9	35	35	1330	
		07/22/10	7.54	178	23.6	212	313	726.6	74	NA	NA	13.9	49.7	13.9	22.6	22.6	1610	
		10/28/10	8.90	179	7.0	249	185	620	193	NA	NA	29.6	92.4	29.6	44.7	44.7	3320	
		01/11/11	9.59	97.5	12.8	102	200	412.3	181	NA	NA	NA	NA	NA	NA	NA	3560	
		04/15/11	7.64	8.4	0.21 I	19	5.9	33.51	17.3	NA	NA	NA	NA	NA	NA	NA	NA	
		10/27/11	12.14	0.75 I	3.1	2.7	17.9	23.91	8	NA	NA	NA	NA	NA	NA	NA	NA	
		01/25/12	12.87	0.20 U	0.20 U	0.20 U	0.52 U	NCD	1.2	NA	NA	0.38 U	0.76 U	0.38 U	0.38 U	0.38 U	158 I	
		04/03/12	11.67	0.20 U	0.20 U	0.78 I	0.52 U	NCD	0.85 I	NA	NA	NA	NA	NA	NA	NA	NA	
		07/19/12	5.51	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	151 I	
		10/29/12	5.68	0.21 U	0.20 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	
01/23/13	9.18	0.21 U	0.26 I	0.29 U	0.50 U	0.26	0.21 U	NA	NA	0.38 U	0.77 U	0.38 U	0.38 U	0.38 U	150 U			
04/09/13	6.15	0.21 U	0.20 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA			
07/18/13	6.94	0.21 U	0.20 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	0.38 U	0.77 U	0.38 U	0.38 U	0.38 U	140 U			
09/18/00	10.80	7800	19000	2500	19000	48300	5000 U	NA	NA	NA	NA	NA	NA	NA	NA			
12/12/02	10.34	28300	42300	2520	12530	85650	56200	NA	NA	NA	NA	503	NA	NA	44900			
12/20/04	9.19	30000	31000	2400	11000	74400	41000	NA	NA	NA	NA	660	NA	NA	NA			
10/11/06	12.80																	
08/14/08	10.53																	
01/20/10	8.46	5500	4700	1900	6800	18900	740	NA	NA	NA	NA	500	43	84	17000 V			
01/11/11	10.30	5690	8490	2690	13800	30670	1210	NA	NA	NA	NA	436	47.7	219	28000			
01/25/12	13.90																	
01/23/13	9.97	343	565	251	3810	4969	84.1 I	NA	NA	NA	NA	482	94.9	161	20300			
04/09/13	8.12	157	215	153	1300	1825	46.2	NA	NA	NA	NA	NA	NA	NA	NA			
07/18/13	7.75	113	14.1	135	303	565.1	24.1	NA	NA	NA	NA	NA	NA	NA	NA			
09/18/00	11.47	5400	14000	2200	10000	31600	5000 U	NA	NA	NA	NA	NA	NA	NA	NA			
12/20/04	9.65	20000	1600	1100	2000	24700	19000	NA	NA	NA	NA	370	NA	NA	NA			
10/11/06	12.70	20000	380	440	484	21304	6900	NA	NA	NA	NA	280	29	49	7500			
08/14/08	11.22	6200	3500	670	3700	14070	1500	NA	NA	NA	NA	200	35	66	4000			

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

U = Below Detection Limit
 NCD = No Compounds Detected
 Not Analyzed = NA
 Analytical Results = ug/L

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

Location	Screen Int.	Date	NADC										Total Lead	Naphthalene	methyl nap. 1	methyl nap. 2	TRPH		
			100	400	300	200	200	200	200	200	2	150						140	280
		DTW	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total VOA	MTBE	EDB										
M-8	5-20 ft	12/16/08	12000	3000	1000	4400	20400	12000	NA	NA	NA	200	0.02	15	14	38	73	NA	
		03/18/09	12000	2800 IV	1000 I	3500 I	19300	16000	NA	NA	NA	20	NA	14	28	57	110	NA	
		06/24/09	12000	2200	750	2000	16950	12000	NA	NA	NA	NA	NA	NA	NA	56	110	NA	
		01/20/10	520	61	90	200	871	1500	NA	NA	NA	NA	NA	NA	NA	7.2	9.2	3000 V	
		04/15/10	351	33.5	6	77.6	468.1	840	NA	NA	NA	NA	NA	NA	NA	0.49 U	0.49 U	NA	
		07/22/10	15.9	2.4	2.4	7.6	28.3	232	NA	NA	NA	NA	NA	NA	NA	0.48 U	0.48 U	NA	
		10/28/10	6.55	3.9	0.50 U	1.0 U	3.9	16.4	NA	NA	NA	NA	NA	NA	NA	0.38 U	0.38 U	NA	
		01/11/11	9.80	6.4	6.7	1.9	12.5	27.5	18.2	NA	NA	NA	NA	NA	NA	0.38 U	0.38 U	NA	
		04/15/11	9.01	57	3.2	2.4	14.3	76.9	93.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	475
		07/12/11	6.15	0.50 U	0.50 U	1.0 U	NCD	1.4	NA	NA	NA	NA	NA	NA	NA	0.38 U	0.38 U	NA	
		10/27/11	13.51	16.7	2.2	7.8	28.3	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/25/12	14.20	42.4	9.6	12.2	4.4	68.6	63.5	NA	NA	NA	NA	NA	NA	0.76 I	1.20 I	344	
		04/03/12	13.13	0.20 U	0.20 U	0.20 U	0.52 U	NCD	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		07/18/12	7.11	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.41 I	NA	NA	NA	NA	NA	0.38 U	0.38 U	0.38 U	NA	NA
		10/29/12	2.30	0.27 I	0.23 I	0.29 U	0.78 I	1.28	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
01/22/13	8.18	0.21 U	0.20 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	0.78 U	0.39 U	0.39 U	140 U		
04/09/13	2.17	0.21 U	0.20 U	0.29 U	0.50 U	NCD	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
07/18/13	8.33	5.9	0.27 I	0.52 I	1.4 I	8.09	4.7	NA	NA	NA	NA	NA	0.77 U	0.38 U	0.38 U	NA	NA		
09/18/00	11.63	Not sampled - Free Product Present																	
12/12/02	10.95	30500	50900	2420	12370	96190	211000	NA	NA	NA	117	NA	NA	NA	NA	NA	NA		
12/20/04	9.60	33000	53000	3200	16000	105200	300000	NA	NA	NA	840	NA	NA	NA	NA	NA	NA		
10/11/06	14.03	Not sampled - Free Product Present (1.84 feet)																	
08/14/08	11.25	Not sampled - Free Product Present (0.19 feet)																	
01/20/10	9.09	19000	34000	2800	16000	71800	86000	NA	NA	NA	2100	NA	NA	440	990	48000 V			
07/22/10	8.74	12800	23400	1720	13200	51120	55800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
10/28/10	10.23	13200	29300	2640	16500	61640	53200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/11/11	11.07	22700	47700	3900	21200	95500	99900	NA	NA	NA	572	NA	NA	126	459	133000			
04/15/11	8.99	15600	19500	1750	16400	53250	47400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
07/12/11	12.09	16300	28400	2630	15500	62830	58600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
10/27/11	13.47	18100	8800	1930	7480	36310	39000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/25/12	14.21	Not sampled - Free Product Present (0.09 feet)																	

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

U = Below Detection Limit
 NCD = No Compounds Detected
 Not Analyzed = NA
 Analytical Results = ug/L

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

Location	Screen Int.	Date	DTW	Not sampled - Free Product Present (0.03 feet)										Total Lead	Naphthalene	methyl nap, 1	methyl nap, 2	TRPH
				100	400	300	200	200	NA	200	2	200	200					
				Benzene	Toluene	Ethyl benzene	Total Xylenes	Total VOA	MTBE	EDB								
M-9	5-20 ft	04/03/12	13.09															
		07/18/12	7.18	14700	10200	1360	7490	33750	16500	NA	NA	NA	NA	NA	NA	NA	NA	NA
		10/29/12	6.57	7710	2740	968	5780	17198	13600	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/23/13	10.44	9180	14900	2200	13300	39580	12800	NA	NA	NA	643	144	359	89500	NA	NA
		04/09/13	8.65	6570	3000	973	6400	16943	8360	NA	NA	NA	NA	NA	NA	NA	NA	NA
		07/18/13	8.41	17400	15400	4680	22600	60080	13400	NA	NA	NA	NA	NA	NA	NA	NA	NA
M-10	9-19 ft	10/10/01	12.45	1 U	1 U	1 U	1 U	NCD	1 U	NA	NA	NA	NA	NA	NA	NA	NA	
		12/12/02	12.23	1 U	1 U	1 U	2 U	NCD	1 U	NA	NA	1 U	NA	NA	NA	NA	NA	
		10/11/06	13.76	0.18 U	0.26 U	0.26 U	0.25 U	NCD	0.19 U	NA	NA	NA	0.085	0.044 U	0.077 U	150 U	NA	
		08/14/08	12.38	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	NA	
		01/19/10	10.41	0.28 U	0.24 U	0.25 U	0.68 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	
		01/11/11	12.08	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	
		01/25/12	15.38	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	
		01/22/13	11.73	0.21 U	0.20 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	
		10/10/01	11.29	1 U	1 U	1 U	1 U	NCD	1 U	NA	NA	NA	NA	NA	NA	NA	NA	
		10/11/06	12.63	0.18 U	0.26 U	0.26 U	0.25 U	NCD	0.19 U	NA	NA	NA	0.024 U	0.045 U	0.079 U	150 U	NA	
M-11	9-19 ft	08/14/08	11.12	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	NA	
		01/19/10	9.12	0.28 U	0.24 U	0.25 U	0.68 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA		
		01/11/11	10.88	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA		
		01/25/12	14.29	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA		
		01/22/13	10.60	0.21 U	0.20 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA		
		10/10/01	87.41	280	31	22	43	376	350	NA	NA	NA	NA	NA	NA	NA		
M-12	9-19 ft	12/12/02	87.59	3.11	1 U	1 U	1.86	4.97	104	NA	NA	1 U	NA	NA	NA	NA		
		12/20/04	89.14	1200	100 U	100 U	200 U	1200	560	NA	NA	100 U	NA	NA	NA	NA		
		10/11/06	86.10	79	3.9	9.9	95.4	36	NA	NA	NA	0.052	0.044 U	0.077 U	280	NA		
		08/14/08	11.00	14	0.30 I	1.6	1.3 I	15.6	4.9	NA	NA	NA	NA	NA	87 I	NA		
		01/19/10	9.10	0.28 U	0.25 I	0.25 U	0.68 U	0.25	1.5	NA	NA	NA	NA	NA	NA	NA		
		01/11/11	10.72	0.20 U	0.21 I	0.20 U	0.52 U	0.21	0.53 I	NA	NA	NA	NA	NA	NA	NA		
01/25/12	14.03	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA				
01/22/13	10.38	0.21 U	0.23 I	0.29 U	0.50 U	0.23	0.21 U	NA	NA	NA	NA	NA	NA	NA				

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

U = Below Detection Limit
 NCD = No Compounds Detected
 Not Analyzed = NA
 Analytical Results = ug/L

Facility Name: Waco #11 (Former Hess Station No. 09274)
 Facility ID#: 62/8517044

Location	Screen Int.	Date	100		400		300		200		200		150		280		280		5000	
			NADC	CTL'S	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total VOA	MTBE	EDB	Total Lead	Naphthalene	methyl nap, 1	methyl nap, 2	TRPH				
M-13	9-19 ft	10/10/01	16	1 U	1.4	1.1	18.5	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		12/12/02	5.11	1 U	1 U	1.72	6.83	57.1	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA
		12/20/04	8.41	1 U	1 U	2 U	NCD	25	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA
		10/11/06	11.44	0.23	0.26 U	0.25 U	0.23	3.6	NA	NA	NA	0.023 U	0.044 U	0.077 U	170					
		08/15/08	9.97	0.26 U	0.19 U	0.36 U	0.26	3.6	NA	NA	NA	NA	NA	NA	65 U					
		01/20/10	7.88	0.28 U	0.24 U	0.68 U	NCD	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/11/11	9.73	0.20 U	0.20 U	0.52 U	0.20	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/25/12	13.09	0.20 U	0.35 U	0.52 U	0.35	0.58 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/23/13	9.44	0.21 U	0.29 U	0.50 U	0.29	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		10/10/01	11.73	1 U	1 U	1 U	1 U	NCD	1 U	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M-14	9-19 ft	12/12/02	11.55	5.41	5.57	30.21	63.69	1 U	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
		10/11/06	13.09	0.18 U	0.26 U	0.25 U	NCD	1.4	NA	NA	0.023 U	0.044 U	0.077 U	150 U						
		08/15/08	11.56	0.18 U	0.19 U	0.36 U	NCD	0.83 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		12/16/08	9.85	0.18 U	0.19 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		03/18/09	11.17	0.18 U	0.65 U	0.56 U	1.21	0.15 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		06/24/09	11.45	0.18 U	0.19 U	0.36 U	NCD	0.16 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		01/19/10	9.70	0.28 U	0.24 U	0.68 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		04/15/10	8.38	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		01/11/11	11.36	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		01/25/12	14.67	0.20 U	0.20 U	0.52 U	NCD	0.42 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
M-15	9-19 ft	01/23/13	11.08	0.21 U	0.29 U	0.50 U	0.27	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		10/10/01	11.91	1 U	1 U	1 U	NCD	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
		12/20/04	10.18	1 U	1 U	2 U	NCD	1 U	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA		
		10/11/06	13.23	0.18 U	0.26 U	0.25 U	NCD	0.50	NA	NA	NA	0.4	0.049 U	0.086 U	150 U					
		08/15/08	NM	0.18 U	0.19 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		01/19/10	9.88	0.28 U	0.24 U	0.68 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		01/11/11	11.52	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		01/25/12	14.85	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		01/22/13	11.18	0.21 U	0.20 U	0.50 U	0.27	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		10/10/01	10.14	1 U	1 U	1 U	1 U	NCD	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
M-16	9-19 ft	10/12/06	11.74	0.18 U	0.26 U	0.25 U	NCD	0.19 U	NA	NA	0.024 U	0.046 U	0.081 U	170 U						

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

U = Below Detection Limit
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Facility Name: Waco #11 (Former Hess Station No. 09274)
 Facility ID#: 62/8517044

Location	Screen Int.	Date	DTW	100	400	300	200	200	200	2	150	140	280	280	5000		
				1	40	30	20	20	0.02	15	14	28	28	280	28	50000	
				NADC	CTL'S	Total Xylenes		Total VOA	MTBE	EDB	Total Lead	Naphthalene	methylnap, 1	methylnap, 2	TRPH		
M-16	9-19 ft	08/14/08	9.96	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	
		12/16/08	9.60	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	NA
		03/18/09	10.15	0.18 U	0.24 U	0.16 U	0.36 U	0.24	0.15 U	NA	NA	NA	NA	NA	NA	NA	NA
		06/24/09	9.90	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	NA
		01/19/10	7.98	0.28 U	0.24 U	0.25 U	0.68 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA
		04/15/10	6.88	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
		07/22/10	7.82	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
		10/28/10	9.11	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
		01/11/11	9.74	0.52 U	2.5	0.42 U	2.2 U	5.64	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA
		04/15/11	7.86	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA
		07/12/11	11.08	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
		10/27/11	12.34	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	NA
		01/25/12	13.14	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA
		04/03/12	11.93	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA
07/18/12	5.85	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA		
10/29/12	6.06	0.21 U	0.20 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA		
01/23/13	9.52	0.21 U	0.20 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA		
M-17	9-19 ft	10/10/01	10.83	1 U	1 U	1 U	1 U	NCD	1 U	NA	NA	NA	NA	NA	NA	NA	
		10/12/06	11.03	0.18 U	0.26 U	0.26 U	0.25 U	NCD	0.19 U	NA	NA	0.066	0.047 U	0.083 U	NA	NA	
		08/14/08	9.64	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	
		12/16/08	9.36	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	
		03/18/09	10.49	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	
		06/24/09	9.55	0.18 U	0.19 U	0.16 U	0.36 U	NCD	0.15 U	NA	NA	NA	NA	NA	NA	NA	
		01/19/10	7.80	0.28 U	0.24 U	0.25 U	0.68 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	
		04/15/10	6.57	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	
		07/22/10	7.49	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	
		10/28/10	8.82	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	
		01/11/11	9.39	0.46 U	2.2	0.42 U	1.9 U	4.98	0.34 U	NA	NA	NA	NA	NA	NA	NA	
		04/15/11	7.51	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	
		07/12/11	10.79	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	
		10/27/11	12.01	0.50 U	0.50 U	0.50 U	1.0 U	NCD	0.50 U	NA	NA	NA	NA	NA	NA	NA	

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Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

Location	Screen Int.	Date	Benzene		Toluene		Ethyl benzene		Total Xylenes		Total VOA		MTBE		EDB		Total Lead		Naphthalene		methyl nap, 1		methyl nap, 2		TRPH		
			100	400	300	200	NA	200	20	0.02	2	200	20	0.02	150	140	280	280	280	28	28	280	280	28	28	5000	50000
M-17	9-19 ft	01/25/12	12.74	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		04/03/12	11.61	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		07/18/12	5.53	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		10/29/12	5.69	0.21 U	0.20 U	0.20 U	0.29 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/23/13	9.19	0.21 U	0.20 U	0.20 U	0.29 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		04/09/13	7.36	0.21 U	0.20 U	0.20 U	0.29 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		07/18/13	6.85	0.21 U	0.20 U	0.20 U	0.29 U	0.29 U	0.50 U	NCD	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		10/12/06	12.22	9.7	0.26 U	0.26 U	0.26 U	1.2	10.9	NA	NA	NA	6.7	NA	NA	NA	NA	NA	NA	NA	0.023 U	0.044 U	0.077 U	0.044 U	0.077 U	1900	1900
		08/14/08	10.78	0.18 U	0.19 U	0.16 U	0.36 U	NCD	1.7	NA	NA	NA	1.7	NA	NA	NA	NA	NA	NA	NA	0.011 U	0.013 U	0.0088 U	0.013 U	0.0088 U	62	62
		01/19/10	8.80	0.28 U	0.24 U	0.25 U	0.68 U	NCD	0.21 U	NA	NA	NA	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
01/11/11	10.50	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/25/12	13.84	0.20 U	0.20 U	0.20 U	0.52 U	NCD	0.34 U	NA	NA	NA	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
01/22/13	10.17	0.21 U	0.20 U	0.20 U	0.50 U	NCD	0.21 U	NA	NA	NA	0.21 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
10/12/06	11.76	14000	25000	1800	9600	50400	8500	NA	NA	NA	110	110	14	26	41000	41000	41000	41000	41000	41000	41000	41000	41000	41000	41000	41000	
08/14/08	10.34	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	
12/16/08	8.00	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	
03/18/09	10.62	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	
baseline		06/24/09	9.91	7400	25000	1300	10000	43700	1900	NA	NA	440	440	56	110	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000
		01/20/10	7.92	6500	21000	1900	14000	43400	2000	NA	NA	750	750	81	160	35000 V	35000 V	35000 V	35000 V	35000 V	35000 V	35000 V	35000 V	35000 V	35000 V	35000 V	35000 V
		04/15/10	6.88	2170	9320	1350	9150	21990	572	NA	NA	363	363	44.1	102	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800
		07/22/10	7.61	3170	11200	1570	9970	25910	1840	NA	NA	405	405	81.7	213	9520	9520	9520	9520	9520	9520	9520	9520	9520	9520	9520	9520
		10/28/10	8.65	3870	12200	1630	10200	27900	805	NA	NA	412	412	65.7	174	17900	17900	17900	17900	17900	17900	17900	17900	17900	17900	17900	17900
		01/11/11	9.23	5380	14500	2140	12900	34920	1970	NA	NA	602	602	218	710	45900	45900	45900	45900	45900	45900	45900	45900	45900	45900	45900	45900
		04/15/11	7.88	5210	11300	2000	11000	29510	974	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		07/12/11	10.01	4100	8050	1180	6320	19650	685	NA	NA	381	381	101	319	12800	12800	12800	12800	12800	12800	12800	12800	12800	12800	12800	12800
		10/27/11	12.34	3480	8290	2000	10200	23970	487	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		01/25/12	12.83	2470	8130	3620	11500	25720	198	NA	NA	3280	3280	6640	3400	88100	88100	88100	88100	88100	88100	88100	88100	88100	88100	88100	88100
		04/03/12	12.01	1830	1110	981	3910	7831	259	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		07/18/12	6.09	431	636	295	2310	3672	93.9	NA	NA	156	156	34.9	54.8	8320	8320	8320	8320	8320	8320	8320	8320	8320	8320	8320	8320
		10/29/12	5.07	355	394	464	2170	3383	71.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
01/23/13	8.75	374	63.2	256	1220	1913.2	113	NA	NA	85.9	85.9	19.8	54.7	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320		

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U = Below Detection Limit
 NCD = No Compounds Detected
 Not Analyzed = NA
 Analytical Results = ug/L

Facility ID#: 62/6517044

Facility Name: Waco #11 (Former Hess Station No. 09274)

Location	Screen Int.	Date	DTW	100	400	300	200	200	200	2	150	140	280	280	5000
				CTL'S	40	30	20	20	0.02	15	14	28	28	50000	
				Benzene	Toluene	Ethyl benzene	Total Xylenes	Total VOA	MTBE	EDB	Total Lead	Naphthalene	methyl nap, 1	methyl nap, 2	TRPH
MW-19	6-16 ft	04/09/13	6.65	261	25.6	162	528	976.6	81.9	NA	NA	NA	NA	NA	NA
		07/18/13	7.23	543	179	360	1130	2212	111	NA	NA	122	42.8	72.8	5330
DW-1	35-40 ft	10/10/01	11.40	110	280	24	120	534	200	NA	NA	NA	NA	NA	NA
		12/12/02	11.16	1290	1080	90.7	583	3043.7	6250	NA	NA	10.5	NA	NA	NA
		01/17/03	10.29	1 U	1.4	1 U	2 U	1.4	14.3	NA	NA	1 U	NA	NA	NA
		12/20/04	9.63	6.1	1 U	2.2	1.6	9.9	26	NA	NA	1 U	NA	NA	NA
		10/12/06	12.70	1.9	0.26 U	1	0.25 U	2.9	13	NA	NA	0.059	0.044 U	0.077 U	150 U
		08/14/08	11.17	0.20 I	0.19 U	0.16 U	0.36 U	0.2	5.0	NA	NA	0.011 U	0.013 U	0.0088 U	NA
		01/19/10	9.17	0.28 U	0.24 U	0.25 U	0.68 U	NCD	4.6	NA	NA	NA	NA	NA	NA
		01/11/11	10.88	4.9	0.20 U	0.51 I	0.52 U	5.41	9.2	NA	NA	NA	NA	NA	NA
		01/25/12	14.26	0.53 I	0.20 U	0.20 U	0.52 U	0.53	3.3	NA	NA	NA	NA	NA	NA
		01/23/13	10.60	0.21 U	0.23 I	0.29 U	0.50 U	NCD	13.7	NA	NA	NA	NA	NA	NA
DW-2	31-36 ft	10/12/06	12.85	57	3.8	4.6	6.8	72.2	31	NA	NA	0.26	0.044 U	0.077 U	160
		08/14/08	11.30	0.18 U	0.19 U	0.16 U	0.36 U	NCD	2.1	NA	NA	NA	NA	NA	NA
		01/19/10	9.50	11	0.24 U	0.60 I	1.2 I	12.8	14	NA	NA	NA	NA	NA	NA
		01/11/11	11.12	1.4	0.20 U	0.20 U	0.52 U	1.4	4.7	NA	NA	NA	NA	NA	NA
		01/25/12	14.34	0.20 U	0.20 U	0.20 U	0.52 U	NCD	1.8	NA	NA	NA	NA	NA	NA
		01/22/13	10.67	0.34 I	0.20 U	0.29 U	0.50 U	0.34	1.4	NA	NA	NA	NA	NA	NA
DW-3	32-37 ft	10/12/06	11.64	480	510	130	590	1710	150	NA	NA	7.4	2.4	4.2	3800
		08/14/08	10.30	23	29	15	52	119	9.5	NA	NA	3.1	1.4	2.6	480
		01/19/10	8.23	6.4	3.8	3.4	9.3	22.9	10	NA	NA	1.3	0.69	1.0	NA
		01/11/11	9.97	6	3.4	2.2	5.8	17.4	9.3	NA	NA	1.1 I	0.45 I	1.8 I	NA
		01/25/12	13.03	8.3	2.9	2	5	18.2	14.3	NA	NA	2.2	1.9 U	5.7	NA
		01/23/13	9.39	9.9	1.3	1.6	2.1 I	14.9	25.8	NA	NA	0.77 U	0.38 U	0.38 U	NA

NOTES:

U = below MDL
 I = detected between MDL and PQL
 V= analyte was detected in both sample and blank

TABLE 7: SVE SYSTEM ANALYTICAL AND PERFORMANCE SUMMARY

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

Not Sampled = NS

Analytical Results = mg/m3

Sample Location	Date	Hour Meter	Vacuum (in of H2O)	Flow (scfm)	OVA (ppm)	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	TRPH	Emission Rate (lb/day)	Total Mass Recovered (lbs)
Influent	10/7/2008	24103	48	100	383	170	160	76	210	616	37	15000	134.9	
	10/8/2008	24127	72	120	NS	280	370	150	450	1370	130	13000	140.3	138
	10/9/2008	24150	50	100	749	210	420	76 J3	370 J3	1076	120	14000	125.9	128
	10/10/2008	24173	72	120	NS	5.9	14	2.3 J3	9.4 J3	31.6	3.7	290	3.1	62
	10/17/2008	24292	78	110	505	57 Q	150 Q	24	150 Q	381	34	6300	62.3	162
	10/24/2008	24315	82	120	706	150	390	43	390	973	65	11000	118.7	87
	11/2/2008	24483	80	120	981	28	170	31	180	409	13	3100	33.4	532
	11/17/2008	24601	100	210	1283	160	400	40	380	980	110	12000	226.6	639
	12/15/2008	24677	92	220	744	1.0 U	1.0 U	1.0 U	2.0 U	NCD	2.0 U	28	0.6	360
	1/12/2009	24963	44	260	810	NS	NS	NS	NS	NS	NS	NS		
	2/12/2009	25541	58	240	452	NS	NS	NS	NS	NS	NS	NS		
	3/18/2009	26039	30	260	891	6.0 J3	32 J3	4.9 J3	62 J3	105	3.4 J3	13 L	0.3	
	6/25/2009	27032	50	220	240	43	240	38	350	671	17	2300	45.5	947
	12/1/2009	15965	30	210	96	20	32	3.8	56	112	4.9	2300	43.4	
	4/14/2010	18491	30	210	12	0.35 U	0.38 U	0.43 U	1.3 U	NCD	0.54 U	35	0.7	2319
	5/20/2010	19280	30	210	47	0.35 U	0.38 U	0.43 U	1.3 U	NCD	0.54 U	427	8.1	143
	9/22/2011	26796	30	210	30	25	55.8	6.5	58.2	145.5	0.54 U	8250	156	25652
	10/27/2011	27635	30	232	30	2.7	7.9	0.56 I	18.0	28.6	0.54 U	1400	29	3233
	1/25/2012	27836	32	155	292	13	45.6	4.3	46.9	109.8	3.1	3120	43	304
	3/1/2012	28183	38	217	278	3.85	11.8	1.07	16.9	33.7	1.74 U	1720	34	557
	4/3/2012	28973	30	163	22	0.35 U	0.68 I	0.43 U	3.5 I	4.2	0.54 U	2.9 U	0	553
	5/2/2012	29670	32	310	286	4.8	18	2.3	56	81.1	0.54 U	1860	52	753
	6/14/2012	30209	35	248	53	1.1 I	5.7	0.83 I	12	17.7	19.6	1610	36	984
	7/18/2012	30301	44	320	5	1.1 I	2.6	0.43 U	1.4 I	5.1	0.54 U	321	9	86

TABLE 7: SVE SYSTEM ANALYTICAL AND PERFORMANCE SUMMARY

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

Not Sampled = NS

Analytical Results = mg/m3

Location	Sample Date	Hour Meter	Vacuum (In of H2O)	Flow (scfm)	OVA (ppm)	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	TRPH	Emission Rate (lb/day)	Total Mass Recovered (lbs)
Effluent	10/7/2008	24103	--	400	NS	1.0U	1.0U	1.0U	2.0U	NCD	1.0U	1.0U	0	0
	10/8/2008	24127	--	350	NS	1.0U	1.0U	1.0U	2.0U	NCD	1.0U	1.0U	0	0
	10/9/2008	24150	--	350	14	1.0U	1.0U	1.0UJ3	2.0UJ3	NCD	1.0U	1.0U	0	0
	10/10/2008	24173	--	340	NS	1.0U	1.0U	1.0UJ3	2.0UJ3	NCD	1.0U	1.0U	0	0
	10/17/2008	24292	--	340	17	1.0U	1.3	1.0U	3.9	5.2	1.0U	1.0U	0	0
	10/24/2008	24315	--	340	26	1.0U	1.2	1.0U	2.0U	NCD	1.0U	1.0U	0	0
	11/2/2008	24483	--	340	33	1.0U	1.8	1.0U	4.1	5.9	1.0U	1.0U	0	0
	11/17/2008	24601	--	340	22	1.2	1.0U	1.0U	2.0U	NCD	1.0U	1.0U	0	0
	12/15/2008	24677	--	330	NS	1.0U	1.0U	1.0U	2.0U	NCD	2.0U	22	0.7	1
	1/12/2009	24963	--	300	12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/12/2009	25541	--	300	44	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/18/2009	26039	--	290	355	1.0UJ3	1.0UJ3	1.0UJ3	2.0UJ3	NCD	1.0UJ3	10U	0	0
	6/25/2009	27032	--	275	84	1.0U	1.2	1.0U	3.8	5.0	1.0U	1.0U	0	0
	12/1/2009*	15965	--	350	10	1.0U	1.0U	1.0U	2.0U	NCD	1.0UJ3	10U	0	0
	4/14/2010	18491	--	300	0	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	2.9U	0	0
	5/20/2010	19280	--	270	2	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	68	2	27
	7/22/2010	20752	--	300	107	3.5	11	1.2	5.2	20.9	0.54U	1840	50	1573
	7/29/2010	20942	--	270	31	0.861	2.2	0.43U	1.31	4.36	0.54U	297	7	225
	9/9/2010	21927	--	279	8	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	2.9U	0	148
	10/26/2010	23121	--	300	15	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	75.7	2	51
	1/12/2011	24017	--	300	35	0.35U	1.31	0.43U	1.3U	NCD	0.54U	300	8	189
	4/15/2011	25126	--	300	35	2.10	2.7	0.43U	2.01	6.80	0.54U	480	13	486
	7/14/2011	26164	--	270	56	3.8	14.0	1.61	36V	55.4	0.54U	1140	28	878
	8/24/2011	26689	--	232	40	1.9	5.3	0.43U	6.11	13.3	0.54U	1280	27	595
	9/22/2011	26796	--	232	30	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	32	1	61
	10/27/2011	27635	--	232	30	2.7	11	0.43U	1.3U	13.7	0.54U	1260	26	472
	1/25/2012	27836	--	270	6	0.35U	0.38U	0.781	2.91	3.7	0.54U	468	11	158
	3/1/2012	28183	--	270	7	0.282U	0.215U	0.178U	0.38	0.4	1.74U	14.9U	0	85
	4/3/2012	28973	--	300	1	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	2.9U	0	7
	5/2/2012	29670	--	350	6	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	199	6	92
	6/14/2012	30209	--	300	NS	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	306	8	163
	7/18/2012	30301	--	350	NS	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	29	1	18
	10/29/2012	33182	--	225	47	0.961	1.71	0.43U	1.3U	2.7	0.54U	350	7	479
	1/23/2013	35043	--	387	3	0.35U	0.38U	0.43U	1.3U	NCD	0.54U	2.9U	0	278

TABLE 7: SVE SYSTEM ANALYTICAL AND PERFORMANCE SUMMARY

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

Not Sampled = NS

Analytical Results = mg/m3

Sample Location	Date	Hour Meter	Vacuum (in of H2O)	Flow (scfm)	OVA (ppm)	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total VOA	MTBE	TRPH	Emission Rate (lb/day)	Total Mass Recovered (lbs)
	4/9/2013	36889	--	387	0	0.35 U	0.38 U	0.43 U	1.3 U	NCD	0.54 U	2.9 U	0	8
	7/18/2013	39163	--	333	8	0.35 U	0.38 U	0.43 U	1.3 U	NCD	0.54 U	174	5	252

U = Indicates that the compound was analyzed but not detected
 J3 = Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
 Q = sample held beyond the accepted holding time

U = detected between MDL and RL
 NCD = no compounds detected
 L = off scale high. Actual value is known to be greater than the value given.

TABLE 8A: SVE WELL DATA

All Measurements = Feet
 NM = not measured
 OVA Readings = ppm
 Vacuum = in of H₂O

Facility Name: Waco #11 (Former Hess Station No. 09274) Facility ID#: 62/8517044

	VE-1	VE-2	VE-3	VE-4
WELL NO.	4-inch	4-inch	4-inch	4-inch
DIAMETER	12	12	12	12
WELL DEPTH	10	10	10	10
SCREEN INT.				

Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA
12/1/2009	26	32	12/1/2009	25	55	12/1/2009	26	70	12/1/2009		
12/22/2009	30	NM	12/22/2009	30	NM	12/22/2009	22	NM	12/22/2009	22	OFF
1/22/2010	48	**	1/22/2010	49	**	1/22/2010	50	**	1/22/2010	40	OFF
2/17/2010	52	0	2/17/2010	54	3	2/17/2010	55	0	2/17/2010	9	**
3/23/2010	9	**	3/23/2010	9	**	3/23/2010	9	**	3/23/2010	9	**
4/14/2010	20	0	4/14/2010	28	0	4/14/2010	8	**	4/14/2010	34	214
5/20/2010	37	0	5/20/2010	37	0	5/20/2010	38	0	5/20/2010	39	36
6/25/2010	30	0	6/25/2010	60	0	6/25/2010	48	0	6/25/2010	61	6
7/21/2010	36	0	7/21/2010	41	0	7/21/2010	40	1137	7/21/2010	30	105
7/29/2010	27	0	7/29/2010	27	2	7/29/2010	27	32	7/29/2010	27	6
8/18/2010	19	1	8/18/2010	19	6	8/18/2010	19	19	8/18/2010	20	26
9/8/2010	21	1	9/8/2010	26	2	9/8/2010	25	12	9/8/2010	18	6
10/28/2010	30	0	10/28/2010	30	0	10/28/2010	28	22	10/28/2010	33	1
11/23/2010	21	1	11/23/2010	25	0	11/23/2010	26	88	11/23/2010	27	0
12/22/2010	30	0	12/22/2010	30	0	12/22/2010	30	73	12/22/2010	32	0
1/12/2011	20	3	1/12/2011	26	3	1/12/2011	26	3	1/12/2011	27	3
2/21/2011	35	2	2/21/2011	68	13	2/21/2011	47	32	2/21/2011	70	191
3/16/2011	41	0	3/16/2011	60	1	3/16/2011	62	21	3/16/2011	62	133
4/15/2011	45	2	4/15/2011	55	4	4/15/2011	57	52	4/15/2011	60	561
5/26/2011	42	0	5/26/2011	50	0	5/26/2011	53	5	5/26/2011	55	24
6/8/2011	50	97	6/8/2011	49	0	6/8/2011	50	31	6/8/2011	51	167
7/12/2011	41	0	7/12/2011	49	1	7/12/2011	52	5	7/12/2011	54	33
8/24/2011	38	0	8/24/2011	38	4	8/24/2011	37	4	8/24/2011	40	10
9/22/2011	27	8	9/22/2011	26	16	9/22/2011	26	117	9/22/2011	27	791
10/27/2011	32	0	10/27/2011	31	40	10/27/2011	32	75	10/27/2011	33	446
1/25/2012	28	0	1/25/2012	28	40	1/25/2012	29	139	1/25/2012	29	308
3/1/2012	34	0	3/1/2012	33	0	3/1/2012	34	31	3/1/2012	35	33

TABLE 8A: SVE WELL DATA

All Measurements = Feet
 NM = not measured
 OVA Readings = ppm
 Vacuum = in of H₂O

Facility Name: Waco #11 (Former Hess Station No. 09274) Facility ID#: 62/8517044

WELL NO.	VE-1	VE-2	VE-3	VE-4
DIAMETER	4-inch	4-inch	4-inch	4-inch
WELL DEPTH	12	12	12	12
SCREEN INT.	10	10	10	10

Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA
4/3/2012	28	4	4/3/2012	27	6	4/3/2012	28	21	4/3/2012	28	14
5/2/2012	28	3	5/2/2012	28	0	5/2/2012	26	81	5/2/2012	28	634
6/14/2012	10	1	6/14/2012	30	0	6/14/2012	32	21	6/14/2012	35	124
7/19/2012		OFF	7/19/2012	40	2	7/19/2012	25	0	7/19/2012	45	55
8/8/2012	NM	68	8/8/2012	NM	10	8/8/2012	NM	92	8/8/2012	NM	120
9/19/2012	45	7	9/19/2012	42	1	9/19/2012	42	9	9/19/2012	45	12
10/29/2012	43	108	10/29/2012	43	14	10/29/2012	44	0	10/29/2012	41	380
11/20/2012	60	0	11/20/2012	38	30	11/20/2012	40	21	11/20/2012	41	45
12/19/2012	31	3	12/19/2012	30	1	12/19/2012	31	0	12/19/2012	33	172
1/22/2013	20	0	1/22/2013	20	0	1/22/2013	21	0	1/22/2013	18	0
2/11/2013	32	0	2/11/2013	31	1	2/11/2013	35	0	2/11/2013	36	26
3/13/2013	70	3	3/13/2013		OFF	3/13/2013	40	3	3/13/2013	48	1
4/9/2013	41	0	4/9/2013		OFF	4/9/2013	43	0	4/9/2013	43	18
5/7/2013	68	0	5/7/2013		OFF	5/7/2013	67	0	5/7/2013	70	0
6/11/2013	74	0	6/11/2013		OFF	6/11/2013	76	0	6/11/2013	75	0
7/18/2013	39	5	7/18/2013		OFF	7/18/2013	39	5	7/18/2013	40	19

TABLE 8A: SVE WELL DATA

All Measurements = Feet
 NM = not measured
 OVA Readings = ppm
 Vacuum = in of H₂O

Facility Name: Waco #11 (Former Hess Station No. 09274) Facility ID#: 62/8517044

WELL NO.	VE-5	VE-6	VE-7	VE-8
DIAMETER	4-inch	4-inch	4-inch	4-inch
WELL DEPTH	12	12	12	12
SCREEN INT.	10	10	10	10

Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA
12/1/2009	6	267	12/1/2009	28	33	12/1/2009	21	48	12/1/2009	20	246
12/22/2009	30	NM	12/22/2009	30	NM	12/22/2009	25	NM	12/22/2009	20	NM
1/22/2010	55	OFF	1/22/2010	30	**	1/22/2010	38	**	1/22/2010	49	**
2/17/2010	9	**	2/17/2010	20	**	2/17/2010	48	**	2/17/2010	42	4
3/23/2010	30	45	3/23/2010	9	**	3/23/2010	9	**	3/23/2010	9	**
4/14/2010	38	212	4/14/2010	28	3	4/14/2010	40	**	4/14/2010	6	**
5/20/2010	60	156	5/20/2010	38	0	5/20/2010	39	**	5/20/2010	39	0
6/25/2010	41	347	6/25/2010	60	0	6/25/2010	45	2	6/25/2010	58	7
7/29/2010	27	45	7/29/2010	41	1200	7/29/2010	28	**	7/29/2010	40	278
8/18/2010	18	37	8/18/2010	19	19	7/29/2010	27	1	7/29/2010	27	34
9/8/2010	24	40	9/8/2010	23	3	8/18/2010	21	1	8/18/2010	21	6
10/28/2010	32	9	10/28/2010	10	0	9/8/2010	19	0	9/8/2010	25	0
11/23/2010	26	51	11/23/2010	27	1	10/28/2010	33	0	10/28/2010	10	9
12/22/2010	31	22	12/22/2010	31	4	11/23/2010	24	0	11/23/2010	26	48
1/12/2011	28	4	1/12/2011	28	2	12/22/2010	31	6	12/22/2010	32	53
2/21/2011	70	252	2/21/2011	70	3	1/12/2011	24	5	1/12/2011	26	4
3/16/2011	61	101	3/16/2011	60	5	2/21/2011	35	**	2/21/2011	45	21
4/15/2011	58	19	4/15/2011	57	7	3/16/2011	48	**	3/16/2011	50	3
5/26/2011	52	22	5/26/2011	52	51	4/15/2011	52	**	4/15/2011	43	27
6/8/2011	50	63	6/8/2011	51	29	5/26/2011	43	**	5/26/2011	38	1
7/12/2011	38	17	7/12/2011	51	37	6/8/2011	41	**	6/8/2011	50	5
8/24/2011	27	488	8/24/2011	40	0	7/12/2011	41	**	7/12/2011	47	12
9/22/2011	32	245	9/22/2011	27	108	8/24/2011	40	7	8/24/2011	39	2
10/27/2011	28	298	10/27/2011	32	69	9/22/2011	27	54	9/22/2011	27	154
1/25/2012	28	298	1/25/2012	28	122	10/27/2011	23	**	10/27/2011	32	29
1/25/2012	28	298	1/25/2012	28	122	1/25/2012	29	57	1/25/2012	29	66
3/1/2012	33	380	3/1/2012	34	97	1/25/2012	29	57	1/25/2012	29	66
						3/1/2012	35	27	3/1/2012	34	62

TABLE 8A: SVE WELL DATA

All Measurements = Feet
 NM = not measured
 OVA Readings = ppm
 Vacuum = in of H₂O

Facility Name: Waco #11 (Former Hess Station No. 09274) Facility ID#: 62/8517044

WELL NO.	VE-5	VE-6	VE-7	VE-8
DIAMETER	4-inch	4-inch	4-inch	4-inch
WELL DEPTH	12	12	12	12
SCREEN INT.	10	10	10	10

Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA
4/3/2012	28	31	4/3/2012	28	24	4/3/2012	28	6	4/3/2012	28	0
5/2/2012	26	149	5/2/2012	28	48	5/2/2012	28	127	5/2/2012	26	66
6/14/2012	32	61	6/14/2012	32	28	6/14/2012	54	63	6/14/2012	34	16
7/19/2012	41	44	7/19/2012	40	0	7/19/2012	64	8	7/19/2012	30	1
8/8/2012	NM	266	8/8/2012	NM	36	8/8/2012	NM	83	8/8/2012	NM	11
9/19/2012	40	14	9/19/2012	42	4	9/19/2012	45	11	9/19/2012	45	5
10/29/2012	43	119	10/29/2012	42	2	10/29/2012	40	0	10/29/2012	44	4
11/20/2012	40	0	11/20/2012	38	1	11/20/2012	NM	0	11/20/2012	52	0
12/19/2012	31	85	12/19/2012	32	0	12/19/2012	32	7	12/19/2012	31	2
1/22/2013	21	0	1/22/2013	22	10	1/22/2013	22	3	1/22/2013	22	0
2/11/2013	34	64	2/11/2013	32	38	2/11/2013	32	24	2/11/2013	35	10
3/13/2013	46	14	3/13/2013	OFF	OFF	3/13/2013	OFF	OFF	3/13/2013	60	0
4/9/2013	42	0	4/9/2013	OFF	OFF	4/9/2013	OFF	OFF	4/9/2013	43	0
5/7/2013	69	2	5/7/2013	OFF	OFF	5/7/2013	OFF	OFF	5/7/2013	69	1
6/11/2013	76	0	6/11/2013	OFF	OFF	6/11/2013	OFF	OFF	6/11/2013	78	0
7/18/2013	39	51	7/18/2013	OFF	OFF	7/18/2013	OFF	OFF	7/18/2013	40	0

TABLE 8A: SVE WELL DATA

All Measurements = Feet
 NM = not measured
 OVA Readings = ppm
 Vacuum = in of H₂O

Facility Name: Waco #11 (Former Hess Station No. 09274) Facility ID#: 62/8517044

WELL NO.	VE-9	VE-10/MMW-19*	VE-11
DIAMETER	4-inch	4-inch	4-inch
WELL DEPTH	12	12	12
SCREEN INT.	10	10	10

Date	VE-9		VE-10/MMW-19*		VE-11	
	Vacuum	OVA	Vacuum	OVA	Vacuum	OVA
12/1/2009		OFF		OFF		
12/22/2009	30	NM	30	NM	12	358
1/22/2010	32	**	45	**	30	NM
2/17/2010	55	**	55	**	35	**
3/23/2010	9	**	9	**	50	**
4/14/2010	23	**	29	22	9	**
5/20/2010	28	**	38	**	28	7
6/25/2010	40	31	40	342	36	**
7/21/2010	42	260	40	303	60	83
7/29/2010	27	63	27	180	41	5
8/18/2010	23	9	22	6	27	17
9/8/2010	19	6	28	8	22	1
10/28/2010	32	16	31	2	27	1
11/23/2010	20	10	26	172	18	7
12/22/2010	31	105	31	17	23	7
11/12/2011	20	7	26	86	32	4
2/21/2011	53	**	41	220	22	18
3/16/2011	44	82	44	14	52	**
4/15/2011	41	19	56	74	50	**
5/26/2011	38	4	51	45	40	**
6/8/2011	43	**	43	42	34	17
7/12/2011	37	7	40	3	31	**
8/24/2011	40	15	39	265	38	41
9/22/2011	26	154	27	566	39	22
10/27/2011	30	**	31	67	27	42
1/25/2012	29	48	29	496	29	47
1/25/2012	29	48	29	496	29	80
3/1/2012	34	24	33	380	29	80
					35	40

TABLE 8A: SVE WELL DATA

All Measurements = Feet
 NM = not measured
 OVA Readings = ppm
 Vacuum = in of H₂O

Facility Name: Waco #11 (Former Hess Station No. 09274) Facility ID#: 62/8517044

WELL NO.	VE-9	VE-10/MW-19*	VE-11
DIAMETER	4-inch	4-inch	4-inch
WELL DEPTH	12	12	12
SCREEN INT.	10	10	10

Date	Vacuum	OVA	Date	Vacuum	OVA	Date	Vacuum	OVA
4/3/2012	28	40	4/3/2012	26	12	4/3/2012	28	0
5/2/2012	27	308	5/2/2012	26	310	5/2/2012	27	52
6/14/2012	35	190	6/14/2012	32	103	6/14/2012		OFF
7/19/2012	43	21	7/19/2012	40	9	7/19/2012		OFF
8/8/2012	NM	70	8/8/2012	NM	NM	8/8/2012		OFF
9/19/2012	42	NM	9/19/2012	42	556	9/19/2012		OFF
10/29/2012	44	90	10/29/2012	42	171	10/29/2012	44	0
11/20/2012	40	17	11/20/2012	NM	59	11/20/2012	38	0
12/19/2012	32	57	12/19/2012	31	129	12/19/2012	32	8
1/22/2013	22	0	1/22/2013	22	24	1/22/2013	22	4
2/11/2013	31	12	2/11/2013	36	135	2/11/2013	35	18
3/13/2013	46	0	3/13/2013	40	0	3/13/2013		OFF
4/9/2013	43	0	4/9/2013	42	0	4/9/2013		OFF
5/7/2013	70	4	5/7/2013	70	4	5/7/2013		OFF
6/11/2013	76	4	6/11/2013	70	11	6/11/2013		OFF
7/18/2013	39	6	7/18/2013	38	32	7/18/2013		OFF

NOTES:

* Well MW-19 was modified for vacuum extraction and added to the piping for well VE-10 on March 17, 2009.

** wet

TABLE 9: AIR SPARGING WELL DATA - ZONE 1

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

All Measurements = Feet
No Data = Blank
Flow = CFM

WELL NO.	AS-2/AS-3	AS-6/AS-7	AS-11/AS-12	AS-17/AS-18
DIAMETER	2-inch	2-inch	2-inch	2-inch
WELL DEPTH	30/30	30/30	30/30	30/30
SCREEN INT.	5/5	5/5	5/5	5/5
TOC ELEVATION				

Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
6/25/2009	8.5	6.0	6/25/2009	8.5	6.5	6/25/2009	7.5	7.5	6/25/2009	9.0	7.0
7/20/2009	12.0	6.0	7/20/2009	12.0	7.0	7/20/2009	12.0	8.0	7/20/2009	12.0	7.5
12/1/2009	off	off	12/1/2009	off	off	12/1/2009	off	off	12/1/2009	off	off
3/23/2010	3.8	8.0	3/23/2010	3.8	7.5	3/23/2010	4.0	11.0	3/23/2010	4.0	8.0
4/14/2010	4.8	7.0	4/14/2010	4.8	7.0	4/14/2010	4.4	10.0	4/14/2010	3.6	8.0
5/20/2010	3.0	8.0	5/20/2010	3.0	7.0	5/20/2010	3.0	10.0	5/20/2010	3.0	8.5
6/25/2010	3.0	7.5	6/25/2010	3.0	7.0	6/25/2010	2.8	8.0	6/25/2010	2.8	8.0
7/21/2010	9.2	8.0	7/21/2010	8.0	8.0	7/21/2010	7.6	9.0	7/21/2010	8.0	9.0
7/29/2010	6.0	7.5	7/29/2010	6.0	7.0	7/29/2010	6.0	9.0	7/29/2010	6.0	8.0
8/18/2010	6.0	7.5	8/18/2010	4.6	7.0	8/18/2010	4.8	10.0	8/18/2010	5.6	8.0
9/8/2010	6.0	7.5	9/8/2010	6.0	7.0	9/8/2010	6.0	9.0	9/8/2010	6.0	8.0
10/28/2010	6.0	7.0	10/28/2010	5.8	7.0	10/28/2010	5.0	9.0	10/28/2010	4.8	8.0
11/23/2010	9.0	7.0	11/23/2010	5.4	6.0	11/23/2010	5.0	8.0	11/23/2010	4.4	7.0
12/22/2010	9.0	7.5	12/22/2010	7.0	6.0	12/22/2010	9.0	9.0	12/22/2010	6.0	7.0
1/12/2011	6.0	7.0	1/12/2011	5.0	7.0	1/12/2011	4.0	8.0	1/12/2011	3.0	7.5
2/21/2011	5.0	7.0	2/21/2011	9.0	7.0	2/21/2011	3.0	8.0	2/21/2011	5.0	8.0
3/16/2011	9.0	8.0	3/16/2011	3.0	6.0	3/16/2011	5.0	9.0	3/16/2011	3.4	8.0
4/15/2011	8.0	8.0	4/15/2011	3.0	7.0	4/15/2011	7.6	9.0	4/15/2011	3.2	8.0
5/26/2011	12.0	7.0	5/26/2011	3.0	6.0	5/26/2011	8.0	8.0	5/26/2011	3.0	7.0
6/8/2011	10.6	7.0	6/8/2011	3.4	6.0	6/8/2011	9.6	9.0	6/8/2011	3.6	7.0
7/12/2011	9.2	7.0	7/12/2011	3.2	6.0	7/12/2011	9.2	7.0	7/12/2011	3.8	7.0
8/24/2011											
9/22/2011	12.0	6.0	9/22/2011	4.0	5.0	9/22/2011	8.8	7.0	9/22/2011	4.6	6.0
10/27/2011	9.0	7.0	10/27/2011	3.8	5.0	10/27/2011	8.4	8.0	10/27/2011	4.6	6.0
1/25/2012	off	off	1/25/2012	off	off	1/25/2012	off	off	1/25/2012	off	off
3/1/2012	10.6	7.0	3/1/2012	7.2	7.0	3/1/2012	14.0	6.0	3/1/2012	12.2	6.0
4/3/2012	8.2	7.0	4/3/2012	13.0	5.0	4/3/2012	3.2	7.0	4/3/2012	7.8	6.5
5/2/2012	7.8	6.0	5/2/2012	12.2	5.0	5/2/2012	4.0	7.0	5/2/2012	9.0	6.5
6/14/2012	12.0	6.0	6/14/2012	3.0	6.0	6/14/2012	3.0	8.0	6/14/2012	3.0	7.0
7/19/2012	6.4	9.0	7/19/2012	3.0	8.0	7/19/2012	off	off	7/19/2012	2.2	9.0
8/8/2012	4.0	11.0	8/8/2012	4.0	8.0	8/8/2012	off	off	8/8/2012	4.0	9.0
9/19/2012	4.0	10.0	9/19/2012	4.0	10.0	9/19/2012	off	off	9/19/2012	4.0	10.0
10/29/2012	2.0	8.0	10/29/2012	2.8	7.5	10/29/2012	2.4	9.5	10/29/2012	2.8	8.0
11/20/2012	9.0	9.0	11/20/2012	2.2	7.0	11/20/2012	2.0	6.5	11/20/2012	2.6	9.0
12/19/2012	10.0	9.0	12/19/2012	2.4	7.0	12/19/2012	2.4	6.0	12/19/2012	3.2	8.0

TABLE 9: AIR SPARGING WELL DATA - ZONE 1

All Measurements = Feet
No Data = Blank

Facility Name: Waco #11 (Former Hess Station No. 09274)
Facility ID#: 62/8517044

Flow = CFM

WELL NO.	DIAMETER	WELL DEPTH	SCREEN INT.	TOC ELEVATION
AS-2/AS-3	2-inch	30/30	5/5	
AS-6/AS-7	2-inch	30/30	5/5	
AS-11/AS-12	2-inch	30/30	5/5	
AS-17/AS-18	2-inch	30/30	5/5	

Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
1/22/2013	9.8	8.0	1/22/2013	3.0	6.0	1/22/2013	3.4	11.0
2/11/2013	10.0	8.0	2/11/2013	3.0	6.0	2/11/2013	2.8	10.0
3/13/2013	8.5	10.0	3/13/2013	8.0	9.0	3/13/2013	7.5	14.0
4/9/2013	9.0	8.0	4/9/2013	9.0	7.0	4/9/2013	off	off
5/7/2013	7.0	9.0	5/7/2013	8.0	6.0	5/7/2013	off	off
6/11/2013	7.0	8.0	6/11/2013	6.8	7.0	6/11/2013	off	off
7/18/2013	5.0	10.0	7/18/2013	7.2	8.5	7/18/2013	off	off

TABLE 9: AIR SPARGING WELL DATA - ZONE 1

All Measurements = Feet
 No Data = Blank
 Flow = CFM

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

WELL NO.	DIAMETER	WELL DEPTH	SCREEN INT.	TOC ELEVATION	AS-19/AS-22	AS-23/AS-24
	2-inch	30/30	5/5		2-inch	30/30
					5/5	5/5

Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
6/25/2009	9.0	7.0	6/25/2009	5.0	7.5			
7/20/2009	12.0	7.5	7/20/2009	12.0	8.0			
12/1/2009	off		12/1/2009	off				
3/23/2010	3.6	8.0	3/23/2010	1.8	8.0			
4/14/2010	2.4	8.0	4/14/2010	3.6	8.0			
5/20/2010	3.0	8.0	5/20/2010	3.0	8.0			
6/25/2010	2.4	7.5	6/25/2010	3.0	7.0			
7/21/2010	8.0	8.0	7/21/2010	5.4	9.0			
7/29/2010	6.2	8.0	7/29/2010	6.8	9.0			
8/18/2010	6.0	8.0	8/18/2010	6.0	8.0			
9/8/2010	6.2	8.0	9/8/2010	6.8	9.0			
10/28/2010	6.0	7.0	10/28/2010	4.6	7.0			
11/23/2010	5.8	7.5	11/23/2010	5.4	7.0			
12/22/2010	9.0	7.0	12/22/2010	6.0	9.0			
1/12/2011	3.0	6.5	1/12/2011	6.0	7.0			
2/21/2011	4.0	8.0	2/21/2011	3.0	8.0			
3/16/2011	5.6	8.0	3/16/2011	5.0	8.0			
4/15/2011	11.0	8.0	4/15/2011	4.0	8.0			
5/26/2011	13.0	7.5	5/26/2011	5.0	7.0			
6/8/2011	10.2	8.0	6/8/2011	5.8	8.0			
7/12/2011	10.6	6.0	7/12/2011	5.2	8.0			
8/24/2011			system off (starter)					
9/22/2011	9.2	7.0	9/22/2011	7.6	8.0			
10/27/2011	8.0	6.5	10/27/2011	4.8	8.5			
1/25/2012	off		1/25/2012	off				
3/1/2012	8.4	7.0	3/1/2012	7.8	7.0			
4/3/2012	6.2	6.5	4/3/2012	10.0	6.0			
5/2/2012	5.6	7.0	5/2/2012	9.8	7.0			
6/14/2012	3.0	7.0	6/14/2012	3.0	9.0			
7/19/2012	2.2	9.0	7/19/2012	8.0	9.0			
8/8/2012	4.0	10.0	8/8/2012	4.0	8.0			
9/19/2012	4.0	11.0	9/19/2012	4.0	10.0			
10/29/2012	2.9	8.5	10/29/2012	2.8	7.5			
11/20/2012	2.4	8.0	11/20/2012	2.6	8.0			
12/19/2012	2.4	8.0	12/19/2012	2.4	8.0			

TABLE 9: AIR SPARGING WELL DATA - ZONE 1

All Measurements = Feet
 No Data = Blank
 Flow = CFM

Facility Name: Waco #11 (Former Hess Station No. 09274) Facility ID#: 628617044

WELL NO.	DIAMETER	WELL DEPTH	SCREEN INT.	TOC ELEVATION
AS-19/AS-22	2-inch	30/30	5/5	
AS-23/AS-24	2-inch	30/30	5/5	

Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
1/22/2013	3.0	8.0	1/22/2013	2.8	7.0			
2/11/2013	3.0	7.0	2/11/2013	2.6	7.0			
3/13/2013	9.0	7.0	3/13/2013	7.0	9.0			
4/9/2013	9.0	10.0	4/9/2013	7.8	10.0			
5/7/2013	8.4	9.0	5/7/2013	8.0	9.0			
6/11/2013	8.8	9.0	6/11/2013	8.0	9.0			
7/18/2013	9.2	9.0	7/18/2013	7.0	9.5			

Note: Air sparge system was operational from 6/24/09 to 7/30/09. Restarted with replacement trailer on March 23, 2010.

TABLE 9A: AIR SPARGING WELL DATA - ZONE 2

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

All Measurements = Feet
 No Data = Blank
 Flow = CFM

WELL NO.	DIAMETER	WELL DEPTH	SCREEN INT.	TOC ELEVATION
AS-1	2-inch	30	5	
AS-4	2-inch	25	5	
AS-5	2-inch	26	5	
AS-8	2-inch	30	5	

Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
6/25/2009	off	not installed	6/25/2009	not installed	not installed	6/25/2009	not installed	not installed	6/25/2009	not installed	not installed
7/20/2009	off	not installed	7/20/2009	not installed	not installed	7/20/2009	not installed	not installed	7/20/2009	not installed	not installed
12/1/2009	off	off	12/1/2009	off	off	12/1/2009	off	off	12/1/2009	off	off
3/23/2010	1.6	4.0	3/23/2010	1.8	6.0	3/23/2010	1.6	7.0	3/23/2010	1.6	8.0
4/14/2010	2.0	2.0	4/14/2010	2.2	6.0	4/14/2010	1.0	6.5	4/14/2010	2.0	8.0
5/20/2010	1.8	4.0	5/20/2010	2.0	6.0	5/20/2010	1.4	7.0	5/20/2010	1.8	8.0
6/25/2010	1.1	3.0	6/25/2010	1.6	5.0	6/25/2010	1.8	7.0	6/25/2010	1.8	7.5
7/21/2010	8.4	5.0	7/21/2010	4.8	7.0	7/21/2010	5.4	7.0	7/21/2010	4.2	9.0
7/29/2010	2.8	2.0	7/29/2010	3.0	6.0	7/29/2010	2.8	7.0	7/29/2010	3.2	8.0
8/18/2010	2.6	2.0	8/18/2010	3.0	5.0	8/18/2010	2.6	6.0	8/18/2010	3.0	7.5
9/8/2010	2.4	3.0	9/8/2010	2.8	6.0	9/8/2010	2.6	6.0	9/8/2010	2.6	7.5
10/28/2010	2.6	2.0	10/28/2010	2.6	5.0	10/28/2010	2.6	6.0	10/28/2010	2.4	7.0
11/23/2010	8.2	4.0	11/23/2010	2.6	5.0	11/23/2010	2.6	5.0	11/23/2010	2.4	7.0
12/22/2010	7.0	3.0	12/22/2010	3.0	6.0	12/22/2010	2.6	5.0	12/22/2010	9.0	8.0
1/12/2011	10.0	3.5	1/12/2011	3.0	6.0	1/12/2011	6.0	7.0	1/12/2011	10.0	7.0
2/21/2011	10.0	4.0	2/21/2011	3.0	6.0	2/21/2011	10.0	7.0	2/21/2011	3.0	7.0
3/16/2011	10.0	3.5	3/16/2011	3.0	6.0	3/16/2011	6.0	7.0	3/16/2011	10.0	7.0
4/15/2011	8.6	5.0	4/15/2011	5.0	6.5	4/15/2011	12.0	7.0	4/15/2011	11.6	8.0
5/26/2011	9.0	4.0	5/26/2011	4.0	6.0	5/26/2011	12.0	6.0	5/26/2011	11.0	8.0
6/8/2011	10.0	5.0	6/8/2011	5.6	6.0	6/8/2011	10.2	6.0	6/8/2011	11.0	6.0
7/12/2011	8.2	6.0	7/12/2011	6.0	5.5	7/12/2011	10.2	6.0	7/12/2011	8.4	7.0
7/12/2011	8.2	6.0	7/12/2011	6.0	5.5	7/12/2011	10.2	6.0	7/12/2011	8.4	7.0
9/22/2011	7.6	7.0	9/22/2011	6.8	5.0	9/22/2011	10.6	5.0	9/22/2011	9.4	7.0
10/27/2011	8.4	7.0	10/27/2011	6.8	5.0	10/27/2011	10.6	5.0	10/27/2011	9.4	7.0
1/25/2012	off	off	1/25/2012	off	off	1/25/2012	off	off	1/25/2012	off	off
3/1/2012	9.6	7.0	3/1/2012	12.4	5.5	3/1/2012	10.6	5.0	3/1/2012	off	off
4/3/2012	9.4	6.5	4/3/2012	8.8	6.0	4/3/2012	8.2	5.0	4/3/2012	off	off
5/2/2012	9.6	7.0	5/2/2012	12.0	6.0	5/2/2012	9.6	5.0	5/2/2012	off	off
6/14/2012	3.0	3.0	6/14/2012	3.0	4.0	6/14/2012	3.0	5.0	6/14/2012	10.0	9.0
7/19/2012	2.6	6.0	7/19/2012	2.4	7.0	7/19/2012	2.1	8.0	7/19/2012	10.0	8.0
8/8/2012	4.0	9.0	8/8/2012	4.0	8.0	8/8/2012	4.0	8.0	8/8/2012	10.0	10.0
9/19/2012	4.0	12.0	9/19/2012	4.0	8.0	9/19/2012	4.0	9.0	9/19/2012	10.0	11.0

TABLE 9A: AIR SPARGING WELL DATA - ZONE 2

All Measurements = Feet
 No Data = Blank
 Flow = CFM

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

WELL NO.	DIAMETER	WELL DEPTH	SCREEN INT.	TOC ELEVATION
AS-1	2-inch	30	5	
AS-4	2-inch	25	5	
AS-5	2-inch	26	5	
AS-8	2-inch	30	5	

Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
10/29/2012	3.2	4.0	10/29/2012	3.0	6.0	10/29/2012	10.0	9.5
11/20/2012	2.8	5.0	11/20/2012	3.0	6.5	11/20/2012	10.0	10.0
12/19/2012	3.0	4.0	12/19/2012	3.0	6.0	12/19/2012	12.2	8.0
1/22/2013	3.0	4.5	1/22/2013	2.8	6.0	1/22/2013	12.4	8.0
2/11/2013	3.0	4.0	2/11/2013	2.8	6.0	2/11/2013	12.2	8.0
3/13/2013	5.0	10.0	3/13/2013	4.2	9.0	3/13/2013	10.0	9.0
4/9/2013	5.4	8.5	4/9/2013	4.4	8.0	4/9/2013	10.0	8.0
5/7/2013	5.4	8.0	5/7/2013	4.2	7.0	5/7/2013	8.4	8.0
6/11/2013	5.0	8.0	6/11/2013	4.7	7.0	6/11/2013	8.0	8.0
7/18/2013	6.0	10.5	7/18/2013	4.0	7.0	7/18/2013	7.4	9.0

TABLE 9A: AIR SPARGING WELL DATA - ZONE 2

All Measurements = Feet
 No Data = Blank
 Flow = CFM

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

WELL NO.	AS-9	AS-10	AS-13/AS-14	AS-15
DIAMETER	2-inch	2-inch	2-inch	2-inch
WELL DEPTH	30	30	30/25	25
SCREEN INT.	5	5	5/5	5
TOC ELEVATION				

Date	AS-9		AS-10		AS-13/AS-14		AS-15	
	Flow	PSI	Flow	PSI	Flow	PSI	Flow	PSI
6/25/2009	not installed	not installed	not installed	not installed	not installed	not installed	not installed	not installed
7/20/2009	not installed	not installed	not installed	not installed	not installed	not installed	not installed	not installed
12/1/2009	off	off	off	off	off	off	off	off
3/23/2010	1.8	8.0	1.8	8.0	3.6	7.0	1.8	7.0
4/14/2010	2.2	8.0	2.8	8.0	4.0	6.0	2.0	7.0
5/20/2010	1.8	8.0	2.0	9.0	3.0	7.0	1.6	8.0
6/25/2010	2.0	7.0	1.8	6.5	3.2	6.0	1.8	7.0
7/21/2010	4.8	8.0	4.6	9.0	9.0	7.0	5.2	8.0
7/29/2010	3.2	8.0	2.8	7.5	6.0	6.0	3.0	7.0
8/18/2010	3.4	8.0	3.0	7.0	6.0	7.0	3.0	7.0
9/8/2010	3.2	8.0	2.8	7.5	6.0	6.0	3.0	7.0
10/28/2010	2.4	8.0	2.6	7.0	5.2	6.0	2.8	7.0
11/23/2010	2.6	6.5	2.4	6.5	5.2	5.0	2.6	6.0
12/22/2010	7.6	8.5	3.0	7.0	6.0	5.0	9.2	7.0
1/12/2011	2.5	7.0	5.0	7.0	15.0	7.0	10.0	7.0
2/21/2011	3.0	7.0	7.0	8.0	14.0	7.0	10.0	8.0
3/16/2011	2.5	7.0	5.0	7.0	15.0	7.0	10.0	7.0
4/15/2011	3.0	8.0	8.8	8.0	11.2	7.0	9.6	8.0
5/26/2011	4.0	7.0	12.0	7.0	6.4	7.0	9.2	7.5
6/8/2011	4.0	8.0	11.2	8.0	10.0	7.5	10.6	8.0
7/12/2011	7.0	8.0	10.2	8.0	10.2	7.5	11.8	8.0
8/24/2011					system off (starter)			
9/22/2011	4.4	8.0	13.4	8.0	9/22/2011	12.8	7.0	7.0
10/27/2011	6.0	8.5	9.6	8.5	10/27/2011	11.0	6.5	6.0
1/25/2012	off	off	off	off	1/25/2012	off	off	off
3/1/2012	off	off	12.0	7.0	3/1/2012	off	off	off
4/3/2012	off	off	4.0	7.0	4/3/2012	off	off	off
5/2/2012	off	off	4.6	7.0	5/2/2012	off	off	off
6/14/2012	10.0	9.0	3.0	6.0	6/14/2012	10.0	7.0	7.0
7/19/2012	9.0	12.0	2.8	9.0	7/19/2012	10.0	10.0	10.0
8/8/2012	10.0	9.0	4.0	9.0	8/8/2012	10.0	9.0	9.0
9/19/2012	10.0	10.0	4.0	11.0	9/19/2012	10.0	10.0	10.0

TABLE 9A: AIR SPARGING WELL DATA - ZONE 2

All Measurements = Feet
 No Data = Blank
 Flow = CFM

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

WELL NO.	AS-9	AS-10	AS-13/AS-14	AS-15
DIAMETER	2-inch	2-inch	2-inch	2-inch
WELL DEPTH	30	30	30/25	25
SCREEN INT.	5	5	5/5	5
TOC ELEVATION				

Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
10/29/2012	10.0	10.0	10/29/2012	4.6	8.0	10/29/2012	10.2	9.0	10/29/2012	10.4	9.0
11/20/2012	10.0	9.0	11/20/2012	3.4	8.0	11/20/2012	10.0	9.0	11/20/2012	10.0	10.0
12/19/2012	9.8	10.0	12/19/2012	3.0	8.0	12/19/2012	11.0	8.0	12/19/2012	11.0	9.0
1/22/2013	11.4	8.5	1/22/2013	3.0	8.0	1/22/2013	12.4	8.0	1/22/2013	11.2	8.5
2/11/2013	11.2	9.0	2/11/2013	2.4	7.5	2/11/2013	12.2	8.0	2/11/2013	11.0	9.0
3/13/2013	9.2	9.0	3/13/2013	2.0	9.0	3/13/2013	10.0	9.0	3/13/2013	9.8	10.0
4/9/2013	8.6	10.0	4/9/2013	4.0	11.0	4/9/2013	8.4	9.0	4/9/2013	9.0	10.0
5/7/2013	10.8	10.0	5/7/2013	7.2	10.0	5/7/2013	8.6	8.0	5/7/2013	9.2	9.5
6/11/2013	10.4	10.0	6/11/2013	7.6	10.0	6/11/2013	8.4	8.0	6/11/2013	8.6	9.0
7/18/2013	8.4	10.5	7/18/2013	8.0	10.0	7/18/2013	8.0	8.0	7/18/2013	8.0	10.0

TABLE 9A: AIR SPARGING WELL DATA - ZONE 2

All Measurements = Feet
 No Data = Blank
 Flow = CFM

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

WELL NO.	AS-16	AS-20/AS-21
DIAMETER	2-inch	2-inch
WELL DEPTH	23	20/27
SCREEN INT.	3	3/5
TOC ELEVATION		

Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
6/25/2009	not installed		6/25/2009	not installed				
7/20/2009	not installed		7/20/2009	not installed				
12/1/2009	off		12/1/2009	off				
3/23/2010	1.8	6.0	3/23/2010	3.6	7.0			
4/14/2010	1.8	5.0	4/14/2010	3.6	6.0			
5/20/2010	1.8	6.0	5/20/2010	3.0	6.0			
6/25/2010	2.0	5.0	6/25/2010	3.2	6.0			
7/21/2010	4.2	6.0	7/21/2010	9.0	7.0			
7/29/2010	2.6	5.0	7/29/2010	5.2	6.0			
8/18/2010	2.6	5.0	8/18/2010	5.4	6.0			
9/8/2010	2.4	5.0	9/8/2010	5.0	6.0			
10/28/2010	2.4	5.0	10/28/2010	4.0	6.0			
11/23/2010	2.4	4.5	11/23/2010	8.6	6.0			
12/22/2010	2.6	4.0	12/22/2010	6.4	5.0			
1/12/2011	3.0	5.0	1/12/2011	15.0	7.0			
2/21/2011	3.0	5.0	2/21/2011	15.0	7.0			
3/16/2011	3.5	6.0	3/16/2011	14.0	6.0			
4/15/2011	4.0	6.0	4/15/2011	11.4	7.0			
5/26/2011	3.8	5.0	5/26/2011	12.0	6.0			
6/8/2011	4.2	5.0	6/8/2011	11.0	5.0			
7/12/2011	5.0	4.0	7/12/2011	11.8	5.5			
8/24/2011			system off (starter)					
9/22/2011	4.6	4.0	9/22/2011	11.6	6.0			
10/27/2011	4.6	4.0	10/27/2011	12.2	5.0			
1/25/2012	off		1/25/2012	off				
3/1/2012	off		3/1/2012	off				
4/3/2012	off		4/3/2012	off				
5/2/2012	off		5/2/2012	off				
6/14/2012	4.6	4.0	6/14/2012	10.0	6.0			
7/19/2012	3.0	7.0	7/19/2012	10.0	8.0			
8/8/2012	4.0	8.0	8/8/2012	10.0	8.0			
9/19/2012	4.0	8.0	9/19/2012	10.0	8.0			

TABLE 9A: AIR SPARGING WELL DATA - ZONE 2

All Measurements = Feet
 No Data = Blank
 Flow = CFM

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 62/8517044

WELL NO.	DIAMETER	WELL DEPTH	SCREEN INT.	TOC ELEVATION													
AS-16	2-inch	23	3		AS-20/AS-21	2-inch	20/27	3/5									
Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI	Date	Flow	PSI
10/29/2012	3.4	6.0	10/29/2012	10.4	7.5												
11/20/2012	3.2	6.0	11/20/2012	10.0	7.0												
12/19/2012	3.4	5.0	12/19/2012	10.8	7.0												
1/22/2013	3.2	5.0	1/22/2013	10.6	6.0												
2/11/2013	3.0	5.0	2/11/2013	10.2	6.0												
3/13/2013	2.6	6.0	3/13/2013	10.0	6.0												
4/9/2013	2.4	6.0	4/9/2013	9.4	7.0												
5/7/2013	2.4	6.0	5/7/2013	9.0	6.0												
6/11/2013	3.0	6.0	6/11/2013	8.6	6.0												
7/18/2013	3.0	6.0	7/18/2013	8.6	7.0												

TABLE 10: PRESSURE/VACUUM READINGS

Facility Name: Waco #11 (Former Hess Station No. 09274) Facility ID#: 628517044

Readings=in. water
NM=not measured

DATE	WELL NUMBER																		
	M-1	M-2	M-3	M-5	M-6	M-7	M-8	M-9	M-10	M-12	M-13	M-14	M-15	M-18	M-19*				
10/7/2008	-0.6	-1.0	-2.3	-0.5	-7.0	-2.8	2.6	-1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10/8/2008	-1.8	-6.3	-2.2	0.0	-2.5	-4.7	-1.7	-3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10/9/2008	-1.5	-4.7	-3.0	-0.5	-4.0	-6.1	2.4	-7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10/10/2008	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM				
10/17/2008	-1.0	-2.0	-2.1	-2.4	-4.0	-2.4	-1.4	-6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10/24/2008	-1.2	-4.1	-2.8	0.0	-4.3	-3.5	-1.7	-9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10/31/2008	0.0	-1.9	-1.4	0.0	-2.4	-0.8	-0.7	-5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10/17/2008	-1.0	-2.0	-2.1	-2.4	4.0	-2.4	-1.4	-6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10/24/2008	-1.2	-4.1	-2.8	0.0	-4.3	-3.5	-1.7	-9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
11/2/2008	0.0	-1.9	-1.4	0.0	-2.4	-0.8	-0.7	-5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
11/17/2008	-1.3	-4.1	-2.3	0.0	-4.9	-4.1	-2.3	-7.6	0.0	-1.7	0.0	0.0	0.0	0.0	0.0				
12/15/2008	-1.1	-4.4	-1.6	0.0	-3.2	-2.2	-1.6	-4.3	0.0	-1.0	0.0	-0.5	0.0	0.0	0.0				
1/12/2009	-1.2	-5.7	-1.4	0.0	-5.6	-4.5	-3.0	-6.3	0.0	-1.6	0.0	-0.7	0.0	0.0	0.0				
2/12/2009	-2.0	-4.6	-2.6	0.0	-8.6	-7.9	-5.0	-5.0	0.0	-3.2	0.0	-0.7	0.0	0.0	0.0				
3/18/2009	-1.7	-5.9	-2.2	-0.5	-4.3	-4.4	-2.6	-5.6	-0.5	-1.7	0.0	-0.8	0.0	0.0	0.0				
4/14/2009	-1.6	-6.6	-2.6	0.0	-7.0	-6.5	-2.9	-8.5	0.0	0.0	0.0	0.0	0.0	0.0	-19.7				
5/14/2009	-1.7	-6.2	-2.1	-0.7	-6.7	-5.2	-3.1	-6.6	-0.5	-2.4	0.0	0.0	0.0	0.0	-24.9				
6/25/2009	-1.0	-5.4	-1.0	0.0	-4.6	-3.8	-1.0	-5.8	0.0	0.0	0.0	-1.0	0.0	-0.6	-22.6				
7/20/2009	-0.8	-4.6	-0.7	0.0	-4.9	-3.5	63.4	-5.4	0.0	5.3	-0.7	-0.7	0.0	0.0	-21.2				
12/11/2009	-0.7	-4.4	-0.8	0.0	-3.9	-0.6	0.0	-0.6	0.0	0.0	0.0	-0.8	0.0	0.0	-20.2				
12/22/2009	-0.9	-3.5	-1.4	-0.3	-3.7	-3.1	-2.2	-4.8	0.0	-1.6	0.0	-0.4	0.0	0.0	-23.4				
1/22/2010	-1.4	-5.2	-1.4	-0.3	-9.5	-2.9	-1.4	-2.4	0.0	0.0	0.0	0.0	-1.8	-0.1	-26.5				
2/17/2010	-1.2	-6.5	-2.8	0.0	0.0	-4.1	-2.0	-5.2	0.0	-1.0	0.0	0.0	0.0	0.0	-40.1				
3/23/2010	0.7	bubbling over	2	0.0	1.3	0.7	bubbling over	1.1	0.0	bubbling over	0.1	0.0	0.0	0.0	-10.0				
4/14/2010	NM	3.5	0.0	0.0	0.0	1	81.8	0.8	0.0	30.6	0.0	0.0	0.0	0.0	-6.7				
5/20/2010	0.0	1.5	-0.8	0.0	0.0	-0.5	43.2	-0.8	0.0	0.0	-0.5	0.0	0.0	0.0	-38.1				
6/25/2010	-0.7	0.0	-2.0	-0.6	-1.9	-5.1	-1.5	-3.5	0.0	-2.1	0.0	0.0	0.0	0.0	-31.7				
7/21/2010	0.0	101	77.6	0.0	-0.6	0	49.4	1.6	0.0	-0.5	0.0	0.0	0.0	0.0	-31.6				
7/29/2010	0.0	1.8	0.0	0.0	0.0	-0.9	37.7	0.6	0.0	-0.5	0.0	0.0	0.0	0.0	-22.1				
8/19/2010	0.0	1.8	0.0	0.0	0.0	-0.6	28.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	-19.7				
9/8/2010	0.0	2.4	0.0	0.0	0.0	0.7	4.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	-23.1				
10/28/2010	0.0	5.4	0.0	0.0	0.0	0.6	18.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	-23.1				
11/23/2010	0.0	1.7	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.5	-0.6	0.0	0.0	0.0	-19.6				
12/22/2010	0	12.9	0.0	-0.7	0.0	1.0	4.92	2.5	0.0	0.0	0.0	0.0	0.0	0.0	-19.6				
1/12/2011	-0.2	-10.8	-8.3	0.0	-0.3	-2.6	1.0	-3.3	-0.3	-0.6	0.0	-0.5	0.0	0.0	-26.0				
2/21/2011	-0.5	14.5	25.8	0	0	1.6	-0.2	-0.5	0	0.1	0	-0.5	0.2	0	-42.3				
3/16/2011	0.3	4.1	3.1	0	0.2	1.6	68	0.4	-0.3	0	0	-0.5	0	0	-39.1				

TABLE 10: PRESSURE/VACUUM READINGS

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

Readings=in. water
NM=not measured

DATE	WELL NUMBER																		
	M-1	M-2	M-3	M-5	M-6	M-7	M-8	M-9	M-10	M-12	M-13	M-14	M-15	M-18	M-19*				
4/15/2011	0.3	13.5	43.5	0.0	0.7	2.6	29.7	3.1	0.0	0.0	0.0	0	0.0	0.0	-31.2				
5/26/2011	0.4	5	3.5	0.0	0.3	1.1	0.2	-0.7	-0.3	-0.1	0.0	-0.8	0.0	0.0	-52.6				
6/8/2011	0.4	6.3	2.7	0.0	2.7	1.7	19.1	-0.6	-0.3	0.0	0.0	-0.4	0.0	0.0	-29.5				
7/12/2011	0.6	12.4	3.1	0.0	NM	1.7	23.4	0.9	-0.2	-0.1	0.0	-0.2	0.0	0.0	-32.3				
8/24/2011	-0.8	-1.1	-2.2	-0.1	-0.8	-1.2	-1.4	-2.6	-0.4	-0.8	0.0	-0.4	-0.1	-0.2	-28.9				
9/22/2011	0.8	5.7	6.1	0.0	3.1	1.7	15.2	2.3	-0.2	0.1	0.2	0.0	0	0.1	-18.6				
10/27/2011	1.0	6.3	9.5	0.0	2.2	1.5	23.7	2.9	-0.1	0.2	0.1	0.0	0.1	0.0	-18.4				
1/25/2012	-0.8	-0.5	-1.5	0.0	-0.2	-0.3	-0.3	-1.4	-0.2	-0.2	0.0	-0.1	-0.1	0.0	-6.6				
3/1/2012	1.0	8.0	4.1	0.0	0.7	-0.1	4.7	0.7	-0.1	0.0	0.0	0.0	0.0	0.0	NM				
4/3/2012	0.4	4.3	0.8	0.0	-0.1	0.0	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	NM				
5/2/2012	-0.2	3.0	1.1	0.0	-0.4	-2.8	1.5	-2.9	-0.1	-0.2	-0.1	-0.3	0.0	0.0	-21.1				
6/14/2012	0.0	1.1	0.5	0.0	0.0	-0.7	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	-0.1	-27.0				
7/19/2012	0.0	13.4	0.0	0.0	0.2	0.0	NM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NM				
8/8/2012																			
9/19/2012	0.3	7.5	0.4	0.0	0.0	0.3	0.5	3.7	0.0	0.0	0.0	0.1	0.0	-1.1	-6.6				
10/29/2012	0.0	8.5	-0.4	0.0	5.9	6.7	54.6	1.6	0.0	0.0	0.0	0.0	0.3	0.0	-39.1				
11/20/2012	-0.3	-0.6	3.1	0.0	3.4	-0.5	37.5	0.0	-0.1	0.0	0.0	0.0	0.3	0.5	-26.1				
12/19/2012	0.4	6.2	-0.6	0.0	2.4	-0.1	0.5	0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	-18.8				
1/22/2013	0.0	-0.1	0.2	0.0	2.2	0.4	2.5	0.7	0.0	0.0	0.1	0.0	0.0	0.0	-18.1				
2/11/2013	0.9	1.2	-0.2	0.0	1.9	0.2	0.7	1.1	0.0	0.0	0.1	-0.1	0.0	0.0	-14.7				
3/13/2013	0.4	4.7	2.7	0.0	2.1	25.0	0.5	0.4	0.0	0.2	0.0	0.4	0.0	0.0	-25.4				
4/9/2013	0.2	4.0	1.7	0.0	3.0	-0.4	38.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-35.7				
5/7/2013	-0.4	-1.0	-0.2	0.0	1.7	-1.7	-0.4	-1.8	0.0	0.0	0.0	-0.6	-0.2	-0.2	-44.3				
6/11/2013	0.3	-0.1	0.2	0.0	0.0	2.0	>10	3.0	0.0	0.3	0.0	1.0	0.2	0.1	>10				
7/18/2013	0.0	2.8	2.0	0.0	0.2	0.5	69.6	0.5	0.1	0.0	0.0	0.0	0.0	0.0	-31.4				

* Well MW-19 was retrofitted for vacuum extraction and added to the piping for well VE-10 on March 17, 2009.

*AS system was off

TABLE 11: DISSOLVED OXYGEN SUMMARY

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

DATE	WELL NUMBER										
	M-1	M-2	M-3	M-5	M-6	M-7	M-8	M-9	M-10	M-12	M-13
8/15/2008*	3.77	NM	3.17	2.19	0.63	NM	1.06	NM	1.57	1.84	2.72
6/25/2009	0.83	0.36	0.84	0.48	1.16	1.03	8.25	1.29	0.82	7.77	1.06
7/20/2009	0.75	0.46	0.63	0.60	7.06	0.53	bubbling over	0.87	1.13	NM	NM
3/23/2010	4.90	bubbling over	4.77	5.10	0.93	2.44	bubbling over	0.74	1.45	bubbling over	NM
4/14/2010	0.64	0.53	2.28	0.47	5.42	1.29	6.97	0.65	0.76	5.76	0.57
5/20/2010	2.91	6.96	3.01	2.78	3.29	2.45	8.08	2.27	2.51	7.11	3.20
6/25/2010	2.70	2.36	2.09	1.85	2.01	3.32	7.88	2.98	1.51	2.43	2.44
7/21/2010	2.72	7.29	6.97	2.04	1.90	4.53	7.42	1.61	2.07	7.23	2.43
7/29/2010	2.43	3.36	5.31	2.15	2.33	3.18	7.70	2.54	3.47	3.96	1.40
8/19/2010	1.90	1.80	2.51	1.22	1.13	1.16	7.78	1.37	0.80	1.24	1.84
9/8/2010	1.79	2.57	7.63	1.43	2.32	1.38	7.91	1.42	1.81	2.01	1.30
10/28/2010	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
11/23/2010	1.09	1.61	7.05	0.62	0.93	0.51	8.12	0.57	0.79	0.91	0.98
12/22/2010	1.53	8.73	3.51	1.33	1.24	1.34	8.94	1.43	1.32	2.14	1.87
1/12/2011	5.05	9.35	9.45	4.22	1.25	3.60	10.39	2.25	1.81	3.65	NM
2/21/2011	1.07	8.27	8.79	1.17	1.90	1.15	8.47	0.82	1.49	0.89	1.99
3/16/2011	1.24	8.65	8.32	1.06	1.35	1.15	8.32	1.52	1.78	1.54	1.99
4/15/2011	2.79	8.70	7.92	1.80	1.68	7.72	8.18	2.70	2.40	2.94	1.91
5/26/2011	1.09	7.62	5.59	0.85	5.49	1.32	silted	0.99	1.11	1.39	1.77
6/8/2011	2.75	8.29	5.60	2.93	silted	2.52	7.66	2.73	3.39	3.12	3.03
7/12/2011	2.00	8.58	6.79	1.45	silted	1.80	8.00	1.22	2.25	2.51	2.21
8/24/2011*	0.73	1.20	1.78	0.39	0.62	0.73	1.71	0.67	0.82	1.28	2.10
9/22/2011	NM - DO meter malfunction										
10/27/2011	0.78	8.37	7.65	0.59	6.23	0.68	6.42	1.28	1.28	0.93	4.08
1/25/2012	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
3/1/2012	1.23	8.78	8.34	0.99	7.51	NM	8.75	NM	2.98	2.29	3.66
4/3/2012	0.82	4.74	7.04	0.87	6.67	NM	4.10	NM	1.38	2.15	6.63
5/2/2012	1.51	8.37	8.23	1.62	7.31	1.74	8.83	2.35	3.86	1.12	5.90
6/14/2012	0.49	5.72	5.62	0.49	2.08	0.35	5.43	0.39	0.41	0.37	0.44
7/19/2012	0.65	5.08	3.36	0.72	5.31	0.45	3.21	0.45	0.57	0.38	1.78
8/8/2012	0.84	4.78	4.79	1.80	NM	0.60	NM	0.60	1.07	1.75	0.47
9/19/2012	0.54	4.94	4.82	0.30	NM	0.36	4.46	0.30	0.51	0.81	1.64
10/29/2012	1.92	9.34	8.26	1.55	9.26	7.61	8.95	1.39	3.32	1.91	3.41
11/20/2012	2.31	9.22	9.62	1.32	9.28	1.86	9.83	2.14	1.73	2.48	5.14
12/19/2012	NM - DO meter malfunction										
1/22/2013	2.33	8.17	7.92	1.91	7.73	1.67	7.20	1.44	1.93	2.91	5.03
2/11/2013	9.68	2.67	2.79	3.87	9.88	3.28	9.43	2.87	3.62	4.46	4.82
3/13/2013	4.89	10.83	9.56	4.42	10.59	10.48	10.26	5.11	5.15	5.08	6.16
4/9/2013	0.91	9.06	8.67	0.58	8.62	0.51	8.22	0.48	2.39	2.30	2.91
5/7/2013	1.02	8.17	4.18	5.03	7.89	1.03	1.73	0.48	2.78	5.12	3.96
6/11/2013	0.07	8.44	0.18	0.28	7.58	0.06	8.19	0.04	4.76	5.67	2.03
7/18/2013	3.11	7.77	7.54	0.35	7.29	5.79	7.96	0.25	1.87	0.36	0.34

TABLE 11: DISSOLVED OXYGEN SUMMARY

Facility Name: Waco #11 (Former Hess Station No. 09274)

Facility ID#: 628517044

DATE	WELL NUMBER																				
	M-14	M-15	MW-18	MW-19																	
8/15/2008*	1.64	NM	1.65	NM																	
6/25/2009	1.56	0.92	3.88	1.49																	
7/20/2009	0.61	0.91	0.54	0.63																	
3/23/2010	2.62	3.88	4.85	0.80																	
7/29/2010	2.51	2.55	2.68	1.81																	
8/19/2010	0.70	2.32	1.75	1.30																	
9/8/2010	0.75	2.07	3.01	1.22																	
10/28/2010	NM	NM	NM	NM																	
11/23/2010	1.18	0.68	1.49	0.89																	
12/22/2010	1.52	1.72	3.73	1.76																	
11/12/2001	2.55	3.15	4.35	1.60																	
2/21/2011	4.36	5.55	5.69	0.74																	
3/16/2011	3.45	3.07	6.25	1.69																	
4/14/2011	2.9	4.06	5.55	2.23																	
5/26/2011	1.66	1.4	2.29	1.21																	
6/8/2011	3.01	2.75	1.86	2.9																	
7/12/2011	2.17	1.74	1.83	3.94																	
8/24/2011*	0.85	0.96	1.66	0.47																	
9/22/2011	NM - DO meter malfunction																				
10/27/2011	2.73	0.93	0.82	1.46																	
1/25/2012	NM	NM	NM	NM																	
3/1/2012	4.49	2.55	6.18	NM																	
4/3/2012	NM	2.37	7.04	0.79																	
5/2/2012	4.07	2.12	4.92	1.52																	
6/14/2012	0.36	0.40	0.55	0.36																	
7/19/2012	0.48	1.58	1.68	0.36																	
8/8/2012	0.51	2.92	3.00	0.37																	
9/19/2012	1.07	2.20	2.4	0.28																	
10/29/2012	1.46	3.24	4.25	1.59																	
11/20/2012	1.92	2.27	4.85	2.79																	
12/19/2012	NM - DO meter malfunction																				
1/22/2013	2.48	3.13	5.06	1.81																	
2/11/2013	3.42	3.03	7.14	3.24																	
3/13/2013	7.72	6.26	6.90	7.38																	
4/9/2013	1.43	1.56	5.79	0.74																	
5/7/2013	1.64	3.56	5.18	6.45																	
6/11/2013	0.07	0.11	4.64	0.44																	
7/18/2013	3.7	0.58	2.12	3.26																	

Dissolved oxygen in mg/L

NM = not measured

NA = not available

* = baseline

+ = AS system off

APPENDIX B

**Analytical Reports
Groundwater Sampling Logs**



04/24/13

Technical Report for

Earth Systems

Hess 9274; 2410 Hwy 19 S, Perry, FL

Accutest Job Number: FA3546

Sampling Date: 04/09/13

Report to:

Earth Systems
223 12th Ave N
Jacksonville Beach, FL 32250
rroberts@earthsys.net; nmanarang@earthsys.net
ATTN: Noel Manarang

Total number of pages in report: 17



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

H. Behzadi
Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Sue Bell 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), AK, AR, GA, KY, MA, NV, OK, UT, VA, WA, WI

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Test results relate only to samples analyzed.

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Sample Summary

Earth Systems

Job No: FA3546

Hess 9274; 2410 Hwy 19 S, Perry, FL

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA3546-1	04/09/13	12:20 PJ	04/10/13	AQ	Ground Water	M-1
FA3546-2	04/09/13	13:07 PJ	04/10/13	AQ	Ground Water	M-9
FA3546-3	04/09/13	13:35 PJ	04/10/13	AQ	Ground Water	M-6
FA3546-4	04/09/13	14:20 PJ	04/10/13	AQ	Ground Water	M-7
FA3546-5	04/09/13	14:47 PJ	04/10/13	AQ	Ground Water	M-8
FA3546-6	04/09/13	15:23 PJ	04/10/13	AQ	Ground Water	MW-19
FA3546-7	04/09/13	15:50 PJ	04/10/13	AQ	Ground Water	M-17
FA3546-8	04/09/13	10:15 PJ	04/10/13	AIR	Air	EFFLUENT AIR

Summary of Hits

Job Number: FA3546
Account: Earth Systems
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL
Collected: 04/09/13

2

Lab Sample ID	Client Sample ID	Result/ Analyte	Qual	PQL	MDL	Units	Method
FA3546-1	M-1						
		Benzene	187	2.5	0.53	ug/l	SW846 8260B
		Toluene	25.1	2.5	0.50	ug/l	SW846 8260B
		Ethylbenzene	185	2.5	0.73	ug/l	SW846 8260B
		Xylene (total)	447	7.5	1.2	ug/l	SW846 8260B
		Methyl Tert Butyl Ether	114	2.5	0.53	ug/l	SW846 8260B
FA3546-2	M-9						
		Benzene	6570	100	21	ug/l	SW846 8260B
		Toluene	3000	100	20	ug/l	SW846 8260B
		Ethylbenzene	973	100	29	ug/l	SW846 8260B
		Xylene (total)	6400	300	50	ug/l	SW846 8260B
		Methyl Tert Butyl Ether	8360	100	21	ug/l	SW846 8260B
FA3546-3	M-6						
		No hits reported in this sample.					
FA3546-4	M-7						
		Benzene	157	5.0	1.1	ug/l	SW846 8260B
		Toluene	215	5.0	1.0	ug/l	SW846 8260B
		Ethylbenzene	153	5.0	1.5	ug/l	SW846 8260B
		Xylene (total)	1300	300	50	ug/l	SW846 8260B
		Methyl Tert Butyl Ether	46.2	5.0	1.1	ug/l	SW846 8260B
FA3546-5	M-8						
		Methyl Tert Butyl Ether	1.8	1.0	0.21	ug/l	SW846 8260B
FA3546-6	MW-19						
		Benzene	261	5.0	1.1	ug/l	SW846 8260B
		Toluene	25.6	5.0	1.0	ug/l	SW846 8260B
		Ethylbenzene	162	5.0	1.5	ug/l	SW846 8260B
		Xylene (total)	528	15	2.5	ug/l	SW846 8260B
		Methyl Tert Butyl Ether	81.9	5.0	1.1	ug/l	SW846 8260B
FA3546-7	M-17						
		No hits reported in this sample.					

Summary of Hits

Job Number: FA3546
Account: Earth Systems
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL
Collected: 04/09/13



Lab Sample ID	Client Sample ID	Result/ Qual	PQL	MDL	Units	Method
---------------	------------------	-----------------	-----	-----	-------	--------

FA3546-8 EFFLUENT AIR

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: M-1	Date Sampled: 04/09/13
Lab Sample ID: FA3546-1	Date Received: 04/10/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0067529.D	2.5	04/17/13	RB	n/a	n/a	VN2905
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	187	2.5	0.53	ug/l	
108-88-3	Toluene	25.1	2.5	0.50	ug/l	
100-41-4	Ethylbenzene	185	2.5	0.73	ug/l	
1330-20-7	Xylene (total)	447	7.5	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	114	2.5	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-9		
Lab Sample ID: FA3546-2		Date Sampled: 04/09/13
Matrix: AQ - Ground Water		Date Received: 04/10/13
Method: SW846 8260B		Percent Solids: n/a
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0067530.D	100	04/17/13	RB	n/a	n/a	VN2905
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	6570	100	21	ug/l	
108-88-3	Toluene	3000	100	20	ug/l	
100-41-4	Ethylbenzene	973	100	29	ug/l	
1330-20-7	Xylene (total)	6400	300	50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	8360	100	21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-6		
Lab Sample ID: FA3546-3		Date Sampled: 04/09/13
Matrix: AQ - Ground Water		Date Received: 04/10/13
Method: SW846 8260B		Percent Solids: n/a
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M65326.D	1	04/15/13	AP	n/a	n/a	VM2743
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
1330-20-7	Xylene (total)	0.50 U	3.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M-7	Date Sampled:	04/09/13
Lab Sample ID:	FA3546-4	Date Received:	04/10/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0067531.D	5	04/17/13	RB	n/a	n/a	VN2905
Run #2	M65327.D	100	04/15/13	AP	n/a	n/a	VM2743

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	157	5.0	1.1	ug/l	
108-88-3	Toluene	215	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	153	5.0	1.5	ug/l	
1330-20-7	Xylene (total)	1300 ^a	300	50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	46.2	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	104%	79-125%
2037-26-5	Toluene-D8	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	103%	97%	83-118%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
PQL = Practical Quantitation Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-8	Date Sampled: 04/09/13
Lab Sample ID: FA3546-5	Date Received: 04/10/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M65328.D	1	04/15/13	AP	n/a	n/a	VM2743
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
1330-20-7	Xylene (total)	0.50 U	3.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.8	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	04/09/13
Lab Sample ID:	FA3546-6	Date Received:	04/10/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M65562.D	5	04/23/13	RB	n/a	n/a	VM2751
Run #2 ^a	N0067707.D	10	04/22/13	RB	n/a	n/a	VN2913

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	261	5.0	1.1	ug/l	
108-88-3	Toluene	25.6	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	162	5.0	1.5	ug/l	
1330-20-7	Xylene (total)	528	15	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	81.9	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	89%	111%	79-125%
2037-26-5	Toluene-D8	98%	97%	85-112%
460-00-4	4-Bromofluorobenzene	101%	99%	83-118%

(a) Confirmation run.

U = Not detected MDL - Method Detection Limit
PQL = Practical Quantitation Limit
L = Indicates value exceeds calibration range

I = Result \geq MDL but $<$ PQL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-17	Date Sampled: 04/09/13
Lab Sample ID: FA3546-7	Date Received: 04/10/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0067545.D	1	04/17/13	RB	n/a	n/a	VN2906
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
1330-20-7	Xylene (total)	0.50 U	3.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT AIR	Date Sampled:	04/09/13
Lab Sample ID:	FA3546-8	Date Received:	04/10/13
Matrix:	AIR - Air	Percent Solids:	n/a
Method:	EPA TO-3		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH045328.D	1	04/11/13	SH	n/a	n/a	GHH2365
Run #2							

Run #	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	PQL	MDL	Units	Q	Result	PQL	MDL	Units
71-43-2	78.11	Benzene	0.11 U	0.50	0.11	ppmv		0.35 U	1.6	0.35	mg/m3
108-88-3	92.14	Toluene	0.10 U	0.50	0.10	ppmv		0.38 U	1.9	0.38	mg/m3
100-41-4	106.2	Ethylbenzene	0.10 U	0.50	0.10	ppmv		0.43 U	2.2	0.43	mg/m3
1330-20-7	106.2	Xylenes (total)	0.30 U	1.5	0.30	ppmv		1.3 U	6.5	1.3	mg/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	0.15 U	0.50	0.15	ppmv		0.54 U	1.8	0.54	mg/m3
	72	TPH as Equiv Pentane	1.0 U	5.0	1.0	ppmv		2.9 U	15	2.9	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		58-132%
460-00-4	4-Bromofluorobenzene	103%		58-132%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



Accutest Laboratories Southeast Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # **FA3546** PAGE 1 OF 1

Client / Reporting Information		Project Information		Analytical Information										Matrix Codes					
Company Name: Earth Systems Inc		Project Name: Hess 9274												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe					
Address: 223 12th Ave North		Street: 2410 S. Byron Butler Pkwy																	
City: Jacksonville Beach State: FL Zip: 32250		City: Perry State: FL																	
Project Contact: Noel Manning		Project #:																	
Phone: 904-247-0740		Fax #:																	
Sampler(s) Name(s): (Printed) Phillip Jones		Client Purchase Order #:																	
Accutest Sample #	Field ID / Point of Collection	DATE		SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION										LAB USE ONLY		
		TIME	TIME				OTHER	WAX	NO	MECH	PLUG	PERSON	SUBSTRATE	DI WATER	MECH				
1	M-1	4-9-13	1220	PJ	GW	3												X	
2	M-9		1307																
3	M-6		1335																
4	M-7		1420																
5	M-8		1447																
6	Mw-19		1523																
7	M-17		1550																
8	EFFluent Air		1015		AIR	1													X
9																			

4.1 4

TURNAROUND TIME (Business Days)		Data Deliverable Information		Comments / Remarks	
<input checked="" type="checkbox"/> 10 Days Standard <input type="checkbox"/> 7 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> OTHER	Approved By: / Rush Code	<input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY) <input type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC) <input type="checkbox"/> REDT1 (EPA LEVEL 3) <input type="checkbox"/> FULT1 (EPA LEVEL 4) <input type="checkbox"/> EDD'S	Hess Rates - M-9, very Hot		

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: Phillip Jones	Date Time: 4-9-13 1600	Received By: [Signature]	Relinquished by: [Signature]	Date Time: 4/9/13	Received By: Frank Jones AISE 4/9/13
Relinquished by: [Signature]	Date Time: [Signature]	Received By: [Signature]	Relinquished by: [Signature]	Date Time: [Signature]	Received By: [Signature]

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: **30**

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 3546 CLIENT: Earth Systems PROJECT: Hess 9724
 DATE/TIME RECEIVED: 04/01/13 1635 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS:

COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET
- WET ICE PRESENT

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES? 25-GRAM 5-GRAM
 NUMBER OF 5035 FIELD KITS?
 NUMBER OF LAB FILTERED METALS?

TEMPERATURE INFORMATION

- IR THERM ID 3 CORR. FACTOR 1.04
- OBSERVED TEMPS: 2.6
- CORRECTED TEMPS: 3.0

SAMPLE INFORMATION

- SAMPLE LABELS PRESENT ON ALL BOTTLES
- INCORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ID'S ON COC DO NOT MATCH LABEL
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- % SOLIDS JAR NOT RECEIVED
- 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE: [Signature] 04/01/13 REVIEWER SIGNATURE/DATE: [Signature] 04-10-13

NF 12/10

receipt confirmation 122910.xls

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL
WELL NO: M-1	SAMPLE ID: M-1
DATE: 4/9/2013	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 9.91	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 9.91 feet) X 0.04 gallons/foot = 0.40 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11.75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11.75	PURGING INITIATED AT: 1145	PURGING ENDED AT: 1215	TOTAL VOLUME PURGED (gallons): 1.2							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1145				9.91							
1155	0.40	0.40	0.04	N/A	6.47	26.2	469	0.82	3.89	Clear	Yes
1205	0.40	0.80	0.04	↓	6.35	26.2	452	0.70	3.72	↓	↓
1215	0.40	1.2	0.04	↓	6.34	26.1	451	0.69	3.71	↓	↓

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI	SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>	SAMPLING INITIATED AT: 1216	SAMPLING ENDED AT: 1220
PUMP OR TUBING DEPTH IN WELL (feet): 11.75	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y ^(N)	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y ^(N)	TUBING Y ^(N) (replaced)	DUPLICATE: Y ^(N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
M-1	3	CG	40 mL	HCL			8260 BTEXMTBE	RFPP	< 100 mL

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

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

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

SITE NAME: Hess 9274		SITE LOCATION: Perry, FL	
WELL NO: M-6	SAMPLE ID: M-6	DATE: 4/9/2013	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 6.15	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 6.15 feet) X 0.04 gallons/foot = 0.55 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	PURGING INITIATED AT: 1320	PURGING ENDED AT: 1329	TOTAL VOLUME PURGED (gallons): 1.8
--	--	----------------------------	------------------------	------------------------------------

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1320				6.15							
1323	0.6	0.6	0.2	NA	7.81	25.2	412	10.03	61	Cloudy	NO
1326	0.6	1.2	0.2	↓	7.69	25.2	398	9.93	53	↓	↓
1329	0.6	1.8	0.2	↓	7.68	25.2	397	9.92	52	↓	↓

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI	SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>	SAMPLING INITIATED AT: 1330	SAMPLING ENDED AT: 1335
PUMP OR TUBING DEPTH IN WELL (feet): 8.0	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y <input checked="" type="checkbox"/>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/>	TUBING Y <input checked="" type="checkbox"/> (replaced)	DUPLICATE: Y <input checked="" type="checkbox"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
M-6	3	CG	40 mL	HCL			8260 BTEXMTBE	RFPP	< 100 mL

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL
WELL NO: M-7	SAMPLE ID: M-7
DATE: 4/9/2013	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 8.12	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (20 feet - 8.12 feet) X 0.04 gallons/foot = 0.48 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0	PURGING INITIATED AT: 1345	PURGING ENDED AT: 1415	TOTAL VOLUME PURGED (gallons): 1.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1345				8.12							
1355	0.5	0.5	0.05	NA	6.79	25.9	373	1.29	3.29	Clear	Poss.
1405	0.5	1.0	0.05	↓	6.65	25.9	361	1.15	3.13	↓	↓
1415	0.5	1.5	0.05	↓	6.64	25.8	360	1.13	3.12	↓	↓

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI			SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>			SAMPLING INITIATED AT: 1416		SAMPLING ENDED AT: 1420	
PUMP OR TUBING DEPTH IN WELL (feet): 10.0			TUBING MATERIAL CODE: PE		FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N)			TUBING Y <input checked="" type="checkbox"/> (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
M-7	3	CG	40 mL	HCL			8260 BTEXMTBE	RFPP	< 100 mL

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL
WELL NO: M-8	SAMPLE ID: M-8
DATE: 4/9/2013	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 2.17	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 2.17 feet) X 0.04 gallons/foot = 0.71 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.0	PURGING INITIATED AT: 1430	PURGING ENDED AT: 1442	TOTAL VOLUME PURGED (gallons): 2.4							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1430				2.17							
1434	0.8	0.8	0.2	NA	7.93	26.1	429	7.91	4.32	Clear	NO
1438	0.8	1.6	0.2	↓	7.81	26.0	415	7.76	4.12	↓	↓
1442	0.8	2.4	0.2	↓	7.80	26.0	414	7.75	4.11	↓	↓
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 1443		SAMPLING ENDED AT: 1447		
PUMP OR TUBING DEPTH IN WELL (feet): 4.0				TUBING MATERIAL CODE: PE		FIELD-FILTERED: Y <input checked="" type="checkbox"/>			FILTER SIZE: _____ μm			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/>				TUBING Y <input checked="" type="checkbox"/> (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
M-8	3	CG	40 mL	HCL			8260 BTEXMTBE		RFPP		< 100 mL	
REMARKS:												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL
WELL NO: M-9	SAMPLE ID: M-9
DATE: 4/9/2013	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 8.65	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 8.65 feet) X 0.04 gallons/foot = 0.45 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.5	PURGING INITIATED AT: 1235	PURGING ENDED AT: 1302	TOTAL VOLUME PURGED (gallons): 1.35							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1235				8.65							
1244	0.45	0.45	0.05	NA	6.63	24.9	821	1.33	5.32	clear	Yes
1253	0.45	0.9	0.05	↓	6.50	24.9	804	1.18	5.18	↓	↓
1302	0.45	1.35	0.05	↓	6.49	24.9	802	1.17	5.17	↓	↓
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI				SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>				SAMPLING INITIATED AT: 1303		SAMPLING ENDED AT: 1307	
PUMP OR TUBING DEPTH IN WELL (feet): 10.5				TUBING MATERIAL CODE: PE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> ϕ		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> ϕ				TUBING Y <input checked="" type="checkbox"/> ϕ (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> ϕ			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
M-9	3	CG	40 mL	HCL			8260 BTEXMTBE	RFPP	< 100 mL		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL
WELL NO: M-17	SAMPLE ID: M-17
DATE: 4/9/2013	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 9 feet to 19 feet	STATIC DEPTH TO WATER (feet): 7.36	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (19 feet - 7.36 feet) X 0.04 gallons/foot = 0.47 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 9.25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9.25	PURGING INITIATED AT: 1535	PURGING ENDED AT: 1544	TOTAL VOLUME PURGED (gallons): 1.8							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1535				7.36							
1538	0.6	0.6	0.2	NA	7.47	22.6	319	6.78	1.32	clear	NO
1541	0.6	1.2	0.2	↓	7.38	22.6	308	6.61	1.20	↓	↓
1544	0.6	1.8	0.2	↓	7.36	22.6	307	6.59	1.19	↓	↓

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI	SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>	SAMPLING INITIATED AT: 1545	SAMPLING ENDED AT: 1550
PUMP OR TUBING DEPTH IN WELL (feet): 9.25	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N)	TUBING Y <input checked="" type="checkbox"/> (replaced)	DUPLICATE: Y <input checked="" type="checkbox"/> (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
M-17	3	CG	40 mL	HCL			8260 BTEXMTBE	RFPP	< 100 mL

REMARKS:

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

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

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL
WELL NO: Mw-19	SAMPLE ID: Mw-19
DATE: 4/9/2013	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 6 feet to 16 feet	STATIC DEPTH TO WATER (feet): 6.65	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (16 feet - 6.65 feet) X 0.16 gallons/foot = 1.49 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.5	PURGING INITIATED AT: 1500	PURGING ENDED AT: 1518	TOTAL VOLUME PURGED (gallons): 4.5							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1500				6.65							
1506	1.5	1.5	0.25	7.13	7.03	24.3	465	1.08	2.59	clear	NO
1512	1.5	3.0	0.25	7.13	6.89	24.3	453	0.94	2.42	↓	↓
1518	1.5	4.5	0.25	7.13	6.88	24.2	452	0.93	2.41	↓	↓

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI	SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>	SAMPLING INITIATED AT: 1519	SAMPLING ENDED AT: 1523
PUMP OR TUBING DEPTH IN WELL (feet): 8.5	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y <input checked="" type="checkbox"/>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/>	TUBING Y <input checked="" type="checkbox"/> (replaced)	DUPLICATE: Y <input checked="" type="checkbox"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
Mw-19	3	CG	40 mL	HCL			8260 BTEXMTBE	RFPP	< 100 mL

REMARKS:

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
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 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



07/30/13

Technical Report for

Earth Systems

Hess 9274; 2410 Hwy 19 S, Perry, FL

605X04

Accutest Job Number: FA6610

Sampling Date: 07/18/13

Report to:

Earth Systems

nmanarang@earthsys.net

ATTN: Noel Manarang

Total number of pages in report: 23



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi
Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Sue Bell 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), AK, AR, GA, KY, MA, NV, OK, UT, VA, WA, WI

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Test results relate only to samples analyzed.

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Sample Summary

Earth Systems

Job No: FA6610

Hess 9274; 2410 Hwy 19 S, Perry, FL
 Project No: 605X04

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA6610-1	07/18/13	08:24 PJ	07/20/13	AQ	Ground Water	M-17
FA6610-2	07/18/13	09:34 PJ	07/20/13	AQ	Ground Water	MW-19
FA6610-3	07/18/13	10:29 PJ	07/20/13	AQ	Ground Water	M-6
FA6610-4	07/18/13	11:08 PJ	07/20/13	AQ	Ground Water	M-7
FA6610-5	07/18/13	11:48 PJ	07/20/13	AQ	Ground Water	M-8
FA6610-6	07/18/13	12:28 PJ	07/20/13	AQ	Ground Water	M-9
FA6610-7	07/18/13	13:08 PJ	07/20/13	AQ	Ground Water	M-1
FA6610-8	07/18/13	15:00 PJ	07/20/13	AIR	Air	EFFLUENT

Summary of Hits

Job Number: FA6610
 Account: Earth Systems
 Project: Hess 9274; 2410 Hwy 19 S, Perry, FL
 Collected: 07/18/13

Lab Sample ID	Client Sample ID	Result/ Analyte	PQL	MDL	Units	Method
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FA6610-1 M-17

No hits reported in this sample.

FA6610-2 MW-19

Benzene	543	10	2.1	ug/l	SW846 8260B
Toluene	179	5.0	1.0	ug/l	SW846 8260B
Ethylbenzene	360	5.0	1.5	ug/l	SW846 8260B
Xylene (total)	1130	15	2.5	ug/l	SW846 8260B
Methyl Tert Butyl Ether	111	5.0	1.1	ug/l	SW846 8260B
TPH (C8-C40) ^a	5.33	0.27	0.14	mg/l	FLORIDA-PRO
Naphthalene ^b	122	3.8	1.5	ug/l	SW846 8310
1-Methylnaphthalene ^b	42.8	1.9	0.38	ug/l	SW846 8310
2-Methylnaphthalene ^b	72.8	1.9	0.38	ug/l	SW846 8310

FA6610-3 M-6

No hits reported in this sample.

FA6610-4 M-7

Benzene	113	2.0	0.42	ug/l	SW846 8260B
Toluene	14.1	2.0	0.40	ug/l	SW846 8260B
Ethylbenzene	135	2.0	0.58	ug/l	SW846 8260B
Xylene (total)	303	6.0	0.99	ug/l	SW846 8260B
Methyl Tert Butyl Ether	24.1	2.0	0.42	ug/l	SW846 8260B

FA6610-5 M-8

Benzene	5.9	1.0	0.21	ug/l	SW846 8260B
Toluene	0.27 I	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene	0.52 I	1.0	0.29	ug/l	SW846 8260B
Xylene (total)	1.4 I	3.0	0.50	ug/l	SW846 8260B
Methyl Tert Butyl Ether	4.7	1.0	0.21	ug/l	SW846 8260B

FA6610-6 M-9

Benzene	17400	200	42	ug/l	SW846 8260B
Toluene	15400	200	40	ug/l	SW846 8260B
Ethylbenzene	4680	100	29	ug/l	SW846 8260B
Xylene (total)	22600	300	50	ug/l	SW846 8260B
Methyl Tert Butyl Ether	13400	200	42	ug/l	SW846 8260B

Summary of Hits

Job Number: FA6610
 Account: Earth Systems
 Project: Hess 9274; 2410 Hwy 19 S, Perry, FL
 Collected: 07/18/13

Lab Sample ID	Client Sample ID	Result/ Qual	PQL	MDL	Units	Method
FA6610-7	M-1					
Benzene		179	5.0	1.1	ug/l	SW846 8260B
Toluene		33.1	5.0	1.0	ug/l	SW846 8260B
Ethylbenzene		201	5.0	1.5	ug/l	SW846 8260B
Xylene (total)		551	15	2.5	ug/l	SW846 8260B
Methyl Tert Butyl Ether		94.9	5.0	1.1	ug/l	SW846 8260B
Naphthalene ^b		61.0	1.9	0.77	ug/l	SW846 8310
1-Methylnaphthalene ^b		17.0	1.9	0.38	ug/l	SW846 8310
2-Methylnaphthalene ^b		24.0	1.9	0.38	ug/l	SW846 8310
FA6610-8	EFFLUENT					
TPH as Equiv Pentane		59.2	5.0	1.0	ppmv	EPA TO-3
TPH as Equiv Pentane		174	15	2.9	mg/m3	EPA TO-3

(a) Associated BS recovery outside control limits. Insufficient sample to re-extract.

(b) All hits confirmed by spectral match using a diode array detector.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	M-17	Date Sampled:	07/18/13
Lab Sample ID:	FA6610-1	Date Received:	07/20/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67431.D	1	07/23/13	DP	n/a	n/a	VM2837
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
1330-20-7	Xylene (total)	0.50 U	3.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	94%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19	
Lab Sample ID:	FA6610-2	Date Sampled: 07/18/13
Matrix:	AQ - Ground Water	Date Received: 07/20/13
Method:	SW846 8260B	Percent Solids: n/a
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67432.D	5	07/23/13	DP	n/a	n/a	VM2837
Run #2	M67473.D	10	07/24/13	DP	n/a	n/a	VM2840

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	543 ^a	10	2.1	ug/l	
108-88-3	Toluene	179	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	360	5.0	1.5	ug/l	
1330-20-7	Xylene (total)	1130	15	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	111	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%	94%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	99%	79-125%
2037-26-5	Toluene-D8	102%	101%	85-112%
460-00-4	4-Bromofluorobenzene	98%	99%	83-118%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	07/18/13
Lab Sample ID:	FA6610-2	Date Received:	07/20/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8310 SW846 3510C		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	EE082709.D	1	07/23/13	RS	07/22/13	OP47888	GEE2957
Run #2 ^a	AA071346.D	2	07/24/13	RS	07/22/13	OP47888	GAA2778

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2	1040 ml	1.0 ml

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	PQL	MDL	Units	Q
83-32-9	Acenaphthene	0.77 U	1.9	0.77	ug/l	
208-96-8	Acenaphthylene	0.77 U	1.9	0.77	ug/l	
120-12-7	Anthracene	0.77 U	1.9	0.77	ug/l	
56-55-3	Benzo(a)anthracene	0.038 U	0.19	0.038	ug/l	
50-32-8	Benzo(a)pyrene	0.038 U	0.19	0.038	ug/l	
205-99-2	Benzo(b)fluoranthene	0.038 U	0.19	0.038	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.038 U	0.19	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	0.038 U	0.19	0.038	ug/l	
218-01-9	Chrysene	0.38 U	1.9	0.38	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.038 U	0.19	0.038	ug/l	
206-44-0	Fluoranthene	0.38 U	1.9	0.38	ug/l	
86-73-7	Fluorene	0.77 U	1.9	0.77	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.038 U	0.19	0.038	ug/l	
91-20-3	Naphthalene	122 ^b	3.8	1.5	ug/l	
90-12-0	1-Methylnaphthalene	42.8	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	72.8	1.9	0.38	ug/l	
85-01-8	Phenanthrene	0.77 U	1.9	0.77	ug/l	
129-00-0	Pyrene	0.38 U	1.9	0.38	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%	103%	43-122%
92-94-4	p-Terphenyl	80%	86%	30-122%

(a) All hits confirmed by spectral match using a diode array detector.

(b) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	07/18/13
Lab Sample ID:	FA6610-2	Date Received:	07/20/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	FLORIDA-PRO SW846 3510C		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW828.D	1	07/23/13	FEA	07/22/13	OP47880	GWW24
Run #2							

Run #	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	5.33	0.27	0.14	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	50%		43-123%		

(a) Associated BS recovery outside control limits. Insufficient sample to re-extract.

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-6		
Lab Sample ID: FA6610-3		Date Sampled: 07/18/13
Matrix: AQ - Ground Water		Date Received: 07/20/13
Method: SW846 8260B		Percent Solids: n/a
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67433.D	1	07/23/13	DP	n/a	n/a	VM2837
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
1330-20-7	Xylene (total)	0.50 U	3.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	95%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M-6	Date Sampled:	07/18/13
Lab Sample ID:	FA6610-3	Date Received:	07/20/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8310 SW846 3510C		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE082710.D	1	07/23/13	RS	07/22/13	OP47888	GEE2957
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	PQL	MDL	Units	Q
83-32-9	Acenaphthene	0.77 U	1.9	0.77	ug/l	
208-96-8	Acenaphthylene	0.77 U	1.9	0.77	ug/l	
120-12-7	Anthracene	0.77 U	1.9	0.77	ug/l	
56-55-3	Benzo(a)anthracene	0.038 U	0.19	0.038	ug/l	
50-32-8	Benzo(a)pyrene	0.038 U	0.19	0.038	ug/l	
205-99-2	Benzo(b)fluoranthene	0.038 U	0.19	0.038	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.038 U	0.19	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	0.038 U	0.19	0.038	ug/l	
218-01-9	Chrysene	0.38 U	1.9	0.38	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.038 U	0.19	0.038	ug/l	
206-44-0	Fluoranthene	0.38 U	1.9	0.38	ug/l	
86-73-7	Fluorene	0.77 U	1.9	0.77	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.038 U	0.19	0.038	ug/l	
91-20-3	Naphthalene	0.77 U	1.9	0.77	ug/l	
90-12-0	1-Methylnaphthalene	0.38 U	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	0.38 U	1.9	0.38	ug/l	
85-01-8	Phenanthrene	0.77 U	1.9	0.77	ug/l	
129-00-0	Pyrene	0.38 U	1.9	0.38	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		43-122%
92-94-4	p-Terphenyl	54%		30-122%

U = Not detected MDL - Method Detection Limit
PQL = Practical Quantitation Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-6 Lab Sample ID: FA6610-3 Matrix: AQ - Ground Water Method: FLORIDA-PRO SW846 3510C Project: Hess 9274; 2410 Hwy 19 S, Perry, FL	Date Sampled: 07/18/13 Date Received: 07/20/13 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW829.D	1	07/23/13	FEA	07/22/13	OP47880	GWW24
Run #2							

Run #	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	0.14 U	0.27	0.14	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	59%		43-123%		

(a) Associated BS recovery outside control limits. Insufficient sample to re-extract.

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-7	Date Sampled: 07/18/13
Lab Sample ID: FA6610-4	Date Received: 07/20/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67474.D	2	07/24/13	DP	n/a	n/a	VM2840
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	113	2.0	0.42	ug/l	
108-88-3	Toluene	14.1	2.0	0.40	ug/l	
100-41-4	Ethylbenzene	135	2.0	0.58	ug/l	
1330-20-7	Xylene (total)	303	6.0	0.99	ug/l	
1634-04-4	Methyl Tert Butyl Ether	24.1	2.0	0.42	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M-8	Date Sampled:	07/18/13
Lab Sample ID:	FA6610-5	Date Received:	07/20/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67435.D	1	07/23/13	DP	n/a	n/a	VM2837
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	5.9	1.0	0.21	ug/l	
108-88-3	Toluene	0.27	1.0	0.20	ug/l	I
100-41-4	Ethylbenzene	0.52	1.0	0.29	ug/l	I
1330-20-7	Xylene (total)	1.4	3.0	0.50	ug/l	I
1634-04-4	Methyl Tert Butyl Ether	4.7	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		83-118%
17060-07-0	1,2-Dichloroethane-D4	95%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

U = Not detected MDL - Method Detection Limit
PQL = Practical Quantitation Limit
L = Indicates value exceeds calibration range

I = Result \geq MDL but $<$ PQL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-8	Date Sampled: 07/18/13
Lab Sample ID: FA6610-5	Date Received: 07/20/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8310 SW846 3510C	
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE082711.D	1	07/23/13	RS	07/22/13	OP47888	GEE2957
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	PQL	MDL	Units	Q
83-32-9	Acenaphthene	0.77 U	1.9	0.77	ug/l	
208-96-8	Acenaphthylene	0.77 U	1.9	0.77	ug/l	
120-12-7	Anthracene	0.77 U	1.9	0.77	ug/l	
56-55-3	Benzo(a)anthracene	0.038 U	0.19	0.038	ug/l	
50-32-8	Benzo(a)pyrene	0.038 U	0.19	0.038	ug/l	
205-99-2	Benzo(b)fluoranthene	0.038 U	0.19	0.038	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.038 U	0.19	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	0.038 U	0.19	0.038	ug/l	
218-01-9	Chrysene	0.38 U	1.9	0.38	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.038 U	0.19	0.038	ug/l	
206-44-0	Fluoranthene	0.38 U	1.9	0.38	ug/l	
86-73-7	Fluorene	0.77 U	1.9	0.77	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.038 U	0.19	0.038	ug/l	
91-20-3	Naphthalene	0.77 U	1.9	0.77	ug/l	
90-12-0	1-Methylnaphthalene	0.38 U	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	0.38 U	1.9	0.38	ug/l	
85-01-8	Phenanthrene	0.77 U	1.9	0.77	ug/l	
129-00-0	Pyrene	0.38 U	1.9	0.38	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		43-122%
92-94-4	p-Terphenyl	67%		30-122%

U = Not detected MDL - Method Detection Limit
PQL = Practical Quantitation Limit
L = Indicates value exceeds calibration range

I = Result \geq MDL but $<$ PQL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-9		
Lab Sample ID: FA6610-6		Date Sampled: 07/18/13
Matrix: AQ - Ground Water		Date Received: 07/20/13
Method: SW846 8260B		Percent Solids: n/a
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67436.D	100	07/23/13	DP	n/a	n/a	VM2837
Run #2	M67475.D	200	07/24/13	DP	n/a	n/a	VM2840

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	17400 ^a	200	42	ug/l	
108-88-3	Toluene	15400 ^a	200	40	ug/l	
100-41-4	Ethylbenzene	4680	100	29	ug/l	
1330-20-7	Xylene (total)	22600	300	50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	13400 ^a	200	42	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%	94%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	97%	79-125%
2037-26-5	Toluene-D8	103%	101%	85-112%
460-00-4	4-Bromofluorobenzene	95%	97%	83-118%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M-1 Lab Sample ID: FA6610-7 Matrix: AQ - Ground Water Method: SW846 8260B Project: Hess 9274; 2410 Hwy 19 S, Perry, FL	Date Sampled: 07/18/13 Date Received: 07/20/13 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67476.D	5	07/24/13	DP	n/a	n/a	VM2840
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	179	5.0	1.1	ug/l	
108-88-3	Toluene	33.1	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	201	5.0	1.5	ug/l	
1330-20-7	Xylene (total)	551	15	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	94.9	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M-1	Date Sampled:	07/18/13
Lab Sample ID:	FA6610-7	Date Received:	07/20/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8310 SW846 3510C		
Project:	Hess 9274; 2410 Hwy 19 S, Perry, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	EE082712.D	1	07/23/13	RS	07/22/13	OP47888	GEE2957
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	PQL	MDL	Units	Q
83-32-9	Acenaphthene	0.77 U	1.9	0.77	ug/l	
208-96-8	Acenaphthylene	0.77 U	1.9	0.77	ug/l	
120-12-7	Anthracene	0.77 U	1.9	0.77	ug/l	
56-55-3	Benzo(a)anthracene	0.038 U	0.19	0.038	ug/l	
50-32-8	Benzo(a)pyrene	0.038 U	0.19	0.038	ug/l	
205-99-2	Benzo(b)fluoranthene	0.038 U	0.19	0.038	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.038 U	0.19	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	0.038 U	0.19	0.038	ug/l	
218-01-9	Chrysene	0.38 U	1.9	0.38	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.038 U	0.19	0.038	ug/l	
206-44-0	Fluoranthene	0.38 U	1.9	0.38	ug/l	
86-73-7	Fluorene	0.77 U	1.9	0.77	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.038 U	0.19	0.038	ug/l	
91-20-3	Naphthalene	61.0	1.9	0.77	ug/l	
90-12-0	1-Methylnaphthalene	17.0	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	24.0	1.9	0.38	ug/l	
85-01-8	Phenanthrene	0.77 U	1.9	0.77	ug/l	
129-00-0	Pyrene	0.38 U	1.9	0.38	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		43-122%
92-94-4	p-Terphenyl	76%		30-122%

(a) All hits confirmed by spectral match using a diode array detector.

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result \geq MDL but $<$ PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: EFFLUENT	Date Sampled: 07/18/13
Lab Sample ID: FA6610-8	Date Received: 07/20/13
Matrix: AIR - Air	Percent Solids: n/a
Method: EPA TO-3	
Project: Hess 9274; 2410 Hwy 19 S, Perry, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH046396.D	1	07/20/13	AH	n/a	n/a	GHH2435
Run #2							

Run #	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	PQL	MDL	Units	Q	Result	PQL	MDL	Units
71-43-2	78.11	Benzene	0.11 U	0.50	0.11	ppmv		0.35 U	1.6	0.35	mg/m3
108-88-3	92.14	Toluene	0.10 U	0.50	0.10	ppmv		0.38 U	1.9	0.38	mg/m3
100-41-4	106.2	Ethylbenzene	0.10 U	0.50	0.10	ppmv		0.43 U	2.2	0.43	mg/m3
1330-20-7	106.2	Xylenes (total)	0.30 U	1.5	0.30	ppmv		1.3 U	6.5	1.3	mg/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	0.15 U	0.50	0.15	ppmv		0.54 U	1.8	0.54	mg/m3
	72	TPH as Equiv Pentane	59.2	5.0	1.0	ppmv		174	15	2.9	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		54-142%
460-00-4	4-Bromofluorobenzene	89%		54-142%

U = Not detected MDL - Method Detection Limit
 PQL = Practical Quantitation Limit
 L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value
 V = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



Accutest Laboratories Southeast Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB **FA6610** PAGE 1 OF 1

Client / Reporting Information		Project Information				Analytical Information				Matrix Codes			
Company Name Earth Systems Inc.		Project Name: Hess 9274				<div style="display: flex; justify-content: space-between;"> V8260 BT XM 8310 PAH FL-PRO ERA TO-3 </div>				DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SD - Soil SL - Sludge OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - W/In			
Address 213 12th Ave North		Street 2410 Byron Butler Pkwy		City Perry							State FL		LAB USE ONLY
City Jacksonville Beach		State FL		Zip 32250									
Project Contact Noel Murray		E-mail		Project # 605X04							Fax #		
Phone# 904-247-0790				Client Purchase Order #									
Sampler(s) Name(s) (Printed) Phillip June S													

Accutest Sample #	Field ID / Point of Collection	COLLECTION		SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION															
		DATE	TIME				OTHER	NONE	SO	ANCH	ONED	PESSH	WASHING	DI WINTER	WASH							
1	M-17	7-18-08	0854	PJ	BW	3				X												
2	Mw-19		1029			5				X		X				X	X	X				
3	M-6		1029			5				X		X				X	X	X				
4	M-7		1108			5				X						X						
5	M-8		1148			4				X						X	X					
6	M-9		1228			3				X						X						
7	M-1		1308			4				X						X	X					
8	EFFluent		1500		AIR	1			X										X			

TURNAROUND TIME (Business Days) <input checked="" type="checkbox"/> 10 Days Standard <input type="checkbox"/> 7 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> OTHER _____	Approved By: / Rush Code _____ _____ _____ _____ _____ _____ <small>Emergency or Rush T/A Data Available VIA Email or Lablink</small>	Data Deliverable Information <input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY) <input type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC) <input type="checkbox"/> REDT1 (EPA LEVEL 3) <input type="checkbox"/> FULT1 (EPA LEVEL 4) <input type="checkbox"/> EDD'S	Comments / Remarks M-9 → sample very hot Hess Rates
--	---	--	--

Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sample # <u>1</u>	Date Time: <u>7-19-13 1210</u>	Received By: <u>[Signature]</u>	Received By: <u>[Signature]</u>
Relinquished by: <u>5</u>	Date Time: _____	Received By: _____	Received By: _____
Relinquished by: _____	Date Time: _____	Received By: _____	Received By: _____

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: _____ Cooler Temperature (s) Celsius: 3.0

414

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA6610 CLIENT: Earth System PROJECT: Hess 9274
 DATE/TIME RECEIVED: 0720-13 820 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET
- WET ICE PRESENT

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES? 25-GRAM 5-GRAM
 NUMBER OF 5035 FIELD KITS? _____
 NUMBER OF LAB FILTERED METALS? _____

TEMPERATURE INFORMATION

IR THERM ID 3 CORR. FACTOR -0.4
 OBSERVED TEMPS: 7.6
 CORRECTED TEMPS: 3.0

SAMPLE INFORMATION

- SAMPLE LABELS PRESENT ON ALL BOTTLES
- INCORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ID'S ON COC DO NOT MATCH LABEL
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- % SOLIDS JAR NOT RECEIVED
- 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: Received 1 Amber ¹⁰⁰⁻ 8310: F1-Pro 250ml sample 2,3 Received 100ml Amber
8310 Samples 5,7

TECHNICIAN SIGNATURE/DATE
 NF 12/10

RWili 0720-03

REVIEWER SIGNATURE/DATE

0720/083

receipt confirmation 122910.xls

4.1
4

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL.
WELL NO: M-1	SAMPLE ID: M-1 DATE: 7-18-13

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 9.58	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 9.58 feet) X 0.04 gallons/foot = 0.42 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11.5	PURGING INITIATED AT: 1245	PURGING ENDED AT: 1303	TOTAL VOLUME PURGED (gallons): 1.8							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μ mhos/cm or μ S/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1245				9.58							
1251	0.6	0.6	0.1	N/A	6.63	27.0	478	0.47	2.51	Clear	Poss
1257	0.6	1.2	0.1	↓	6.52	27.0	470	0.38	2.43	↓	↓
1303	0.6	1.8	0.1	↓	6.51	27.0	469	0.37	2.41	↓	↓
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI				SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>				SAMPLING INITIATED AT: 1304		SAMPLING ENDED AT: 1308	
PUMP OR TUBING DEPTH IN WELL (feet): 11.5				TUBING MATERIAL CODE: PE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ μ m	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N)				TUBING Y <input checked="" type="checkbox"/> (N) (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
M-1	3	CG	40 mL	HCL			V8260BTEXM		RFP		
↓	1	AG	1L	None			8310 PAH		APP		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL.
WELL NO: M-6	SAMPLE ID: M-6
DATE: 7-18-13	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 6.94	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 6.94 feet) X 0.16 gallons/foot = 2.09 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8.75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.75	PURGING INITIATED AT: 0950	PURGING ENDED AT: 1023	TOTAL VOLUME PURGED (gallons): 6.6							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) (mg/l) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0950				6.94							
1001	2.2	2.2	0.2	N/A	7.87	27.0	379	6.79	3.24	Clear	NO
1012	2.2	4.4	0.2	↓	7.99	27.0	368	6.73	3.18	↓	↓
1023	2.2	6.6	0.2	↓	7.99	27.0	367	6.72	3.16	↓	↓
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI				SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>				SAMPLING INITIATED AT: 1024		SAMPLING ENDED AT: 1029		
PUMP OR TUBING DEPTH IN WELL (feet): 8.75				TUBING MATERIAL CODE: PE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N)				TUBING Y <input checked="" type="checkbox"/> (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
M-6	3	CG	40 mL	HCL			V8260BTEXM		RFPP		2100mL	
↓	1	AG	1L	NONE			8310 PAH		APP		0.2 gpm	
↓	1	AG	250ML	H2SO4			FL-PRO		↓		↓	
REMARKS:												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL.
WELL NO: M-7	SAMPLE ID: M-7
DATE: 7-18-13	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 7.75	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 7.75 feet) X 0.04 gallons/foot = 0.49 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 9.75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9.75	PURGING INITIATED AT: 1045	PURGING ENDED AT: 1103	TOTAL VOLUME PURGED (gallons): 1.8							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/l) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1045				7.75							
1051	0.6	0.6	0.1	N/A	7.05	26.2	407	0.19	2.19	Clear	Yes
1057	0.6	1.2	0.1	↓	7.00	26.2	399	0.13	2.12	↓	↓
1103	0.6	1.8	0.1	↓	6.99	26.2	398	0.12	2.11	↓	↓
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI				SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>			SAMPLING INITIATED AT: 1104		SAMPLING ENDED AT: 1108	
PUMP OR TUBING DEPTH IN WELL (feet): 9.75				TUBING MATERIAL CODE: PE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N)				TUBING Y <input checked="" type="checkbox"/> (N) (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
M-7	3	CG	40 mL	HCL			V8260BTEXM		RFPP	4100ML
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL.
WELL NO: M-8	SAMPLE ID: M-8
DATE: 7-18-13	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 5 feet to 26 feet	STATIC DEPTH TO WATER (feet): 8.33	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (20 feet - 8.33 feet) X 0.04 gallons/foot = 0.47 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.25	PURGING INITIATED AT: 1125	PURGING ENDED AT: 1143	TOTAL VOLUME PURGED (gallons): 1.8							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1125				8.33							
1131	0.6	0.6	0.1	N/A	7.82	25.7	416	5.83	4.07	Clear	Poss
1137	0.6	1.2	0.1	↓	7.96	25.7	402	5.76	4.03	↓	↓
1143	0.6	1.8	0.1	↓	7.97	25.7	401	5.74	4.02	↓	↓

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI	SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>	SAMPLING INITIATED AT: 1144	SAMPLING ENDED AT: 1148
PUMP OR TUBING DEPTH IN WELL (feet): 10.25	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N)	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
M-8	3	CG	40 mL	HCL			V8260BTEXM	RFP	2100 mL
↓	1	AG	1L	NONE			8310PAM	APP	0.1 gpm

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL.
WELL NO: M-9	SAMPLE ID: M-9
DATE: 7-18-13	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet	STATIC DEPTH TO WATER (feet): 8.41	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 8.41 feet) X 0.04 gallons/foot = 0.46 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.25	PURGING INITIATED AT: 1205	PURGING ENDED AT: 1223	TOTAL VOLUME PURGED (gallons): 1.8							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or (μS/cm)	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTU)	COLOR (describe)	ODOR (describe)
1205				8.41							
1211	0.6	0.6	0.1	N/A	6.79	27.0	752	0.19	5.28	Clear	Yes/slow
1217	0.6	1.2	0.1	↓	6.71	27.0	763	0.17	5.14		
1223	0.6	1.8	0.1	↓	6.70	27.0	764	0.16	5.13	↓	↓
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI				SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>				SAMPLING INITIATED AT: 1224		SAMPLING ENDED AT: 1228		
PUMP OR TUBING DEPTH IN WELL (feet): 10.25				TUBING MATERIAL CODE: PE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N)				TUBING Y <input checked="" type="checkbox"/> (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
M-9	3	CG	40 mL	HCL			V8260BTEXM		RFPP		100mL	
REMARKS:												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

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

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL.
WELL NO: M-17	SAMPLE ID: M-17
DATE: 7-18-13	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 9 feet to 19 feet	STATIC DEPTH TO WATER (feet): 6.85	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (19 feet - 6.85 feet) X 0.04 gallons/foot = 0.49 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8.75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.75	PURGING INITIATED AT: 0800	PURGING ENDED AT: 0818	TOTAL VOLUME PURGED (gallons): 1.8							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or (μS/cm)	DISSOLVED OXYGEN (circle units) (mg/l) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0800				6.85							
0806	0.6	0.6	0.1	N/A	7.71	23.7	305	4.98	1.58	clear	NO
0812	0.6	1.2	0.1	↓	7.62	23.7	297	4.91	1.51	↓	↓
0818	0.6	1.8	0.1	↓	7.61	23.7	296	4.89	1.49	↓	↓
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Phillip Jones / ESI				SAMPLER(S) SIGNATURE(S): <i>Phillip Jones</i>				SAMPLING INITIATED AT: 0819		SAMPLING ENDED AT: 0824	
PUMP OR TUBING DEPTH IN WELL (feet): 8.77				TUBING MATERIAL CODE: PE		FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)			FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N)				TUBING Y <input checked="" type="checkbox"/> (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
M-17	3	CG	40 mL	HCL			V8260BTEXM	RFPP	6100ML		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

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

SITE NAME: Hess 9274	SITE LOCATION: Perry, FL.
WELL NO: <u>MW-19</u>	SAMPLE ID: <u>MW-19</u>
DATE: <u>7-18-13</u>	

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>1/4</u>	WELL SCREEN INTERVAL DEPTH: <u>6</u> feet to <u>16</u> feet	STATIC DEPTH TO WATER (feet): <u>7.23</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (<u>16</u> feet - <u>7.23</u> feet) X <u>0.16</u> gallons/foot = <u>1.46</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>9.0</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>9.0</u>	PURGING INITIATED AT: <u>0845</u>	PURGING ENDED AT: <u>0927</u>	TOTAL VOLUME PURGED (gallons): <u>4.2</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
<u>0845</u>				<u>7.23</u>							
<u>0859</u>	<u>1.4</u>	<u>1.4</u>	<u>0.1</u>	<u>7.91</u>	<u>6.87</u>	<u>26.4</u>	<u>563</u>	<u>0.67</u>	<u>2.57</u>	<u>Clear</u>	<u>Yes</u>
<u>0913</u>	<u>1.4</u>	<u>2.8</u>	<u>0.1</u>	<u>7.91</u>	<u>6.80</u>	<u>26.4</u>	<u>574</u>	<u>0.59</u>	<u>2.49</u>		
<u>0927</u>	<u>1.4</u>	<u>4.2</u>	<u>0.1</u>	<u>7.91</u>	<u>6.79</u>	<u>26.4</u>	<u>575</u>	<u>0.57</u>	<u>2.48</u>	<u>↓</u>	<u>↓</u>

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>Phillip Jones / ESI</u>	SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>	SAMPLING INITIATED AT: <u>0928</u>	SAMPLING ENDED AT: <u>0934</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>9.0</u>	TUBING MATERIAL CODE: <u>PE</u>	FIELD-FILTERED: <u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP <u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	TUBING <u>Y</u> <input checked="" type="checkbox"/> <u>N</u> (replaced)	DUPLICATE: <u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	

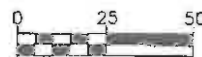
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>MW-19</u>	<u>3</u>	<u>CG</u>	<u>40 mL</u>	<u>HCL</u>			<u>V8260BTEXM</u>	<u>RFPP</u>	<u>100 mL</u>
<u>↓</u>	<u>1</u>	<u>AG</u>	<u>1L</u>	<u>NONE</u>			<u>8310 PAH</u>	<u>APP</u>	<u>0.1 gpm</u>
<u>↓</u>	<u>1</u>	<u>AG</u>	<u>250mL</u>	<u>H2SO4</u>			<u>FL-Pro</u>	<u>↓</u>	<u>0.1 gpm</u>

REMARKS:

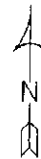
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

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GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.



	4/19/13	7/18/13
B	0.21 U	0.21 U
T	NCD	NCD
M	0.21 U	0.21 U
N	NA	0.77 U
TR	NA	140 U

	4/9/13	7/18/13
B	6570	17400
T	16943	60080
M	8360	13400
N	NA	NA
TR	NA	NA

	4/9/13	7/18/13
B	187	179
T	844.1	964.1
M	114	94.9
N	NA	61
TR	NA	NA

	4/9/13	7/18/13
B	0.21 U	0.21 U
T	NCD	NCD
M	0.21 U	0.21 U
N	NA	NA
TR	NA	NA

	4/9/13	7/18/13
B	261	543
T	976.6	2212
M	81.9	111
N	NA	122
TR	NA	5330

	4/9/13	7/18/13
B	157	113
T	1825	565.1
M	46.2	24.1
N	NA	NA
TR	NA	NA

	4/3/12	7/18/12
B	0.21 U	5.9
T	NCD	8.09
M	1.8	4.7
N	NA	0.77 U
TR	NA	NA

LEGEND

- ⊙ MICRO WELL LOCATION
- ⊕ MONITORING WELL LOCATION
- ⊗ DEEP MONITORING WELL LOCATION
- B BENZENE (ug/L)
- T TOTAL BTEX (ug/L)
- M MTBE (ug/L)
- N NAPHTHALENE (ug/L)
- TR TRPH (ug/L)
- NA NOT ANALYZED
- NCD NO COMPOUNDS DETECTED
- BF.OH DETECTION LIMIT
- ~ HYDROCARBONS > GCTLs OR NADCs

NOTE: DATA IN BOLD ITALICS EXCEED GCTLs

DISSOLVED
HYDROCARBON MAP
(APRIL & JULY,
2013)

WACO #11 (Former Hess Station No. 0927*)
2410 Highway 19 South, Perry, Florida

Earth Systems

Figure 5