de maximis, inc.

1550 Pond Road
Suite 120
Allentown, PA 18104
(610) 435-1151
(610) 435-8459 FAX

August 3, 2016

Via U.S. Mail

Mr. Dustin Armstrong
PADEP
2 East Main Street
Norristown, PA 19401

RE: Boarhead Farms Superfund Site OU-1
EPA Docket No. III-2000-01-DC
2nd Quarter 2016 Effluent Discharge Monitoring Report
Groundwater Collection and Treatment System

Dear Mr. Armstrong:

Enclosed please find the completed Discharge Monitoring Report (DMR) forms for the 2nd Quarter 2016 effluent samples from the groundwater treatment plant at the Boarhead Farms Site (Site). These DMR forms are being submitted on behalf of the Respondents in the above referenced EPA docket, and other companies contributing to the funding of the OU-1 remedy. The DMRs are submitted based on PADEP's December 29, 2000 revised Permit with the exception of collecting a 24-hour composite sample for inorganic constituents. In a letter dated March 28, 2001, EPA recommended that the sampling frequency be changed to a composite sample over an 8-hour period.

I would like to call to your attention the following, relative to these DMRs for the 2nd Quarter 2016:

- VOCs were not detected above permit levels.
- 5 of the 6 constituents designated "Monitor and Report" were not detected in the effluent.

Please contact Geoff Seibel or me with any questions at (610) 435-1151.

Sincerely,

de maximis, inc.

R. Craig Coslett
Project Coordinator for OU 1

Enclosures: DMR Forms for 2nd Quarter 2016
Test America Analytical Reports

CC: Chris Sklaney, USEPA
Boarhead Farms OU1 Performing Parties
Peter Randazzo, Brown and Caldwell
D. Jelinek, GES

File: 4087 /dmr 2nd QDMR 2016

PAPER

ATTACHMENT A – 2nd QUARTER 2016 DISCHARGE MONITORING REPORT

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Boarhead Farms c/o de maximis, inc.

ADDRESS 1550 Pond Rd, Suite 120
Allentown, PA 18104

FACILITY LOCATION Groundwater Treatment System
1310 Lonely Cottage Rd 18972

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER	(17-19) DISCHARGE NUMBER
PAXXXX	001

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	16	04	01	TO	16	06	30
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

Form Approved.
OMB No. 2040-0004
Approval expires 05-31-98

☐ Check here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW (MGD)	SAMPLE MEASUREMENT	0.012512	0.026491	MGD	XXXX	XXXX	XXXX	XXXX		CONT	REC
	PERMIT REQUIREMENT	MONITOR	MONITOR		XXXX	XXXX	XXXX			CONT	REC
ANTIMONY	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0062	<0.0062	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.015	0.031			1/QTR	8 HC
ARSENIC	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0078	<0.0078	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	MONITOR/ REPORT	MONITOR/ REPORT			1/QTR	8 HC
CADMIUM	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.00064	<0.00064	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.0042	0.0084			1/QTR	8 HC
CHROMIUM HEXAVALENT	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0010	<0.0010	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.011	0.023			1/QTR	8 HC
COPPER	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0032	<0.0032	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.016	0.033			1/QTR	8 HC
LEAD	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0051	<0.0051	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.007	0.014			1/QTR	8 HC

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

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NICKEL	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0025	<0.0025	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.09	0.18			1/QTR	8 HC
ZINC	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0042	<0.0042	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.157	0.315			1/QTR	8 HC
MANGENESE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	0.0080	0.0080	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	1.12	2.24			1/QTR	8 HC
ALUMINUM	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0929	<0.0929	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.623	1.25			1/QTR	8 HC
COBALT	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.00090	<0.00090	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.021	0.043			1/QTR	8 HC
IRON/TOTAL	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0333	<0.0333	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	1.68	3.36			1/QTR	8 HC
MERCURY	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.000050	<0.000050	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	ND	ND			1/QTR	8 HC

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SILVER	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0018	<0.0018	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.008	0.017			1/QTR	8 HC
CYANIDE, FREE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0040	<0.0040	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.005	0.011			1/QTR	8 HC
2,4,6-TRICHLOROPHENOL	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0007	<0.0007	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.0038	0.0076			1/QTR	GRAB
BENZENE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0001	<0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.0022	0.004			1/QTR	GRAB
1,2-DICHLOROETHANE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0001	<0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.0007	0.0014			1/QTR	GRAB
1,1-DICHLOROETHYLENE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0001	<0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	ND	0.0002			1/QTR	GRAB
METHYLENE CHLORIDE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0002	<0.0002	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.0086	0.017			1/QTR	GRAB

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TETRACHLOROETHYLENE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0001	<0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.0015	0.003			1/QTR	GRAB
TOLUENE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0001	<0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.0023	0.0046			1/QTR	GRAB
1,1,1-TRICHLOROETHANE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	0.0002	0.0002	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.017	0.034			1/QTR	GRAB
TRICHLOROETHYLENE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	0.0001	0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.005	0.01			1/QTR	GRAB
VINYL CHLORIDE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0001	<0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	0.0036	0.0072			1/QTR	GRAB
ACETONE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0030	<0.0030	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	MONITOR/ REPORT	MONITOR/ REPORT			1/QTR	GRAB
XYLENES, TOTAL	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0001	<0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	MONITOR/ REPORT	MONITOR/ REPORT			1/QTR	GRAB

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1,2-DICHLOROBENZENE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0001	<0.0001	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	MONITOR/ REPORT	MONITOR/ REPORT			1/QTR	GRAB
NAPHTHALENE	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	<0.0002	<0.0002	MG/L		1/QTR	GRAB
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	MONITOR/ REPORT	MONITOR/ REPORT			1/QTR	GRAB
CHROMIUM, TRIVALENT	SAMPLE MEASUREMENT	XXXX	XXXX	XXXX	XXXX	0.0039	0.0039	MG/L		1/QTR	8 HC
	PERMIT REQUIREMENT	XXXX	XXXX		XXXX	MONITOR/ REPORT	MONITOR/ REPORT			1/QTR	8 HC
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

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TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

ATTACHMENT B – LABORATORY ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

eurofins | Lancaster Laboratories Environmental

Analysis Report

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

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

Report Date: June 29, 2016

Project: Boarhead Farms

Submittal Date: 06/16/2016
Group Number: 1672833
PO Number: BOARHEAD FARMS
Release Number: 0215000-05001
State of Sample Origin: PA

Client Sample Description	Lancaster Labs (LL) #
Effluent Composite Groundwater	8429455
Effluent Grab Groundwater	8429456
Midfluent Grab Groundwater	8429457
Influent Grab Groundwater	8429458
Trip Blank Water	8429459

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 scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

Electronic Copy To	GES, Inc.-PA	Attn: Derek Jelinek
Electronic Copy To	GES Inc.	Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

eurofins | Lancaster Laboratories Environmental

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

Analysis Report

Sample Description: Effluent Composite Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429455
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 17:45

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals	**EPA 200.7 rev 4.4**		mg/l	mg/l	
01743	Aluminum	7429-90-5	N.D.	0.0929	1
07044	Antimony	7440-36-0	N.D.	0.0062	1
07035	Arsenic	7440-38-2	N.D.	0.0078	1
07049	Cadmium	7440-43-9	N.D.	0.00064	1
07052	Cobalt	7440-48-4	N.D.	0.00090	1
07053	Copper	7440-50-8	N.D.	0.0032	1
01754	Iron	7439-89-6	N.D.	0.0333	1
07055	Lead	7439-92-1	N.D.	0.0051	1
07058	Manganese	7439-96-5	0.0080	0.0012	1
07061	Nickel	7440-02-0	N.D.	0.0025	1
07066	Silver	7440-22-4	N.D.	0.0018	1
07072	Zinc	7440-66-6	N.D.	0.0042	1
	EPA 245.1 rev 3		mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000050	1
Wet Chemistry	**SM 4500-CN E-1999**		mg/l	mg/l	
00241	Cyanide (Free)	n.a.	N.D.	0.0040	1
	SM 3500-Cr B-2009		mg/l	mg/l	
01446	Hexavalent Chromium	18540-29-9	N.D.	0.0010	1

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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
01743	Aluminum	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07044	Antimony	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07035	Arsenic	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07049	Cadmium	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07052	Cobalt	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07053	Copper	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
01754	Iron	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07055	Lead	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07058	Manganese	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07061	Nickel	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07066	Silver	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
07072	Zinc	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:16	Cindy M Gehman	1
00259	Mercury	EPA 245.1 rev 3	1	161745714003	06/24/2016 07:08	Damary Valentin	1

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Analysis Report

Sample Description: Effluent Composite Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429455
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 17:45

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 08:05	Lisa J Cooke	1
05714	PW/WW Hg Digest	EPA 245.1 rev 3	1	161735714002	06/21/2016 20:55	Barbara A Kane	1
05714	PW/WW Hg Digest	EPA 245.1 rev 3	2	161745714003	06/23/2016 08:50	Lisa J Cooke	1
00241	Cyanide (Free)	SM 4500-CN E-1999	1	16180114101A	06/28/2016 14:20	Dain K Bernot	1
01446	Hexavalent Chromium	SM 3500-Cr B-2009	1	16168144601A	06/16/2016 20:30	Michelle L Lalli	1

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Analysis Report

Sample Description: Effluent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429456
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 17:40

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BOREG

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l		ug/l	
02898	Acetone	67-64-1	N.D.		3.0	1
02898	Benzene	71-43-2	N.D.		0.1	1
02898	Bromochloromethane	74-97-5	N.D.		0.1	1
02898	Bromodichloromethane	75-27-4	N.D.		0.1	1
02898	Bromoform	75-25-2	N.D.		0.1	1
02898	Bromomethane	74-83-9	N.D.		0.1	1
02898	2-Butanone	78-93-3	N.D.		1.0	1
02898	Carbon Disulfide	75-15-0	N.D.		0.4	1
02898	Carbon Tetrachloride	56-23-5	N.D.		0.1	1
02898	Chlorobenzene	108-90-7	N.D.		0.1	1
02898	Chloroethane	75-00-3	N.D.		0.1	1
02898	Chloroform	67-66-3	N.D.		0.1	1
02898	Chloromethane	74-87-3	N.D.		0.2	1
02898	Cyclohexane	110-82-7	N.D.		0.1	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		0.2	1
02898	Dibromochloromethane	124-48-1	N.D.		0.1	1
02898	1,2-Dibromoethane	106-93-4	N.D.		0.1	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.		0.1	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.		0.1	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.		0.1	1
02898	Dichlorodifluoromethane	75-71-8	N.D.		0.1	1
02898	1,1-Dichloroethane	75-34-3	0.2	J	0.1	1
02898	1,2-Dichloroethane	107-06-2	N.D.		0.1	1
02898	1,1-Dichloroethene	75-35-4	N.D.		0.1	1
02898	cis-1,2-Dichloroethene	156-59-2	2.8		0.1	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.		0.1	1
02898	1,2-Dichloropropane	78-87-5	N.D.		0.1	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.		0.1	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.		0.1	1
02898	1,4-Dioxane	123-91-1	N.D.		20	1
02898	Ethylbenzene	100-41-4	N.D.		0.1	1
02898	Freon 113	76-13-1	N.D.		0.2	1
02898	2-Hexanone	591-78-6	N.D.		1.0	1
02898	Isopropylbenzene	98-82-8	N.D.		0.1	1
02898	Methyl Acetate	79-20-9	N.D.		0.3	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.1	1
02898	4-Methyl-2-pentanone	108-10-1	N.D.		1.0	1
02898	Methylcyclohexane	108-87-2	N.D.		0.1	1
02898	Methylene Chloride	75-09-2	N.D.		0.2	1
02898	Styrene	100-42-5	N.D.		0.1	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	1
02898	Toluene	108-88-3	N.D.		0.1	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	1
02898	1,1,1-Trichloroethane	71-55-6	0.2	J	0.1	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.		0.1	1
02898	Trichloroethene	79-01-6	0.1	J	0.1	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	1

Sample Description: Effluent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429456
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 17:40

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

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CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l	ug/l	
02898	Vinyl Chloride	75-01-4	N.D.	0.1	1
02898	m+p-Xylene	179601-23-1	N.D.	0.1	1
02898	o-Xylene	95-47-6	N.D.	0.1	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	1
GC/MS Semivolatiles	EPA 625		ug/l	ug/l	
10334	Acenaphthene	83-32-9	N.D.	0.3	1
10334	Acenaphthylene	208-96-8	N.D.	0.3	1
10334	Anthracene	120-12-7	N.D.	0.2	1
10334	Benzo(a)anthracene	56-55-3	N.D.	0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.	0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.	0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.	0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.	0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.	0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.	0.5	1
10334	Carbazole	86-74-8	N.D.	0.2	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.	0.3	1
10334	4-Chloroaniline	106-47-8	N.D.	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
10334	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.4	1
10334	bis(2-Chloroisopropyl)ether	39638-32-9	N.D.	0.3	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
10334	2-Chloronaphthalene	91-58-7	N.D.	0.2	1
10334	2-Chlorophenol	95-57-8	N.D.	0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.3	1
10334	Chrysene	218-01-9	N.D.	0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.	0.4	1
10334	Dibenzofuran	132-64-9	N.D.	0.2	1
10334	1,2-Dichlorobenzene	95-50-1	N.D.	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.	0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.	0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.	0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.	0.3	1
10334	Diethylphthalate	84-66-2	N.D.	0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.	0.3	1
10334	Dimethylphthalate	131-11-3	N.D.	1	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.	10	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.	0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.	0.3	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	1	1
10334	Fluoranthene	206-44-0	N.D.	0.3	1
10334	Fluorene	86-73-7	N.D.	0.3	1

Sample Description: Effluent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429456
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 17:40

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

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CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**EPA 625**		ug/l	ug/l	
10334	Hexachlorobenzene	118-74-1	N.D.	1	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	2-Methylnaphthalene	91-57-6	N.D.	0.3	1
10334	2-Methylphenol	95-48-7	N.D.	0.3	1
10334	4-Methylphenol	106-44-5	N.D.	0.3	1
10334	Naphthalene	91-20-3	N.D.	0.2	1
10334	2-Nitroaniline	88-74-4	N.D.	0.3	1
10334	3-Nitroaniline	99-09-2	N.D.	0.4	1
10334	4-Nitroaniline	100-01-6	N.D.	0.4	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	N.D.	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	N.D.	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,5-Trichlorophenol	95-95-4	N.D.	0.4	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	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:
Hexachlorocyclopentadiene

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is >10%, the data is reported.

Metals	**EPA 200.7 rev 4.4**		mg/l	mg/l	
07051	Chromium	7440-47-3	0.0039 J	0.0020	1
02828	Trivalent Chromium waters	16065-83-1	0.0039 J	0.0020	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.				
Wet Chemistry	**SM 3500-Cr B-2009**		mg/l	mg/l	
01446	Hexavalent Chromium	18540-29-9	N.D.	0.0010	1

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Analysis Report

Sample Description: Effluent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429456
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 17:40

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BOREG

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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
02898	TCL SOM01.2 VOCs	SW-846 8260B 25mL purge	1	I161751AA	06/23/2016	20:08	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I161751AA	06/23/2016	20:08	Kerri E Legerlotz	1
10334	TCL 3.2 SVOCs	EPA 625	1	16169WAG625	06/21/2016	16:41	Linda M Hartenstine	1
08108	625 Water Extraction	EPA 625	1	16169WAG625	06/19/2016	08:15	Nicholas W Shroyer	1
07051	Chromium	EPA 200.7 rev 4.4	1	161735716004	06/22/2016	15:19	Cindy M Gehman	1
02828	Trivalent Chromium waters	EPA 200.7 rev 4.4	1	161762828001	06/24/2016	15:42	Parker D Lindstrom	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	161735716004	06/22/2016	08:05	Lisa J Cooke	1
01446	Hexavalent Chromium	SM 3500-Cr B-2009	1	16168144601A	06/16/2016	20:30	Michelle L Lalli	1

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Analysis Report

Sample Description: Midfluent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429457
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:30

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORMG

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l		ug/l	
02898	Acetone	67-64-1	N.D.		3.0	1
02898	Benzene	71-43-2	N.D.		0.1	1
02898	Bromochloromethane	74-97-5	N.D.		0.1	1
02898	Bromodichloromethane	75-27-4	N.D.		0.1	1
02898	Bromoform	75-25-2	N.D.		0.1	1
02898	Bromomethane	74-83-9	N.D.		0.1	1
02898	2-Butanone	78-93-3	N.D.		1.0	1
02898	Carbon Disulfide	75-15-0	N.D.		0.4	1
02898	Carbon Tetrachloride	56-23-5	N.D.		0.1	1
02898	Chlorobenzene	108-90-7	N.D.		0.1	1
02898	Chloroethane	75-00-3	N.D.		0.1	1
02898	Chloroform	67-66-3	N.D.		0.1	1
02898	Chloromethane	74-87-3	N.D.		0.2	1
02898	Cyclohexane	110-82-7	N.D.		0.1	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		0.2	1
02898	Dibromochloromethane	124-48-1	N.D.		0.1	1
02898	1,2-Dibromoethane	106-93-4	N.D.		0.1	1
02898	1,2-Dichlorobenzene	95-50-1	0.1	J	0.1	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.		0.1	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.		0.1	1
02898	Dichlorodifluoromethane	75-71-8	N.D.		0.1	1
02898	1,1-Dichloroethane	75-34-3	0.1	J	0.1	1
02898	1,2-Dichloroethane	107-06-2	N.D.		0.1	1
02898	1,1-Dichloroethene	75-35-4	N.D.		0.1	1
02898	cis-1,2-Dichloroethene	156-59-2	5.3		0.1	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.		0.1	1
02898	1,2-Dichloropropane	78-87-5	N.D.		0.1	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.		0.1	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.		0.1	1
02898	1,4-Dioxane	123-91-1	N.D.		20	1
02898	Ethylbenzene	100-41-4	N.D.		0.1	1
02898	Freon 113	76-13-1	N.D.		0.2	1
02898	2-Hexanone	591-78-6	N.D.		1.0	1
02898	Isopropylbenzene	98-82-8	N.D.		0.1	1
02898	Methyl Acetate	79-20-9	N.D.		0.3	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.1	1
02898	4-Methyl-2-pentanone	108-10-1	N.D.		1.0	1
02898	Methylcyclohexane	108-87-2	N.D.		0.1	1
02898	Methylene Chloride	75-09-2	N.D.		0.2	1
02898	Styrene	100-42-5	N.D.		0.1	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	1
02898	Toluene	108-88-3	N.D.		0.1	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	1
02898	1,1,1-Trichloroethane	71-55-6	0.3	J	0.1	1
02898	1,1,2-Trichloroethane	79-00-5	0.2	J	0.1	1
02898	Trichloroethene	79-01-6	4.8		0.1	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	1

Sample Description: Midfluent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429457
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:30

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORMG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	
02898	Vinyl Chloride	75-01-4	N.D.	0.1	1
02898	m+p-Xylene	179601-23-1	N.D.	0.1	1
02898	o-Xylene	95-47-6	N.D.	0.1	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	1
GC/MS Semivolatiles	**EPA 625**		ug/l	ug/l	
10334	Acenaphthene	83-32-9	N.D.	0.3	1
10334	Acenaphthylene	208-96-8	N.D.	0.3	1
10334	Anthracene	120-12-7	N.D.	0.2	1
10334	Benzo(a)anthracene	56-55-3	N.D.	0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.	0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.	0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.	0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.	0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.	0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.	0.5	1
10334	Carbazole	86-74-8	N.D.	0.2	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.	0.3	1
10334	4-Chloroaniline	106-47-8	N.D.	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
10334	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.4	1
10334	bis(2-Chloroisopropyl)ether	39638-32-9	N.D.	0.3	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
10334	2-Chloronaphthalene	91-58-7	N.D.	0.2	1
10334	2-Chlorophenol	95-57-8	N.D.	0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.3	1
10334	Chrysene	218-01-9	N.D.	0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.	0.4	1
10334	Dibenzofuran	132-64-9	N.D.	0.2	1
10334	1,2-Dichlorobenzene	95-50-1	N.D.	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.	0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.	0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.	0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.	0.3	1
10334	Diethylphthalate	84-66-2	N.D.	0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.	0.3	1
10334	Dimethylphthalate	131-11-3	N.D.	0.9	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.	9	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.	0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.	0.3	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	0.9	1
10334	Fluoranthene	206-44-0	N.D.	0.3	1
10334	Fluorene	86-73-7	N.D.	0.3	1

Sample Description: Midfluent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429457
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:30

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORMG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**EPA 625**		ug/l	ug/l	
10334	Hexachlorobenzene	118-74-1	N.D.	0.9	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	2-Methylnaphthalene	91-57-6	N.D.	0.3	1
10334	2-Methylphenol	95-48-7	N.D.	0.3	1
10334	4-Methylphenol	106-44-5	N.D.	0.3	1
10334	Naphthalene	91-20-3	N.D.	0.2	1
10334	2-Nitroaniline	88-74-4	N.D.	0.3	1
10334	3-Nitroaniline	99-09-2	N.D.	0.4	1
10334	4-Nitroaniline	100-01-6	N.D.	0.4	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	N.D.	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	N.D.	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,5-Trichlorophenol	95-95-4	N.D.	0.4	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	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:
Hexachlorocyclopentadiene

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is >10%, the data is reported.

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

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Analysis Report

Sample Description: Midfluent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429457
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:30

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORMG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	TCL SOM01.2 VOCs	SW-846 8260B 25mL purge	1	I161751AA	06/23/2016 20:30	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I161751AA	06/23/2016 20:30	Kerri E Legerlotz	1
10334	TCL 3.2 SVOCs	EPA 625	1	16169WAG625	06/21/2016 17:04	Linda M Hartenstine	1
08108	625 Water Extraction	EPA 625	1	16169WAG625	06/19/2016 08:15	Nicholas W Shroyer	1

Sample Description: Influent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429458
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:45

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORIG

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l		ug/l	
02898	Acetone	67-64-1	N.D.		3.0	1
02898	Benzene	71-43-2	N.D.		0.1	1
02898	Bromochloromethane	74-97-5	N.D.		0.1	1
02898	Bromodichloromethane	75-27-4	N.D.		0.1	1
02898	Bromoform	75-25-2	N.D.		0.1	1
02898	Bromomethane	74-83-9	N.D.		0.1	1
02898	2-Butanone	78-93-3	N.D.		1.0	1
02898	Carbon Disulfide	75-15-0	N.D.		0.4	1
02898	Carbon Tetrachloride	56-23-5	N.D.		0.1	1
02898	Chlorobenzene	108-90-7	N.D.		0.1	1
02898	Chloroethane	75-00-3	N.D.		0.1	1
02898	Chloroform	67-66-3	N.D.		0.1	1
02898	Chloromethane	74-87-3	N.D.		0.2	1
02898	Cyclohexane	110-82-7	N.D.		0.1	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		0.2	1
02898	Dibromochloromethane	124-48-1	N.D.		0.1	1
02898	1,2-Dibromoethane	106-93-4	N.D.		0.1	1
02898	1,2-Dichlorobenzene	95-50-1	0.7		0.1	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.		0.1	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.		0.1	1
02898	Dichlorodifluoromethane	75-71-8	N.D.		0.1	1
02898	1,1-Dichloroethane	75-34-3	1.1		0.1	1
02898	1,2-Dichloroethane	107-06-2	N.D.		0.1	1
02898	1,1-Dichloroethene	75-35-4	0.7		0.1	1
02898	cis-1,2-Dichloroethene	156-59-2	24		1.0	10
02898	trans-1,2-Dichloroethene	156-60-5	0.1	J	0.1	1
02898	1,2-Dichloropropane	78-87-5	N.D.		0.1	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.		0.1	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.		0.1	1
02898	1,4-Dioxane	123-91-1	N.D.		20	1
02898	Ethylbenzene	100-41-4	N.D.		0.1	1
02898	Freon 113	76-13-1	N.D.		0.2	1
02898	2-Hexanone	591-78-6	N.D.		1.0	1
02898	Isopropylbenzene	98-82-8	N.D.		0.1	1
02898	Methyl Acetate	79-20-9	N.D.		0.3	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.1	1
02898	4-Methyl-2-pentanone	108-10-1	N.D.		1.0	1
02898	Methylcyclohexane	108-87-2	N.D.		0.1	1
02898	Methylene Chloride	75-09-2	N.D.		0.2	1
02898	Styrene	100-42-5	N.D.		0.1	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	1
02898	Tetrachloroethene	127-18-4	0.8		0.1	1
02898	Toluene	108-88-3	0.7		0.1	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	1
02898	1,1,1-Trichloroethane	71-55-6	5.6		0.1	1
02898	1,1,2-Trichloroethane	79-00-5	0.3	J	0.1	1
02898	Trichloroethene	79-01-6	40		1.0	10
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	1

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Analysis Report

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Sample Description: Influent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429458
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:45

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORIG

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l		ug/l	
02898	Vinyl Chloride	75-01-4	0.1	J	0.1	1
02898	m+p-Xylene	179601-23-1	0.2	J	0.1	1
02898	o-Xylene	95-47-6	0.1	J	0.1	1
02898	Xylene (Total)	1330-20-7	0.3	J	0.1	1
GC/MS Semivolatiles	EPA 625		ug/l		ug/l	
10334	Acenaphthene	83-32-9	N.D.		0.3	1
10334	Acenaphthylene	208-96-8	N.D.		0.3	1
10334	Anthracene	120-12-7	N.D.		0.2	1
10334	Benzo(a)anthracene	56-55-3	N.D.		0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.		0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.		0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.		0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.		0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.		0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.		0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.		0.5	1
10334	Carbazole	86-74-8	N.D.		0.2	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.		0.3	1
10334	4-Chloroaniline	106-47-8	1	J	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.		0.5	1
10334	bis(2-Chloroethyl)ether	111-44-4	N.D.		0.4	1
10334	bis(2-Chloroisopropyl)ether	39638-32-9	N.D.		0.3	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.					
10334	2-Chloronaphthalene	91-58-7	N.D.		0.2	1
10334	2-Chlorophenol	95-57-8	N.D.		0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.		0.3	1
10334	Chrysene	218-01-9	N.D.		0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.		0.4	1
10334	Dibenzofuran	132-64-9	N.D.		0.2	1
10334	1,2-Dichlorobenzene	95-50-1	0.7	J	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.		0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.		0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.		0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.		0.3	1
10334	Diethylphthalate	84-66-2	N.D.		0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.		0.3	1
10334	Dimethylphthalate	131-11-3	N.D.		0.9	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.		4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.		9	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.		0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.		0.3	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		0.9	1
10334	Fluoranthene	206-44-0	N.D.		0.3	1
10334	Fluorene	86-73-7	N.D.		0.3	1

Sample Description: Influent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429458
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:45

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORIG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**EPA 625**		ug/l	ug/l	
10334	Hexachlorobenzene	118-74-1	N.D.	0.9	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	2-Methylnaphthalene	91-57-6	N.D.	0.3	1
10334	2-Methylphenol	95-48-7	N.D.	0.3	1
10334	4-Methylphenol	106-44-5	N.D.	0.3	1
10334	Naphthalene	91-20-3	N.D.	0.2	1
10334	2-Nitroaniline	88-74-4	N.D.	0.3	1
10334	3-Nitroaniline	99-09-2	N.D.	0.4	1
10334	4-Nitroaniline	100-01-6	N.D.	0.4	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	N.D.	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	N.D.	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,5-Trichlorophenol	95-95-4	N.D.	0.4	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	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: Hexachlorocyclopentadiene				
Metals	**EPA 200.7 rev 4.4**		mg/l	mg/l	
01743	Aluminum	7429-90-5	N.D.	0.0929	1
07044	Antimony	7440-36-0	N.D.	0.0062	1
07035	Arsenic	7440-38-2	N.D.	0.0078	1
07049	Cadmium	7440-43-9	0.0044 J	0.00064	1
07051	Chromium	7440-47-3	0.0046 J	0.0020	1
02828	Trivalent Chromium waters	16065-83-1	0.0046 J	0.0020	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.				
07052	Cobalt	7440-48-4	0.0189	0.00090	1
07053	Copper	7440-50-8	0.0228	0.0032	1
01754	Iron	7439-89-6	6.12	0.0333	1
07055	Lead	7439-92-1	0.0164	0.0051	1
07058	Manganese	7439-96-5	3.13	0.0012	1
07061	Nickel	7440-02-0	0.0336	0.0025	1

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Analysis Report

Sample Description: Influent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429458
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:45

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORIG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals		**EPA 200.7 rev 4.4**	mg/l	mg/l	
07066	Silver	7440-22-4	N.D.	0.0018	1
07072	Zinc	7440-66-6	0.0348	0.0042	1
		EPA 245.1 rev 3	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000050	1
Wet Chemistry		**SM 4500-CN E-1999**	mg/l	mg/l	
00241	Cyanide (Free)	n.a.	N.D.	0.0040	1
		SM 3500-Cr B-2009	mg/l	mg/l	
01446	Hexavalent Chromium	18540-29-9	N.D.	0.0010	1

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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
02898	TCL SOM01.2 VOCs	SW-846 8260B 25mL purge	1	C161762AA	06/24/2016 18:32	Kerri E Legerlotz	1
02898	TCL SOM01.2 VOCs	SW-846 8260B 25mL purge	1	C161762AA	06/24/2016 18:55	Kerri E Legerlotz	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C161762AA	06/24/2016 18:32	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	C161762AA	06/24/2016 18:55	Kerri E Legerlotz	10
10334	TCL 3.2 SVOCs	EPA 625	1	16169WAG625	06/21/2016 17:27	Linda M Hartenstine	1
08108	625 Water Extraction	EPA 625	1	16169WAG625	06/19/2016 08:15	Nicholas W Shroyer	1
01743	Aluminum	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07044	Antimony	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07035	Arsenic	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07049	Cadmium	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07051	Chromium	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
02828	Trivalent Chromium waters	EPA 200.7 rev 4.4	1	161762828001	06/24/2016 15:42	Parker D Lindstrom	1
07052	Cobalt	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07053	Copper	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
01754	Iron	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07055	Lead	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07058	Manganese	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07061	Nickel	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1
07066	Silver	EPA 200.7 rev 4.4	1	161735716004	06/22/2016 15:30	Cindy M Gehman	1

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Analysis Report

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

Sample Description: Influent Grab Groundwater
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429458
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016 16:45

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORIG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
07072	Zinc	EPA 200.7 rev 4.4	1	161735716004	06/22/2016	15:30	Cindy M Gehman	1
00259	Mercury	EPA 245.1 rev 3	1	161745714003	06/24/2016	07:10	Damary Valentin	1
05716	EPA 600 ICP Digest (tot rec)	EPA 200.7 rev 4.4	1	161735716004	06/22/2016	08:05	Lisa J Cooke	1
05714	PW/WW Hg Digest	EPA 245.1 rev 3	1	161735714002	06/21/2016	20:55	Barbara A Kane	1
05714	PW/WW Hg Digest	EPA 245.1 rev 3	2	161745714003	06/23/2016	08:50	Lisa J Cooke	1
00241	Cyanide (Free)	SM 4500-CN E-1999	1	16180114101A	06/28/2016	14:24	Dein K Bernot	1
01446	Hexavalent Chromium	SM 3500-Cr B-2009	1	16168144601A	06/16/2016	20:30	Michelle L Lalli	1

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Analysis Report

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

Sample Description: Trip Blank Water
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429459
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORTB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	1
02898	Benzene	71-43-2	N.D.	0.1	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	1
02898	Bromoform	75-25-2	N.D.	0.1	1
02898	Bromomethane	74-83-9	N.D.	0.1	1
02898	2-Butanone	78-93-3	N.D.	1.0	1
02898	Carbon Disulfide	75-15-0	N.D.	0.4	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	1
02898	Chloroethane	75-00-3	N.D.	0.1	1
02898	Chloroform	67-66-3	N.D.	0.1	1
02898	Chloromethane	74-87-3	N.D.	0.2	1
02898	Cyclohexane	110-82-7	N.D.	0.1	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	1
02898	1,4-Dioxane	123-91-1	N.D.	20	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	1
02898	Freon 113	76-13-1	N.D.	0.2	1
02898	2-Hexanone	591-78-6	N.D.	1.0	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	1
02898	Methyl Acetate	79-20-9	N.D.	0.3	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	1
02898	4-Methyl-2-pentanone	108-10-1	N.D.	1.0	1
02898	Methylcyclohexane	108-87-2	N.D.	0.1	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	1
02898	Styrene	100-42-5	N.D.	0.1	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	1
02898	Toluene	108-88-3	N.D.	0.1	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	1
02898	Trichloroethene	79-01-6	N.D.	0.1	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	1

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Analysis Report

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

Sample Description: Trip Blank Water
Upper Black Eddy, PA
Boarhead Farms Quarterly GW Sampling

LL Sample # WW 8429459
LL Group # 1672833
Account # 02575

Project Name: Boarhead Farms

Collected: 06/15/2016

Submitted: 06/16/2016 16:30
Reported: 06/29/2016 03:41

GES, Inc.
440 Creamery Way
Suite 500
Exton PA 19341

BORTB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l	ug/l	
02898	Vinyl Chloride	75-01-4	N.D.	0.1	1
02898	m+p-Xylene	179601-23-1	N.D.	0.1	1
02898	o-Xylene	95-47-6	N.D.	0.1	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	1

Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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
02898	TCL SOM01.2 VOCs	SW-846 8260B 25mL purge	1	I161692AA	06/18/2016 00:15	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I161692AA	06/18/2016 00:15	Matthew S Krause	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

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	MDL
	ug/l	ug/l
Batch number: C161762AA	Sample number(s): 8429458	
Acetone	N.D.	3.0
Benzene	N.D.	0.1
Bromochloromethane	N.D.	0.1
Bromodichloromethane	N.D.	0.1
Bromoform	N.D.	0.1
Bromomethane	N.D.	0.1
2-Butanone	N.D.	1.0
Carbon Disulfide	N.D.	0.4
Carbon Tetrachloride	N.D.	0.1
Chlorobenzene	N.D.	0.1
Chloroethane	N.D.	0.1
Chloroform	N.D.	0.1
Chloromethane	N.D.	0.2
Cyclohexane	N.D.	0.1
1,2-Dibromo-3-chloropropane	N.D.	0.2
Dibromochloromethane	N.D.	0.1
1,2-Dibromoethane	N.D.	0.1
1,2-Dichlorobenzene	N.D.	0.1
1,3-Dichlorobenzene	N.D.	0.1
1,4-Dichlorobenzene	N.D.	0.1
Dichlorodifluoromethane	N.D.	0.1
1,1-Dichloroethane	N.D.	0.1
1,2-Dichloroethane	N.D.	0.1
1,1-Dichloroethene	N.D.	0.1
cis-1,2-Dichloroethene	N.D.	0.1
trans-1,2-Dichloroethene	N.D.	0.1
1,2-Dichloropropane	N.D.	0.1
cis-1,3-Dichloropropene	N.D.	0.1
trans-1,3-Dichloropropene	N.D.	0.1
1,4-Dioxane	N.D.	20
Ethylbenzene	N.D.	0.1
Freon 113	N.D.	0.2
2-Hexanone	N.D.	1.0
Isopropylbenzene	N.D.	0.1
Methyl Acetate	N.D.	0.3
Methyl Tertiary Butyl Ether	N.D.	0.1
4-Methyl-2-pentanone	N.D.	1.0
Methylcyclohexane	N.D.	0.1
Methylene Chloride	N.D.	0.2
Styrene	N.D.	0.1
1,1,2,2-Tetrachloroethane	N.D.	0.1
Tetrachloroethene	N.D.	0.1
Toluene	N.D.	0.1

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
1,2,3-Trichlorobenzene	N.D.	0.1
1,2,4-Trichlorobenzene	N.D.	0.1
1,1,1-Trichloroethane	N.D.	0.1
1,1,2-Trichloroethane	N.D.	0.1
Trichloroethene	N.D.	0.1
Trichlorofluoromethane	N.D.	0.1
Vinyl Chloride	N.D.	0.1
m+p-Xylene	N.D.	0.1
o-Xylene	N.D.	0.1
Xylene (Total)	N.D.	0.1
Batch number: I161692AA	Sample number(s): 8429459	
Acetone	N.D.	3.0
Benzene	N.D.	0.1
Bromochloromethane	N.D.	0.1
Bromodichloromethane	N.D.	0.1
Bromoform	N.D.	0.1
Bromomethane	N.D.	0.1
2-Butanone	N.D.	1.0
Carbon Disulfide	N.D.	0.4
Carbon Tetrachloride	N.D.	0.1
Chlorobenzene	N.D.	0.1
Chloroethane	N.D.	0.1
Chloroform	N.D.	0.1
Chloromethane	N.D.	0.2
Cyclohexane	N.D.	0.1
1,2-Dibromo-3-chloropropane	N.D.	0.2
Dibromochloromethane	N.D.	0.1
1,2-Dibromoethane	N.D.	0.1
1,2-Dichlorobenzene	N.D.	0.1
1,3-Dichlorobenzene	N.D.	0.1
1,4-Dichlorobenzene	N.D.	0.1
Dichlorodifluoromethane	N.D.	0.1
1,1-Dichloroethane	N.D.	0.1
1,2-Dichloroethane	N.D.	0.1
1,1-Dichloroethene	N.D.	0.1
cis-1,2-Dichloroethene	N.D.	0.1
trans-1,2-Dichloroethene	N.D.	0.1
1,2-Dichloropropane	N.D.	0.1
cis-1,3-Dichloropropene	N.D.	0.1
trans-1,3-Dichloropropene	N.D.	0.1
1,4-Dioxane	N.D.	20
Ethylbenzene	N.D.	0.1
Freon 113	N.D.	0.2
2-Hexanone	N.D.	1.0
Isopropylbenzene	N.D.	0.1
Methyl Acetate	N.D.	0.3
Methyl Tertiary Butyl Ether	N.D.	0.1
4-Methyl-2-pentanone	N.D.	1.0
Methylcyclohexane	N.D.	0.1
Methylene Chloride	N.D.	0.2
Styrene	N.D.	0.1

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
1,1,2,2-Tetrachloroethane	N.D.	0.1
Tetrachloroethene	N.D.	0.1
Toluene	N.D.	0.1
1,2,3-Trichlorobenzene	N.D.	0.1
1,2,4-Trichlorobenzene	N.D.	0.1
1,1,1-Trichloroethane	N.D.	0.1
1,1,2-Trichloroethane	N.D.	0.1
Trichloroethene	N.D.	0.1
Trichlorofluoromethane	N.D.	0.1
Vinyl Chloride	N.D.	0.1
m+p-Xylene	N.D.	0.1
o-Xylene	N.D.	0.1
Xylene (Total)	N.D.	0.1
Batch number: I161781AA	Sample number(s): 8429456-8429457	
Acetone	N.D.	3.0
Benzene	N.D.	0.1
Bromochloromethane	N.D.	0.1
Bromodichloromethane	N.D.	0.1
Bromoform	N.D.	0.1
Bromomethane	N.D.	0.1
2-Butanone	N.D.	1.0
Carbon Disulfide	N.D.	0.4
Carbon Tetrachloride	N.D.	0.1
Chlorobenzene	N.D.	0.1
Chloroethane	N.D.	0.1
Chloroform	N.D.	0.1
Chloromethane	N.D.	0.2
Cyclohexane	N.D.	0.1
1,2-Dibromo-3-chloropropane	N.D.	0.2
Dibromochloromethane	N.D.	0.1
1,2-Dibromoethane	N.D.	0.1
1,2-Dichlorobenzene	N.D.	0.1
1,3-Dichlorobenzene	N.D.	0.1
1,4-Dichlorobenzene	N.D.	0.1
Dichlorodifluoromethane	N.D.	0.1
1,1-Dichloroethane	N.D.	0.1
1,2-Dichloroethane	N.D.	0.1
1,1-Dichloroethene	N.D.	0.1
cis-1,2-Dichloroethene	N.D.	0.1
trans-1,2-Dichloroethene	N.D.	0.1
1,2-Dichloropropane	N.D.	0.1
cis-1,3-Dichloropropene	N.D.	0.1
trans-1,3-Dichloropropene	N.D.	0.1
1,4-Dioxane	N.D.	20
Ethylbenzene	N.D.	0.1
Freon 113	N.D.	0.2
2-Hexanone	N.D.	1.0
Isopropylbenzene	N.D.	0.1
Methyl Acetate	N.D.	0.3
Methyl Tertiary Butyl Ether	N.D.	0.1
4-Methyl-2-pentanone	N.D.	1.0

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

Method Blank (continued)

Analysis Name	Result ug/l	MDL ug/l
Methylcyclohexane	N.D.	0.1
Methylene Chloride	N.D.	0.2
Styrene	N.D.	0.1
1,1,2,2-Tetrachloroethane	N.D.	0.1
Tetrachloroethene	N.D.	0.1
Toluene	N.D.	0.1
1,2,3-Trichlorobenzene	N.D.	0.1
1,2,4-Trichlorobenzene	N.D.	0.1
1,1,1-Trichloroethane	N.D.	0.1
1,1,2-Trichloroethane	N.D.	0.1
Trichloroethene	N.D.	0.1
Trichlorofluoromethane	N.D.	0.1
Vinyl Chloride	N.D.	0.1
m+p-Xylene	N.D.	0.1
o-Xylene	N.D.	0.1
Xylene (Total)	N.D.	0.1
Batch number: 16169WAG625	Sample number(s): 8429456-8429458	
Acenaphthene	N.D.	0.3
Acenaphthylene	N.D.	0.3
Anthracene	N.D.	0.2
Benzo(a)anthracene	N.D.	0.2
Benzo(a)pyrene	N.D.	0.3
Benzo(b)fluoranthene	N.D.	0.3
Benzo(g,h,i)perylene	N.D.	0.2
Benzo(k)fluoranthene	N.D.	0.3
4-Bromophenyl-phenylether	N.D.	0.3
Butylbenzylphthalate	N.D.	0.8
Di-n-butylphthalate	N.D.	0.5
Carbazole	N.D.	0.2
4-Chloro-3-methylphenol	N.D.	0.3
4-Chloroaniline	N.D.	0.3
bis(2-Chloroethoxy)methane	N.D.	0.5
bis(2-Chloroethyl)ether	N.D.	0.4
bis(2-Chloroisopropyl)ether	N.D.	0.3
2-Chloronaphthalene	N.D.	0.2
2-Chlorophenol	N.D.	0.3
4-Chlorophenyl-phenylether	N.D.	0.3
Chrysene	N.D.	0.2
Dibenz(a,h)anthracene	N.D.	0.4
Dibenzofuran	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.3
1,3-Dichlorobenzene	N.D.	0.3
1,4-Dichlorobenzene	N.D.	0.3
3,3'-Dichlorobenzidine	N.D.	0.8
2,4-Dichlorophenol	N.D.	0.3
Diethylphthalate	N.D.	0.3
2,4-Dimethylphenol	N.D.	0.3
Dimethylphthalate	N.D.	1
4,6-Dinitro-2-methylphenol	N.D.	4
2,4-Dinitrophenol	N.D.	10
2,4-Dinitrotoluene	N.D.	0.4

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
2,6-Dinitrotoluene	N.D.	0.3
bis(2-Ethylhexyl)phthalate	N.D.	1
Fluoranthene	N.D.	0.3
Fluorene	N.D.	0.3
Hexachlorobenzene	N.D.	1
Hexachlorobutadiene	N.D.	0.8
Hexachlorocyclopentadiene	N.D.	2
Hexachloroethane	N.D.	0.4
Indeno(1,2,3-cd)pyrene	N.D.	0.3
Isophorone	N.D.	0.3
2-Methylnaphthalene	N.D.	0.3
2-Methylphenol	N.D.	0.3
4-Methylphenol	N.D.	0.3
Naphthalene	N.D.	0.2
2-Nitroaniline	N.D.	0.3
3-Nitroaniline	N.D.	0.4
4-Nitroaniline	N.D.	0.4
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	0.4
4-Nitrophenol	N.D.	5
N-Nitroso-di-n-propylamine	N.D.	0.4
N-Nitrosodiphenylamine	N.D.	0.3
Di-n-octylphthalate	N.D.	0.5
Pentachlorophenol	N.D.	3
Phenanthrene	N.D.	0.2
Phenol	N.D.	0.4
Pyrene	N.D.	0.2
1,2,4-Trichlorobenzene	N.D.	0.3
2,4,5-Trichlorophenol	N.D.	0.4
2,4,6-Trichlorophenol	N.D.	0.7
	mg/l	mg/l
Batch number: 161735716004	Sample number(s): 8429455-8429456,8429458	
Aluminum	N.D.	0.0929
Antimony	N.D.	0.0062
Arsenic	N.D.	0.0078
Cadmium	N.D.	0.00064
Chromium	N.D.	0.0020
Cobalt	N.D.	0.00090
Copper	N.D.	0.0032
Iron	N.D.	0.0333
Lead	N.D.	0.0051
Manganese	N.D.	0.0012
Nickel	N.D.	0.0025
Silver	N.D.	0.0018
Zinc	N.D.	0.0042
Batch number: 161745714003	Sample number(s): 8429455,8429458	
Mercury	N.D.	0.000050
Batch number: 16180114101A	Sample number(s): 8429455,8429458	
Cyanide (Free)	N.D.	0.0040

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

Method Blank (continued)

Analysis Name	Result mg/l	MDL mg/l
Batch number: 16168144601A	Sample number(s): 8429455-8429456,8429458	
Hexavalent Chromium	N.D.	0.0010

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: C161762AA	Sample number(s): 8429458								
Acetone	37.5	33.41	37.5	34.72	89	93	65-124	4	30
Benzene	5.00	4.72	5.00	4.48	94	90	80-120	5	30
Bromochloromethane	5.00	5.01	5.00	4.90	100	98	80-125	2	30
Bromodichloromethane	5.00	5.39	5.00	5.21	108	104	80-120	3	30
Bromoform	5.00	4.44	5.00	4.27	89	85	62-128	4	30
Bromomethane	5.00	4.94	5.00	4.81	99	96	71-126	3	30
2-Butanone	37.5	33.82	37.5	34.69	90	93	66-135	3	30
Carbon Disulfide	5.00	4.87	5.00	4.41	97	88	65-120	10	30
Carbon Tetrachloride	5.00	5.31	5.00	4.95	106	99	65-134	7	30
Chlorobenzene	5.00	4.71	5.00	4.53	94	91	80-120	4	30
Chloroethane	5.00	4.92	5.00	4.64	98	93	71-122	6	30
Chloroform	5.00	4.89	5.00	4.70	98	94	80-120	4	30
Chloromethane	5.00	4.67	5.00	4.41	93	88	63-121	6	30
Cyclohexane	5.00	4.65	5.00	4.37	93	87	69-120	6	30
1,2-Dibromo-3-chloropropane	5.00	4.34	5.00	4.31	87	86	56-131	1	30
Dibromochloromethane	5.00	4.61	5.00	4.53	92	91	68-131	2	30
1,2-Dibromoethane	5.00	5.07	5.00	4.98	101	100	80-120	2	30
1,2-Dichlorobenzene	5.00	4.70	5.00	4.57	94	91	80-120	3	30
1,3-Dichlorobenzene	5.00	4.62	5.00	4.50	92	90	80-120	3	30
1,4-Dichlorobenzene	5.00	4.65	5.00	4.52	93	90	80-120	3	30
Dichlorodifluoromethane	5.00	5.38	5.00	5.15	108	103	35-142	4	30
1,1-Dichloroethane	5.00	4.85	5.00	4.64	97	93	75-120	4	30
1,2-Dichloroethane	5.00	4.83	5.00	4.77	97	95	72-127	1	30
1,1-Dichloroethene	5.00	4.87	5.00	4.55	97	91	70-120	7	30
cis-1,2-Dichloroethene	5.00	4.70	5.00	4.54	94	91	80-120	4	30
trans-1,2-Dichloroethene	5.00	4.91	5.00	4.63	98	93	80-120	6	30
1,2-Dichloropropane	5.00	4.84	5.00	4.66	97	93	80-120	4	30
cis-1,3-Dichloropropene	5.00	4.94	5.00	4.75	99	95	80-124	4	30
trans-1,3-Dichloropropene	5.00	5.19	5.00	5.05	104	101	77-121	3	30
1,4-Dioxane	125	123.13	125	129.76	99	104	75-152	5	30
Ethylbenzene	5.00	4.71	5.00	4.50	94	90	80-120	5	30
Freon 113	5.00	4.94	5.00	4.65	99	93	75-120	6	30
2-Hexanone	25	23.55	25	23.17	94	93	73-128	2	30
Isopropylbenzene	5.00	4.86	5.00	4.63	97	93	80-120	5	30
Methyl Acetate	5.00	4.74	5.00	4.62	95	92	57-143	3	30
Methyl Tertiary Butyl Ether	5.00	4.75	5.00	4.65	95	93	74-120	2	30
4-Methyl-2-pentanone	25	24.07	25	23.51	96	94	71-129	2	30
Methylcyclohexane	5.00	4.79	5.00	4.51	96	90	72-120	6	30
Methylene Chloride	5.00	4.56	5.00	4.41	91	88	80-120	3	30

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

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
Styrene	5.00	4.80	5.00	4.65	96	93	80-122	3	30
1,1,2,2-Tetrachloroethane	5.00	4.69	5.00	4.61	94	92	80-120	2	30
Tetrachloroethene	5.00	4.88	5.00	4.57	98	91	80-120	7	30
Toluene	5.00	4.67	5.00	4.51	93	90	80-120	4	30
1,2,3-Trichlorobenzene	5.00	4.54	5.00	4.36	91	87	59-120	4	30
1,2,4-Trichlorobenzene	5.00	4.60	5.00	4.48	92	90	67-120	2	30
1,1,1-Trichloroethane	5.00	5.12	5.00	4.75	102	95	70-124	7	30
1,1,2-Trichloroethane	5.00	4.65	5.00	4.61	93	92	80-120	1	30
Trichloroethene	5.00	4.94	5.00	4.66	99	93	80-120	6	30
Trichlorofluoromethane	5.00	5.77	5.00	5.31	115	106	64-133	8	30
Vinyl Chloride	5.00	5.10	5.00	4.83	102	97	62-128	5	30
m+p-Xylene	10	9.45	10	9.11	94	91	80-120	4	30
o-Xylene	5.00	4.65	5.00	4.45	93	89	80-120	5	30
Xylene (Total)	15	14.1	15	13.56	94	90	80-120	4	30
Batch number: I161692AA	Sample number(s): 8429459								
Acetone	37.5	38.75	37.5	30.97	103	83	65-124	22	30
Benzene	5.00	4.84	5.00	4.77	97	95	80-120	1	30
Bromochloromethane	5.00	4.99	5.00	4.92	100	98	80-125	1	30
Bromodichloromethane	5.00	4.60	5.00	4.49	92	90	80-120	2	30
Bromoform	5.00	3.57	5.00	3.44	71	69	62-128	4	30
Bromomethane	5.00	4.06	5.00	3.95	81	79	71-126	3	30
2-Butanone	37.5	43.94	37.5	35.96	117	96	66-135	20	30
Carbon Disulfide	5.00	4.27	5.00	4.19	85	84	65-120	2	30
Carbon Tetrachloride	5.00	4.71	5.00	4.58	94	92	65-134	3	30
Chlorobenzene	5.00	4.75	5.00	4.59	95	92	80-120	3	30
Chloroethane	5.00	3.93	5.00	3.82	79	76	71-122	3	30
Chloroform	5.00	4.74	5.00	4.66	95	93	80-120	2	30
Chloromethane	5.00	3.61	5.00	3.50	72	70	63-121	3	30
Cyclohexane	5.00	4.50	5.00	4.37	90	87	69-120	3	30
1,2-Dibromo-3-chloropropane	5.00	5.04	5.00	4.23	101	85	56-131	18	30
Dibromochloromethane	5.00	4.44	5.00	4.30	89	86	68-131	3	30
1,2-Dibromoethane	5.00	5.36	5.00	5.23	107	105	80-120	3	30
1,2-Dichlorobenzene	5.00	4.84	5.00	4.73	97	95	80-120	2	30
1,3-Dichlorobenzene	5.00	4.73	5.00	4.60	95	92	80-120	3	30
1,4-Dichlorobenzene	5.00	4.77	5.00	4.63	95	93	80-120	3	30
Dichlorodifluoromethane	5.00	3.70	5.00	3.59	74	72	35-142	3	30
1,1-Dichloroethane	5.00	4.52	5.00	4.43	90	89	75-120	2	30
1,2-Dichloroethane	5.00	4.48	5.00	4.39	90	88	72-127	2	30
1,1-Dichloroethene	5.00	4.91	5.00	4.82	98	96	70-120	2	30
cis-1,2-Dichloroethene	5.00	4.90	5.00	4.82	98	96	80-120	2	30
trans-1,2-Dichloroethene	5.00	4.97	5.00	4.91	99	98	80-120	1	30
1,2-Dichloropropane	5.00	5.01	5.00	4.92	100	98	80-120	2	30
cis-1,3-Dichloropropene	5.00	4.55	5.00	4.44	91	89	80-124	3	30
trans-1,3-Dichloropropene	5.00	4.49	5.00	4.38	90	88	77-121	2	30
1,4-Dioxane	125	185.11	125	144.18	148	115	75-152	25	30
Ethylbenzene	5.00	4.70	5.00	4.57	94	91	80-120	3	30
Freon 113	5.00	4.84	5.00	4.73	97	95	75-120	2	30
2-Hexanone	25	24.89	25	24.26	100	97	73-128	3	30
Isopropylbenzene	5.00	4.72	5.00	4.62	94	92	80-120	2	30
Methyl Acetate	5.00	5.55	5.00	5.63	111	113	57-143	1	30

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

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	5.00	4.82	5.00	4.71	96	94	74-120	2	30
4-Methyl-2-pentanone	25	25.73	25	25.75	103	103	71-129	0	30
Methylcyclohexane	5.00	4.81	5.00	4.71	96	94	72-120	2	30
Methylene Chloride	5.00	4.85	5.00	4.72	97	94	80-120	3	30
Styrene	5.00	4.88	5.00	4.73	98	95	80-122	3	30
1,1,2,2-Tetrachloroethane	5.00	5.41	5.00	5.28	108	106	80-120	2	30
Tetrachloroethene	5.00	4.46	5.00	4.34	89	87	80-120	3	30
Toluene	5.00	4.57	5.00	4.47	91	89	80-120	2	30
1,2,3-Trichlorobenzene	5.00	5.02	5.00	4.81	100	96	59-120	4	30
1,2,4-Trichlorobenzene	5.00	4.88	5.00	4.71	98	94	67-120	3	30
1,1,1-Trichloroethane	5.00	4.55	5.00	4.48	91	90	70-124	1	30
1,1,2-Trichloroethane	5.00	5.10	5.00	4.93	102	99	80-120	3	30
Trichloroethene	5.00	5.00	5.00	4.86	100	97	80-120	3	30
Trichlorofluoromethane	5.00	4.38	5.00	4.41	88	88	64-133	1	30
Vinyl Chloride	5.00	3.92	5.00	3.76	78	75	62-128	4	30
m+p-Xylene	10	9.33	10	9.03	93	90	80-120	3	30
o-Xylene	5.00	4.58	5.00	4.50	92	90	80-120	2	30
Xylene (Total)	15	13.91	15	13.53	93	90	80-120	3	30
Batch number: I161751AA	Sample number(s): 8429456-8429457								
Acetone	37.5	30.4	37.5	32.22	81	86	65-124	6	30
Benzene	5.00	5.27	5.00	5.10	105	102	80-120	3	30
Bromochloromethane	5.00	5.19	5.00	5.09	104	102	80-125	2	30
Bromodichloromethane	5.00	5.09	5.00	5.02	102	100	80-120	1	30
Bromoform	5.00	4.43	5.00	4.27	89	85	62-128	4	30
Bromomethane	5.00	4.80	5.00	4.58	96	92	71-126	5	30
2-Butanone	37.5	37.32	37.5	39.92	100	106	66-135	7	30
Carbon Disulfide	5.00	5.80	5.00	5.39	116	108	65-120	7	30
Carbon Tetrachloride	5.00	5.20	5.00	4.90	104	98	65-134	6	30
Chlorobenzene	5.00	4.93	5.00	4.69	99	94	80-120	5	30
Chloroethane	5.00	4.71	5.00	4.55	94	91	71-122	3	30
Chloroform	5.00	5.04	5.00	4.92	101	98	80-120	2	30
Chloromethane	5.00	4.49	5.00	4.35	90	87	63-121	3	30
Cyclohexane	5.00	4.96	5.00	4.80	99	96	69-120	3	30
1,2-Dibromo-3-chloropropane	5.00	4.64	5.00	5.06	93	101	56-131	9	30
Dibromochloromethane	5.00	5.28	5.00	5.02	106	100	68-131	5	30
1,2-Dibromoethane	5.00	5.33	5.00	5.31	107	106	80-120	1	30
1,2-Dichlorobenzene	5.00	4.65	5.00	4.50	93	90	80-120	3	30
1,3-Dichlorobenzene	5.00	4.57	5.00	4.47	91	89	80-120	2	30
1,4-Dichlorobenzene	5.00	4.61	5.00	4.45	92	89	80-120	4	30
Dichlorodifluoromethane	5.00	4.98	5.00	4.62	100	92	35-142	7	30
1,1-Dichloroethane	5.00	4.91	5.00	4.78	98	96	75-120	3	30
1,2-Dichloroethane	5.00	4.53	5.00	4.46	91	89	72-127	1	30
1,1-Dichloroethene	5.00	5.44	5.00	5.21	109	104	70-120	4	30
cis-1,2-Dichloroethene	5.00	5.31	5.00	5.12	106	102	80-120	4	30
trans-1,2-Dichloroethene	5.00	5.51	5.00	5.30	110	106	80-120	4	30
1,2-Dichloropropane	5.00	5.27	5.00	5.18	105	104	80-120	2	30
cis-1,3-Dichloropropene	5.00	5.17	5.00	5.06	103	101	80-124	2	30
trans-1,3-Dichloropropene	5.00	5.07	5.00	4.91	101	98	77-121	3	30
1,4-Dioxane	125	143.19	125	137.68	115	110	75-152	4	30
Ethylbenzene	5.00	4.97	5.00	4.64	99	93	80-120	7	30

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

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
Freon 113	5.00	5.36	5.00	5.06	107	101	75-120	6	30
2-Hexanone	25	23.79	25	23.3	95	93	73-128	2	30
Isopropylbenzene	5.00	5.02	5.00	4.70	100	94	80-120	7	30
Methyl Acetate	5.00	5.53	5.00	5.46	111	109	57-143	1	30
Methyl Tertiary Butyl Ether	5.00	5.00	5.00	4.96	100	99	74-120	1	30
4-Methyl-2-pentanone	25	24.72	25	24.77	99	99	71-129	0	30
Methylcyclohexane	5.00	5.22	5.00	4.90	104	98	72-120	6	30
Methylene Chloride	5.00	5.20	5.00	5.05	104	101	80-120	3	30
Styrene	5.00	5.11	5.00	4.85	102	97	80-122	5	30
1,1,2,2-Tetrachloroethane	5.00	5.08	5.00	5.07	102	101	80-120	0	30
Tetrachloroethene	5.00	4.72	5.00	4.40	94	88	80-120	7	30
Toluene	5.00	4.91	5.00	4.63	98	93	80-120	6	30
1,2,3-Trichlorobenzene	5.00	4.70	5.00	4.51	94	90	59-120	4	30
1,2,4-Trichlorobenzene	5.00	4.69	5.00	4.46	94	89	67-120	5	30
1,1,1-Trichloroethane	5.00	4.99	5.00	4.71	100	94	70-124	6	30
1,1,2-Trichloroethane	5.00	5.13	5.00	4.99	103	100	80-120	3	30
Trichloroethene	5.00	5.24	5.00	5.04	105	101	80-120	4	30
Trichlorofluoromethane	5.00	5.02	5.00	4.75	100	95	64-133	6	30
Vinyl Chloride	5.00	4.92	5.00	4.72	98	94	62-128	4	30
m+p-Xylene	10	9.89	10	9.11	99	91	80-120	8	30
o-Xylene	5.00	4.86	5.00	4.57	97	91	80-120	6	30
Xylene (Total)	15	14.75	15	13.68	98	91	80-120	8	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16169WAG625	Sample number(s): 8429456-8429458								
Acenaphthene	50	55.62			111		71-118		
Acenaphthylene	50	52.08			104		70-121		
Anthracene	50	55.82			112		80-114		
Benzo(a)anthracene	50	58.24			116		76-117		
Benzo(a)pyrene	50	55.26			111		76-112		
Benzo(b)fluoranthene	50	59.84			120		80-120		
Benzo(g,h,i)perylene	50	57.98			116		76-120		
Benzo(k)fluoranthene	50	54.66			109		75-121		
4-Bromophenyl-phenylether	50	59.37			119*		75-118		
Butylbenzylphthalate	50	58.5			117		80-125		
Di-n-butylphthalate	50	57.18			114		77-116		
Carbazole	50	55.14			110		84-114		
4-Chloro-3-methylphenol	50	52.42			105		72-116		
4-Chloroaniline	50	36.37			73		23-117		
bis(2-Chloroethoxy)methane	50	58.16			116		67-122		
bis(2-Chloroethyl)ether	50	55.2			110		74-111		
bis(2-Chloroisopropyl)ether	50	50.24			100		74-116		
2-Chloronaphthalene	50	50.54			101		41-144		
2-Chlorophenol	50	52.24			104		68-117		
4-Chlorophenyl-phenylether	50	57.05			114		76-115		
Chrysene	50	59.04			118		81-118		
Dibenz(a,h)anthracene	50	59.3			119		77-119		
Dibenzofuran	50	54.98			110		81-110		
1,2-Dichlorobenzene	50	24.74			49		32-111		
1,3-Dichlorobenzene	50	21.51			43		24-107		

*- Outside of specification
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Quality Control Summary

Client Name: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

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
1,4-Dichlorobenzene	50	22.82			46		26-108		
3,3'-Dichlorobenzidine	50	50.4			101		10-103		
2,4-Dichlorophenol	50	56.24			112		79-114		
Diethylphthalate	50	57.01			114		39-137		
2,4-Dimethylphenol	50	47.92			96		72-110		
Dimethylphthalate	50	52.69			105		33-136		
4,6-Dinitro-2-methylphenol	50	53.34			107		74-120		
2,4-Dinitrophenol	100	66.61			67		50-128		
2,4-Dinitrotoluene	50	55.45			111		85-117		
2,6-Dinitrotoluene	50	55.18			110		80-115		
bis(2-Ethylhexyl)phthalate	50	57.97			116		77-118		
Fluoranthene	50	54.03			108		77-111		
Fluorene	50	56.78			114		80-116		
Hexachlorobenzene	50	58.58			117*		75-116		
Hexachlorobutadiene	50	18.46			37		11-113		
Hexachlorocyclopentadiene	100	12.48			12*		24-128		
Hexachloroethane	50	16.7			33		11-105		
Indeno(1,2,3-cd)pyrene	50	55.65			111		76-115		
Isophorone	50	55.51			111		78-120		
2-Methylnaphthalene	50	40.85			82		65-110		
2-Methylphenol	50	45.88			92		58-117		
4-Methylphenol	50	38.43			77		44-108		
Naphthalene	50	35.45			71		52-115		
2-Nitroaniline	50	53.76			108		80-120		
3-Nitroaniline	50	48.09			96		78-106		
4-Nitroaniline	50	46.85			94		61-104		
Nitrobenzene	50	56.63			113		73-113		
2-Nitrophenol	50	55.44			111*		83-109		
4-Nitrophenol	50	28.8			58		10-83		
N-Nitroso-di-n-propylamine	50	56.1			112*		78-110		
N-Nitrosodiphenylamine	50	58.49			117*		77-116		
Di-n-octylphthalate	50	56.95			114		79-125		
Pentachlorophenol	50	36.38			73		57-116		
Phenanthrene	50	55.2			110		78-112		
Phenol	50	21.64			43		14-69		
Pyrene	50	57.58			115		78-117		
1,2,4-Trichlorobenzene	50	26.68			53		31-118		
2,4,5-Trichlorophenol	50	50.99			102		78-112		
2,4,6-Trichlorophenol	50	58.15			116		83-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 161735716004	Sample number(s): 8429455-8429456,8429458								
Aluminum	2.00	2.02			101		85-115		
Antimony	0.500	0.495			99		85-115		
Arsenic	0.150	0.145			97		85-115		
Cadmium	0.0500	0.0510			102		85-115		
Chromium	0.200	0.196			98		85-115		
Cobalt	0.500	0.502			100		85-115		
Copper	0.250	0.245			98		85-115		
Iron	1.00	1.01			101		85-115		

*- Outside of specification
(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.
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Quality Control Summary

Client Name: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Lead	0.150	0.150			100		85-115		
Manganese	0.500	0.508			102		85-115		
Nickel	0.500	0.511			102		85-115		
Silver	0.0500	0.0518			104		85-115		
Zinc	0.500	0.500			100		85-115		
Batch number: 161745714003	Sample number(s): 8429455,8429458								
Mercury	0.00100	0.000858			86		85-115		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16180114101A	Sample number(s): 8429455,8429458								
Cyanide (Free)	0.150	0.150			100		90-110		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16168144601A	Sample number(s): 8429455-8429456,8429458								
Hexavalent Chromium	0.0200	0.0196	0.0200	0.0196	98	98	95-105	0	20

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: 16169WAG625	Sample number(s): 8429456-8429458 UNSPK: P427995									
Acenaphthene	N.D.	50.92	59.26	50.76	57.75	116	114	71-118	3	30
Acenaphthylene	N.D.	50.92	58.22	50.76	59.16	114	117	70-121	2	30
Anthracene	N.D.	50.92	56.72	50.76	56.79	111	112	80-114	0	30
Benzo(a)anthracene	N.D.	50.92	58.2	50.76	57.18	114	113	76-117	2	30
Benzo(a)pyrene	N.D.	50.92	56.77	50.76	55.51	111	109	76-112	2	30
Benzo(b)fluoranthene	N.D.	50.92	59.49	50.76	57.43	117	113	80-120	4	30
Benzo(g,h,i)perylene	N.D.	50.92	59.52	50.76	58.66	117	116	76-120	1	30
Benzo(k)fluoranthene	N.D.	50.92	57.79	50.76	58.3	113	115	75-121	1	30
4-Bromophenyl-phenylether	N.D.	50.92	58.87	50.76	59.65	116	118	75-118	1	30
Butylbenzylphthalate	N.D.	50.92	59.36	50.76	58.74	117	116	80-125	1	30
Di-n-butylphthalate	N.D.	50.92	57.06	50.76	58.16	112	115	77-116	2	30
Carbazole	N.D.	50.92	55.88	50.76	56.17	110	111	84-114	1	30
4-Chloro-3-methylphenol	N.D.	50.92	53.23	50.76	52.31	105	103	72-116	2	30
4-Chloroaniline	N.D.	50.92	35.42	50.76	35.12	70	69	23-117	1	30
bis(2-Chloroethoxy)methane	N.D.	50.92	58.94	50.76	59.65	116	118	67-122	1	30
bis(2-Chloroethyl)ether	N.D.	50.92	55.74	50.76	54.93	109	108	74-111	1	30
bis(2-Chloroisopropyl)ether	N.D.	50.92	52.5	50.76	51.33	103	101	74-116	2	30
2-Chloronaphthalene	N.D.	50.92	73.86	50.76	71.5	145*	141	41-144	3	30
2-Chlorophenol	N.D.	50.92	51.07	50.76	50.62	100	100	68-117	1	30
4-Chlorophenyl-phenylether	N.D.	50.92	59.25	50.76	58.86	116*	116*	76-115	1	30
Chrysene	N.D.	50.92	58.48	50.76	58.37	115	115	81-118	0	30
Dibenz(a,h)anthracene	N.D.	50.92	60.35	50.76	57.75	119	114	77-119	4	30

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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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

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
Dibenzofuran	N.D.	50.92	57.41	50.76	58.06	113*	114*	81-110	1	30
1,2-Dichlorobenzene	N.D.	50.92	36.26	50.76	36	71	71	32-111	1	30
1,3-Dichlorobenzene	N.D.	50.92	31.25	50.76	31.24	61	62	24-107	0	30
1,4-Dichlorobenzene	N.D.	50.92	32.87	50.76	32.76	65	65	26-108	0	30
3,3'-Dichlorobenzidine	N.D.	50.92	48.96	50.76	48.11	96	95	10-103	2	30
2,4-Dichlorophenol	N.D.	50.92	55.25	50.76	54.97	109	108	79-114	1	30
Diethylphthalate	N.D.	50.92	57.33	50.76	57.44	113	113	39-137	0	30
2,4-Dimethylphenol	N.D.	50.92	49.26	50.76	48.98	97	96	72-110	1	30
Dimethylphthalate	N.D.	50.92	50.28	50.76	50.6	99	100	33-136	1	30
4,6-Dinitro-2-methylphenol	N.D.	50.92	50.39	50.76	46.45	99	91	74-120	8	30
2,4-Dinitrophenol	N.D.	101.83	52.91	101.52	43.1	52	42*	50-128	20	30
2,4-Dinitrotoluene	N.D.	50.92	57.06	50.76	57.98	112	114	85-117	2	30
2,6-Dinitrotoluene	N.D.	50.92	56.35	50.76	56.42	111	111	80-115	0	30
bis(2-Ethylhexyl)phthalate	N.D.	50.92	57.41	50.76	58.12	113	115	77-118	1	30
Fluoranthene	N.D.	50.92	54.62	50.76	54.31	107	107	77-111	1	30
Fluorene	N.D.	50.92	58.82	50.76	59.15	116	117*	80-116	1	30
Hexachlorobenzene	N.D.	50.92	57.81	50.76	58.34	114	115	75-116	1	30
Hexachlorobutadiene	N.D.	50.92	42.89	50.76	43.11	84	85	11-113	0	30
Hexachlorocyclopentadiene	N.D.	101.83	74.31	101.52	79.68	73	78	24-128	7	30
Hexachloroethane	N.D.	50.92	31.06	50.76	31.19	61	61	11-105	0	30
Indeno(1,2,3-cd)pyrene	N.D.	50.92	58.15	50.76	56.22	114	111	76-115	3	30
Isophorone	N.D.	50.92	56.88	50.76	57.59	112	113	78-120	1	30
2-Methylnaphthalene	N.D.	50.92	53.6	50.76	53.86	105	106	65-110	0	30
2-Methylphenol	N.D.	50.92	45.92	50.76	44.08	90	87	58-117	4	30
4-Methylphenol	N.D.	50.92	40.22	50.76	37.62	79	74	44-108	7	30
Naphthalene	N.D.	50.92	49.38	50.76	49.64	97	98	52-115	1	30
2-Nitroaniline	N.D.	50.92	56.5	50.76	56.55	111	111	80-120	0	30
3-Nitroaniline	N.D.	50.92	47.82	50.76	49.28	94	97	78-106	3	30
4-Nitroaniline	N.D.	50.92	47.03	50.76	48.24	92	95	61-104	3	30
Nitrobenzene	N.D.	50.92	58.46	50.76	58.46	115*	115*	73-113	0	30
2-Nitrophenol	N.D.	50.92	54.89	50.76	55.11	108	109	83-109	0	30
4-Nitrophenol	N.D.	50.92	31.26	50.76	27.55	61	54	10-83	13	30
N-Nitroso-di-n-propylamine	N.D.	50.92	55.64	50.76	56.23	109	111*	78-110	1	30
N-Nitrosodiphenylamine	N.D.	50.92	58.02	50.76	58.73	114	116	77-116	1	30
Di-n-octylphthalate	N.D.	50.92	57.59	50.76	59.54	113	117	79-125	3	30
Pentachlorophenol	N.D.	50.92	32.71	50.76	29.93	64	59	57-116	9	30
Phenanthrene	N.D.	50.92	55.3	50.76	55.23	109	109	78-112	0	30
Phenol	N.D.	50.92	24.23	50.76	22.24	48	44	14-69	9	30
Pyrene	N.D.	50.92	57.32	50.76	56.81	113	112	78-117	1	30
1,2,4-Trichlorobenzene	N.D.	50.92	47.33	50.76	48.55	93	96	31-118	3	30
2,4,5-Trichlorophenol	N.D.	50.92	51.89	50.76	49.87	102	98	78-112	4	30
2,4,6-Trichlorophenol	N.D.	50.92	59.18	50.76	58.19	116	115	83-120	2	30
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 161735716004	Sample number(s): 8429455-8429456,8429458 UNSPK: P431587									
Aluminum	N.D.	2.00	1.96			98		70-130		
Antimony	N.D.	0.500	0.496			99		70-130		
Arsenic	N.D.	0.150	0.153			102		70-130		

*- Outside of specification
(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: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

MS/MSD (continued)

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

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Cadmium	N.D.	0.0500	0.0508			102		70-130		
Chromium	N.D.	0.200	0.199			99		70-130		
Cobalt	N.D.	0.500	0.498			100		70-130		
Copper	N.D.	0.250	0.251			100		70-130		
Iron	N.D.	1.00	0.968			97		70-130		
Lead	N.D.	0.150	0.146			97		70-130		
Manganese	N.D.	0.500	0.507			101		70-130		
Nickel	N.D.	0.500	0.505			101		70-130		
Silver	N.D.	0.0500	0.0532			106		70-130		
Zinc	N.D.	0.500	0.512			102		70-130		
Batch number: 161745714003	Sample number(s): 8429455,8429458 UNSPK: P432010									
Mercury	N.D.	0.00100	0.000793			79*		80-120		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16180114101A	Sample number(s): 8429455,8429458 UNSPK: 8429455									
Cyanide (Free)	N.D.	0.200	0.225			112*		90-110		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 161735716004	Sample number(s): 8429455-8429456,8429458 BKG: P431587			
Aluminum	N.D.	N.D.	0 (1)	20
Antimony	N.D.	N.D.	0 (1)	20
Arsenic	N.D.	N.D.	0 (1)	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	N.D.	N.D.	0 (1)	20
Cobalt	N.D.	N.D.	0 (1)	20
Copper	N.D.	N.D.	0 (1)	20
Iron	N.D.	N.D.	0 (1)	20
Lead	N.D.	N.D.	0 (1)	20
Manganese	N.D.	N.D.	0 (1)	20
Nickel	N.D.	N.D.	0 (1)	20
Silver	N.D.	N.D.	0 (1)	20
Zinc	N.D.	N.D.	0 (1)	20
Batch number: 161745714003	Sample number(s): 8429455,8429458 BKG: P432010			
Mercury	N.D.	N.D.	0 (1)	20
	mg/l	mg/l		
Batch number: 16180114101A	Sample number(s): 8429455,8429458 BKG: 8429455			
Cyanide (Free)	N.D.	N.D.	0 (1)	20

*- Outside of specification
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Quality Control Summary

Client Name: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	mg/l	mg/l		
	mg/l	mg/l		
Batch number: 16168144601A	Sample number(s): 8429455-8429456,8429458 BKG: P429582			
Hexavalent Chromium	N.D.	N.D.	0 (1)	20

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: TCL SOM01.2 VOCs
Batch number: C161762AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8429458	103	101	101	99
Blank	102	102	99	99
LCS	104	104	99	100
LCSD	103	101	100	100
Limits:	77-114	74-113	77-110	78-110

Analysis Name: TCL SOM01.2 VOCs
Batch number: I161692AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8429459	101	105	97	99
Blank	100	111	94	99
LCS	101	109	94	98
LCSD	100	109	94	99
Limits:	77-114	74-113	77-110	78-110

Analysis Name: TCL SOM01.2 VOCs
Batch number: I161751AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8429456	99	109	94	99
8429457	99	111	95	101
Blank	100	109	94	101
LCS	100	107	93	102
LCSD	102	109	93	101
Limits:	77-114	74-113	77-110	78-110

Analysis Name: TCL 3.2 SVOCs
Batch number: 16169WAG625

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
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Quality Control Summary

Client Name: GES, Inc.
Reported: 06/29/2016 03:41

Group Number: 1672833

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.

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol
8429456	120*	122*	117	40	65	120
8429457	119	117*	117	39	63	121
8429458	122*	118*	107	1*	3*	11
Blank	112	85	109	37	60	122
LCS	116	112	119	41	64	107
MS	118	117*	114	45	67	109
MSD	119	118*	112	42	66	110
Limits:	60-119	62-116	55-124	10-75	10-105	11-154

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2575 1672833 8429455-59

Serial Number

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Add to Eff & Inf Grab per D. Jelinek LF 6/21/16

Lancaster Laboratories, Inc.
2425 New Holland Pike
Lancaster, PA 17605

Lynn Frederickson
Principal Project Manager - Client Services
Phone: (717) 656-2300

Page 1 of 1

Project Name:	GES Project Number:
Boarhead Farms (02575)	0215000-05001-BHF002
1310 Lonely Cottage Rd. Upper Black Eddy, PA 18972	Quote No.:
GES Project Manager: Derek Jelinek	Client Phone: 610-458-1077 x3065 / Client Fax: 610-458-2300
Client Name: Groundwater & Environmental Services, Inc.	Client E-mail: labreportspae@gesonline.com and DJelinek@gesonline.com
Client Address: 440 Creamery Way, Suite 500, Exton PA 19341	

STANDARD REPORT DELIVERY ⊗

DATE DUE

EXPEDITED REPORT DELIVERY (SURCHARGE) DATE DUE ○

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

REQUIRED ANALYSES / NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT...)	Chromium (200.7), Trivalent Chromium	Chromium, Hexavalent (SM20 3500 Cr B)	Cyanide, Free (SM20 4500 CN E)	Metals (200.7) - See Site Specific List	SVOCs (625) - See Site Specific List	VOCs (SW846-8260B 25mL purge) - See Site Specific List					REMARKS
PRESERVATIVE (Bottle Size)								HNO_3 (250 mL)	None (250 mL)	NaOH/asc (250 mL)	HNO_3 (250 mL)	None (1000 mL)	HCl (40 mL)					
6/15/16	1745	Effluent Composite	C	X					1	1	1							
6/15/16	1740	Effluent Grab	G	X				1	1			2	3					
6/15/16	1630	Midfluent Grab	G	X								2	3					
6/15/16	1645	Influent Grab	G	X				X	1	1	1	2	3					
6/15/16	—	Trip Blank	G	X									2					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	6/15/16	1620	[signature]	6/16/16	0910	[signature]	6/16/16	1630
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
fridge	6/15/16	1620	[signature]	6/16/16	0910	[signature]		

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL LOG NO.	LABORATORY REMARKS:
[signature]	6/16/16	1630	YES ○ NO ○ N/A			

FCU035:12.20.00:2

Original - Return to Laboratory with Sample(s)

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Sample Administration Receipt Documentation Log

Doc Log ID: 150720
Group Number(s): 1672833

Client: GES

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	06/16/2016 16:30
Number of Packages:	1	Number of Projects:	2
State/Province of Origin:	PA		

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:	Yes
Paperwork Enclosed:	Yes	VOA IDs (≥ 6mm):	See Below
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		

VOA Vial IDs (Headspace ≥ 6mm): Trip Blank Vials

Unpacked by Patrick Engle (3472) at 16:58 on 06/16/2016

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	DT146	0.2	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:

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

< 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...

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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