Earth Systems
Environmental Engineering

October 18, 2021

Mr. Matthew Mueller
Maryland Department of the Environment
Remediation Division
Oil Control Program
1800 Washington Boulevard, Suite 620
Baltimore, Maryland 21230-1719

Via: Email and FedEx

Re: 2021 Third Quarter Status Report
Former Hess Station #20204
1613 East Joppa Road
Towson, Maryland
Case Number 1991-2100 BA

Dear Mr. Mueller:

Enclosed please find the above-referenced report prepared by Earth Systems, Inc (ESI). ESI is the new consultant for this project and is submitting this report on behalf of Hess Corporation. This report summarizes the results of the groundwater management system vapor screening, operations and maintenance (O&M), and discharge sampling events conducted during the Third Quarter of 2021.

Should you have any questions or require any additional information, please feel free to contact me by telephone at (610) 509-5153 or via email at jfox@earthsys.net. If you have any questions relating to the project, please contact John Schenkewitz of Hess Corporation at (609) 406-3969.

Sincerely,
Earth Systems, Inc.

Jeremy L. Fox
Operations Manger

Enclosure

cc: J. Schenkewitz, Hess Corporation
T. Jackson, Baker Botts
G. Helfrick, PMG
B. Hopkins, NeighborSpace
P. Groff Robertson, WSP

2021 THIRD QUARTER STATUS REPORT

FORMER HESS STATION #20204
1613 East Joppa Road
Towson, Maryland

Case Number 1991-2100 BA

October 18, 2021

Prepared for:

Hess Corporation

Trenton-Mercer Airport
601 Jack Stephan Way
West Trenton, New Jersey 08628

Prepared By:

Earth Systems
Environmental Engineering

Bethlehem, PA

INTRODUCTION

The following is the 2021 Third Quarter Site Status Report for Former Hess Station #20204, located at 1613 East Joppa Road in Towson, Maryland. A semi-annual groundwater monitoring and sampling event was not conducted this quarter. Historical groundwater monitoring and sampling data is summarized on **Tables 1** and **2**.

This report includes results from the groundwater management system vapor screening, operations and maintenance (O&M), and discharge sampling events. **Figure 1** is included as a Site Plan depicting the subject site layout, adjacent properties, the site's below-grade system, as well as all monitoring wells, piezometers, storm drain outlets, and vapor monitoring points bounded by the area known as Ridgely Manor Park.

During the Third Quarter of 2021, continued monthly system vapor screening events, using a photoionization detector (PID), were conducted at the designated vapor monitoring points depicted in **Figure 1**. Additionally, system O&M events were performed on a weekly basis. Post-treatment discharge samples were collected twice monthly from the system's groundwater collection vault. Besides routine system maintenance (e.g., filter bag and carbon changeouts, pump and hose checks, electrical component maintenance, system throughput monitoring, etc.), noteworthy or unusual conditions, such as surficial dissolved iron staining, were not observed. **Tables 3** through **5** summarize the system vapor screening and discharge data.

GENERAL INFORMATION

Site:	Former Hess Station #20204 – Towson, MD (See **Figure 1**)
Sampling Frequency:	Semi-Annual
Reporting Frequency:	Quarterly

REMEDIATION DATA

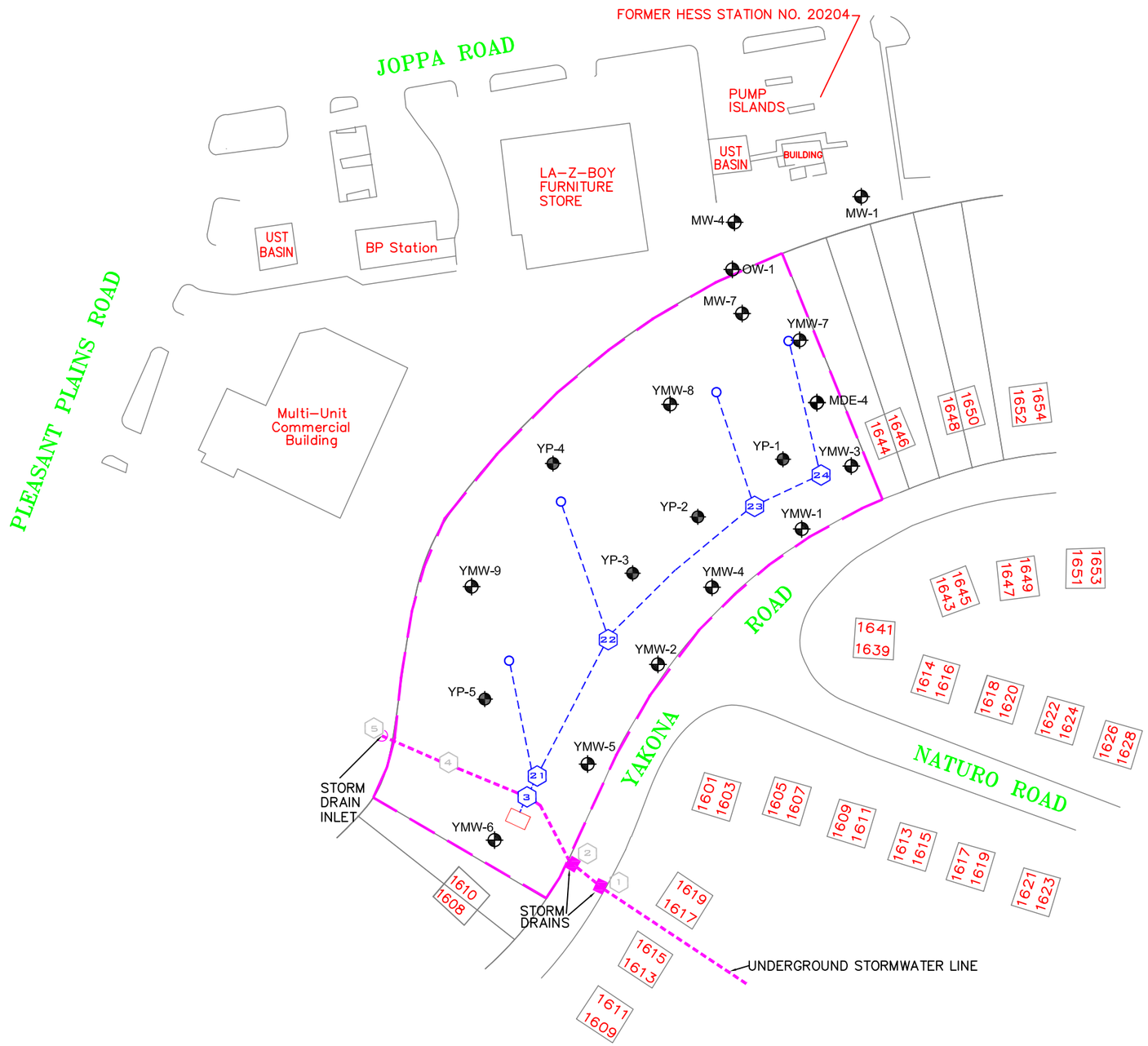
Technology:	Groundwater Collection System
System Start:	May 22, 2014
Waste Stream Treatment:	Groundwater collected within the site's groundwater collection system vault is treated via the use of both liquid phase carbon adsorbers and filter bags prior to being discharged to the adjacent public storm sewer system.
Vapor Screening Frequency:	Monthly
O&M Frequency:	Weekly
Discharge Sampling Frequency:	Twice monthly
System Performance Data:	See **Tables 4** and **5**

SCHEDULED/PROPOSED WORK

System vapor screening events are scheduled to continue on a monthly basis during the Fourth Quarter of 2021. System O&M events and discharge sampling events are scheduled to continue weekly and twice monthly, respectively, during the Fourth Quarter of 2021. Groundwater monitoring and sampling will continue on a semi-annual basis.

ATTACHMENTS

Figure 1:	Site Plan
Table 1:	Historical Groundwater Monitoring Data Summary
Table 2:	Groundwater Gauging Results Summary
Table 3:	Monthly PID Screening Results Summary
Table 4:	Groundwater Treatment System Discharge Summary
Table 5:	Groundwater Treatment System Sampling Results Summary
Appendix:	Remediation System Laboratory Analytical Reports



LEGEND

- Ridgely Manor Park Boundary
- Groundwater Monitoring Well
- Piezometer
- Groundwater Management System Access Manhole (Vapor Screening Point)
- Stormwater Inlet Callout
- Drainage Piping Cleanout
- Below Grade Groundwater Management System Vault
- Underground Groundwater Management System Drainage Piping

NORTH

EMS

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

FIGURE 1

SITE PLAN

FORMER HESS STATION #20204

1613 East Joppa Road

Towson, Maryland

Drawn By: YSN

Date: 4/5/16

EMS ENVIRONMENTAL

Table 1
HISTORICAL GROUNDWATER MONITORING DATA SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
MDE-4	7/17/1996	NSVD	NM	NM	NM	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	11/26/1996	NSVD	NM	NM	NM	3	3	ND	ND	6	ND	NS	NS	NS	NS
Casing:	2/27/1997	444.03	5.78	0.00	438.25	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
0 to 3 feet	5/30/1997	444.03	6.20	0.00	437.83	ND	ND	ND	2	2	ND	NS	NS	NS	NS
	8/21/1997	444.03	7.37	0.00	436.66	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
Screen:	11/25/1997	444.03	7.42	0.00	436.61	**11**	642	**892**	3,050	4,595	**69**	NS	NS	NS	NS
3 to 13 feet	2/19/1998	444.03	6.01	0.00	438.02	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	5/28/1998	444.03	5.60	0.00	438.43	4	5	4	8	21	ND	NS	NS	NS	NS
	8/18/1998	444.03	6.68	0.00	437.35	**13**	10	57	92	172	**31**	NS	NS	NS	NS
	11/21/1998	444.03	7.64	0.00	436.39	1	8	31	176	216	**57**	NS	NS	NS	NS
	2/17/1999	444.03	7.70	0.00	436.33	3.7	107	193	605	909	**39**	NS	NS	NS	NS
	5/24/1999	444.03	7.02	0.00	437.01	2	ND	ND	ND	2	ND	NS	NS	NS	NS
	8/26/1999	444.03	7.87	0.00	436.16	**24**	140	390	750	1,304	**44**	NS	NS	NS	NS
	11/18/1999	444.03	6.90	0.00	437.13	ND	500	**920**	2,850	4,270	ND	NS	NS	NS	NS
	2/23/2000	444.03	6.50	0.00	437.53	ND	ND	ND	ND	ND	3.9	NS	NS	NS	NS
	5/17/2000	444.03	6.00	0.00	438.03	ND	ND	2.4	11.7	14.1	**30**	NS	NS	NS	NS
	8/3/2000	444.03	6.48	0.00	437.55	**7.7**	9	59	101	177	**54**	NS	NS	NS	NS
	11/20/2000	444.03	7.15	0.00	436.88	ND	ND	120	242	362	ND	NS	NS	NS	NS
	2/20/2001	444.03	6.87	0.00	437.16	**7.3**	7.5	19	81	115	**22**	NS	NS	NS	NS
	5/25/2001	444.03	6.66	0.00	437.37	**15**	8.8	ND	20.3	44	**34**	NS	NS	NS	NS
	8/6/2001	444.03	7.26	0.00	436.77	**9.7**	33	380	1,220	1,643	**87**	NS	NS	NS	NS
	11/7/2001	444.03	8.39	0.00	435.64	ND	41	220	760	1,021	**120**	NS	NS	NS	NS
	2/22/2002	444.03	8.83	0.00	435.20	**12**	91	220	1,380	1,703	ND	NS	NS	NS	NS
	5/16/2002	444.03	6.52	0.00	437.51	ND	27	120	268	415	15	NS	NS	NS	NS
	8/6/2002	444.03	8.72	0.00	435.31	ND	360	**1,100**	3,630	5,090	**150**	NS	NS	NS	NS
	11/13/2002	444.03	8.23	0.00	435.80	ND	610	**1,300**	5,900	7,810	ND	NS	NS	NS	NS
	3/5/2003	444.03	5.43	0.00	438.60	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	5/13/2003	444.03	5.36	0.00	438.67	2.0	ND	ND	2.6	4.6	11	NS	NS	NS	NS
	8/27/2003	444.03	5.72	0.00	438.31	1.0	ND	1.8	ND	2.8	ND	NS	NS	NS	NS
	11/12/2003	444.03	6.66	0.00	437.37	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	2/2/2004	444.03	5.39	0.00	438.64	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	5/14/2004	444.03	5.24	0.00	438.79	ND	ND	ND	ND	ND	1.7	NS	NS	NS	NS
	8/19/2004	444.03	5.97	0.00	438.06	ND	ND	ND	ND	ND	**26.8**	NS	NS	NS	NS
	5/19/2005	444.03	5.94	0.00	438.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/24/2007	444.03	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/27/2007	444.03	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2008	444.03	6.91	0.00	437.12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/25/2008	444.03	6.56	0.00	437.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/2008	444.03	7.14	0.00	436.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/17/2008	444.03	6.53	0.00	437.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/31/2009	444.03	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/22/2009	444.03	6.36	0.00	437.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/25/2009	444.03	6.60	0.00	437.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/14/2009	444.03	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/2009	444.03	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/17/2010	444.03	4.51	0.00	439.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/18/2010	444.03	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/24/2010	443.68	6.69	0.00	436.99	1.3	0.87 (J)	2.8	1.3	6.27 (J)	ND	ND	**858**	**216**	**1.6 (J)**
	1/11/2011	443.68	7.17	0.00	436.51	ND	ND	0.42 (J)	ND	0.42 (J)	ND	ND	**ND (<200)**	**ND (<100)**	ND
	6/23/2011	443.68	6.26	0.00	437.42	1.3	0.46 (J)	4.4	3.6	9.76 (J)	ND	ND	**982**	**464**	**3.3 (J)**
	9/28/2011	443.68	6.02	0.00	437.66	ND	ND	ND	ND	ND	ND	ND	**ND (<200)**	**ND (<100)**	ND
	12/21/2012	443.68	5.90	0.00	437.78	ND	ND	ND	ND	ND	ND	ND	**ND (<200)**	**ND (<100)**	ND
	3/21/2012	443.68	6.18	0.00	437.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/16/2012	443.68	6.48	0.00	437.20	0.50 (J)	ND	0.46 (J)	0.73 (J)	1.69 (J)	ND	ND	**340**	**104**	ND
	8/29/2012	443.68	7.67	0.00	436.01	0.50 (J)	ND	0.30 (J)	0.43 (J)	1.23 (J)	ND	ND	**407**	ND	ND
	12/19/2012	443.68	6.94	0.00	436.74	0.40 (J)	0.44 (J)	2.5	19.2	22.54 (J)	ND	ND	**390**	**372**	**1.1 (J)**
	3/20/2013	443.68	6.57	0.00	437.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/19/2013	443.68	6.47	0.00	437.21	0.45 (J)	0.56 (J)	7.0	8.4	16.41 (J)	ND	ND	**328**	ND	**2.0 (J)**
	9/19/2013	443.68	7.31	0.00	436.37	0.71 (J)	ND	1.3	0.60 (J)	2.61 (J)	ND	ND	**580**	**221**	**2.0 (J)**
	11/22/2013	443.68	7.25	0.00	436.43	1.9	3.2	427	1,420	1,852.10	ND	ND	**13,300**	**2,310**	**110**
	3/20/2014	443.68	5.56	0.00	438.12	ND	ND	0.99	5.8	6.79	ND	ND	ND	ND	ND
***	6/18/2014	443.68	8.33	0.00	435.35	ND	1.2	ND	17.5	18.7	ND	ND	**762**	***	**6.9**
***	6/30/2014	443.68	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS
	9/23/2014	443.18	9.54	0.00	433.64	ND	0.53 (J)	0.99 (J)	1.1	2.62 (J)	ND	ND	ND	**ND (<80)**	**0.93 (J)**
	12/23/2014	443.18	9.94	0.00	433.24	ND	ND	0.62 (J)	0.53 (J)	1.15 (J)	ND	ND	ND	**ND (<80)**	0.37 (J)
	3/24/2015	443.18	9.58	0.00	433.60	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<77)**	ND
	6/22/2015	443.18	9.25	0.00	433.93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/21/2015	443.18	9.28	0.00	433.90	ND	ND	ND	ND	ND	ND	ND	ND	**125**	ND
	12/9/2015	443.18	9.58	0.00	433.60	ND	ND	ND	ND	ND	ND	ND	ND	**98.4**	ND
	3/8/2016	443.18	8.98	0.00	434.20	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<64)**	ND
	6/7/2016	443.18	9.03	0.00	434.15	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<58)**	ND
	9/13/2016	443.18	9.48	0.00	433.70	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**94.6**	ND
	11/21/2016	443.18	9.90	0.00	433.28	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**469**	ND
	3/9/2017	443.18	10.42	0.00	432.76	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
‡	6/7/2017	443.18	9.72	0.00	433.46	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	9/6/2017	443.18	9.77	0.00	433.41	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	11/1/2017	443.18	9.97	0.00	433.21	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**154**	**ND (<1.1)**
	3/6/2018	443.18	9.84	0.00	433.34	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	6/20/2018	443.18	8.72	0.00	434.46	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/5/2018	443.18	8.64	0.00	434.54	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	443.18	8.11	0.00	435.07	Not sampled									
	11/13/2019	443.18	9.23	0.00	433.95	Not sampled									
	7/8/2020	443.18	8.33	0.00	434.85	Not sampled									
	12/9/2020	443.18	8.36	0.00	434.82	Not sampled									
	6/2/2021	443.18	8.68	0.00	434.50	Not sampled									
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

Table 1
HISTORICAL GROUNDWATER MONITORING DATA SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
MW-1	3/28/1991	455.93	15.86	0.00	440.07	**17**	ND	ND	35	52	5	NS	NS	NS	NS
	6/26/1991	455.93	29.40	0.00	426.53	2	ND	ND	2	4	8	NS	NS	NS	NS
Casing:	9/1/1992	455.93	26.35	0.00	429.58	**25**	18	10	41	94	ND	NS	NS	NS	NS
Unknown	1/7/1993	455.93	24.70	0.00	431.23	3	4	ND	10	17	**142**	NS	NS	NS	NS
	4/12/1993	455.93	NM	NM	NM	**29**	5	7	51	92	**30**	NS	NS	NS	NS
Screen:	7/15/1993	455.93	NM	NM	NM	**12**	3	3	66	84	ND	NS	NS	NS	NS
Unknown	10/19/1993	455.93	NM	NM	NM	**11**	ND	ND	37	48	ND	NS	NS	NS	NS
	1/26/1994	455.93	NM	NM	NM	**10**	ND	3	22	35	ND	NS	NS	NS	NS
	4/20/1994	455.93	NM	NM	NM	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	8/2/1994	455.93	NM	NM	NM	**23**	ND	4	38	65	ND	NS	NS	NS	NS
	11/22/1994	455.93	NM	NM	NM	**14**	ND	3	16	33	11	NS	NS	NS	NS
	3/3/1995	455.93	NM	NM	NM	**12**	2	3	13	30	6	NS	NS	NS	NS
	5/9/1995	455.93	NM	NM	NM	**10**	ND	ND	11	21	16	NS	NS	NS	NS
	8/15/1995	455.93	NM	NM	NM	**12**	ND	2	23	37	ND	NS	NS	NS	NS
	11/28/1995	455.93	NM	NM	NM	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	2/13/1996	455.93	16.20	0.00	439.73	ND	ND	ND	4	4	ND	NS	NS	NS	NS
	5/15/1996	455.93	18.06	0.00	437.87	4	ND	ND	6	10	**24.3**	NS	NS	NS	NS
	8/28/1996	455.93	16.95	0.00	438.98	ND	6	3	12	21	5.6	NS	NS	NS	NS
	11/26/1996	455.93	26.21	0.00	429.72	3	ND	ND	2	5	ND	NS	NS	NS	NS
	2/27/1997	455.93	15.73	0.00	440.20	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	5/30/1997	455.93	16.00	0.00	439.93	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	8/21/1997	455.93	18.66	0.00	437.27	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	11/25/1997	455.93	17.97	0.00	437.96	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	2/19/1998	455.93	15.47	0.00	440.46	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	5/28/1998	455.93	15.06	0.00	440.87	ND	ND	3	9	12	ND	NS	NS	NS	NS
	8/18/1998	455.93	16.42	0.00	439.51	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	5/19/2005	455.93	16.83	0.00	439.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/24/2007	455.93	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/27/2007	455.93	17.58	0.00	438.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2008	455.93	17.39	0.00	438.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/25/2008	455.93	16.41	0.00	439.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/2008	455.93	16.57	0.00	439.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/17/2008	455.93	16.26	0.00	439.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/31/2009	455.93	17.87	0.00	438.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/22/2009	455.93	16.07	0.00	439.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/25/2009	455.93	16.48	0.00	439.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/14/2009	455.93	15.94	0.00	439.99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/2009	455.93	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/17/2010	455.93	0.01	0.00	455.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/18/2010	455.93	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/26/2010	454.42	16.61	0.00	437.81	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/10/2011	454.42	17.64	0.00	436.78	ND	ND	ND	ND	ND	ND	ND	**ND (<200)**	**ND (<100)**	ND
	6/22/2011	454.42	16.05	0.00	438.37	ND	ND	ND	ND	ND	ND	ND	**ND (<200)**	**ND (<110)**	ND
	9/28/2011	454.42	6.68	0.00	447.74	ND	ND	ND	ND	ND	ND	ND	**ND (<200)**	**ND (<110)**	ND
	12/20/2012	454.42	15.90	0.00	438.52	ND	ND	ND	ND	ND	ND	ND	**ND (<200)**	**ND (<100)**	ND
	3/21/2012	454.42	16.41	0.00	438.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/15/2012	454.42	14.43	0.00	439.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	8/28/2012	454.42	15.84	0.00	438.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/18/2012	454.42	17.16	0.00	437.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	3/19/2013	454.42	16.57	0.00	437.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/18/2013	454.42	17.45	0.00	436.97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/19/2013	454.42	17.54	0.00	436.88	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/22/2013	454.42	17.87	0.00	436.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	3/20/2014	454.42	15.89	0.00	438.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59 (J)
***	6/18/2014	454.42	18.43	0.00	435.99	ND	ND	ND	ND	ND	ND	ND	ND	***	ND
***	6/30/2014	454.42	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS
	9/23/2014	453.92	18.73	0.00	435.19	ND	ND	ND	ND	ND	ND	18.4	ND	**243**	ND
	12/23/2014	453.92	19.67	0.00	434.25	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<80)**	ND
	3/24/2015	453.92	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/22/2015	453.92	18.24	0.00	435.68	ND	ND	ND	ND	ND	ND	ND	ND	**102**	ND
	9/21/2015	453.92	18.49	0.00	435.43	ND	ND	ND	ND	ND	ND	ND	ND	**233**	ND
	12/9/2015	453.92	19.24	0.00	434.68	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<64)**	ND
	3/8/2016	453.92	18.28	0.00	435.64	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<64)**	ND
	6/7/2016	453.92	18.21	0.00	435.71	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<58)**	ND
	9/13/2016	453.92	18.92	0.00	435.00	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**108**	ND
	11/21/2016	453.92	19.83	0.00	434.09	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	ND
	3/9/2017	453.92	20.49	0.00	433.43	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	6/7/2017	453.92	19.38	0.00	434.54	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	9/6/2017	453.92	19.04	0.00	434.88	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	11/1/2017	453.92	19.67	0.00	434.25	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	3/6/2018	453.92	20.16	0.00	433.76	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**91.9**	**ND (<1.1)**
	6/20/2018	453.92	17.45	0.00	436.47	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/5/2018	453.92	16.71	0.00	437.21	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	453.92	16.52	0.00	437.40	Not sampled									
	11/13/2019	453.92	18.44	0.00	435.48	Not sampled									
	7/8/2020	453.92	16.57	0.00	437.35	Not sampled									
	12/9/2020	453.92	17.28	0.00	436.64	Not sampled									
	6/2/2021	453.92	17.57	0.00	436.35	Not sampled									
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

Table 1
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Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
MW-4	3/28/1991	457.11	16.98	0.00	440.13	**600**	**1,300**	380	1,500	3,780	**40**	NS	NS	NS	NS
	6/26/1991	457.11	23.80	0.00	433.31	**3,775**	**4,825**	**925**	4,075	13,600	**1,125**	NS	NS	NS	NS
Casing:	9/1/1992	457.11	22.00	0.00	435.11	**3,500**	**9,300**	**1,625**	5,225	19,650	**1,100**	NS	NS	NS	NS
0 to 10 feet	9/4/1992	457.11	22.79	0.01	434.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/15/1992	457.11	22.98	sheen	434.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Screen:	11/9/1992	457.11	23.20	2.50	435.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
10 to 25 feet	12/9/1992	457.11	21.58	1.36	436.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/7/1993	457.11	21.68	0.02	435.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/1/1993	457.11	23.15	0.85	434.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/8/1993	457.11	20.10	sheen	437.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/12/1993	457.11	18.20	0.05	438.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/11/1993	457.11	18.10	0.15	439.12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/3/1993	457.11	18.96	0.38	438.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/7/1993	457.11	19.65	0.30	437.69	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/2/1993	457.11	18.95	0.00	438.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/15/1993	457.11	19.34	0.00	437.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/19/1993	457.11	19.75	0.00	437.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/1993	457.11	20.75	sheen	436.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/14/1993	457.11	19.85	0.00	437.26	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/25/1994	457.11	17.84	0.00	439.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/11/1994	457.11	17.13	0.00	439.98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/20/1994	457.11	17.68	0.00	439.43	**1,650**	**6,130**	678	3,950	12,408	**223**	NS	NS	NS	NS
	8/2/1994	457.11	18.35	0.00	438.76	**2,630**	**12,200**	**1,430**	9,070	25,330	ND	NS	NS	NS	NS
	11/22/1994	457.11	18.52	0.00	438.59	**2,950**	**7,040**	**1,430**	8,700	20,120	**340**	NS	NS	NS	NS
	3/3/1995	457.11	20.31	0.00	436.80	**1,560**	**12,400**	**1,690**	9,050	24,700	**775**	NS	NS	NS	NS
	5/9/1995	457.11	20.25	0.00	436.86	**1,600**	**12,800**	**1,840**	**10,400**	26,640	**499**	NS	NS	NS	NS
	8/15/1995	457.11	21.10	0.00	436.01	**<200**	<200	<200	726	726	**<200**	NS	NS	NS	NS
	7/24/1995	457.11	19.29	0.02	437.84	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/28/1995	457.11	22.00	0.00	435.11	ND	10	ND	58	68	**47**	NS	NS	NS	NS
	2/13/1996	457.11	20.20	0.00	436.91	3	11	2	21	37	14	NS	NS	NS	NS
	5/15/1996	457.11	17.60	0.00	439.51	ND	53	18	133	204	6	NS	NS	NS	NS
	8/28/1996	457.11	16.98	0.00	440.13	ND	3	3	10	16	6	NS	NS	NS	NS
	11/26/1996	457.11	15.85	0.00	441.26	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	2/27/1997	457.11	14.19	0.00	442.92	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	5/30/1997	457.11	15.77	0.00	441.34	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	8/21/1997	457.11	19.01	0.00	438.10	**15**	24	4	27	70	ND	NS	NS	NS	NS
	11/25/1997	457.11	19.15	0.00	437.96	**89**	75	143	240	547	3	NS	NS	NS	NS
	2/19/1998	457.11	17.68	0.00	439.43	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	5/28/1998	457.11	16.64	0.00	440.47	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	8/18/1998	457.11	18.21	0.00	438.90	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	11/21/1998	457.11	19.65	0.00	437.46	**71**	**1,600**	183	731	2,585	19	NS	NS	NS	NS
	2/17/1999	457.11	19.70	0.00	437.41	ND	780	252	460	1,492	**<100**	NS	NS	NS	NS
	5/24/1999	457.11	18.90	0.00	438.21	ND	14	8.7	21.9	44.6	**77.7**	NS	NS	NS	NS
	8/26/1999	457.11	20.60	0.00	436.51	ND	ND	35	123	158	**220**	NS	NS	NS	NS
	11/18/1999	457.11	18.52	0.00	438.59	ND	ND	ND	3.8	3.8	**2,000**	NS	NS	NS	NS
	12/29/1999	457.11	NM	NM	NM	ND	ND	ND	ND	ND	**2,100**	NS	NS	NS	NS
	2/23/2000	457.11	19.21	0.00	437.90	**120**	4.5	32	106	263	**730**	NS	NS	NS	NS
	5/17/2000	457.11	16.90	0.00	440.21	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	8/3/2000	457.11	17.28	0.00	439.83	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	11/20/2000	457.11	19.69	0.00	437.42	**87**	ND	ND	ND	87	**3,000**	NS	NS	NS	NS
	2/20/2001	457.11	18.60	0.00	438.51	ND	ND	ND	ND	ND	6.8	NS	NS	NS	NS
	5/25/2001	457.11	17.30	0.00	439.81	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	8/6/2001	457.11	19.17	0.00	437.94	ND	ND	ND	ND	ND	2.0	NS	NS	NS	NS
	11/7/2001	457.11	21.17	0.00	435.94	**330**	62	370	800	1,562	**110**	NS	NS	NS	NS
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

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Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
MW-4 (continued)	2/22/2002	457.11	20.80	0.00	436.31	**81**	120	200	510	911	**33**	NS	NS	NS	NS
	5/16/2002	457.11	18.12	0.00	438.99	ND	15	12	223	250	2.2	NS	NS	NS	NS
	8/6/2002	457.11	21.61	0.00	435.50	3.5	3.2	7.0	22.8	36.5	3.9	NS	NS	NS	NS
	11/13/2002	457.11	18.81	0.00	438.30	ND	4.9	14	141	159.9	ND	NS	NS	NS	NS
	3/5/2003	457.11	18.41	0.00	438.70	ND	ND	ND	ND	ND	2.0	NS	NS	NS	NS
	5/13/2003	457.11	16.96	0.00	440.15	3.9	ND	ND	ND	3.9	**110**	NS	NS	NS	NS
	9/25/2003	457.11	NM	NM	NM	ND	ND	ND	ND	ND	1.5	NS	NS	NS	NS
	11/12/2003	457.11	18.32	0.00	438.79	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS
	2/2/2004	457.11	14.70	0.00	442.41	ND	ND	ND	ND	ND	**666**	NS	NS	NS	NS
	5/14/2004	457.11	18.09	0.00	439.02	ND	ND	ND	ND	ND	**24.8**	NS	NS	NS	NS
	8/19/2004	457.11	16.55	0.00	440.56	1.6	2.1	36.5	92.4	132.6	1.6	NS	NS	NS	NS
	11/22/2004	457.11	19.43	0.00	437.68	ND	ND	0.31 (J)	0.57 (J)	0.88 (J)	0.29 (J)	NS	NS	NS	NS
	2/23/2005	457.11	18.93	0.00	438.18	ND	ND	ND	ND	ND	0.65 (J)	NS	NS	NS	NS
	5/19/2005	457.11	16.67	0.00	440.44	ND	ND	ND	ND	ND	0.91 (J)	ND	ND	ND	NS
	8/24/2007	457.11	19.06	0.00	438.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/27/2007	457.11	18.72	0.00	438.39	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2008	457.11	18.63	0.00	438.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/25/2008	457.11	17.57	0.00	439.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/2008	457.11	19.28	0.00	437.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/17/2008	457.11	19.10	0.00	438.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/31/2009	457.11	19.12	0.00	437.99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/22/2009	457.11	15.07	0.00	442.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/25/2009	457.11	17.63	0.00	439.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/14/2009	457.11	16.56	0.00	440.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/2009	457.11	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/17/2010	457.11	14.98	0.00	442.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/18/2010	457.11	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/23/2010	455.60	18.10	0.00	437.50	0.52 (J)	22.3	41.1	84.2	148.12 (J)	ND	ND	**449**	**244**	**7.2**
	1/10/2011	455.60	18.94	0.00	436.66	**16.4**	16.9	151	235	419.30	2.7	112	**1,940**	**1,930**	**84.1**
	6/22/2011	455.60	17.57	0.00	438.03	**8.7**	10.6	5.7	8.6	33.60	1.9	128	**306**	**304**	ND
	9/28/2011	455.60	17.08	0.00	438.52	ND	ND	ND	ND	ND	ND	ND	**ND (<200)**	**ND (<100)**	ND
	12/20/2012	455.60	17.30	0.00	438.30	ND	ND	0.29 (J)	ND	0.29 (J)	ND	ND	**ND (<200)**	**ND (<100)**	ND
	3/21/2012	455.60	17.78	0.00	437.82	0.24 (J)	ND	1.5	ND	1.74 (J)	ND	ND	ND	ND	ND
	5/15/2012	455.60	11.49	0.00	444.11	ND	ND	ND	ND	ND	ND	ND	ND	**283**	ND
	8/28/2012	455.60	18.91	0.00	436.69	ND	ND	ND	ND	ND	ND	ND	ND	**924**	ND
	12/18/2012	455.60	18.58	0.00	437.02	**6.5**	37.2	419	108	570.7	ND	18.5 (J)	**2,510**	**1,120**	**154**
	3/19/2013	455.60	17.99	0.00	437.61	ND	ND	ND	ND	ND	ND	ND	ND	**350**	ND
	6/18/2013	455.60	17.77	0.00	437.83	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/19/2013	455.60	19.01	0.00	436.59	3.0	16.1	85.9	16.2	121.2	ND	55.8	**2,420**	**367**	**34.3**
	11/22/2013	455.60	19.21	0.00	436.39	**9.9**	32.3	38.4	23.7	104.3	1.3	52.9	**4,110**	**1,400**	**7.0**
	3/20/2014	455.60	15.71	0.00	439.89	2.0	5.2	ND	5.8	13.0	1.2	71.3	**1,870**	**408**	ND
***	6/18/2014	455.60	18.24	0.00	437.36	**87.4**	59.2	9.4	24.8	180.8	**106**	1,770	**3,850**	***	**1.5 (J)**
***	6/30/2014	455.60	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	**2,160**	NS
	9/23/2014	455.10	20.69	0.00	434.41	**7.3**	212	541	567	1,327.3	**269**	1,150	**5,740**	**2,560**	**159**
	12/23/2014	455.10	21.37	0.00	433.73	**88.0**	83.0	**1,290**	1,480	2,941.0	**50.6**	771	**12,200**	**3,090**	**490**
	3/24/2015	455.10	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/22/2015	455.10	20.38	0.00	434.72	**178**	34.1	661	409	1,282.1	17.3	3,200	**6,130**	**4,540**	**392**
	9/21/2015	455.10	20.57	0.00	434.53	**153**	44.3	623	394	1,214.3	16.9	1,730	**10,300**	**3,740**	**430**
	12/9/2015	455.10	21.08	0.00	434.02	**7.8**	1.4	34.8	10.1	54.1	ND	250	**650**	**684**	**28.3**
	3/8/2016	455.10	20.29	0.00	434.81	**103**	9.4	223	49.0	384.4	7.5	553	**2,130**	**874**	**143**
	6/7/2016	455.10	20.28	0.00	434.82	**155**	27.1	**744**	139	1,065.1	6.2	3,030	**6,540**	**3,150**	**436**
	9/13/2016	455.10	20.87	0.00	434.23	**131**	23.1	**763**	150	1,067.1	5.8	2,320	**6,520**	**2,750**	**422**
	11/21/2016	455.10	21.56	0.00	433.54	**108**	25.9	**727**	192	1,052.9	12.9	2,480	**6,730**	**3,520**	**439**
	3/9/2017	455.10	22.05	0.00	433.05	**23.7**	5.5	142	42.8	214.0	3.4	ND	**2,450**	**1,090**	**144**
	6/7/2017	455.10	21.18	0.00	433.92	**14.6**	2.8	50.7	7.8	75.9	2.3	174	**1,590**	**1,050**	**34.3**
	9/6/2017	455.10	20.94	0.00	434.16	**44.1**	5.8	141	24.5	215.4	ND	1,230	**1,980**	**1,570**	**107**
	11/1/2017	455.10	21.41	0.00	433.69	**69.8**	7.6	146	42.1	266	6.1	1,380	**3,050**	**1,900**	**118**
	3/6/2018	455.10	21.75	0.00	433.35	**11.3**	0.71 (J)	12.3	4.4	28.7 (J)	ND	9.4 (J)	**1,090**	**1,070**	**20.6**
	6/20/2018	455.10	19.73	0.00	435.37	**18.2**	ND	0.77 (J)	ND	18.97 (J)	2.5	83.4	**124 (J)**	**112**	**ND (<1.1)**
	9/5/2018	455.10	19.34	0.00	435.76	**7.3**	ND	2.7	ND	10.0	ND	40.3	**226**	**110**	**2.8 (J)**
	7/18/2019	455.10	18.82	0.00	436.28	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	ND (<42)	**ND (<53)**	**ND (<0.98)**
	11/13/2019	455.10	20.42	0.00	434.68	**8.4**	4.5	37.5	6.6	57.0	0.64 (J)	16.8	**507**	**168**	**19.9**
	7/8/2020	455.10	18.78	0.00	436.32	ND (<0.43)	ND (<0.53)	0.84 (J)	ND (<0.59)	< 2.39	ND (<0.51)	30.6	**208**	**ND (<53)**	**ND (<2.5)**
	12/9/2020	455.10	17.47	0.00	437.63	0.62	ND (<0.53)	ND (<0.60)	ND (<0.59)	< 2.34	ND (<0.51)	ND (<5.8)	**438**	**ND (<53)**	**ND (<2.5)**
	6/2/2021	455.10	19.62	0.00	435.48	ND (<0.43)	ND (<0.53)	0.81	ND (<0.59)	< 2.36	ND (<0.51)	ND (<5.8)	**101**	**ND (<49)**	**ND (<2.5)**
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

Table 1
HISTORICAL GROUNDWATER MONITORING DATA SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
MW-7	3/28/1991	452.69	15.10	0.00	437.59	**7,950**	**6,100**	**2,700**	8,550	25,300	**650**	NS	NS	NS	NS
	6/26/1991	452.69	16.12	0.00	436.57	**2,100**	**2,400**	**800**	2,300	7,600	**1,000**	NS	NS	NS	NS
Casing:	9/1/1992	452.69	17.22	0.00	435.47	**1,470**	**3,670**	**1,350**	5,350	11,840	**1,200**	NS	NS	NS	NS
0 to 8 feet	1/7/1993	452.69	26.25	0.00	426.44	**1,550**	**5,750**	**1,100**	6,250	14,650	**600**	NS	NS	NS	NS
	4/12/1993	452.69	NM	NM	NM	**200**	**2,550**	350	3,600	6,700	ND	NS	NS	NS	NS
Screen:	7/15/1993	452.69	NM	NM	NM	**2,150**	**8,550**	**1,200**	8,950	20,850	**1,000**	NS	NS	NS	NS
8 to 33 feet	10/19/1993	452.69	NM	NM	NM	**2,400**	**15,700**	**1,300**	9,000	28,400	**870**	NS	NS	NS	NS
	1/26/1994	452.69	NM	NM	NM	**1,100**	**6,200**	**950**	5,650	13,900	ND	NS	NS	NS	NS
	4/19/1994	452.69	NM	NM	NM	**11**	68	11	86	176	**64.4**	NS	NS	NS	NS
	8/2/1994	452.69	NM	NM	NM	**280**	**1,160**	260	2,280	3,980	**180**	NS	NS	NS	NS
	11/22/1994	452.69	NM	NM	NM	**1,530**	**1,780**	**1,380**	5,400	10,090	**338**	NS	NS	NS	NS
	3/3/1995	452.69	NM	NM	NM	**1,690**	**9,600**	**1,930**	**11,000**	24,220	**913**	NS	NS	NS	NS
	5/9/1995	452.69	NM	NM	NM	**448**	**2,330**	294	3,560	6,632	**<200**	NS	NS	NS	NS
	8/15/1995	452.69	NM	NM	NM	**370**	**1,790**	420	3,430	6,010	**<200**	NS	NS	NS	NS
	11/28/1995	452.69	NM	NM	NM	**394**	**3,440**	646	4,230	8,710	ND	NS	NS	NS	NS
	2/13/1996	452.69	14.75	0.00	437.94	**104**	164	106	259	633	ND	NS	NS	NS	NS
	5/15/1996	452.69	15.40	0.00	437.29	**132**	429	101	436	1,098	**33**	NS	NS	NS	NS
	8/28/1996	452.69	15.27	0.00	437.42	**422**	**3,460**	480	5,540	9,902	**78**	NS	NS	NS	NS
	11/26/1996	452.69	15.61	0.00	437.08	**96**	340	ND	875	1,311	ND	NS	NS	NS	NS
	2/27/1997	452.69	14.69	0.00	438.00	**56**	225	**1,420**	3,830	5,531	**109**	NS	NS	NS	NS
	5/30/1997	452.69	15.10	0.00	437.59	**69**	293	**1,600**	4,900	6,862	**149**	NS	NS	NS	NS
	8/21/1997	452.69	16.53	0.00	436.16	ND	349	**1,280**	5,730	7,359	ND	NS	NS	NS	NS
	11/25/1997	452.69	16.63	0.00	436.06	ND	175	**913**	4,160	5,248	**57**	NS	NS	NS	NS
	2/19/1998	452.69	15.23	0.00	437.46	ND	165	381	2,360	2,906	ND	NS	NS	NS	NS
	5/28/1998	452.69	14.36	0.00	438.33	**100**	364	**1,270**	5,070	6,804	**147**	NS	NS	NS	NS
	8/18/1998	452.69	15.61	0.00	437.08	**120**	313	**1,300**	5,540	7,273	ND	NS	NS	NS	NS
	11/21/1998	452.69	16.86	0.00	435.83	**<100**	195	**1,280**	6,340	7,815	**129**	NS	NS	NS	NS
	2/17/1999	452.69	17.02	0.00	435.67	**<50**	409	**1,510**	6,230	8,149	**136**	NS	NS	NS	NS
	5/24/1999	452.69	16.20	0.00	436.49	**37**	229	**1,010**	3,230	4,506	**211**	NS	NS	NS	NS
	8/26/1999	452.69	17.18	0.00	435.51	**<50**	110	**920**	3,900	4,930	**170**	NS	NS	NS	NS
	11/18/1999	452.69	16.02	0.00	436.67	**<20**	130	**870**	3,300	4,300	**1,400**	NS	NS	NS	NS
	12/29/1999	452.69	NM	NM	NM	**9**	140	**780**	3,200	4,129	**240**	NS	NS	NS	NS
	2/23/2000	452.69	15.43	0.00	437.26	**<20**	320	**990**	3,800	5,110	**370**	NS	NS	NS	NS
	5/17/2000	452.69	14.47	0.00	438.22	ND	180	**1,100**	3,900	5,180	**1,300**	NS	NS	NS	NS
	8/3/2000	452.69	14.92	0.00	437.77	**84**	260	**1,000**	4,200	5,544	**2,100**	NS	NS	NS	NS
	11/20/2000	452.69	16.65	0.00	436.04	ND	140	**830**	3,180	4,150	**150**	NS	NS	NS	NS
	2/20/2001	452.69	17.86	0.00	434.83	**70**	240	**850**	2,540	3,700	**130**	NS	NS	NS	NS
	5/25/2001	452.69	15.05	0.00	437.64	ND	250	**1,300**	3,600	5,150	ND	NS	NS	NS	NS
	8/6/2001	452.69	16.70	0.00	435.99	**11**	280	**1,400**	4,900	6,591	**210**	NS	NS	NS	NS
	11/7/2001	452.69	17.64	0.00	435.05	ND	64	**810**	2,284	3,158	**98**	NS	NS	NS	NS
	2/22/2002	452.69	17.92	0.00	434.77	**11**	75	660	2,080	2,826	**54**	NS	NS	NS	NS
	5/16/2002	452.69	15.80	0.00	436.89	ND	140	690	2,110	2,940	**51**	NS	NS	NS	NS
	8/6/2002	452.69	18.05	0.00	434.64	**60**	93	**800**	2,180	3,133	**140**	NS	NS	NS	NS
	11/13/2002	452.69	17.23	0.00	435.46	ND	ND	**760**	1,746	2,506	ND	NS	NS	NS	NS
	3/5/2003	452.69	13.94	0.00	438.75	ND	16	100	301	417	5.1	NS	NS	NS	NS
	5/13/2003	452.69	15.10	0.00	437.59	**10**	10	110	198	328	**22**	NS	NS	NS	NS
	9/25/2003	452.69	NM	NM	NM	**25.6**	24.9	343	273	667	16.1	NS	NS	NS	NS
	11/12/2003	452.69	15.36	0.00	437.33	**24.5**	91.7	**907**	1,400	2,423	10	NS	NS	NS	NS
	2/2/2004	452.69	14.40	0.00	438.29	**22.6**	76.4	605	1,390	2,094	7.0	NS	NS	NS	NS
	5/14/2004	452.69	13.97	0.00	438.72	**10.3**	28.8	499	595	1,133	5.8	NS	NS	NS	NS
	8/19/2004	452.69	14.67	0.00	438.02	**18.8**	82.8	**763**	2,720	3,585	11.3	NS	NS	NS	NS
	2/23/2005	452.69	16.39	0.00	436.30	3.5 (J)	80	**1,080**	4,320	5,484 (J)	7.6 (J)	NS	NS	NS	NS
	5/19/2005	452.69	16.25	0.00	436.44	2.1 (J)	61.9	**740**	2,580	3,384 (J)	3.7 (J)	NS	NS	NS	NS
	8/24/2005	452.69	15.89	0.00	436.80	**<10**	56.9	**1,020**	3,770	4,847	8.4 (J)	NS	NS	NS	NS
	11/8/2005	452.69	15.54	0.00	437.15	1.6 (J)	18.1	472	913	1,405 (J)	9.1	NS	NS	NS	NS
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

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Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
MW-7	2/10/2006	452.69	14.54	0.00	438.15	1.2 (J)	22	413	1,390	1,826	5.2	NS	NS	NS	NS
(continued)	5/15/2006	452.69	15.50	0.00	437.19	**<10**	34.4	**880**	2,690	3,604	**22.2**	NS	NS	NS	NS
	8/9/2006	452.69	15.41	0.00	437.28	ND	40	**911**	3,140	4,091	6.1	NS	NS	NS	NS
	10/17/2006	452.69	17.28	0.00	435.41	**<10**	42.3	**1,170**	4,340	5,552	10	NS	NS	NS	NS
	4/11/2007	452.69	NG	NG	NG	ND	1.9	57	92	150.9	ND	ND	**1,900**	ND	NS
	8/24/2007	452.69	16.38	0.00	436.31	1.5	7.2	200	150	359	4.3	ND	**1,900**	**1,300**	NS
	12/27/2007	452.69	16.02	0.00	436.67	ND	ND	1.2	2.2	3.4	ND	ND	ND	**4,900**	NS
	3/27/2008	452.69	16.11	0.00	436.58	ND	ND	14	12.9	26.9	1.0	ND	ND	ND	NS
	6/25/2008	452.69	15.56	0.00	437.13	0.42 (J)	3.1	17.4	39	59.9	ND	ND	**1,400**	**700**	NS
	9/24/2008	452.69	16.20	0.00	436.49	1.7	9.7	278	323	612.4	3.4	ND	**4,340**	**976**	NS
	12/17/2008	452.69	9.65	0.00	443.04	2.0	17.3	495	911	1,425.3	3.4	ND	**8,250**	**1,160**	NS
	3/31/2009	452.69	16.77	0.00	435.92	1.0	ND	ND	ND	1.0	**59.8**	ND (<25)	ND	**1,160**	NS
	6/22/2009	452.69	15.50	0.00	437.19	1.2 (J)	7.9	257	285	551.1 (J)	1.6 (J)	ND (<63)	**4,810**	**1,870**	NS
	9/25/2009	452.69	15.64	0.00	437.05	1.2 (J)	9.1	528	549	1,087.3 (J)	ND	ND (<50)	**9,450**	**2,330**	NS
	12/14/2009	452.69	13.57	0.00	439.12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/2009	452.69	NM	NM	NM	0.51 (J)	3.4	98.9	53.7	156.51 (J)	ND	ND (<25)	**1,490**	**531**	NS
	3/17/2010	452.69	13.17	0.00	439.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/18/2010	452.69	NM	NM	NM	ND	ND	43.3	7.4	50.7	ND	ND (<25)	**1,160**	**516**	NS
19 ft. sample	8/24/2010	453.52	15.73	0.00	437.79	1.8	3	238	58.4	301.2	ND	ND	**3,000**	**567**	NS
27 ft. sample	8/24/2010	453.52	15.73	0.00	437.79	**13**	2	127	31.3	173.3	**53.1**	47.6	**2,080**	**655**	**7.3**
	1/11/2011	453.52	16.36	0.00	437.16	1.8	8.7	492	294	796.5	1.8	ND	**7,180**	**2,360**	**75.4**
	6/23/2011	453.52	15.20	0.00	438.32	0.76 (J)	3.8	114	19.9	138.46 (J)	0.75 (J)	ND	**1,640**	**772**	**12.6**
	9/29/2011	453.52	14.99	0.00	438.53	1.5	6.7	330	200	538.2	1.7	18.8 (J)	**3,060**	**2,620**	**48.0**
	12/21/2012	453.52	14.86	0.00	438.66	3.7	2.8	13.6	3.0	23.1	6.7	276	**452**	**422**	**32.9**
	3/21/2012	453.52	15.26	0.00	438.26	4.0	3.4	128	10.1	145.5	4.5	198	**1,820**	**1,390**	**11.9**
	5/16/2012	453.52	15.60	0.00	437.92	2.3	3.5	138	55.7	199.5	2.9	126	**2,270**	**1,330**	**20.5**
	8/29/2012	453.52	15.84	0.00	437.68	3.5	9.3	392	354	758.8	3.5	96.3	**6,070**	**1,530**	**85.7**
	12/19/2012	453.52	16.06	0.00	437.46	3.2	8.9	464	424	900.1	9.7	44.3 (J)	**8,770**	**1,760**	**153**
	3/20/2013	453.52	14.45	0.00	439.07	1.8	7.8	208	289	506.6	3.7	ND	**4,880**	**1,400**	**171**
	6/19/2013	453.52	15.46	0.00	438.06	1.6	6.1	193	150	350.7	2.4	5.4 (J)	**3,980**	**1,690**	**80.0**
	9/19/2013	453.52	16.49	0.00	437.03	2.4	8.0	386	259	647.4	2.8	ND	**6,250**	**1,520**	**162**
	11/22/2013	453.52	16.56	0.00	436.96	2.1	9.0	481	295	787.1	3.8	10.1 (J)	**8,920**	**1,230**	**197**
	3/20/2014	453.52	14.60	0.00	438.92	2.1	3.2	147	20.3	172.6	1.5	ND	**2,830**	**1,560**	**29.2**
	6/18/2014	453.52	Inaccessible - Sampled on 6/24/2014												
***	6/24/2014	453.52	16.89	0.00	436.63	4.8	10.5	396	284	695.3	**32.1**	256	**8,400**	***	**34.1**
***	6/30/2014	453.52	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	**1,840**	NS
	9/23/2014	452.69	18.44	0.00	434.25	1.3	5.5	350	389	745.8	**28.3**	125	**8,640**	**232**	**159**
	12/23/2014	452.69	19.02	0.00	433.67	1.4	4.3	200	177	382.7	**29.6**	90.1	**5,990**	**1,030**	**91.8**
	3/24/2015	452.69	18.67	0.00	434.02	3.6	1.9	97.4	53.4	156.3	**80.0**	130	**3,540**	**463**	**56.2**
	6/22/2015	452.69	18.29	0.00	434.40	5.0	3.6	117	117	242.6	**51.0**	145	**2,980**	**1,580**	**45.7**
	9/21/2015	452.69	18.42	0.00	434.27	**5.9**	2.6	77.0	73.2	158.7	18.0	89.7	**3,460**	**902**	**27.3**
	12/9/2015	452.69	18.81	0.00	433.88	**7.3**	2.5	63.3	40.4	113.5	18.1	93.2	**2,080**	**714**	**6.4**
	3/8/2016	452.69	18.16	0.00	434.53	**8.9**	1.6	36.9	11.6	59.0	**81.5**	138	**1,990**	**785**	**2.8 (J)**
	6/7/2016	452.69	18.19	0.00	434.50	**8.3**	1.5	32.0	14.4	56.2	**25.3**	73.8	**1,390**	**904**	**5.5**
	9/13/2016	452.69	18.62	0.00	434.07	**8.5**	1.5	31.6	15.6	57.2	10.7	73.5	**2,600**	**925**	**5.0**
	11/21/2016	452.69	19.14	0.00	433.55	**7.6**	1.8	39.0	21.8	70.2	7.4	77.1	**2,240**	**564**	**7.7**
	3/9/2017	452.69	19.63	0.00	433.06	**6.9**	1.1	27.8	14.0	49.8	9.7	ND	**1,720**	**434**	**4.5**
‡	6/7/2017	452.69	18.89	0.00	433.80	**6.2**	0.81(J)	8.5	7.8	23.31 (J)	**43.2**	94.7	**1,130**	**585**	**ND (<1.0)**
	9/6/2017	452.69	18.78	0.00	433.91	**6.6**	2.2	42.6	35.4	86.8	8.2	64.6	**1,630**	**665**	**6.7**
	11/1/2017	452.69	19.07	0.00	433.62	**8.3**	3.3	63.2	56.2	131.0	9.2	96.2	**1,560**	**893**	**10.5**
	3/6/2018	452.69	19.31	0.00	433.38	3.3	0.56 (J)	3.3	2.2	9.36 (J)	**21.0**	72.8	**826**	**517**	**ND (<1.1)**
	6/20/2018	452.69	17.74	0.00	434.95	**18.4**	3.4	59.1	47.2	128.1	**52.7**	187	**1,810**	**866**	**12.0**
	9/5/2018	452.69	17.38	0.00	435.31	**12.9**	2.1	27.8	20.6	63.4	14.2	100	**1,410**	**715**	**4.6 (J)**
	7/18/2019	452.69	16.97	0.00	435.72	**5.1**	3.6	31.0	19.0	58.7	1.5	ND (<5.8)	**1,640**	**537**	**9.0**
	11/13/2019	452.69	18.28	0.00	434.41	**15.7**	12.5	112	96.9	237	0.80 (J)	8.0 (J)	**2,540**	**1,380**	**55.7**
	7/8/2020	452.69	17.12	0.00	435.57	**6.1**	2.8	28.6	12.8	50.3	2.7	26.4	**920**	**436**	**7.8**
	12/9/2020	452.69	17.51	0.00	435.18	**8.2**	9.1	39.8	56.9	114.0	0.75 (J)	68.7	**2,620**	**740**	**54.5**
	6/2/2021	452.69	17.62	0.00	435.07	4.5	2.7	29.0	8.1	44.3	4.1	56.6	**1,690**	**663**	**18.2**
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

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OW-1	11/22/2004	NSVD	18.36	0.00	NSVD	**74.8**	169	**919**	5,220	6,383	**25**	NS	NS	NS	NS
	2/23/2005	NSVD	17.93	0.00	NSVD	4.4	9.4	168	621	803	19.9	NS	NS	NS	NS
Casing:	5/19/2005	NSVD	17.44	0.00	NSVD	**14.5**	46	343	1,130	1,534	14.3	NS	NS	NS	NS
0 to 9 feet	8/24/2005	NSVD	18.44	0.00	NSVD	**43.1**	163	**831**	3,890	4,927	5.9	NS	NS	NS	NS
	11/8/2005	NSVD	18.57	0.00	NSVD	4.0	17.8	344	1,050	1,416	7.7	NS	NS	NS	NS
Screen:	2/10/2006	NSVD	17.35	0.00	NSVD	1.8	11.2	77.3	328	418	2.2	NS	NS	NS	NS
9 to 34 feet	5/15/2006	NSVD	17.99	0.00	NSVD	4.0 (J)	53.4	414	1,690	2,161	6.4	NS	NS	NS	NS
	8/9/2006	NSVD	18.15	0.00	NSVD	**5.8**	68.4	432	1,550	2,056	10.8	NS	NS	NS	NS
	10/17/2006	NSVD	18.50	0.00	NSVD	1.2 (J)	18.6	268	712	1,000	10.2	NS	NS	NS	NS
	4/11/2007	NSVD	17.68	0.00	NSVD	ND	26	320	1,400	1,746	8.7	ND	**14,000**	**3,000**	NS
	8/24/2007	NSVD	19.14	0.00	NSVD	ND	11	210	440	661	4.2	ND	**6,900**	**2,400**	NS
	12/27/2007	NSVD	18.98	0.00	NSVD	ND	5.8	120	3.1	128.9	3.3	13	**9,600**	**2,400**	NS
	3/27/2008	NSVD	18.24	0.00	NSVD	ND	4.2	69	382.5	455.7	5.0	7.6	**9,200**	**2,000**	NS
	6/25/2008	NSVD	NM	NM	NSVD	ND	8.7	163	347	518.7	ND	ND	**8,900**	**1,400**	NS
	9/24/2008	NSVD	16.30	0.00	NSVD	0.67 (J)	11.6	170	372	554.3	1.2	13.3 (J)	**8,400**	**1,550**	NS
	12/17/2008	NSVD	15.95	0.00	NSVD	0.46 (J)	6.2	96.3	248	351.0	ND	ND	**6,020**	**1,490**	NS
	3/31/2009	NSVD	19.19	0.00	NSVD	ND	3.4	31.2	157	191.6	1.9	ND (<25)	**8,110**	**1,820**	NS
	6/22/2009	NSVD	17.74	0.00	NSVD	0.60 (J)	7.5	111	352	471.1 (J)	1.0	ND (<25)	**7,200**	**1,710**	NS
	9/25/2009	NSVD	18.10	0.00	NSVD	ND	3.0	73.0	168	244.0	ND	ND (<50)	**5,920**	**2,960**	NS
	12/14/2009	NSVD	16.51	0.00	NSVD	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/2009	NSVD	NM	NM	NM	0.30 (J)	6.3	209	934	1,149.6 (J)	0.44 (J)	ND (<25)	**8,690**	**1,440**	NS
	3/17/2010	NSVD	15.70	0.00	NSVD	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/18/2010	NSVD	NM	NM	NM	ND	22.1	98.5	378	498.6	ND	ND (<25)	**6,880**	**2,030**	NS
23 ft. sample	8/25/2010	455.81	18.27	0.00	437.54	0.71 (J)	14.7	267	376	658.41 (J)	ND	ND	**8,780**	**2,290**	NS
28 ft.sample	8/25/2010	455.81	18.27	0.00	437.54	0.88 (J)	13.4	239	384	637.28 (J)	ND	ND	**8,290**	**2,500**	ND
	1/10/2011	455.81	18.99	0.00	436.82	0.81 (J)	13.1	143	376	532.91 (J)	ND	ND	**7,960**	**2,800**	**138**
	6/22/2011	455.81	18.73	0.00	437.08	ND	0.20 (J)	4.3	9.1	13.6 (J)	ND	ND	**353**	**1,110**	**4.1 (J)**
	9/28/2011	455.81	17.56	0.00	438.25	ND	2.0	41.0	110	153.0	ND	ND	**3,920**	**268**	**53.9**
	12/20/2012	455.81	15.49	0.00	440.32	0.53 (J)	2.2	33.9	124	160.63 (J)	ND	ND	**4,430**	**465**	**61.8**
	3/20/2012	455.81	17.84	0.00	437.97	0.41 (J)	2.5	24.2	107	134.11 (J)	0.87 (J)	ND	**6,030**	**1,760**	**74.4**
	5/15/2012	455.81	20.16	0.00	435.65	0.65 (J)	1.1	11.8	57.4	70.95 (J)	ND	ND	**2,630**	**514**	**29.4**
	8/28/2012	455.81	18.31	0.00	437.50	0.54 (J)	2.8	54.3	95.0	152.64 (J)	ND	ND	**5,060**	**1,840**	**70.0**
	12/18/2012	455.81	18.64	0.00	437.17	0.90 (J)	3.6	77.8	145	227.30 (J)	0.42 (J)	ND	**4,890**	**1,280**	**58.8**
	3/19/2013	455.81	18.05	0.00	437.76	0.80 (J)	2.0	21.5	84.5	108.80 (J)	0.74 (J)	ND	**3,670**	**1,280**	**41.3**
	6/18/2013	455.81	17.91	0.00	437.90	ND	1.5	21.8	48.1	71.4	ND	ND	**4,330**	**2,190**	**56.7**
	9/19/2013	455.81	19.03	0.00	436.78	ND	2.5	53.7	68.5	124.7	ND	ND	**3,910**	**1,200**	**65.5**
	11/22/2013	455.81	19.13	0.00	436.68	0.38 (J)	5.1	116	92.4	213.88 (J)	ND	ND	**5,810**	**1,620**	**98.6**
	3/20/2014	455.81	17.24	0.00	438.57	0.33 (J)	1.7	27.4	35.5	64.93 (J)	0.52 (J)	ND	**4,100**	**1,240**	**45.3**
***	6/18/2014	455.81	18.82	0.00	436.99	2.2	3.5	47.6	65.1	118.4	7.9	ND	**6,150**	***	**66.4**
***	6/30/2014	455.81	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	**2,020**	NS
	9/23/2014	455.31	20.88	0.00	434.43	0.43 (J)	1.6	53.3	135	190.33 (J)	1.5	56.7	**7,780**	**1,170**	**72.0**
	12/23/2014	455.31	21.28	0.00	434.03	0.81	1.4	13.1	34.2	49.51	1.5	33.9	**4,310**	**1,280**	**23.6**
	3/24/2015	455.31	21.08	0.00	434.23	0.47 (J)	0.64 (J)	2.3	8.9	12.31 (J)	ND	ND	**3,180**	**787**	**14.6**
	6/22/2015	455.31	20.58	0.00	434.73	1.4	0.32 (J)	1.0	1.8	4.52 (J)	6.9	29.5	**1,370**	**918**	**3.4 (J)**
	9/21/2015	455.31	20.73	0.00	434.58	1.7	0.27 (J)	1.4	1.8	5.17 (J)	5.3	24.5	**982**	**515**	**1.3 (J)**
	12/9/2015	455.31	21.23	0.00	434.08	2.3	0.23 (J)	0.93 (J)	1.3	4.76 (J)	6.9	19.5	**1,040**	**459**	**0.76 (J)**
	3/8/2016	455.31	20.54	0.00	434.77	1.9	ND	0.36 (J)	ND	2.26 (J)	6.1	ND	**1,100**	**373**	0.33 (J)
	6/7/2016	455.31	20.58	0.00	434.73	2.5	0.33 (J)	2.5	3.0	8.33 (J)	6.6	14.0	**934**	**370**	ND
	9/13/2016	455.31	21.03	0.00	434.28	0.99	ND	ND	ND	0.99	3.3	10.7	**583**	**209**	ND
	11/21/2016	455.31	21.82	0.00	433.49	1.2	ND	0.56 (J)	ND	1.76 (J)	4.2	11.4	**486**	**344**	ND
	3/9/2017	455.31	22.04	0.00	433.27	1.5	ND	0.34 (J)	0.58 (J)	2.42 (J)	7.9	ND	**845**	**298**	**ND (<1.0)**
‡	6/7/2017	455.31	21.22	0.00	434.09	1.6	ND	0.47 (J)	0.69 (J)	2.76 (J)	7.3	11.5	**572**	**356**	**ND (<1.0)**
	9/6/2017	455.31	21.27	0.00	434.04	1.3	ND	0.37 (J)	0.45 (J)	2.12 (J)	4.7	12.8	**583**	**348**	**ND (<1.1)**
	11/1/2017	455.31	21.53	0.00	433.78	1.4	ND	0.49 (J)	0.32 (J)	2.2 (J)	6.1	11.3	**439**	**336**	**ND (<1.1)**
	3/6/2018	455.31	21.77	0.00	433.54	1.5	ND	1.3	8.6	11.4	7.5	19.7	**962**	**511**	**ND (<1.1)**
	6/20/2018	455.31	20.03	0.00	435.28	1.7	0.45 (J)	2.8	16.1	21.1 (J)	6.2	14.2	**746**	**469**	**ND (<1.1)**
	9/5/2018	455.31	19.61	0.00	435.70	2.2	ND	7.8	8.3	18.3	5.2	21.3	**816**	**441**	**1.2 (J)**
	7/18/2019	455.31	19.23	0.00	436.08	Not sampled									
	11/13/2019	455.31	20.66	0.00	434.65	Not sampled									
	7/8/2020	455.31	19.35	0.00	435.96	Not sampled									
	12/9/2020	455.31	19.70	0.00	435.61	Not sampled									
	6/2/2021	455.31	19.92	0.00	435.39	Not sampled									
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

Table 1
HISTORICAL GROUNDWATER MONITORING DATA SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
YMW-1	6/13/2006	433.72	3.00	0.00	430.72	**21.7**	30.1	559	373	984	15.6	NS	NS	NS	NS
	7/17/2006	433.72	3.95	0.00	429.77	**5.3**	61.4	543	1,390	2,000	ND	NS	NS	NS	NS
Casing:	4/11/2007	433.72	4.89	0.00	428.83	**5.5**	140	**1,200**	3,300	4,646	ND	ND	**37,000**	ND	NS
0 to 2 feet	8/24/2007	433.72	5.94	0.00	427.78	4.6	60	660	850	1,574.6	ND	ND	**12,000**	**1,500**	NS
	12/27/2007	433.72	5.29	0.00	428.43	4.8	32	500	30	566.8	ND	ND	**14,000**	**1,500**	NS
Screen:	3/27/2008	433.72	5.19	0.00	428.53	**5.6**	73	610	1,510	2,198.6	1.2	ND	**9,600**	**1,000**	NS
2 to 14 feet	6/25/2008	433.72	1.68	0.00	432.04	4.0	92.7	648	1,700	2,444.7	ND	ND	**14,300**	**1,980**	NS
	9/24/2008	433.72	2.55	0.00	431.17	2.3	38.1	477	912	1,429.4	ND	ND	**11,200**	**1,010**	NS
	12/17/2008	433.72	2.30	0.00	431.42	2.0	38.5	346	1,000	1,386.5	ND	ND	**10,700**	**731**	NS
	3/31/2009	433.72	2.78	0.00	430.94	**7.7**	20.2	112	290	429.9	6.1	ND (<25)	**7,790**	**567**	NS
	6/22/2009	433.72	1.13	0.00	432.59	1.9 (J)	54.4	557	1,470	2,083.3 (J)	ND	ND	**11,600**	**1,810**	NS
	9/25/2009	433.72	0.20	0.00	433.52	2.0	28.1	325	701	1,056.1	ND	ND (<50)	**8,540**	**1,540**	NS
	12/14/2009	433.72	0.00	0.00	433.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/2009	433.72	NM	NM	NM	ND	40.7	401	1,490	1,931.7	ND	ND	**10,700**	**1,760**	NS
	3/17/2010	433.72	0.01	0.00	433.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/18/2010	433.72	NM	NM	NM	ND	60.4	407	1,060	1,527.4	ND	ND	**10,500**	**1,080**	NS
	8/25/2010	434.11	1.39	0.00	432.72	2.3 (J)	81.1	635	1,250	1,968.4	ND	131	**5,350**	**796**	**234**
	1/12/2011	434.11	1.51	0.00	432.60	1.8	40.6	464	1,620	2,126.4	ND	ND	**11,500**	**2,080**	**168**
	6/22/2011	434.11	1.34	0.00	432.77	0.74 (J)	18.0	181	392	591.74 (J)	ND	ND	**4,200**	**1,530**	**59.3**
	9/28/2011	434.11	0.03	0.00	434.08	1.6	31.3	463	685	1,180.9	ND	ND	**7,580**	**ND (<110)**	**168**
	12/20/2012	434.11	1.01	0.00	433.10	1.4 (J)	52.0	**792**	1,530	2375.4 (J)	ND	ND	**12,600**	**1,161**	**285**
	3/20/2012	434.11	0.90	0.00	433.21	0.51 (J)	11.4	145	298	454.91 (J)	ND	ND	**1,690**	**1,140**	**58.6**
†	5/15/2012	434.11	0.04	0.00	434.07	3.5	7.3	14.1	73.8	98.7	5.8	21.8 (J)	**2,420**	**1,650**	**83.3**
	8/28/2012	434.11	1.56	0.00	432.55	1.9 (J)	22.0	240	107	370.9 (J)	ND	ND	**5,040**	**1,860**	**156**
	12/18/2012	434.11	0.50	0.00	433.61	2.0	23.4	178	143	346.4	ND	ND	**3,790**	**616**	**15.1**
	3/19/2013	434.11	0.03	0.00	434.08	1.3	54.4	444	645	1,144.7	ND	ND	**6,810**	**807**	**184**
	6/18/2013	434.11	0.89	0.00	433.22	0.90 (J)	21.3	231	164	417.2 (J)	ND	ND	**3,770**	**1,280**	**104**
	9/19/2013	434.11	1.49	0.00	432.62	2.2	27.3	428	173	630.5	ND	ND	**5,960**	**1,560**	**200**
	11/22/2013	434.11	0.50	0.00	433.61	2.2	23.0	377	89.5	491.7	ND	ND	**8,760**	**1,130**	**186**
	3/20/2014	434.11	0.01	0.00	434.10	1.4	18.6	234	69.5	323.5	ND	ND	**3,210**	**659**	**57.4**
***	6/18/2014	434.11	3.62	0.00	430.49	3.3	19.2	96.6	104	223.1	ND	ND	**4,710**	***	**132**
***	6/30/2014	434.11	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	**1,040**	NS
	9/23/2014	433.64	5.33	0.00	428.31	0.72	1.4	0.98 (J)	2.7	5.8 (J)	ND	ND	**775**	**269**	**2.3 (J)**
	12/23/2014	433.64	4.19	0.00	429.45	0.31 (J)	0.33 (J)	2.5	0.61 (J)	3.75 (J)	ND	ND	**277**	**ND (<80)**	ND
	3/24/2015	433.64	3.02	0.00	430.62	ND	ND	2.0	0.57 (J)	2.57 (J)	ND	ND	ND	**ND (<77)**	**0.97 (J)**
	6/22/2015	433.64	3.04	0.00	430.60	ND	ND	0.39 (J)	ND	0.39 (J)	ND	ND	ND	**108**	ND
	9/21/2015	433.64	4.94	0.00	428.70	0.60	ND	0.61 (J)	ND	1.21 (J)	ND	ND	**205**	**144**	**0.81 (J)**
	12/9/2015	433.64	4.37	0.00	429.27	ND	ND	1.7	ND	1.7	ND	ND	ND	**160**	ND
	3/8/2016	433.64	3.31	0.00	430.33	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<64)**	ND
	6/7/2016	433.64	3.90	0.00	429.74	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<64)**	ND
	9/13/2016	433.64	5.47	0.00	428.17	0.86	ND	ND	ND	0.86	ND	ND	**157 (J)**	**112**	ND
	11/21/2016	433.64	6.21	0.00	427.43	0.35 (J)	ND	ND	ND	0.35 (J)	ND	ND	**ND (<100)**	**ND (<64)**	ND
	3/9/2017	433.64	5.40	0.00	428.24	0.41 (J)	ND	13.1	0.46 (J)	13.97 (J)	ND	ND	**184**	**ND (<64)**	**ND (<1.0)**
ǂ	6/7/2017	433.64	4.25	0.00	429.39	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	9/6/2017	433.64	4.44	0.00	429.20	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND(<83)**	**ND (<1.1)**
	11/1/2017	433.64	5.37	0.00	428.27	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND(<83)**	**ND (<1.1)**
	3/6/2018	433.64	4.16	0.00	429.48	ND	ND	0.86 (J)	ND	0.86 (J)	ND	ND	**ND (<100)**	**90.6**	**ND (<1.1)**
	6/20/2018	433.64	3.08	0.00	430.56	0.55	ND	ND	ND	0.55	ND	ND	**ND (<100)**	**ND(<83)**	**ND (<1.1)**
	9/5/2018	433.64	3.35	0.00	430.29	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND(<53)**	**ND (<0.90)**
	7/18/2019	433.64	2.73	0.00	430.91	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	ND (<42)	**ND(<53)**	**ND (<0.98)**
	11/13/2019	433.64	4.19	0.00	429.45	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**128**	**ND(<53)**	**ND (<2.5)**
	7/8/2020	433.64	2.87	0.00	430.77	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND(<53)**	**ND (<2.5)**
	12/9/2020	433.64	2.59	0.00	431.05	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND(<53)**	**ND (<2.5)**
	6/2/2021	433.64	3.41	0.00	430.23	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND(<49)**	**ND (<2.5)**
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

Table 1
HISTORICAL GROUNDWATER MONITORING DATA SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
YMW-2	6/13/2006	431.42	0.89	0.00	430.53	3.3	47.6	211	656	917.9	2.3	NS	NS	NS	NS
	7/17/2006	431.42	1.25	0.00	430.17	**14.9**	25.6	533	285	858.5	10.7	NS	NS	NS	NS
Casing:	4/11/2007	431.42	1.60	0.00	429.82	**15**	24	630	670	1,339	14	17	**1,400**	**3,000**	NS
0 to 2 feet	8/24/2007	431.42	2.61	0.00	428.81	**16**	59	250	270	595	14	ND	**4,800**	**3,200**	NS
	12/27/2007	431.42	2.48	0.00	428.94	**13**	21	370	14	418	9.9	17	**13,000**	**2,300**	NS
Screen:	3/27/2008	431.42	1.06	0.00	430.36	**8.2**	21	260	395	684.2	7.7	ND	**7,700**	**1,400**	NS
2 to 14 feet	6/25/2008	431.42	1.00	0.00	430.42	**11.5**	38.5	66.3	163	279.3	10.5	ND	**6,010**	**1,550**	NS
	9/24/2008	431.42	1.15	0.00	430.27	**13.5**	45.7	125	215	399.2	9	ND	**7,710**	**2,000**	NS
	12/17/2008	431.42	1.00	0.00	430.42	1.3	2.4	22.7	33.9	60.3	1.1	ND	**920**	ND	NS
	3/31/2009	431.42	1.66	0.00	429.76	**8.1**	23.2	164	357	552.3	5.8	ND (<25)	**7,750**	**1,030**	NS
	6/22/2009	431.42	0.60	0.00	430.82	**6.6**	14.6	43.8	93.8	158.8	4.1	ND (<25)	**3,960**	**977**	NS
	9/25/2009	431.42	0.30	0.00	431.12	**9.1**	25.8	73.0	178	285.9	6.5	ND (<25)	**5,290**	**3,070**	NS
	12/14/2009	431.42	0.10	0.00	431.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/2009	431.42	NM	NM	NM	4.8	12.0	117	176	309.8	2.7	ND (<25)	**4,560**	**534**	NS
	3/17/2010	431.42	0.74	0.00	430.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/18/2010	431.42	NM	NM	NM	4.9	17.0	115	187	323.9	3.8	ND (<25)	**3,670**	**549**	NS
	8/25/2010	431.34	0.90	0.00	430.44	**6.9**	25.4	63.8	118	214.1	5.3	ND	**5,820**	**1,580**	**239**
	1/11/2011	431.34	1.39	0.00	429.95	**7.0**	23.6	199	251	480.6	4.8	ND	**7,190**	**1,950**	**215**
	6/23/2011	431.34	0.87	0.00	430.47	1.8	3.0	2.1	7.8	14.7	5.5	ND	**2,140**	**649**	**17.8**
	9/29/2011	431.34	0.08	0.00	431.26	**6.9**	19.6	29.0	138	193.5	9.4	31.5	**3,010**	**1,140**	**150**
	12/21/2012	431.34	0.92	0.00	430.42	**7.2**	14.9	98.0	194	314.1	8.6	ND	**5,510**	**1,470**	**164**
	3/21/2012	431.34	1.18	0.00	430.16	4.1	8.6	38.1	90.5	141.3	6.5	27.3	**3,800**	**859**	**86.2**
	5/16/2012	431.34	1.47	0.00	429.87	1.0 (J)	28.6	450	551	1,030.6 (J)	ND	ND	**8,100**	**1,820**	**247**
	8/29/2012	431.34	0.59	0.00	430.75	4.7	15.2	25.4	135	180.3	4.7	39.0	**4,490**	**1,990**	**157 (E)**
	12/19/2012	431.34	1.03	0.00	430.31	4.5	19.1	77.9	229	330.5	3.1	ND	**6,000**	**1,300**	**148**
	3/20/2013	431.34	1.00	0.00	430.34	2.9	12.4	55.1	133	203.4	5.0	ND	**3,550**	**582**	**96.5**
	6/19/2013	431.34	0.58	0.00	430.76	2.2	7.9	6.2	85.8	102.1	4.6	ND	**3,190**	**612**	**61.1**
	9/19/2013	431.34	0.08	0.00	431.26	3.2	18.9	23.3	158	203.4	2.7	ND	**3,770**	**1,250**	**102**
	11/22/2013	431.34	0.50	0.00	430.84	0.98 (J)	4.1	12.3	67.9	85.28 (J)	1.4	ND	**2,180**	**747**	**34.3**
	3/20/2014	431.34	0.00	0.00	431.34	4.5	7.6	124	178	314.1	4.7	ND	**4,340**	**934**	**76.6**
***	6/18/2014	431.34	1.23	0.00	430.11	0.89	0.43 (J)	9.4	24.6	35.32 (J)	ND	ND	**729**	***	**2.2 (J)**
***	6/30/2014	431.34	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	**183**	NS
	9/23/2014	431.37	2.51	0.00	428.86	3.4	ND	ND	ND	3.4	13.4	77.3	**759**	**313**	ND
	12/23/2014	431.37	2.64	0.00	428.73	2.7	ND	ND	ND	2.7	18.7	103	**740**	**310**	ND
	3/24/2015	431.37	2.78	0.00	428.59	3.0	0.27 (J)	ND	ND	3.27 (J)	**22.6**	92.9	**671**	**309**	ND
	6/22/2015	431.37	2.51	0.00	428.86	2.4	ND	ND	ND	2.4	12.7	87.7	**336**	**315**	0.41 (J)
	9/21/2015	431.37	2.58	0.00	428.79	4.0	ND	ND	ND	4.0	18.2	150	**391**	**320**	ND
	12/9/2015	431.37	3.94	0.00	427.43	**6.8**	1.6	0.96 (J)	5.7	15.06 (J)	16.5	202	**671**	**345**	**1.6 (J)**
	3/8/2016	431.37	2.97	0.00	428.40	2.2	ND	ND	ND	2.2	19.6	96.2	**364**	**ND (<64)**	ND
	6/7/2016	431.37	2.84	0.00	428.53	**5.2**	ND	ND	ND	5.2	14.3	99.4	**222**	**ND (<64)**	ND
	9/13/2016	431.37	2.44	0.00	428.93	3.3	ND	ND	ND	3.3	11.6	135	**304**	**489**	ND
	11/21/2016	431.37	2.94	0.00	428.43	**5.8**	ND	ND	ND	5.8	ND	185	**645**	**260**	ND
	3/9/2017	431.37	2.94	0.00	428.43	**5.8**	ND	0.51 (J)	0.45 (J)	6.76 (J)	7.9	185	**727**	**ND (<64)**	**ND (<1.0)**
	6/7/2017	431.37	3.10	0.00	428.27	1.1	ND	ND	ND	1.1	11.5	238	**376**	**318**	**ND (<1.0)**
	9/6/2017	431.37	2.65	0.00	428.72	ND	ND	ND	ND	ND	10.7	280	**334**	**358**	**ND (<1.1)**
	11/1/2017	431.37	2.67	0.00	428.70	ND	ND	ND	ND	ND	ND	338	**374**	**420**	**ND (<1.1)**
	3/6/2018	431.37	2.85	0.00	428.52	0.53	ND	ND	ND	0.53	5.8	200	**514**	**308**	**ND (<1.1)**
	6/20/2018	431.37	2.58	0.00	428.79	ND	ND	ND	ND	ND	**20.6**	189	**150 (J)**	**162**	**ND (<1.1)**
	9/5/2018	431.37	2.51	0.00	428.86	ND	ND	ND	ND	ND	**22.3**	184	**144 (J)**	**151**	**ND (<0.98)**
	7/18/2019	431.37	3.01	0.00	428.36	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	**54.4**	59.0	**158 (J)**	**ND (<53)**	**ND (<0.98)**
	11/13/2019	431.37	2.61	0.00	428.76	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	9.4	27.5	**337**	**178**	**ND (<2.5)**
	7/8/2020	431.37	1.27	0.00	430.10	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	1.5	ND (<5.8)	**ND (<100)**	**ND (<53)**	**ND (<2.5)**
	12/9/2020	431.37	2.13	0.00	429.24	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	**85.5**	42.6	**173**	**ND (<53)**	**ND (<2.5)**
	6/2/2021	431.37	2.55	0.00	428.82	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	**122**	42.4	**169**	**218**	**ND (<2.5)**
YMW-3	9/23/2014	440.39	9.41	0.00	430.98	ND	0.39 (J)	9.0	5.1	14.49 (J)	ND	ND	**268**	**327**	**1.1 (J)**
	12/23/2014	440.39	9.86	0.00	430.53	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<80)**	ND
Casing:	3/24/2015	440.39	8.17	0.00	432.22	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<76)**	ND
0 to 4.5 feet	6/22/2015	440.39	8.54	0.00	431.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/21/2015	440.39	9.21	0.00	431.18	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<58)**	ND
Screen:	12/9/2015	440.39	8.83	0.00	431.56	ND	ND	ND	ND	ND	ND	ND	ND	**231**	ND
4.5 to 19.5 feet	3/8/2016	440.39	8.63	0.00	431.76	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<64)**	ND
	6/7/2016	440.39	8.86	0.00	431.53	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<64)**	ND
	9/13/2016	440.39	9.54	0.00	430.85	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	ND
	11/21/2016	440.39	10.44	0.00	429.95	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	ND
	3/9/2017	440.39	9.55	0.00	430.84	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
‡	6/7/2017	440.39	8.82	0.00	431.57	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	9/6/2017	440.39	8.84	0.00	431.55	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	11/1/2017	440.39	9.34	0.00	431.05	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	3/6/2018	440.39	7.97	0.00	432.42	ND	ND	ND	ND	ND	ND	13.3	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	6/20/2018	440.39	8.27	0.00	432.12	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/5/2018	440.39	8.48	0.00	431.91	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	440.39	8.12	0.00	432.27	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	ND (<42)	**ND (<53)**	**ND (<0.98)**
	11/13/2019	440.39	8.56	0.00	431.83	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND (<53)**	**ND (<2.5)**
	7/8/2020	440.39	7.78	0.00	432.61	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND (<53)**	**ND (<2.5)**
	12/9/2020	440.39	8.01	0.00	432.38	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND (<53)**	**ND (<2.5)**
	6/2/2021	440.39	8.54	0.00	431.85	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND (<49)**	**ND (<2.5)**
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

Table 1
HISTORICAL GROUNDWATER MONITORING DATA SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
YMW-4	9/23/2014	433.72	4.71	0.00	429.01	**6.1**	9.2	94.0	192	301.3	4.3	ND	**3,780**	**1,050**	**45.0**
	12/23/2014	433.72	4.31	0.00	429.41	**5.7**	14.2	44.7	219	283.6	5.9	16.6	**4,240**	**612**	**57.3**
Casing:	3/24/2015	433.72	4.06	0.00	429.66	4.0	21.6	36.6	434	496.2	10.6	53.8	**4,470**	**1,190**	**73.1**
0 to 2 feet	6/22/2015	433.72	3.96	0.00	429.76	**5.6**	21.6	36.3	376	439.5	**24.5**	114	**4,280**	**2,460**	**124**
	9/21/2015	433.72	4.45	0.00	429.27	**7.8**	17.2	33.2	289	347.2	**38.9**	163	**5,480**	**1,560**	**138**
Screen:	12/9/2015	433.72	4.34	0.00	429.38	**9.2**	13.7	31.9	252	306.8	**38.4**	251	**5,110**	**1,560**	**87.8**
2 to 17 feet	3/8/2016	433.72	4.18	0.00	429.54	2.4	3.1	4.4	39.0	48.9	10	68.8	**828**	**414**	**15.8**
	6/7/2016	433.72	4.18	0.00	429.54	**13.9**	9.5	27.8	116	167.2	**32.3**	280	**4,040**	**1,790**	**98.7**
	9/13/2016	433.72	4.46	0.00	429.26	**18.4**	8.7	25.3	108	160.4	**24.9**	240	**3,500**	**2,490**	**64.3**
	11/21/2016	433.72	4.85	0.00	428.87	**18.8**	5.2	13.6	59.5	97.1	**28.4**	247	**3,520**	**299**	**28.9**
	3/9/2017	433.72	4.30	0.00	429.42	**19.6**	4.8	8.9	47.4	80.7	**50.9**	ND	**2,830**	**925**	**32.4**
	6/7/2017	433.72	4.26	0.00	429.46	**13.4**	3.0	7.6	18.7	42.7	**21.4**	169	**1,940**	**1,300**	**20.8**
	9/6/2017	433.72	4.18	0.00	429.54	0.49 (J)	ND	0.70 (J)	1.6	2.79 (J)	0.46 (J)	7.2 (J)	**262**	**134**	**ND (<1.1)**
	11/1/2017	433.72	4.41	0.00	429.31	**20.9**	12.9	35.9	286	355.7	17.8	345	**3,570**	**1,730**	**50.3**
	3/6/2018	433.72	4.24	0.00	429.48	**6.2**	2.2	3.6	29.6	41.6	10.0	144	**688**	**383**	**4.8 (J)**
	6/20/2018	433.72	3.89	0.00	429.83	5.0	ND	0.63 (J)	ND	5.6 (J)	16.6	361	**591**	**623**	**ND (<1.1)**
	9/5/2018	433.72	4.01	0.00	429.71	**10.4**	0.72 (J)	4.2	5.7	21.0 (J)	14.0	355	**1,010**	**813**	**1.9 (J)**
	7/18/2019	433.72	3.79	0.00	429.93	1.8	ND (<0.53)	ND (<0.60)	ND (<0.59)	<3.5	**181**	384	**625**	**406**	**ND (<0.98)**
	11/13/2019	433.72	4.16	0.00	429.56	**8.7**	0.60 (J)	ND (<0.60)	ND (<0.59)	<10.5	6.6	120	**764**	**582**	**ND (<2.5)**
	7/8/2020	433.72	3.53	0.00	430.19	**12.0**	1.5	2.1	7.6	23.2	ND (<0.51)	87.0	**1,070**	**893**	**8.7**
	12/9/2020	433.72	3.57	0.00	430.15	**9.7**	ND (<0.53)	ND (<0.60)	ND (<0.59)	<11.4	**36.1**	89.5	**836**	**496**	**ND (<2.5)**
	6/2/2021	433.72	4.07	0.00	429.65	**11.9**	0.56 (J)	ND (<0.60)	ND (<0.59)	<13.7	**130**	153	**1,080**	**460**	**ND (<2.5)**
YMW-5	9/23/2014	430.70	4.42	0.00	426.28	ND	ND	ND	181	0.63 (J)	6.6	ND	**294**	**273**	ND
	12/23/2014	430.70	5.52	0.00	425.18	0.25 (J)	ND	ND	ND	0.25 (J)	5.6	ND	ND	**ND (<80)**	ND
Casing:	3/24/2015	430.70	3.05	0.00	427.65	0.65	ND	ND	ND	0.65	7.7	7.0 (J)	ND	**ND (<80)**	ND
0 to 1 feet	6/22/2015	430.70	3.05	0.00	427.65	0.92	ND	ND	ND	0.92	6.3	10.3	ND	**123**	ND
	9/21/2015	430.70	3.52	0.00	427.18	0.54	ND	ND	ND	0.54	9.2	23.5	ND	**98.0**	ND
Screen:	12/9/2015	430.70	3.16	0.00	427.54	0.35 (J)	ND	ND	ND	0.35 (J)	7.4	27.3	ND	**ND (<64)**	ND
1 to 16 feet	3/8/2016	430.70	2.99	0.00	427.71	0.38 (J)	ND	ND	ND	0.38 (J)	6.8	19.7	**ND (<55)**	**ND (<64)**	ND
	6/7/2016	430.70	3.01	0.00	427.69	0.23 (J)	ND	ND	ND	0.23 (J)	6.8	12.6	**ND (<55)**	**ND (<64)**	ND
	9/13/2016	430.70	3.39	0.00	427.31	0.20 (J)	ND	ND	ND	0.20 (J)	6.6	15.4	**ND (<100)**	**ND (<64)**	ND
	11/21/2016	430.70	3.74	0.00	426.96	ND	ND	ND	ND	ND	6.2	26.2	**ND (<100)**	**565**	ND
	3/9/2017	430.70	3.14	0.00	427.56	0.30 (J)	ND	ND	ND	0.30 (J)	5.7	23.2	**ND (<100)**	**ND (<64)**	**ND (<100)**
	6/7/2017	430.70	3.07	0.00	427.63	0.25 (J)	ND	ND	ND	0.25 (J)	4.5	13.5	**ND (<100)**	**105**	**ND (<100)**
	9/6/2017	430.70	2.98	0.00	427.72	ND	ND	ND	ND	ND	3.6	12.2	**ND (<100)**	**171**	**ND (<1.1)**
	11/1/2017	430.70	3.23	0.00	427.47	ND	ND	ND	ND	ND	5.5	27.9	**ND (<100)**	**109**	**ND (<1.1)**
	3/6/2018	430.70	2.83	0.00	427.87	ND	ND	ND	ND	ND	4.2	27.9	**ND (<100)**	**98.6**	**ND (<1.1)**
	6/20/2018	430.70	2.67	0.00	428.03	ND	ND	ND	ND	ND	3.0	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/5/2018	430.70	2.74	0.00	427.96	ND	ND	ND	ND	ND	3.3	ND	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	430.70	2.36	0.00	428.34	Not sampled									
	11/13/2019	430.70	2.70	0.00	428.00	Not sampled									
	7/8/2020	430.70	1.87	0.00	428.83	Not sampled									
	12/9/2020	430.70	2.31	0.00	428.39	Not sampled									
	6/2/2021	430.70	2.67	0.00	428.03	Not sampled									
YMW-6	9/23/2014	432.68	6.61	0.00	426.07	ND	ND	ND	ND	ND	1.5	26.9	ND	**ND (<80)**	ND
	12/23/2014	432.68	5.69	0.00	426.99	ND	ND	ND	ND	ND	1.4	24.7	ND	**ND (<80)**	ND
Casing:	3/24/2015	432.68	5.11	0.00	427.57	ND	ND	ND	ND	ND	2.1	44.5	ND	**ND (<80)**	ND
0 to 3 feet	6/22/2015	432.68	5.11	0.00	427.57	ND	ND	ND	ND	ND	2.4	65.6	ND	ND	ND
	9/21/2015	432.68	6.11	0.00	426.57	ND	ND	ND	ND	ND	2.9	73.3	ND	**76.9**	ND
Screen:	12/9/2015	432.68	5.56	0.00	427.12	ND	ND	ND	ND	ND	2.9	80.3	ND	**ND (<64)**	ND
3 to 18 feet	3/8/2016	432.68	5.10	0.00	427.58	ND	ND	ND	ND	ND	3.3	91.0	**ND (<55)**	**ND (<64)**	ND
	6/7/2016	432.68	5.36	0.00	427.32	ND	ND	ND	ND	ND	4.3	109	**ND (<55)**	**ND (<64)**	ND
	9/13/2016	432.68	6.38	0.00	426.30	ND	ND	ND	ND	ND	4.3	98.6	**ND (<100)**	**ND (<64)**	ND
	11/21/2016	432.68	7.05	0.00	425.63	ND	ND	ND	ND	ND	3.8	85.9	**ND (<100)**	**ND (<64)**	ND
	3/9/2017	432.68	6.25	0.00	426.43	ND	ND	ND	ND	ND	4.5	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	6/7/2017	432.68	5.49	0.00	427.19	ND	ND	ND	ND	ND	4.9	97.3	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	9/6/2017	432.68	6.25	0.00	426.43	ND	ND	ND	ND	ND	4.0	89.6	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	11/1/2017	432.68	6.65	0.00	426.03	ND	ND	ND	ND	ND	4.7	83.7	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	3/6/2018	432.68	5.35	0.00	427.33	ND	ND	ND	ND	ND	5.0	85.6	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	6/20/2018	432.68	4.89	0.00	427.79	ND	ND	ND	ND	ND	5.5	96.8	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/5/2018	432.68	5.05	0.00	427.63	ND	ND	ND	ND	ND	5.3	98.4	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	432.68	4.74	0.00	427.94	Not sampled									
	11/13/2019	432.68	5.49	0.00	427.19	Not sampled									
	7/8/2020	432.68	4.65	0.00	428.03	Not sampled									
	12/9/2020	432.68	4.48	0.00	428.20	Not sampled									
	6/2/2021	432.68	5.03	0.00	427.65	Not sampled									
YMW-7	9/23/2014	449.40	15.33	0.00	434.07	**173**	141	428	2,240	2,982	10.0	ND	**17,500**	**1,670**	**73.6**
	12/23/2014	449.40	15.16	0.00	434.24	**176**	130	690	2,580	3,576	9.1 (J)	ND	**23,800**	**2,250**	**99.7**
Casing:	3/24/2015	449.40	15.54	0.00	433.86	**142**	78.0	261	2,330	2,811	11.4	ND	**16,300**	**2,560**	**92.8**
0 to 18 feet	6/22/2015	449.40	15.22	0.00	434.18	**134**	37.4	146	828	1,145.4	9.1	ND	**6,820**	**1,680**	**39.8**
	9/21/2015	449.40	15.32	0.00	434.08	**101**	18.9	67.9	286	473.8	8.3	17.0	**4,970**	**736**	**22.1**
Screen:	12/9/2015	449.40	15.68	0.00	433.72	**129**	80.2	301	1,140	1,650.2	7.3	ND	**14,100**	**1,630**	**122**
18 to 28 feet	3/8/2016	449.40	15.13	0.00	434.27	**136**	52.0	140	688	1,016.0	7.3	17.0 (J)	**7,050**	**1,300**	**97.7**
	6/7/2016	449.40	15.09	0.00	434.31	**127**	42.3	166	620	955.3	7.6	15.7	**7,370**	**1,320**	**75.6**
	9/13/2016	449.40	15.47	0.00	433.93	**118**	65.2	296	961	1,440.2	6.9	14.0 (J)	**9,010**	**1,480**	**103**
	11/21/2016	449.40	15.69	0.00	433.71	**97.2**	68.1	313	1,080	1,558.3	ND	ND	**10,300**	**841**	**108**
	3/9/2017	449.40	16.31	0.00	433.09	**45.0**	81.7	342	1,450	1,918.7	1.9	ND	**12,000**	**1,290**	**121**
	6/7/2017	449.40	15.24	0.00	434.16	**60.0**	76.2	303	1,310	1,749.2	2.6 (J)	ND	**13,100**	**2,350**	**124**
	9/6/2017	449.40	15.68	0.00	433.72	**57.3**	92.3	398	1,470	2,017.6	ND	ND	**13,200**	**1,650**	**130**
	11/1/2017	449.40	15.91	0.00	433.49	**48.5**	89.6	374	1,550	2,062	ND	ND	**13,200**	**2,330**	**116**
	3/6/2018	449.40	16.12	0.00	433.28	**37.9**	54.1	267	1,190	1,549	1.4	ND	**13,000**	**2,170**	**91.5**
	6/20/2018	449.40	14.75	0.00	434.65	**57.9**	23.6	195	473	750	2.7	15.9 (J)	**6,530**	**1,100**	**63.4**
	9/5/2018	449.40	14.43	0.00	434.97	**64.9**	10.1	105	207	387	3.5	12.1	**3,810**	**ND (<53)**	**39.8**
	7/18/2019	449.40	13.96	0.00	435.44	Not sampled									
	11/13/2019	449.40	14.98	0.00	434.42	Not sampled									
	7/8/2020	449.40	14.11	0.00	435.29	Not sampled									
	12/9/2020	449.40	14.32	0.00	435.08	Not sampled									
	6/2/2021	449.40	14.53	0.00	434.87	Not sampled									
				MDE MEAT GNCSG**		**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

Table 1
HISTORICAL GROUNDWATER MONITORING DATA SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
YMW-8	9/23/2014	446.91	13.63	0.00	433.28	**56.4**	46.8	638	2,270	3,011.2	**50.8**	ND	**16,100**	**1,820**	**182**
	12/23/2014	446.91	13.96	0.00	432.95	**61.9**	50.5	**793**	2,570	3,475.4	**40.0**	ND	**17,800**	**2,450**	**216**
Casing:	3/24/2015	446.91	12.91	0.00	434.00	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<80)**	ND
0 to 7 feet	6/22/2015	446.91	13.44	0.00	433.47	**91.5**	18.4	255	395	759.9	**28.4**	17.2	**4,330**	**1,710**	**75.9**
	9/21/2015	446.91	13.85	0.00	433.06	**45.7**	24.9	533	1,150	1,753.6	**31.2**	ND	**16,600**	**1,900**	**145**
Screen:	12/9/2015	446.91	13.94	0.00	432.97	**39.5**	96.9	631	1,500	2,267.4	**24.6**	ND	**18,400**	**2,470**	**169**
7 to 22 feet	3/8/2016	446.91	13.05	0.00	433.86	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<64)**	ND
	6/7/2016	446.91	13.52	0.00	433.39	**72.4**	14.6	341	185	613.0	**29.1**	20.9	**4,260**	**1,020**	**77.1**
	9/13/2016	446.91	14.03	0.00	432.88	**37.0**	117	**806**	1,790	2,750	**26.1**	30.6 (J)	**14,700**	**3,440**	**200**
	11/21/2016	446.91	14.39	0.00	432.52	**22.9**	113	**710**	2,240	3,085.9	18.8	ND	**18,200**	**3,920**	**208**
	3/9/2017	446.91	14.61	0.00	432.30	**31.2**	114	**1,010**	3,070	4,225.2	**21.3**	ND	**20,400**	**2,620**	**297**
	6/7/2017	446.91	14.07	0.00	432.84	**41.9**	70.9	**953**	2,840	3,905.8	**22.4**	47.8 (J)	**19,500**	**3,080**	**251**
	9/6/2017	446.91	14.28	0.00	432.63	**25.1**	155	**1,060**	3,190	4,430.1	18.4	ND	**26,300**	**6,870**	**291**
	11/1/2017	446.91	14.43	0.00	432.48	**23.9**	144	**1,190**	4,250	5,608	19.2	ND	**21,600**	**4,510**	**301**
	3/6/2018	446.91	14.07	0.00	432.84	**36.3**	76.0	**1,240**	4,660	6,012	**21.6**	102	**26,400**	**4,570**	**325**
	6/20/2018	446.91	12.80	0.00	434.11	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/5/2018	446.91	12.99	0.00	433.92	**29.3**	10.4	202	267	509	9.4	17.4	**3,000**	**823**	**59.7**
	7/18/2019	446.91	12.57	0.00	434.34	**11.4**	1.1	31.4	34.5	78.4	5.5	ND (<5.8)	**403**	**ND (<53)**	**6.1**
	11/13/2019	446.91	13.63	0.00	433.28	**26.8**	46.1	673	1,000	1,746	19.8	ND (<29)	**9,190**	**2,940**	**217**
	7/8/2020	446.91	11.71	0.00	435.20	**18.9**	3.1	116	101	239	9.5	ND (<5.8)	**1,110**	**213**	**18.0**
	12/9/2020	446.91	12.76	0.00	434.15	**27.0**	33.2	569	965	1,594	**21.4**	33.3	**10,600**	**2,170**	**164**
	6/2/2021	446.91	12.99	0.00	433.92	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND (<49)**	**ND (<2.5)**
YMW-9	9/23/2014	436.71	6.16	0.00	430.55	ND	ND	ND	ND	ND	1.8	ND	ND	**ND (<80)**	ND
	12/23/2014	436.71	5.94	0.00	430.77	ND	ND	ND	ND	ND	1.6	ND	ND	**ND (<80)**	ND
Casing:	3/24/2015	436.71	5.41	0.00	431.30	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<80)**	ND
0 to 2.5 feet	6/22/2015	436.71	5.81	0.00	430.90	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9/21/2015	436.71	6.17	0.00	430.54	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<58)**	ND
Screen:	12/9/2015	436.71	5.86	0.00	430.85	ND	ND	ND	ND	ND	ND	ND	ND	**ND (<64)**	ND
2.5 to 17.5 feet	3/8/2016	436.71	5.43	0.00	431.28	ND	ND	ND	ND	ND	ND	ND	**ND (<55)**	**ND (<64)**	ND
	6/7/2016	436.71	5.93	0.00	430.78	ND	ND	ND	ND	ND	0.48 (J)	ND	**ND (<55)**	**ND (<64)**	ND
	9/13/2016	436.71	6.44	0.00	430.27	ND	ND	ND	ND	ND	0.67 (J)	ND	**ND (<100)**	**ND (<64)**	ND
	11/21/2016	436.71	6.50	0.00	430.21	ND	ND	ND	ND	ND	0.62 (J)	ND	**ND (<100)**	**ND (<64)**	ND
	3/9/2017	436.71	6.23	0.00	430.48	ND	ND	ND	ND	ND	0.94 (J)	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	6/7/2017	436.71	6.13	0.00	430.58	ND	ND	ND	ND	ND	0.86 (J)	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	9/6/2017	436.71	6.42	0.00	430.29	ND	ND	ND	ND	ND	0.92 (J)	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	11/1/2017	436.71	6.34	0.00	430.37	ND	ND	ND	ND	ND	1.2	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	3/6/2018	436.71	5.29	0.00	431.42	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**87.5**	**ND (<1.1)**
	6/20/2018	436.71	5.73	0.00	430.98	ND	ND	ND	ND	ND	1.7	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/5/2018	436.71	5.88	0.00	430.83	ND	ND	ND	ND	ND	1.7	ND	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	436.71	5.65	0.00	431.06	Not sampled									
	11/13/2019	436.71	5.87	0.00	430.84	Not sampled									
	7/8/2020	436.71	5.27	0.00	431.44	Not sampled									
	12/9/2020	436.71	4.91	0.00	431.80	Not sampled									
	6/2/2021	436.71	5.96	0.00	430.75	Not sampled									
YP-1	9/23/2014	440.41	9.11	0.00	431.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/23/2014	440.41	9.16	0.00	431.25	0.98	42.1	383	326	752.08	6.3	34.5	**4,370**	**221**	**67.0**
Casing:	3/25/2015	440.41	9.26	0.00	431.15	1.8 (J)	72.6	**762**	2,120	2,956.4 (J)	11.2	70.9	**13,300**	**2,160**	**160**
0 to 8 feet	6/23/2015	440.41	9.18	0.00	431.23	**5.6**	75.6	**714**	1,420	2,215.2	19.3	104	**11,100**	**1,980**	**186**
	9/22/2015	440.41	9.20	0.00	431.21	**7.0**	63.1	**807**	1,460	2,337.1	9.4	120	**9,470**	**2,500**	**280**
Screen:	12/10/2015	440.41	9.17	0.00	431.24	**5.5**	31.0	**723**	872	1,631.5	5.0	113	**13,400**	**1,590**	**181**
8 to 13 feet	3/9/2016	440.41	9.24	0.00	431.17	**6.0**	28.1	**756**	970	1,760.1	5.0	38.4	**10,700**	**1,940**	**166**
	6/8/2016	440.41	9.14	0.00	431.27	**6.4**	20.2	638	773	1,437.6	4.2	53.3	**8,270**	**2,490**	**189**
	9/14/2016	440.41	8.18	0.00	432.23	**6.8**	12.4	516	259	794.2	3.5	25.0	**6,130**	**1,730**	**113**
	11/22/2016	440.41	9.25	0.00	431.16	**7.4**	12.7	652	314	986.1	2.4	24.7	**6,950**	**1,230**	**129**
	3/10/2017	440.41	9.39	0.00	431.02	4.0	22.7	**820**	1,160	2,006.7	ND	ND	**8,680**	**1,710**	**171**
ǂ	6/8/2017	440.41	9.34	0.00	431.07	4.4	14.4	683	1,020	1,721.8	2.0 (J)	32.4 (J)	**11,500**	**1,780**	**185**
	9/7/2017	440.41	9.29	0.00	431.12	**6.9**	23.4	698	466	1,194.3	ND	ND	**8,770**	**3,130**	**228**
	11/1/2017	440.41	9.32	0.00	431.09	**8.4**	31.3	**785**	398	1,222.7	3.1	ND	**6,930**	**2,230**	**202**
	3/7/2018	440.41	9.41	0.00	431.00	**5.5**	54.7	**952**	2,210	3,222.2	1.9 (J)	52.7	**14,600**	**3,660**	**284**
	6/21/2018	440.41	9.14	0.00	431.27	4.2	22.6	**811**	1,360	2,198	4.1	89.5	**9,620**	**2,000**	**245**
	9/6/2018	440.41	9.01	0.00	431.40	**10.1**	30.6	688	759	1,488	5.3	115	**9,700**	**2,030**	**202**
	7/18/2019	440.41	8.93	0.00	431.48	**5.8**	16.5	**725**	404	1,151	1.9	ND (<5.8)	**11,200**	**1,510**	**268**
	11/13/2019	440.41	9.16	0.00	431.25	4.6	9.8	602	157	773	2.0	13.5 (J)	**6,350**	**2,020**	**237**
	7/8/2020	440.41	8.77	0.00	431.64	4.6	16.3	479	196	696	3.8	26.6	**5,400**	**2,020**	**180**
	12/9/2020	440.41	8.93	0.00	431.48	2.7	11.5	558	130	702	1.2	113	**7,460**	**2,670**	**198**
	6/2/2021	440.41	9.12	0.00	431.29	3.8	10.8	485	88.0	588	2.4 (J)	53.7	**6,350**	**2,420**	**244**
YP-2	9/23/2014	438.35	8.25	0.00	430.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/23/2014	438.35	8.10	0.00	430.25	3.0	ND	ND	ND	3.0	8.5	7.4 (J)	ND	**ND (<80)**	0.43 (J)
Casing:	3/25/2015	438.35	8.05	0.00	430.30	**5.3**	ND	1.7	1	7.0	12.5	ND	ND	**ND (<80)**	0.42 (J)
0 to 7 feet	6/23/2015	438.35	7.98	0.00	430.37	3.9	ND	ND	ND	3.9	12.6	4.7 (J)	ND	**95**	ND
	9/22/2015	438.35	8.13	0.00	430.22	**5.2**	0.20 (J)	ND	0.77 (J)	6.17 (J)	13.2	60.2	**399**	**299**	0.52 (J)
Screen:	12/10/2015	438.35	8.25	0.00	430.10	**9.8**	0.18 (J)	ND	0.44 (J)	10.42 (J)	15.5	76.0	**322**	**254**	**0.81 (J)**
7 to 12 feet	3/9/2016	438.35	8.15	0.00	430.20	**62.4**	0.21 (J)	2.8	0.44 (J)	65.85 (J)	**32.7**	18.9	**324**	**110**	0.66 (J)
	6/8/2016	438.35	8.07	0.00	430.28	**13.9**	ND	ND	ND	13.9	17.7	23.4	**159**	**151**	ND
	9/14/2016	438.35	8.07	0.00	430.28	2.0	ND	ND	ND	2.0	6.1	37.0	**215**	**ND (<64)**	ND
	11/22/2016	438.35	8.11	0.00	430.24	**6.9**	0.46 (J)	15.9	7.4	30.66 (J)	8.6	167	**1,030**	**437**	**7.7**
	3/10/2017	438.35	8.11	0.00	430.24	3.0	ND	ND	ND	3.0	11.6	78.5	**168**	**ND (<64)**	**ND (<1.0)**
	9/7/2017	438.35	8.10	0.00	430.25	1.4	ND	ND	ND	1.4	10.1	26.3	**121 (J)**	**196**	**ND (<1.1)**
ǂ	6/8/2017	438.35	8.23	0.00	430.12	2.0	ND	ND	ND	2.0	13.1	21.6	**130 (J)**	**192**	**ND (<1.1)**
	9/7/2017	438.35	8.10	0.00	430.25	1.4	ND	ND	ND	1.4	10.1	26.3	**121 (J)**	**196**	**ND (<1.1)**
	11/1/2017	438.35	8.08	0.00	430.27	**6.7**	ND	3.0	0.36 (J)	10.1	10.5	257	**521**	**984**	**4.3 (J)**
	3/7/2018	438.35	8.12	0.00	430.23	0.93	ND	ND	ND	0.93	5.0	44.0	**ND (<100)**	**106**	**ND (<1.1)**
	6/21/2018	438.35	8.13	0.00	430.22	0.92	ND	ND	ND	0.92	7.0	13.6	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/6/2018	438.35	8.16	0.00	430.19	2.9	ND	ND	ND	2.9	9.6	57.7	**181 (J)**	**96.3**	**ND (<0.98)**
	7/18/2019	438.35	8.03	0.00	430.32	0.70	ND (<0.53)	ND (<0.60)	ND (<0.59)	<2.42	12.5	ND (<5.8)	**150 (J)**	**ND (<53)**	**ND (<0.98)**
	11/13/2019	438.35	8.16	0.00	430.19	**6.5**	ND (<0.53)	ND (<0.60)	ND (<0.59)	<8.22	16.1	15.0	**422**	**248**	**6.3**
	7/8/2020	438.35	7.53	0.00	430.82	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	8.7	ND (<5.8)	**ND (<100)**	**ND (<53)**	**ND (<2.5)**
	12/9/2020	438.35	7.97	0.00	430.38	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	9.9	6.2 (J)	**ND (<100)**	**ND (<53)**	**ND (<2.5)**
	6/2/2021	438.35	8.12	0.00	430.23	1.1	ND (<0.53)	ND (<0.60)	ND (<0.59)	<2.82	16.3	12.4	**113**	**ND (<49)**	**ND (<2.5)**
MDE MEAT GNCSG**						**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

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Former Hess Station No. 20204
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Well No.	Date	Casing Elevation* (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Table Elevation* (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Naphthalene (µg/L)
YP-3	9/23/2014	436.51	5.21	0.00	431.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/23/2014	436.51	5.21	0.00	431.30	ND	ND	ND	ND	ND	1.9	ND	ND	**ND (<80)**	ND
Casing:	3/25/2015	436.51	4.85	0.00	431.66	0.30 (J)	ND	ND	ND	0.30 (J)	6.0	ND	ND	**ND (<80)**	ND
0 to 5.5 feet	6/23/2015	436.51	4.75	0.00	431.76	0.91	ND	ND	ND	0.91	6.9	4.8 (J)	ND	**199**	ND
	9/22/2015	436.51	5.19	0.00	431.32	1.0	ND	ND	ND	1.0	6.6	ND	ND	**122**	ND
Screen:	12/10/2015	436.51	5.27	0.00	431.24	0.98	ND	ND	ND	0.98	5.9	5.3 (J)	ND	**146**	ND
5.5 to 10.5 feet	3/9/2016	436.51	4.74	0.00	431.77	0.25 (J)	ND	ND	ND	0.25 (J)	2.6	ND	**ND (<55)**	**122**	ND
	6/8/2016	436.51	5.02	0.00	431.49	0.84	ND	ND	ND	0.84	4.3	ND	**ND (<55)**	**216**	ND
	9/14/2016	436.51	5.32	0.00	431.19	0.61	ND	ND	ND	0.61	4.9	ND	**ND (<100)**	**ND (<64)**	ND
	11/22/2016	436.51	6.65	0.00	429.86	1.0	ND	ND	ND	1.0	6.7	ND	**ND (<100)**	NS	ND
	3/10/2017	436.51	5.62	0.00	430.89	0.88	ND	ND	ND	0.88	5.0	3.3 (J)	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	ǂ 6/8/2017	436.51	5.21	0.00	431.30	0.69	ND	ND	ND	0.69	4.0	4.0 (J)	**ND (<100)**	**89.6**	**ND (<1.0)**
	9/7/2017	436.51	5.16	0.00	431.35	0.67	ND	ND	ND	0.67	3.6	ND	**ND (<100)**	**197**	**ND (<1.1)**
	11/1/2017	436.51	5.94	0.00	430.57	0.96	ND	ND	ND	0.96	5.7	ND	**ND (<100)**	**413**	**ND (<1.1)**
	3/7/2018	436.51	4.95	0.00	431.56	0.25 (J)	ND	ND	ND	0.25 (J)	2.0	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	6/21/2018	436.51	4.62	0.00	431.89	0.39 (J)	ND	ND	ND	0.39 (J)	2.5	ND	**ND (<100)**	**102**	**ND (<1.1)**
	9/6/2018	436.51	4.76	0.00	431.75	ND	ND	ND	ND	ND	2.2	ND	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	436.51	4.49	0.00	432.02	Not sampled									
	11/13/2019	436.51	5.03	0.00	431.48	Not sampled									
	7/8/2020	436.51	4.33	0.00	432.18	Not sampled									
	12/9/2020	436.51	4.54	0.00	431.97	Not sampled									
	6/2/2021	436.51	4.74	0.00	431.77	Not sampled									
YP-4	9/23/2014	441.83	9.01	0.00	432.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/23/2014	441.83	9.24	0.00	432.59	0.44 (J)	ND	ND	ND	0.44 (J)	**36.5**	19.7	**386**	**ND (<80)**	ND
Casing:	3/25/2015	441.83	8.25	0.00	433.58	ND	ND	ND	ND	ND	5.5	ND	ND	**ND (<80)**	ND
0 to 8 feet	6/23/2015	441.83	8.96	0.00	432.87	ND	ND	ND	ND	ND	3.1	ND	ND	**ND (<64)**	ND
	9/22/2015	441.83	9.31	0.00	432.52	ND	ND	ND	ND	ND	12.2	ND	ND	**199**	0.26 (J)
Screen:	12/10/2015	441.83	9.28	0.00	432.55	0.41 (J)	ND	ND	ND	0.41 (J)	19.5	13.7	ND	**ND (<64)**	ND
8 to 13 feet	3/9/2016	441.83	8.54	0.00	433.29	ND	ND	ND	ND	ND	2.7	ND	**ND (<55)**	**ND (<64)**	ND
	6/8/2016	441.83	9.02	0.00	432.81	ND	ND	ND	ND	ND	4.2	ND	**ND (<55)**	**ND (<64)**	ND
	9/14/2016	441.83	9.53	0.00	432.30	0.23 (J)	ND	ND	ND	0.23 (J)	14.1	9.3 (J)	**118 (J)**	**ND (<64)**	ND
	11/22/2016	441.83	9.74	0.00	432.09	0.29 (J)	ND	ND	ND	0.29 (J)	19.8	18.4	**140 (J)**	**122**	ND
	3/10/2017	441.83	9.91	0.00	431.92	ND	ND	ND	ND	ND	19.9	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	ǂ 6/8/2017	441.83	9.31	0.00	432.52	ND	ND	ND	ND	ND	5.0	ND	**ND (<100)**	**115**	**ND (<1.0)**
	9/7/2017	441.83	9.72	0.00	432.11	ND	ND	ND	ND	ND	11.0	ND	**ND (<100)**	**199**	**ND (<1.1)**
	11/1/2017	441.83	9.82	0.00	432.01	ND	ND	ND	ND	ND	14.2	ND	**ND (<100)**	**107**	**ND (<1.1)**
	3/7/2018	441.83	9.23	0.00	432.60	ND	ND	ND	ND	ND	8.5	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	6/21/2018	441.83	8.48	0.00	433.35	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/6/2018	441.83	8.61	0.00	433.22	ND	ND	ND	ND	ND	4.7	ND	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	441.83	8.18	0.00	433.65	Not sampled									
	11/13/2019	441.83	9.01	0.00	432.82	Not sampled									
	7/8/2020	441.83	8.37	0.00	433.46	Not sampled									
	12/9/2020	441.83	8.06	0.00	433.77	Not sampled									
	6/2/2021	441.83	8.59	0.00	433.24	Not sampled									
YP-5	9/23/2014	433.65	4.01	0.00	429.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/23/2014	433.65	4.33	0.00	429.32	ND	ND	ND	ND	ND	0.66 (J)	ND	ND	**137**	ND
Casing:	3/25/2015	433.65	3.90	0.00	429.75	ND	ND	ND	ND	ND	17.7	51.2	ND	**ND (<80)**	ND
0 to 5 feet	6/23/2015	433.65	4.49	0.00	429.16	0.28 (J)	ND	ND	ND	0.28 (J)	**32.3**	106	ND	**117**	ND
	9/22/2015	433.65	4.12	0.00	429.53	1.2	ND	ND	ND	1.2	**45.7**	139	ND	**236**	ND
Screen:	12/10/2015	433.65	3.88	0.00	429.77	ND	ND	ND	ND	ND	**33.2**	8.7 (J)	ND	**ND (<64)**	ND
5 to 10 feet	3/9/2016	433.65	3.97	0.00	429.68	ND	ND	ND	ND	ND	1.6	ND	**ND (<55)**	**ND (<64)**	ND
	6/8/2016	433.65	4.31	0.00	429.34	ND	ND	ND	ND	ND	2.2	7.5 (J)	**ND (<55)**	**232**	ND
	9/14/2016	433.65	4.33	0.00	429.32	ND	ND	ND	ND	ND	10.4	32.6	**ND (<100)**	**ND (<64)**	ND
	11/22/2016	433.65	4.37	0.00	429.28	ND	ND	ND	ND	ND	**29.7**	34.5	**ND (<100)**	**ND (<64)**	ND
	3/10/2017	433.65	4.18	0.00	429.47	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	6/8/2017	433.65	4.31	0.00	429.34	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<64)**	**ND (<1.0)**
	9/7/2017	433.65	3.31	0.00	430.34	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**140**	**ND (<1.1)**
	11/1/2017	433.65	4.33	0.00	429.32	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**299**	**ND (<1.1)**
	3/7/2018	433.65	3.84	0.00	429.81	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**105**	**ND (<1.1)**
	6/21/2018	433.65	3.93	0.00	429.72	ND	ND	ND	ND	ND	ND	ND	**ND (<100)**	**ND (<83)**	**ND (<1.1)**
	9/6/2018	433.65	4.01	0.00	429.64	ND	ND	ND	ND	ND	0.62 (J)	ND	**ND (<100)**	**ND (<53)**	**ND (<0.98)**
	7/18/2019	433.65	3.83	0.00	429.82	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	ND (<42)	**ND (<53)**	**ND (<0.98)**
	11/13/2019	433.65	3.96	0.00	429.69	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND (<53)**	**ND (<2.5)**
	7/8/2020	433.65	1.84	0.00	431.81	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND (<53)**	**you**
	12/9/2020	433.65	2.32	0.00	431.33	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**ND (<53)**	**ND (<2.5)**
	6/2/2021	433.65	4.21	0.00	429.44	ND (<0.43)	ND (<0.53)	ND (<0.60)	ND (<0.59)	ND (<2.15)	ND (<0.51)	ND (<5.8)	**ND (<100)**	**197**	**ND (<2.5)**
				MDE MEAT GNCSG**		**5**	**1,000**	**700**	**10,000**	**NA**	**20**	**NA**	**47**	**47**	**0.7**

Table Notes:

*Elevation is relative to a designated benchmark
(Current Casing elevations surveyed on August 25, 2010.)
**Generic Numeric Cleanup Standards for Groundwater (GNCSG) from Appendix F of the Maryland Department of the Environments (MDE) Maryland Environmental Assessment Technology (MEAT) for Leaking Undergound Storage Tanks
***The June 18, 2014 TPH-DRO parameters were analyzed out of laboratory holding times; Follow-up samples were collected on June 30, 2014, for analysis of TPH-DRO only
ǂ-The June 8, 2017 TPH-DRO sample was lost in transit. Follow-up sample was collected on June 21, 2017, for analysis of TPH-DRO only
ND (<MDL) = Not Detected above Method Detection Limit. (As of 2012 this changed to mean "Not Detected above Method Dection Limit".)
Groundwater elevations corrected for the presence of LPH using the following formula: Water Table Elevation = Water Elevation+(0.75*LPH Thickness)
Values in boldface type exceed applicable MDE MEAT GNCSG
ND = Not Detected
NA = Not Applicable
Total BTEX = sum of Benzene, Toluene, Ethylbenzene, and Xylenes
MTBE = Methyl-tertiary-Butyl Ether
NS = Not Sampled for indicated analyte
LPH = Liquid Phase Hydrocarbons
¥ = Bottleware broken in shipment.
J = Laboratory Estimated Value
µg/L = micrograms per liter
† = Samples damaged in shipment, resampled for TPH-DRO on 5/24/12
E= Value Exceeded Laboratory Calibration Range
NM = Not Measured
NSVD - Not Surveyed

TABLE 2
GROUNDWATER GAUGING
RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
MDE-4	1/19/2015	443.18	0.00	9.89	433.29
	2/25/2015	443.18	0.00	9.99	433.19
Casing:	3/24/2015	443.18	0.00	9.58	433.60
0 to 3 feet	4/20/2015	443.18	0.00	9.41	433.77
	5/27/2015	443.18	0.00	9.51	433.67
Screen:	6/22/2015	443.18	0.00	9.25	433.93
3 to 13 feet	7/28/2015	443.18	0.00	8.94	434.24
	8/24/2015	443.18	0.00	9.14	434.04
	9/21/2015	443.18	0.00	9.28	433.90
	10/29/2015	443.18	0.00	9.03	434.15
	11/18/2015	443.18	0.00	9.73	433.45
	12/9/2015	443.18	0.00	9.58	433.60
	1/12/2016	443.18	0.00	9.31	433.87
	3/8/2016	443.18	0.00	8.98	434.20
	6/7/2016	443.18	0.00	9.03	434.15
	9/13/2016	443.18	0.00	9.48	433.70
	11/21/2016	443.18	0.00	9.90	433.28
	3/9/2017	443.18	0.00	10.42	432.76
	6/7/2017	443.18	0.00	9.72	433.46
	9/6/2017	443.18	0.00	9.77	433.41
	11/1/2017	443.18	0.00	9.97	433.21
	3/6/2018	443.18	0.00	9.84	433.34
	6/20/2018	443.18	0.00	8.72	434.46
	9/5/2018	443.18	0.00	8.64	434.54
	7/18/2019	443.18	0.00	8.11	435.07
	11/13/2019	443.18	0.00	9.23	433.95
	7/8/2020	443.18	0.00	8.33	434.85
	12/9/2020	443.18	0.00	8.36	434.82
	6/2/2021	443.18	0.00	8.68	434.50
MW-1	1/19/2015	453.92	NM	NM	NM
	2/25/2015	453.92	NM	NM	NM
Casing:	3/24/2015	453.92	NM	NM	NM
Unknown	4/20/2015	453.92	0.00	16.71	437.21
	5/27/2015	453.92	0.00	18.75	435.17
Screen:	6/22/2015	453.92	0.00	18.24	435.68
Unknown	7/28/2015	453.92	0.00	17.20	436.72
	8/24/2015	453.92	0.00	17.42	436.50
	9/21/2015	453.92	0.00	18.49	435.43
	10/29/2015	453.92	0.00	18.36	435.56
	11/18/2015	453.92	0.00	19.40	434.52
	12/9/2015	453.92	0.00	19.24	434.68
	1/12/2016	453.92	0.00	18.45	435.47
	3/8/2016	453.92	0.00	18.28	435.64
	6/7/2016	453.92	0.00	18.21	435.71
	9/13/2016	453.92	0.00	18.92	435.00
	11/21/2016	453.92	0.00	19.83	434.09
	3/9/2017	453.92	0.00	20.49	433.43
	6/7/2017	453.92	0.00	19.38	434.54
	9/6/2017	453.92	0.00	19.04	434.88
	11/1/2017	453.92	0.00	19.67	434.25
	3/6/2018	453.92	0.00	20.16	433.76
	6/20/2018	453.92	0.00	17.45	436.47
	9/5/2018	453.92	0.00	16.71	437.21
	7/18/2019	453.92	0.00	16.52	437.40
	11/13/2019	453.92	0.00	18.44	435.48
	7/8/2020	453.92	0.00	16.57	437.35
	12/9/2020	453.92	0.00	17.28	436.64
	6/2/2021	453.92	0.00	17.57	436.35

TABLE 2
GROUNDWATER GAUGING
RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
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Case No. 1991-2100-BA

Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
MW-4	1/19/2015	455.10	NM	NM	NM
	2/25/2015	455.10	NM	NM	NM
Casing:	3/24/2015	455.10	NM	NM	NM
0 to 10 feet	4/20/2015	455.10	0.00	20.72	434.38
	5/27/2015	455.10	0.00	20.68	434.42
Screen:	6/22/2015	455.10	0.00	20.38	434.72
10 to 25 feet	7/28/2015	455.10	0.00	19.86	435.24
	8/24/2015	455.10	0.00	20.08	435.02
	9/21/2015	455.10	0.00	20.57	434.53
	10/29/2015	455.10	0.00	20.26	434.84
	11/18/2015	455.10	0.00	21.29	433.81
	12/9/2015	455.10	0.00	21.08	434.02
	1/12/2016	455.10	0.00	20.54	434.56
	3/8/2016	455.10	0.00	20.29	434.81
	6/7/2016	455.10	0.00	20.28	434.82
	9/13/2016	455.10	0.00	20.87	434.23
	11/21/2016	455.10	0.00	21.56	433.54
	3/9/2017	455.10	0.00	22.05	433.05
	9/6/2017	455.10	0.00	20.94	434.16
	6/7/2017	455.10	0.00	21.18	433.92
	11/1/2017	455.10	0.00	21.41	433.69
	3/6/2018	455.10	0.00	21.75	433.35
	6/20/2018	455.10	0.00	19.73	435.37
	9/5/2018	455.10	0.00	19.34	435.76
	7/18/2019	455.10	0.00	18.82	436.28
	11/13/2019	455.10	0.00	20.42	434.68
	7/8/2020	455.10	0.00	18.78	436.32
	12/9/2020	455.10	0.00	17.47	437.63
	6/2/2021	455.10	0.00	19.62	435.48
MW-7	1/19/2015	452.69	0.00	19.21	433.48
	2/25/2015	452.69	0.00	19.06	433.63
Casing:	3/24/2015	452.69	0.00	18.67	434.02
0 to 8 feet	4/20/2015	452.69	0.00	18.47	434.22
	5/27/2015	452.69	0.00	15.60	437.09
Screen:	6/22/2015	452.69	0.00	18.29	434.40
8 to 33 feet	7/28/2015	452.69	0.00	17.90	434.79
	8/24/2015	452.69	0.00	18.11	434.58
	9/21/2015	452.69	0.00	18.42	434.27
	10/29/2015	452.69	0.00	18.20	434.49
	11/18/2015	452.69	0.00	18.99	433.70
	12/9/2015	452.69	0.00	18.81	433.88
	1/12/2016	452.69	0.00	18.71	433.98
	3/8/2016	452.69	0.00	18.16	434.53
	6/7/2016	452.69	0.00	18.19	434.50
	9/13/2016	452.69	0.00	18.62	434.07
	11/21/2016	452.69	0.00	19.14	433.55
	3/9/2017	452.69	0.00	19.63	433.06
	6/7/2017	452.69	0.00	18.89	433.80
	9/6/2017	452.69	0.00	18.78	433.91
	11/1/2017	452.69	0.00	19.07	433.62
	3/6/2018	452.69	0.00	19.31	433.38
	6/20/2018	452.69	0.00	17.74	434.95
	9/5/2018	452.69	0.00	17.38	435.31
	7/18/2019	452.69	0.00	16.97	435.72
	11/13/2019	452.69	0.00	18.28	434.41
	7/8/2020	452.69	0.00	17.12	435.57
	12/9/2020	452.69	0.00	17.51	435.18
	6/2/2021	452.69	0.00	17.62	435.07

TABLE 2
GROUNDWATER GAUGING
RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
OW-1	1/19/2015	455.31	0.00	19.33	435.98
	2/25/2015	455.31	0.00	21.66	433.65
Casing:	3/24/2015	455.31	0.00	21.08	434.23
0 to 9 feet	4/20/2015	455.31	0.00	20.66	434.65
	5/27/2015	455.31	0.00	20.59	434.72
Screen:	6/22/2015	455.31	0.00	20.58	434.73
9 to 34 feet	7/28/2015	455.31	0.00	20.18	435.13
	8/24/2015	455.31	0.00	20.40	434.91
	9/21/2015	455.31	0.00	20.73	434.58
	10/29/2015	455.31	0.00	20.55	434.76
	11/18/2015	455.31	0.00	21.38	433.93
	12/9/2015	455.31	0.00	21.23	434.08
	1/12/2016	455.31	0.00	21.06	434.25
	3/8/2016	455.31	0.00	20.54	434.77
	6/7/2016	455.31	0.00	20.58	434.73
	9/13/2016	455.31	0.00	21.03	434.28
	11/21/2016	455.31	0.00	21.82	433.49
	3/9/2017	455.31	0.00	22.04	433.27
	9/6/2017	455.31	0.00	21.27	434.04
	6/7/2017	455.31	0.00	21.22	434.09
	11/1/2017	455.31	0.00	21.53	433.78
	3/6/2018	455.31	0.00	21.77	433.54
	6/20/2018	455.31	0.00	20.03	435.28
	9/5/2018	455.31	0.00	19.61	435.70
	7/18/2019	455.31	0.00	19.23	436.08
	11/13/2019	455.31	0.00	20.66	434.65
	7/8/2020	455.31	0.00	19.35	435.96
	12/9/2020	455.31	0.00	19.70	435.61
	6/2/2021	455.31	0.00	19.92	435.39
YMW-1	1/19/2015	433.64	0.00	3.66	429.98
	2/25/2015	433.64	0.00	4.01	429.63
Casing:	3/24/2015	433.64	0.00	3.02	430.62
0 to 2 feet	4/20/2015	433.64	0.00	3.34	430.30
	5/27/2015	433.64	0.00	4.08	429.56
Screen:	6/22/2015	433.64	0.00	3.04	430.60
2 to 14 feet	7/28/2015	433.64	0.00	3.04	430.60
	8/24/2015	433.64	0.00	1.51	432.13
	9/21/2015	433.64	0.00	4.94	428.70
	10/29/2015	433.64	0.00	4.63	429.01
	11/18/2015	433.64	0.00	4.45	429.19
	12/9/2015	433.64	0.00	4.37	429.27
	1/12/2016	433.64	0.00	3.31	430.33
	3/8/2016	433.64	0.00	3.31	430.33
	6/7/2016	433.64	0.00	3.90	429.74
	9/13/2016	433.64	0.00	5.47	428.17
	11/21/2016	433.64	0.00	6.21	427.43
	3/9/2017	433.64	0.00	5.40	428.24
	6/7/2017	433.64	0.00	4.25	429.39
	9/6/2017	433.64	0.00	4.44	429.20
	11/1/2017	433.64	0.00	5.37	428.27
	3/6/2018	433.64	0.00	4.16	429.48
	6/20/2018	433.64	0.00	3.08	430.56
	9/5/2018	433.64	0.00	3.35	430.29
	7/18/2019	433.64	0.00	2.73	430.91
	11/13/2019	433.64	0.00	4.19	429.45
	7/8/2020	433.64	0.00	2.87	430.77
	12/9/2020	433.64	0.00	2.59	431.05
	6/2/2021	433.64	0.00	3.41	430.23

TABLE 2
GROUNDWATER GAUGING
RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
YMW-2	1/19/2015	431.37	0.00	2.86	428.51
	2/25/2015	431.37	0.00	2.84	428.53
Casing:	3/24/2015	431.37	0.00	2.78	428.59
0 to 2 feet	4/20/2015	431.37	0.00	2.71	428.66
	5/27/2015	431.37	0.00	2.78	428.59
Screen:	6/22/2015	431.37	0.00	2.51	428.86
2 to 14 feet	7/28/2015	431.37	0.00	2.41	428.96
	8/24/2015	431.37	0.00	0.61	430.76
	9/21/2015	431.37	0.00	2.58	428.79
	10/29/2015	431.37	0.00	2.31	429.06
	11/18/2015	431.37	0.00	4.02	427.35
	12/9/2015	431.37	0.00	3.94	427.43
	1/12/2016	431.37	0.00	2.90	428.47
	3/8/2016	431.37	0.00	2.97	428.40
	6/7/2016	431.37	0.00	2.84	428.53
	9/13/2016	431.37	0.00	2.44	428.93
	11/21/2016	431.37	0.00	2.94	428.43
	3/9/2017	431.37	0.00	2.94	428.43
	6/7/2017	431.37	0.00	3.10	428.27
	9/6/2017	431.37	0.00	2.65	428.72
	11/1/2017	431.37	0.00	2.67	428.70
	3/6/2018	431.37	0.00	2.85	428.52
	6/20/2018	431.37	0.00	2.58	428.79
	9/5/2018	431.37	0.00	2.51	428.86
	7/18/2019	431.37	0.00	3.01	428.36
	11/13/2019	431.37	0.00	2.61	428.76
	7/8/2020	431.37	0.00	1.27	430.10
	12/9/2020	431.37	0.00	2.13	429.24
	6/2/2021	431.37	0.00	2.55	428.82
YMW-3	1/19/2015	440.39	0.00	8.63	431.76
	2/25/2015	440.39	0.00	8.87	431.52
Casing:	3/24/2015	440.39	0.00	8.17	432.22
0 to 4.5 feet	4/20/2015	440.39	0.00	8.19	432.20
	5/27/2015	440.39	0.00	8.54	431.85
Screen:	6/22/2015	440.39	0.00	8.54	431.85
4.5 to 19.5 feet	7/28/2015	440.39	0.00	7.76	432.63
	8/24/2015	440.39	0.00	7.97	432.42
	9/21/2015	440.39	0.00	9.21	431.18
	10/29/2015	440.39	0.00	9.00	431.39
	11/18/2015	440.39	0.00	9.09	431.30
	12/9/2015	440.39	0.00	8.83	431.56
	1/12/2016	440.39	0.00	7.97	432.42
	3/8/2016	440.39	0.00	8.63	431.76
	6/7/2016	440.39	0.00	8.86	431.53
	9/13/2016	440.39	0.00	9.54	430.85
	11/21/2016	440.39	0.00	10.44	429.95
	3/9/2017	440.39	0.00	9.55	430.84
	6/7/2017	440.39	0.00	8.82	431.57
	9/6/2017	440.39	0.00	8.84	431.55
	11/1/2017	440.39	0.00	9.34	431.05
	3/6/2018	440.39	0.00	7.97	432.42
	6/20/2018	440.39	0.00	8.27	432.12
	9/5/2018	440.39	0.00	8.48	431.91
	7/18/2019	440.39	0.00	8.12	432.27
	11/13/2019	440.39	0.00	8.56	431.83
	7/8/2020	440.39	0.00	7.78	432.61
	12/9/2020	440.39	0.00	8.01	432.38
	6/2/2021	440.39	0.00	8.54	431.85

TABLE 2
GROUNDWATER GAUGING
RESULTS SUMMARY
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Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
YMW-4	1/19/2015	433.72	0.00	4.29	429.43
	2/25/2015	433.72	0.00	4.02	429.70
Casing:	3/24/2015	433.72	0.00	4.06	429.66
0 to 2 feet	4/20/2015	433.72	0.00	4.09	429.63
	5/27/2015	433.72	0.00	4.33	429.39
Screen:	6/22/2015	433.72	0.00	3.96	429.76
2 to 17 feet	7/28/2015	433.72	0.00	4.13	429.59
	8/24/2015	433.72	0.00	2.34	431.38
	9/21/2015	433.72	0.00	4.45	429.27
	10/29/2015	433.72	0.00	4.24	429.48
	11/18/2015	433.72	0.00	4.55	429.17
	12/9/2015	433.72	0.00	4.34	429.38
	1/12/2016	433.72	0.00	4.71	429.01
	3/8/2016	433.72	0.00	4.18	429.54
	6/7/2016	433.72	0.00	4.18	429.54
	9/13/2016	433.72	0.00	4.46	429.26
	11/21/2016	433.72	0.00	4.85	428.87
	3/9/2017	433.72	0.00	4.30	429.42
	6/7/2017	433.72	0.00	4.26	429.46
	9/6/2017	433.72	0.00	4.18	429.54
	11/1/2017	433.72	0.00	4.41	429.31
	3/6/2018	433.72	0.00	4.24	429.48
	6/20/2018	433.72	0.00	3.89	429.83
	9/5/2018	433.72	0.00	4.01	429.71
	7/18/2019	433.72	0.00	3.79	429.93
	11/13/2019	433.72	0.00	4.16	429.56
	7/8/2020	433.72	0.00	3.53	430.19
	12/9/2020	433.72	0.00	3.57	430.15
	6/2/2021	433.72	0.00	4.07	429.65
YMW-5	1/19/2015	430.70	0.00	3.26	427.44
	2/25/2015	430.70	0.00	3.15	427.55
Casing:	3/24/2015	430.70	0.00	3.05	427.65
0 to 1 feet	4/20/2015	430.70	0.00	3.19	427.51
	5/27/2015	430.70	0.00	3.25	427.45
Screen:	6/22/2015	430.70	0.00	3.05	427.65
1 to 16 feet	7/28/2015	430.70	0.00	3.23	427.47
	8/24/2015	430.70	0.00	1.43	429.27
	9/21/2015	430.70	0.00	3.52	427.18
	10/29/2015	430.70	0.00	3.23	427.47
	11/18/2015	430.70	0.00	3.32	427.38
	12/9/2015	430.70	0.00	3.16	427.54
	1/12/2016	430.70	0.00	2.91	427.79
	3/8/2016	430.70	0.00	2.99	427.71
	6/7/2016	430.70	0.00	3.01	427.69
	9/13/2016	430.70	0.00	3.39	427.31
	11/21/2016	430.70	0.00	3.74	426.96
	3/9/2017	430.70	0.00	3.14	427.56
	6/7/2017	430.70	0.00	3.07	427.63
	9/6/2017	430.70	0.00	2.98	427.72
	11/1/2017	430.70	0.00	3.23	427.47
	3/6/2018	430.70	0.00	2.83	427.87
	6/20/2018	430.70	0.00	2.67	428.03
	9/5/2018	430.70	0.00	2.74	427.96
	7/18/2019	430.70	0.00	2.36	428.34
	11/13/2019	430.70	0.00	2.70	428.00
	7/8/2020	430.70	0.00	1.87	428.83
	12/9/2020	430.70	0.00	2.31	428.39
	6/2/2021	430.70	0.00	2.67	428.03

TABLE 2
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RESULTS SUMMARY
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Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
YMW-6	1/19/2015	432.68	0.00	5.42	427.26
	2/25/2015	432.68	0.00	5.59	427.09
Casing:	3/24/2015	432.68	0.00	5.11	427.57
0 to 3 feet	4/20/2015	432.68	0.00	5.08	427.60
	5/27/2015	432.68	0.00	5.87	426.81
Screen:	6/22/2015	432.68	0.00	5.11	427.57
3 to 18 feet	7/28/2015	432.68	0.00	5.38	427.30
	8/24/2015	432.68	0.00	3.58	429.10
	9/21/2015	432.68	0.00	6.11	426.57
	10/29/2015	432.68	0.00	6.01	426.67
	11/18/2015	432.68	0.00	5.79	426.89
	12/9/2015	432.68	0.00	5.56	427.12
	1/12/2016	432.68	0.00	5.11	427.57
	3/8/2016	432.68	0.00	5.10	427.58
	6/7/2016	432.68	0.00	5.36	427.32
	9/13/2016	432.68	0.00	6.38	426.30
	11/21/2016	432.68	0.00	7.05	425.63
	3/9/2017	432.68	0.00	6.25	426.43
	6/7/2017	432.68	0.00	5.49	427.19
	9/6/2017	432.68	0.00	6.25	426.43
	11/1/2017	432.68	0.00	6.65	426.03
	3/6/2018	432.68	0.00	5.35	427.33
	6/20/2018	432.68	0.00	4.89	427.79
	9/5/2018	432.68	0.00	5.05	427.63
	7/18/2019	432.68	0.00	4.74	427.94
	11/13/2019	432.68	0.00	5.49	427.19
	7/8/2020	432.68	0.00	4.65	428.03
	12/9/2020	432.68	0.00	4.48	428.20
	6/2/2021	432.68	0.00	5.03	427.65
YMW-7	1/19/2015	449.40	0.00	15.91	433.49
	2/25/2015	449.40	0.00	15.98	433.42
Casing:	3/24/2015	449.40	0.00	15.54	433.86
0 to 18 feet	4/20/2015	449.40	0.00	15.47	433.93
	5/27/2015	449.40	0.00	15.51	433.89
Screen:	6/22/2015	449.40	0.00	15.22	434.18
18 to 28 feet	7/28/2015	449.40	0.00	14.89	434.51
	8/24/2015	449.40	0.00	15.10	434.30
	9/21/2015	449.40	0.00	15.32	434.08
	10/29/2015	449.40	0.00	14.97	434.43
	11/18/2015	449.40	0.00	15.83	433.57
	12/9/2015	449.40	0.00	15.68	433.72
	1/12/2016	449.40	0.00	15.29	434.11
	3/8/2016	449.40	0.00	15.13	434.27
	6/7/2016	449.40	0.00	15.09	434.31
	9/13/2016	449.40	0.00	15.47	433.93
	11/21/2016	449.40	0.00	15.69	433.71
	3/9/2017	449.40	0.00	16.31	433.09
	6/7/2017	449.40	0.00	15.24	434.16
	9/6/2017	449.40	0.00	15.68	433.72
	11/1/2017	449.40	0.00	15.91	433.49
	3/6/2018	449.40	0.00	16.12	433.28
	6/20/2018	449.40	0.00	14.75	434.65
	9/5/2018	449.40	0.00	14.43	434.97
	7/18/2019	449.40	0.00	13.96	435.44
	11/13/2019	449.40	0.00	14.98	434.42
	7/8/2020	449.40	0.00	14.11	435.29
	12/9/2020	449.40	0.00	14.32	435.08
	6/2/2021	449.40	0.00	14.53	434.87

TABLE 2
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RESULTS SUMMARY
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Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
YMW-8	1/19/2015	446.91	0.00	13.86	433.05
	2/25/2015	446.91	0.00	14.52	432.39
Casing:	3/24/2015	446.91	0.00	12.91	434.00
0 to 7 feet	4/20/2015	446.91	0.00	13.34	433.57
	5/27/2015	446.91	0.00	13.61	433.30
Screen:	6/22/2015	446.91	0.00	13.44	433.47
7 to 22 feet	7/28/2015	446.91	0.00	13.34	433.57
	8/24/2015	446.91	0.00	13.55	433.36
	9/21/2015	446.91	0.00	13.85	433.06
	10/29/2015	446.91	0.00	13.56	433.35
	11/18/2015	446.91	0.00	14.11	432.80
	12/9/2015	446.91	0.00	13.94	432.97
	1/12/2016	446.91	0.00	13.57	433.34
	3/8/2016	446.91	0.00	13.05	433.86
	6/7/2016	446.91	0.00	13.52	433.39
	9/13/2016	446.91	0.00	14.03	432.88
	11/21/2016	446.91	0.00	14.39	432.52
	3/9/2017	446.91	0.00	14.61	432.30
	6/7/2017	446.91	0.00	14.07	432.84
	9/6/2017	446.91	0.00	14.28	432.63
	11/1/2017	446.91	0.00	14.43	432.48
	3/6/2018	446.91	0.00	14.07	432.84
	6/20/2018	446.91	0.00	12.80	434.11
	9/5/2018	446.91	0.00	12.99	433.92
	7/18/2019	446.91	0.00	12.57	434.34
	11/13/2019	446.91	0.00	13.63	433.28
	7/8/2020	446.91	0.00	11.71	435.20
	12/9/2020	446.91	0.00	12.76	434.15
	6/2/2021	446.91	0.00	12.99	433.92
YMW-9	1/19/2015	436.71	0.00	5.69	431.02
	2/25/2015	436.71	0.00	5.93	430.78
Casing:	3/24/2015	436.71	0.00	5.41	431.30
0 to 2.5 feet	4/20/2015	436.71	0.00	4.80	431.91
	5/27/2015	436.71	0.00	6.02	430.69
Screen:	6/22/2015	436.71	0.00	5.81	430.90
2.5 to 17.5 feet	7/28/2015	436.71	0.00	5.94	430.77
	8/24/2015	436.71	0.00	4.14	432.57
	9/21/2015	436.71	0.00	6.17	430.54
	10/29/2015	436.71	0.00	5.99	430.72
	11/18/2015	436.71	0.00	6.13	430.58
	12/9/2015	436.71	0.00	5.86	430.85
	1/12/2016	436.71	0.00	5.04	431.67
	3/8/2016	436.71	0.00	5.43	431.28
	6/7/2016	436.71	0.00	5.93	430.78
	9/13/2016	436.71	0.00	6.44	430.27
	11/21/2016	436.71	0.00	6.50	430.21
	3/9/2017	436.71	0.00	6.23	430.48
	6/7/2017	436.71	0.00	6.13	430.58
	9/6/2017	436.71	0.00	6.42	430.29
	11/1/2017	436.71	0.00	6.34	430.37
	3/6/2018	436.71	0.00	5.29	431.42
	6/20/2018	436.71	0.00	5.73	430.98
	9/5/2018	436.71	0.00	5.88	430.83
	7/18/2019	436.71	0.00	5.65	431.06
	11/13/2019	436.71	0.00	5.87	430.84
	7/8/2020	436.71	0.00	5.27	431.44
	12/9/2020	436.71	0.00	4.91	431.80
	6/2/2021	436.71	0.00	5.96	430.75

TABLE 2
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RESULTS SUMMARY
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Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
YP-1	1/19/2015	440.41	0.00	9.25	431.16
	2/25/2015	440.41	0.00	9.25	431.16
Casing:	3/24/2015	440.41	0.00	9.26	431.15
0 to 8 feet	4/20/2015	440.41	0.00	9.23	431.18
	5/27/2015	440.41	0.00	9.34	431.07
Screen:	6/22/2015	440.41	0.00	9.18	431.23
8 to 13 feet	7/28/2015	440.41	0.00	8.79	431.62
	8/24/2015	440.41	0.00	8.99	431.42
	9/21/2015	440.41	0.00	9.20	431.21
	10/29/2015	440.41	0.00	8.96	431.45
	11/18/2015	440.41	0.00	9.30	431.11
	12/9/2015	440.41	0.00	9.17	431.24
	1/12/2016	440.41	0.00	9.14	431.27
	3/8/2016	440.41	0.00	9.24	431.17
	6/7/2016	440.41	0.00	9.14	431.27
	9/13/2016	440.41	0.00	8.18	432.23
	11/21/2016	440.41	0.00	9.25	431.16
	3/10/2017	440.41	0.00	9.39	431.02
	6/8/2017	440.41	0.00	9.34	431.07
	9/7/2017	440.41	0.00	9.29	431.12
	11/2/2017	440.41	0.00	9.32	431.09
	3/7/2018	440.41	0.00	9.41	431.00
	6/21/2018	440.41	0.00	9.14	431.27
	9/6/2018	440.41	0.00	9.01	431.40
	7/18/2019	440.41	0.00	8.93	431.48
	11/13/2019	440.41	0.00	9.16	431.25
	7/8/2020	440.41	0.00	8.77	431.64
	12/9/2020	440.41	0.00	8.93	431.48
	6/2/2021	440.41	0.00	9.12	431.29
YP-2	1/19/2015	438.35	0.00	8.27	430.08
	2/25/2015	438.35	0.00	8.09	430.26
Casing:	3/24/2015	438.35	0.00	8.05	430.30
0 to 7 feet	4/20/2015	438.35	0.00	8.01	430.34
	5/27/2015	438.35	0.00	8.36	429.99
Screen:	6/22/2015	438.35	0.00	7.98	430.37
7 to 12 feet	7/28/2015	438.35	0.00	8.08	430.27
	8/24/2015	438.35	0.00	8.28	430.07
	9/21/2015	438.35	0.00	8.13	430.22
	10/29/2015	438.35	0.00	7.91	430.44
	11/18/2015	438.35	0.00	8.36	429.99
	12/9/2015	438.35	0.00	8.25	430.10
	1/12/2016	438.35	0.00	8.17	430.18
	3/8/2016	438.35	0.00	8.15	430.20
	6/7/2016	438.35	0.00	8.07	430.28
	9/13/2016	438.35	0.00	8.07	430.28
	11/21/2016	438.35	0.00	8.11	430.24
	3/10/2017	438.35	0.00	8.11	430.24
	6/8/2017	438.35	0.00	8.23	430.12
	9/7/2017	438.35	0.00	8.10	430.25
	11/2/2017	438.35	0.00	8.08	430.27
	3/7/2018	438.35	0.00	8.12	430.23
	6/21/2018	438.35	0.00	8.13	430.22
	9/6/2018	438.35	0.00	8.16	430.19
	7/18/2019	438.35	0.00	8.03	430.32
	11/13/2019	438.35	0.00	8.16	430.19
	7/8/2020	438.35	0.00	7.53	430.82
	12/9/2020	438.35	0.00	7.97	430.38
	6/2/2021	438.35	0.00	8.12	430.23

TABLE 2
GROUNDWATER GAUGING
RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
YP-3	1/19/2015	436.51	0.00	5.09	431.42
	2/25/2015	436.51	0.00	5.01	431.50
Casing:	3/24/2015	436.51	0.00	4.85	431.66
0 to 5.5 feet	4/20/2015	436.51	0.00	5.67	430.84
	5/27/2015	436.51	0.00	5.47	431.04
Screen:	6/22/2015	436.51	0.00	4.75	431.76
5.5 to 10.5 feet	7/28/2015	436.51	0.00	5.08	431.43
	8/24/2015	436.51	0.00	5.11	431.40
	9/21/2015	436.51	0.00	5.19	431.32
	10/29/2015	436.51	0.00	4.88	431.63
	11/18/2015	436.51	0.00	5.40	431.11
	12/9/2015	436.51	0.00	5.27	431.24
	1/12/2016	436.51	0.00	4.93	431.58
	3/8/2016	436.51	0.00	4.74	431.77
	6/7/2016	436.51	0.00	5.02	431.49
	9/13/2016	436.51	0.00	5.32	431.19
	11/21/2016	436.51	0.00	6.65	429.86
	3/10/2017	436.51	0.00	5.62	430.89
	6/8/2017	436.51	0.00	5.21	431.30
	9/7/2017	436.51	0.00	5.16	431.35
	11/2/2017	436.51	0.00	5.94	430.57
	3/7/2018	436.51	0.00	4.95	431.56
	6/21/2018	436.51	0.00	4.62	431.89
	9/6/2018	436.51	0.00	4.76	431.75
	7/18/2019	436.51	0.00	4.49	432.02
	11/13/2019	436.51	0.00	5.03	431.48
	7/8/2020	436.51	0.00	4.33	432.18
	12/9/2020	436.51	0.00	4.54	431.97
	6/2/2021	436.51	0.00	4.74	431.77
YP-4	1/19/2015	441.83	0.00	9.13	432.70
	2/25/2015	441.83	0.00	9.32	432.51
Casing:	3/24/2015	441.83	0.00	8.25	433.58
0 to 8 feet	4/20/2015	441.83	0.00	8.74	433.09
	5/27/2015	441.83	0.00	9.07	432.76
Screen:	6/22/2015	441.83	0.00	8.96	432.87
8 to 13 feet	7/28/2015	441.83	0.00	8.27	433.56
	8/24/2015	441.83	0.00	9.18	432.65
	9/21/2015	441.83	0.00	9.31	432.52
	10/29/2015	441.83	0.00	9.11	432.72
	11/18/2015	441.83	0.00	9.41	432.42
	12/9/2015	441.83	0.00	9.28	432.55
	1/12/2016	441.83	0.00	8.78	433.05
	3/8/2016	441.83	0.00	8.54	433.29
	6/7/2016	441.83	0.00	9.02	432.81
	9/13/2016	441.83	0.00	9.53	432.30
	11/21/2016	441.83	0.00	9.74	432.09
	3/10/2017	441.83	0.00	9.91	431.92
	6/8/2017	441.83	0.00	9.31	432.52
	9/7/2017	441.83	0.00	9.72	432.11
	11/2/2017	441.83	0.00	9.82	432.01
	3/7/2018	441.83	0.00	9.23	432.60
	6/21/2018	441.83	0.00	8.48	433.35
	9/6/2018	441.83	0.00	8.61	433.22
	7/18/2019	441.83	0.00	8.18	433.65
	11/13/2019	441.83	0.00	9.01	432.82
	7/8/2020	441.83	0.00	8.37	433.46
	12/9/2020	441.83	0.00	8.06	433.77
	6/2/2021	441.83	0.00	8.59	433.24

TABLE 2
GROUNDWATER GAUGING
RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Monitoring Well/Piezometer Identification	Gauging Date	Top of Casing Elevation (ft)	LPH Thickness (ft)	Depth to Groundwater (ft)	Corrected Groundwater Table Elevation (ft)
YP-5	1/19/2015	433.65	0.00	5.50	428.15
	2/25/2015	433.65	0.00	5.79	427.86
Casing:	3/24/2015	433.65	0.00	3.90	429.75
0 to 5 feet	4/20/2015	433.65	0.00	4.05	429.60
	5/27/2015	433.65	0.00	4.21	429.44
Screen:	6/22/2015	433.65	0.00	4.49	429.16
5 to 10 feet	7/28/2015	433.65	0.00	5.48	428.17
	8/24/2015	433.65	0.00	3.68	429.97
	9/21/2015	433.65	0.00	4.12	429.53
	10/29/2015	433.65	0.00	4.02	429.63
	11/18/2015	433.65	0.00	4.02	429.63
	12/9/2015	433.65	0.00	3.88	429.77
	1/12/2016	433.65	0.00	4.69	428.96
	3/8/2016	433.65	0.00	3.97	429.68
	6/7/2016	433.65	0.00	4.31	429.34
	9/13/2016	433.65	0.00	4.33	429.32
	11/21/2016	433.65	0.00	4.37	429.28
	3/10/2017	433.65	0.00	4.18	429.47
	6/8/2017	433.65	0.00	4.31	429.34
	9/7/2017	433.65	0.00	3.31	430.34
	11/2/2017	433.65	0.00	4.33	429.32
	3/7/2018	433.65	0.00	3.84	429.81
	6/21/2018	433.65	0.00	3.93	429.72
	9/6/2018	433.65	0.00	4.01	429.64
	7/18/2019	433.65	0.00	3.83	429.82
	11/13/2019	433.65	0.00	3.96	429.69
	7/8/2020	433.65	0.00	1.84	431.81
	12/9/2020	433.65	0.00	2.32	431.33
	6/2/2021	433.65	0.00	4.21	429.44

Notes:
ft = feet
LPH = Liquid Phase Hydrocarbons
NM = Not Monitored (Well not accessible)

TABLE 3
MONTHLY PID SCREENING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Location (Corresponds with Site Plan)	Date	Breathing Zone Readings (ppm)	Below Grade Readings (ppm)
Yakona Road Curb Inlet	5/27/2020	0.0	0.0
	6/3/2020	0.0	0.0
	6/10/2020	0.0	0.0
	6/17/2020	0.0	0.0
	6/25/2020	0.0	0.0
	7/1/2020	0.0	0.0
	7/9/2020	0.0	0.0
	7/15/2020	0.0	0.0
	7/22/2020	0.0	0.0
	7/29/2020	0.0	0.0
	8/5/2020	0.0	0.0
	8/12/2020	0.0	0.0
	8/19/2020	0.0	0.0
	8/25/2020	0.0	0.0
	9/2/2020	0.0	0.0
	9/9/2020	0.0	0.0
	9/16/2020	0.0	0.0
	9/23/2020	0.0	0.0
	9/30/2020	0.0	0.0
	10/7/2020	0.0	0.0
	10/14/2020	0.0	0.0
	10/21/2020	0.0	0.0
	10/28/2020	0.0	0.0
	11/4/2020	0.0	0.0
	11/11/2020	0.0	0.0
	11/19/2020	0.0	0.0
	11/24/2020	0.0	0.0
	12/2/2020	0.0	0.0
	12/10/2020	0.0	0.0
	12/15/2020	0.0	0.0
	12/22/2020	0.0	0.0
	12/29/2020	0.0	0.0
	1/6/2021	0.0	0.0
	1/13/2021	0.0	0.0
	1/21/2021	0.0	0.0
	1/28/2021	0.0	0.0
	2/3/2021	0.0	0.0
	2/9/2021	0.0	0.0
	2/15/2021	0.0	0.0
	3/3/2021	0.0	0.0
	3/8/2021	0.0	0.0
	3/17/2021	0.0	0.0
	3/24/2021	0.0	0.0
	4/1/2021	0.0	0.0
	4/7/2021	0.0	0.0
	4/14/2021	0.0	0.0
	4/21/2021	0.0	0.0
	4/27/2021	0.0	0.0
	5/5/2021	0.0	0.0
	5/12/2021	0.0	0.0
	5/19/2021	0.0	0.0
	5/27/2021	0.0	0.0
	6/3/2021	0.0	0.0
	6/10/2021	0.0	0.0
	6/16/2021	0.0	0.0
	6/22/2021	0.0	0.0
	6/30/2021	0.0	0.0
	7/7/2021	0.0	0.0
	7/13/2021	0.0	0.0
	7/21/2021	0.0	0.0
	7/28/2021	0.0	0.0
	8/11/2021	0.0	0.0
	8/18/2021	0.0	0.0
	8/25/2021	0.0	0.0
	9/1/2021	0.0	0.0
	9/8/2021	0.0	0.0
	9/17/2021	0.0	0.0
	9/21/2021	0.0	0.0
	9/29/2021	0.0	0.0

TABLE 3
MONTHLY PID SCREENING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Location (Corresponds with Site Plan)	Date	Breathing Zone Readings (ppm)	Below Grade Readings (ppm)
Manhole 3	5/27/2020	0.0	0.0
	6/3/2020	0.0	0.0
	6/10/2020	0.0	0.0
	6/17/2020	0.0	0.0
	6/25/2020	0.0	0.0
	7/1/2020	0.0	0.0
	7/9/2020	0.0	0.0
	7/15/2020	0.0	0.0
	7/22/2020	0.0	0.0
	7/29/2020	0.0	0.0
	8/5/2020	0.0	0.0
	8/12/2020	0.0	0.0
	8/19/2020	0.0	0.0
	8/25/2020	0.0	0.0
	9/2/2020	0.0	0.0
	9/9/2020	0.0	0.0
	9/16/2020	0.0	0.0
	9/23/2020	0.0	0.0
	9/30/2020	0.0	0.0
	10/7/2020	0.0	0.0
	10/14/2020	0.0	0.0
	10/21/2020	0.0	0.0
	10/28/2020	0.0	0.0
	11/4/2020	0.0	0.0
	11/11/2020	0.0	0.0
	11/19/2020	0.0	0.0
	11/24/2020	0.0	0.0
	12/2/2020	0.0	0.0
	12/10/2020	0.0	0.0
	12/15/2020	0.0	0.0
	12/22/2020	0.0	0.0
	12/29/2020	0.0	17.2
	1/6/2021	0.0	0.0
	1/13/2021	0.0	0.0
	1/21/2021	0.0	0.0
	1/28/2021	0.0	0.0
	2/3/2021	0.0	0.0
	2/9/2021	0.0	0.0
	2/15/2021	0.0	0.0
	3/3/2021	0.0	0.0
	3/8/2021	0.0	0.0
	3/17/2021	0.0	0.0
	3/24/2021	0.0	0.0
	4/1/2021	0.0	0.0
	4/7/2021	0.0	0.0
	4/14/2021	0.0	0.0
	4/21/2021	0.0	0.0
	4/27/2021	0.0	0.0
	5/5/2021	0.0	0.0
	5/12/2021	0.0	0.0
	5/19/2021	0.0	0.0
	5/27/2021	0.0	0.0
	6/3/2021	0.0	0.0
	6/10/2021	0.0	0.0
	6/16/2021	0.0	0.0
	6/22/2021	0.0	0.0
	6/30/2021	0.0	0.0
	7/7/2021	0.0	0.0
	7/13/2021	0.0	0.0
	7/21/2021	0.0	0.0
	7/28/2021	0.0	0.0
	8/11/2021	0.0	0.0
	8/18/2021	0.0	0.0
	8/25/2021	0.0	0.0
	9/1/2021	0.0	0.0
	9/8/2021	0.0	0.0
	9/17/2021	0.0	0.0
	9/21/2021	0.0	0.0
	9/29/2021	0.0	0.0

TABLE 3
MONTHLY PID SCREENING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Location (Corresponds with Site Plan)	Date	Breathing Zone Readings (ppm)	Below Grade Readings (ppm)
Manhole 21	5/27/2020	0.0	6.1
	6/3/2020	0.0	3.9
	6/10/2020	0.0	3.0
	6/17/2020	0.0	0.8
	6/25/2020	0.0	1.7
	7/1/2020	0.0	5.7
	7/9/2020	0.0	0.0
	7/15/2020	0.0	0.0
	7/22/2020	0.0	0.2
	7/29/2020	0.0	3.8
	8/5/2020	0.0	1.9
	8/12/2020	0.0	9.4
	8/19/2020	0.0	31.8
	8/25/2020	0.0	25.9
	9/2/2020	0.0	17.3
	9/9/2020	0.0	5.9
	9/16/2020	0.0	17.7
	9/23/2020	0.0	6.3
	9/30/2020	0.0	1.8
	10/7/2020	0.0	14.8
	10/14/2020	0.0	19.7
	10/21/2020	0.0	21.2
	10/28/2020	0.0	20.9
	11/4/2020	0.0	5.1
	11/11/2020	0.0	4.3
	11/19/2020	0.0	2.1
	11/24/2020	0.0	3.6
	12/2/2020	0.0	2.9
	12/10/2020	0.0	10.9
	12/15/2020	0.0	0.9
	12/22/2020	0.0	10.9
	12/29/2020	0.0	33.6
	1/6/2021	0.0	2.2
	1/13/2021	0.0	19.8
	1/21/2021	0.0	2.4
	1/28/2021	0.0	2.6
	2/3/2021	0.0	3.8
	2/9/2021	0.0	18.9
	2/15/2021	0.0	4.0
	3/3/2021	0.0	16.1
	3/8/2021	0.0	22.7
	3/17/2021	0.0	16.8
	3/24/2021	0.0	10.0
	4/1/2021	0.0	5.8
	4/7/2021	0.0	4.1
	4/14/2021	0.0	3.9
	4/21/2021	0.0	11.8
	4/27/2021	0.0	2.9
	5/5/2021	0.0	1.5
	5/12/2021	0.0	10.7
	5/19/2021	0.0	9.7
	5/27/2021	0.0	19.1
	6/3/2021	0.0	9.1
	6/10/2021	0.0	39.2
	6/16/2021	0.0	27.1
	6/22/2021	0.0	26.8
	6/30/2021	0.0	15.8
	7/7/2021	0.0	19.4
	7/13/2021	0.0	8.9
	7/21/2021	0.0	13.8
	7/28/2021	0.0	25.2
	8/11/2021	0.0	42.1
	8/18/2021	0.0	26.2
	8/25/2021	0.0	32.1
	9/1/2021	0.0	6.8
	9/8/2021	0.0	8.7
	9/17/2021	0.0	43.6
	9/21/2021	0.0	21.7
	9/29/2021	0.0	32.7

TABLE 3
MONTHLY PID SCREENING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Location (Corresponds with Site Plan)	Date	Breathing Zone Readings (ppm)	Below Grade Readings (ppm)
Manhole 22	5/27/2020	0.0	0.0
	6/3/2020	0.0	0.0
	6/10/2020	0.0	0.0
	6/17/2020	0.0	0.0
	6/25/2020	0.0	0.0
	7/1/2020	0.0	0.0
	7/9/2020	0.0	0.0
	7/15/2020	0.0	0.0
	7/22/2020	0.0	0.8
	7/29/2020	0.0	0.0
	8/5/2020	0.0	7.4
	8/12/2020	0.0	0.0
	8/19/2020	0.0	12.7
	8/25/2020	0.0	8.8
	9/2/2020	0.0	1.8
	9/9/2020	0.0	17.2
	9/16/2020	0.0	0.0
	9/23/2020	0.0	0.9
	9/30/2020	0.0	33.9
	10/7/2020	0.0	0.0
	10/14/2020	0.0	0.0
	10/21/2020	0.0	1.7
	10/28/2020	0.0	4.4
	11/4/2020	0.0	2.7
	11/11/2020	0.0	0.9
	11/19/2020	0.0	18.5
	11/24/2020	0.0	28.1
	12/2/2020	0.0	7.6
	12/10/2020	0.0	20.9
	12/15/2020	0.0	11.6
	12/22/2020	0.0	15.8
	12/29/2020	0.0	6.3
	1/6/2021	0.0	19.1
	1/13/2021	0.0	34.7
	1/21/2021	0.0	47.3
	1/28/2021	0.0	25.8
	2/3/2021	0.0	25.9
	2/9/2021	0.0	15.1
	2/15/2021	0.0	89.1
	3/3/2021	0.0	7.9
	3/8/2021	0.0	9.1
	3/17/2021	0.0	5.5
	3/24/2021	0.0	1.1
	4/1/2021	0.0	0.0
	4/7/2021	0.0	0.0
	4/14/2021	0.0	0.0
	4/21/2021	0.0	0.0
	4/27/2021	0.0	1.1
	5/5/2021	0.0	4.8
	5/12/2021	0.0	0.0
	5/19/2021	0.0	0.0
	5/27/2021	0.0	0.0
	6/3/2021	0.0	0.0
	6/10/2021	0.0	1.6
	6/16/2021	0.0	0.0
	6/22/2021	0.0	0.3
	6/30/2021	0.0	0.0
	7/7/2021	0.0	0.0
	7/13/2021	0.0	0.0
	7/21/2021	0.0	0.9
	7/28/2021	0.0	0.0
	8/11/2021	0.0	0.0
	8/18/2021	0.0	0.0
	8/25/2021	0.0	0.5
	9/1/2021	0.0	0.0
	9/8/2021	0.0	0.9
	9/17/2021	0.0	26.2
	9/21/2021	0.0	10.9
	9/29/2021	0.0	25.8

TABLE 3
MONTHLY PID SCREENING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Location (Corresponds with Site Plan)	Date	Breathing Zone Readings (ppm)	Below Grade Readings (ppm)
Manhole 23	5/27/2020	0.0	0.0
	6/3/2020	0.0	0.0
	6/10/2020	0.0	0.0
	6/17/2020	0.0	0.0
	6/25/2020	0.0	0.0
	7/1/2020	0.0	0.0
	7/9/2020	0.0	0.0
	7/15/2020	0.0	0.0
	7/22/2020	0.0	1.7
	7/29/2020	0.0	0.0
	8/5/2020	0.0	0.0
	8/12/2020	0.0	0.0
	8/19/2020	0.0	27.1
	8/25/2020	0.0	13.1
	9/2/2020	0.0	2.9
	9/9/2020	0.0	12.1
	9/16/2020	0.0	0.0
	9/23/2020	0.0	2.1
	9/30/2020	0.0	29.7
	10/7/2020	0.0	0.0
	10/14/2020	0.0	0.0
	10/21/2020	0.0	0.8
	10/28/2020	0.0	8.1
	11/4/2020	0.0	25.2
	11/11/2020	0.0	17.1
	11/19/2020	0.0	31.7
	11/24/2020	0.0	10.9
	12/2/2020	0.0	12.1
	12/10/2020	0.0	13.7
	12/15/2020	0.0	26.3
	12/22/2020	0.0	10.6
	12/29/2020	0.0	17.5
	1/6/2021	0.0	37.4
	1/13/2021	0.0	26.1
	1/21/2021	0.0	59.5
	1/28/2021	0.0	34.3
	2/3/2021	0.0	60.7
	2/9/2021	0.0	61.7
	2/15/2021	0.0	56.6
	3/3/2021	0.0	51.8
	3/8/2021	0.0	40.5
	3/17/2021	0.0	14.1
	3/24/2021	0.0	17.2
	4/1/2021	0.0	2.7
	4/7/2021	0.0	0.0
	4/14/2021	0.0	6.4
	4/21/2021	0.0	0.0
	4/27/2021	0.0	0.7
	5/5/2021	0.0	0.2
	5/12/2021	0.0	0.0
	5/19/2021	0.0	0.0
	5/27/2021	0.0	0.0
	6/3/2021	0.0	0.3
	6/10/2021	0.0	1.8
	6/16/2021	0.0	0.0
	6/22/2021	0.0	0.0
	6/30/2021	0.0	0.0
	7/7/2021	0.0	0.0
	7/13/2021	0.0	0.8
	7/21/2021	0.0	2.7
	7/28/2021	0.0	3.6
	8/11/2021	0.0	3.9
	8/18/2021	0.0	0.0
	8/25/2021	0.0	0.0
	9/1/2021	0.0	0.0
	9/8/2021	0.0	0.0
	9/17/2021	0.0	12.5
	9/21/2021	0.0	27.1
	9/29/2021	0.0	121.5

TABLE 3
MONTHLY PID SCREENING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Location (Corresponds with Site Plan)	Date	Breathing Zone Readings (ppm)	Below Grade Readings (ppm)
Manhole 24	5/27/2020	0.0	18.7
	6/3/2020	0.0	4.1
	6/10/2020	0.0	2.1
	6/17/2020	0.0	0.0
	6/25/2020	0.0	0.0
	7/1/2020	0.0	0.0
	7/9/2020	0.0	43.6
	7/15/2020	0.0	27.1
	7/22/2020	0.0	14.4
	7/29/2020	0.0	0.0
	8/5/2020	0.0	0.0
	8/12/2020	0.0	0.3
	8/19/2020	0.0	15.4
	8/25/2020	0.0	9.7
	9/2/2020	0.0	1.4
	9/9/2020	0.0	3.9
	9/16/2020	0.0	0.0
	9/23/2020	0.0	0.6
	9/30/2020	0.0	21.4
	10/7/2020	0.0	0.0
	10/14/2020	0.0	0.0
	10/21/2020	0.0	0.0
	10/28/2020	0.0	17.6
	11/4/2020	0.0	3.9
	11/11/2020	0.0	0.0
	11/19/2020	0.0	20.8
	11/24/2020	0.0	17.4
	12/2/2020	0.0	5.8
	12/10/2020	0.0	18.1
	12/15/2020	0.0	21.4
	12/22/2020	0.0	11.4
	12/29/2020	0.0	3.8
	1/6/2021	0.0	21.8
	1/13/2021	0.0	8.3
	1/21/2021	0.0	24.6
	1/28/2021	0.0	19.7
	2/3/2021	0.0	29.1
	2/9/2021	0.0	28.3
	2/15/2021	0.0	48.7
	3/3/2021	0.0	4.6
	3/8/2021	0.0	13.7
	3/17/2021	0.0	58.9
	3/24/2021	0.0	41.8
	4/1/2021	0.0	5.7
	4/7/2021	0.0	0.7
	4/14/2021	0.0	0.7
	4/21/2021	0.0	0.0
	4/27/2021	0.0	1.8
	5/5/2021	0.0	0.0
	5/12/2021	0.0	0.0
	5/19/2021	0.0	0.0
	5/27/2021	0.0	0.3
	6/3/2021	0.0	1.2
	6/10/2021	0.0	1.1
	6/16/2021	0.0	0.0
	6/22/2021	0.0	0.0
	6/30/2021	0.0	0.0
	7/7/2021	0.0	0.0
	7/13/2021	0.0	3.2
	7/21/2021	0.0	0.0
	7/28/2021	0.0	0.0
	8/11/2021	0.0	0.0
	8/18/2021	0.0	0.8
	8/25/2021	0.0	0.0
	9/1/2021	0.0	0.0
	9/8/2021	0.0	0.0
	9/17/2021	0.0	3.9
	9/21/2021	0.0	14.3
	9/29/2021	0.0	34.7

Notes: PID = Photoionization Detector ppm = parts per million

TABLE 4
GROUNDWATER TREATMENT SYSTEM
DISCHARGE SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Month Year	Monthly Discharge Volume (gallons)	Cumulative Discharge Volume (gallons)
January 2016	35,570	408,610
February 2016	33,300	441,910
March 2016	38,030	479,940
April 2016	54,020	533,960
May 2016	75,280	609,240
June 2016	54,560	663,800
July 2016	37,250	701,050
August 2016	32,410	733,460
September 2016	39,190	772,650
October 2016	34,620	807,270
November 2016	42,680	849,950
December 2016	45,380	895,330
January 2017	57,450	952,780
February 2017	30,100	982,880
March 2017	35,940	1,018,820
April 2017	32,050	1,050,870
May 2017	50,660	1,101,530
June 2017	48,510	1,150,040
July 2017	67,450	1,217,490
August 2017	41,410	1,258,900
September 2017	52,870	1,311,770
October 2017	47,560	1,359,330
November 2017	35,300	1,394,630
December 2017	38,470	1,433,100
January 2018	51,060	1,484,160
February 2018	29,770	1,513,930
March 2018	41,760	1,555,690
April 2018	37,050	1,592,740
May 2018	37,120	1,629,860
June 2018	36,080	1,665,940
July 2018	32,020	1,697,960
August 2018	43,500	1,741,460
September 2018	44,960	1,786,420
October 2018	52,550	1,838,970
November 2018	42,510	1,881,480
December 2018	40,490	1,921,970
January 2019	43,930	1,965,900
February 2019	46,710	2,012,610
March 2019	45,230	2,057,840
April 2019	45,490	2,103,330
May 2019	83,670	2,187,000
June 2019	43,460	2,230,460
July 2019	69,230	2,299,690
August 2019	50,770	2,350,460
September 2019	65,450	2,415,910
October 2019	92,570	2,508,480
November 2019	57,370	2,565,850
December 2019	36,980	2,602,830
January 2020	50,330	2,653,160
February 2020	55,590	2,708,750
March 2020	59,510	2,768,260
April 2020	36,250	2,804,510

TABLE 4
GROUNDWATER TREATMENT SYSTEM
DISCHARGE SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case No. 1991-2100-BA

Month Year	Monthly Discharge Volume (gallons)	Cumulative Discharge Volume (gallons)
May 2020	87,810	2,892,320
June 2020	92,930	2,985,250
July 2020	95,870	3,081,120
August 2020	70,120	3,151,240
September 2020	56,800	3,208,040
October 2020	74,980	3,283,020
November 2020	77,770	3,360,790
December 2020	41,940	3,402,730
January 2021	59,180	3,461,910
February 2021	63,150	3,525,060
March 2021	78,320	3,603,380
April 2021	96,040	3,699,420
May 2021	71,500	3,770,920
June 2021	55,010	3,825,930
July 2021	63,690	3,889,620
August 2021	83,920	3,973,540
September 2021	58,050	4,031,590

TABLE 5
GROUNDWATER TREATMENT SYSTEM SAMPLING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case # 1991-2100-BA

Groundwater Treatment System Sample Identification	Groundwater Treatment System Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (Total) (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)	Naphthalene (µg/L)
INF	1/19/2015	1.1	7.7	77.6	107	193.4	11.8	1.42	0.898	2.318	49.3
EFF	1/19/2015	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND
INF	1/26/2015	0.48 (J)	4.4	35.2	68.7	108.78 (J)	ND	0.973	0.454	1.427	35.1
EFF	1/26/2015	0.26 (J)	2.3	15.7	38.5	56.76 (J)	6.8	0.418	0.267	0.685	12.3
INF	2/4/2015	1.2	10.9	96.1	173	281.2	12.4	1.70	1.21	2.91	60.1
EFF	2/4/2015	ND	0.74 (J)	1.6	16.0	18.34 (J)	7.0	ND	ND	ND	0.84 (J)
INF	2/20/2015	0.90	8.7	81.5	167	258.10	14.5	1.79	0.826	2.616	62.5
EFF	2/20/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	3/3/2015	0.77	8.6	71.1	152	232.47	10.9	1.51	0.573	2.083	47.3
EFF	3/3/2015	ND	ND	ND	ND	ND	0.88 (J)	ND	ND	ND	ND
INF	3/30/2015	1.6	15.3	100	352	468.9	11.5	2.33	0.779	3.109	51.3
EFF	3/30/2015	ND	ND	ND	ND	ND	0.97 (J)	ND	ND	ND	ND
INF	4/7/2015	1.9	16.7	143	439	600.6	12.5	3.52	0.870	4.390	94.1
EFF	4/7/2015	ND	ND	ND	ND	ND	0.59 (J)	ND	ND	ND	ND
INF	4/27/2015	1.7	ND	ND	ND	1.7	ND	2.51	1.24	3.75	79.7
EFF	4/27/2015	ND	ND	ND	ND	ND	0.41 (J)	ND	ND	ND	ND
INF	5/4/2015	1.4	15.3	117	340	473.7	11.9	2.02	0.873	2.893	76.6
EFF	5/4/2015	ND	ND	ND	ND	ND	1.0	ND	0.192	0.192	ND
INF	5/18/2015	1.7	20.9	141	417	580.6	12.8	3.58	1.17	4.75	71.3
EFF	5/18/2015	ND	ND	ND	0.37 (J)	0.37 (J)	2.2	ND	ND	ND	ND
INF	6/2/2015	0.83	8.7	75.3	250	334.83	6.2	1.45	0.461	1.911	38.2
EFF	6/2/2015	ND	ND	ND	ND	ND	1.5	ND	0.114	0.114	ND
INF	6/23/2015	1.6	14.7	116	343	475.3	ND	1.45	0.937	2.387	69.3
EFF	6/23/2015	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND
INF	7/6/2015	1.7	13.1	109	355	478.8	11.6	2.20	1.02	3.22	67.4
EFF	7/6/2015	ND	ND	ND	0.27 (J)	0.27 (J)	3.8	ND	0.212	0.212	ND
INF	7/21/2015	1.4	10.4	81.4	278	371.2	7.0	2.03	0.943	2.973	58.7
EFF	7/21/2015	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND
INF	8/3/2015	2.3	17.7	125	430	575.0	12.4	3.08	0.812	3.892	72.9
EFF	8/3/2015	ND	ND	ND	ND	ND	3.0	ND	ND	ND	ND
INF	8/20/2015	1.1	5.9	22.4	81.3	110.7	5.3	0.476	0.206	0.682	3.6 (J)
EFF	8/20/2015	ND	ND	ND	ND	ND	2.5	ND	0.239	0.239	ND
INF	9/9/2015	3.1	25.5	144	446	618.6	11.2	3.15	1.27	4.42	50.8
EFF	9/9/2015	ND	ND	ND	ND	ND	2.4	ND	0.448	0.448	ND
INF	9/22/2015	2.6	14.4	93.4	272	382.4	8.5	3.16	0.971	4.131	65.8
EFF	9/22/2015	ND	ND	ND	ND	ND	2.6	ND	0.0953	0.0953	ND
INF	10/7/2015	3.1	14.7	105	298	420.8	10.3	2.09	0.290	2.380	58.1
EFF	10/7/2015	ND	ND	ND	ND	ND	2.1	ND	0.0987	0.0987	ND
INF	10/13/2015	2.8	11.7	88.8	263	366.3	10.2	2.82	1.40	4.22	48.0
EFF	10/13/2015	ND	ND	ND	ND	ND	1.9	ND	0.105	0.105	ND
INF	11/10/2015	2.0	9.1	71.9	177	260.0	ND	1.98	0.807	2.787	35.7
EFF	11/10/2015	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND
INF	12/2/2015	1.9	4.3	48.7	106	160.9	7.3	1.02	0.502	1.522	39.7
EFF	12/2/2015	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND
INF	12/16/2015	1.8	5.0	57.4	111	175.2	7.6	1.17	0.527	1.697	51.0
EFF	12/16/2015	ND	ND	ND	ND	ND	1.0	ND	ND	ND	ND
INF	1/6/2016	2.4	7.0	86.8	144	240.2	7.2	1.90	0.627	2.527	41.2
EFF	1/6/2016	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND
	NPDES Permit Limits*	**5**	**NL**	**NL**	**NL**	**100**	**NL**	**NL**	**NL**	**15**	**NL**

TABLE 5
GROUNDWATER TREATMENT SYSTEM SAMPLING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case # 1991-2100-BA

Groundwater Treatment System Sample Identification	Groundwater Treatment System Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (Total) (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)	Naphthalene (µg/L)
INF	1/12/2016	1.2	3.7	36.5	83.2	124.6	5.4	1.31	0.376	1.686	21.0
EFF	1/12/2016	ND	ND	ND	ND	ND	3.1	ND	ND	ND	ND
INF	2/3/2016	0.86	3.3	26.6	66.1	96.86	3.2	0.668	0.340	1.008	17.5
EFF	2/3/2016	ND	ND	ND	ND	ND	2.0	ND	ND	ND	ND
INF	2/9/2016	2.6	11.8	96.2	219	329.6	7.1	1.79	0.665	2.455	49.6
EFF	2/9/2016	ND	ND	ND	ND	ND	2.1	ND	0.0850	0.0850	ND
INF	3/3/2016	3.1	12.2	112	367	494.3	7.6	2.71	0.717	3.427	68.5
EFF	3/3/2016	ND	ND	ND	ND	ND	5.3	ND	ND	ND	ND
INF	3/9/2016	3.1	14.1	125	377	519.2	6.6	3.03	0.665	3.695	76.7
EFF	3/9/2016	ND	ND	ND	0.78 (J)	0.78 (J)	6.2	ND	ND	ND	ND
INF	4/6/2016	4.6	35.1	156	505	700.7	7.3	3.78	0.947	4.727	75.3
EFF	4/6/2016	ND	0.32 (J)	0.75 (J)	2.3	3.37 (J)	2.4	ND	ND	ND	ND
INF	4/12/2016	4.3	29.0	109	439	581.3	7.4	2.83	0.994	3.824	74.9
EFF	4/12/2016	ND	0.17 (J)	0.41 (J)	1.4	1.98 (J)	1.4	ND	ND	ND	ND
INF	5/4/2016	2.7	23.1	123	358	506.8	5.0	2.43	0.656	3.086	63.2
EFF	5/4/2016	ND	0.40 (J)	0.94 (J)	3.6	4.94 (J)	3.7	ND	ND	ND	ND
INF	5/12/2016	3.8	29.2	166	388	587.0	7.4	3.28	1.40	4.68	76.1
EFF	5/12/2016	0.22 (J)	0.58 (J)	1.2	3.1	5.1 (J)	5.8	ND	0.269	0.269	ND
INF	6/8/2016	4.6	33.2	187	466	690.8	7.3	3.24	0.777	4.017	86.0
EFF	6/8/2016	0.50	1.4	3.5	10.4	15.80	7.2	0.226	ND	0.226	ND
INF	6/14/2016	4.9	30.1	164	422	621.0	7.2	2.94	0.822	3.762	74.4
EFF	6/14/2016	0.83	3.0	8.1	20.5	32.43	4.9	0.316	ND	0.316	ND
INF	7/7/2016	3.9	22.1	144	353	523.0	ND	2.64	1.11	3.75	73.8
EFF	7/7/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	7/12/2016	2.2	11.6	68.8	203	285.6	3.5	1.66	0.957	2.617	42.9
EFF	7/12/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	8/3/2016	3.0	7.0	36.3	147	193.3	4.7	1.28	0.810	2.090	41.4
EFF	8/3/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	8/17/2016	3.5	12.4	81.5	273	370.4	5.2	2.10	0.792	2.892	63.1
EFF	8/17/2016	ND	ND	ND	ND	0.00	0.70 (J)	ND	ND	ND	ND
INF	9/8/2016	4.3	10.2	88.9	263	366.4	5.6	2.26	0.802	3.062	61.0
EFF	9/8/2016	ND	ND	0.36 (J)	0.40 (J)	0.76 (J)	1.4	ND	ND	ND	ND
INF	9/14/2016	3.8	8.4	84.9	218	315.1	4.7	1.92	1.06	2.980	58.2
EFF	9/14/2016	ND	ND	0.30 (J)	0.59 (J)	0.89 (J)	0.84	ND	ND	ND	ND
INF	10/12/2016	4.4	5.0	15.4	79.2	104.0	5.4	1.24	0.704	1.94	6.1
EFF	10/12/2016	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND
INF	10/18/2016	4.9	6.8	46.0	177	234.7	4.9	2.72	1.06	3.78	53.7
EFF	10/18/2016	ND	ND	0.36 (J)	0.50 (J)	0.86 (J)	1.80	ND	ND	ND	ND
INF	11/3/2016	6.7	7.4	61.0	164	239.1	4.4	2.89	1.01	3.90	65.3
EFF	11/3/2016	ND	ND	0.35 (J)	ND	0.35 (J)	1.70	ND	ND	ND	ND
INF	11/8/2016	7.5	8.1	28.3	193	236.9	4.1	3.75	1.36	5.11	83.1
EFF	11/8/2016	ND	ND	ND	ND	ND	1.40	ND	ND	ND	ND
INF	12/7/2016	2.2	1.4	10.4	23.9	37.9	3.5	0.971	0.329	1.300	8.3
EFF	12/7/2016	ND	ND	ND	ND	ND	3.10	ND	ND	ND	ND
INF	12/15/2016	2.9	2.3	24.2	26.7	56.1	4.3	ND	0.486	0.486	18.2
EFF	12/15/2016	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND
INF	1/4/2017	2.7	5.3	26.6	34.7	69.3	4.7	1.12	0.46	1.58	13.8
EFF	1/4/2017	ND	ND	ND	ND	ND	1.40	ND	ND	ND	ND
	NPDES Permit Limits*	**5**	**NL**	**NL**	**NL**	**100**	**NL**	**NL**	**NL**	**15**	**NL**

TABLE 5
GROUNDWATER TREATMENT SYSTEM SAMPLING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case # 1991-2100-BA

Groundwater Treatment System Sample Identification	Groundwater Treatment System Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (Total) (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)	Naphthalene (µg/L)
INF	1/11/2017	3.5	4.7	44.2	43.1	95.5	5.4	1.12	0.367	1.49	18.8
EFF	1/11/2017	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND
INF	2/7/2017	3.9	4.3	53.6	59.0	120.8	5.5	1.58	0.464	2.04	21.1
EFF	2/7/2017	ND	ND	ND	ND	ND	2.0	ND	ND	ND	ND
INF	2/21/2017	3.1	3.3	47.1	60.5	114.0	5.2	1.62	0.394	2.01	17.5
EFF	2/21/2017	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND
INF	3/1/2017	3.0	3.3	49.6	65.0	120.9	5.3	1.54	0.322	1.86	17.0
EFF	3/1/2017	ND	ND	0.24 (J)	ND	0.24 (J)	2.5	ND	ND	ND	ND
INF	3/10/2017	2.9	3.0	40.3	59.1	105.3	5.8	1.09	0.444	1.53	21.0
EFF	3/10/2017	0.28 (J)	ND	0.58 (J)	1.2	2.06 (J)	2.5	0.123	ND	0.123	ND
INF	4/4/2017	2.1	4.7	53	187	246.8	6.8	2.07	0.708	2.778	24.9
EFF	4/4/2017	0.31 (J)	ND	0.51 (J)	2.8	3.62 (J)	3.9	0.113	ND	0.113	ND
INF	4/11/2017	2.3	6.2	59.2	168	235.7	8.1	1.63	1.140	2.770	31.8
EFF	4/11/2017	0.55	0.37 (J)	0.95 (J)	4.9	6.77 (J)	3.4	ND	0.114	0.114	ND
INF	5/3/2017	2.0	2.6	43.7	114	162.3	6.2	1.53	0.905	2.435	34.0
EFF	5/3/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	5/16/2017	1.6	2.2	31.6	107	142.4	6.3	1.09	0.813	1.903	34.3
EFF	5/16/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	6/1/2017	2.5	4.0	50.5	202	259.0	5.9	1.95	1.03	2.98	47.1
EFF	6/1/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	6/8/2017	2.7	6.0	76	440	524.7	5.1	3.34	1.84	5.18	72.5
EFF	6/8/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	7/11/2017	1.4	2.8	29.6	159	192.8	4.5	0.857	1.63	2.49	41.4
EFF	7/11/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	7/20/2017	1.4	2.8	31.3	167	202.5	4.2	1.23	1.47	2.70	58.5
EFF	7/20/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9
INF	8/10/2017	1.8	3.2	30.6	129	164.6	4.8	1.06	0.991	2.051	33.8
EFF	8/10/2017	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND
INF	8/18/2017	0.7	1.4	11.9	47.3	61.3	3.4	0.39	0.64	1.02	23.5
EFF	8/18/2017	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND
INF	9/7/2017	2.5	4.6	42.6	238	287.7	ND	1.97	2.19	4.16	82.5
EFF	9/7/2017	ND	1.4	0.38 (J)	2.4	4.18 (J)	243.0	ND	ND	ND	ND
INF	9/18/2017	3.6	6.5	57.0	167	234.1	4.2	1.23	1.47	2.70	68.9
EFF	9/18/2017	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND
INF	10/3/2017	3.4	5.5	44.2	157	210.1	3.7	1.82	1.22	3.04	64.3
EFF	10/3/2017	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND
INF	10/17/2017	2.3	3.5	31.4	95.2	132.4	3.9	1.24	0.755	2.00	34.8
EFF	10/17/2017	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND
INF	11/2/2017	2.7	3.0	19.3	86.1	111.1	5.9	1.05	2.780	3.83	24.9
EFF	11/2/2017	ND	ND	ND	ND	ND	2.0	ND	ND	ND	ND
INF	11/9/2017	1.4	1.5	10.3	47.1	60.3	4.4	0.643	1.20	1.84	13.4
EFF	11/9/2017	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND
INF	12/8/2017	2.9	3.3	42.1	75.2	123.5	5.4	1.18	1.04	2.22	33.8
EFF	12/8/2017	ND	ND	ND	0.22 (J)	0.22 (J)	2.3	ND	ND	ND	ND
INF	12/21/2017	3.4	3.3	33.0	54.4	94.1	5.7	0.871	4.72	5.59	29.0
EFF	12/21/2017	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND
INF	1/11/2018	1.1	0.98 (J)	9.3	17.2	28.6 (J)	5.2	0.315	1.72	2.035	17.5
EFF	1/11/2018	ND	ND	0.24 (J)	0.42 (J)	0.66 (J)	2.7	ND	0.0893	0.0893	ND
	NPDES Permit Limits*	**5**	**NL**	**NL**	**NL**	**100**	**NL**	**NL**	**NL**	**15**	**NL**

TABLE 5
GROUNDWATER TREATMENT SYSTEM SAMPLING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case # 1991-2100-BA

Groundwater Treatment System Sample Identification	Groundwater Treatment System Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (Total) (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)	Naphthalene (µg/L)
INF	1/22/2018	2.5	2.2	22.3	32.2	59.2	5.2	0.358	1.48	1.838	15.2
EFF	1/22/2018	ND	ND	ND	ND	ND	2.2	ND	0.133	0.133	ND
INF	2/7/2018	2.0	2.1	18.7	33.1	55.9	5.8	0.656	1.22	1.876	14.3
EFF	2/7/2018	ND	ND	ND	ND	ND	2.0	ND	ND	ND	ND
INF	2/14/2018	1.3	2.5	17.1	44.9	65.8	6.3	0.731	1.05	1.781	8.4
EFF	2/14/2018	ND	ND	0.33 (J)	0.99 (J)	1.32 (J)	3.3	ND	0.108	0.108	ND
INF	3/7/2018	2.1	7.8	49.3	137	196.2	6.3	0.970	2.49	3.460	22.9
EFF	3/7/2018	ND	ND	0.33 (J)	1.2	1.5 (J)	3.5	ND	ND	ND	ND
INF	3/14/2018	2.3	7.6	55.2	149	214.1	5.8	1.29	1.01	2.30	28.3
EFF	3/14/2018	0.29 (J)	0.58 (J)	0.63 (J)	15.4	16.9 (J)	3.6	0.196 (J)	0.173	0.369 (J)	ND
INF	4/3/2018	2.3	6.3	59.2	162	230	6.3	1.35	0.755	2.11	27.8
EFF	4/3/2018	0.19 (J)	ND	0.60 (J)	2.5	3.3 (J)	3.0	0.110 (J)	0.0990	0.209 (J)	ND
INF	4/11/2018	2.5	5.8	70.6	188	267	5.4	1.41	0.933	2.34	31.1
EFF	4/11/2018	0.53	1.1	5.5	31.4	38.5	3.1	0.301	0.304	0.605	2.5 (J)
INF	5/2/2018	1.7	4.9	51.1	190	248	4.9	1.84	0.889	2.73	40.8
EFF	5/2/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	5/9/2018	2.8	7.6	80.5	302	393	6.8	2.15	1.46	3.61	50.6
EFF	5/9/2018	ND	ND	ND	ND	ND	ND	ND	0.179	0.179	ND
INF	6/6/2018	2.1	7.3	48.2	241	299	4.8	1.54	0.907	2.45	35.2
EFF	6/6/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	6/13/2018	2.0	6.8	39.5	214	262	4.4	1.47	0.728	2.20	34.3
EFF	6/13/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	7/3/2018	2.4	9.2	47.9	256	316	4.5	1.81	0.913	2.72	43.2
EFF	7/3/2018	ND	ND	ND	0.29 (J)	0.29 (J)	0.39 (J)	ND	ND	ND	ND
INF	7/12/2018	3.0	9.5	50.9	271	334	5.2	1.82	0.728	2.55	55.6
EFF	7/12/2018	ND	ND	ND	ND	ND	0.41 (J)	ND	ND	ND	ND
INF	8/1/2018	3.0	6.6	36.2	181	227	4.6	1.58	ND	1.58	35.0
EFF	8/1/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	8/8/2018	3.9	9.0	52.8	234	300	5.6	1.81	0.851	2.66	47.2
EFF	8/8/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	9/4/2018	4.6	8.0	59.1	191	263	4.5	1.88	0.716	2.60	42.9
EFF	9/4/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	9/12/2018	4.0	5.8	43.0	181	234	4.5	1.61	0.315	1.93	34.7
EFF	9/12/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INF	10/3/2018	4.1	6.7	39.6	263	313	3.8	1.88	0.974	2.85	55.5
EFF	10/3/2018	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND	0.65 (J)	ND (< 0.10)	ND (< 0.050)	ND (< 0.15)	ND (< 0.98)
INF	10/10/2018	4.0	6.3	44.6	263	317.9	3.7	1.69	0.677	2.37	52.7
EFF	10/10/2018	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND	0.95 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	11/7/2018	3.9	6.2	45.4	210	265.5	3.2	1.23	0.614	1.84	36.5
EFF	11/7/2018	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND	0.65 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	11/14/2018	2.6	3.9	25.3	158	189.8	2.4	0.850	0.672	1.522	26.3
EFF	11/14/2018	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND	0.60 (J)	ND (< 0.10)	ND (< 0.050)	ND (< 0.15)	ND (< 0.98)
INF	12/4/2018	5.7	11.8	90.7	363	471.2	4.2	2.51	1.63	4.14	34.7
EFF	12/4/2018	ND (< 0.43)	ND (< 0.53)	1.3	5.0	6.3	0.73 (J)	ND (< 0.10)	ND (< 0.048)	ND (< 0.15)	ND (< 0.98)
INF	12/12/2018	5.7	12.3	101	437	556.0	4.8	2.05	1.12	3.17	76.9
EFF	12/12/2018	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND	1.1	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	1/3/2019	5.1	9.9	55.4	377	447	3.9	1.94	0.707	2.65	58.1
EFF	1/3/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.98 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
	NPDES Permit Limits*	**5**	**NL**	**NL**	**NL**	**100**	**NL**	**NL**	**NL**	**15**	**NL**

TABLE 5
GROUNDWATER TREATMENT SYSTEM SAMPLING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case # 1991-2100-BA

Groundwater Treatment System Sample Identification	Groundwater Treatment System Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (Total) (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)	Naphthalene (µg/L)
INF	1/10/2019	4.8	12.3	119	439	575	3.5	2.25	1.32	3.57	76.9
EFF	1/10/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.94 (J)	ND (< 0.10)	ND (< 0.052)	ND (< 0.15)	ND (< 0.98)
INF	2/6/2019	4.1	9.9	96.2	374	484	3.3	2.19	0.871	3.06	75.0
EFF	2/6/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.80 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	2/15/2019	2.9	6.7	61.0	280	351	2.9	2.25	0.963	3.21	39.3
EFF	2/15/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	4.5	< 6.1	1.0	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	3/6/2019	1.9	2.5	9.5	230	244	2.9	1.56	0.992	2.55	9.8
EFF	3/6/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	1.7	< 3.3	1.0	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	3/13/2019	3.5	7.4	44.8	350	406	3.5	2.36	1.18	3.54	43.3
EFF	3/13/2019	ND (< 0.43)	ND (< 0.53)	0.93 (J)	8.3	< 10.2	1.1	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	4/3/2019	4.5	13.8	112	419	549	2.5	3.29	1.08	4.37	76.7
EFF	4/3/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	1.4	< 3.0	0.97 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	4/17/2019	4.9	13.9	118	532	669	3.0	3.13	0.972	4.10	67.4
EFF	4/17/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 0.98)
INF	5/1/2019	4.8	12.4	102	492	611	2.7	3.04	1.50	4.54	63.6
EFF	5/1/2019	ND (< 0.43)	0.80 (J)	ND (< 0.60)	ND (< 0.59)	< 2.42	ND (< 0.51)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	5/8/2019	6.3	17.1	142	499	664	3.5	3.17	1.11	4.28	87.6
EFF	5/8/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	6/5/2019	4.4	11.2	91.9	455	563	3.3	2.60	1.06	3.66	69.3
EFF	6/5/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	0.63 (J)	< 2.19	ND (< 0.51)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	6/12/2019	4.8	12.3	100	456	573	2.9	2.94	1.14	4.08	77.0
EFF	6/12/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	3.0	4.6	ND (< 0.51)	ND (< 0.042)	ND (< 0.050)	ND (< 0.092)	ND (< 0.98)
INF	7/10/2019	4.0	7.7	48.9	328	389	2.7	1.88	0.92	2.80	57.5
EFF	7/10/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	7/19/2019	3.2	6.1	49.0	270	328.3	2.3	1.81	0.77	2.58	50.3
EFF	7/19/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	8/5/2019	3.4	5.3	24.6	203	236.3	0.68 (J)	1.77	0.81	2.58	57.6
EFF	8/5/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.68 (J)	ND (< 0.042)	0.109	0.151	ND (< 0.98)
INF	8/13/2019	2.9	3.1	10.5	90.6	107.1	2.9	1.10	0.693	1.79	27.9
EFF	8/13/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.62 (J)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	9/4/2019	2.6	1.9	7.3	32.2	44.0	3.2	0.720	0.356	1.08	17.0
EFF	9/4/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	9/11/2019	3.1	2.2	26.6	35.9	67.8	2.9	0.895	0.435	1.330	11.7
EFF	9/11/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.74 (J)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	10/1/2019	4.1	4.3	10.6	71.9	90.9	2.6	1.25	0.625	1.875	29.4
EFF	10/1/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.84 (J)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	10/9/2019	3.6	2.9	19.1	57.0	82.6	2.6	1.24	0.386	1.626	23.2
EFF	10/9/2019	0.48 (J)	ND (< 0.53)	ND (< 0.60)	1.0	<2.61	0.85 (J)	ND (< 0.042)	ND (< 0.053)	ND (< 0.095)	ND (< 0.98)
INF	11/14/2019	2.7	3.6	37.0	104	147	3.4	1.47	0.628	2.098	45.1
EFF	11/14/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.59 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	11/19/2019	2.9	4.2	43.2	117	167	3.4	1.33	0.646	1.976	47.5
EFF	11/19/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	0.79 (J)	<2.35	0.78 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	12/4/2019	1.4	2.2	26.4	56.4	86.4	2.0	0.695	0.158	0.853	16.9
EFF	12/4/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.67 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	12/11/2019	1.7	2.6	31.5	62.4	98.2	2.0	0.778	0.334	1.112	19.4
EFF	12/11/2019	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.62 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
	NPDES Permit Limits*	**5**	**NL**	**NL**	**NL**	**100**	**NL**	**NL**	**NL**	**15**	**NL**

TABLE 5
GROUNDWATER TREATMENT SYSTEM SAMPLING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case # 1991-2100-BA

Groundwater Treatment System Sample Identification	Groundwater Treatment System Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (Total) (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)	Naphthalene (µg/L)
INF	1/2/2020	2.5	4.4	59.3	108	174	3.0	1.44	0.548	1.99	24.7
EFF	1/2/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	0.87 (J)	< 2.43	0.54 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	1/8/2020	1.9	3.2	39.8	74.0	118.9	2.4	0.896	0.307	1.203	14.1
EFF	1/8/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	0.96 (J)	< 2.52	0.78 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	2/12/2020	0.67	ND (< 0.53)	ND (< 0.60)	12.1	< 13.9	2.7	0.384	0.213	0.597	ND (< 2.5)
EFF	2/12/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.96 (J)	0.103 (J)	ND (< 0.053)	< 0.156	ND (< 2.5)
INF	2/18/2020	0.96	1.1	0.81 (J)	37.9	40.8 (J)	2.6	0.631	0.348	0.979	6.7
EFF	2/18/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	3/4/2020	1.2	0.96 (J)	ND (< 0.60)	50.2	< 53.0	2.8	0.716	ND (0.053)	< 0.769	7.6
EFF	3/4/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.79 (J)	ND (< 0.10)	0.201	< 0.30	ND (< 2.5)
INF	3/11/2020	1.0	1.1	ND (< 0.60)	32.0	< 34.7	2.6	0.496	0.502	0.998	2.9 (J)
EFF	3/11/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.94 (J)	ND (< 0.10)	ND (< 0.050)	ND (< 0.15)	ND (< 2.5)
INF	4/1/2020	1.8	2.4	0.61 (J)	56.5	61.3 (J)	3.7	0.680	0.378	1.058	7.4
EFF	4/1/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.66 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	4/8/2020	2.0	2.8	0.81 (J)	48.0	53.6 (J)	3.7	0.801	0.571	1.372	10.3
EFF	4/8/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	0.63 (J)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	5/6/2020	1.5	1.4	3.2	39.0	45.1	2.8	0.754	0.380	1.134	8.0
EFF	5/6/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	5/13/2020	2.0	3.9	4.6	76.4	86.9	2.7	0.978	ND (< 0.053)	< 1.031	17.3
EFF	5/13/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF**	6/3/2020	2.6	9.3	98.1	98.9	208.9	2.2	ND (< 0.10)	0.732	< 0.83	34.2
EFF	6/3/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	6/10/2020	2.4	4.4	9.5	37.0	53.3	3.0	0.924	0.694	1.618	15.9
EFF	6/10/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	7/9/2020	1.1	0.76 (J)	0.91 (J)	16.4	19.2 (J)	1.8	0.458	0.182	0.640	3.1 (J)
EFF	7/9/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	7/15/2020	1.9	2.1	5.5	21.7	31.2	2.1	0.747	0.453	1.200	7.8
EFF	7/15/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	8/5/2020	1.0	2.0	18.2	84.1	105.3	1.9	0.644	0.505	1.149	19.7
EFF	8/5/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.052)	ND (< 0.15)	ND (< 2.5)
INF	8/12/2020	1.2	1.8	16.6	68.8	88.4	2.3	0.688	0.588	1.276	32.2
EFF	8/12/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	9/9/2020	1.3	1.6	2.3	71.3	76.5	2.0	0.618	0.311	0.929	9.3
EFF	9/9/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	9/16/2020	1.4	2.6	18.0	116	138	2.1	1.07	0.536	1.61	28.9
EFF	9/16/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	10/7/2020	2.2	3.6	41.8	116	164	2.1	1.49	0.640	2.13	38.6
EFF	10/7/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	10/14/2020	2.0	4.1	50.0	146	202	2.1	1.35	0.793	2.14	43.1
EFF	10/14/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	11/4/2020	1.3	1.8	15.8	103	122	2.1	0.964	0.580	1.544	23.4
EFF	11/4/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	11/11/2020	1.8	3.4	22.4	170	198	2.0	1.25	0.529	1.78	35.1
EFF	11/11/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	12/2/2020	1.1	1.4	12.3	92.3	107.1	2.3	0.838	0.613	1.45	18.8
EFF	12/2/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
	NPDES Permit Limits*	**5**	**NL**	**NL**	**NL**	**100**	**NL**	**NL**	**NL**	**15**	**NL**

TABLE 5
GROUNDWATER TREATMENT SYSTEM SAMPLING RESULTS SUMMARY
Former Hess Station No. 20204
1613 East Joppa Road
Towson, MD
Case # 1991-2100-BA

Groundwater Treatment System Sample Identification	Groundwater Treatment System Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (Total) (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)	Naphthalene (µg/L)
INF	12/10/2020	1.3	2.2	17.5	108	129	2.0	0.944	0.756	1.700	24.5
EFF	12/10/2020	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.050)	ND (< 0.15)	ND (< 2.5)
INF	1/21/2021	1.1	2.9	29.5	108	141.5	2.0	1.03	0.578	1.61	41.5
EFF	1/21/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	1/28/2021	1.2	3.0	32.8	114	151	2.1	0.983	0.562	1.545	35.8
EFF	1/28/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	2/3/2021	0.92	2.4	28.9	90.4	122.6	1.9	0.866	0.439	1.305	21.7
EFF	2/3/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	2/9/2021	1.9	4.1	55.4	144	205.4	2.5	1.30	0.398	1.70	33.0
EFF	2/9/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	3/3/2021	1.2	2.8	33.4	98	135.8	1.9	1.15	0.620	1.77	20.0
EFF	3/3/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.065)	0.308	ND (< 0.15)	ND (< 2.5)
INF	3/8/2021	1.6	3.8	34.5	143	182.9	2.1	1.37	0.550	1.92	28.5
EFF	3/8/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	3.0	< 4.56	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	4/1/2021	1.5	3.8	34.4	131	171	1.8	1.33	0.564	1.89	25.3
EFF	4/1/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	1.8	< 3.4	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	4/7/2021	1.5	4.4	15.4	184	205	1.9	1.46	0.629	2.09	26.4
EFF	4/7/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	9.7	< 11.3	ND (< 0.51)	0.122 (J)	ND (< 0.052)	< 0.174	ND (< 2.5)
INF	5/5/2021	1.8	6.2	36.8	127	172	2.3	1.33	0.746	2.08	29.6
EFF	5/5/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	5/12/2021	1.9	5.3	38.7	97.5	143.4	2.7	1.28	0.574	1.85	20.6
EFF	5/12/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.053)	ND (< 0.15)	ND (< 2.5)
INF	6/3/2021	1.5	3.2	29.4	114	148	2.0	1.06	0.709	1.77	23.0
EFF	6/3/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.050)	ND (< 0.15)	ND (< 2.5)
INF	6/10/2021	1.7	3.4	37.8	118	161	2.2	1.31	0.831	2.14	29.4
EFF	6/10/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.052)	ND (< 0.15)	ND (< 2.5)
INF	7/7/2021	1.5	3.2	28.4	128	161	2.0	0.560	0.549	1.109	34.1
EFF	7/7/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	2.2	3.8	ND (< 0.51)	ND (< 0.250)	ND (< 0.050)	ND (< 0.300)	ND (< 2.5)
INF	7/13/2021	1.1	2.1	16.2	93.4	112.8	1.8	0.720	0.575	1.295	20.4
EFF	7/13/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.250)	ND (< 0.053)	ND (< 0.303)	ND (< 2.5)
INF	8/11/2021	1.4	2.3	20.3	98.1	122.1	1.9	0.826	0.646	1.472	32.3
EFF	8/11/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.050)	ND (< 0.15)	ND (< 2.5)
INF	8/18/2021	0.99	1.4	15.3	53.0	70.7	1.4	0.550	0.304	0.854	19.2
EFF	8/18/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	0.86 (J)	< 2.42	ND (< 0.51)	ND (< 0.10)	ND (< 0.050)	ND (< 0.15)	ND (< 2.5)
INF	9/1/2021	1.5	2.2	12.7	91.5	107.9	2.0	0.982	0.560	1.542	21.4
EFF	9/1/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	1.60	3.16	ND (< 0.51)	0.101 (J)	ND (< 0.053)	< 0.154	ND (< 2.5)
INF	9/8/2021	1.5	2.0	18.7	69.5	91.7	2.1	0.741	0.566	1.307	24.5
EFF	9/8/2021	ND (< 0.43)	ND (< 0.53)	ND (< 0.60)	ND (< 0.59)	ND (< 2.15)	ND (< 0.51)	ND (< 0.10)	ND (< 0.050)	ND (< 0.15)	ND (< 2.5)
	NPDES Permit Limits*	**5**	**NL**	**NL**	**NL**	**100**	**NL**	**NL**	**NL**	**15**	**NL**

*Effluent Limitations listed in NPDES Permit # MDG915958
** Due to an anomalous Ethylbenzene concentration, the system was resampled on 6/25/2020.
EFF = Effluent Sample (Post-filtration)
INF = Influent Sample (Pre-filtration)
ND = Constituent Compound Not Detected
NL = No limit listed in NPDES permit
NA = Not Analyzed
(J) = Laboratory-Estimated Value

µg/L = micrograms/Liter
mg/L = milligrams/Liter
MTBE = Methyl-Tertiary-Butyl Ether
Total BTEX = sum of Benzene, Toluene, Ethylbenzene, and Xylenes
TPH = Total Petroleum Hydrocarbons
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
ND (< MDL) = Not Detected above Method Detection Limit

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EMS Environmental, Inc.

HESS #20204, 1613 East Joppa Road, Towson, MD

5713 PO#5713

SGS Job Number: JD27916

Sampling Date: 07/07/21

Report to:

jfox@emsenv.com

ATTN: Distribution4

Total number of pages in report: **10**

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

Caitlin Brice, M.S.
General Manager

Client Service contact: Beth Wasserman 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Sample Summary

EMS Environmental, Inc.

Job No: JD27916

HESS #20204, 1613 East Joppa Road, Towson, MD
Project No: 5713 PO#5713

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD27916-1	07/07/21	14:20	BR	07/08/21	AQ	Influent	INF
JD27916-2	07/07/21	14:10	BR	07/08/21	AQ	Water	MID
JD27916-3	07/07/21	14:00	BR	07/08/21	AQ	Effluent	EFF

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD27916-1	**Date Sampled:**	07/07/21
Matrix:	AQ - Influent	**Date Received:**	07/08/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E170284.D	1	07/09/21 12:58	ED	n/a	n/a	V2E8512
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.5	0.50	0.43	ug/l	
108-88-3	Toluene	3.2	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	28.4	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	128	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.0	1.0	0.51	ug/l	
91-20-3	Naphthalene	34.1	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		85-118%
17060-07-0	1,2-Dichloroethane-D4	86%		80-121%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	85%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD27916-1	**Date Sampled:**	07/07/21
Matrix:	AQ - Influent	**Date Received:**	07/08/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y105865.D	1	07/13/21 13:43	TL	07/12/21 16:40	OP34260	G2Y4113
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.549	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	47%		22-140%
438-22-2	5a-Androstane	49%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD27916-2	**Date Sampled:**	07/07/21
Matrix:	AQ - Water	**Date Received:**	07/08/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E170283.D	1	07/09/21 12:27	ED	n/a	n/a	V2E8512
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	0.80	1.0	0.60	ug/l	J
1330-20-7	Xylene (total)	5.1	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		85-118%
17060-07-0	1,2-Dichloroethane-D4	87%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	86%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD27916-2	**Date Sampled:**	07/07/21
Matrix:	AQ - Water	**Date Received:**	07/08/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y105866.D	1	07/13/21 14:16	TL	07/12/21 16:40	OP34260	G2Y4113
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	44%		22-140%
438-22-2	5a-Androstane	42%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD27916-3	**Date Sampled:**	07/07/21
Matrix:	AQ - Effluent	**Date Received:**	07/08/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E170282.D	1	07/09/21 11:57	ED	n/a	n/a	V2E8512
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	2.2	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		85-118%
17060-07-0	1,2-Dichloroethane-D4	86%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	86%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD27916-3	**Date Sampled:**	07/07/21
Matrix:	AQ - Effluent	**Date Received:**	07/08/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y105867.D	1	07/13/21 14:49	TL	07/12/21 16:40	OP34260	G2Y4113
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	51%		22-140%
438-22-2	5a-Androstane	61%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

ACCUTEST Laboratories

WW

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

FED-EX Tracking #

Bottle Order Control # None

Accutest Quote #

Accutest Job # JD27916

Client / Reporting Information

Company Name: EMS Environmental, Inc.
Address: 4550 Bath Pike
City: Bethlehem State: PA Zip: 18017
Project Contact: Jeremy Fox E-mail: jfox@emsenv.com
Phone #: 610-866-7799
Samplers's Name: Brad Rohrbaugh

Project Information

Project Name: Former Hess - 20204
Street: 1613 E. Joppa Road
City: Towson State: MD
Project #: 5713
Fax #: 610-866-8195
Client Purchase Order #: 5713

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles	8260 ☐ 624 ☐ 8021 ☐ 602 ☐ BTEX ☐ MTBE ☐ TBA ☐ NAP ☐	8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAPD ☐ +10 ☐ +15 ☐	8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ AED ☐ BN ☐ PAH ☐ +TICs ☐	BTEX, MTBE and Naphthalene by 8260B	TPH-GRO by 8015B	TPH-DRO by 8015B	Matrix Codes / LAB USE ONLY
1	INF		7/7/2021	1720	BR	WW	7	7				X	X	X	E8
2	MID		7/7/2021	1910	BR	WW	7	7				X	X	X	V1076
3	EFF		7/7/2021	1900	BR	WW	7	7				X	X	X	

Matrix Codes: DW- Drinking Water; GW- Ground Water; WW- Water; SW- Surface Water; SO- Soil; SL-Sludge; OI-Oil; LIQ- Other Liquid; AIR- Air; SOL-Other Solid; WP-Wipe

Number of preserved Bottles: HCl; NaOH; HNO3; H2SO4; NONE; NaHSO4; MEOH; ENCORE

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*
- ☒ Other 14 Day Hess Standard

Approved By:/ Date:

Emergency T/A data available VIA Lablink

Data Deliverable Information

- ☒ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other Full TIER 1
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

• 2 x 300 mL DRO

INITIAL ASESSMENT 3 ASK

LABEL VERIFICATION

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Brad Rohr	7.8.21 850	Robin Kemp	2 Robin Kemp	7.8.21 1705	2 Jeremy Fox
3	Relinquished by:	Date Time:	Received By:	4 Relinquished By:	Date Time:	4 Received By:
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 3.9c

IP

SGS Sample Receipt Summary

Job Number: JD27916 **Client:** _____ **Project:** _____

Date / Time Received: 7/8/2021 5:15:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.9);

Cooler Temps (Corrected) °C: Cooler 1: (3.2);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JD27916: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EMS Environmental, Inc.

HESS #20204, 1613 East Joppa Road, Towson, MD

5713 PO#5713

SGS Job Number: JD27916X

Sampling Date: 07/07/21

Report to:

EMS Environmental, Inc.
4550 Bath Pike
Bethlehem, PA 18017
jfox@emsenv.com

ATTN: Jeremy Fox

Total number of pages in report: **43**

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

Mike Earp

Client Service contact: Beth Wasserman 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Sections: 1 2 3

Table of Contents

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Sample Summary

EMS Environmental, Inc.

Job No: JD27916X

HESS #20204, 1613 East Joppa Road, Towson, MD
Project No: 5713 PO#5713

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD27916-1X	07/07/21	14:20	BR	07/08/21	AQ	Influent	INF
JD27916-2X	07/07/21	14:10	BR	07/08/21	AQ	Water	MID
JD27916-3X	07/07/21	14:00	BR	07/08/21	AQ	Effluent	EFF

Subcontract Lab Data

Report of Analysis

Hampton-Clarke
Analytical & Field Services

175 US Highway 46, STE D · Fairfield, NJ 07004-2327
2 Madison Road, Fairfield, NJ 07004-2327
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

2

Project: JD27916X-HESS#20204

Client PO: Not Available

Report To: SGS Environmental Services
2235 Route 130
Dayton, NJ 08810
Attn: B.Wasserman/J.Schiller

Received Date: 7/20/2021

Report Date: 8/4/2021

Deliverables: MDE-R

Lab ID: AD24837

Lab Project No: 1072031

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

Table of Contents - 1072031

Sample Summary

Client: SGS Environmental Services
HC Project #: 1072031
Project: JD27916X-HESS#20204

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AD24837-001	INF	Aqueous	7/7/2021	7/20/2021
AD24837-002	MID	Aqueous	7/7/2021	7/20/2021
AD24837-003	EFF	Aqueous	7/7/2021	7/20/2021

HC Case Narrative

Client: SGS Environmental Services
Project: JD27916X - HESS # 20204

HC Project: 1072031

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Gasoline Range Organics Analysis:

Sample AD24837-001 had one or more surrogate recoveries outside QC limits. The sample was reanalyzed confirming recoveries outside QC limits due to matrix interference. The re-analysis is reported. Please refer to the applicable Form 2 for the recoveries.

Sean Berls
Quality Assurance Officer

Or

Jean Revolus
Laboratory Director

8/4/21
Date

HC Executive Summary

Client: SGS Environmental Services
HC Project #: 1072031
Project: JD27916X-HESS#20204

Lab#: AD24837-001 **Sample ID: INF**

Analyte	Units	RL	Result	Analytical Method
Gasoline Range Organics	ug/l	250	560	EPA 8015D

NOTE: Soil Results are reported to Dry Weigh

HC Report of Analysis

Client: SGS Environmental Services
HC Project #: 1072031
Project: JD27916X-HESS#20204

Sample ID: INF
Lab#: AD24837-001
Matrix: Aqueous
Collection Date: 7/7/2021
Receipt Date: 7/20/2021

Gasoline range organics 8015D(C6-C10)

Analyte	DF	Units	RL	Result
Gasoline Range Organics	1	ug/l	250	560

Sample ID: MID
Lab#: AD24837-002
Matrix: Aqueous

Collection Date: 7/7/2021
Receipt Date: 7/20/2021

Gasoline range organics 8015D(C6-C10)

Analyte	DF	Units	RL	Result
Gasoline Range Organics	1	ug/l	250	ND

Sample ID: EFF
Lab#: AD24837-003
Matrix: Aqueous

Collection Date: 7/7/2021
Receipt Date: 7/20/2021

Gasoline range organics 8015D(C6-C10)

Analyte	DF	Units	RL	Result
Gasoline Range Organics	1	ug/l	250	ND

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

DUP = Duplicate

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MDL = Method Detection Limit

MR = Matrix Replicate

MS = Matrix Spike

MSD = Matrix Spike Duplicate

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

SD = Serial Dilution

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Laboratory Chronicle

Client: SGS Environmental Services
Project: JD27916X-HESS#20204

HC Project #: 1072031

Lab#: AD24837-001 **Sample ID: INF**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Gasoline range organics 8015D(C6-C10)	EPA5030/5035			EPA 8015D	7/21/21 18:06	RL

Lab#: AD24837-002 **Sample ID: MID**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Gasoline range organics 8015D(C6-C10)	EPA5030/5035			EPA 8015D	7/21/21 15:26	RL

Lab#: AD24837-003 **Sample ID: EFF**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Gasoline range organics 8015D(C6-C10)	EPA5030/5035			EPA 8015D	7/21/21 15:44	RL

Chain of Custody

1072031 0010

CHAIN OF CUSTODY

1072031

Page 1 of 1

SGS

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job # JD27916X

Client / Reporting Information	Project Information	Requested Analysis (see TEST CODE sheet)
Company Name: SGS North America Inc.	Project Name: HESS #20204, 1613 East Joppa Road, Towson, MD	
Street Address: 2235 Route 130	Street	Billing Information (if different from Report to)
City State Zip: Dayton NJ 08810	City State	Company Name
Project Contact E-mail: Beth.Wasserman@sgs.com	Project #	Street Address
Phone # Fax #: 732-329-0200	Client Purchase Order #	City State Zip
Sampler(s) Name(s) Phone: BR	Project Manager	Attention:

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	V8015GRO -	LAB USE ONLY
1X	INF AD24837 001		7/7/21	2:20:00 PM	BR	AQ	2	2								X	
2X	MID 002		7/7/21	2:10:00 PM	BR	AQ	2	2								X	
3X	EFF 003		7/7/21	2:00:00 PM	BR	AQ	2	2								X	

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 7/15/2021

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Please email sample receipt confirmation & report to beth.wasserman@sgs.com, jadon.schiller@sgs.com. Please email invoice to beth.wasserman@sgs.com, angela.wu2@sgs.com

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	7-20-21 13:00	1 Joseph A.	2 Joseph A. 7/20/21	14:25	2 C Quiñones
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Intact / Not intact	Preserved where applicable / On Ice / Cooler Temp: 2.4

CONDITION UPON RECEIPT

Batch Number AD24837 Entered By: Ricardo
Date Entered 7/20/2021 4:18:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.4
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	No	Is there enough sample sent for the analyses listed on the COC? If no, specify: TWO 40ML VIALS RECEIVED FOR ALL THREE SAMPLES
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
14	NA	Corrective actions (Specify item number and corrective action taken).
15	NA	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD24837-001	07/20/21 14:28	RICAR	0	M	Received
AD24837-001	07/20/21 16:18	RICAR	0	M	Login
AD24837-001	07/20/21 17:10	R31	1	A	NONE
AD24837-001	07/20/21 17:10	R31	2	A	NONE
AD24837-001	07/22/21 12:22	RL	2	A	GRO
AD24837-002	07/20/21 14:28	RICAR	0	M	Received
AD24837-002	07/20/21 16:18	RICAR	0	M	Login
AD24837-002	07/20/21 17:10	R31	1	A	NONE
AD24837-002	07/20/21 17:10	R31	2	A	NONE
AD24837-002	07/22/21 12:22	RL	2	A	GRO
AD24837-003	07/20/21 14:28	RICAR	0	M	Received
AD24837-003	07/20/21 16:18	RICAR	0	M	Login
AD24837-003	07/20/21 17:10	R31	1	A	NONE
AD24837-003	07/20/21 17:10	R31	2	A	NONE
AD24837-003	07/22/21 12:22	RL	2	A	GRO

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

GRO Data

Form1

ORGANICS REPORT

Sample Number: AD24837-001
Client Id: INF
Data File: 13M21916.D
Analysis Date: 07/21/21 18:06
Date Rec/Extracted: 07/20/21-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	**Gasoline Range Organics**	**250**	**560**				

Worksheet #: 601251

Total Target Concentration 560

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Data Path : G:\GcMsData\2021\GC_13\Data\07-21-21\
Data File : 13M21916.D
Signal(s) : FID1A.CH
Acq On : 21 Jul 2021 18:06
Operator : RL
Sample : AD24837-001
Misc : A,5ML!1
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 22 14:50:17 2021
Quant Method : G:\GcMsData\2020\GC_13\MethodQt\13M_G0604.M
Quant Title : @GC_13,ug,8015
QLast Update : Fri Jun 04 18:40:09 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

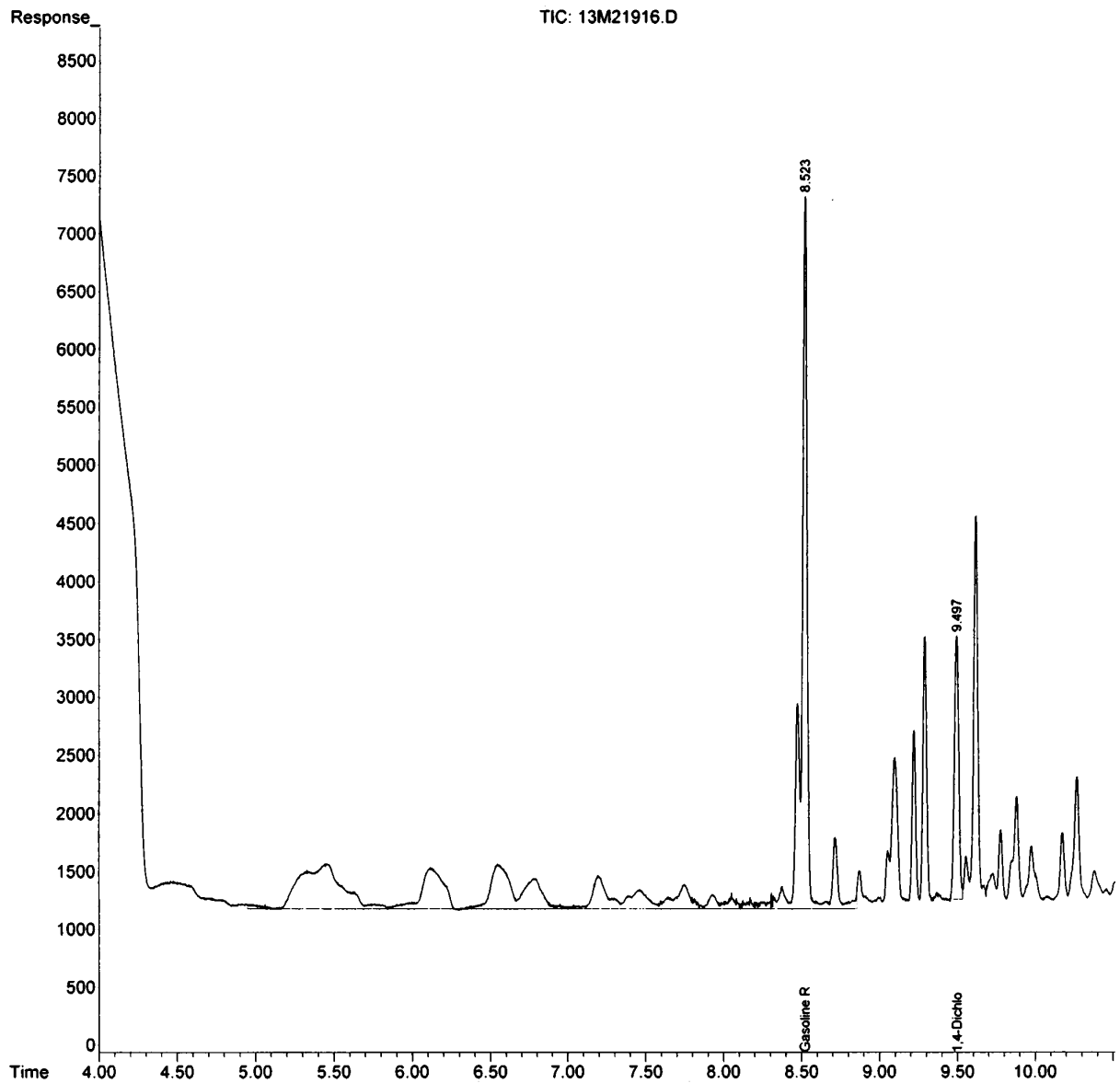
Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1)S 1,4-Dichlorobenzene-d4	9.497	44499	59.657		
Target Compounds					
2) 2-Methylpentane	0.000	0	N.D.		d
3) 1,2,4-Trimethylbenzene	0.000	0	N.D.		d
4)g Gasoline Range Organics	8.523	401755	564.906	ug/L	m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\GcMsData\2021\GC_13\Data\07-21-21\
Data File : 13M21916.D
Signal(s) : FID1A.CH
Acq On : 21 Jul 2021 18:06
Operator : RL
Sample : AD24837-001
Misc : A,5ML!1
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 22 14:50:17 2021
Quant Method : G:\GcMsData\2020\GC_13\MethodQt\13M_G0604.M
Quant Title : @GC_13,ug,8015
QLast Update : Fri Jun 04 18:40:09 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AD24837-002
Client Id: MID
Data File: 13M21909.D
Analysis Date: 07/21/21 15:26
Date Rec/Extracted: 07/20/21-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	250	U				

Worksheet #: 601251

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Data Path : G:\GcMsData\2021\GC_13\Data\07-21-21\
Data File : 13M21909.D
Signal(s) : FID1A.CH
Acq On : 21 Jul 2021 15:26
Operator : RL
Sample : AD24837-002
Misc : A,5ML!1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 22 10:06:50 2021
Quant Method : G:\GcMsData\2020\GC_13\MethodQt\13M_G0604.M
Quant Title : @GC_13,ug,8015
QLast Update : Fri Jun 04 18:40:09 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

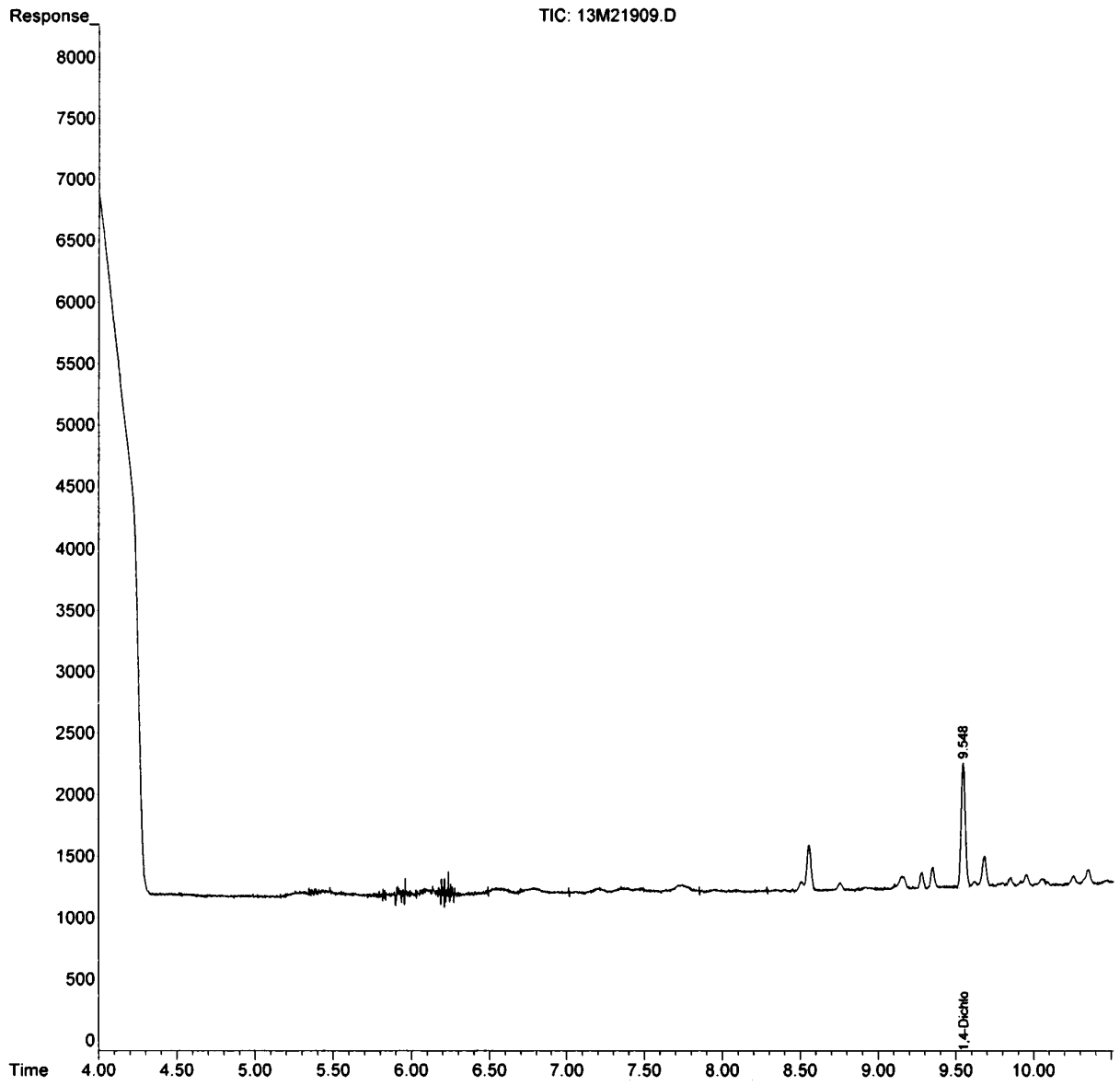
Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1)S 1,4-Dichlorobenzene-d4	9.548f	19285	25.854		m
Target Compounds					
2) 2-Methylpentane	0.000	0	N.D.		
3) 1,2,4-Trimethylbenzene	0.000	0	N.D.		d
4)g Gasoline Range Organics	0.000	0	N.D.	ug/L	d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\GcMsData\2021\GC_13\Data\07-21-21\
Data File : 13M21909.D
Signal(s) : FID1A.CH
Acq On : 21 Jul 2021 15:26
Operator : RL
Sample : AD24837-002
Misc : A,5ML!1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 22 10:06:50 2021
Quant Method : G:\GcMsData\2020\GC_13\MethodQt\13M_G0604.M
Quant Title : @GC_13,ug,8015
QLast Update : Fri Jun 04 18:40:09 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AD24837-003
Client Id: EFF
Data File: 13M21910.D
Analysis Date: 07/21/21 15:44
Date Rec/Extracted: 07/20/21-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	250	U				

Worksheet #: 601251

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Data Path : G:\GcMsData\2021\GC_13\Data\07-21-21\
Data File : 13M21910.D
Signal(s) : FID1A.CH
Acq On : 21 Jul 2021 15:44
Operator : RL
Sample : AD24837-003
Misc : A,5ML!1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 22 10:07:01 2021
Quant Method : G:\GcMsData\2020\GC_13\MethodQt\13M_G0604.M
Quant Title : @GC_13,ug,8015
QLast Update : Fri Jun 04 18:40:09 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

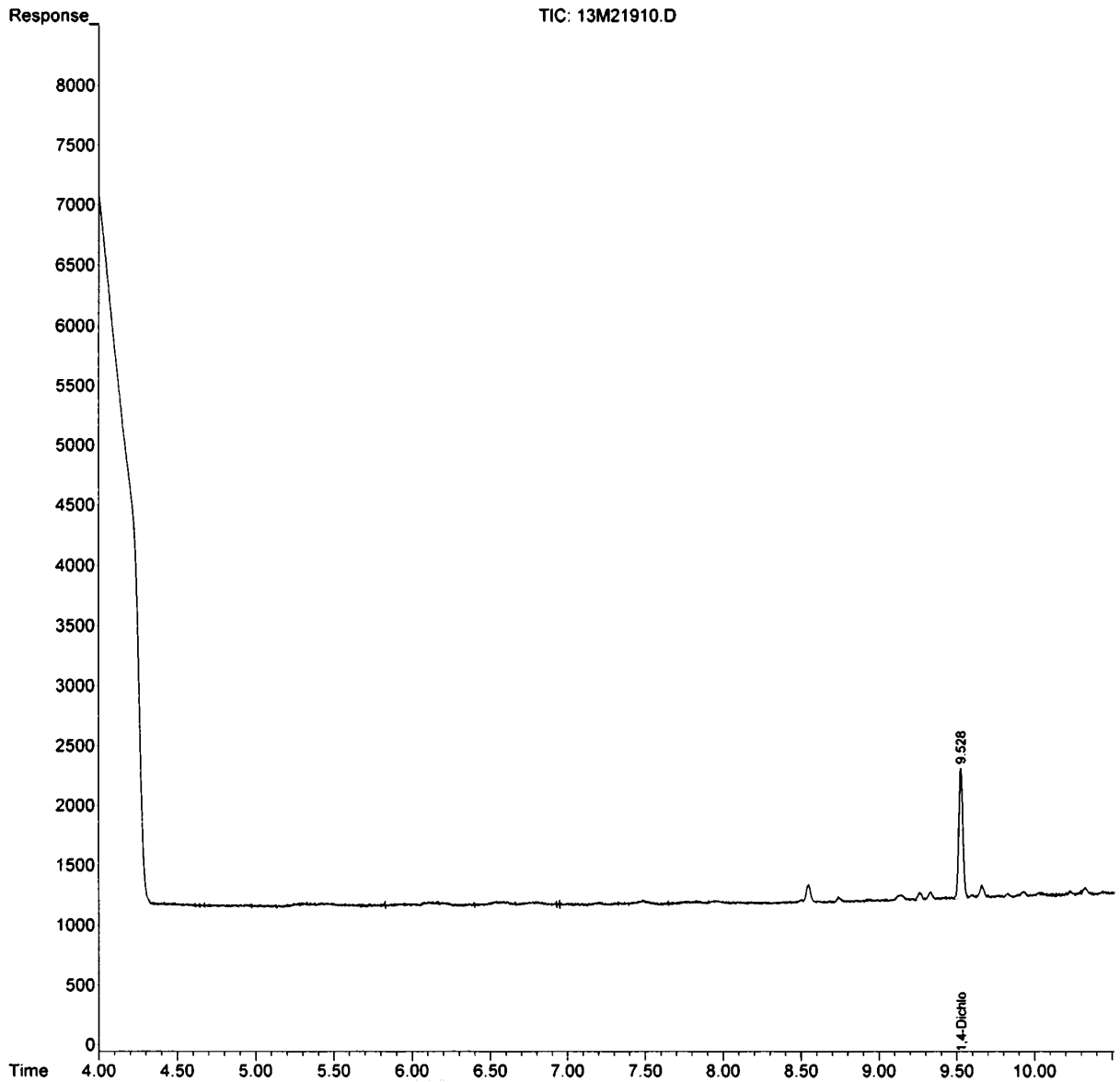
Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1)S 1,4-Dichlorobenzene-d4	9.528f	20267	27.171		m
Target Compounds					
2) 2-Methylpentane	0.000	0	N.D.		
3) 1,2,4-Trimethylbenzene	0.000	0	N.D.		
4)g Gasoline Range Organics	0.000	0	N.D.	ug/L	d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\GcMsData\2021\GC_13\Data\07-21-21\
Data File : 13M21910.D
Signal(s) : FID1A.CH
Acq On : 21 Jul 2021 15:44
Operator : RL
Sample : AD24837-003
Misc : A,5ML!1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 22 10:07:01 2021
Quant Method : G:\GcMsData\2020\GC_13\MethodQt\13M_G0604.M
Quant Title : @GC_13,ug,8015
QLast Update : Fri Jun 04 18:40:09 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 13M21904.D
Analysis Date: 07/21/21 13:09
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	250	U				

Worksheet #: 601251

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Data Path : G:\GcMsData\2021\GC_13\Data\07-21-21\
Data File : 13M21904.D
Signal(s) : FID1A.CH
Acq On : 21 Jul 2021 13:09
Operator : RL
Sample : DAILY BLANK
Misc : A,5ML
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 22 10:07:11 2021
Quant Method : G:\GcMsData\2020\GC_13\MethodQt\13M_G0604.M
Quant Title : @GC_13,ug,8015
QLast Update : Fri Jun 04 18:40:09 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

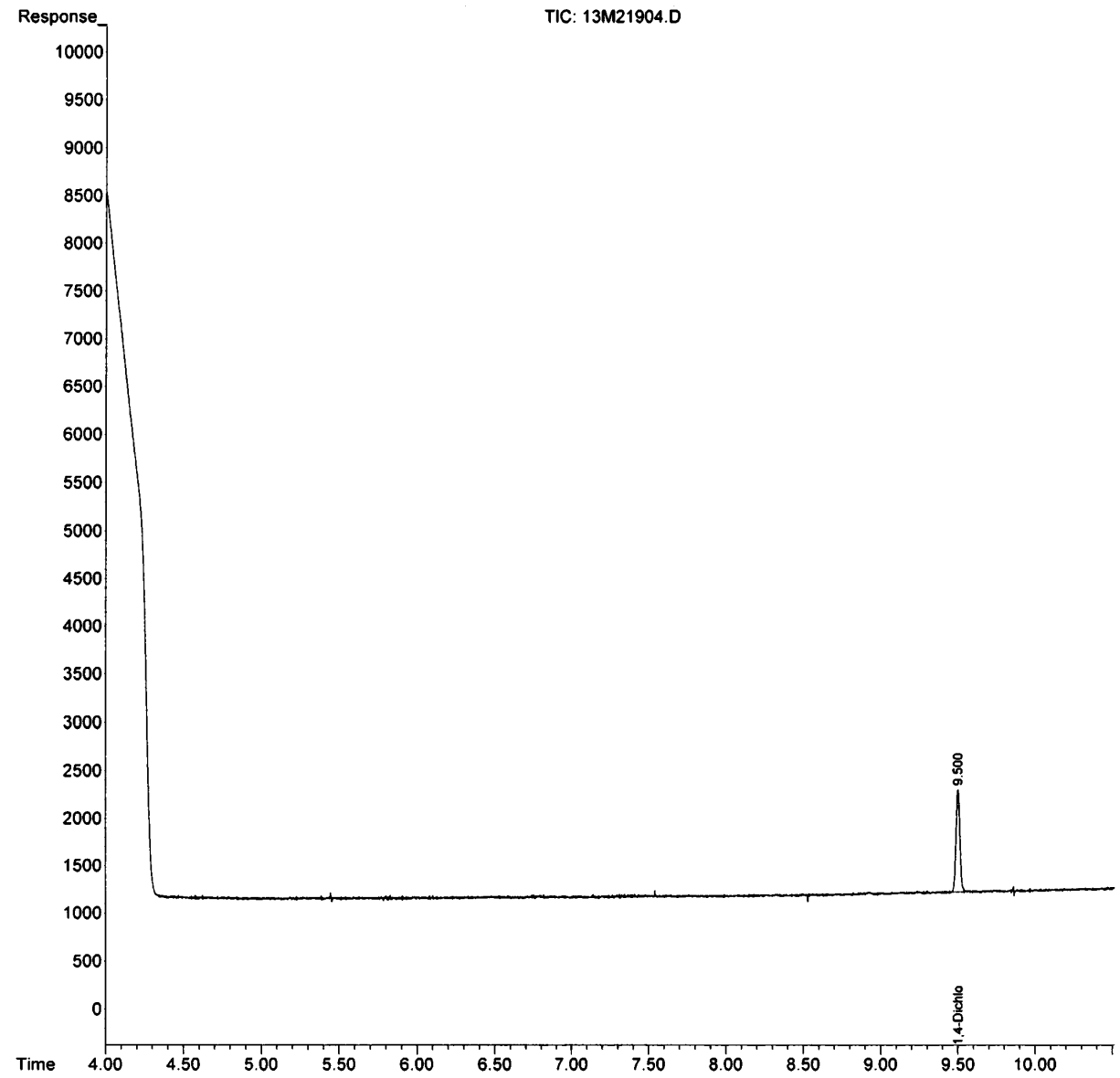
Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1)S 1,4-Dichlorobenzene-d4	9.500	18831	25.245		m
Target Compounds					
2) 2-Methylpentane	0.000	0	N.D.		
3) 1,2,4-Trimethylbenzene	0.000	0	N.D.		
4)g Gasoline Range Organics	0.000	0	N.D.	ug/L	d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\GcMsData\2021\GC_13\Data\07-21-21\
Data File : 13M21904.D
Signal(s) : FID1A.CH
Acq On : 21 Jul 2021 13:09
Operator : RL
Sample : DAILY BLANK
Misc : A,5ML
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 22 10:07:11 2021
Quant Method : G:\GcMsData\2020\GC_13\MethodQt\13M_G0604.M
Quant Title : @GC_13,ug,8015
QLast Update : Fri Jun 04 18:40:09 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



FORM2

Surrogate Recovery

Method: EPA 8015D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column0 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
13M21904.D	DAILY BLANK	A	07/21/21 13:09	1		84					
13M21908.D	AD24837-001	A	07/21/21 14:35	1		200*					
13M21916.D	AD24837-001	A	07/21/21 18:06	1		199*					
13M21909.D	AD24837-002	A	07/21/21 15:26	1		86					
13M21910.D	AD24837-003	A	07/21/21 15:44	1		91					
13M21905.D	AD24831-001	A	07/21/21 13:38	1		83					
13M21914.D	MBS94195	A	07/21/21 17:16	1		106					
13M21917.D	AD24831-001(MS)	A	07/21/21 18:24	1		122					

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8015D

Aqueous Limits

Compound	Spike Amt	Limits
S1=1,4-Dichlorobenzene-d4	30	50-150

Form3
Recovery Data
QC Batch: MBS94195

	Data File	Sample ID:	Analysis Date
Spike or Dup:	13M21914.D	MBS94195	7/21/2021 5:16:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8015 | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1636.76	0	2000	82	40	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS94195

	Data File	Sample ID:	Analysis Date
Spike or Dup:	13M21917.D	AD24831-001(MS)	7/21/2021 6:24:00 PM
Non Spike(If applicable):	13M21905.D	AD24831-001	7/21/2021 1:38:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1657.27	0	2000	83	40	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 13M21904.D
Matrix: Aqueous

Blank Analysis Date: 07/21/21 13:09
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8015D

Sample Number	Data File	Analysis Date
AD24837-001	13M21916.D	07/21/21 18:06
AD24837-001	13M21908.D	07/21/21 14:35
AD24837-002	13M21909.D	07/21/21 15:26
AD24837-003	13M21910.D	07/21/21 15:44
AD24831-001(MS)	13M21917.D	07/21/21 18:24
MBS94195	13M21914.D	07/21/21 17:16
AD24831-001	13M21905.D	07/21/21 13:38

Form 5

Method: EPA 8015D
Instrument: GC_13 Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
13M21296.D	BLK	06/04/21 15:15	Aqueous	13M2132	9.4605	0.2476		
13M21297.D	CAL @ 250 PPB	06/04/21 15:32	Aqueous	13M2130	9.4448	0.0339		
13M21298.D	CAL @ 500 PPB	06/04/21 15:48	Aqueous	13M2130	9.4520	0.1101		
13M21299.D	CAL @ 750 PPB	06/04/21 16:05	Aqueous	13M2130	9.4457	0.0434		
13M21300.D	CAL @ 1000 PPB	06/04/21 16:21	Aqueous	13M2130	9.4379	0.0392		
13M21301.D	CAL @ 1500 PPB	06/04/21 16:38	Aqueous	13M2130	9.4348	0.072		
13M21302.D	CAL @ 2000 PPB	06/04/21 16:54	Aqueous	13M2130	9.4340	0.0805		
13M21303.D	CAL @ 4000 PPB	06/04/21 17:11	Aqueous	13M2130	9.4416	0		
13M21307.D	ICV	06/04/21 18:17	Aqueous	13M2130	9.4444	0.0297		
13M21311.D	BLK	06/04/21 19:23	Aqueous	13M2130	9.4412	0.0042		
13M21312.D	DAILY BLANK	06/04/21 19:40	Methanol	13M2130	9.4419	0.0032		
13M21313.D	AD23695-001	06/04/21 19:57	Methanol	13M2130	9.4416	0		
13M21314.D	AD23711-001	06/04/21 20:13	Methanol	13M2130	9.4406	0.0106		
13M21315.D	AD23711-001(MS)	06/04/21 20:30	Methanol	13M2130	9.4416	0		
13M21316.D	AD23711-001(MSD)	06/04/21 20:48	Methanol	13M2130	9.4433	0.018		
13M21317.D	MBS93586	06/04/21 21:05	Methanol	13M2130	9.4389	0.0286		
13M21318.D	STD	06/04/21 21:21	Methanol	13M2130	0.0000	200		
13M21319.D	2000 PPB	06/04/21 21:38	Aqueous	13M2130	9.4424	0.0085		
13M21323.D	MBS93595	06/04/21 22:45	Methanol	13M2130	9.4422	0.0064		
13M21324.D	MBS93596	06/04/21 23:01	Methanol	13M2130	9.4372	0.0466		
13M21325.D	MBS93597	06/04/21 23:18	Methanol	13M2130	9.4393	0.0244		
13M21326.D	MBS93598	06/04/21 23:34	Methanol	13M2130	9.4351	0.0689		
13M21328.D	CAL @ 2000 PPB	06/05/21 00:08	Aqueous	13M2130	9.4371	0.0477		
13M21330.D	MBS93600	06/05/21 00:41	Methanol	13M2132	9.4557	0.1969		
13M21335.D	BLK	06/05/21 02:05	Aqueous	13M2132	9.4476	0.1112		

Drift Compound: 1,4-Dichloroben Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8015D
Instrument: GC_13

Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
13M21900.D	CAL @ 2000 PPB	07/21/21 12:00	Aqueous	13M2190	9.5003	0		
13M21901.D	BLK	07/21/21 12:17	Methanol	13M2190	9.4858	0.1527		
13M21903.D	DAILY BLANK	07/21/21 12:50	Methanol	13M2190	9.4983	0.0211		
13M21904.D	DAILY BLANK	07/21/21 13:09	Aqueous	13M2190	9.5000	0.0032		
13M21905.D	AD24831-001	07/21/21 13:38	Aqueous	13M2190	9.5303	0.3153		
13M21906.D	AD24831-002	07/21/21 13:54	Aqueous	13M2190	9.5250	0.2596		
13M21907.D	AD24831-003	07/21/21 14:11	Aqueous	13M2190	9.5050	0.0495		
13M21908.D	AD24837-001	07/21/21 14:35	Aqueous	13M2190	9.5403	0.4202		
13M21909.D	AD24837-002	07/21/21 15:26	Aqueous	13M2190	9.5482	0.5029		
13M21910.D	AD24837-003	07/21/21 15:44	Aqueous	13M2190	9.5284	0.2953		
13M21911.D	AD24831-004	07/21/21 16:08	Methanol	13M2190	9.5341	0.3551		
13M21912.D	AD24831-005	07/21/21 16:25	Methanol	13M2190	9.5131	0.1346		
13M21913.D	MBS94194	07/21/21 16:59	Methanol	13M2190	9.5009	0.0063		
13M21914.D	MBS94195	07/21/21 17:16	Aqueous	13M2190	9.4886	0.1232		
13M21915.D	BLK	07/21/21 17:49	Aqueous	13M2190	9.4948	0.0579		
13M21916.D	AD24837-001	07/21/21 18:06	Aqueous	13M2190	9.4970	0.0347		
13M21917.D	AD24831-001(MS)	07/21/21 18:24	Aqueous	13M2190	9.4855	0.1559		
13M21918.D	AD24831-004(MS)	07/21/21 18:42	Methanol	13M2190	9.4845	0.1665		
13M21919.D	AD24831-004(MSD)	07/21/21 19:06	Methanol	13M2190	9.4916	0.0916		
13M21920.D	BLK	07/21/21 19:23	Methanol	13M2190	9.4696	0.3237		
13M21921.D	BLK	07/21/21 19:40	Methanol	13M2190	9.4679	0.3416		
13M21922.D	AD24831-006	07/21/21 19:57	Methanol	13M2190	9.4814	0.1991		
13M21923.D	AD24831-007	07/21/21 20:16	Methanol	13M2190	9.4900	0.1085		
13M21924.D	AD24831-008	07/21/21 20:43	Methanol	13M2190	9.4929	0.0779		
13M21925.D	AD24831-009	07/21/21 20:59	Methanol	13M2190	9.4721	0.2973		
13M21926.D	AD24831-010	07/21/21 21:16	Methanol	13M2190	9.4604	0.4209		
13M21927.D	AD24831-011	07/21/21 21:44	Methanol	13M2190	9.4704	0.3152		
13M21928.D	AD24831-012	07/21/21 22:01	Methanol	13M2190	9.4657	0.3649		
13M21929.D	AD24831-013	07/21/21 22:17	Methanol	13M2190	9.4576	0.4505		
13M21930.D	AD24831-014	07/21/21 22:51	Methanol	13M2190	9.4653	0.3691		
13M21931.D	AD24835-001	07/21/21 23:10	Methanol	13M2190	9.4539	0.4896		
13M21932.D	AD24814-010	07/21/21 23:26	Methanol	13M2190	9.4494	0.5372		
13M21933.D	CAL @ 2000 PPB	07/21/21 23:45	Aqueous	13M2190	9.4597	0.4283		
13M21934.D	2000 PPB	07/22/21 00:01	Aqueous	13M2193	9.4525	0.0761		

Drift Compound: 1,4-Dichloroben Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 6
Initial Calibration

Method: EPA 8015D

Instrument: GC_13

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	13M21303.	CAL @ 4000 PPB	06/04/21 17:11	2	13M21302.	CAL @ 2000 PPB	06/04/21 16:54
3	13M21301.	CAL @ 1500 PPB	06/04/21 16:38	4	13M21300.	CAL @ 1000 PPB	06/04/21 16:21
5	13M21299.	CAL @ 750 PPB	06/04/21 16:05	6	13M21298.	CAL @ 500 PPB	06/04/21 15:48
7	13M21297.	CAL @ 250 PPB	06/04/21 15:32				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
1,4-Dichlorobenzene-d4	1	0	Avg	----	0.0857	0.0820	0.0761	0.0722	0.0667	0.0645	----	0.0746	9.47	-1	-1	11		30.00	30.00	30.00	30.00	30.00	30.00	
2-Methylpentane	1	0	Avg	0.0014	0.0015	0.0012	0.0016	0.0016	0.0017	0.0016	----	0.00157	5.46	0.991	0.991	11	4000.	2000.	1500.	1000.	750.0	500.0	250.0	
1,2,4-Trimethylbenzene	1	0	Avg	0.0015	0.0013	0.0013	0.0014	0.0013	0.0012	0.0013	----	0.00136	9.27	0.995	0.999	8.3	4000.	2000.	1500.	1000.	750.0	500.0	250.0	
Gasoline Range Organics	1	0	Avg	0.0763	0.0698	0.0665	0.0730	0.0747	0.0676	0.0697	----	0.0711	8.07	0.996	0.999	5.2	4000.	2000.	1500.	1000.	750.0	500.0	250.0	

Avg Rsd Col 1: 17.7 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 ; Signal #2 db-608
^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8015D

2

Data File:				13M21900.D			13M21933.D											
Method:				8015			8015											
Calibration Name:				CAL @ 2000 PPB			CAL @ 2000 PPB											
Calibration Date/Time				07/21/21 12:00			07/21/21 23:45											
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
Gasoline Range Orga	20	1	0	1613	2000	19.4	2300	2000	15.0									

Flags/Notes: **** - Values outside of limits for this column/run***

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST Laboratories

WW

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Page 1

FED-EX Tracking #

Bottle Order Control # None

Accutest Quote #

Accutest Job # JD27916

Client / Reporting Information

Company Name: EMS Environmental, Inc.
Address: 4550 Bath Pike
City: Bethlehem State: PA Zip: 18017
Project Contact: Jeremy Fox E-mail: jfox@emsenv.com
Phone #: 610-866-7799
Samplers's Name: Brad Rohrbaugh

Project Information

Project Name: Former Hess - 20204
Street: 1613 E. Joppa Road
City: Towson State: MD
Project #: 5713
Fax #: 610-866-8195
Client Purchase Order #: 5713

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles	8260 BTEX ☐ MTBE ☐ 624 ☐ 8021 ☐ 602 ☐ TBA ☐ NAP ☐	8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAPD ☐ +10 ☐ +15 ☐	8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ AED ☐ BN ☐ PAH ☐ +TICs ☐	BTEX, MTBE and Naphthalene by 8260B	TPH-GRO by 8015B	TPH-DRO by 8015B	LAB USE ONLY
1	INF		7/7/2021	1720	BR	WW	7	7				X	X	X	E8
2	MID		7/7/2021	1910	BR	WW	7	7				X	X	X	V1076
3	EFF		7/7/2021	1900	BR	WW	7	7				X	X	X	

Number of preserved Bottles: HCl, NaOH, HNO3, H2SO4, NONE, NaHSO4, MEOH, ENCORE

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*
- ☒ Other 14 Day Hess Standard

Approved By:/ Date:

Emergency T/A data available VIA Lablink

Data Deliverable Information

- ☒ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other Full TIER 1
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

• 2 x 300 mL DRO

INITIAL ASESSMENT 3A JK

LABEL VERIFICATION

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Brad Rohr	7.8.21 850	Robin Kemp	2 Robin Kemp	7.8.21 1705	2 Jeremy Fox
3	Relinquished by:	Date Time:	Received By:	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 3.9c IP

SGS Sample Receipt Summary

Job Number: JD27916 **Client:** _____ **Project:** _____

Date / Time Received: 7/8/2021 5:15:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.9);

Cooler Temps (Corrected) °C: Cooler 1: (3.2);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JD27916X: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EMS Environmental, Inc.

HESS #20204, 1613 East Joppa Road, Towson, MD

5713

SGS Job Number: JD28395

Sampling Date: 07/13/21

Report to:

EMS Environmental, Inc.
4550 Bath Pike
Bethlehem, PA 18017
jfox@emsenv.com

ATTN: Jeremy Fox

Total number of pages in report: **14**

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

Mike Earp

Client Service contact: Beth Wasserman 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Sections: 1 2 3 4

Table of Contents

SGS North America Inc.

Sample Summary

EMS Environmental, Inc.

Job No: JD28395

HESS #20204, 1613 East Joppa Road, Towson, MD
Project No: 5713

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD28395-1	07/13/21	13:20	BR	07/15/21	AQ	Influent	INF
JD28395-2	07/13/21	13:10	BR	07/15/21	AQ	Water	MID
JD28395-3	07/13/21	13:00	BR	07/15/21	AQ	Effluent	EFF

Summary of Hits

Job Number: JD28395
Account: EMS Environmental, Inc.
Project: HESS #20204, 1613 East Joppa Road, Towson, MD
Collected: 07/13/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD28395-1	**INF**					
Benzene		1.1	0.50	0.43	ug/l	SW846 8260D
Toluene		2.1	1.0	0.53	ug/l	SW846 8260D
Ethylbenzene		16.2	1.0	0.60	ug/l	SW846 8260D
Xylene (total)		93.4	1.0	0.59	ug/l	SW846 8260D
Methyl Tert Butyl Ether		1.8	1.0	0.51	ug/l	SW846 8260D
Naphthalene		20.4	5.0	2.5	ug/l	SW846 8260D
TPH-DRO (C10-C28)		0.575	0.083	0.053	mg/l	SW846 8015D
JD28395-2	**MID**					
Xylene (total)		2.4	1.0	0.59	ug/l	SW846 8260D
JD28395-3	**EFF**					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD28395-1	**Date Sampled:**	07/13/21
Matrix:	AQ - Influent	**Date Received:**	07/15/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C184308.D	1	07/24/21 21:05	EH	n/a	n/a	V2C8213
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.1	0.50	0.43	ug/l	
108-88-3	Toluene	2.1	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	16.2	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	93.4	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.8	1.0	0.51	ug/l	
91-20-3	Naphthalene	20.4	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		85-118%
17060-07-0	1,2-Dichloroethane-D4	93%		80-121%
2037-26-5	Toluene-D8	108%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD28395-1	**Date Sampled:**	07/13/21
Matrix:	AQ - Influent	**Date Received:**	07/15/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ99923.D	1	07/20/21 13:47	RK	07/19/21 17:25	OP34356	GZZ3679
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.575	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		22-140%
438-22-2	5a-Androstane	53%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD28395-2	**Date Sampled:**	07/13/21
Matrix:	AQ - Water	**Date Received:**	07/15/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C184302.D	1	07/24/21 18:12	EH	n/a	n/a	V2C8213
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	2.4	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%
17060-07-0	1,2-Dichloroethane-D4	95%		80-121%
2037-26-5	Toluene-D8	108%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD28395-2	**Date Sampled:**	07/13/21
Matrix:	AQ - Water	**Date Received:**	07/15/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ99924.D	1	07/20/21 14:21	RK	07/19/21 17:25	OP34356	GZZ3679
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		22-140%
438-22-2	5a-Androstane	63%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD28395-3	**Date Sampled:**	07/13/21
Matrix:	AQ - Effluent	**Date Received:**	07/15/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C184299.D	1	07/24/21 16:45	EH	n/a	n/a	V2C8213
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		85-118%
17060-07-0	1,2-Dichloroethane-D4	95%		80-121%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD28395-3	**Date Sampled:**	07/13/21
Matrix:	AQ - Effluent	**Date Received:**	07/15/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ99929.D	1	07/20/21 17:10	RK	07/19/21 17:25	OP34356	GZZ3679
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		22-140%
438-22-2	5a-Androstane	59%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = 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

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

06121 BW-061221-168 Page 1

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JD28395

Client / Reporting Information

Company Name: EMS Environmental, Inc.
Address: 4550 Bath Pike
City: Bethlehem State: PA Zip: 18017
Project Contact: Jeremy Fox E-mail: jfox@emsenv.com
Phone #: 610-866-7799
Samplers's Name: Brad Rohrbaugh

Project Information

Project Name: Former Hess - 20204
Street: 1613 E. Joppa Road
City: Towson State: MD
Project #: 5713
Fax #: 610-866-8196
Client Purchase Order #: 5713

Requested Analysis

624 ☐ 8021 ☐ 602 ☐ MTBE ☐ BTEX ☐ TBA ☐ NAP ☐
8260 ☐ 624 ☐ TBA ☐ NAPD ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ ABN ☐ AE ☐ TCL ☐ PPL ☐ STARS ☐ BN ☐ PAH ☐ +TICs ☐

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	MeOH	H2O	NaOH	HNO3	H2SO4	MeOH	Encore	BTEX, MTBE and Naphthalene by 8260B	TPH-GRO by 8015B	TPH-DRO by 8015B	LAB USE ONLY
1	INF		7/13/2021	1320	BR	WW	7	7								X	X	X	E106
2	MID		7/13/2021	1310	BR	WW	7	7								X	X	X	V1131
3	EFF		7/13/2021	1300	BR	WW	7	7								X	X	X	

Matrix Codes: DW- Drinking Water; GW- Ground Water; WW- Water; SW- Surface Water; SO- Soil; SL- Sludge; OI-Oil; LIQ- Other Liquid; AIR- Air; SOL- Other Solid; WP-Wipe

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*
- ☒ Other 14 Day Hess Standard

Approved By:/ Date:

INITIAL ASESSMENT 3 days

LABEL VERIFICATION

Emergency T/A data available VIA Lablink

Data Deliverable Information

- ☒ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other Full TIER 1
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Brad Rohrbaugh	7-15-21 08:00	1 Rabin Pemp	2 Rabin Pemp	7-15-21 1740	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 4.0 CIP

JD28395: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD28395 **Client:** EMS ENVIRONMENTAL, INC. **Project:** HESS #20204, 1613 EAST JOPPA ROAD, TOWS

Date / Time Received: 7/15/2021 5:40:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD28395: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EMS Environmental, Inc.

HESS #20204, 1613 East Joppa Road, Towson, MD

5713

SGS Job Number: JD28395X

Sampling Date: 07/13/21

Report to:

EMS Environmental, Inc.
4550 Bath Pike
Bethlehem, PA 18017
jfox@emsenv.com

ATTN: Jeremy Fox

Total number of pages in report: **12**

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

Mike Earp

Client Service contact: Beth Wasserman 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Sections:

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Table of Contents

SGS North America Inc.

Sample Summary

EMS Environmental, Inc.

Job No: JD28395X

HESS #20204, 1613 East Joppa Road, Towson, MD
Project No: 5713

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD28395-1X	07/13/21	13:20	BR	07/15/21	AQ	Influent	INF
JD28395-2X	07/13/21	13:10	BR	07/15/21	AQ	Water	MID
JD28395-3X	07/13/21	13:00	BR	07/15/21	AQ	Effluent	EFF

Subcontract Lab Data

Report of Analysis

Hampton-Clarke Report Of Analysis

Client: SGS Environmental Services **HC Project #:** 1072035

Project: JD28395X-HESS#20204

Sample ID: INF **Collection Date:** 7/13/2021
Lab#: AD24841-001 **Receipt Date:** 7/20/2021
Matrix: Aqueous

Gasoline range organics 8015D(C6-C10)

Analyte	DF	Units	RL	Result
Gasoline Range Organics	1	ug/l	250	720

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	58.73	30	50	150	196	S8

Sample ID: MID
Lab#: AD24841-002
Matrix: Aqueous

Collection Date: 7/13/2021
Receipt Date: 7/20/2021

2

Gasoline range organics 8015D(C6-C10)

Analyte	DF	Units	RL	Result
Gasoline Range Organics	1	ug/l	250	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	26.22	30	50	150	87	

NOTE: Soil Results are reported to Dry Weight

Project #: 1072035

Sample ID:	**EFF**	**Collection Date:**	**7/13/2021**
Lab#:	**AD24841-003**	**Receipt Date:**	**7/20/2021**
Matrix:	**Aqueous**		

Gasoline range organics 8015D(C6-C10)

Analyte	DF	Units	RL	Result
Gasoline Range Organics	1	ug/l	250	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	25.48	30	50	150	85	

NOTE: Soil Results are reported to Dry Weight

Project #: 1072035

CHAIN OF CUSTODY

1072035

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: JD28395X

Client / Reporting Information

Company Name: SGS North America Inc.
Street Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Project Contact: Beth.Wasserman@sgs.com E-mail:
Phone #: 732-329-0200 Fax #:
Sampler(s) Name(s): BR Phone:

Project Information

Project Name: HESS #20204, 1613 East Joppa Road, Towson, MD
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	V8015GRO_	LAB USE ONLY
	AD24841																
1X	INF 001		7/13/21	1:20:00 PM	BR	AQ	2	2								X	
2X	MID 002		7/13/21	1:10:00 PM	BR	AQ	2	2								X	
3X	EFF 003		7/13/21	1:00:00 PM	BR	AQ	2	2								X	

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 7/22/2021

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Please email sample receipt confirmation & report to beth.wasserman@sgs.com, jadon.schiller@sgs.com. Please email invoice to beth.wasserman@sgs.com, angela.wu2@sgs.com

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

Relinquished by Sampler:	Date Time: 7-20-21 13:00	Received By: 1 Joseph A.	Relinquished By: 2 Joseph A. 7/20/21	Date Time: 14:28	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☐ Cooler Temp 2 4

Date / Time: 7/19/2021 4:40:17 PM
CSR: BETHW
Job #: JD28395X
Client Project: HESS #20204, 1613 East Joppa Road, Towson, M
Deliverable: COMMA
TAT: Due 7/22/2021

Sub Lab: Hampton-Clarke
Address: 175 Route 46 West, Unit D
City: Fairfield
State: NJ Zip: 07004
Contact: Sample Management
Phone: 800-426-9992

SGS Sample #	Client Sample Description	Analysis	Location	Sampled By	Date Sampled	Time Sampled	Aliquot
JD28395-1X	INF	V8015GRO ,		BR	7/13/2021	1:20:00 PM	
JD28395-2X	MID	V8015GRO ,		BR	7/13/2021	1:10:00 PM	
JD28395-3X	EFF	V8015GRO ,		BR	7/13/2021	1:00:00 PM	

Comments: Please email sample receipt confirmation & report to beth.wasserman@sgs.com, jadon.schiller@sgs.com. Please email invoice to beth.wasserman@sgs.com, angela.wu2@sgs.com

Sample Management Receipt: _____ Date: _____

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

WW

ACCUTEST Laboratories

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Page 1

20121 BW-061221-168

FED-EX Tracking #

Bottle Order Control #

Accutest Quote #

Accutest Job # JD28395

3.1

3

Client / Reporting Information

Company Name: EMS Environmental, Inc.
Address: 4550 Bath Pike
City: Bethlehem State: PA Zip: 18017
Project Contact: Jeremy Fox E-mail: jfox@emsenv.com
Phone #: 610-866-7799
Samplers's Name: Brad Rohrbaugh

Project Information

Project Name: Former Hess - 20204
Street: 1613 E Joppa Road
City: Towson State: MD
Project #: 5713
Fax #: 610-866-8195
Client Purchase Order #: 5713

Requested Analysis: 8260 □ 624 □ 8021 □ 602 □ BTEX □ MTBE □ TBA□ NAP □; 8260 □ 624 □ TCL □ PPL □ STARS □ MTBE □ TBA □ NAP□ +10 □ +15 □; 8270 □ 625 □ TCL □ PPL □ STARS□ ABN□ AE□ BN□ PAH□ +TICs□; BTEX, MTBE and Naphthalene by 8260B; TPH-GRO by 8015B; TPH-DRO by 8015B

Matrix Codes: DW- Drinking Water; GW- Ground Water; WW- Water; SW- Surface Water; SO- Soil; SL-Sludge; OI-Oil; LIQ- Other Liquid; AIR- Air; SOL-Other Solid; WP-Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # MEOH Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	8260/624/8021/602	8260/624 TCL/PPL	8270/625 TCL/PPL	BTEX, MTBE and Naphthalene by 8260B	TPH-GRO by 8015B	TPH-DRO by 8015B	LAB USE ONLY
1	INF		7/13/2021	1320	BR	WW	7	7											X	X	X	E106
2	MID		7/13/2021	1310	BR	WW	7	7											X	X	X	V1131
3	EFF		7/13/2021	1300	BR	WW	7	7											X	X	X	

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*
- [X] Other 14 Day Hess Standard

Approved By:/ Date:

INITIAL ASESSMENT 3B

LABEL VERIFICATION

Emergency T/A data available VIA Lablink

Data Deliverable Information

- [X] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [ ] Other Full TIER 1
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format________

Commercial "A" = Results Only

Comments / Remarks

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	08:00 7-15-21	1 Robin Remp	2 Robin Remp	7-15-21 1740	2 [signature]
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable □	On Ice: ✓ Cooler Temp. 4.0 C IR

JD28395X: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD28395 **Client:** EMS ENVIRONMENTAL, INC. **Project:** HESS #20204, 1613 EAST JOPPA ROAD, TOWS

Date / Time Received: 7/15/2021 5:40:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD28395X: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EMS Environmental, Inc.

HESS #20204, 1613 East Joppa Road, Towson, MD

5713 PO#5713

SGS Job Number: JD29941

Sampling Date: 08/11/21

Report to:

EMS Environmental, Inc.
4550 Bath Pike
Bethlehem, PA 18017
jfox@emsenv.com

ATTN: Jeremy Fox

Total number of pages in report: 17

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

Mike Earp
General Manager

Client Service contact: Beth Wasserman 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Sections: 1 2 3 4

Table of Contents

SGS North America Inc.

Sample Summary

EMS Environmental, Inc.

Job No: JD29941

HESS #20204, 1613 East Joppa Road, Towson, MD
Project No: 5713 PO#5713

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD29941-1	08/11/21	15:20	BR	08/13/21	AQ	Influent	INF
JD29941-2	08/11/21	15:10	BR	08/13/21	AQ	Water	MID
JD29941-3	08/11/21	15:00	BR	08/13/21	AQ	Effluent	EFF

Summary of Hits

Job Number: JD29941
Account: EMS Environmental, Inc.
Project: HESS #20204, 1613 East Joppa Road, Towson, MD
Collected: 08/11/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD29941-1	**INF**					
Benzene		1.4	0.50	0.43	ug/l	SW846 8260D
Toluene		2.3	1.0	0.53	ug/l	SW846 8260D
Ethylbenzene		20.3	1.0	0.60	ug/l	SW846 8260D
Xylene (total)		98.1	1.0	0.59	ug/l	SW846 8260D
Methyl Tert Butyl Ether		1.9	1.0	0.51	ug/l	SW846 8260D
Naphthalene		32.3	5.0	2.5	ug/l	SW846 8260D
TPH-GRO (C6-C10)		0.826	0.20	0.10	mg/l	SW846 8015D
TPH-DRO (C10-C28)		0.646	0.078	0.050	mg/l	SW846 8015D
JD29941-2	**MID**					
Xylene (total)		2.0	1.0	0.59	ug/l	SW846 8260D
JD29941-3	**EFF**					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD29941-1	**Date Sampled:**	08/11/21
Matrix:	AQ - Influent	**Date Received:**	08/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D112014.D	1	08/23/21 20:05	EH	n/a	n/a	V4D4988
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.4	0.50	0.43	ug/l	
108-88-3	Toluene	2.3	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	20.3	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	98.1	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.9	1.0	0.51	ug/l	
91-20-3	Naphthalene	32.3	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		85-118%
17060-07-0	1,2-Dichloroethane-D4	112%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	89%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD29941-1	**Date Sampled:**	08/11/21
Matrix:	AQ - Influent	**Date Received:**	08/13/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111377.D	1	08/23/21 11:48	ED	n/a	n/a	GLM4683
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.826	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	99%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD29941-1	**Date Sampled:**	08/11/21
Matrix:	AQ - Influent	**Date Received:**	08/13/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y106195.D	1	08/16/21 23:42	TL	08/16/21 12:15	OP34894	G2Y4127
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.646	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	45%		22-140%
438-22-2	5a-Androstane	36%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD29941-2	**Date Sampled:**	08/11/21
Matrix:	AQ - Water	**Date Received:**	08/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D112015.D	1	08/23/21 20:34	EH	n/a	n/a	V4D4988
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	2.0	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		85-118%
17060-07-0	1,2-Dichloroethane-D4	107%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD29941-2	**Date Sampled:**	08/11/21
Matrix:	AQ - Water	**Date Received:**	08/13/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111376.D	1	08/23/21 11:23	ED	n/a	n/a	GLM4683
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	97%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD29941-2	**Date Sampled:**	08/11/21
Matrix:	AQ - Water	**Date Received:**	08/13/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y106196.D	1	08/17/21 00:16	TL	08/16/21 12:15	OP34894	G2Y4127
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	51%		22-140%
438-22-2	5a-Androstane	51%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD29941-3	**Date Sampled:**	08/11/21
Matrix:	AQ - Effluent	**Date Received:**	08/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D112013.D	1	08/23/21 19:36	EH	n/a	n/a	V4D4988
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		85-118%
17060-07-0	1,2-Dichloroethane-D4	109%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD29941-3	**Date Sampled:**	08/11/21
Matrix:	AQ - Effluent	**Date Received:**	08/13/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111389.D	1	08/23/21 16:52	ED	n/a	n/a	GLM4683
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	101%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD29941-3	**Date Sampled:**	08/11/21
Matrix:	AQ - Effluent	**Date Received:**	08/13/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y106197.D	1	08/17/21 00:49	TL	08/16/21 12:15	OP34894	G2Y4127
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	51%		22-140%
438-22-2	5a-Androstane	45%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = 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

WW

CHAIN OF CUSTODY

ACCUTEST Laboratories
2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Page 1

FED-EX Tracking # | Bottle Order Control # None
Accutest Quote # | Accutest Job # JD29941

Client / Reporting Information

Company Name: EMS Environmental, Inc.
Address: 4550 Bath Pike
City: Bethlehem | State: PA | Zip: 18017
Project Contact: Jeremy Fox | E-mail: jfox@emsenv.com
Phone #: 610-866-7799
Samplers's Name: Brad Rohrbaugh

Project Information

Project Name: Former Hess - 20204
Street: 1613 E Joppa Road
City: Towson | State: MD
Project #: 5713
Fax #: 610-866-8195
Client Purchase Order #: 5713

Requested Analysis

8021 ☐ 602 ☐ 624 ☐ MTBE ☐ TBA ☐ NAP ☐ BTEX ☐
8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAPO ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ AE ☐ BND ☐ PAH ☐ +TIC ☐

Matrix Codes

DW- Drinking Water
GW- Ground Water
WW- Water
SW- Surface Water
SO- Soil
SL- Sludge
OI-Oil
LIQ- Other Liquid
AIR- Air
SOL-Other Solid
WP-Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # MEOH Vial #	Collection Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	MeOH	HNO3	H2SO4	NONE	NaHSO4	NaOH	ENCORE	BTEX, MTBE and Naphthalene by 8260B	TPH-GRO by 8015B	TPH-DRO by 8015B	LAB USE ONLY
1	INF	4	8/11/2021	1520	BR	WW	7	7								X	X	X	EGS
2	MID	5	8/11/2021	1510	BR	WW	7	7								X	X	X	
3	EFF	6	8/11/2021	1500	BR	WW	7	7								X	X	X	VIOS

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*
- ☒ Other 14 Day Hess Standard

Approved By:/ Date:

Emergency T/A data available VIA Lablink

Data Deliverable Information

- ☒ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other Full TIER 1
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

2 x 1L 300 mL DRO
INITIAL ASESSMENT 2A
LABEL VERIFICATION

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Brad Rohrbaugh	8-13-21 0800	1 Mike Gonnella	Mike Gonnella	8/13/21 1825	2 DL
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☐ Cooler Temp. 3.8 C IP

SGS Sample Receipt Summary

Job Number: JD29941 **Client:** _____ **Project:** _____

Date / Time Received: 8/13/2021 3:15:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JD29941: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EMS Environmental, Inc.

HESS #20204, 1613 East Joppa Road, Towson, MD

5713 PO#5713

SGS Job Number: JD30397

Sampling Date: 08/18/21

Report to:

EMS Environmental, Inc.
4550 Bath Pike
Bethlehem, PA 18017
jfox@emsenv.com

ATTN: Jeremy Fox

Total number of pages in report: 17

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

Mike Earp
General Manager

Client Service contact: Beth Wasserman 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Table of Contents

SGS North America Inc.

Sample Summary

EMS Environmental, Inc.

Job No: JD30397

HESS #20204, 1613 East Joppa Road, Towson, MD
Project No: 5713 PO#5713

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD30397-1	08/18/21	13:35	BR	08/20/21	AQ	Influent	INF
JD30397-2	08/18/21	13:25	BR	08/20/21	AQ	Water	MID
JD30397-3	08/18/21	13:15	BR	08/20/21	AQ	Effluent	EFF

Summary of Hits

Job Number: JD30397
Account: EMS Environmental, Inc.
Project: HESS #20204, 1613 East Joppa Road, Towson, MD
Collected: 08/18/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD30397-1	**INF**					
Benzene		0.99	0.50	0.43	ug/l	SW846 8260D
Toluene		1.4	1.0	0.53	ug/l	SW846 8260D
Ethylbenzene		15.3	1.0	0.60	ug/l	SW846 8260D
Xylene (total)		53.0	1.0	0.59	ug/l	SW846 8260D
Methyl Tert Butyl Ether		1.4	1.0	0.51	ug/l	SW846 8260D
Naphthalene		19.2	5.0	2.5	ug/l	SW846 8260D
TPH-GRO (C6-C10)		0.550	0.20	0.10	mg/l	SW846 8015D
TPH-DRO (C10-C28)		0.304	0.078	0.050	mg/l	SW846 8015D
JD30397-2	**MID**					
Xylene (total)		1.4	1.0	0.59	ug/l	SW846 8260D
JD30397-3	**EFF**					
Xylene (total)		0.86 J	1.0	0.59	ug/l	SW846 8260D

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD30397-1	**Date Sampled:**	08/18/21
Matrix:	AQ - Influent	**Date Received:**	08/20/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D112171.D	1	08/28/21 21:31	MD	n/a	n/a	V4D4994
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.99	0.50	0.43	ug/l	
108-88-3	Toluene	1.4	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	15.3	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	53.0	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.4	1.0	0.51	ug/l	
91-20-3	Naphthalene	19.2	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%
17060-07-0	1,2-Dichloroethane-D4	107%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD30397-1	**Date Sampled:**	08/18/21
Matrix:	AQ - Influent	**Date Received:**	08/20/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111531.D	1	08/26/21 20:55	ED	n/a	n/a	GLM4687
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.550	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	97%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD30397-1	**Date Sampled:**	08/18/21
Matrix:	AQ - Influent	**Date Received:**	08/20/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ100480.D	1	08/26/21 06:53	CP	08/25/21 14:05	OP35074	GZZ3703
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.304	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%		22-140%
438-22-2	5a-Androstane	36%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD30397-2	**Date Sampled:**	08/18/21
Matrix:	AQ - Water	**Date Received:**	08/20/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D112172.D	1	08/28/21 22:00	MD	n/a	n/a	V4D4994
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	1.4	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%
17060-07-0	1,2-Dichloroethane-D4	105%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD30397-2	**Date Sampled:**	08/18/21
Matrix:	AQ - Water	**Date Received:**	08/20/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111530.D	1	08/26/21 20:30	ED	n/a	n/a	GLM4687
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	97%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD30397-2	**Date Sampled:**	08/18/21
Matrix:	AQ - Water	**Date Received:**	08/20/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ100481.D	1	08/26/21 07:26	CP	08/25/21 14:05	OP35074	GZZ3703
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		22-140%
438-22-2	5a-Androstane	44%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD30397-3	**Date Sampled:**	08/18/21
Matrix:	AQ - Effluent	**Date Received:**	08/20/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D112169.D	1	08/28/21 20:35	MD	n/a	n/a	V4D4994
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	0.86	1.0	0.59	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%
17060-07-0	1,2-Dichloroethane-D4	106%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD30397-3	**Date Sampled:**	08/18/21
Matrix:	AQ - Effluent	**Date Received:**	08/20/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111524.D	1	08/26/21 18:02	ED	n/a	n/a	GLM4687
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	101%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD30397-3	**Date Sampled:**	08/18/21
Matrix:	AQ - Effluent	**Date Received:**	08/20/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ100482.D	1	08/26/21 08:00	CP	08/25/21 14:05	OP35074	GZZ3703
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		22-140%
438-22-2	5a-Androstane	45%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = 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

CHAIN OF CUSTODY

ACCUTEST Laboratories
2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

FED-EX Tracking #: | Bottle Order Control #: BW-021921-195
Accutest Quote #: | Accutest Job #: JD 30397

Client / Reporting Information

Company Name: EMS Environmental, Inc.
Address: 4550 Bath Pike
City: Bethlehem | State: PA | Zip: 18017
Project Contact: Jeremy Fox | E-mail: jfox@emsenv.com
Phone #: 610-866-7799
Samplers's Name: Brad Rohrbaugh

Project Information

Project Name: Former Hess - 20204
Street: 1613 E. Joppa Road
City: Towson | State: MD
Project #: 5713
Fax #: 610-866-8195
Client Purchase Order #: 5713

Requested Analysis

8260 ☐ 624 ☐ 8021 ☐ 602 ☐ BTEX ☐ MTBE ☐ TBA ☐ NAP ☐
8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAPO ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ AEO ☐ BND ☐ PAH ☐ +TICs ☐
BTEX, MTBE and Naphthalene by 8260B
TPH-GRO by 8015B
TPH-DRO by 8015B

Matrix Codes

DW- Drinking Water
GW- Ground Water
WW- Water
SW- Surface Water
SO- Soil
SL-Sludge
OI-Oil
LIQ- Other Liquid
AIR- Air
SOL-Other Solid
WP-Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	BTEX, MTBE and Naphthalene by 8260B	TPH-GRO by 8015B	TPH-DRO by 8015B	LAB USE ONLY
1	INF		8/18/2021	1335	BR	WW	7	7								X	X	X	E32
2	MID		8/18/2021	1325	BR	WW	7	7								X	X	X	V142
3	EFF		8/18/2021	1315	BR	WW	7	7								X	X	X	S

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*
- ☒ Other 14 Day Hess Standard

Approved By:/ Date:

Emergency T/A data available VIA Lablink

Data Deliverable Information

- ☒ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other Full TIER 1
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

INITIAL ASSESSMENT MK 2/1
LABEL VERIFICATION

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		8-20-21 0850	1 Robin Pemp	2 Robin Pemp	8.20.21 1710	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal # 10	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 3.9 CTP

SGS Sample Receipt Summary

Job Number: JD30397 **Client:** EMS ENVIRONMENTAL, INC. **Project:** HESS #20204, 1613 EAST JOPPA ROAD, TOW

Date / Time Received: 8/20/2021 5:10:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.9);

Cooler Temps (Corrected) °C: Cooler 1: (3.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD30397: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EMS Environmental, Inc.

HESS #20204, 1613 East Joppa Road, Towson, MD

5713 PO#5713

SGS Job Number: JD30980

Sampling Date: 09/01/21

Report to:

EMS Environmental, Inc.
4550 Bath Pike
Bethlehem, PA 18017
jfox@emsenv.com

ATTN: Jeremy Fox

Total number of pages in report: 17

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

Mike Earp
General Manager

Client Service contact: Beth Stopen 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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SGS North America Inc.

Sample Summary

EMS Environmental, Inc.

Job No: JD30980

HESS #20204, 1613 East Joppa Road, Towson, MD
Project No: 5713 PO#5713

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD30980-1	09/01/21	14:20	BR	09/03/21	AQ	Influent	INF
JD30980-2	09/01/21	14:10	BR	09/03/21	AQ	Water	MID
JD30980-3	09/01/21	14:00	BR	09/03/21	AQ	Effluent	EFF

Summary of Hits

Job Number: JD30980
Account: EMS Environmental, Inc.
Project: HESS #20204, 1613 East Joppa Road, Towson, MD
Collected: 09/01/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD30980-1	**INF**					
Benzene		1.5	0.50	0.43	ug/l	SW846 8260D
Toluene		2.2	1.0	0.53	ug/l	SW846 8260D
Ethylbenzene		12.7	1.0	0.60	ug/l	SW846 8260D
Xylene (total)		91.5	1.0	0.59	ug/l	SW846 8260D
Methyl Tert Butyl Ether		2.0	1.0	0.51	ug/l	SW846 8260D
Naphthalene		21.4	5.0	2.5	ug/l	SW846 8260D
TPH-GRO (C6-C10)		0.982	0.20	0.10	mg/l	SW846 8015D
TPH-DRO (C10-C28)		0.560	0.083	0.053	mg/l	SW846 8015D
JD30980-2	**MID**					
Ethylbenzene		0.83 J	1.0	0.60	ug/l	SW846 8260D
Xylene (total)		6.0	1.0	0.59	ug/l	SW846 8260D
TPH-GRO (C6-C10)		0.120 J	0.20	0.10	mg/l	SW846 8015D
JD30980-3	**EFF**					
Xylene (total)		1.6	1.0	0.59	ug/l	SW846 8260D
TPH-GRO (C6-C10)		0.101 J	0.20	0.10	mg/l	SW846 8015D

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD30980-1	**Date Sampled:**	09/01/21
Matrix:	AQ - Influent	**Date Received:**	09/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A212957.D	1	09/12/21 23:04	EH	n/a	n/a	V2A9270
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.5	0.50	0.43	ug/l	
108-88-3	Toluene	2.2	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	12.7	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	91.5	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.0	1.0	0.51	ug/l	
91-20-3	Naphthalene	21.4	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		85-118%
17060-07-0	1,2-Dichloroethane-D4	92%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD30980-1	**Date Sampled:**	09/01/21
Matrix:	AQ - Influent	**Date Received:**	09/03/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111808.D	1	09/09/21 18:03	ED	n/a	n/a	GLM4696
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.982	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	95%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD30980-1	**Date Sampled:**	09/01/21
Matrix:	AQ - Influent	**Date Received:**	09/03/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ100642.D	1	09/09/21 02:34	CP	09/08/21 15:15	OP35290	GZZ3711
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.560	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		22-140%
438-22-2	5a-Androstane	49%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD30980-2	**Date Sampled:**	09/01/21
Matrix:	AQ - Water	**Date Received:**	09/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A212956.D	1	09/12/21 22:36	EH	n/a	n/a	V2A9270
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	0.83	1.0	0.60	ug/l	J
1330-20-7	Xylene (total)	6.0	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		85-118%
17060-07-0	1,2-Dichloroethane-D4	91%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD30980-2	**Date Sampled:**	09/01/21
Matrix:	AQ - Water	**Date Received:**	09/03/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111805.D	1	09/09/21 16:49	ED	n/a	n/a	GLM4696
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.120	0.20	0.10	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	94%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD30980-2	**Date Sampled:**	09/01/21
Matrix:	AQ - Water	**Date Received:**	09/03/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ100643.D	1	09/09/21 03:08	CP	09/08/21 15:15	OP35290	GZZ3711
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		22-140%
438-22-2	5a-Androstane	57%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD30980-3	**Date Sampled:**	09/01/21
Matrix:	AQ - Effluent	**Date Received:**	09/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A213019.D	1	09/14/21 22:15	BK	n/a	n/a	V2A9274
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene [a]	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	1.6	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		85-118%
17060-07-0	1,2-Dichloroethane-D4	96%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD30980-3	**Date Sampled:**	09/01/21
Matrix:	AQ - Effluent	**Date Received:**	09/03/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111804.D	1	09/09/21 16:24	ED	n/a	n/a	GLM4696
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.101	0.20	0.10	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	94%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD30980-3	**Date Sampled:**	09/01/21
Matrix:	AQ - Effluent	**Date Received:**	09/03/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ100644.D	1	09/09/21 03:42	CP	09/08/21 15:15	OP35290	GZZ3711
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		22-140%
438-22-2	5a-Androstane	61%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = 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 WW

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Page 1

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # JD30980

Client / Reporting Information

Company Name	EMS Environmental, Inc.
Address	4550 Bath Pike
City / State / Zip	Bethlehem, PA 18017
Project Contact	Jeremy Fox
E-mail	jfox@emsenv.com
Phone #	610-866-7799
Samplers's Name	Brad Rohrbaugh

Project Information

Project Name	Former Hess - 20204
Street	1613 E. Joppa Road
City / State	Towson, MD
Project #	5713
Fax #	610-866-8195
Client Purchase Order #	5713

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # MEOH Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	8260 ☐ 624 ☐ 8021 ☐ 602 ☐ BTEX ☐ MTBE ☐ TBA☐ NAP ☐	8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAP☐ +10 ☐ +15 ☐	8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS☐ ABN☐ AE☐ BN☐ PAH☐ +TICs☐	BTEX, MTBE and Naphthalene by 8260B	TPH-GRO by 8015B	TPH-DRO by 8015B	LAB USE ONLY
1	INF		9/1/2021	1420	BR	WW	7	7											X	X	X	E50
2	MID		9/1/2021	1440	BR	WW	7	7											X	X	X	V213
3	EFF		9/1/2021	1450	BR	WW	7	7											X	X	X	S

Matrix Codes
DW- Drinking Water
GW- Ground Water
WW- Water
SW- Surface Water
SO- Soil
SL-Sludge
OI-Oil
LIQ- Other Liquid
AIR- Air
SOL-Other Solid
WP-Wipe

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*
- ☒ Other 14 Day Hess Standard

Approved By:/ Date:

Emergency T/A data available VIA Lablink

Data Deliverable Information

- ☒ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other Full TIER 1
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

• 2 • 300mL HCl DRO

Initial Assessment SI3A

Label Verification

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

Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
1 Brad Rohrbaugh (Sampler)	9/3/21 1120	1 Mike Gonnella	2 Mike Gonnella	9/3/21 1438	2
3		3	4		4
5		5	Custody Seal #	Preserved where applicable ☐	On Ice ☑ Cooler Temp. 3.2C IR

JD30980: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD30980 **Client:** EMS **Project:** FORMER HESS 20204

Date / Time Received: 9/3/2021 11:00:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (3.2);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD30980: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EMS Environmental, Inc.

HESS #20204, 1613 East Joppa Road, Towson, MD

5713 PO#5713

SGS Job Number: JD31224

Sampling Date: 09/08/21

Report to:

EMS Environmental, Inc.
4550 Bath Pike
Bethlehem, PA 18017
jfox@emsenv.com

ATTN: Jeremy Fox

Total number of pages in report: 17

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

Mike Earp
General Manager

Client Service contact: Beth Stopen 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Sections: 1 2 3 4

Table of Contents

SGS North America Inc.

Sample Summary

EMS Environmental, Inc.

Job No: JD31224

HESS #20204, 1613 East Joppa Road, Towson, MD
Project No: 5713 PO#5713

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD31224-1	09/08/21	13:20	BR	09/09/21	AQ	Influent	INF
JD31224-2	09/08/21	13:10	BR	09/09/21	AQ	Water	MID
JD31224-3	09/08/21	13:00	BR	09/09/21	AQ	Effluent	EFF

Summary of Hits

Job Number: JD31224
Account: EMS Environmental, Inc.
Project: HESS #20204, 1613 East Joppa Road, Towson, MD
Collected: 09/08/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD31224-1	**INF**					
Benzene		1.5	0.50	0.43	ug/l	SW846 8260D
Toluene		2.0	1.0	0.53	ug/l	SW846 8260D
Ethylbenzene		18.7	1.0	0.60	ug/l	SW846 8260D
Xylene (total)		69.5	1.0	0.59	ug/l	SW846 8260D
Methyl Tert Butyl Ether		2.1	1.0	0.51	ug/l	SW846 8260D
Naphthalene		24.5	5.0	2.5	ug/l	SW846 8260D
TPH-GRO (C6-C10)		0.741	0.20	0.10	mg/l	SW846 8015D
TPH-DRO (C10-C28)		0.566	0.078	0.050	mg/l	SW846 8015D
JD31224-2	**MID**					
No hits reported in this sample.						
JD31224-3	**EFF**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD31224-1	**Date Sampled:**	09/08/21
Matrix:	AQ - Influent	**Date Received:**	09/09/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D198801.D	1	09/20/21 18:55	JS	n/a	n/a	V2D8645
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.5	0.50	0.43	ug/l	
108-88-3	Toluene	2.0	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	18.7	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	69.5	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.1	1.0	0.51	ug/l	
91-20-3	Naphthalene	24.5	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		85-118%
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD31224-1	**Date Sampled:**	09/08/21
Matrix:	AQ - Influent	**Date Received:**	09/09/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111933.D	1	09/14/21 11:41	ED	n/a	n/a	GLM4700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.741	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	89%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF		
Lab Sample ID:	JD31224-1	**Date Sampled:**	09/08/21
Matrix:	AQ - Influent	**Date Received:**	09/09/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y106526.D	1	09/14/21 17:57	TL	09/14/21 08:35	OP35374	G2Y4140
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.566	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	50%		22-140%
438-22-2	5a-Androstane	38%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD31224-2	**Date Sampled:**	09/08/21
Matrix:	AQ - Water	**Date Received:**	09/09/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D198802.D	1	09/20/21 19:24	JS	n/a	n/a	V2D8645
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		85-118%
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD31224-2	**Date Sampled:**	09/08/21
Matrix:	AQ - Water	**Date Received:**	09/09/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111932.D	1	09/14/21 11:16	ED	n/a	n/a	GLM4700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	88%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MID		
Lab Sample ID:	JD31224-2	**Date Sampled:**	09/08/21
Matrix:	AQ - Water	**Date Received:**	09/09/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y106527.D	1	09/14/21 18:30	TL	09/14/21 08:35	OP35374	G2Y4140
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	50%		22-140%
438-22-2	5a-Androstane	41%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD31224-3	**Date Sampled:**	09/08/21
Matrix:	AQ - Effluent	**Date Received:**	09/09/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D198800.D	1	09/20/21 18:25	JS	n/a	n/a	V2D8645
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		85-118%
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD31224-3	**Date Sampled:**	09/08/21
Matrix:	AQ - Effluent	**Date Received:**	09/09/21
Method:	SW846 8015D	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM111931.D	1	09/14/21 10:51	ED	n/a	n/a	GLM4700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	89%		55-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFF		
Lab Sample ID:	JD31224-3	**Date Sampled:**	09/08/21
Matrix:	AQ - Effluent	**Date Received:**	09/09/21
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	HESS #20204, 1613 East Joppa Road, Towson, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y106528.D	1	09/14/21 19:03	TL	09/14/21 08:35	OP35374	G2Y4140
Run #2							

	Initial Volume	Final Volume
Run #1	320 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.078	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	48%		22-140%
438-22-2	5a-Androstane	43%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = 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

WW

CHAIN OF CUSTODY

ACCUTEST Laboratories
2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Page 1

FED-EX Tracking #

Bottle Order Control # BW-021921-195

Accutest Quote #

Accutest Job # JD31224

Client / Reporting Information

Company Name: EMS Environmental, Inc.
Address: 4550 Bath Pike
City: Bethlehem State: PA Zip: 18017
Project Contact: Jeremy Fox E-mail: jfox@emsenv.com
Phone #: 610-866-7799
Samplers's Name: Brad Rohrbaugh

Project Information

Project Name: Former Hess - 20204
Street: 1613 E. Joppa Road
City: Towson State: MD
Project #: 5713
Fax #: 610-866-8195
Client Purchase Order #: 5713

Requested Analysis

8260 ☐ 8021 ☐ 602 ☐ BTEX ☐ MTBE ☐ TBA ☐ NAP ☐
8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐ TBA ☐ NAPD ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐ ABN ☐ AE ☐ BND ☐ PAH ☐ +TICs ☐

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection: Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	MeOH	NaHSO4	H2SO4	NONE	NaHSO4	MEOH	ENCORE	BTEX, MTBE and Naphthalene by 8260B	TPH-GRO by 8015B	TPH-DRO by 8015B	LAB USE ONLY
1	INF		9/8/2021	1320	BR	WW	7	7								X	X	X	E43
2	MID		9/8/2021	1310	BR	WW	7	7								X	X	X	V246
3	EFF		9/8/2021	1300	BR	WW	7	7								X	X	X	

Matrix Codes

DW- Drinking Water
GW- Ground Water
WW- Water
SW- Surface Water
SO- Soil
SL- Sludge
OI-Oil
LIQ- Other Liquid
AIR- Air
SOL-Other Solid
WP-Wipe

Turnaround Time (Business days)

☐ Std. 15 Business Days
☐ 10 Day *RUSH*
☐ 6 Day *RUSH*
☐ 3 Day *EMERGENCY*
☐ 2 Day *EMERGENCY*
☐ 1 Day *EMERGENCY*
☒ Other 14 Day Hess Standard

Approved By:/ Date:

Emergency T/A data available VIA Lablink

Data Deliverable Information

☒ Commercial "A"
☐ Commercial "B"
☐ NJ Reduced
☐ NJ Full
☐ Other Full TIER 1
☐ FULL CLP
☐ NYASP Category A
☐ NYASP Category B
☐ State Forms
☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

Initial Assessment 2A.SS.
Label Verification

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Brad Rohrbaugh	9/9/21 08:30	1 MikeGonnella	2 MikeGonnella	9/9/21 1550	2
	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3			3	4		4
	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp.
5			5		☐	3,8C,P

SGS Sample Receipt Summary

Job Number: JD31224 **Client:** EMS ENVIRONMENTAL, INC. **Project:** HESS #20204, 1613 EAST JOPPA ROAD, TOWS

Date / Time Received: 9/9/2021 3:50:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD31224: Chain of Custody
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