FEDEX: 779445293296

June 22, 2017

Mr. Christopher Ralston
Maryland Department of the Environment
Remediation Division, Oil Control Program
1800 Washington Blvd., Suite 620
Baltimore, Maryland 21230

RE: Well Installation Report for MW-189D
Inactive Exxon Facility #28077
14258 Jarrettsville Pike
Phoenix, Baltimore County, Maryland
Facility I.D. No. 12342
Case No. 2006-0303-BA2

Dear Mr. Ralston:

This letter report is submitted by Kleinfelder on behalf of Exxon Mobil Environmental Services Company (ExxonMobil) to summarize monitoring well installation and sampling activities associated with MW-189D. The well was installed as proposed in the Monitoring Well Installation Work Plan – MW-189D[1] ("Work Plan"), as approved in the Maryland Department of the Environment's (MDE) November 10, 2016 Monitoring Well Installation Work Plan – MW-189D Approval.[2]

The objective of the work was to resolve a data gap identified in the Conceptual Site Model and to aid in determining whether or not a potential migration pathway exists between 3627A Southside Avenue and the 2006 release from the former Exxon station at 14258 Jarrettsville Pike.

MONITORING WELL INSTALLATION

As proposed in the Work Plan, well installation and a geophysical survey have been completed for MW-189D, located at 3605A Southside Avenue, Phoenix, MD (**Figure 1**). On December 7, 2016, the well location was cleared via airknife to a depth of eight feet. From December 12-16, 2016, the borehole was advanced with an air rotary drill rig to 384 feet below ground surface

[1] Kleinfelder, October 6, 2016, Monitoring Well Installation Work Plan – MW-189D, Inactive Exxon Facility #28077, 14258 Jarrettsville Pike, Phoenix, Baltimore County, Maryland, MDE Case # 2006-0303-BA2
[2] MDE, November 10, 2016, Monitoring Well Installation Work Plan – MW-189D Approval, Case Number 2006-0303-BA, Former Exxon R/S No. 2-8077 14258 Jarrettsville Pike, Phoenix, Baltimore County, Maryland

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(ft-bgs). The well is cased with 6" solid steel casing from 0-35 ft-bgs, 6" slotted steel casing from 35-72 ft-bgs, and is an open borehole from 72-384 ft-bgs. The boring log, including well construction, is found in **Appendix B.**

During drilling activities, groundwater was evacuated from the well at the end of each day of drilling, then sampled at the start of the next day following overnight recharge. Sample results are found **Table 1** and analytical laboratory reports are included as **Appendix A**.

GEOPHYSICAL SURVEY

MW-189D was logged on December 21, 2016 using the following borehole geophysical methods: optical televiewer, acoustic televiewer, 3-arm caliper, fluid temperature, fluid conductivity, natural gamma, and heat pulse flowmeter. Borehole geophysical results are presented in **Appendix C**.

GROUNDWATER SAMPLING

Following geophysical logging, Kleinfelder, on behalf of ExxonMobil, proposed intervals for discrete-depth HydraSleeve™ sampling.[3] MDE approved these intervals with modifications in an email on February 1, 2017.[4] HydraSleeve™ sampling was conducted in MW-189D in February, March, April and May.

[3] Kleinfelder, January 19, 2017 email re: MDE Case No. 2006-0303-BA2 / 28077 Phoenix: Discrete Interval Sampling from MW-189D.
[4] MDE, February 1, 2017 email Re: FW: MDE Case No. 2006-0303-BA2 / 28077 Phoenix: Discrete Interval Sampling from MW-189D

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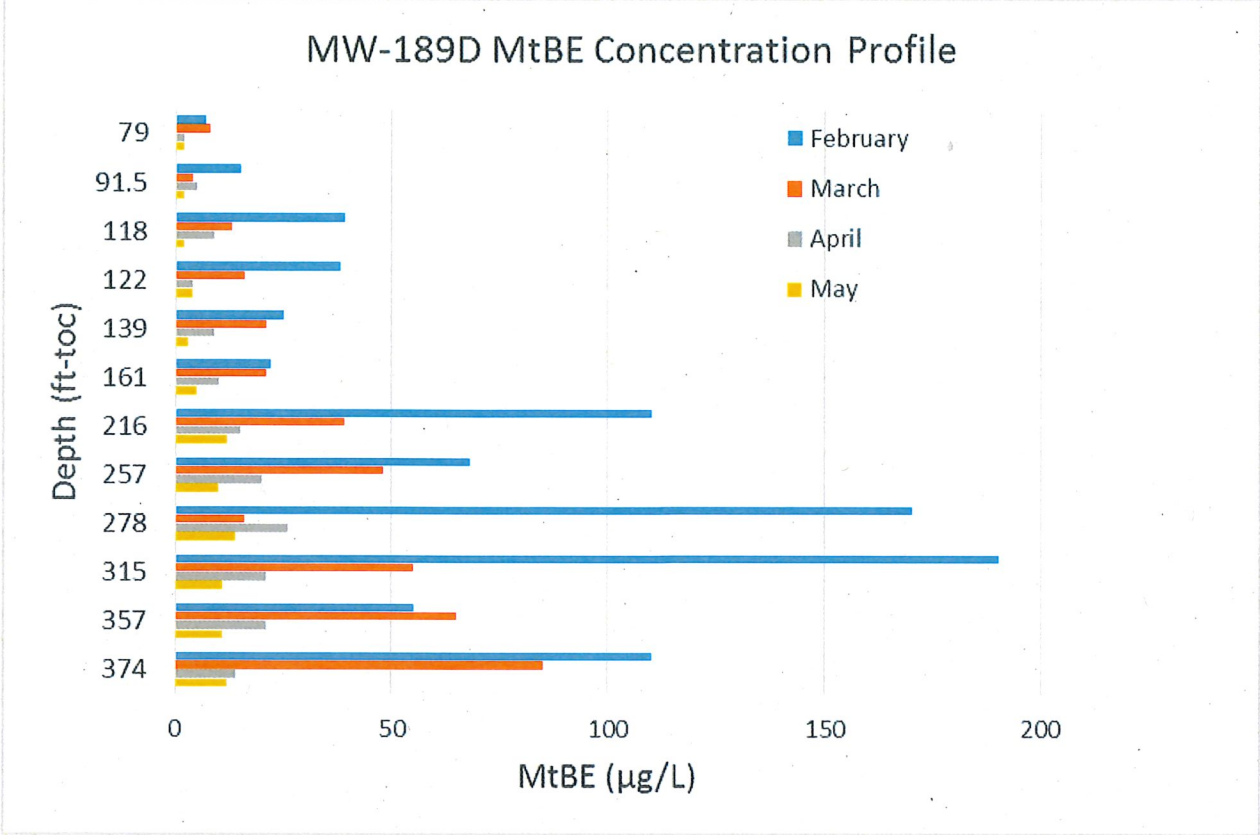

A summary of analytical results can be found on **Table 1**, and laboratory analytical reports are provided in **Appendix A**.

Please contact the undersigned with any questions or requests for additional information.

Sincerely,

KLEINFELDER

Stacey E. Schiding
Project Manager

Mark J. Schaaf, C.P.G.
Project Director

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TABLE

1 MW-189D - Analytical Data Summary

FIGURE

1 Well Location Map

APPENDICES

A Laboratory Analytical Reports
B Boring/Well Construction Log
C Geophysical Log
D Well Completion Report

cc: Mr. Clarke Bozeman – ExxonMobil (project file)
Ms. Ellen Jackson – Maryland Department of the Environment
Mr. Andrew Miller – Maryland Department of the Environment
Carlos Bollar, Esquire – Archer & Greiner, P.C.

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TABLE

Table 1

Summary of Groundwater Analytical Results
Inactive Exxon Facility #28077
14528 Jarrettsville Pike
Phoenix, Maryland

December 13, 2016 through May 4, 2017

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Comments
MW-189D(35)	12/13/2016	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	
MW-189D(65)	12/14/2016	ND(1)	ND(1)	ND(1)	ND(1)	BRL	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	
MW-189D(72)	12/15/2016	ND(1)	22	ND(1)	ND(1)	22	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	
MW-189D(277)	12/16/2016	14	ND(1)	ND(1)	18	32	450	2	7	43	5 J	
MW-189D(384)	12/19/2016	3	ND(1)	ND(1)	ND(1)	3	490	2	7	46	12 J	
MW-189D(79)	02/08/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	7	ND(1)	ND(1)	0.7 J	9	
	03/23/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	8	ND(1)	ND(1)	0.9 J	12	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	2	ND(1)	ND(1)	ND(1)	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	1 J	ND(1)	ND(1)	ND(1)	ND(5)	
MW-189D(91.5)	02/08/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	14	ND(1)	ND(1)	1	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	4	ND(1)	ND(1)	ND(1)	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	5	ND(1)	ND(1)	ND(1)	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	0.7 J	ND(1)	ND(1)	ND(1)	ND(5)	
MW-189D(117-119)	02/08/2017	ND(1)	ND(1)	ND(1)	0.5 J	0.5 J	37	ND(1)	ND(1)	3	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	13	ND(1)	ND(1)	1	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	9	ND(1)	ND(1)	0.9 J	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	6	ND(1)	ND(1)	ND(1)	ND(5)	
MW-189D(122)	02/08/2017	ND(1)	ND(1)	ND(1)	0.5 J	0.5 J	37	ND(1)	ND(1)	3	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	16	ND(1)	ND(1)	1	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	4	ND(1)	ND(1)	ND(1)	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	0.9 J	ND(1)	ND(1)	ND(1)	ND(5)	
MW-189D(138-140)	02/08/2017	ND(1)	ND(1)	ND(1)	0.6 J	0.6 J	24	ND(1)	ND(1)	2	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	21	ND(1)	ND(1)	2	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	9	ND(1)	ND(1)	0.8 J	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	3	ND(1)	ND(1)	ND(1)	ND(5)	
MW-189D(161)	02/08/2017	0.5 J	ND(1)	ND(1)	0.7 J	1.2 J	21	ND(1)	ND(1)	2	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	21	ND(1)	ND(1)	2	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	10	ND(1)	ND(1)	1	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	7	ND(1)	ND(1)	ND(1)	ND(5)	
MW-189D(216)	02/08/2017	0.9 J	ND(1)	ND(1)	1	2 J	100	0.6 J	1	8	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	0.8 J	0.8 J	39	ND(1)	0.6 J	4	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	15	ND(1)	ND(1)	2	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	4	ND(1)	ND(1)	ND(1)	ND(5)	

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Table 1

Summary of Groundwater Analytical Results
Inactive Exxon Facility #28077
14528 Jarrettsville Pike
Phoenix, Maryland

December 13, 2016 through May 4, 2017

MW-189D(256-258)	02/08/2017	0.7 J	ND(1)	ND(1)	1	2 J	65	ND(1)	0.8 J	5	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	0.9 J	0.9 J	48	ND(1)	0.7 J	4	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	20	ND(1)	ND(1)	2	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	21	ND(1)	ND(1)	2	ND(5)	
MW-189D(278)	02/08/2017	1	ND(1)	ND(1)	2	3	170	0.8 J	2	14	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	0.5 J	0.5 J	16	ND(1)	ND(1)	2	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	26	ND(1)	ND(1)	3	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	18	ND(1)	ND(1)	2	ND(5)	
MW-189D(315)	02/08/2017	2	ND(1)	ND(1)	3	5	190	1	2	16	ND(20)	
	03/23/2017	ND(1)	ND(1)	ND(1)	2	2	55	ND(1)	0.8 J	5	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	21	ND(1)	ND(1)	2	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	8	ND(1)	ND(1)	0.6 J	ND(5)	
MW-189D(357)	02/08/2017	1	ND(1)	ND(1)	2	3	53	ND(1)	0.7 J	4	ND(20)	
	03/23/2017	0.5 J	ND(1)	ND(1)	1	2 J	65	ND(1)	0.9 J	6	ND(5)	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	21	ND(1)	ND(1)	2	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	5	ND(1)	ND(1)	ND(1)	ND(5)	
MW-189D(374)	02/08/2017	1	ND(1)	ND(1)	2	3	110	0.5 J	1	9	ND(20)	
	03/23/2017	0.6 J	ND(1)	ND(1)	1	2 J	85	ND(1)	1	8	2 J	
	04/27/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	14	ND(1)	ND(1)	1	ND(5)	
	05/04/2017	ND(1)	ND(1)	ND(1)	ND(1)	BRL	4	ND(1)	ND(1)	ND(1)	ND(5)	

Notes:
[R] - Indicates the well was used for remediation at the time of reporting.
µg/L - micrograms per liter
AP - above packer
BP - below packer
BRL - Below laboratory reporting limits
BTEX - Benzene, toluene, ethylbenzene, and total xylenes
DIPE - di-isopropyl ether
ETBE - ethyl tert butyl ether
HS - Composite HydraSleeve
HS-D - deep composite HydraSleeve sampler; set at bottom of open borehole
HS-S - shallow composite HydraSleeve sampler; set at ½ of open borehole
J - Indicates an estimated value
MTBE - methyl tertiary butyl ether
NA - Not analyzed
ND(5.0) - Not detected at or above the laboratory reporting limit, laboratory reporting limit included.
NS - Not sampled
PW - Inactive supply well being used as a monitoring/sampling location
TAME - tert-amyl methyl ether
TBA - tert butyl alcohol

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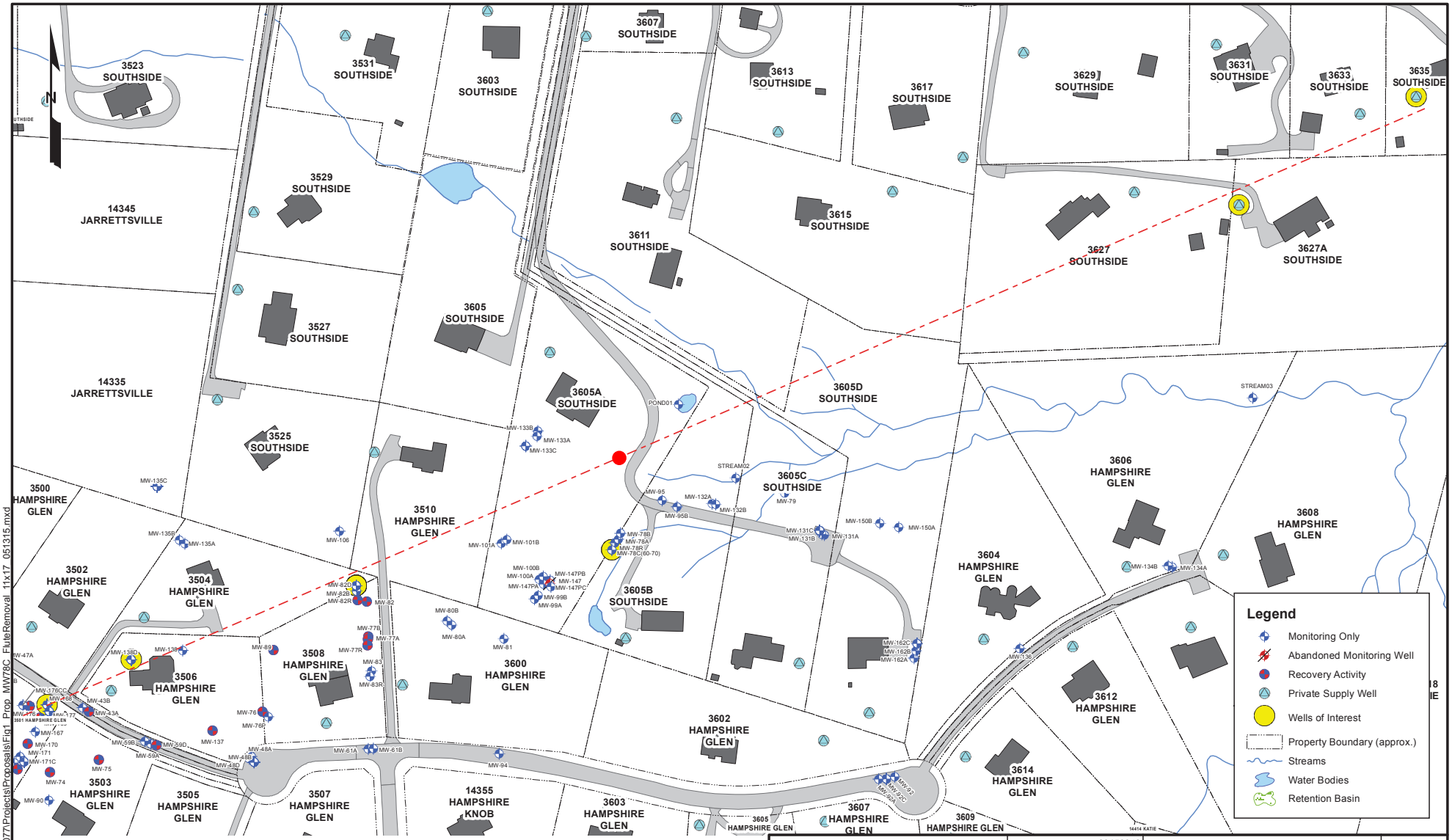
FIGURE



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PROJECT NO.	20153942
DRAWN:	5/21/2015
DRAWN BY:	B. Myers
CHECKED BY:	M. Baird
FILE NAME:	

Northeast Area Well Locations

INACTIVE EXXON FACILITY #28077
14258 JARRETTSVILLE PIKE
PHOENIX, MARYLAND
BALTIMORE COUNTY

FIGURE
1

G:\Projects\0507606-8077\Projects\Proposals\Fig1 Prop MW78C FluteRemoval 11x17 051315.mxd

APPENDIX A

Laboratory Analytical Reports

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Partial Report

Sample Description: MW-189D (35) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8744322
LL Group # 1744412
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/13/2016 09:00 by CL

Submitted: 12/14/2016 19:05
Reported: 12/15/2016 17:06

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

18935

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	22		20	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.		1	0.5	1
10335	Benzene	71-43-2	N.D.		1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.		20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.		5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	4	J	10	3	1

*=This limit was used in the evaluation of the final result

Reference ID:
1744412151216170602

Partial Report

Sample Description: MW-189D (35) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8744322
LL Group # 1744412
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/13/2016 09:00 by CL

Submitted: 12/14/2016 19:05
Reported: 12/15/2016 17:06

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

18935

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	Y163501AA	12/15/2016 11:53	Kevin A Sposito	1

Sample Description: MW-189D (65) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8744323
LL Group # 1744412
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/14/2016 08:30 by CL

Submitted: 12/14/2016 19:05
Reported: 12/15/2016 17:06

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

18965

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Reference ID:
1744412151216170602

Partial Report

Sample Description: MW-189D (65) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8744323
LL Group # 1744412
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/14/2016 08:30 by CL

Submitted: 12/14/2016 19:05
Reported: 12/15/2016 17:06

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

18965

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Reference ID:
1744412151216170602

Sample Description: MW-189D (65) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8744323
LL Group # 1744412
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/14/2016 08:30 by CL

Submitted: 12/14/2016 19:05
Reported: 12/15/2016 17:06

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

18965

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	Y163501AA	12/15/2016 12:15	Kevin A Sposito	1

Sample Description: Trip Blank Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8744324
LL Group # 1744412
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/07/2016

Submitted: 12/14/2016 19:05
Reported: 12/15/2016 17:06

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

TB141

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Reference ID:
1744412151216170602

Partial Report

Sample Description: Trip Blank Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8744324
LL Group # 1744412
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/07/2016

Submitted: 12/14/2016 19:05
Reported: 12/15/2016 17:06

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

TB141

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Reference ID:
1744412151216170602

Partial Report

Sample Description: Trip Blank Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8744324
LL Group # 1744412
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/07/2016

Submitted: 12/14/2016 19:05
Reported: 12/15/2016 17:06

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

TB141

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	Y163501AA	12/15/2016 10:25	Kevin A Sposito	1

*=This limit was used in the evaluation of the final result

Reference ID:
1744412151216170602

13459 1744412 8744322-24

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

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

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #:
Sampler(s) Name(s): Charlie Low Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix
Major Project (AFE): 28077
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: John Hoban
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City State Zip:
Attention: PO#:

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

Accutest 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	Full List VOCs +Oxy5 by 8260	LAB USE ONLY
	MW-189D (35)		12/13/16	0900	CL	GW	3	X								X	
	MW-189D (65)		12/14/16	0830	CL	GW	3	X								X	
	Trip Blank		12/7/16	—	CE	TB	2	X								X	

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [x] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [x] 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
- [ ] Other

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

Comments / Special Instructions

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	Charlie Low	12/14/16 13:10	D Duncan	D Duncan	12/14/16 1905	2
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By: 4
5	Relinquished by:	12/14/16 1905	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable

On Ice: ☑ Cooler Temp: 2.4

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 170800

Group Number(s): 1744412

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	12/14/2016 19:05
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	2
Samples Intact:	Yes	Trip Blank Type:	HCl
Missing Samples:	No	Air Quality Samples Present:	No
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 19:58 on 12/14/2016

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	2.4	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Analysis Report

Partial Report

Sample Description: MW-189D (72) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8747206
LL Group # 1745048
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/15/2016 08:00 by CL

Submitted: 12/15/2016 17:20
Reported: 12/16/2016 17:43

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

18972

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Reference ID:
1745048161216174259

Partial Report

Sample Description: MW-189D (72) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8747206
LL Group # 1745048
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/15/2016 08:00 by CL

Submitted: 12/15/2016 17:20
Reported: 12/16/2016 17:43

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

18972

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	49	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	22	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	E163503AA	12/15/2016 21:47	Sara E Johnson	1

Sample Description: Trip Blank (TB16337) Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8747207
LL Group # 1745048
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/08/2016

Submitted: 12/15/2016 17:20
Reported: 12/16/2016 17:43

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

151TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Reference ID:
1745048161216174259

Partial Report

Sample Description: Trip Blank (TB16337) Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8747207
LL Group # 1745048
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/08/2016

Submitted: 12/15/2016 17:20
Reported: 12/16/2016 17:43

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

151TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Reference ID:
1745048161216174259

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Partial Report

Sample Description: Trip Blank (TB16337) Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8747207
LL Group # 1745048
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/08/2016

Submitted: 12/15/2016 17:20
Reported: 12/16/2016 17:43

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

151TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	E163503AA	12/15/2016 21:26	Sara E Johnson	1

*=This limit was used in the evaluation of the final result

Reference ID:
1745048161216174259

13459 1745048 8747206-07

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

FED-EX Tracking #	Bottle Order Control #
Lancaster Quote #	Lancaster Job #

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #: 410-850-0049
Sampler(s) Name(s): Charlie Low Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix 28077
Major Project (AFE):
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: John Hoban
ExxonMobil Purchase Order #: Direct Bill to Exxon Mobil

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City State Zip:
Attention: PO#:

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

Lancaster 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	Full List VOCs + Oxy 5 by 8260	LAB USE ONLY
	MW-189D (72)		12/15/16	0800	CL	GW	3	X								X	
	Trip Blank (TB16337)		12/8/16	-	CE	TB	2	X								X	

Data Deliverable Information

- [X] 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
- [ ] Other

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

Comments / Special Instructions

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [X] 1 Day *EMERGENCY*

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		12/15/16 1320	1	2	12/15/16 1320	2
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Intact / Not intact	Preserved where applicable

Received By: 5 — 12/15/16 1720

On Ice: ☑ Cooler Temp. 0.6°C

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Sample Administration Receipt Documentation Log

Doc Log ID: 170950

Group Number(s): 1745048

Client: KLEINFELDER

EXXON PHOENIX 28077

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	12/15/2016 17:20
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	MD		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	2
Samples Intact:	Yes	Trip Blank Type:	HCL
Missing Samples:	No	Air Quality Samples Present:	No
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Corey Eshleman (3647) at 18:25 on 12/15/2016

Samples Chilled Details: EXXON PHOENIX 28077

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	0.6	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

Report Date: December 19, 2016

Project: 2-8077 - Phoenix, MD (GW)

Submittal Date: 12/16/2016
Group Number: 1745693
PO Number: 4410375940
Release Number: HOBAN
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LL) #
MW-189D(277) Groundwater	8750132
Trip Blank (TB16345) Water	8750133

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Kleinfelder, MD	Attn: Jen Kozak
Electronic Copy To	Kleinfelder, MD	Attn: Mike Baird
Electronic Copy To	Kleinfelder, MD	Attn: Bryan Johnson
Electronic Copy To	Kleinfelder, MD	Attn: Stacey Schiding
Electronic Copy To	Kleinfelder, MD	Attn: Shari Schoonmaker

Respectfully Submitted,

Barbara A. Weyandt
Specialist

(717) 556-7264

Sample Description: MW-189D(277) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8750132
LL Group # 1745693
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/16/2016 08:15 by CL

Submitted: 12/16/2016 14:20
Reported: 12/19/2016 17:03

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

89277

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	N.D.		20	6	1
10335	t-Amyl methyl ether	994-05-8	43		1	0.5	1
10335	Benzene	71-43-2	14		1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	5	J	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	7		1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	2		1	0.5	1
10335	Isopropylbenzene	98-82-8	1	J	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	450		10	5	10
10335	4-Methyl-2-pentanone	108-10-1	N.D.		10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(277) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8750132
LL Group # 1745693
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/16/2016 08:15 by CL

Submitted: 12/16/2016 14:20
Reported: 12/19/2016 17:03

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

89277

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.		4	2	1
10335	Naphthalene	91-20-3	3	J	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.		5	1	1
10335	Styrene	100-42-5	N.D.		5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.		1	0.5	1
10335	Toluene	108-88-3	N.D.		1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.		5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.		5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.		1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.		1	0.5	1
10335	Trichloroethene	79-01-6	N.D.		1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.		1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.		5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.		5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.		5	1	1
10335	Vinyl Chloride	75-01-4	N.D.		1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.		1	0.5	1
10335	o-Xylene	95-47-6	18		1	0.5	1
10335	Xylene (Total)	1330-20-7	18		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	E163521AA	12/17/2016 09:29	Jason M Long	1
10335	Full list + oxys + hexane	SW-846 8260B	1	E163521AA	12/17/2016 09:50	Jason M Long	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E163521AA	12/17/2016 09:29	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	E163521AA	12/17/2016 09:50	Jason M Long	10

*=This limit was used in the evaluation of the final result

Sample Description: Trip Blank (TB16345) Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8750133
LL Group # 1745693
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/15/2016

Submitted: 12/16/2016 14:20
Reported: 12/19/2016 17:03

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

161TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: Trip Blank (TB16345) Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8750133
LL Group # 1745693
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/15/2016

Submitted: 12/16/2016 14:20
Reported: 12/19/2016 17:03

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

161TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	E163521AA	12/17/2016 09:09	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E163521AA	12/17/2016 09:09	Jason M Long	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1745693
Reported: 12/19/2016 17:03

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ**	MDL
	ug/l	ug/l	ug/l
Batch number: E163521AA	Sample number(s): 8750132-8750133		
Acetone	N.D.	20	6
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
Bromobenzene	N.D.	5	1
Bromochloromethane	N.D.	5	1
Bromodichloromethane	N.D.	1	0.5
Bromoform	N.D.	4	0.5
Bromomethane	N.D.	1	0.5
2-Butanone	N.D.	10	3
t-Butyl alcohol	N.D.	20	5
n-Butylbenzene	N.D.	5	1
sec-Butylbenzene	N.D.	5	1
tert-Butylbenzene	N.D.	5	1
Carbon Disulfide	N.D.	5	1
Carbon Tetrachloride	N.D.	1	0.5
Chlorobenzene	N.D.	1	0.5
Chloroethane	N.D.	1	0.5
Chloroform	N.D.	1	0.5
Chloromethane	N.D.	1	0.5
2-Chlorotoluene	N.D.	5	1
4-Chlorotoluene	N.D.	5	1
1,2-Dibromo-3-chloropropane	N.D.	5	2
Dibromochloromethane	N.D.	1	0.5
1,2-Dibromoethane	N.D.	1	0.5
Dibromomethane	N.D.	1	0.5
1,2-Dichlorobenzene	N.D.	5	1
1,3-Dichlorobenzene	N.D.	5	1
1,4-Dichlorobenzene	N.D.	5	1
Dichlorodifluoromethane	N.D.	1	0.5
1,1-Dichloroethane	N.D.	1	0.5
1,2-Dichloroethane	N.D.	1	0.5
1,1-Dichloroethene	N.D.	1	0.5
cis-1,2-Dichloroethene	N.D.	1	0.5
trans-1,2-Dichloroethene	N.D.	1	0.5
1,2-Dichloropropane	N.D.	1	0.5
1,3-Dichloropropane	N.D.	1	0.5
2,2-Dichloropropane	N.D.	1	0.5
1,1-Dichloropropene	N.D.	5	1
cis-1,3-Dichloropropene	N.D.	1	0.5
trans-1,3-Dichloropropene	N.D.	1	0.5

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1745693
Reported: 12/19/2016 17:03

Method Blank (continued)

Analysis Name	Result ug/l	LOQ** ug/l	MDL ug/l
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
Hexachlorobutadiene	N.D.	5	2
n-Hexane	N.D.	5	2
2-Hexanone	N.D.	10	3
di-Isopropyl ether	N.D.	1	0.5
Isopropylbenzene	N.D.	5	1
p-Isopropyltoluene	N.D.	5	1
Methyl Tertiary Butyl Ether	N.D.	1	0.5
4-Methyl-2-pentanone	N.D.	10	3
Methylene Chloride	N.D.	4	2
Naphthalene	N.D.	5	1
n-Propylbenzene	N.D.	5	1
Styrene	N.D.	5	1
1,1,1,2-Tetrachloroethane	N.D.	1	0.5
1,1,2,2-Tetrachloroethane	N.D.	1	0.5
Tetrachloroethene	N.D.	1	0.5
Toluene	N.D.	1	0.5
1,2,3-Trichlorobenzene	N.D.	5	1
1,2,4-Trichlorobenzene	N.D.	5	1
1,1,1-Trichloroethane	N.D.	1	0.5
1,1,2-Trichloroethane	N.D.	1	0.5
Trichloroethene	N.D.	1	0.5
Trichlorofluoromethane	N.D.	1	0.5
1,2,3-Trichloropropane	N.D.	5	1
1,2,4-Trimethylbenzene	N.D.	5	1
1,3,5-Trimethylbenzene	N.D.	5	1
Vinyl Chloride	N.D.	1	0.5
m+p-Xylene	N.D.	1	0.5
o-Xylene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: E163521AA	Sample number(s): 8750132-8750133								
Acetone	150	132.09	150	135.29	88	90	50-168	2	30
t-Amyl methyl ether	20	19.04	20	19.17	95	96	67-120	1	30
Benzene	20	19.63	20	19.43	98	97	78-120	1	30
Bromobenzene	20	18.88	20	18.8	94	94	80-120	0	30
Bromochloromethane	20	18.84	20	18.71	94	94	80-125	1	30
Bromodichloromethane	20	18.06	20	17.77	90	89	80-120	2	30
Bromoform	20	15.44	20	15.33	77	77	59-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation
Reported: 12/19/2016 17:03

Group Number: 1745693

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bromomethane	20	20.63	20	20.47	103	102	55-123	1	30
2-Butanone	150	142.86	150	141.03	95	94	57-145	1	30
t-Butyl alcohol	200	188.04	200	191.27	94	96	70-128	2	30
n-Butylbenzene	20	16.92	20	17.02	85	85	68-120	1	30
sec-Butylbenzene	20	17.71	20	17.8	89	89	77-120	0	30
tert-Butylbenzene	20	18.02	20	17.91	90	90	74-121	1	30
Carbon Disulfide	20	20.02	20	19.9	100	100	58-120	1	30
Carbon Tetrachloride	20	17.92	20	18.12	90	91	74-130	1	30
Chlorobenzene	20	19.14	20	18.6	96	93	80-120	3	30
Chloroethane	20	22.16	20	21.97	111	110	56-120	1	30
Chloroform	20	19.13	20	18.83	96	94	80-120	2	30
Chloromethane	20	19.3	20	19.14	97	96	59-127	1	30
2-Chlorotoluene	20	18.26	20	18.65	91	93	80-120	2	30
4-Chlorotoluene	20	18.83	20	18.69	94	93	80-120	1	30
1,2-Dibromo-3-chloropropane	20	14.91	20	15.65	75	78	59-120	5	30
Dibromochloromethane	20	17.3	20	16.94	86	85	78-120	2	30
1,2-Dibromoethane	20	19.75	20	19.18	99	96	80-120	3	30
Dibromomethane	20	18.96	20	18.62	95	93	80-120	2	30
1,2-Dichlorobenzene	20	18.02	20	18.08	90	90	80-120	0	30
1,3-Dichlorobenzene	20	18.07	20	17.96	90	90	80-120	1	30
1,4-Dichlorobenzene	20	18.32	20	18.23	92	91	80-120	0	30
Dichlorodifluoromethane	20	18.68	20	18.19	93	91	49-134	3	30
1,1-Dichloroethane	20	20	20	19.47	100	97	80-120	3	30
1,2-Dichloroethane	20	18.43	20	18.35	92	92	66-128	0	30
1,1-Dichloroethene	20	19.29	20	19.23	96	96	76-124	0	30
cis-1,2-Dichloroethene	20	19.5	20	19.31	98	97	80-120	1	30
trans-1,2-Dichloroethene	20	19.91	20	19.96	100	100	80-120	0	30
1,2-Dichloropropane	20	19.99	20	19.79	100	99	80-120	1	30
1,3-Dichloropropane	20	19.5	20	19.38	98	97	80-120	1	30
2,2-Dichloropropane	20	18.71	20	18.62	94	93	66-128	0	30
1,1-Dichloropropene	20	18.79	20	18.26	94	91	78-120	3	30
cis-1,3-Dichloropropene	20	18.24	20	18.63	91	93	80-120	2	30
trans-1,3-Dichloropropene	20	17.92	20	17.85	90	89	76-120	0	30
Ethyl t-butyl ether	20	19.62	20	19.61	98	98	69-120	0	30
Ethylbenzene	20	19.47	20	18.83	97	94	78-120	3	30
Hexachlorobutadiene	20	14.43	20	14.94	72	75	61-127	3	30
n-Hexane	20	20.2	20	20.33	101	102	62-144	1	30
2-Hexanone	100	98.39	100	97.43	98	97	49-146	1	30
di-Isopropyl ether	20	20.97	20	21.06	105	105	70-124	0	30
Isopropylbenzene	20	18.99	20	18.49	95	92	80-120	3	30
p-Isopropyltoluene	20	17.01	20	16.88	85	84	76-120	1	30
Methyl Tertiary Butyl Ether	20	19.77	20	19.67	99	98	75-120	1	30
4-Methyl-2-pentanone	100	99.26	100	99.57	99	100	55-141	0	30
Methylene Chloride	20	19.1	20	18.93	96	95	80-120	1	30
Naphthalene	20	14.71	20	15.51	74	78	59-120	5	30
n-Propylbenzene	20	19.47	20	19.19	97	96	79-121	1	30
Styrene	20	18.15	20	17.98	91	90	80-120	1	30
1,1,1,2-Tetrachloroethane	20	17.9	20	17.63	90	88	80-120	2	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1745693
Reported: 12/19/2016 17:03

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,2,2-Tetrachloroethane	20	19.01	20	19.01	95	95	72-120	0	30
Tetrachloroethene	20	19.17	20	18.73	96	94	80-129	2	30
Toluene	20	19.3	20	19.1	97	95	80-120	1	30
1,2,3-Trichlorobenzene	20	14.1	20	15.05	71	75	69-120	6	30
1,2,4-Trichlorobenzene	20	15.54	20	15.66	78	78	72-120	1	30
1,1,1-Trichloroethane	20	16.16	20	16.25	81	81	66-126	1	30
1,1,2-Trichloroethane	20	19.07	20	18.77	95	94	80-120	2	30
Trichloroethene	20	19.61	20	19.04	98	95	80-120	3	30
Trichlorofluoromethane	20	21.24	20	21.02	106	105	67-129	1	30
1,2,3-Trichloropropane	20	20.33	20	20.2	102	101	80-120	1	30
1,2,4-Trimethylbenzene	20	18.01	20	18.11	90	91	75-120	1	30
1,3,5-Trimethylbenzene	20	18.22	20	18.22	91	91	75-120	0	30
Vinyl Chloride	20	21.3	20	21.75	107	109	63-121	2	30
m+p-Xylene	40	37.91	40	37.39	95	93	80-120	1	30
o-Xylene	20	18.6	20	18.25	93	91	80-120	2	30
Xylene (Total)	60	56.51	60	55.63	94	93	80-120	2	30

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: E163521AA	Sample number(s): 8750132-8750133 UNSPK: P735604									
Acetone	14.67	150	149.24	150	154.12	90	93	50-168	3	30
t-Amyl methyl ether	N.D.	20	20	20	20.04	100	100	67-120	0	30
Benzene	54.65	20	74.23	20	82.19	98	138*	78-120	10	30
Bromobenzene	N.D.	20	19.97	20	20.61	100	103	80-120	3	30
Bromochloromethane	N.D.	20	19.83	20	19.91	99	100	80-125	0	30
Bromodichloromethane	N.D.	20	20.13	20	20.53	101	103	80-120	2	30
Bromoform	N.D.	20	15.61	20	15.72	78	79	59-120	1	30
Bromomethane	N.D.	20	19.6	20	19.75	98	99	55-123	1	30
2-Butanone	14.4	150	155.34	150	150.45	94	91	57-145	3	30
t-Butyl alcohol	5.04	200	179.9	200	181.09	87	88	70-128	1	30
n-Butylbenzene	4.67	20	22.95	20	22.21	91	88	68-120	3	30
sec-Butylbenzene	4.20	20	23.56	20	22.95	97	94	77-120	3	30
tert-Butylbenzene	N.D.	20	19.61	20	19.64	98	98	74-121	0	30
Carbon Disulfide	N.D.	20	22.14	20	22.89	111	114	58-120	3	30
Carbon Tetrachloride	N.D.	20	20.54	20	21.01	103	105	74-130	2	30
Chlorobenzene	N.D.	20	20.16	20	20.23	101	101	80-120	0	30
Chloroethane	N.D.	20	21.76	20	22.03	109	110	56-120	1	30
Chloroform	N.D.	20	24.26	20	24.75	121*	124*	80-120	2	30
Chloromethane	N.D.	20	18.99	20	19.41	95	97	59-127	2	30

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1745693
Reported: 12/19/2016 17:03

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
2-Chlorotoluene	N.D.	20	20.07	20	20.72	100	104	80-120	3	30
4-Chlorotoluene	N.D.	20	20.01	20	20.11	100	101	80-120	0	30
1,2-Dibromo-3-chloropropane	N.D.	20	19.58	20	20.54	98	103	59-120	5	30
Dibromochloromethane	N.D.	20	17.43	20	17.82	87	89	78-120	2	30
1,2-Dibromoethane	N.D.	20	19.87	20	20.11	99	101	80-120	1	30
Dibromomethane	N.D.	20	19.94	20	20.33	100	102	80-120	2	30
1,2-Dichlorobenzene	N.D.	20	18.8	20	19.11	94	96	80-120	2	30
1,3-Dichlorobenzene	N.D.	20	18.84	20	19.04	94	95	80-120	1	30
1,4-Dichlorobenzene	N.D.	20	19.04	20	19.32	95	97	80-120	2	30
Dichlorodifluoromethane	N.D.	20	20.12	20	20.17	101	101	49-134	0	30
1,1-Dichloroethane	N.D.	20	21.97	20	22.59	110	113	80-120	3	30
1,2-Dichloroethane	N.D.	20	21.24	20	21.8	106	109	66-128	3	30
1,1-Dichloroethene	N.D.	20	22.83	20	22.98	114	115	76-124	1	30
cis-1,2-Dichloroethene	N.D.	20	20.92	20	21.3	105	106	80-120	2	30
trans-1,2-Dichloroethene	N.D.	20	22.12	20	22.31	111	112	80-120	1	30
1,2-Dichloropropane	N.D.	20	22.83	20	22.99	114	115	80-120	1	30
1,3-Dichloropropane	N.D.	20	20.18	20	20.44	101	102	80-120	1	30
2,2-Dichloropropane	N.D.	20	20.82	20	21.45	104	107	66-128	3	30
1,1-Dichloropropene	N.D.	20	21.06	20	21.63	105	108	78-120	3	30
cis-1,3-Dichloropropene	N.D.	20	19.41	20	19.96	97	100	80-120	3	30
trans-1,3-Dichloropropene	N.D.	20	18.77	20	19.58	94	98	76-120	4	30
Ethyl t-butyl ether	N.D.	20	20.26	20	20.91	101	105	69-120	3	30
Ethylbenzene	4.40	20	24.8	20	25.09	102	103	78-120	1	30
Hexachlorobutadiene	N.D.	20	15.57	20	16.14	78	81	61-127	4	30
n-Hexane	4.74	20	28.37	20	27.44	118	113	62-144	3	30
2-Hexanone	N.D.	100	109.11	100	111.57	109	112	49-146	2	30
di-Isopropyl ether	N.D.	20	21.8	20	22.23	109	111	70-124	2	30
Isopropylbenzene	20.19	20	39.81	20	38.15	98	90	80-120	4	30
p-Isopropyltoluene	1.38	20	19.76	20	19.28	92	89	76-120	2	30
Methyl Tertiary Butyl Ether	N.D.	20	20.13	20	20.54	101	103	75-120	2	30
4-Methyl-2-pentanone	N.D.	100	105.6	100	110.04	106	110	55-141	4	30
Methylene Chloride	N.D.	20	20.97	20	22.04	105	110	80-120	5	30
Naphthalene	4.34	20	20.23	20	20.79	79	82	59-120	3	30
n-Propylbenzene	57.4	20	75.32	20	70.07	90	63*	79-121	7	30
Styrene	N.D.	20	19.39	20	19.7	97	99	80-120	2	30
1,1,1,2-Tetrachloroethane	N.D.	20	18.24	20	18.61	91	93	80-120	2	30
1,1,2,2-Tetrachloroethane	N.D.	20	20.42	20	20.69	102	103	72-120	1	30
Tetrachloroethene	N.D.	20	20.87	20	20.7	104	103	80-129	1	30
Toluene	9.97	20	30.24	20	31.31	101	107	80-120	3	30
1,2,3-Trichlorobenzene	N.D.	20	14.69	20	15.52	73	78	69-120	6	30
1,2,4-Trichlorobenzene	N.D.	20	16.36	20	16.54	82	83	72-120	1	30
1,1,1-Trichloroethane	N.D.	20	18.05	20	18.5	90	92	66-126	2	30
1,1,2-Trichloroethane	N.D.	20	24.75	20	24.66	124*	123*	80-120	0	30
Trichloroethene	N.D.	20	23.92	20	23.44	120	117	80-120	2	30
Trichlorofluoromethane	N.D.	20	21.91	20	21.96	110	110	67-129	0	30
1,2,3-Trichloropropane	N.D.	20	20.22	20	20.6	101	103	80-120	2	30

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P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1745693
Reported: 12/19/2016 17:03

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,2,4-Trimethylbenzene	3.59	20	22.71	20	22.8	96	96	75-120	0	30
1,3,5-Trimethylbenzene	1.09	20	20.59	20	20.74	98	98	75-120	1	30
Vinyl Chloride	N.D.	20	22.17	20	22.47	111	112	63-121	1	30
m+p-Xylene	15.81	40	56.81	40	55.65	102	100	80-120	2	30
o-Xylene	5.65	20	24.78	20	24.88	96	96	80-120	0	30
Xylene (Total)	21.46	60	81.58	60	80.54	100	98	80-120	1	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Full list + oxys + hexane
Batch number: E163521AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8750132	95	98	99	97
8750133	95	98	99	97
Blank	97	99	99	96
LCS	98	98	100	98
LCSD	97	101	99	98
MS	96	98	100	100
MSD	97	101	100	100
Limits:	80-116	77-113	80-113	78-113

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P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

13459 1745693 6750132-33

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

FED-EX Tracking #	Bottle Order Control #
Lancaster Quote #	Lancaster Job #

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #: 410-850-0049
Sampler(s) Name(s): Charlie Low Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix 28077
Major Project (AFE):
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: John Hoban
ExxonMobil Purchase Order #: Direct Bill to Exxon Mobil

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City: State: Zip:
Attention: PO#

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

Lancaster 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	Full List VOCs + Oxy 5 by 8260	LAB USE ONLY
	MW-189D(277)		12/16/16	0815	CL	GW	3	X								X	
	Trip Blank CTB (6345)		12/13/16	-	CL	TB	2	X								X	

Data Deliverable Information

- [X] 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
- [ ] Other

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

Comments / Special Instructions

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 6 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [X] 1 Day *EMERGENCY*

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	Charlie Low	12/16/16 1235				
2					12/16/16 1420	
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	12/16/16 1422		Custody Seal #	Intact / Not Intact	Preserved where applicable / On Ice / Cooler Temp.

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Sample Administration Receipt Documentation Log

Doc Log ID: 171089

Group Number(s): 745603

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	12/16/2016 14:20
Number of Packages:	1	Number of Projects:	3
State/Province of Origin:	MD		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	No	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 16:05 on 12/16/2016

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	0.5	DT	Wet	Y	Loose	N

Samples Not Intact Details

Sample ID on Label	Bottle Code	Bottle Quantity	Container Salvageable?	Comments
MW-189	40 ml glass vial (GC/MS) - HCl	1	N	

2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

Report Date: December 21, 2016

Project: 2-8077 - Phoenix, MD (GW)

Submittal Date: 12/20/2016
Group Number: 1746798
PO Number: 4410375940
Release Number: HOBAN
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LL) #
MW-189D (384) Groundwater	8755297
Trip Blank (TB16345) Water	8755298

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Kleinfelder, MD	Attn: Jen Kozak
Electronic Copy To	Kleinfelder, MD	Attn: Mike Baird
Electronic Copy To	Kleinfelder, MD	Attn: Bryan Johnson
Electronic Copy To	Kleinfelder, MD	Attn: Stacey Schiding
Electronic Copy To	Kleinfelder, MD	Attn: Shari Schoonmaker

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

Sample Description: MW-189D (384) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8755297
LL Group # 1746798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/19/2016 08:00 by CL

Submitted: 12/20/2016 18:15
Reported: 12/21/2016 23:44

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

89384

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	N.D.		20	6	1
10335	t-Amyl methyl ether	994-05-8	46		1	0.5	1
10335	Benzene	71-43-2	3		1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	12	J	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	7		1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	2		1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.		5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	490		10	5	10
10335	4-Methyl-2-pentanone	108-10-1	N.D.		10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D (384) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8755297
LL Group # 1746798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/19/2016 08:00 by CL

Submitted: 12/20/2016 18:15
Reported: 12/21/2016 23:44

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

89384

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	N163561AA	12/21/2016 12:13	Linda C Pape	1
10335	Full list + oxys + hexane	SW-846 8260B	1	N163561AA	12/21/2016 12:37	Linda C Pape	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N163561AA	12/21/2016 12:13	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	N163561AA	12/21/2016 12:37	Linda C Pape	10

*=This limit was used in the evaluation of the final result

Sample Description: Trip Blank (TB16345) Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8755298
LL Group # 1746798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/15/2016

Submitted: 12/20/2016 18:15
Reported: 12/21/2016 23:44

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

201TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: Trip Blank (TB16345) Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8755298
LL Group # 1746798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 12/15/2016

Submitted: 12/20/2016 18:15
Reported: 12/21/2016 23:44

ExxonMobil-Global Remediation
7715 Crittenden Street
#309
Phildelphia PA 19118

201TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	N163561AA	12/21/2016 11:50	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N163561AA	12/21/2016 11:50	Linda C Pape	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1746798
Reported: 12/21/2016 23:44

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ**	MDL
	ug/l	ug/l	ug/l
Batch number: N163561AA	Sample number(s): 8755297-8755298		
Acetone	N.D.	20	6
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
Bromobenzene	N.D.	5	1
Bromochloromethane	N.D.	5	1
Bromodichloromethane	N.D.	1	0.5
Bromoform	N.D.	4	0.5
Bromomethane	N.D.	1	0.5
2-Butanone	N.D.	10	3
t-Butyl alcohol	N.D.	20	5
n-Butylbenzene	N.D.	5	1
sec-Butylbenzene	N.D.	5	1
tert-Butylbenzene	N.D.	5	1
Carbon Disulfide	N.D.	5	1
Carbon Tetrachloride	N.D.	1	0.5
Chlorobenzene	N.D.	1	0.5
Chloroethane	N.D.	1	0.5
Chloroform	N.D.	1	0.5
Chloromethane	N.D.	1	0.5
2-Chlorotoluene	N.D.	5	1
4-Chlorotoluene	N.D.	5	1
1,2-Dibromo-3-chloropropane	N.D.	5	2
Dibromochloromethane	N.D.	1	0.5
1,2-Dibromoethane	N.D.	1	0.5
Dibromomethane	N.D.	1	0.5
1,2-Dichlorobenzene	N.D.	5	1
1,3-Dichlorobenzene	N.D.	5	1
1,4-Dichlorobenzene	N.D.	5	1
Dichlorodifluoromethane	N.D.	1	0.5
1,1-Dichloroethane	N.D.	1	0.5
1,2-Dichloroethane	N.D.	1	0.5
1,1-Dichloroethene	N.D.	1	0.5
cis-1,2-Dichloroethene	N.D.	1	0.5
trans-1,2-Dichloroethene	N.D.	1	0.5
1,2-Dichloropropane	N.D.	1	0.5
1,3-Dichloropropane	N.D.	1	0.5
2,2-Dichloropropane	N.D.	1	0.5
1,1-Dichloropropene	N.D.	5	1
cis-1,3-Dichloropropene	N.D.	1	0.5
trans-1,3-Dichloropropene	N.D.	1	0.5

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1746798
Reported: 12/21/2016 23:44

Method Blank (continued)

Analysis Name	Result	LOQ**	MDL
	ug/l	ug/l	ug/l
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
Hexachlorobutadiene	N.D.	5	2
n-Hexane	N.D.	5	2
2-Hexanone	N.D.	10	3
di-Isopropyl ether	N.D.	1	0.5
Isopropylbenzene	N.D.	5	1
p-Isopropyltoluene	N.D.	5	1
Methyl Tertiary Butyl Ether	N.D.	1	0.5
4-Methyl-2-pentanone	N.D.	10	3
Methylene Chloride	N.D.	4	2
Naphthalene	N.D.	5	1
n-Propylbenzene	N.D.	5	1
Styrene	N.D.	5	1
1,1,1,2-Tetrachloroethane	N.D.	1	0.5
1,1,2,2-Tetrachloroethane	N.D.	1	0.5
Tetrachloroethene	N.D.	1	0.5
Toluene	N.D.	1	0.5
1,2,3-Trichlorobenzene	N.D.	5	1
1,2,4-Trichlorobenzene	N.D.	5	1
1,1,1-Trichloroethane	N.D.	1	0.5
1,1,2-Trichloroethane	N.D.	1	0.5
Trichloroethene	N.D.	1	0.5
Trichlorofluoromethane	N.D.	1	0.5
1,2,3-Trichloropropane	N.D.	5	1
1,2,4-Trimethylbenzene	N.D.	5	1
1,3,5-Trimethylbenzene	N.D.	5	1
Vinyl Chloride	N.D.	1	0.5
m+p-Xylene	N.D.	1	0.5
o-Xylene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: N163561AA	Sample number(s): 8755297-8755298								
Acetone	150	130.9			87		50-168		
t-Amyl methyl ether	20	20.7			103		67-120		
Benzene	20	22.07			110		78-120		
Bromobenzene	20	20.14			101		80-120		
Bromochloromethane	20	22.49			112		80-125		
Bromodichloromethane	20	21.5			108		80-120		
Bromoform	20	18.61			93		59-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1746798
Reported: 12/21/2016 23:44

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bromomethane	20	16.44			82		55-123		
2-Butanone	150	173.77			116		57-145		
t-Butyl alcohol	200	205.48			103		70-128		
n-Butylbenzene	20	20.09			100		68-120		
sec-Butylbenzene	20	20.89			104		77-120		
tert-Butylbenzene	20	20.17			101		74-121		
Carbon Disulfide	20	20.04			100		58-120		
Carbon Tetrachloride	20	22.87			114		74-130		
Chlorobenzene	20	20.89			104		80-120		
Chloroethane	20	17.9			90		56-120		
Chloroform	20	21.93			110		80-120		
Chloromethane	20	18.89			94		59-127		
2-Chlorotoluene	20	20.55			103		80-120		
4-Chlorotoluene	20	20.07			100		80-120		
1,2-Dibromo-3-chloropropane	20	17.11			86		59-120		
Dibromochloromethane	20	18.73			94		78-120		
1,2-Dibromoethane	20	20.43			102		80-120		
Dibromomethane	20	21.61			108		80-120		
1,2-Dichlorobenzene	20	20.21			101		80-120		
1,3-Dichlorobenzene	20	19.84			99		80-120		
1,4-Dichlorobenzene	20	20.1			100		80-120		
Dichlorodifluoromethane	20	15.39			77		49-134		
1,1-Dichloroethane	20	21.85			109		80-120		
1,2-Dichloroethane	20	21.65			108		66-128		
1,1-Dichloroethene	20	21.86			109		76-124		
cis-1,2-Dichloroethene	20	22.11			111		80-120		
trans-1,2-Dichloroethene	20	22.31			112		80-120		
1,2-Dichloropropane	20	21.98			110		80-120		
1,3-Dichloropropane	20	19.8			99		80-120		
2,2-Dichloropropane	20	21.93			110		66-128		
1,1-Dichloropropene	20	21.04			105		78-120		
cis-1,3-Dichloropropene	20	21.56			108		80-120		
trans-1,3-Dichloropropene	20	20.07			100		76-120		
Ethyl t-butyl ether	20	21.06			105		69-120		
Ethylbenzene	20	21.04			105		78-120		
Hexachlorobutadiene	20	17.9			89		61-127		
n-Hexane	20	20.13			101		62-144		
2-Hexanone	100	106.89			107		49-146		
di-Isopropyl ether	20	21.33			107		70-124		
Isopropylbenzene	20	21.67			108		80-120		
p-Isopropyltoluene	20	20.55			103		76-120		
Methyl Tertiary Butyl Ether	20	21.09			105		75-120		
4-Methyl-2-pentanone	100	113.49			113		55-141		
Methylene Chloride	20	21.24			106		80-120		
Naphthalene	20	16			80		59-120		
n-Propylbenzene	20	20.89			104		79-121		
Styrene	20	21			105		80-120		
1,1,1,2-Tetrachloroethane	20	20.08			100		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
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Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1746798
Reported: 12/21/2016 23:44

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,2,2-Tetrachloroethane	20	19.44			97		72-120		
Tetrachloroethene	20	21.39			107		80-129		
Toluene	20	20.92			105		80-120		
1,2,3-Trichlorobenzene	20	17.25			86		69-120		
1,2,4-Trichlorobenzene	20	18.34			92		72-120		
1,1,1-Trichloroethane	20	20.18			101		66-126		
1,1,2-Trichloroethane	20	20.14			101		80-120		
Trichloroethene	20	22.1			110		80-120		
Trichlorofluoromethane	20	19.06			95		67-129		
1,2,3-Trichloropropane	20	20.01			100		80-120		
1,2,4-Trimethylbenzene	20	20.16			101		75-120		
1,3,5-Trimethylbenzene	20	20.61			103		75-120		
Vinyl Chloride	20	21.31			107		63-121		
m+p-Xylene	40	42.35			106		80-120		
o-Xylene	20	20.57			103		80-120		
Xylene (Total)	60	62.92			105		80-120		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: N163561AA	Sample number(s): 8755297-8755298 UNSPK: P745989									
Acetone	N.D.	150	124.44	150	131.41	83	88	50-168	5	30
t-Amyl methyl ether	N.D.	20	20.5	20	21.28	103	106	67-120	4	30
Benzene	N.D.	20	22.78	20	23.44	114	117	78-120	3	30
Bromobenzene	N.D.	20	19.43	20	20.1	97	101	80-120	3	30
Bromochloromethane	N.D.	20	22.27	20	23.14	111	116	80-125	4	30
Bromodichloromethane	1.47	20	23.04	20	23.77	108	111	80-120	3	30
Bromoform	N.D.	20	16.75	20	17.93	84	90	59-120	7	30
Bromomethane	N.D.	20	17.58	20	18.71	88	94	55-123	6	30
2-Butanone	N.D.	150	167.14	150	171.66	111	114	57-145	3	30
t-Butyl alcohol	N.D.	200	192.85	200	200.86	96	100	70-128	4	30
n-Butylbenzene	N.D.	20	18.16	20	18.76	91	94	68-120	3	30
sec-Butylbenzene	N.D.	20	19.63	20	20.27	98	101	77-120	3	30
tert-Butylbenzene	N.D.	20	19.5	20	20.38	98	102	74-121	4	30
Carbon Disulfide	N.D.	20	22.25	20	21.68	111	108	58-120	3	30
Carbon Tetrachloride	N.D.	20	23.97	20	24.81	120	124	74-130	3	30
Chlorobenzene	N.D.	20	21.03	20	21.67	105	108	80-120	3	30
Chloroethane	N.D.	20	20.44	20	21.22	102	106	56-120	4	30
Chloroform	2.52	20	25.32	20	26.1	114	118	80-120	3	30
Chloromethane	N.D.	20	23.34	20	23.45	117	117	59-127	0	30

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P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1746798
Reported: 12/21/2016 23:44

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
2-Chlorotoluene	N.D.	20	21.47	20	22.25	107	111	80-120	4	30
4-Chlorotoluene	N.D.	20	20.2	20	20.75	101	104	80-120	3	30
1,2-Dibromo-3-chloropropane	N.D.	20	16.2	20	16.53	81	83	59-120	2	30
Dibromochloromethane	0.816	20	19.21	20	19.89	92	95	78-120	3	30
1,2-Dibromoethane	N.D.	20	19.73	20	20.66	99	103	80-120	5	30
Dibromomethane	N.D.	20	21.57	20	22.32	108	112	80-120	3	30
1,2-Dichlorobenzene	N.D.	20	19.29	20	20.09	96	100	80-120	4	30
1,3-Dichlorobenzene	N.D.	20	19.19	20	19.87	96	99	80-120	3	30
1,4-Dichlorobenzene	N.D.	20	19.56	20	19.94	98	100	80-120	2	30
Dichlorodifluoromethane	N.D.	20	16.35	20	17.15	82	86	49-134	5	30
1,1-Dichloroethane	N.D.	20	22.38	20	23.03	112	115	80-120	3	30
1,2-Dichloroethane	N.D.	20	21.88	20	22.49	109	112	66-128	3	30
1,1-Dichloroethene	N.D.	20	22.84	20	23.09	114	115	76-124	1	30
cis-1,2-Dichloroethene	N.D.	20	23.09	20	23.11	115	116	80-120	0	30
trans-1,2-Dichloroethene	N.D.	20	23.08	20	24.08	115	120	80-120	4	30
1,2-Dichloropropane	N.D.	20	22.16	20	23.07	111	115	80-120	4	30
1,3-Dichloropropane	N.D.	20	19.39	20	20.05	97	100	80-120	3	30
2,2-Dichloropropane	N.D.	20	22.75	20	23.4	114	117	66-128	3	30
1,1-Dichloropropene	N.D.	20	18.05	20	18.61	90	93	78-120	3	30
cis-1,3-Dichloropropene	N.D.	20	20.43	20	20.87	102	104	80-120	2	30
trans-1,3-Dichloropropene	N.D.	20	18.99	20	19.73	95	99	76-120	4	30
Ethyl t-butyl ether	N.D.	20	20.69	20	21.67	103	108	69-120	5	30
Ethylbenzene	N.D.	20	20.03	20	20.86	100	104	78-120	4	30
Hexachlorobutadiene	N.D.	20	17.93	20	19	90	95	61-127	6	30
n-Hexane	N.D.	20	21.98	20	21.85	110	109	62-144	1	30
2-Hexanone	N.D.	100	103.18	100	106.51	103	107	49-146	3	30
di-Isopropyl ether	N.D.	20	21.51	20	22.22	108	111	70-124	3	30
Isopropylbenzene	N.D.	20	20.68	20	21.55	103	108	80-120	4	30
p-Isopropyltoluene	N.D.	20	12.52	20	12.88	63*	64*	76-120	3	30
Methyl Tertiary Butyl Ether	N.D.	20	20.9	20	21.62	105	108	75-120	3	30
4-Methyl-2-pentanone	N.D.	100	112.08	100	115.86	112	116	55-141	3	30
Methylene Chloride	N.D.	20	21.58	20	22.56	108	113	80-120	4	30
Naphthalene	N.D.	20	2.07	20	2.05	10*	10*	59-120	1	30
n-Propylbenzene	N.D.	20	19.31	20	19.83	97	99	79-121	3	30
Styrene	N.D.	20	N.D.	20	N.D.	0*	0*	80-120	0	30
1,1,1,2-Tetrachloroethane	N.D.	20	19.51	20	20.38	98	102	80-120	4	30
1,1,2,2-Tetrachloroethane	N.D.	20	18.6	20	18.39	93	92	72-120	1	30
Tetrachloroethene	N.D.	20	21.58	20	22.29	108	111	80-129	3	30
Toluene	N.D.	20	19.47	20	20.25	97	101	80-120	4	30
1,2,3-Trichlorobenzene	N.D.	20	16.34	20	17.43	82	87	69-120	6	30
1,2,4-Trichlorobenzene	N.D.	20	17.43	20	18.59	87	93	72-120	6	30
1,1,1-Trichloroethane	N.D.	20	21.39	20	23.9	107	119	66-126	11	30
1,1,2-Trichloroethane	N.D.	20	19.7	20	20.57	99	103	80-120	4	30
Trichloroethene	N.D.	20	23.28	20	23.94	116	120	80-120	3	30
Trichlorofluoromethane	N.D.	20	20.82	20	21.6	104	108	67-129	4	30
1,2,3-Trichloropropane	N.D.	20	19.3	20	19.54	97	98	80-120	1	30

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Global Remediation Group Number: 1746798
Reported: 12/21/2016 23:44

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,2,4-Trimethylbenzene	N.D.	20	N.D.	20	N.D.	0*	0*	75-120	0	30
1,3,5-Trimethylbenzene	N.D.	20	N.D.	20	N.D.	0*	0*	75-120	0	30
Vinyl Chloride	N.D.	20	17.58	20	17.8	88	89	63-121	1	30
m+p-Xylene	N.D.	40	11.68	40	12.05	29*	30*	80-120	3	30
o-Xylene	N.D.	20	12.55	20	13.02	63*	65*	80-120	4	30
Xylene (Total)	N.D.	60	24.23	60	25.07	40*	42*	80-120	3	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Full list + oxys + hexane
Batch number: N163561AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8755297	101	102	95	99
8755298	102	101	95	99
Blank	103	103	95	98
LCS	102	104	96	100
MS	102	102	96	100
MSD	104	103	98	102
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
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P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

13459 1746798 8755297-98

SR

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

FED-EX Tracking #	Bottle Order Control #
Lancaster Quote #	Lancaster Job #

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #: 410-850-0049
Sampler(s) Name(s): Charlie Low Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix 28077
Major Project (AFE):
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: John Hoban
ExxonMobil Purchase Order #: Direct Bill to Exxon Mobil

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City: State: Zip:
Attention: PO#:

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

Lancaster 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	Full List VOCs + Oxy 5 by 8260	LAB USE ONLY
	MW-189D (384)		12/19/16	0800	CL	GW	3	X								X	
	Trip Blank (TB16345)		12/15/16		CE	TB	2	X								X	

Data Deliverable Information

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [X] 1 Day *EMERGENCY*

- [X] 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
- [ ] Other

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

Comments / Special Instructions

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	Charlie Low	12/20/16 1325	1	2	12/20/16 1815	2
3			3	4		4
5			5	Custody Seal #	Intact / Not intact	Preserved where applicable / On Ice / Cooler Temp.

12/20/16 1815

0.5°C

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 171325

Group Number(s): 1746798

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	12/20/2016 18:15
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	MD		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Melvin Sanchez (8943) at 19:19 on 12/20/2016

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	0.5	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

Report Date: February 23, 2017

Project: 2-8077 - Phoenix, MD (GW)

Submittal Date: 02/09/2017
Group Number: 1768145
PO Number: 4410481176
Release Number: BOZEMAN
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LL) #
MW-189D(91.5) Groundwater	8846333
MW-189D(117-119) Groundwater	8846334
MW-189D(122) Groundwater	8846335
MW-189D(138-140) Groundwater	8846336
MW-189D(161) Groundwater	8846337
MW-189D(216) Groundwater	8846338
MW-189D(256-258) Groundwater	8846339
MW-189D(278) Groundwater	8846340
MW-189D(315) Groundwater	8846341
MW-189D(357) Groundwater	8846342
MW-189D(374) Groundwater	8846343

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Electronic Copy To	Kleinfelder, MD	Attn: Jen Kozak
Electronic Copy To	Kleinfelder, MD	Attn: Mike Baird
Electronic Copy To	Kleinfelder, MD	Attn: Bryan Johnson
Electronic Copy To	Kleinfelder, MD	Attn: Stacey Schiding
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Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

Sample Description: MW-189D(91.5) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846333
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:32

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	1	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	14	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(91.5) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846333
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:32

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	1	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/21/2017 23:40	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/21/2017 23:40	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(117-119) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846334
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:34

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D3

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	3	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	37	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(117-119) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846334
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:34

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D3

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Methylene Chloride	75-09-2	N.D.		4	2	1
10335	Naphthalene	91-20-3	N.D.		5	1	1
10335	n-Propylbenzene	103-65-1	N.D.		5	1	1
10335	Styrene	100-42-5	N.D.		5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.		1	0.5	1
10335	Toluene	108-88-3	N.D.		1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.		5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.		5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.		1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.		1	0.5	1
10335	Trichloroethene	79-01-6	N.D.		1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.		1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.		5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.		5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.		5	1	1
10335	Vinyl Chloride	75-01-4	N.D.		1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.		1	0.5	1
10335	o-Xylene	95-47-6	0.5	J	1	0.5	1
10335	Xylene (Total)	1330-20-7	0.5	J	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 00:04	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 00:04	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(122) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846335
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:36

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D4

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	3	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	37	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(122) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846335
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:36

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D4

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.		4	2	1
10335	Naphthalene	91-20-3	N.D.		5	1	1
10335	n-Propylbenzene	103-65-1	N.D.		5	1	1
10335	Styrene	100-42-5	N.D.		5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.		1	0.5	1
10335	Toluene	108-88-3	N.D.		1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.		5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.		5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.		1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.		1	0.5	1
10335	Trichloroethene	79-01-6	N.D.		1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.		1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.		5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.		5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.		5	1	1
10335	Vinyl Chloride	75-01-4	N.D.		1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.		1	0.5	1
10335	o-Xylene	95-47-6	0.5	J	1	0.5	1
10335	Xylene (Total)	1330-20-7	0.5	J	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 00:28	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 00:28	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(138-140) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846336
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:38

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D5

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	2	1	0.5	1
10335	Benzene	71-43-2	N.D.	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	24	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(138-140) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846336
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:38

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D5

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.		4	2	1
10335	Naphthalene	91-20-3	N.D.		5	1	1
10335	n-Propylbenzene	103-65-1	N.D.		5	1	1
10335	Styrene	100-42-5	N.D.		5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.		1	0.5	1
10335	Toluene	108-88-3	N.D.		1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.		5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.		5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.		1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.		1	0.5	1
10335	Trichloroethene	79-01-6	N.D.		1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.		1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.		5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.		5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.		5	1	1
10335	Vinyl Chloride	75-01-4	N.D.		1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.		1	0.5	1
10335	o-Xylene	95-47-6	0.6	J	1	0.5	1
10335	Xylene (Total)	1330-20-7	0.6	J	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 00:51	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 00:51	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(161) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846337
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:40

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D6

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	N.D.		20	6	1
10335	t-Amyl methyl ether	994-05-8	2		1	0.5	1
10335	Benzene	71-43-2	0.5	J	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.		20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.		5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	21		1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.		10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(161) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846337
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:40

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D6

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Methylene Chloride	75-09-2	N.D.		4	2	1
10335	Naphthalene	91-20-3	N.D.		5	1	1
10335	n-Propylbenzene	103-65-1	N.D.		5	1	1
10335	Styrene	100-42-5	N.D.		5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.		1	0.5	1
10335	Toluene	108-88-3	N.D.		1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.		5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.		5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.		1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.		1	0.5	1
10335	Trichloroethene	79-01-6	N.D.		1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.		1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.		5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.		5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.		5	1	1
10335	Vinyl Chloride	75-01-4	N.D.		1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.		1	0.5	1
10335	o-Xylene	95-47-6	0.7	J	1	0.5	1
10335	Xylene (Total)	1330-20-7	0.7	J	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 01:15	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 01:15	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(216) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846338
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:42

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D7

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	N.D.		20	6	1
10335	t-Amyl methyl ether	994-05-8	8		1	0.5	1
10335	Benzene	71-43-2	0.9	J	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.		20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	1		1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	0.6	J	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.		5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	100		1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.		10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(216) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846338
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:42

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D7

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	1	1	0.5	1
10335	Xylene (Total)	1330-20-7	1	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 01:39	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 01:39	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(256-258) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846339
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:44

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D8

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	N.D.		20	6	1
10335	t-Amyl methyl ether	994-05-8	5		1	0.5	1
10335	Benzene	71-43-2	0.7	J	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.		20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	0.8	J	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.		5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	65		1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.		10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(256-258) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846339
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:44

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D8

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	1	1	0.5	1
10335	Xylene (Total)	1330-20-7	1	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 02:03	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 02:03	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(278) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846340
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:46

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D9

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	N.D.		20	6	1
10335	t-Amyl methyl ether	994-05-8	14		1	0.5	1
10335	Benzene	71-43-2	1		1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.		20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	2		1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	0.8	J	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.		5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	170		1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.		10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(278) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846340
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:46

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

189D9

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	2	1	0.5	1
10335	Xylene (Total)	1330-20-7	2	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 02:27	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 02:27	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(315) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846341
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:48

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

18910

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	N.D.	20	6	1
10335	t-Amyl methyl ether	994-05-8	16	1	0.5	1
10335	Benzene	71-43-2	2	1	0.5	1
10335	Bromobenzene	108-86-1	N.D.	5	1	1
10335	Bromochloromethane	74-97-5	N.D.	5	1	1
10335	Bromodichloromethane	75-27-4	N.D.	1	0.5	1
10335	Bromoform	75-25-2	N.D.	4	0.5	1
10335	Bromomethane	74-83-9	N.D.	1	0.5	1
10335	2-Butanone	78-93-3	N.D.	10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.	20	5	1
10335	n-Butylbenzene	104-51-8	N.D.	5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	5	1	1
10335	Carbon Disulfide	75-15-0	N.D.	5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	1	0.5	1
10335	Chloroethane	75-00-3	N.D.	1	0.5	1
10335	Chloroform	67-66-3	N.D.	1	0.5	1
10335	Chloromethane	74-87-3	N.D.	1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	5	2	1
10335	Dibromochloromethane	124-48-1	N.D.	1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	1	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	2	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	5	2	1
10335	n-Hexane	110-54-3	N.D.	5	2	1
10335	2-Hexanone	591-78-6	N.D.	10	3	1
10335	di-Isopropyl ether	108-20-3	1	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.	5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	190	1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(315) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846341
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:48

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

18910

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	3	1	0.5	1
10335	Xylene (Total)	1330-20-7	3	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 02:50	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 02:50	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(357) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846342
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:50

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

11189

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	N.D.		20	6	1
10335	t-Amyl methyl ether	994-05-8	4		1	0.5	1
10335	Benzene	71-43-2	1		1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.		20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	0.7	J	1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.		5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	53		1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.		10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(357) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846342
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:50

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

11189

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	2	1	0.5	1
10335	Xylene (Total)	1330-20-7	2	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 03:14	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 03:14	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(374) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846343
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:52

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

12189

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	N.D.		20	6	1
10335	t-Amyl methyl ether	994-05-8	9		1	0.5	1
10335	Benzene	71-43-2	1		1	0.5	1
10335	Bromobenzene	108-86-1	N.D.		5	1	1
10335	Bromochloromethane	74-97-5	N.D.		5	1	1
10335	Bromodichloromethane	75-27-4	N.D.		1	0.5	1
10335	Bromoform	75-25-2	N.D.		4	0.5	1
10335	Bromomethane	74-83-9	N.D.		1	0.5	1
10335	2-Butanone	78-93-3	N.D.		10	3	1
10335	t-Butyl alcohol	75-65-0	N.D.		20	5	1
10335	n-Butylbenzene	104-51-8	N.D.		5	1	1
10335	sec-Butylbenzene	135-98-8	N.D.		5	1	1
10335	tert-Butylbenzene	98-06-6	N.D.		5	1	1
10335	Carbon Disulfide	75-15-0	N.D.		5	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.		1	0.5	1
10335	Chlorobenzene	108-90-7	N.D.		1	0.5	1
10335	Chloroethane	75-00-3	N.D.		1	0.5	1
10335	Chloroform	67-66-3	N.D.		1	0.5	1
10335	Chloromethane	74-87-3	N.D.		1	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.		5	1	1
10335	4-Chlorotoluene	106-43-4	N.D.		5	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		5	2	1
10335	Dibromochloromethane	124-48-1	N.D.		1	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.		1	0.5	1
10335	Dibromomethane	74-95-3	N.D.		1	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.		5	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.		5	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.		5	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.		1	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.		1	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.		1	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.		1	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.		1	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.		1	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.		1	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.		1	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.		1	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.		5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.		1	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.		1	0.5	1
10335	Ethyl t-butyl ether	637-92-3	1		1	0.5	1
10335	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.		5	2	1
10335	n-Hexane	110-54-3	N.D.		5	2	1
10335	2-Hexanone	591-78-6	N.D.		10	3	1
10335	di-Isopropyl ether	108-20-3	0.5	J	1	0.5	1
10335	Isopropylbenzene	98-82-8	N.D.		5	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.		5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	110		1	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.		10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(374) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8846343
LL Group # 1768145
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 02/08/2017 08:52

Submitted: 02/09/2017 17:15
Reported: 02/23/2017 12:28

ExxonMobil-Kleinfelder, MD
1400 Park Avenue
Building 7
Linden NJ 07036

12189

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10335	Methylene Chloride	75-09-2	N.D.	4	2	1
10335	Naphthalene	91-20-3	N.D.	5	1	1
10335	n-Propylbenzene	103-65-1	N.D.	5	1	1
10335	Styrene	100-42-5	N.D.	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	0.5	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	1	0.5	1
10335	Toluene	108-88-3	N.D.	1	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	0.5	1
10335	Trichloroethene	79-01-6	N.D.	1	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	1	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	5	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	1	0.5	1
10335	o-Xylene	95-47-6	2	1	0.5	1
10335	Xylene (Total)	1330-20-7	2	1	0.5	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: dibromochloromethane.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Full list + oxys + hexane	SW-846 8260B	1	W170522AA	02/22/2017 03:38	Kevin D Kelly	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W170522AA	02/22/2017 03:38	Kevin D Kelly	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ExxonMobil-Kleinfelder, MD Group Number: 1768145
Reported: 02/23/2017 12:28

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ**	MDL
	ug/l	ug/l	ug/l
Batch number: W170522AA	Sample number(s): 8846333-8846343		
Acetone	N.D.	20	6
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
Bromobenzene	N.D.	5	1
Bromochloromethane	N.D.	5	1
Bromodichloromethane	N.D.	1	0.5
Bromoform	N.D.	4	0.5
Bromomethane	N.D.	1	0.5
2-Butanone	N.D.	10	3
t-Butyl alcohol	N.D.	20	5
n-Butylbenzene	N.D.	5	1
sec-Butylbenzene	N.D.	5	1
tert-Butylbenzene	N.D.	5	1
Carbon Disulfide	N.D.	5	1
Carbon Tetrachloride	N.D.	1	0.5
Chlorobenzene	N.D.	1	0.5
Chloroethane	N.D.	1	0.5
Chloroform	N.D.	1	0.5
Chloromethane	N.D.	1	0.5
2-Chlorotoluene	N.D.	5	1
4-Chlorotoluene	N.D.	5	1
1,2-Dibromo-3-chloropropane	N.D.	5	2
Dibromochloromethane	N.D.	1	0.5
1,2-Dibromoethane	N.D.	1	0.5
Dibromomethane	N.D.	1	0.5
1,2-Dichlorobenzene	N.D.	5	1
1,3-Dichlorobenzene	N.D.	5	1
1,4-Dichlorobenzene	N.D.	5	1
Dichlorodifluoromethane	N.D.	1	0.5
1,1-Dichloroethane	N.D.	1	0.5
1,2-Dichloroethane	N.D.	1	0.5
1,1-Dichloroethene	N.D.	1	0.5
cis-1,2-Dichloroethene	N.D.	1	0.5
trans-1,2-Dichloroethene	N.D.	1	0.5
1,2-Dichloropropane	N.D.	1	0.5
1,3-Dichloropropane	N.D.	1	0.5
2,2-Dichloropropane	N.D.	1	0.5
1,1-Dichloropropene	N.D.	5	1
cis-1,3-Dichloropropene	N.D.	1	0.5
trans-1,3-Dichloropropene	N.D.	1	0.5

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Quality Control Summary

Client Name: ExxonMobil-Kleinfelder, MD Group Number: 1768145
Reported: 02/23/2017 12:28

Method Blank (continued)

Analysis Name	Result ug/l	LOQ** ug/l	MDL ug/l
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
Hexachlorobutadiene	N.D.	5	2
n-Hexane	N.D.	5	2
2-Hexanone	N.D.	10	3
di-Isopropyl ether	N.D.	1	0.5
Isopropylbenzene	N.D.	5	1
p-Isopropyltoluene	N.D.	5	1
Methyl Tertiary Butyl Ether	N.D.	1	0.5
4-Methyl-2-pentanone	N.D.	10	3
Methylene Chloride	N.D.	4	2
Naphthalene	N.D.	5	1
n-Propylbenzene	N.D.	5	1
Styrene	N.D.	5	1
1,1,1,2-Tetrachloroethane	N.D.	1	0.5
1,1,2,2-Tetrachloroethane	N.D.	1	0.5
Tetrachloroethene	N.D.	1	0.5
Toluene	N.D.	1	0.5
1,2,3-Trichlorobenzene	N.D.	5	1
1,2,4-Trichlorobenzene	N.D.	5	1
1,1,1-Trichloroethane	N.D.	1	0.5
1,1,2-Trichloroethane	N.D.	1	0.5
Trichloroethene	N.D.	1	0.5
Trichlorofluoromethane	N.D.	1	0.5
1,2,3-Trichloropropane	N.D.	5	1
1,2,4-Trimethylbenzene	N.D.	5	1
1,3,5-Trimethylbenzene	N.D.	5	1
Vinyl Chloride	N.D.	1	0.5
m+p-Xylene	N.D.	1	0.5
o-Xylene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: W170522AA	Sample number(s): 8846333-8846343								
Acetone	150	139.59			93		50-168		
t-Amyl methyl ether	20	18.01			90		67-120		
Benzene	20	19.78			99		78-120		
Bromobenzene	20	19.53			98		80-120		
Bromochloromethane	20	17.68			88		80-125		
Bromodichloromethane	20	16.44			82		80-120		
Bromoform	20	14.59			73		64-120		

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Quality Control Summary

Client Name: ExxonMobil-Kleinfelder, MD
Group Number: 1768145
Reported: 02/23/2017 12:28

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bromomethane	20	12.31			62		49-121		
2-Butanone	150	127.59			85		53-140		
t-Butyl alcohol	200	207.83			104		68-122		
n-Butylbenzene	20	18.45			92		76-120		
sec-Butylbenzene	20	19.59			98		77-120		
tert-Butylbenzene	20	18.59			93		78-120		
Carbon Disulfide	20	20.14			101		63-122		
Carbon Tetrachloride	20	16.44			82		76-123		
Chlorobenzene	20	18.87			94		80-120		
Chloroethane	20	15.64			78		51-121		
Chloroform	20	18.2			91		80-120		
Chloromethane	20	17.79			89		57-120		
2-Chlorotoluene	20	19.87			99		80-120		
4-Chlorotoluene	20	18.93			95		80-120		
1,2-Dibromo-3-chloropropane	20	17.98			90		59-120		
Dibromochloromethane	20	15.14			76*		78-120		
1,2-Dibromoethane	20	17.43			87		75-120		
Dibromomethane	20	17.07			85		80-120		
1,2-Dichlorobenzene	20	18.08			90		80-120		
1,3-Dichlorobenzene	20	18.6			93		80-120		
1,4-Dichlorobenzene	20	18.78			94		80-120		
Dichlorodifluoromethane	20	14.79			74		54-122		
1,1-Dichloroethane	20	20.88			104		80-120		
1,2-Dichloroethane	20	18.91			95		66-128		
1,1-Dichloroethene	20	21.45			107		76-124		
cis-1,2-Dichloroethene	20	18.64			93		80-120		
trans-1,2-Dichloroethene	20	19.45			97		80-120		
1,2-Dichloropropane	20	19.86			99		80-120		
1,3-Dichloropropane	20	18.89			94		80-120		
2,2-Dichloropropane	20	17.23			86		66-128		
1,1-Dichloropropene	20	18.81			94		78-120		
cis-1,3-Dichloropropene	20	17.75			89		75-120		
trans-1,3-Dichloropropene	20	17.26			86		76-120		
Ethyl t-butyl ether	20	18.68			93		69-120		
Ethylbenzene	20	19.14			96		78-120		
Hexachlorobutadiene	20	22.74			114		60-120		
n-Hexane	20	21.09			105		52-147		
2-Hexanone	100	79.57			80		49-137		
di-Isopropyl ether	20	21.13			106		70-124		
Isopropylbenzene	20	17.96			90		80-120		
p-Isopropyltoluene	20	18.46			92		76-120		
Methyl Tertiary Butyl Ether	20	18.71			94		75-120		
4-Methyl-2-pentanone	100	83.33			83		56-131		
Methylene Chloride	20	18.51			93		80-120		
Naphthalene	20	18.23			91		59-120		
n-Propylbenzene	20	21			105		79-121		
Styrene	20	16.22			81		80-120		
1,1,1,2-Tetrachloroethane	20	17.1			85		80-120		

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Quality Control Summary

Client Name: ExxonMobil-Kleinfelder, MD Group Number: 1768145
Reported: 02/23/2017 12:28

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,2,2-Tetrachloroethane	20	20.64			103		72-120		
Tetrachloroethene	20	19.44			97		80-129		
Toluene	20	19.71			99		80-120		
1,2,3-Trichlorobenzene	20	18.96			95		51-120		
1,2,4-Trichlorobenzene	20	18.85			94		58-120		
1,1,1-Trichloroethane	20	16.26			81		67-120		
1,1,2-Trichloroethane	20	18.09			90		80-120		
Trichloroethene	20	18.64			93		80-120		
Trichlorofluoromethane	20	13.25			66		57-134		
1,2,3-Trichloropropane	20	19.88			99		80-120		
1,2,4-Trimethylbenzene	20	19.14			96		75-120		
1,3,5-Trimethylbenzene	20	19.25			96		75-120		
Vinyl Chloride	20	17.48			87		63-121		
m+p-Xylene	40	36.34			91		80-120		
o-Xylene	20	17.28			86		80-120		
Xylene (Total)	60	53.62			89		80-120		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: W170522AA	Sample number(s): 8846333-8846343 UNSPK: P831566									
Acetone	N.D.	150	173.28	150	157.18	116	105	50-168	10	30
t-Amyl methyl ether	N.D.	20	16.62	20	18.25	83	91	67-120	9	30
Benzene	N.D.	20	21.55	20	21.18	108	106	78-120	2	30
Bromobenzene	N.D.	20	20.61	20	20.12	103	101	80-120	2	30
Bromochloromethane	N.D.	20	17.48	20	17.89	87	89	80-125	2	30
Bromodichloromethane	N.D.	20	17.71	20	17.32	89	87	80-120	2	30
Bromoform	N.D.	20	14.91	20	14.76	75	74	64-120	1	30
Bromomethane	N.D.	20	13.57	20	13.33	68	67	49-121	2	30
2-Butanone	N.D.	150	119.27	150	136.89	80	91	53-140	14	30
t-Butyl alcohol	N.D.	200	184.35	200	187.34	92	94	68-122	2	30
n-Butylbenzene	N.D.	20	20.7	20	20.1	103	100	76-120	3	30
sec-Butylbenzene	N.D.	20	21.85	20	21.62	109	108	77-120	1	30
tert-Butylbenzene	N.D.	20	20.91	20	20.57	105	103	78-120	2	30
Carbon Disulfide	N.D.	20	19.65	20	19.43	98	97	63-122	1	30
Carbon Tetrachloride	N.D.	20	18.76	20	18.19	94	91	76-123	3	30
Chlorobenzene	0.610	20	21.94	20	21.87	107	106	80-120	0	30
Chloroethane	N.D.	20	17.3	20	17.3	86	87	51-121	0	30
Chloroform	N.D.	20	19.42	20	19.49	97	97	80-120	0	30
Chloromethane	N.D.	20	15.46	20	15.98	77	80	57-120	3	30

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Quality Control Summary

Client Name: ExxonMobil-Kleinfelder, MD
Group Number: 1768145
Reported: 02/23/2017 12:28

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
2-Chlorotoluene	N.D.	20	21.3	20	21.25	107	106	80-120	0	30
4-Chlorotoluene	N.D.	20	20.35	20	20.17	102	101	80-120	1	30
1,2-Dibromo-3-chloropropane	N.D.	20	17.92	20	17.7	90	88	59-120	1	30
Dibromochloromethane	N.D.	20	16.73	20	16.55	84	83	78-120	1	30
1,2-Dibromoethane	N.D.	20	19.78	20	19.79	99	99	75-120	0	30
Dibromomethane	N.D.	20	16.54	20	18.18	83	91	80-120	9	30
1,2-Dichlorobenzene	1.11	20	21.66	20	21.04	103	100	80-120	3	30
1,3-Dichlorobenzene	N.D.	20	20.19	20	19.92	101	100	80-120	1	30
1,4-Dichlorobenzene	N.D.	20	20.91	20	20.61	105	103	80-120	1	30
Dichlorodifluoromethane	N.D.	20	13.31	20	13.39	67	67	54-122	1	30
1,1-Dichloroethane	N.D.	20	21.98	20	22.1	110	111	80-120	1	30
1,2-Dichloroethane	N.D.	20	19.23	20	19.64	96	98	66-128	2	30
1,1-Dichloroethene	N.D.	20	23.79	20	23.65	119	118	76-124	1	30
cis-1,2-Dichloroethene	N.D.	20	20.24	20	19.7	101	98	80-120	3	30
trans-1,2-Dichloroethene	N.D.	20	20.58	20	20.77	103	104	80-120	1	30
1,2-Dichloropropane	N.D.	20	21.83	20	22.04	109	110	80-120	1	30
1,3-Dichloropropane	N.D.	20	21.6	20	20.87	108	104	80-120	3	30
2,2-Dichloropropane	N.D.	20	17.99	20	18.3	90	92	66-128	2	30
1,1-Dichloropropene	N.D.	20	20.9	20	20.7	104	103	78-120	1	30
cis-1,3-Dichloropropene	N.D.	20	19.22	20	18.95	96	95	75-120	1	30
trans-1,3-Dichloropropene	N.D.	20	19.14	20	19.21	96	96	76-120	0	30
Ethyl t-butyl ether	N.D.	20	18.53	20	19.41	93	97	69-120	5	30
Ethylbenzene	N.D.	20	21.1	20	20.92	106	105	78-120	1	30
Hexachlorobutadiene	N.D.	20	25.41	20	25.44	127*	127*	60-120	0	30
n-Hexane	N.D.	20	24.61	20	24.92	123	125	52-147	1	30
2-Hexanone	N.D.	100	104.98	100	104.71	105	105	49-137	0	30
di-Isopropyl ether	N.D.	20	20.82	20	21.61	104	108	70-124	4	30
Isopropylbenzene	N.D.	20	20.1	20	19.61	100	98	80-120	2	30
p-Isopropyltoluene	N.D.	20	20.53	20	20.04	103	100	76-120	2	30
Methyl Tertiary Butyl Ether	N.D.	20	18.01	20	18.84	90	94	75-120	5	30
4-Methyl-2-pentanone	N.D.	100	84.46	100	92.33	84	92	56-131	9	30
Methylene Chloride	N.D.	20	19.14	20	19.36	96	97	80-120	1	30
Naphthalene	N.D.	20	19.25	20	19.31	96	97	59-120	0	30
n-Propylbenzene	N.D.	20	23.13	20	22.76	116	114	79-121	2	30
Styrene	N.D.	20	17.98	20	17.56	90	88	80-120	2	30
1,1,1,2-Tetrachloroethane	N.D.	20	18.53	20	17.94	93	90	80-120	3	30
1,1,2,2-Tetrachloroethane	1.01	20	22.63	20	22.53	108	108	72-120	0	30
Tetrachloroethene	N.D.	20	20.23	20	19.86	101	99	80-129	2	30
Toluene	N.D.	20	21.61	20	21.48	108	107	80-120	1	30
1,2,3-Trichlorobenzene	N.D.	20	22.09	20	21.91	110	110	51-120	1	30
1,2,4-Trichlorobenzene	1.76	20	25.33	20	24.61	118	114	58-120	3	30
1,1,1-Trichloroethane	N.D.	20	17.41	20	17.22	87	86	67-120	1	30
1,1,2-Trichloroethane	N.D.	20	20.05	20	19.48	100	97	80-120	3	30
Trichloroethene	N.D.	20	20.92	20	19.51	105	98	80-120	7	30
Trichlorofluoromethane	N.D.	20	15.6	20	15.86	78	79	57-134	2	30
1,2,3-Trichloropropane	N.D.	20	20.17	20	19.93	101	100	80-120	1	30

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Quality Control Summary

Client Name: ExxonMobil-Kleinfelder, MD Group Number: 1768145
Reported: 02/23/2017 12:28

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,2,4-Trimethylbenzene	N.D.	20	20.6	20	20.33	103	102	75-120	1	30
1,3,5-Trimethylbenzene	N.D.	20	20.71	20	20.48	104	102	75-120	1	30
Vinyl Chloride	N.D.	20	16.52	20	17.07	83	85	63-121	3	30
m+p-Xylene	N.D.	40	40.2	40	39.62	101	99	80-120	1	30
o-Xylene	N.D.	20	19.07	20	18.71	95	94	80-120	2	30
Xylene (Total)	N.D.	60	59.27	60	58.33	99	97	80-120	2	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Full list + oxys + hexane
Batch number: W170522AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8846333	94	102	104	95
8846334	92	105	104	95
8846335	94	103	104	95
8846336	94	101	104	95
8846337	93	103	104	95
8846338	93	102	104	95
8846339	94	102	104	95
8846340	93	103	104	95
8846341	92	103	105	95
8846342	93	103	104	95
8846343	93	100	103	95
Blank	94	105	104	96
LCS	95	104	104	101
MS	91	99	105	101
MSD	93	98	106	101
Limits:	80-116	77-113	80-113	78-113

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1768145 8846332-43 On 2/21/17
TH 13459 ~~176459~~ ~~8828666-17~~

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

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

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, State: MD, Zip: 21076
Project Contact: Stacey Schilding | E-mail:
Phone #: 410-860-0404 | Fax #:
Sampler(s) Name(s): Sean Powell | Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix
Major Project (AFE): 28077
Project Name: 14268 Jarrettsville Pike
City: Phoenix, State: MD
ExxonMobil Manager: John Hoban
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City: State: Zip:
Attention: PO#:

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

	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	MTBE, BTEX, ETBE, TAME, DIPE, TBA by 8260B	Full List VOCs +Oxy5 by 8260	LAB USE ONLY
	MW-189D(79)		2/8/17	0830	SP	GW	3	X								X		
	MW-189D(91.5)		2/8/17	0832	SP	GW	3	X								X		
	MW-189D(117-119)		2/8/17	0834	SP	GW	3	X								X		
	MW-189D(122)		2/8/17	0836	SP	GW	3	X								X		
	MW-189D(138-140)		2/8/17	0838	SP	GW	3	X								X		
	MW-189D(161)		2/8/17	0840	SP	GW	3	X								X		
	MW-189D(216)		2/8/17	0842	SP	GW	3	X								X		
	MW-189D(256-258)		2/8/17	0844	SP	GW	3	X								X		
	MW-189D(278)		2/8/17	0846	SP	GW	3	X								X		
	MW-189D(315)		2/8/17	0848	SP	GW	3	X								X		
	MW-189D(357)		2/8/17	0850	SP	GW	3	X								X		
	MW-189D(374)		2/8/17	0852	SP	GW	3	X								X		

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] 6 Day *RUSH*
- [X] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [X] 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
- [ ] Other

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

Comments / Special Instructions

5 - DAY T.AT

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		2/9/17 1430	1	2	2/10/17 1715	2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time: 2/11/17 1715	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable / On Ice / Cooler Temp: 3.9

Barbara Weyandt

From: Stacey Schiding <SSchiding@kleinfelder.com>
Sent: Tuesday, February 21, 2017 1:21 PM
To: Barbara Weyandt; Michael Baird
Subject: RE: 1764159-2-8077 - Phoenix, MD (GW) 02-09-2017 1

Go ahead and do all

From: Barbara Weyandt [mailto:BarbaraWeyandt@eurofinsUS.com]
Sent: Tuesday, February 21, 2017 1:20 PM
To: Michael Baird <MBaird@kleinfelder.com>
Cc: Stacey Schiding <SSchiding@kleinfelder.com>
Subject: RE: 1764159-2-8077 - Phoenix, MD (GW) 02-09-2017 1
Importance: High

Hi Mike,

For several of the samples, we only have vials with headspace available. Do you still want to proceed? Or do you want us to only analyze the samples for which we have vials without headspace?

Barb
717-556-7264

From: Michael Baird [mailto:MBaird@kleinfelder.com]
Sent: Tuesday, February 21, 2017 11:46 AM
To: Barbara Weyandt
Cc: Stacey Schiding
Subject: RE: 1764159-2-8077 - Phoenix, MD (GW) 02-09-2017 1

Please go ahead and try to resample if there is enough sample left. Thanks

Michael Baird
Professional I

Kleinfelder
1340 Charwood Road, Suite I
Hanover, MD 21076
c| 301.980.9540
o| 410.689.0805
e| mbaird@kleinfelder.com

KLEINFELDER
Bright People. Right Solutions.

From: Barbara Weyandt [mailto:BarbaraWeyandt@eurofinsUS.com]
Sent: Tuesday, February 21, 2017 11:36 AM
To: Michael Baird <MBaird@kleinfelder.com>

Subject: RE: 1764159-2-8077 - Phoenix, MD (GW) 02-09-2017 1
Importance: High

Yes, sorry-I was out since Thursday.

Unfortunately, we only ran these samples using an instrument that is only calibrated for a select list of UST VOCs. I can see if we have any extra vials and rerun the samples, but hold time is up tomorrow, so I'd need to know ASAP. Also, we would have to charge for the reanalysis.

Barb
717-556-7264

From: Michael Baird [mailto:MBaird@kleinfelder.com]
Sent: Tuesday, February 21, 2017 11:31 AM
To: Barbara Weyandt
Subject: FW: 1764159-2-8077 - Phoenix, MD (GW) 02-09-2017 1

Hi Barb, did you get a chance to discuss this with the lab yet? See Below. Thanks

Michael Baird
Professional I

Kleinfelder
1340 Charwood Road, Suite I
Hanover, MD 21076
c| 301.980.9540
o| 410.689.0805
e| mbaird@kleinfelder.com

From: Barbara Weyandt [mailto:BarbaraWeyandt@eurofinsUS.com]
Sent: Thursday, February 16, 2017 4:40 PM
To: Michael Baird <MBaird@kleinfelder.com>
Cc: Stacey Schiding <SSchiding@kleinfelder.com>
Subject: RE: 1764159-2-8077 - Phoenix, MD (GW) 02-09-2017 1

Hi Mike,

I'll check and get back to you.

Barb
717-556-7264

From: Michael Baird [mailto:MBaird@kleinfelder.com]
Sent: Thursday, February 16, 2017 4:31 PM
To: Barbara Weyandt
Cc: Stacey Schiding
Subject: FW: 1764159-2-8077 - Phoenix, MD (GW) 02-09-2017 1

Barb, would it be possible to report full-suite VOCs with this report? It looks like we labeled just select VOCs but would like full. Let me know if that is possible thanks

Michael Baird
Professional I

Kleinfelder
1340 Charwood Road, Suite I
Hanover, MD 21076
c| 301.980.9540
o| 410.689.0805
e| mbaird@kleinfelder.com

From: LLAutomatedReportingSystem@eurofins.com [mailto:LLAutomatedReportingSystem@eurofins.com]
Sent: Thursday, February 16, 2017 11:59 AM
To: Michael Baird <MBaird@kleinfelder.com>
Subject: 1764159-2-8077 - Phoenix, MD (GW) 02-09-2017 1

If you have questions, contact your client service representative, Barbara A Weyandt.

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Sample Administration Receipt Documentation Log

Doc Log ID: 175290

Group Number(s): ~~1766459~~ 1768145

Client: Kleinfelder

Bfw 2/2/17

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	02/09/2017 17:15
Number of Packages:	1	Number of Projects:	3

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	2
Samples Intact:	Yes	Trip Blank Type:	HCl
Missing Samples:	No	Air Quality Samples Present:	No
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 18:29 on 02/09/2017

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle)* *IR = Infrared (Surface Temp)* *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	3.9	DT	Wet	Y	Loose	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

Report Date: March 28, 2017

Project: 2-8077 - Phoenix, MD (GW)

Submittal Date: 03/24/2017
Group Number: 1780798
PO Number: 4410481176
Release Number: BOZEMAN
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LL) #
MW-189D(79) Groundwater	8900504
MW-189D(91.5) Groundwater	8900505
MW-189D(117-119) Groundwater	8900506
MW-189D(122) Groundwater	8900507
MW-189D(138-140) Groundwater	8900508
MW-189D(161) Groundwater	8900509
MW-189D(216) Groundwater	8900510
MW-189D(256-258) Groundwater	8900511
MW-189D(278) Groundwater	8900512
MW-189D(315) Groundwater	8900513
MW-189D(357) Groundwater	8900514
MW-189D(374) Groundwater	8900515
TB17062 Water	8900516

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Kleinfelder, MD	Attn: Charlie Low
Electronic Copy To	Kleinfelder, MD	Attn: Charlie Brehm
Electronic Copy To	Kleinfelder, MD	Attn: Jen Kozak
Electronic Copy To	Kleinfelder, MD	Attn: Bryan Johnson
Electronic Copy To	Kleinfelder, MD	Attn: Stacey Schiding
Electronic Copy To	Kleinfelder, MD	Attn: Shari Schoonmaker

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Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

Sample Description: MW-189D(79) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900504
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:00 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

18979

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.9	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	12		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	8		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 19:09	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 19:09	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(91.5) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900505
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:05 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

91189

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	4	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 20:58	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 20:58	Hu Yang	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: MW-189D(117-119) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900506
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:10 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89117

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	1	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	13	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 21:20	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 21:20	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(122) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900507
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:15 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89122

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	1	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	16	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 21:42	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 21:42	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(138-140) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900508
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:20 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89138

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	2	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	21	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 22:04	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 22:04	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(161) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900509
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:25 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89161

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	2	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	21	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 22:26	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 22:26	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(216) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900510
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:30 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89216

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	4		1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.6	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	39		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	0.8	J	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 22:47	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 22:47	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(256-258) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900511
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:35 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89256

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	4		1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.7	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	48		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	0.9	J	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 23:09	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 23:09	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(278) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900512
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:40 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89278

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	2		1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	16		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	0.5	J	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 23:31	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 23:31	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(315) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900513
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:45 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89315

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	5		1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.8	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	55		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	2		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 23:53	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 23:53	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(357) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900514
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:50 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89357

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	6		1	0.5	1
10945	Benzene	71-43-2	0.5	J	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.9	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	65		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	1		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/27/2017 00:15	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/27/2017 00:15	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(374) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900515
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/23/2017 13:55 by CB

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89374

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	8		1	0.5	1
10945	Benzene	71-43-2	0.6	J	1	0.5	1
10945	t-Butyl alcohol	75-65-0	2	J	5	2	1
10945	Ethyl t-butyl ether	637-92-3	1		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	85		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	1		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/27/2017 00:37	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/27/2017 00:37	Hu Yang	1

*=This limit was used in the evaluation of the final result

Sample Description: TB17062 Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8900516
LL Group # 1780798
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/12/2017

Submitted: 03/24/2017 17:34
Reported: 03/28/2017 13:54

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

241TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F170851AA	03/26/2017 20:36	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170851AA	03/26/2017 20:36	Hu Yang	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ExxonMobil-Kleinfelder
Reported: 03/28/2017 13:54

Group Number: 1780798

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result ug/l	LOQ** ug/l	MDL ug/l
Batch number: F170851AA	Sample number(s): 8900504-8900516		
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
t-Butyl alcohol	N.D.	5	2
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
di-Isopropyl ether	N.D.	1	0.5
Methyl Tertiary Butyl Ether	N.D.	1	0.5
Toluene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F170851AA	Sample number(s): 8900504-8900516								
t-Amyl methyl ether	20	17.85			89		67-120		
Benzene	20	18.59			93		78-120		
t-Butyl alcohol	200	178.64			89		68-122		
Ethyl t-butyl ether	20	17.99			90		69-120		
Ethylbenzene	20	18.12			91		78-120		
di-Isopropyl ether	20	17.81			89		70-124		
Methyl Tertiary Butyl Ether	20	17.93			90		75-120		
Toluene	20	18.38			92		80-120		
Xylene (Total)	60	54.75			91		80-120		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Kleinfelder
Reported: 03/28/2017 13:54

Group Number: 1780798

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: F170851AA	Sample number(s): 8900504-8900516 UNSPK: 8900504									
t-Amyl methyl ether	0.857	20	19.45	20	19.74	93	94	67-120	1	30
Benzene	N.D.	20	20.64	20	21.32	103	107	78-120	3	30
t-Butyl alcohol	11.78	200	178.54	200	196.8	83	93	68-122	10	30
Ethyl t-butyl ether	N.D.	20	19.04	20	19.48	95	97	69-120	2	30
Ethylbenzene	N.D.	20	19.86	20	20.56	99	103	78-120	3	30
di-Isopropyl ether	N.D.	20	19.17	20	19.74	96	99	70-124	3	30
Methyl Tertiary Butyl Ether	8.41	20	26.67	20	27.61	91	96	75-120	3	30
Toluene	N.D.	20	20.32	20	20.73	102	104	80-120	2	30
Xylene (Total)	N.D.	60	59.8	60	62.19	100	104	80-120	4	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 BTEX + 5 Oxys
Batch number: F170851AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8900504	103	103	98	92
8900505	104	102	98	92
8900506	103	101	99	91
8900507	101	100	98	92
8900508	103	102	98	92
8900509	103	100	98	92
8900510	102	98	99	93
8900511	102	103	99	91
8900512	103	101	99	92
8900513	101	99	99	92
8900514	103	99	98	91
8900515	102	98	99	91
8900516	103	100	99	93
Blank	103	101	97	91
LCS	101	101	99	97
MS	102	100	99	96
MSD	101	101	99	96
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

13459 1780798 8900504-16

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

BJ

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

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

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #:
Sampler(s) Name(s): Charlie Brehm Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix
Major Project (AFE): 28077
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: John Hoban
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City State Zip:
Attention: PO#:

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

	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	MTBE, BTEX, ETBE, TAME, DIPE, TBA by 8260B	Full List VOCs +Oxy5 by 8260	LAB USE ONLY
	MW-189D(79)		3/23/17	1300	CB	GW	3	X								X		
	MW-189D(91.5)		3/23/17	1305	CB	GW	3	X								X		
	MW-189D(117-119)		3/23/17	1310	CB	GW	3	X								X		
	MW-189D(122)		3/23/17	1315	CB	GW	3	X								X		
	MW-189D(138-140)		3/23/17	1320	CB	GW	3	X								X		
	MW-189D(161)		3/23/17	1325	CB	GW	3	X								X		
	MW-189D(216)		3/23/17	1330	CB	GW	3	X								X		
	MW-189D(256-258)		3/23/17	1335	CB	GW	3	X								X		
	MW-189D(278)		3/23/17	1340	CB	GW	3	X								X		
	MW-189D(315)		3/23/17	1345	CB	GW	3	X								X		
	MW-189D(357)		3/23/17	1350	CB	GW	3	X								X		
	MW-189D(374)		3/23/17	1355	CB	GW	3	X								X		

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [X] 3 Day *EMERGENCY*
- [ ] ~~2 Day EMERGENCY~~
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [X] 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
- [ ] Other

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

Comments / Special Instructions

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			3/24/17 12:45		3/24/17 1610	
2						
3						
4						3/24/17 1610
5	Relinquished by:	Date Time:	Received By:	Custody Seal # NA	Intact / Not intact	Preserved where applicable / On Ice / Cooler Temp. 2.2c

13459 1780798 8900504-16

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

Lancaster Laboratories BF

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

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

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #:
Sampler(s) Name(s): Charlie Brehm Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix
Major Project (AFE): 28077
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: John Hoban
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preserved Bottles HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	MTBE, BTEX, ETBE, TAME, DIPE, TBA by 8260B	Full List VOCs +Oxy5 by 8260	LAB USE ONLY
TB17062		3/12/17	—	SD	TB	2	X								X		

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

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [X] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [X] 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
- [ ] Other

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

Comments / Special Instructions

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		3/24/17 1245	1	2	3/24/17 1610	2
3		Date Time:	3	4	Date Time:	4 3/24/17 1610
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal # NA	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp. 2.2 C

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 178952

Group Number(s): 1780798

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	03/24/2017 16:10
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	MD		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	2
Samples Intact:	Yes	Trip Blank Type:	HCl
Missing Samples:	No	Air Quality Samples Present:	No
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Simon Nies (25112) at 16:56 on 03/24/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	2.2	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

Report Date: May 08, 2017

Project: 2-8077 - Phoenix, MD (GW)

Submittal Date: 04/28/2017
Group Number: 1795146
PO Number: 4410481176
Release Number: BOZEMAN
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LL) #
MW-189D(79) Groundwater	8966069
MW-189D(91.5) Groundwater	8966070
MW-189D(117-119) Groundwater	8966071
MW-189D(122) Groundwater	8966072
MW-189D(138-140) Groundwater	8966073
MW-189D(161) Groundwater	8966074
MW-189D(216) Groundwater	8966075
MW-189D(256-258) Groundwater	8966076
MW-189D(278) Groundwater	8966077
MW-189D(315) Groundwater	8966078
MW-189D(357) Groundwater	8966079
MW-189D(374) Groundwater	8966080
TB-17079 Water	8966081
MW-48D (HS-S) Groundwater	8966082
MW-48D (HS-D) Groundwater	8966083
MW-179C (HS-S) Groundwater	8966084
MW-179C (HS-D) Groundwater	8966085
MW-181C (HS-S) Groundwater	8966086
MW-181C (HS-D) Groundwater	8966087
MW-182 (HS-S) Groundwater	8966088
MW-182 (HS-D) Groundwater	8966089

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Kleinfelder, MD	Attn: Charlie Low
Electronic Copy To	Kleinfelder, MD	Attn: Charlie Brehm
Electronic Copy To	Kleinfelder, MD	Attn: Jen Kozak
Electronic Copy To	Kleinfelder, MD	Attn: Bryan Johnson
Electronic Copy To	Kleinfelder, MD	Attn: Stacey Schiding
Electronic Copy To	Kleinfelder, MD	Attn: Shari Schoonmaker

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

Sample Description: MW-189D(79) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966069
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:00 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

18979

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171221AA	05/02/2017 17:02	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171221AA	05/02/2017 17:02	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(91.5) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966070
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:02 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
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Linden NJ 07036

18991

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	5	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171221AA	05/02/2017 17:23	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171221AA	05/02/2017 17:23	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(117-119) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966071
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:04 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89117

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.9	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	9		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171221AA	05/02/2017 17:45	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171221AA	05/02/2017 17:45	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(122) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966072
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:06 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89122

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	4	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171221AA	05/02/2017 18:07	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171221AA	05/02/2017 18:07	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(138-140) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966073
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:08 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89138

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.8	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	9		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171221AA	05/02/2017 18:29	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171221AA	05/02/2017 18:29	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(161) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966074
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:10 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89161

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	1	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	10	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171222AA	05/02/2017 19:21	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171222AA	05/02/2017 19:21	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(216) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966075
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:12 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89216

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	2	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	15	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171222AA	05/02/2017 19:42	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171222AA	05/02/2017 19:42	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(256-258) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966076
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:14 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89256

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	2	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	20	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171222AA	05/02/2017 20:04	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171222AA	05/02/2017 20:04	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(278) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966077
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:16 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89278

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	3	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	26	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171231AA	05/03/2017 10:11	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171231AA	05/03/2017 10:11	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(315) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966078
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:18 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89315

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	2	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	21	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171231AA	05/03/2017 10:33	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171231AA	05/03/2017 10:33	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(357) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966079
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:20 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89357

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	2	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	21	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 17:23	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 17:23	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(374) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966080
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/27/2017 13:22 by CB

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89374

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	1	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	14	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 17:47	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 17:47	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-17079 Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966081
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 03/22/2017

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

T4281

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 18:11	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 18:11	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-48D (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966082
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/28/2017 09:50 by TH

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

SS48D

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 18:36	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 18:36	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-48D (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966083
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/28/2017 09:55 by TH

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

SD48D

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 18:59	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 18:59	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-179C (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966084
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/28/2017 10:40 by TH

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

179SS

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.		1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.8	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 19:23	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 19:23	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-179C (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966085
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/28/2017 10:45 by TH

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

179SD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	4	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	36	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 19:47	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 19:47	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-181C (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966086
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/28/2017 09:00 by TH

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

181SS

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	1		1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.7	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	20		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 20:11	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 20:11	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-181C (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966087
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/28/2017 09:05 by TH

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

181SD

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.8	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.6	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	16		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 20:35	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 20:35	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-182 (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966088
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/28/2017 10:15 by TH

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

182SS

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171222AA	05/02/2017 20:59	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171222AA	05/02/2017 20:59	Daniel H Heller	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-182 (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 8966089
LL Group # 1795146
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 04/28/2017 10:20 by TH

Submitted: 04/28/2017 17:15
Reported: 05/08/2017 17:50

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

182SD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	F171231AA	05/03/2017 10:55	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F171231AA	05/03/2017 10:55	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ExxonMobil-Kleinfelder Group Number: 1795146
Reported: 05/08/2017 17:50

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ**	MDL
	ug/l	ug/l	ug/l
Batch number: F171221AA	Sample number(s): 8966069-8966073		
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
t-Butyl alcohol	N.D.	5	2
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
di-Isopropyl ether	N.D.	1	0.5
Methyl Tertiary Butyl Ether	N.D.	1	0.5
Toluene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5
Batch number: F171222AA	Sample number(s): 8966074-8966076		
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
t-Butyl alcohol	N.D.	5	2
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
di-Isopropyl ether	N.D.	1	0.5
Methyl Tertiary Butyl Ether	N.D.	1	0.5
Toluene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5
Batch number: F171231AA	Sample number(s): 8966077-8966078,8966089		
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
t-Butyl alcohol	N.D.	5	2
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
di-Isopropyl ether	N.D.	1	0.5
Methyl Tertiary Butyl Ether	N.D.	1	0.5
Toluene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5
Batch number: Z171222AA	Sample number(s): 8966079-8966088		
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
t-Butyl alcohol	N.D.	5	2
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
di-Isopropyl ether	N.D.	1	0.5
Methyl Tertiary Butyl Ether	N.D.	1	0.5
Toluene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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(2) The unspiked result was more than four times the spike added.
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Quality Control Summary

Client Name: ExxonMobil-Kleinfelder
Reported: 05/08/2017 17:50

Group Number: 1795146

Method Blank (continued)

Analysis Name	Result	LOQ**	MDL
	ug/l	ug/l	ug/l

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F171221AA	Sample number(s): 8966069-8966073								
t-Amyl methyl ether	20	18.93			95		67-120		
Benzene	20	20.22			101		78-120		
t-Butyl alcohol	200	191.67			96		68-122		
Ethyl t-butyl ether	20	19.42			97		69-120		
Ethylbenzene	20	18.63			93		78-120		
di-Isopropyl ether	20	21.17			106		70-124		
Methyl Tertiary Butyl Ether	20	17.93			90		75-120		
Toluene	20	19.43			97		80-120		
Xylene (Total)	60	57.61			96		80-120		
Batch number: F171222AA	Sample number(s): 8966074-8966076								
t-Amyl methyl ether	20	19.11			96		67-120		
Benzene	20	19.85			99		78-120		
t-Butyl alcohol	200	196.57			98		68-122		
Ethyl t-butyl ether	20	19.75			99		69-120		
Ethylbenzene	20	19.02			95		78-120		
di-Isopropyl ether	20	21.33			107		70-124		
Methyl Tertiary Butyl Ether	20	18.64			93		75-120		
Toluene	20	19.92			100		80-120		
Xylene (Total)	60	59.87			100		80-120		
Batch number: F171231AA	Sample number(s): 8966077-8966078,8966089								
t-Amyl methyl ether	20	18.64			93		67-120		
Benzene	20	20.09			100		78-120		
t-Butyl alcohol	200	206.34			103		68-122		
Ethyl t-butyl ether	20	19.37			97		69-120		
Ethylbenzene	20	19.73			99		78-120		
di-Isopropyl ether	20	20.76			104		70-124		
Methyl Tertiary Butyl Ether	20	17.78			89		75-120		
Toluene	20	20.38			102		80-120		
Xylene (Total)	60	60.15			100		80-120		
Batch number: Z171222AA	Sample number(s): 8966079-8966088								
t-Amyl methyl ether	20	16.31			82		67-120		
Benzene	20	18.9			95		78-120		
t-Butyl alcohol	200	191.92			96		68-122		
Ethyl t-butyl ether	20	17.22			86		69-120		
Ethylbenzene	20	19.04			95		78-120		
di-Isopropyl ether	20	18.23			91		70-124		

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(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Kleinfelder
Reported: 05/08/2017 17:50

Group Number: 1795146

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	20	17.69			88		75-120		
Toluene	20	19.85			99		80-120		
Xylene (Total)	60	59.02			98		80-120		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: F171221AA	Sample number(s): 8966069-8966073 UNSPK: P963801									
t-Amyl methyl ether	N.D.	20	19.02	20	19.96	95	100	67-120	5	30
Benzene	79.46	20	101.23	20	100.55	109	105	78-120	1	30
t-Butyl alcohol	971.11	200	1211.23	200	1230.87	120 (2)	130 (2)	68-122	2	30
Ethyl t-butyl ether	N.D.	20	19.52	20	20.04	98	100	69-120	3	30
Ethylbenzene	N.D.	20	20.6	20	21.07	103	105	78-120	2	30
di-Isopropyl ether	N.D.	20	21.75	20	22.32	109	112	70-124	3	30
Methyl Tertiary Butyl Ether	19.47	20	36.5	20	36.91	85	87	75-120	1	30
Toluene	N.D.	20	21.2	20	21.61	106	108	80-120	2	30
Xylene (Total)	N.D.	60	61.75	60	63.83	103	106	80-120	3	30
Batch number: F171222AA	Sample number(s): 8966074-8966076 UNSPK: P965337									
t-Amyl methyl ether	N.D.	20	19.37	20	19.4	97	97	67-120	0	30
Benzene	8.12	20	28.52	20	28.57	102	102	78-120	0	30
t-Butyl alcohol	117.11	200	316.04	200	320.65	99	102	68-122	1	30
Ethyl t-butyl ether	0.797	20	20.3	20	20.28	98	97	69-120	0	30
Ethylbenzene	N.D.	20	20.35	20	20.35	102	102	78-120	0	30
di-Isopropyl ether	N.D.	20	21.04	20	21.11	105	106	70-124	0	30
Methyl Tertiary Butyl Ether	13.48	20	31.42	20	32.48	90	95	75-120	3	30
Toluene	0.674	20	21.45	20	21.46	104	104	80-120	0	30
Xylene (Total)	N.D.	60	62.83	60	62.73	105	105	80-120	0	30
Batch number: F171231AA	Sample number(s): 8966077-8966078,8966089 UNSPK: P967205									
t-Amyl methyl ether	N.D.	20	17.64	20	17.51	88	88	67-120	1	30
Benzene	N.D.	20	20.27	20	19.96	101	100	78-120	2	30
t-Butyl alcohol	N.D.	200	185.05	200	192.58	93	96	68-122	4	30
Ethyl t-butyl ether	N.D.	20	18.26	20	18.2	91	91	69-120	0	30
Ethylbenzene	N.D.	20	19.83	20	19.39	99	97	78-120	2	30
di-Isopropyl ether	N.D.	20	20.46	20	20.1	102	100	70-124	2	30
Methyl Tertiary Butyl Ether	N.D.	20	16.98	20	16.69	85	83	75-120	2	30
Toluene	N.D.	20	20.9	20	20	104	100	80-120	4	30
Xylene (Total)	N.D.	60	61.05	60	59.08	102	98	80-120	3	30
Batch number: Z171222AA	Sample number(s): 8966079-8966088 UNSPK: P963695									

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Quality Control Summary

Client Name: ExxonMobil-Kleinfelder Group Number: 1795146
Reported: 05/08/2017 17:50

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
t-Amyl methyl ether	N.D.	20	16.73	20	17.1	84	86	67-120	2	30
Benzene	N.D.	20	19.99	20	19.94	100	100	78-120	0	30
t-Butyl alcohol	N.D.	200	192.23	200	192.27	96	96	68-122	0	30
Ethyl t-butyl ether	N.D.	20	17.77	20	17.78	89	89	69-120	0	30
Ethylbenzene	N.D.	20	20.76	20	20.56	104	103	78-120	1	30
di-Isopropyl ether	N.D.	20	18.96	20	19.08	95	95	70-124	1	30
Methyl Tertiary Butyl Ether	N.D.	20	18.59	20	18.88	93	94	75-120	2	30
Toluene	N.D.	20	20.78	20	20.65	104	103	80-120	1	30
Xylene (Total)	0.584	60	64.28	60	63.98	106	106	80-120	0	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 BTEX + 5 Oxys
Batch number: F171221AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8966069	99	102	99	91
8966070	100	103	99	91
8966071	101	103	100	91
8966072	100	103	101	93
8966073	100	103	100	91
Blank	101	102	96	93
LCS	100	104	98	97
MS	98	105	101	97
MSD	98	104	99	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 BTEX + 5 Oxys
Batch number: F171222AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8966074	100	101	100	92
8966075	98	100	99	92
8966076	100	101	100	91
Blank	100	101	97	94
LCS	99	101	98	98
MS	98	104	100	99
MSD	99	101	99	98
Limits:	80-116	77-113	80-113	78-113

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Quality Control Summary

Client Name: ExxonMobil-Kleinfelder Group Number: 1795146
Reported: 05/08/2017 17:50

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 BTEX + 5 Oxys
Batch number: F171231AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8966077	102	102	98	90
8966078	101	103	99	92
8966089	99	103	99	92
Blank	100	100	98	90
LCS	99	104	99	95
MS	99	102	100	95
MSD	99	102	100	96
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 BTEX + 5 Oxys
Batch number: Z171222AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8966079	95	97	99	95
8966080	95	99	99	95
8966081	95	97	99	95
8966082	95	98	99	96
8966083	95	98	99	94
8966084	97	97	98	94
8966085	97	97	98	95
8966086	96	97	99	95
8966087	96	98	99	95
8966088	96	97	100	95
Blank	97	99	99	95
LCS	95	100	99	98
MS	96	98	99	98
MSD	96	100	100	98
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
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CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

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

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #:
Sampler(s) Name(s): Charlie Brehm Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix
Major Project (AFE): 28077
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: ~~John Hoban~~ Clarke Bozeman
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City State Zip:
Attention: PO#:

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

	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	MTBE, BTEX, ETBE, TAME, DIPE, TBA by 8260B	Full List VOCs +Oxy5 by 8260	LAB USE ONLY
	MW-189D(79)		4/27/17	1300	CB	GW	3	X								X		
	MW-189D(91.5)		4/27/17	1302	CB	GW	3	X								X		
	MW-189D(117-119)		4/27/17	1304	CB	GW	3	X								X		
	MW-189D(122)		4/27/17	1306	CB	GW	3	X								X		
	MW-189D(138-140)		4/27/17	1308	CB	GW	3	X								X		
	MW-189D(161)		4/27/17	1310	CB	GW	3	X								X		
	MW-189D(216)		4/27/17	1312	CB	GW	3	X								X		
	MW-189D(256-258)		4/27/17	1314	CB	GW	3	X								X		
	MW-189D(278)		4/27/17	1316	CB	GW	3	X								X		
	MW-189D(315)		4/27/17	1318	CB	GW	3	X								X		
	MW-189D(357)		4/27/17	1320	CB	GW	3	X								X		
	MW-189D(374)		4/27/17	1322	CB	GW	3	X								X		

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [x] 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
- [ ] Other

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

Comments / Special Instructions

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		4/28/17 12:00	1	2	4/28/17 17:15	2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	4/28/17 17:15	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp. 3.7

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CHAIN OF CUSTODY- ExxonMobil Projects

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Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

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

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #:
Sampler(s) Name(s): Tom Heiser Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix
Major Project (AFE): 28077
Project Name: 14268 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: Clark Bozeman
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City: State: Zip:
Attention: PO#:

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

Accutest 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 Wat	MEOH	ENCO	MTBE, BTEX, ETBE, TAME, DIPE, TBA by 8260B	Full List VOCs +Oxy5 by 8260	LAB USE ONLY
	TB-17079		3/22/17		KG	GW	2	X								X		
	MW-48D (HS-S)		4/28/17	0950	TH	GW	3	X								X		
	MW-48D HS-D)		4/28/17	0955	TH	GW	3	X								X		
	MW-179C (HS-S)		4/28/17	1040	TH	GW	3	X								X		
	MW-179C (HS-D)		4/28/17	1045	TH	GW	3	X								X		
	MW-181C (HS-S)		4/28/17	0900	TH	GW	3	X								X		
	MW-181C (HS-D)		4/28/17	0905	TH	GW	3	X								X		
	MW-182 (HS-S)		4/28/17	1015	TH	GW	3	X								X		
	MW-182 (HS-D)		4/28/17	1020	TH	GW	3	X								X		

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [X] 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
- [ ] Other

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

Comments / Special Instructions

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	Tom Heiser	4/28/17 1200	1 A Duncan	2 A Duncan	4/28/17 1715	2
3			3	4		4
5	Relinquished by:	Date Time: 4/28/17 1715	Received By:	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ]

On Ice [X] Cooler Temp 3.7

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 182173

Group Number(s): 1795146

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	04/28/2017 15:55
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	Yes
Paperwork Enclosed:	Yes	VOA IDs (≥ 6mm):	MW-181C
Samples Intact:	Yes	Total Trip Blank Qty:	2
Missing Samples:	No	Trip Blank Type:	HCl
Extra Samples:	No	Air Quality Samples Present:	No
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 17:59 on 04/28/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	3.7	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

Report Date: June 01, 2017

Project: 2-8077 - Phoenix, MD (GW)

Submittal Date: 05/25/2017
Group Number: 1805927
PO Number: 4410481176
Release Number: BOZEMAN
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LL) #
MW-189D(79) Groundwater	9015095
MW-189D(91.5) Groundwater	9015096
MW-189D(117-119) Groundwater	9015097
MW-189D(122) Groundwater	9015098
MW-189D(138-140) Groundwater	9015099
MW-189D(161) Groundwater	9015100
MW-189D(216) Groundwater	9015101
MW-189D(256-258) Groundwater	9015102
MW-189D(278) Groundwater	9015103
MW-189D(315) Groundwater	9015104
MW-189D(357) Groundwater	9015105
MW-189D(374) Groundwater	9015106
PW-3501 (HS-S) Groundwater	9015107
PW-3501 (HS-D) Groundwater	9015108
MW-171C (HS-S) Groundwater	9015109
MW-171C (HS-D) Groundwater	9015110
MW-48D (HS-S) Groundwater	9015111
MW-48D (HS-D) Groundwater	9015112
MW-73C (HS-S) Groundwater	9015113
MW-73C (HS-D) Groundwater	9015114
MW-82D (HS-S) Groundwater	9015115
MW-82D (HS-M) Groundwater	9015116
MW-82D (HS-D) Groundwater	9015117
TB17130 Water	9015118

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-

laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Kleinfelder, MD	Attn: Charlie Low
Electronic Copy To	Kleinfelder, MD	Attn: Charlie Brehm
Electronic Copy To	Kleinfelder, MD	Attn: Jen Kozak
Electronic Copy To	Kleinfelder, MD	Attn: Bryan Johnson
Electronic Copy To	Kleinfelder, MD	Attn: Stacey Schiding
Electronic Copy To	Kleinfelder, MD	Attn: Shari Schoonmaker

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

Sample Description: MW-189D(79) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015095
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:00 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89-79

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 09:18	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 09:18	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(91.5) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015096
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:02 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89-91

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 09:42	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 09:42	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(117-119) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015097
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:04 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89-17

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	2	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 10:07	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 10:07	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(122) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015098
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:06 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89-22

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	4	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 10:31	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 10:31	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(138-140) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015099
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:08 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
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89-38

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	3	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 10:55	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 10:55	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(161) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015100
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:10 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
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Linden NJ 07036

89-61

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	5	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 11:19	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 11:19	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(216) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015101
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:12 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
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89-21

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.8	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	12		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 11:43	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 11:43	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(256-258) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015102
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:14 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
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89-25

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.6	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	10		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 12:07	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 12:07	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(278) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015103
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:16 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
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Building 7
Linden NJ 07036

89-27

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.9	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	14		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 12:31	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 12:31	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(315) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015104
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:18 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89-31

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.6	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	11		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 12:55	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 12:55	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(357) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015105
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:20 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
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89-35

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.8	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	11		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 13:19	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 13:19	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-189D(374) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015106
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 10:22 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

89-37

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	0.7	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	12		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 13:43	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 13:43	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: PW-3501 (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015107
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 13:00 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

3501S

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 14:07	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 14:07	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: PW-3501 (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015108
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 13:05 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
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Building 7
Linden NJ 07036

3501D

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 14:31	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 14:31	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-171C (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015109
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 13:30 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

171SS

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.		1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.5	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	1		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 14:55	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 14:55	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-171C (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015110
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 13:35 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

171SD

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.		1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	0.6	J	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	1		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 15:20	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 15:20	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-48D (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015111
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 12:30 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

48DSS

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 15:43	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 15:43	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-48D (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015112
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 12:35 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

48DSD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171512AA	05/31/2017 16:07	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171512AA	05/31/2017 16:07	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-73C (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015113
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 14:20 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

73CSS

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	5		1	0.5	1
10945	Benzene	71-43-2	2		1	0.5	1
10945	t-Butyl alcohol	75-65-0	120		5	2	1
10945	Ethyl t-butyl ether	637-92-3	2		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	0.6	J	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	100		1	0.5	1
10945	Toluene	108-88-3	2		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171511AA	05/31/2017 09:31	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171511AA	05/31/2017 09:31	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-73C (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015114
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 14:25 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

73CSD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	5	1	0.5	1
10945	Benzene	71-43-2	2	1	0.5	1
10945	t-Butyl alcohol	75-65-0	120	5	2	1
10945	Ethyl t-butyl ether	637-92-3	2	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	100	1	0.5	1
10945	Toluene	108-88-3	2	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171511AA	05/31/2017 09:55	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171511AA	05/31/2017 09:55	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-82D (HS-S) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015115
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 14:40 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

82DSS

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	1	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	18		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171511AA	05/31/2017 10:19	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171511AA	05/31/2017 10:19	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-82D (HS-M) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015116
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 14:45 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

82DSM

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	1	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	18	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171511AA	05/31/2017 10:43	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171511AA	05/31/2017 10:43	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-82D (HS-D) Groundwater
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015117
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/24/2017 14:50 by TH

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

82DSD

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	1	J	1	0.5	1
10945	Benzene	71-43-2	N.D.		1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.		5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.		1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.		1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.		1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	18		1	0.5	1
10945	Toluene	108-88-3	N.D.		1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.		1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171511AA	05/31/2017 11:07	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171511AA	05/31/2017 11:07	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Sample Description: TB17130 Water
S2010L4236 2-8077 - Phoenix, MD

LL Sample # WW 9015118
LL Group # 1805927
Account # 13459

Project Name: 2-8077 - Phoenix, MD (GW)

Collected: 05/17/2017

Submitted: 05/25/2017 17:45
Reported: 06/01/2017 13:23

ExxonMobil-Kleinfelder
1400 Park Avenue
Building 7
Linden NJ 07036

T5252

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	t-Amyl methyl ether	994-05-8	N.D.	1	0.5	1
10945	Benzene	71-43-2	N.D.	1	0.5	1
10945	t-Butyl alcohol	75-65-0	N.D.	5	2	1
10945	Ethyl t-butyl ether	637-92-3	N.D.	1	0.5	1
10945	Ethylbenzene	100-41-4	N.D.	1	0.5	1
10945	di-Isopropyl ether	108-20-3	N.D.	1	0.5	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	0.5	1
10945	Toluene	108-88-3	N.D.	1	0.5	1
10945	Xylene (Total)	1330-20-7	N.D.	1	0.5	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	8260 BTEX + 5 Oxys	SW-846 8260B	1	Z171511AA	05/31/2017 07:30	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z171511AA	05/31/2017 07:30	Anita M Dale	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ExxonMobil-Kleinfelder Group Number: 1805927
Reported: 06/01/2017 13:23

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ**	MDL
	ug/l	ug/l	ug/l
Batch number: Z171511AA	Sample number(s): 9015113-9015118		
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
t-Butyl alcohol	N.D.	5	2
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
di-Isopropyl ether	N.D.	1	0.5
Methyl Tertiary Butyl Ether	N.D.	1	0.5
Toluene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5
Batch number: Z171512AA	Sample number(s): 9015095-9015112		
t-Amyl methyl ether	N.D.	1	0.5
Benzene	N.D.	1	0.5
t-Butyl alcohol	N.D.	5	2
Ethyl t-butyl ether	N.D.	1	0.5
Ethylbenzene	N.D.	1	0.5
di-Isopropyl ether	N.D.	1	0.5
Methyl Tertiary Butyl Ether	N.D.	1	0.5
Toluene	N.D.	1	0.5
Xylene (Total)	N.D.	1	0.5

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: Z171511AA	Sample number(s): 9015113-9015118								
t-Amyl methyl ether	20	15.77			79		67-120		
Benzene	20	18.78			94		78-120		
t-Butyl alcohol	200	190.84			95		68-122		
Ethyl t-butyl ether	20	16.84			84		69-120		
Ethylbenzene	20	19.02			95		78-120		
di-Isopropyl ether	20	17.7			89		70-124		
Methyl Tertiary Butyl Ether	20	18.06			90		75-120		
Toluene	20	19.98			100		80-120		
Xylene (Total)	60	59.63			99		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Kleinfelder
Reported: 06/01/2017 13:23

Group Number: 1805927

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: Z171512AA	Sample number(s): 9015095-9015112								
t-Amyl methyl ether	20	16.14			81		67-120		
Benzene	20	19.09			95		78-120		
t-Butyl alcohol	200	187.63			94		68-122		
Ethyl t-butyl ether	20	16.91			85		69-120		
Ethylbenzene	20	18.89			94		78-120		
di-Isopropyl ether	20	17.87			89		70-124		
Methyl Tertiary Butyl Ether	20	19.67			98		75-120		
Toluene	20	19.86			99		80-120		
Xylene (Total)	60	59.39			99		80-120		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: Z171511AA	Sample number(s): 9015113-9015118 UNSPK: P012990									
t-Amyl methyl ether	N.D.	20	15.79	20	15.58	79	78	67-120	1	30
Benzene	N.D.	20	19.42	20	19.19	97	96	78-120	1	30
t-Butyl alcohol	N.D.	200	189.38	200	188.44	95	94	68-122	1	30
Ethyl t-butyl ether	N.D.	20	16.55	20	16.69	83	83	69-120	1	30
Ethylbenzene	N.D.	20	19.57	20	19.67	98	98	78-120	1	30
di-Isopropyl ether	N.D.	20	18.06	20	17.84	90	89	70-124	1	30
Methyl Tertiary Butyl Ether	N.D.	20	17.67	20	17.53	88	88	75-120	1	30
Toluene	N.D.	20	20.77	20	20.56	104	103	80-120	1	30
Xylene (Total)	N.D.	60	61.73	60	61.09	103	102	80-120	1	30
Batch number: Z171512AA	Sample number(s): 9015095-9015112 UNSPK: P012979									
t-Amyl methyl ether	N.D.	20	16.09	20	16.65	80	83	67-120	3	30
Benzene	N.D.	20	19.97	20	20.4	100	102	78-120	2	30
t-Butyl alcohol	N.D.	200	187.57	200	191.62	94	96	68-122	2	30
Ethyl t-butyl ether	N.D.	20	16.98	20	17.5	85	88	69-120	3	30
Ethylbenzene	N.D.	20	20.02	20	20.61	100	103	78-120	3	30
di-Isopropyl ether	N.D.	20	18.03	20	18.69	90	93	70-124	4	30
Methyl Tertiary Butyl Ether	N.D.	20	19.33	20	19.84	97	99	75-120	3	30
Toluene	N.D.	20	21.07	20	21.62	105	108	80-120	3	30
Xylene (Total)	N.D.	60	62.68	60	64.3	104	107	80-120	3	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
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P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ExxonMobil-Kleinfelder Group Number: 1805927
Reported: 06/01/2017 13:23

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 BTEX + 5 Oxys
Batch number: Z171511AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9015113	100	99	99	93
9015114	101	98	98	93
9015115	103	100	99	94
9015116	103	100	99	92
9015117	102	102	99	93
9015118	102	100	99	93
Blank	101	97	99	94
LCS	99	100	101	99
MS	100	99	100	99
MSD	98	99	100	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 BTEX + 5 Oxys
Batch number: Z171512AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9015095	102	99	99	93
9015096	102	99	99	93
9015097	104	99	98	92
9015098	102	99	98	92
9015099	103	101	99	93
9015100	104	100	99	92
9015101	103	100	99	93
9015102	105	103	99	93
9015103	104	98	99	92
9015104	105	101	98	92
9015105	104	102	99	92
9015106	104	100	100	92
9015107	104	101	99	93
9015108	104	102	100	94
9015109	104	101	99	92
9015110	103	100	99	92
9015111	102	100	99	93
9015112	102	98	100	93
Blank	102	100	98	94
LCS	100	101	100	98
MS	100	101	100	99
MSD	100	101	101	99
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
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P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

13459 1805927 9015095-118

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___ (2)

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
TEL. 717-656-2300
www.lancasterlabs.com

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

Client / Reporting Information

Company Name: Kleinfelder
Street Address: 1340 Charwood Road Ste. 1
City: Hanover, MD State: Zip: 21076
Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #:
Sampler(s) Name(s): Tom Heiser Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix
Major Project (AFE): 28077
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: John Hoban
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City State Zip:
Attention: PO#

Requested Analysis (see TEST CODE sheet)

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	MTBE, BTEX, ETBE, TAME, DIPE, TBA by 8260B	Full List VOCs +Oxy5 by 8260	LAB USE ONLY
MW-189D(79)		5/24/17	1000	TH	GW	3	X								X		
MW-189D(91.5)		5/24/17	1002	TH	GW	3	X								X		
MW-189D(117-119)		5/24/17	1004	TH	GW	3	X								X		
MW-189D(122)		5/24/17	1006	TH	GW	3	X								X		
MW-189D(138-140)		5/24/17	1008	TH	GW	3	X								X		
MW-189D(161)		5/24/17	1010	TH	GW	3	X								X		
MW-189D(216)		5/24/17	1012	TH	GW	3	X								X		
MW-189D(256-258)		5/24/17	1014	TH	GW	3	X								X		
MW-189D(278)		5/24/17	1016	TH	GW	3	X								X		
MW-189D(315)		5/24/17	1018	TH	GW	3	X								X		
MW-189D(357)		5/24/17	1020	TH	GW	3	X								X		
MW-189D(374)		5/24/17	1022	TH	GW	3	X								X		

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

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [x] 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
- [ ] Other

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

Comments / Special Instructions

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		5/24/17 12:00	1	2	5/24/17 17:45	2
3			3	4		4
5			5			

Custody Seal # ☐ Intact ☐ Not Intact — Preserved where applicable ☐ — On Ice ☒ — Cooler Temp. 2.3-3.0°C

5/25/17

CB 13459 1805927 9015095-118 (2)

CHAIN OF CUSTODY- ExxonMobil Projects

PAGE ___ OF ___

Lancaster Laboratories

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17605
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FED-EX Tracking # | Bottle Order Control #

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Project Contact: Stacey Schiding E-mail:
Phone #: 410-850-0404 Fax #:
Sampler(s) Name(s): Tom Heiser Phone #:

SITE NAME - Provide Site Name for Retail or AFE Number for Major Projects

Retail Project (Site Name): Exxon - Phoenix
Major Project (AFE): 28077
Project Name: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: Clark Bozeman
ExxonMobil Purchase Order #:

ExxonMobil Environmental Services Co.

If Project is Direct Bill to Consultant
Company Name:
Street Address:
City State Zip:
Attention: PO#:

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Wat	MEOH	ENCO	MTBE, BTEX, ETBE, TAME, DIPE, TBA by 8260B	Full List VOCs +Oxy5 by 8260	LAB USE ONLY
	PW-3501 (HS-S)		5/24/17	1300	TH	GW	3	X								X		
	PW-3501 (HS-D)		5/24/17	1305	TH	GW	3	X								X		
	MW-171C (HS-S)		5/24/17	1330	TH	GW	3	X								X		
	MW-171C (HS-D)		5/24/17	1335	TH	GW	3	X								X		
	MW-48D (HS-S)		5/24/17	1230	TH	GW	3	X								X		
	MW-48D (HS-D)		5/24/17	1235	TH	GW	3	X								X		
	MW-73C (HS-S)		5/24/17	1420	TH	GW	3	X								X		
	MW-73C (HS-D)		5/24/17	1425	TH	GW	3	X								X		
	MW-82D (HS-S)		5/24/17	1440	TH	GW	3	X								X		
	MW-82D (HS-M)		5/24/17	1445	TH	GW	3	X								X		
	MW-82D (HS-D)		5/24/17	1450	TH	GW	3	X								X		
	TA17130		5/17/17	—	AM	TB	2	X								X		

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [X] 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
- [ ] Other

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

Comments / Special Instructions

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

	Relinquished by Sampler:	Date Time:	Received By:
1	Tom Heiser	5/16/17 1500	1
2			2
3			3
4			4
5			5

	Relinquished By:	Date Time:	Received By:
1			2
2		5/16/17 17:41	
3			4
4			

Custody Seal # ☐ Intact ☐ Not intact — Preserved where applicable ☐ — On Ice ☒ — Cooler Temp. 2.3-3.0°C

1745

Barbara Weyandt

From: Stacey Schiding <SSchiding@kleinfelder.com>
Sent: Tuesday, May 30, 2017 3:28 PM
To: Barbara Weyandt
Subject: FW: 1805927-2-8077 - Phoenix, MD (GW)-05/25/2017 17:45:00 Acknowledgement
Attachments: EAcknow_1805927.xls; 1805927c.pdf; 1805927d.pdf

Hi, Barb - can we get these samples on an accelerated TAT? 5 day?

-----Original Message-----
From: LLAutomatedReportingSystem@eurofins.com [mailto:LLAutomatedReportingSystem@eurofins.com]
Sent: Friday, May 26, 2017 4:35 PM
To: Shari Schoonmaker <SSchoonmaker@kleinfelder.com>; Stacey Schiding <SSchiding@kleinfelder.com>; Bryan Johnson <BJohnson@kleinfelder.com>; Charles Brehm <CBrehm@kleinfelder.com>; Charlie Low <CLow@kleinfelder.com>
Subject: 1805927-2-8077 - Phoenix, MD (GW)-05/25/2017 17:45:00 Acknowledgement

The following is an acknowledgement of the receipt of samples by Lancaster Laboratories. Please review this acknowledgement and contact your Client Service Representative if you have concerns.

This is an automated message from an unmonitored address. Please do not reply to this address.

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 184711

Group Number(s): 180527

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	05/25/2017 17:45
Number of Packages:	2	Number of Projects:	2
State/Province of Origin:	MD		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	2
Samples Intact:	Yes	Trip Blank Type:	HCl
Missing Samples:	No	Air Quality Samples Present:	No
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Wesley Miller (2308) at 22:16 on 05/25/2017

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle)* *IR = Infrared (Surface Temp)* *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	2.3	DT	Wet	Y	Bagged	N
2	DT131	3.0	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

APPENDIX B

Boring/Well Construction Log

PLOTTED: 01/13/2017 02:12 PM BY: nlandry

Date Begin - End:	12/08/2016 - 12/16/2016	**Drilling Co.-Lic.#:**	Eichelbergers - #JWD-314
Logged By:	C. Low	**Drill Crew:**	C. Knaub
Hor.-Vert. Datum:	Not Available	**Drilling Equipment:**	Ingersoll Rand T-4
Plunge:	-90 degrees	**Drilling Method:**	Air Hammer/Air Rotary
Weather:	10°-50° Cloudy	**Borehole Diameter:**	12;10;6 in. O.D.

MONITORING WELL LOG MW-189D

FIELD EXPLORATION | MONITORING WELL CONSTRUCTION

Latitude: 39.52032° N
Longitude: -76.55405° E
Surface Condition: Grass

Completion Method:
Flush mount cap in concrete

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	FID (ppmv)	Graphical Log	Lithologic Description
0	Air Hammer				0.0			**Sandy CLAY (CL)**: red, moist
5					0.0			**Sandy CLAY with Cobbles (CL)**: red brown, moist
10 ▽					0.0			wet
15					0.0			
20					0.0			
25					0.0			
30					0.0			**GNEISS**: olive, dry
35			Water Sample MW-189D_(35)		0.0			
40					0.0			
45					0.0			- water bearing fracture from 44'-47' bgs
50	Air Rotary				0.0			
55					0.0			- small void ~52'-52.5'
60					0.0			- very hard drilling 59'-62' (bedrock)
65			Water Sample MW-189D_(65)		0.0			- high angle fracture 63.5'-65' (water producing)
70					0.0			**SCHIST**: olive gray, dry
75			Water Sample MW-189D_(72)		0.0			
80					0.0			
85					0.0			
90					0.0			
95					0.0			

Grout
12" Bore
6" Conductor Casing
Bentonite
Perforated Pipe
10" Bore
Bentonite
Open Hole
Soil Cuttings

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	20173385
DRAWN BY:	NML
CHECKED BY:	MB
DATE:	1/13/2017
REVISED:	-

MONITORING WELL LOG MW-189D
PERMIT NO.: BA-14-0863

28077_Phoenix, MD
14258 Jarrettsville Pike
Phoenix, MD

PLOTTED: 01/13/2017 02:12 PM BY: nlandry

Date Begin - End:	12/08/2016 - 12/16/2016	**Drilling Co.-Lic.#:**	Eichelbergers - #JWD-314
Logged By:	C. Low	**Drill Crew:**	C. Knaub
Hor.-Vert. Datum:	Not Available	**Drilling Equipment:**	Ingersoll Rand T-4
Plunge:	-90 degrees	**Drilling Method:**	Air Hammer/Air Rotary
Weather:	10°-50° Cloudy	**Borehole Diameter:**	12;10;6 in. O.D.

MONITORING WELL LOG MW-189D

FIELD EXPLORATION | MONITORING WELL CONSTRUCTION

Latitude: 39.52032° N
Longitude: -76.55405° E
Surface Condition: Grass

Completion Method:
Flush mount cap in concrete

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	FID (ppmv)	Graphical Log	Lithologic Description
100	Air Rotary				0.0			**SCHIST**: olive gray, dry
105					0.0			
110					0.0			
115					0.0			
120					0.0			
125					0.0			
130					0.0			
135					0.0			
140					0.0			
145					0.0			
150					0.0			
155					0.0			
160					0.0			- small water bearing fracture at~160' bgs
165					0.0			
170					0.0			
175					0.0			
180					0.0			
185					0.0			
190					0.0			
195					0.0			

Open Hole
Soil Cuttings

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	20173385
DRAWN BY:	NML
CHECKED BY:	MB
DATE:	1/13/2017
REVISED:	-

MONITORING WELL LOG MW-189D
PERMIT NO.: BA-14-0863

28077_Phoenix, MD
14258 Jarrettsville Pike
Phoenix, MD

gINT FILE: Klf_gint_master_2016
gINT TEMPLATE: E:\KLF_STANDARD_GINT_LIBRARY_2016.GLB [KLF_ENVIRONMENTAL LOG]

Date Begin - End:	12/08/2016 - 12/16/2016	**Drilling Co.-Lic.#:**	Eichelbergers - #JWD-314
Logged By:	C. Low	**Drill Crew:**	C. Knaub
Hor.-Vert. Datum:	Not Available	**Drilling Equipment:**	Ingersoll Rand T-4
Plunge:	-90 degrees	**Drilling Method:**	Air Hammer/Air Rotary
Weather:	10°-50° Cloudy	**Borehole Diameter:**	12;10;6 in. O.D.

MONITORING WELL LOG MW-189D

FIELD EXPLORATION | MONITORING WELL CONSTRUCTION

Latitude: 39.52032° N
Longitude: -76.55405° E
Surface Condition: Grass

Completion Method:
Flush mount cap in concrete

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	FID (ppmv)	Graphical Log	Lithologic Description
205	Air Rotary				0.0			**SCHIST**: olive gray, dry
210					0.0			
215								
220					0.0			
225								
230					0.0			
235								
240					0.0			
245								
250					0.0			
255								
260					0.0			
265								
270					0.0			
275			Water Sample MW-189D_(277)					
280					0.0			
285								
290								
295								

Open Hole
Soil Cuttings

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	20173385
DRAWN BY:	NML
CHECKED BY:	MB
DATE:	1/13/2017
REVISED:	-

MONITORING WELL LOG MW-189D
PERMIT NO.: BA-14-0863

28077_Phoenix, MD
14258 Jarrettsville Pike
Phoenix, MD

Date Begin - End:	12/08/2016 - 12/16/2016	**Drilling Co.-Lic.#:**	Eichelbergers - #JWD-314	**MONITORING WELL LOG MW-189D**
Logged By:	C. Low	**Drill Crew:**	C. Knaub	
Hor.-Vert. Datum:	Not Available	**Drilling Equipment:**	Ingersoll Rand T-4	
Plunge:	-90 degrees	**Drilling Method:**	Air Hammer/Air Rotary	
Weather:	10°-50° Cloudy	**Borehole Diameter:**	12;10;6 in. O.D.	

FIELD EXPLORATION | MONITORING WELL CONSTRUCTION

Latitude: 39.52032° N
Longitude: -76.55405° E
Surface Condition: Grass

Completion Method:
Flush mount cap in concrete

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	FID (ppmv)	Graphical Log	Lithologic Description
305	Air Rotary				0.0			**SCHIST**: olive gray, dry
310					0.0			
315								
320					0.0			
325								
330					0.0			
335								
340					0.0			
345								
350					0.0			
355								
360					0.0			
365								
370					0.0			
375								
380			Water Sample MW-189D_(384)		0.0			
385					0.0			
390								
395								

Soil Cuttings

Open Hole

The borehole was terminated at approximately 384 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:
▽ Groundwater was observed at approximately 10 ft. below ground surface during drilling.
GENERAL NOTES:
A PID (ppmv) was used for environmental field screening.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.:	20173385
DRAWN BY:	NML
CHECKED BY:	MB
DATE:	1/13/2017
REVISED:	-

MONITORING WELL LOG MW-189D
PERMIT NO.: BA-14-0863

28077_Phoenix, MD
14258 Jarrettsville Pike
Phoenix, MD

APPENDIX C

Geophysical Log

GEOPHYSICAL INVESTIGATION
Report

MW 189D
Phoenix, MD

FOR

Kleinfelder
Hanover, MD

by

ENVIROPROBE SERVICE, INC.
81 Marter Avenue, Mt Laurel, NJ 08054

January 2017

January 10, 2017

Stacey Schiding
Kleinfelder
1340 Charwood Road, Suite I
Hanover, MD 21076

REPORT: GEOPHYSICAL INVESTIGATION
MW 189D
Phoenix, MD

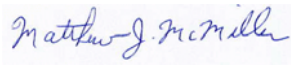
Dear Ms. Schiding:

We are pleased to present our report for the geophysical borehole logging investigation performed at the MW 189D well in Phoenix, MD. The investigation was performed on December 21, 2016.

If you have any questions concerning this report please contact us at 856-858-8584. We look forward to working with you in the future.

Respectfully submitted,

EnviroProbe Service, Inc.



Matthew J. McMillen
Senior Geophysicist

1) INTRODUCTION AND PURPOSE

The monitoring well MW 189D located in Phoenix, MD was the object of this geophysical survey.

The purpose of the geophysical borehole logging was to investigate lithology, fracture location and orientation, flow in the borehole, and overall physical condition of the borehole.

2) GEOPHYSICAL METHODOLOGY

Geophysical borehole logging was conducted using a Mount Sopris MXA winch with a Matrix console and Mount Sopris QL40 FTC fluid probe, Mount Sopris 2PCA-1000 caliper probe, Mount Sopris HFP-2293 heat-pulse flowmeter, ALT QL40-2G acoustical televiewer, and an ALT QL40-OBI-2G optical televiewer.

The borehole logs consist of caliper, fluid conductivity, fluid temperature, optical televiewer, acoustical televiewer, and heat-pulse flowmeter.

3) INTERPRETATION

Fractures are classified in the structure logs and tadpole plots as three groups. Open fractures, partial open fractures, and closed fractures. Additionally possible bedding planes are also identified.

Open fractures are fractures in the rock that appear to be open based on caliper data. Partial open fractures are fractures that appear not to be fully open in the borehole. Closed fractures show as fractures and have no significant caliper enlargement.

Flow values of 0.03 gals./min. or less are considered as no flow and approach the limit of the flowmeter. However, data below this limits may be useful in determining a trend within the borehole.

Interpretations are on the comments section of the log.

Appendix A has all the geophysical logs. Appendix B has the fracture data and heat pulse flowmeter data.

The well was approximately 386.7 feet in depth. Bottom of casing is at 71.7 feet. Water level in the well was at approximately 9.1 feet.

The geophysical logging of this borehole detected fractures based on the caliper log. Significant fractures were detected at approximately:

1) 72.2 feet
2) 78.0 feet to 78.9 feet
3) 91.5 feet
4) 117.3 feet to 118.6 feet

5) 121.8 feet
6) 139.6 feet
7) 160.3 feet
8) 311.7 feet to 314.1 feet
9) 356.8
10) 369.7 feet

Possible flow in or out of the well were detected at numerous possible locations based on the change in the fluid conductivity and fluid temperature. Ten locations in the well were where flow may be occurring are at approximately:

1) 75.0 feet	Possible from fracture at 72.2 feet
2) 79.8 feet	Possible from fracture at 78.0 feet to 78.9 feet
3) 116.8 feet	Possible from fracture at 117.3 feet to 118.6 feet
4) 158.2 feet	Possible from fracture at 160.3 feet
5) 177.8 feet	
6) 225.5 feet	
7) 256.0 feet	
8) 275.6 feet	
9) 321.3 feet	
10) 355.6 feet	Possible from fracture at 356.8 feet

The areas without a significant fracture could have flow out of a bedding plane or small fracture not detected by the caliper.

The heat pulse flowmeter was conducted at 27 depths as shown on the caliper fluid log. Values for these were at or below the lower limit of the tool which indicated no or very low flow in the well under ambient conditions.

See Appendix A for the logs of this borehole.
Appendix B has the fracture orientation data and the heat pulse flowmeter data.

4) CONCLUSIONS

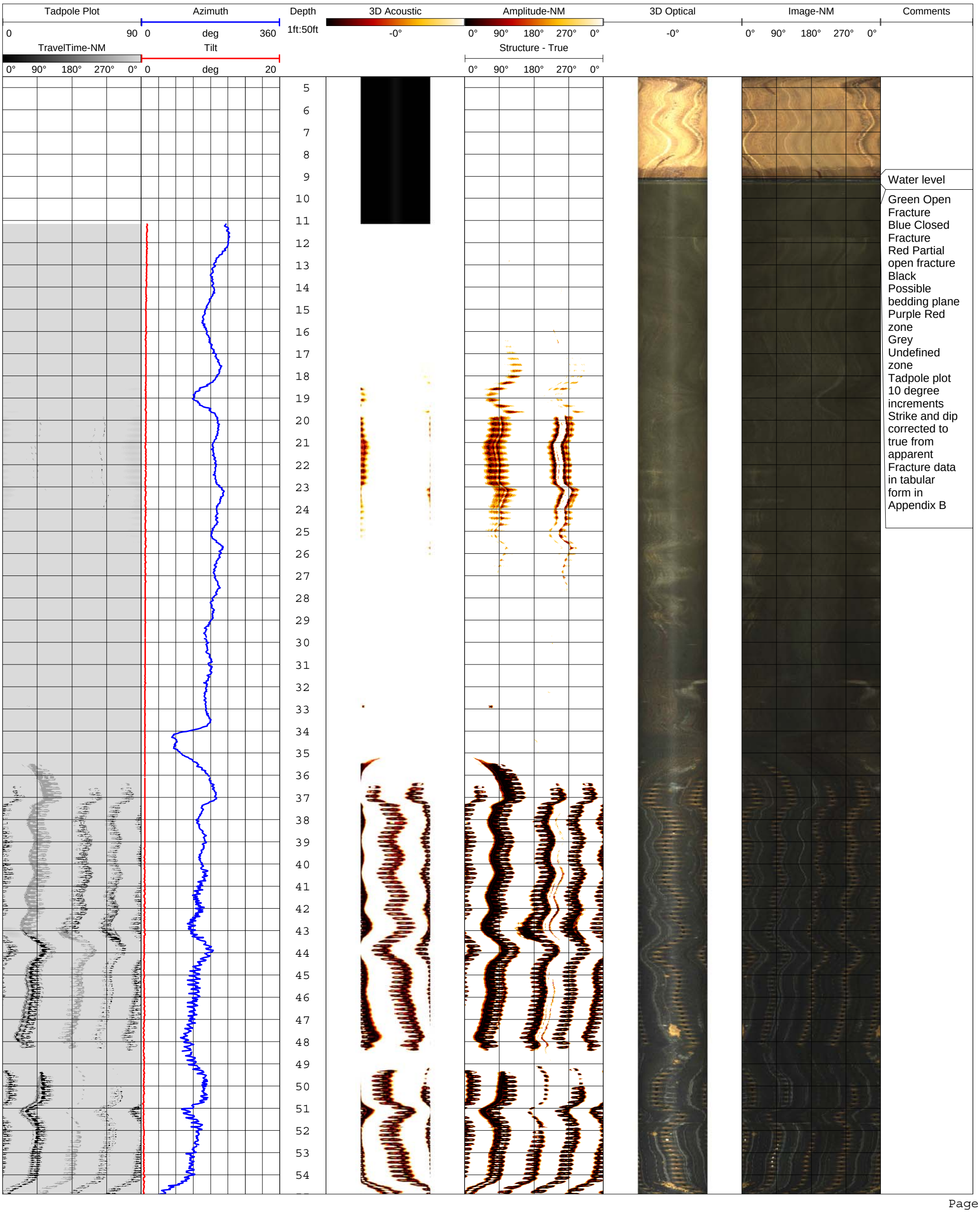
A geophysical borehole logging investigation of monitoring well MW198D in Phoenix, MD was conducted using of caliper, fluid conductivity, fluid temperature, acoustic televiewer, optical televiewer and heat pulse flowmeter. The purpose of this investigation was to investigate lithology, fracture location and orientation, flow in the borehole, and overall physical condition of the borehole.

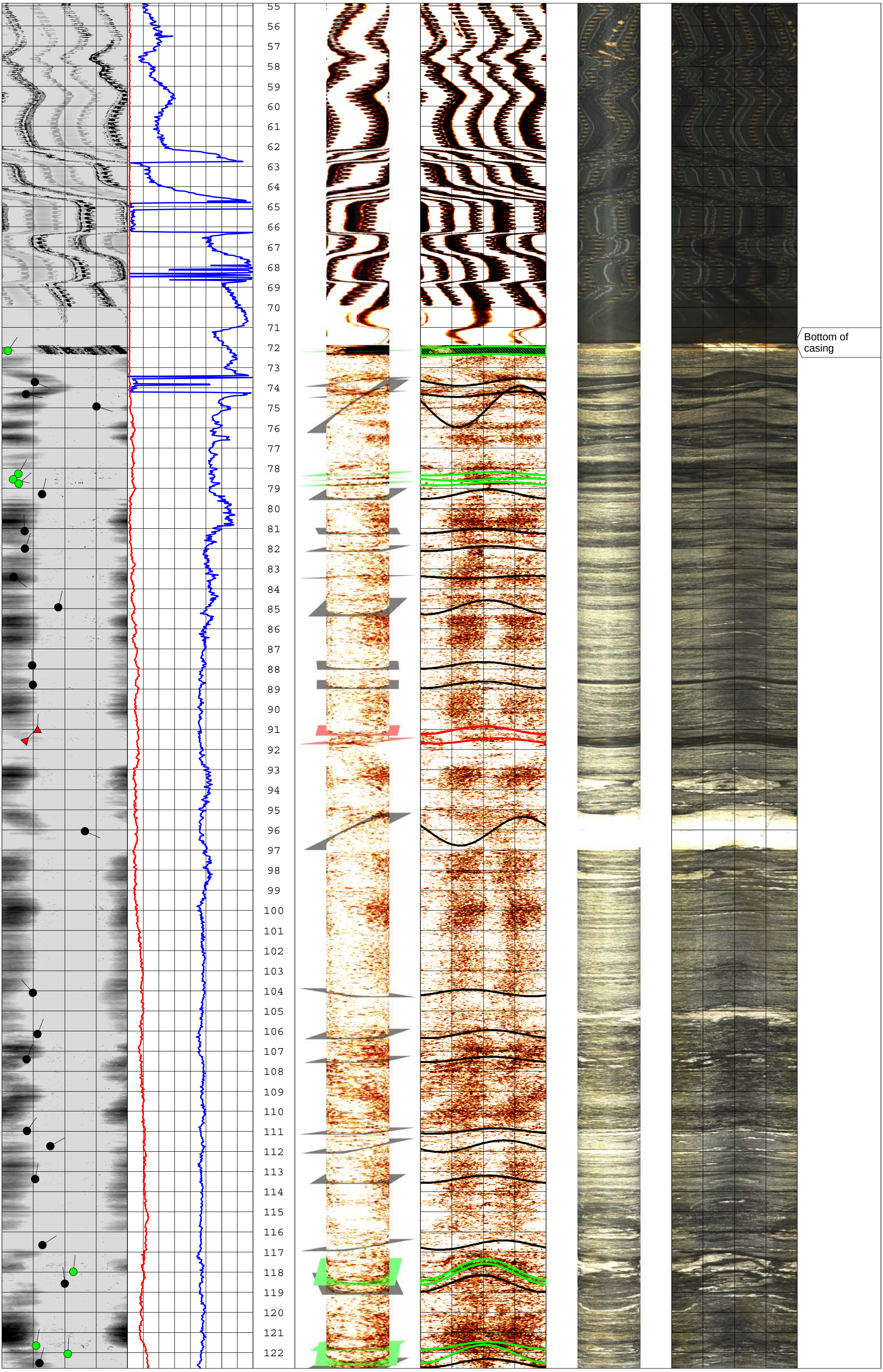
Results are shown as borehole logs. A discussion of the borehole is given in the interpretation section.

Appendix A shows the borehole logs.
Appendix B has the fracture orientation data and the heat pulse flowmeter data.

APPENDIX A

MW 189D
Phoenix, MD
prepared for
Kleinfelder
Hanover, MD
by
Enviroprobe Service, Inc.
Mount Laurel, NJ
Acoustical and Optical Televiewer

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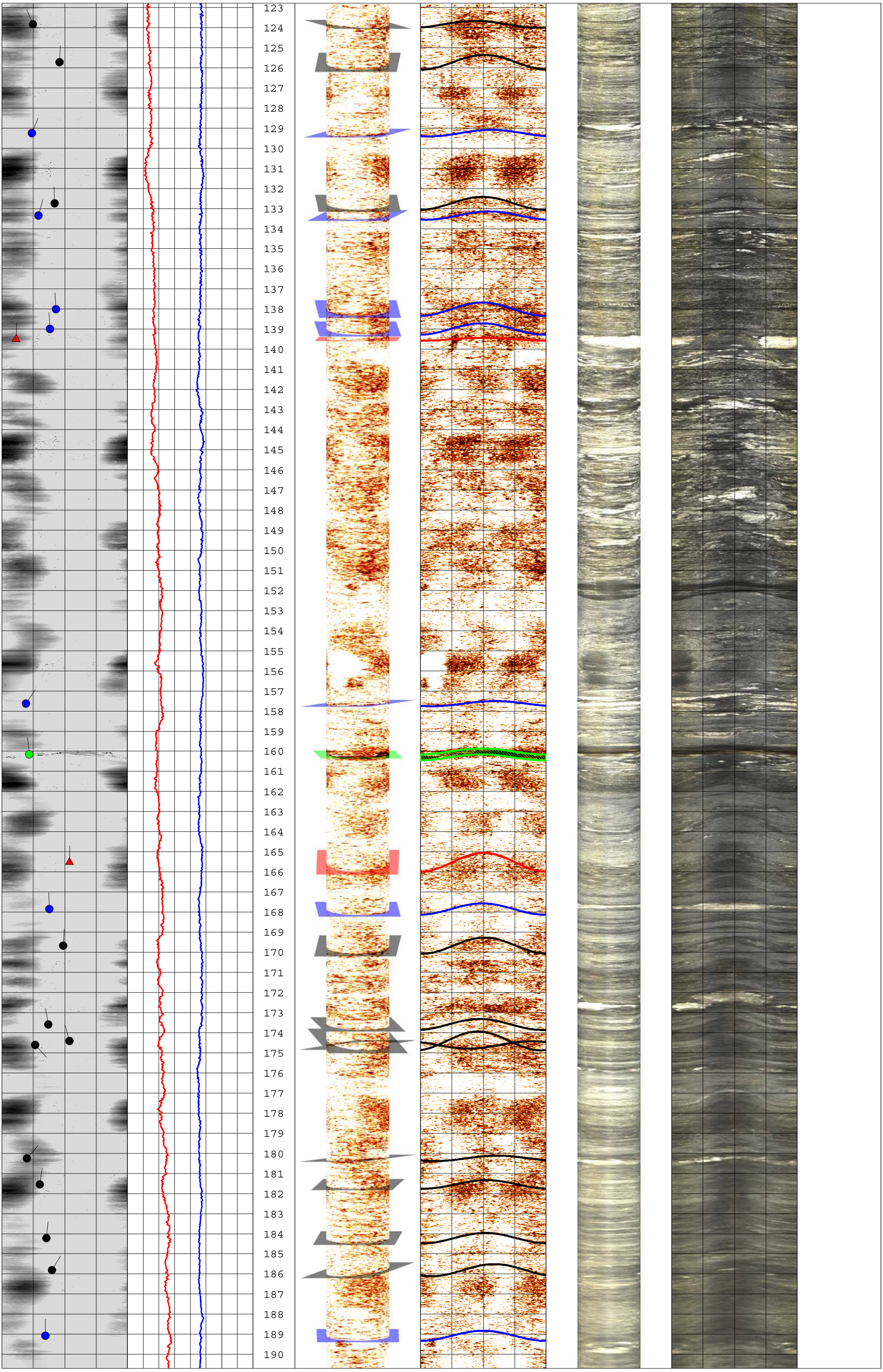
Bottom of casing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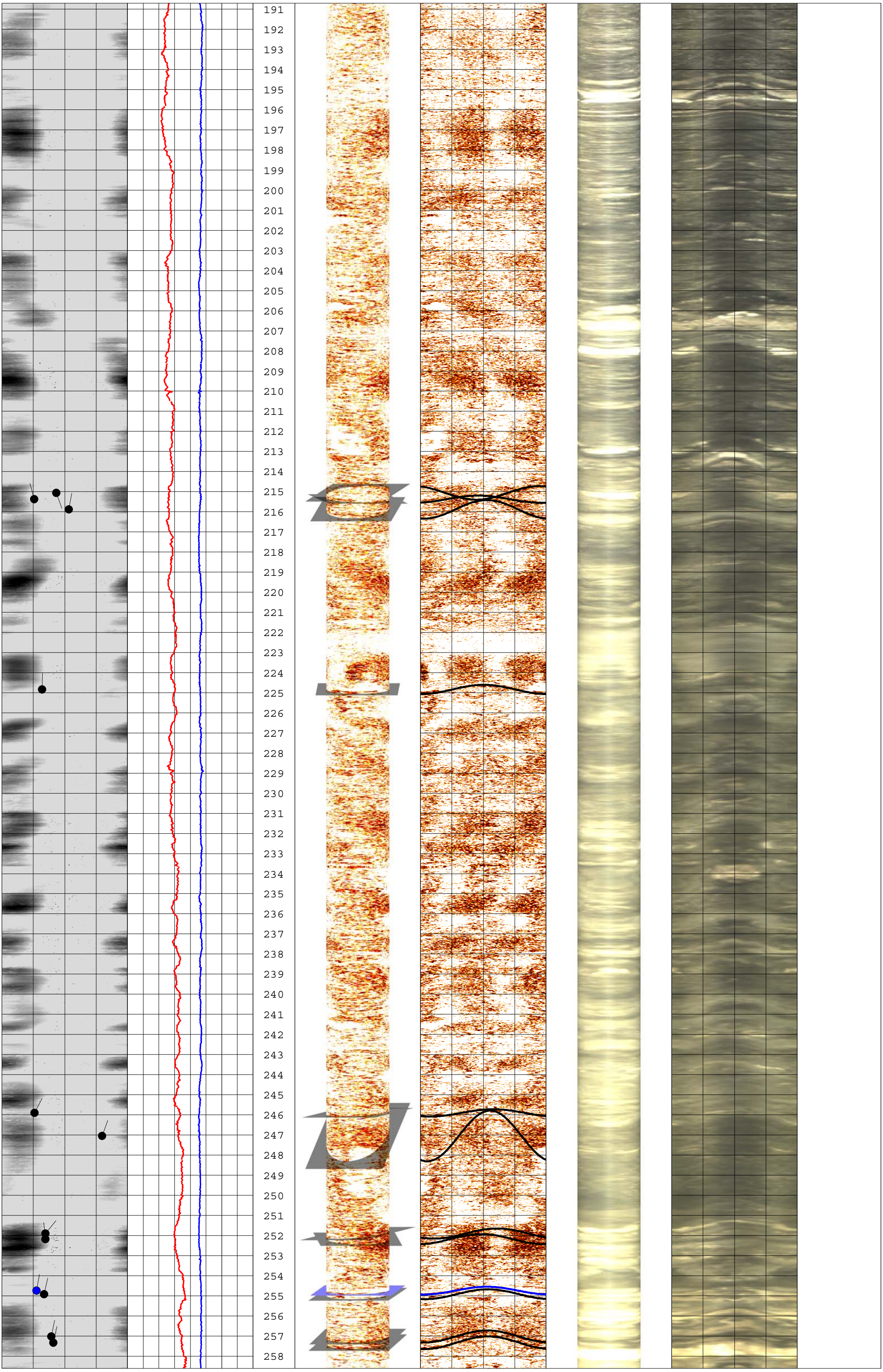
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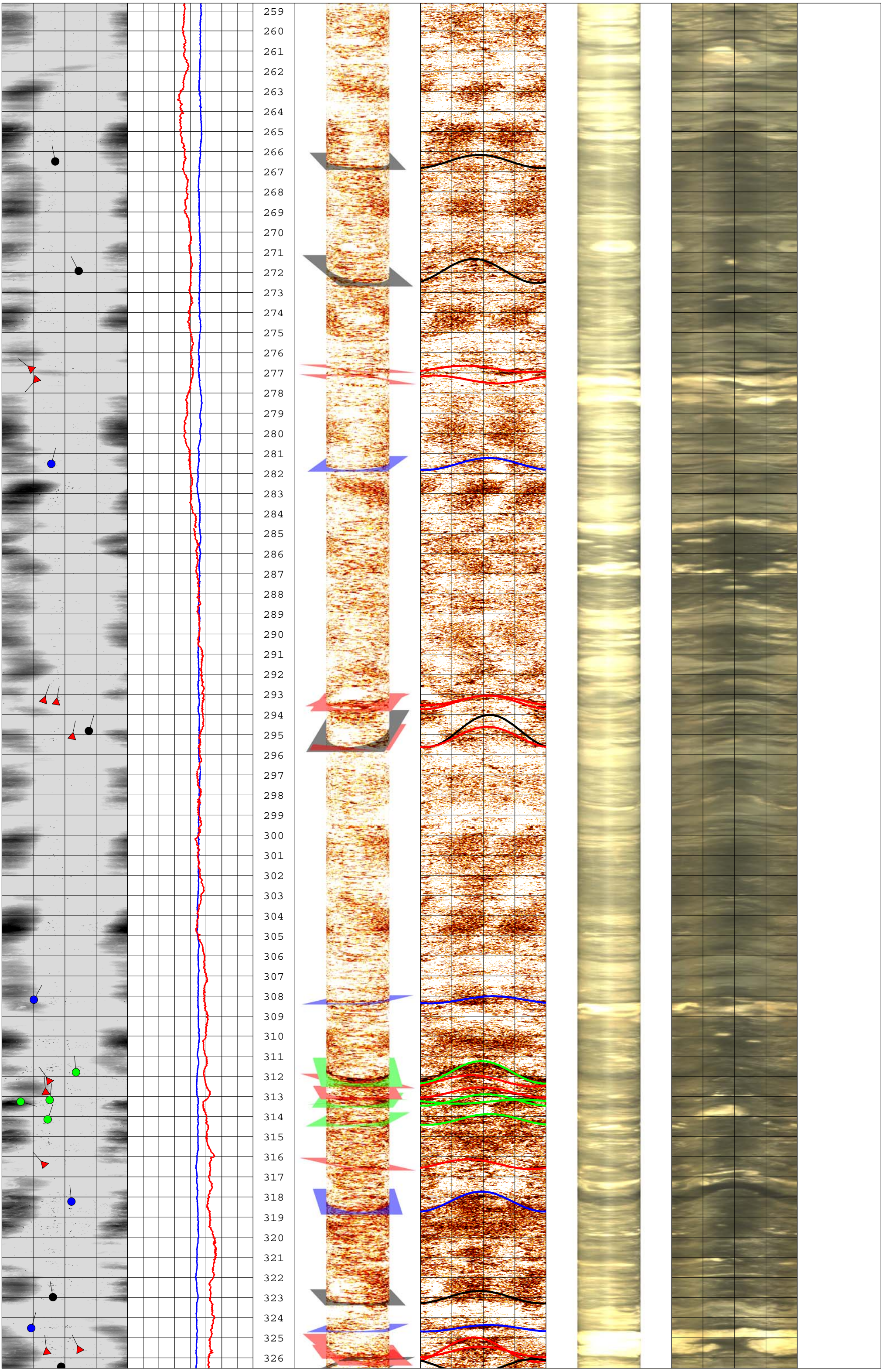
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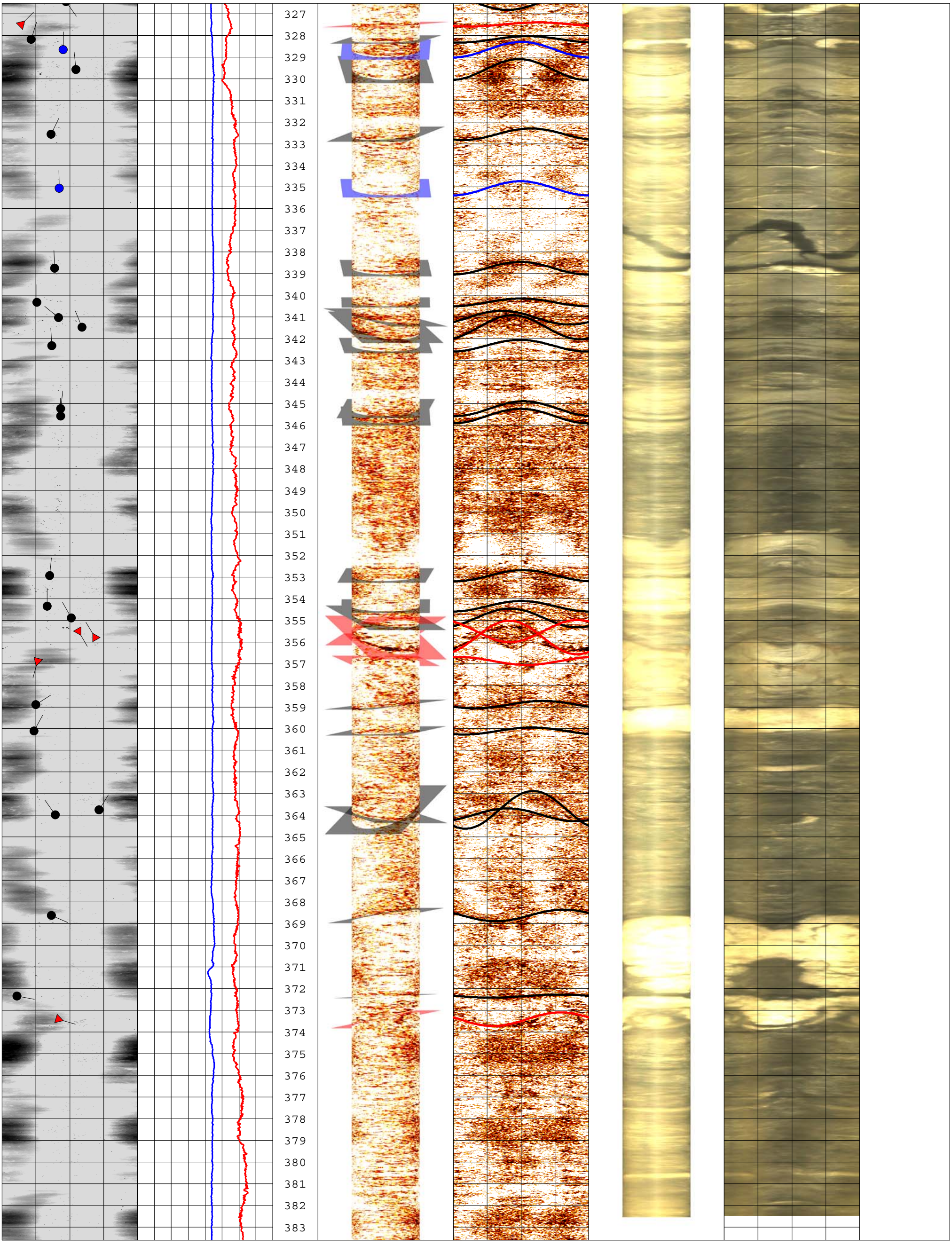
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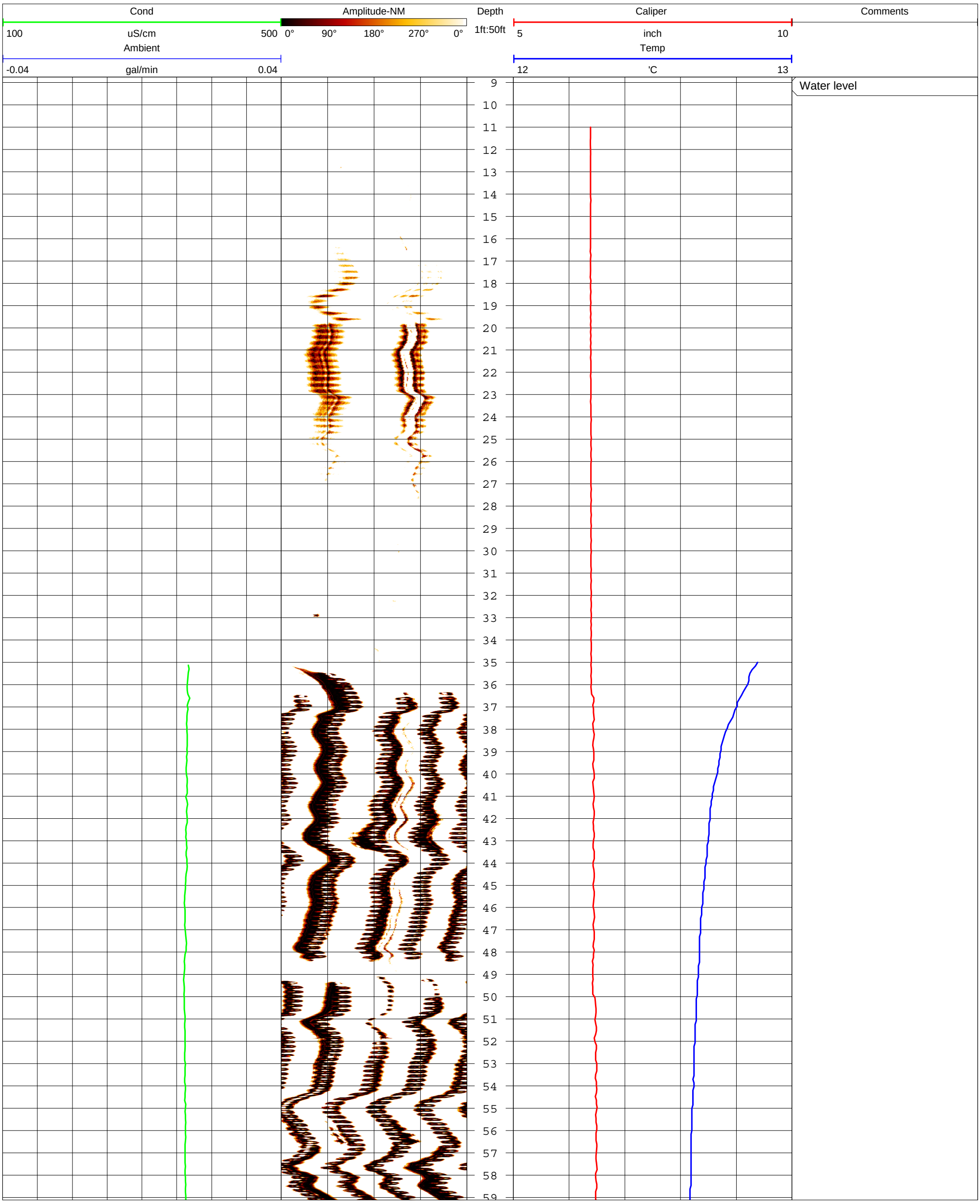
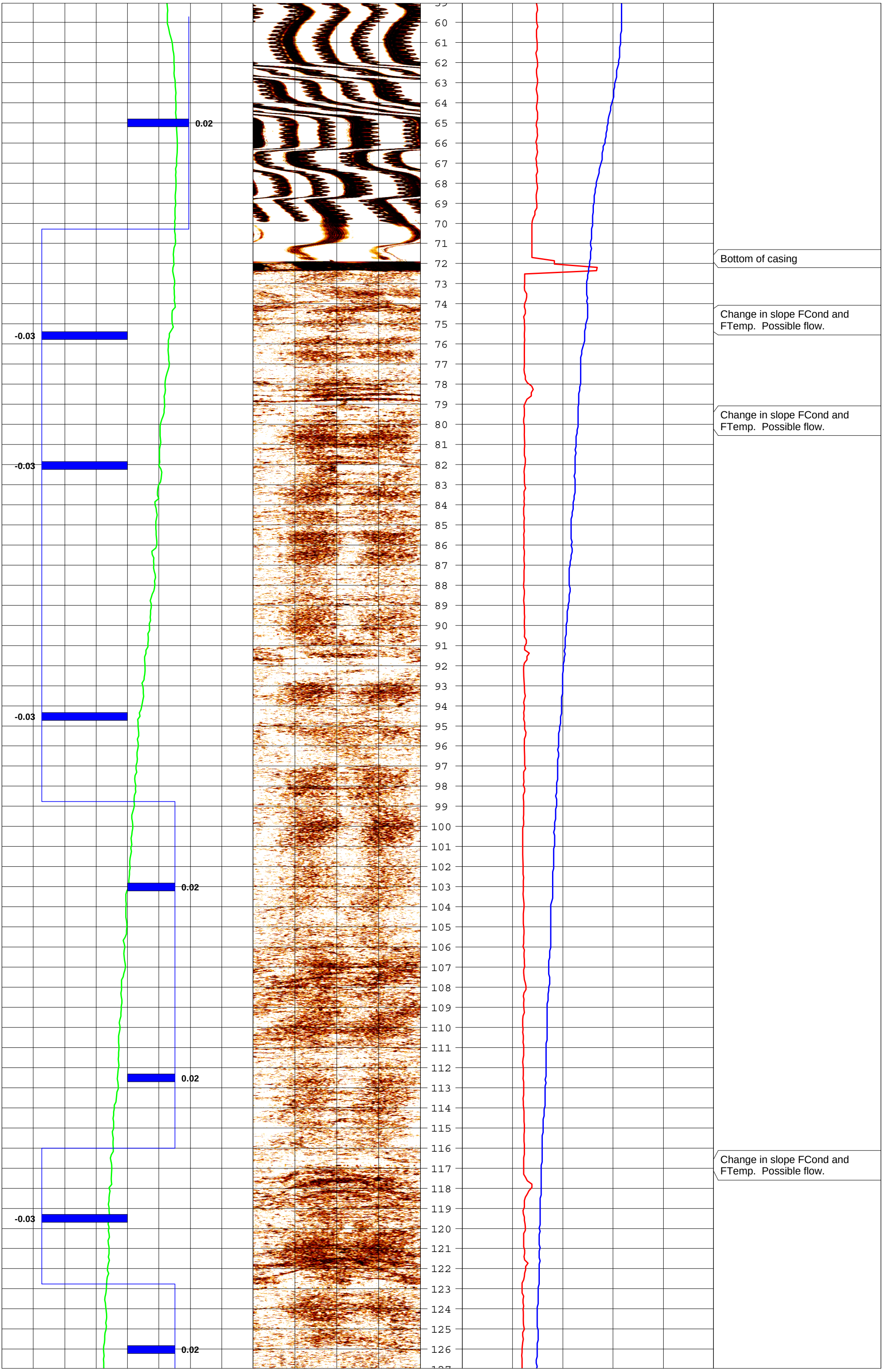
MW 189D
Phoenix, MD
prepared for
Kleinfelder
Hanover, MD
by
Enviroprobe Service, Inc.
Mount Laurel, NJ
Caliper and Fluid

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Change in slope FCond and FTemp. Possible flow.
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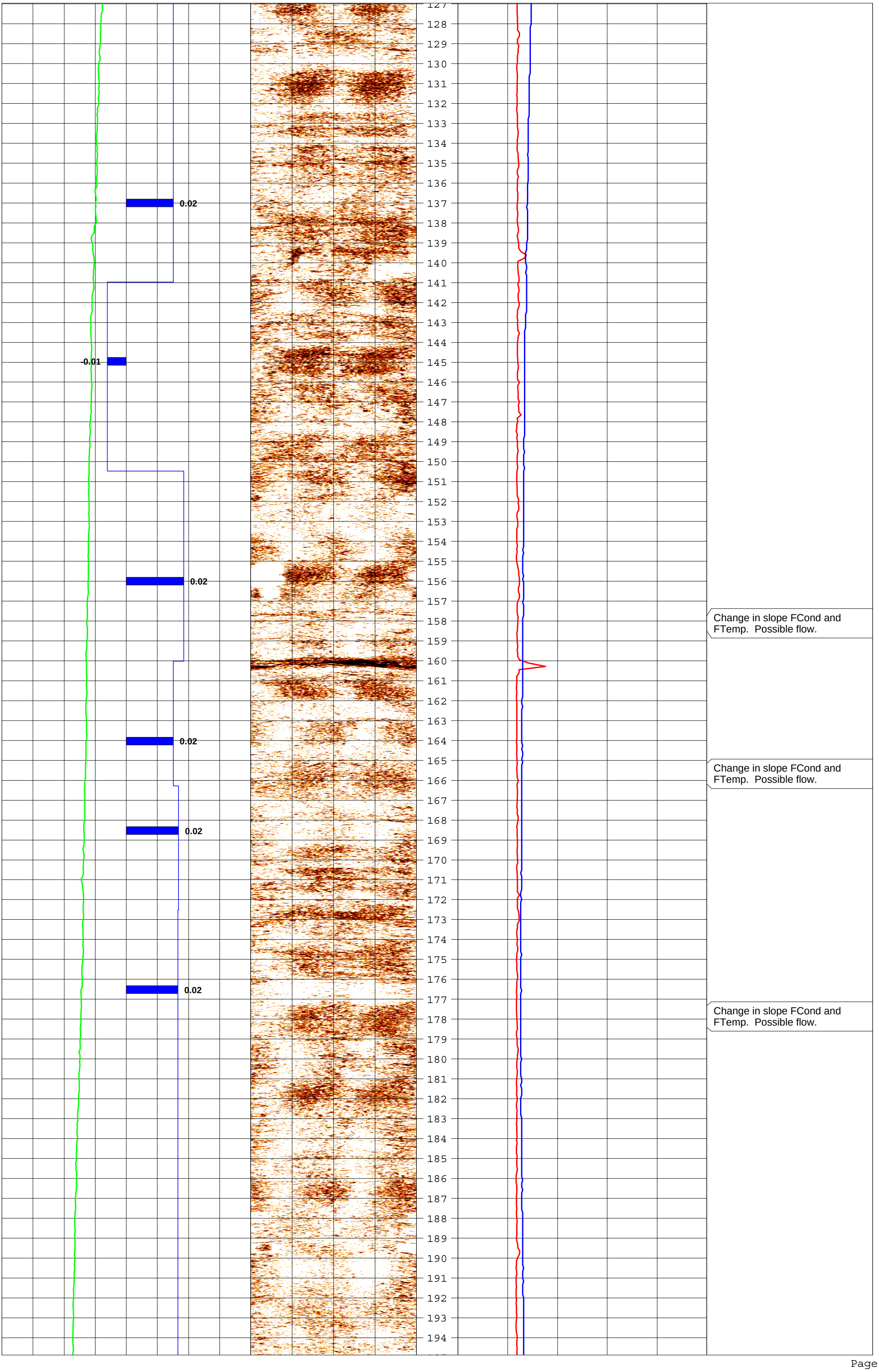
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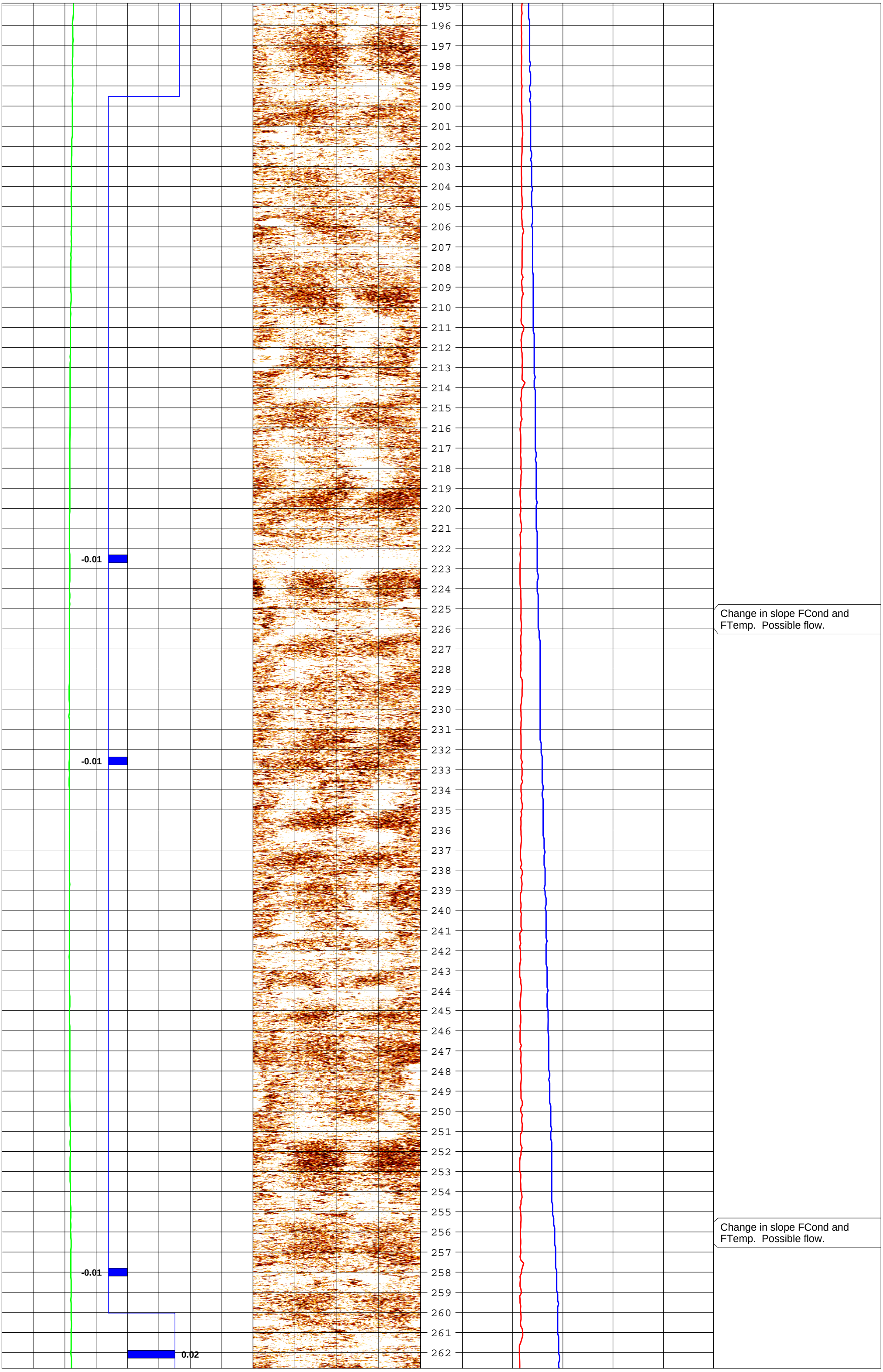
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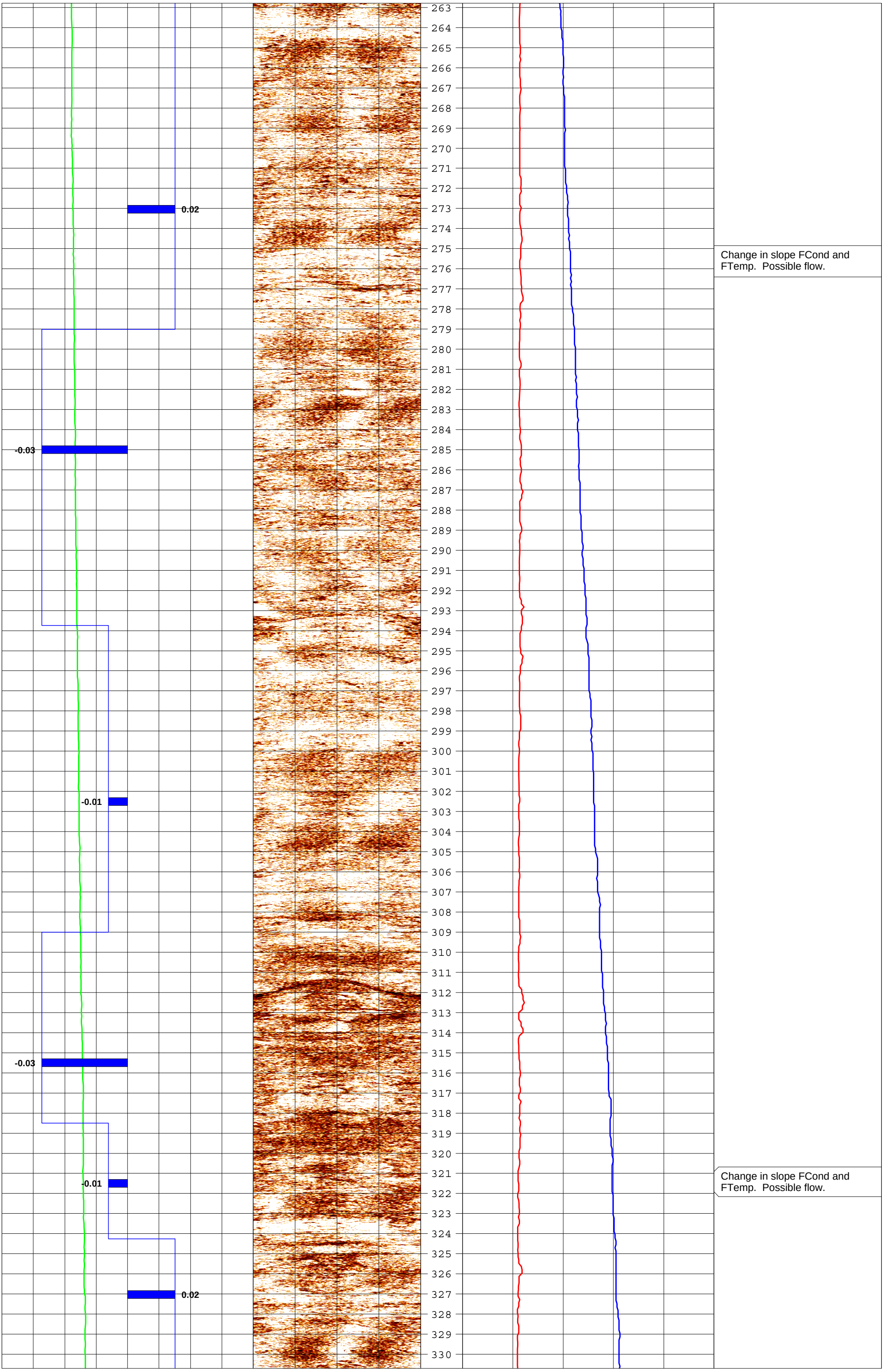
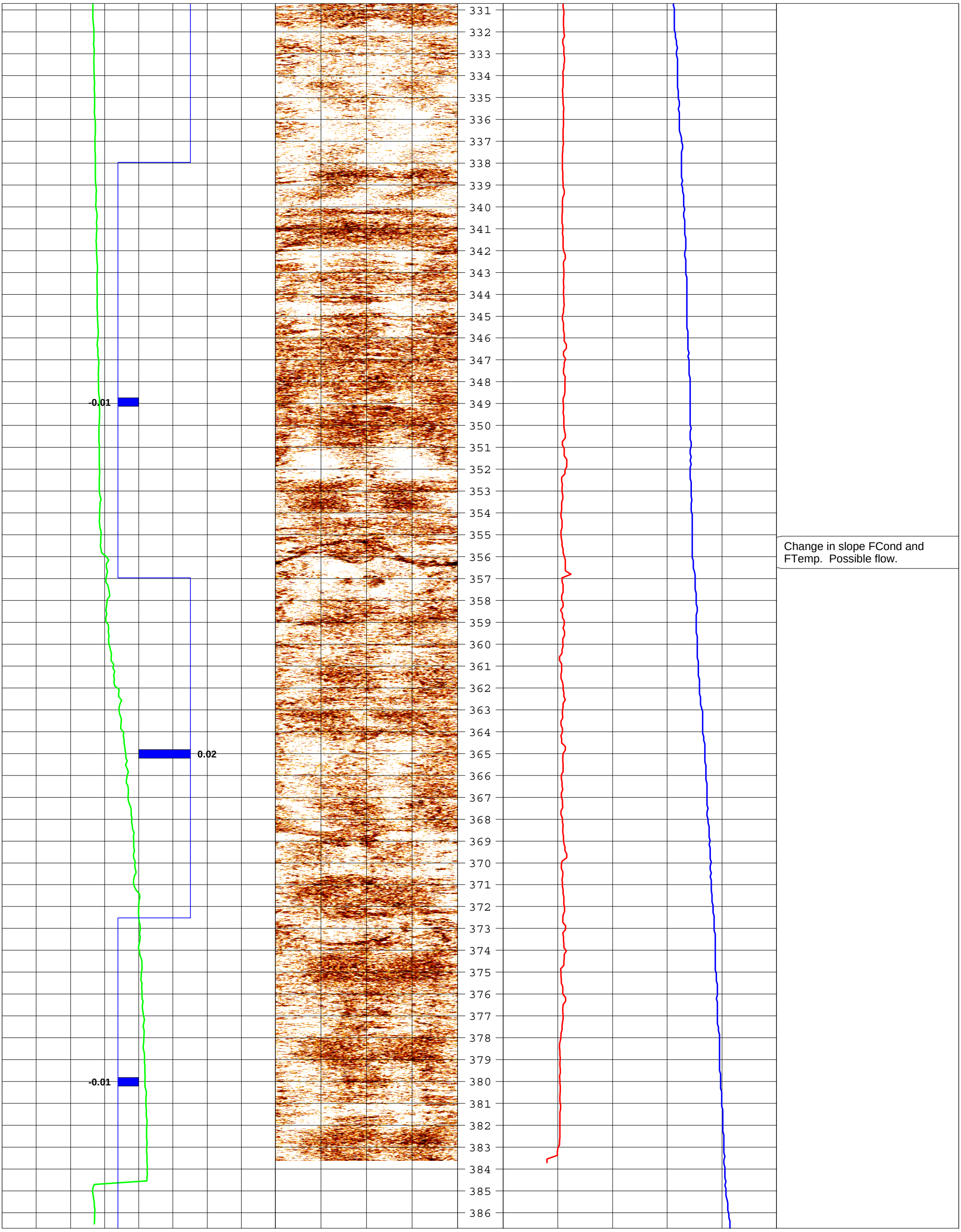
Change in slope FCond and FTemp. Possible flow.



Change in slope FCond and FTemp. Possible flow.

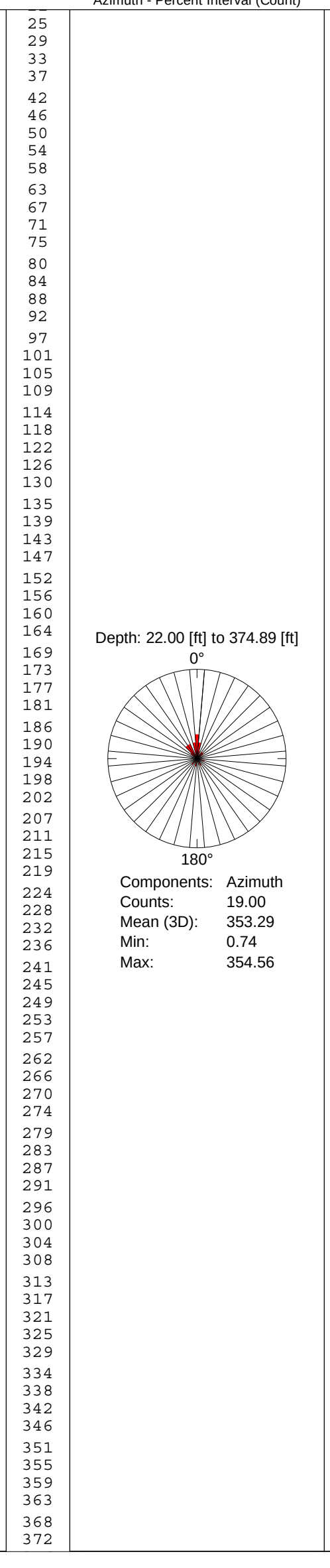
Change in slope FCond and FTemp. Possible flow.



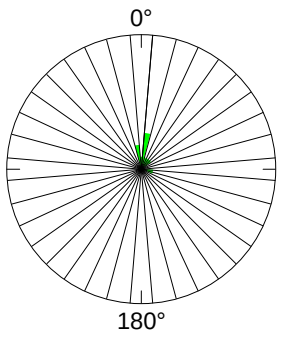
Change in slope FCond and FTemp. Possible flow.

MW 189D
Phonenix, MD
prepared for
Kleinfelder
Hanover, MD
by
Enviroprobe Service, Inc.
Mount Laurel, NJ
Rose Diagram

Tadpole Plot	Open Fracture	Depth	Partial OpenFracture	Closed Fracture	Possible bedding plane
0 90	Azimuth - Percent Interval (Count)	1ft:350ft	Azimuth - Percent Interval (Count)	Azimuth - Percent Interval (Count)	Azimuth - Percent Interval (Count)



Depth: 22.00 [ft] to 374.89 [ft]

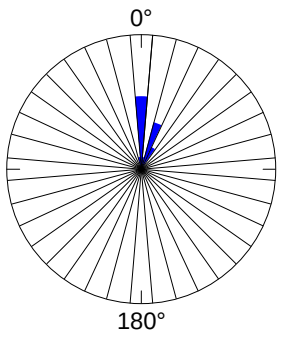


Components:	Azimuth
Counts:	12.00
Mean (3D):	12.79
Min:	2.93
Max:	354.39

Depth: 22.00 [ft] to 374.89 [ft]

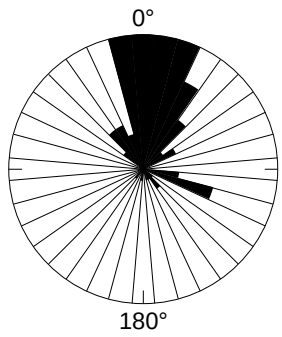
Components:	Azimuth
Counts:	19.00
Mean (3D):	353.29
Min:	0.74
Max:	354.56

Depth: 22.00 [ft] to 374.89 [ft]



Components:	Azimuth
Counts:	14.00
Mean (3D):	6.09
Min:	1.19
Max:	359.51

Depth: 22.00 [ft] to 374.89 [ft]



Components:	Azimuth
Counts:	111.00
Mean (3D):	7.54
Min:	0.08
Max:	359.74

APPENDIX B

MW 189D					
Fracture Data					
Depth	Azimuth	Dip	Aperture	Frac1	
ft	deg	deg	inch/10		
72.17	35.06	4.21	47.12	Fracture Open	
73.72	112.25	23.64	0	Bedding Plane	
74.33	101.99	17.27	0	Bedding Plane	
74.93	107.06	67.81	0	Bedding Plane	
78.29	29.9	11.8	0	Fracture Open	
78.55	102.85	8.07	0	Fracture Open	
78.78	49.03	12.08	0	Fracture Open	
79.3	14.11	28.93	0	Bedding Plane	
81.14	357.64	16.31	0	Bedding Plane	
82.01	20.45	16.45	0	Bedding Plane	
83.41	127.63	8.54	0	Bedding Plane	
84.92	13.91	40.47	0	Bedding Plane	
87.82	359.36	21.85	0	Bedding Plane	
88.77	0.08	22.25	0	Bedding Plane	
91.05	1.94	25.43	0	Partial open fracture	
91.57	42.81	16.83	0	Partial open fracture	
96.07	113.68	59.63	0	Bedding Plane	
104.1	319.03	22.21	0	Bedding Plane	
106.15	21.57	25.58	0	Bedding Plane	
107.41	21.7	17.76	0	Bedding Plane	
110.97	35.21	17.93	0	Bedding Plane	
111.72	59.67	34.76	0	Bedding Plane	
113.36	10.86	23.85	0	Bedding Plane	
116.65	56.3	29.03	0	Bedding Plane	
117.98	5.35	51.31	17.53	Fracture Open	
118.58	352.79	45.03	0	Bedding Plane	
121.66	10.5	24.6	0	Fracture Open	
122.07	2.93	47.34	0	Fracture Open	
122.53	16.65	26.96	0	Bedding Plane	
123.84	337.62	22.12	0	Bedding Plane	
125.73	2.81	41.3	0	Bedding Plane	
129.25	22.34	21.4	0	Fracture Closed	
132.74	357.4	37.78	0	Bedding Plane	
133.35	15.42	26.25	0	Fracture Closed	
138	356.76	38.83	0	Fracture Closed	
139	356.23	34.54	0	Fracture Closed	
139.5	2.29	10.09	0	Partial open fracture	
157.62	33.55	17.14	0	Fracture Closed	
160.16	354.39	19.7	33.28	Fracture Open	
165.52	0.74	48.4	0	Partial open fracture	
167.86	357.27	33.98	0	Fracture Closed	
169.67	3.71	43.95	0	Bedding Plane	

173.58	349.83	33.24	0	Bedding Plane
174.41	344.92	48.36	0	Bedding Plane
174.61	137.24	23.8	0	Bedding Plane
180.24	40.79	17.94	0	Bedding Plane
181.55	8.61	27.1	0	Bedding Plane
184.21	5.46	31.82	0	Bedding Plane
185.82	31.76	35.82	0	Bedding Plane
189.07	359.51	31.19	0	Fracture Closed
215.05	160.43	39.02	0	Bedding Plane
215.37	345.48	23.19	0	Bedding Plane
215.88	9.93	47.9	0	Bedding Plane
224.84	1.65	28.8	0	Bedding Plane
245.9	27.64	23.48	0	Bedding Plane
247.04	19.56	71.71	0	Bedding Plane
251.91	39.15	31.28	0	Bedding Plane
252.19	354.83	31.16	0	Bedding Plane
254.74	9.88	24.83	0	Fracture Closed
254.93	13.24	30.22	0	Bedding Plane
257.03	11.37	35.48	0	Bedding Plane
257.33	12.96	36.87	0	Bedding Plane
266.48	348.73	38.19	0	Bedding Plane
271.93	332.71	55.15	0	Bedding Plane
276.8	308.64	20.93	0	Partial open fracture
277.33	221.79	24.58	0	Partial open fracture
281.54	15.04	35.38	0	Fracture Closed
293.29	19.43	29.89	0	Partial open fracture
293.39	10.06	39.01	0	Partial open fracture
294.81	17.81	62.45	0	Bedding Plane
295.12	11.79	50.34	0	Partial open fracture
308.19	28.42	22.8	0	Fracture Closed
311.79	354.2	53.11	0	Fracture Open
312.23	324.27	33.73	0	Partial open fracture
312.8	354.56	31.36	0	Partial open fracture
313.18	7.47	34.28	0	Fracture Open
313.26	105.91	13.4	0	Fracture Open
314.14	18.81	32.86	0	Fracture Open
316.37	317.78	30.22	0	Partial open fracture
318.23	354.18	49.9	0	Fracture Closed
322.99	349.38	36.53	0	Bedding Plane
324.52	16.31	21.05	0	Fracture Closed
325.6	333.39	55.42	0	Partial open fracture
325.7	352.88	32.19	0	Partial open fracture
326.45	144.51	42.49	0	Bedding Plane
327.5	45.22	12.77	0	Partial open fracture
328.19	17.44	19.38	0	Bedding Plane
328.66	1.19	40.55	0	Fracture Closed
329.58	354.61	49.08	0	Bedding Plane

332.56	25.53	32.61	0	Bedding Plane
335.06	358.43	38.01	0	Fracture Closed
338.75	357.56	35	0	Bedding Plane
340.33	359.74	23.12	0	Bedding Plane
341.02	309.2	37.48	0	Bedding Plane
341.48	337.25	53.18	0	Bedding Plane
342.32	356.46	32.98	0	Bedding Plane
345.23	6.86	39.08	0	Bedding Plane
345.57	359.05	38.96	0	Bedding Plane
352.93	5.62	31.58	0	Bedding Plane
354.35	0.18	30.06	0	Bedding Plane
354.88	330.57	46.17	0	Bedding Plane
355.49	149.73	50.71	0	Partial open fracture
355.8	328.62	61.77	0	Partial open fracture
356.87	194.71	23.53	0	Partial open fracture
358.89	57.49	22.49	0	Bedding Plane
360.1	28.47	21.2	0	Bedding Plane
363.75	31.98	64.37	0	Bedding Plane
363.97	324.25	35.39	0	Bedding Plane
368.63	113.1	32.85	0	Bedding Plane
372.34	100.81	9.85	0	Bedding Plane
373.42	105.85	37.22	0	Partial open fracture

MW 189D	
Heat pulse data	
Depth	Flow
ft	Gal./min.
65.00	0.02
75.58	-0.03
82.05	-0.03
94.53	-0.03
103.01	0.02
112.51	0.02
119.50	-0.03
126.03	0.02
137.00	0.02
144.96	-0.01
156.00	0.02
164.03	0.02
168.54	0.02
176.52	0.02
222.52	-0.01
232.58	-0.01
258.01	-0.01
262.09	0.02
273.05	0.02
285.00	-0.03
302.51	-0.01
315.50	-0.03
321.51	-0.01
327.03	0.02
348.93	-0.01
365.03	0.02
380.01	-0.01

APPENDIX D

Well Completion Report

WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE TYPE

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 003

ST/CO USE ONLY
DATE Received MM DD YY

DATE WELL COMPLETED: MM 12 DD 21 YY 16

Depth of Well: 385 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": BA-1408 63

OWNER: Exxon Mobil

WELL SITE ADDRESS: 3605A Southside Avenue TOWN: Phoenix

SUBDIVISION: SECTION: LOT:

WELL LOG DN 16072

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
overburden	0	8	
wet clay	8	27	✓
weathered schist	27	35	
very soft schist	35	44	
gneiss	44	63	✓
schist	63	385	✓

NUMBER OF UNSUCCESSFUL WELLS: Ø

WELL HYDROFRACTURED: yes [Y] no [N]

CIRCLE APPROPRIATE LETTER

- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MSD028

Michael A Roble
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: JWD314

X Corey Krauss
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box): yes [Y] no [N]

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT [CM] BENTONITE CLAY [BC]

NO. OF BAGS 18 NO. OF POUNDS 1692

GALLONS OF WATER 108

DEPTH OF GROUT SEAL (to nearest foot)

from 0 ft. TOP to 72 ft. BOTTOM

(enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below: [ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
ST	6	72

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD

screen type or open hole insert appropriate code below: [ST] STEEL [BR] BRASS BRONZE [PL] PLASTIC [HO] OPEN HOLE [OT] OTHER

C 2

EACH SCREEN	DEPTH (nearest ft.)	
1	40	
2		
3		

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ (NEAREST INCH)

from ____ to ____

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W Q

TELESCOPE CASING | LOG INDICATOR | OTHER DATA

C 3 n/a

PUMPING TEST

HOURS PUMPED (nearest hour) ____

PUMPING RATE (gal. per min.) ____

METHOD USED TO MEASURE PUMPING RATE ____

WATER LEVEL (distance from land surface)

BEFORE PUMPING ____ ft.

WHEN PUMPING ____ ft.

TYPE OF PUMP USED (for test)

[A] air [P] piston [T] turbine [C] centrifugal [R] rotary [O] other (describe below) [J] jet [S] submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. ____

CAPACITY: GALLONS PER MINUTE (to nearest gallon) ____

PUMP HORSE POWER ____

PUMP COLUMN LENGTH (nearest ft.) ____

CASING HEIGHT (circle appropriate box and enter casing height): [+] above [−] below LAND SURFACE (nearest foot) ____

LATITUDE 39.520321

LONGITUDE -76.554048

(DEFAULT COORD. WGS 84)