

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-69122-1

Client Project/Site: 58505, Janesville WI, SSOW 108020

For:

GHD Services Inc.

45 Farmington Valley Drive

Plainville, Connecticut 06062

Attn: Ms. Kathy Shaw



Authorized for release by:

9/12/2016 4:26:21 PM

Denise Heckler, Project Manager II

(330)966-9477

denise.heckler@testamericainc.com



LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	11
QC Sample Results	13
QC Association Summary	20
Lab Chronicle	24
Certification Summary	25
Chain of Custody	26

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Job ID: 240-69122-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative 240-69122-1

Comments

No additional comments.

Receipt

The sample was received on 9/7/2016 9:40 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8082: Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: ST-090616-JN-003 (240-69122-1). These results have been reported and qualified.

Method(s) 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: ST-090616-JN-003 (240-69122-1).2688697, 2103098, 2586316.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8015B	Gasoline Range Organics - (GC)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CAN
9012A	Cyanide, Total and/or Amenable	SW846	TAL CAN
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL CAN
9095A	Paint Filter	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-69122-1	ST-090616-JN-003	Solid	09/06/16 14:00	09/07/16 09:40

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Client Sample ID: ST-090616-JN-003

Lab Sample ID: 240-69122-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics [C6 - C10]	150		140	ug/Kg	1	☼	8015B	Total/NA
C20-C34	2400		680	mg/Kg	10	☼	8015B	Total/NA
Aroclor-1260	94		69	ug/Kg	1	☼	8082	Total/NA
Barium	0.86		0.50	mg/L	1		6010B	TCLP
Lead	0.091		0.050	mg/L	1		6010B	TCLP
Flashpoint	>200		1.00	Degrees F	1		1010	Total/NA
Cyanide, Total	0.91		0.66	mg/Kg	1	☼	9012A	Total/NA
Sulfide	71		42	mg/Kg	1	☼	9034	Total/NA
Free Liquid	CNF		0.10	NONE	1		9095A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Client Sample ID: ST-090616-JN-003

Lab Sample ID: 240-69122-1

Date Collected: 09/06/16 14:00

Matrix: Solid

Date Received: 09/07/16 09:40

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	mg/L			09/09/16 20:46	1
1,2-Dichloroethane	0.025	U	0.025	mg/L			09/09/16 20:46	1
2-Butanone (MEK)	0.25	U	0.25	mg/L			09/09/16 20:46	1
Benzene	0.025	U	0.025	mg/L			09/09/16 20:46	1
Carbon tetrachloride	0.025	U	0.025	mg/L			09/09/16 20:46	1
Chlorobenzene	0.025	U	0.025	mg/L			09/09/16 20:46	1
Chloroform	0.025	U	0.025	mg/L			09/09/16 20:46	1
Tetrachloroethene	0.025	U	0.025	mg/L			09/09/16 20:46	1
Trichloroethene	0.025	U	0.025	mg/L			09/09/16 20:46	1
Vinyl chloride	0.025	U	0.025	mg/L			09/09/16 20:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		73 - 120		09/09/16 20:46	1
4-Bromofluorobenzene (Surr)	97		69 - 120		09/09/16 20:46	1
Toluene-d8 (Surr)	92		76 - 120		09/09/16 20:46	1
Dibromofluoromethane (Surr)	96		80 - 120		09/09/16 20:46	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
2,4-Dinitrotoluene	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
Hexachlorobenzene	0.00080	U	0.00080	mg/L		09/09/16 12:13	09/12/16 12:17	1
Hexachlorobutadiene	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
Hexachloroethane	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
3 & 4 Methylphenol	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
2-Methylphenol	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
Nitrobenzene	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1
Pentachlorophenol	0.016	U	0.016	mg/L		09/09/16 12:13	09/12/16 12:17	1
Pyridine	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 12:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63		42 - 120	09/09/16 12:13	09/12/16 12:17	1
2-Fluorophenol (Surr)	57		10 - 120	09/09/16 12:13	09/12/16 12:17	1
2,4,6-Tribromophenol (Surr)	70		35 - 125	09/09/16 12:13	09/12/16 12:17	1
Nitrobenzene-d5 (Surr)	58		36 - 120	09/09/16 12:13	09/12/16 12:17	1
Phenol-d5 (Surr)	55		10 - 120	09/09/16 12:13	09/12/16 12:17	1
Terphenyl-d14 (Surr)	75		17 - 120	09/09/16 12:13	09/12/16 12:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 11:01	1
Barium	0.86		0.50	mg/L		09/09/16 14:00	09/12/16 11:01	1
Cadmium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 11:01	1
Chromium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 11:01	1
Lead	0.091		0.050	mg/L		09/09/16 14:00	09/12/16 11:01	1
Selenium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 11:01	1
Silver	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 11:01	1

TestAmerica Canton

Client Sample Results

Client: GHD Services Inc.
 Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Client Sample ID: ST-090616-JN-003

Lab Sample ID: 240-69122-1

Date Collected: 09/06/16 14:00

Matrix: Solid

Date Received: 09/07/16 09:40

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	mg/L		09/09/16 13:00	09/12/16 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>200		1.00	Degrees F			09/07/16 16:21	1
Free Liquid	CNF		0.10	NONE			09/12/16 05:11	1
Percent Solids	71.7		0.1	%			09/07/16 10:11	1
Percent Moisture	28.3		0.1	%			09/07/16 10:11	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Client Sample ID: ST-090616-JN-003

Lab Sample ID: 240-69122-1

Date Collected: 09/06/16 14:00

Matrix: Solid

Date Received: 09/07/16 09:40

Percent Solids: 71.7

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	150		140	ug/Kg	☼	09/09/16 04:45	09/09/16 08:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	61		43 - 120			09/09/16 04:45	09/09/16 08:37	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C20	680	U	680	mg/Kg	☼	09/07/16 12:36	09/09/16 21:59	10
C20-C34	2400		680	mg/Kg	☼	09/07/16 12:36	09/09/16 21:59	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	48		40 - 160			09/07/16 12:36	09/09/16 21:59	10

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	69	U	69	ug/Kg	☼	09/07/16 12:09	09/08/16 20:45	1
Aroclor-1221	69	U	69	ug/Kg	☼	09/07/16 12:09	09/08/16 20:45	1
Aroclor-1232	69	U	69	ug/Kg	☼	09/07/16 12:09	09/08/16 20:45	1
Aroclor-1242	69	U	69	ug/Kg	☼	09/07/16 12:09	09/08/16 20:45	1
Aroclor-1248	69	U	69	ug/Kg	☼	09/07/16 12:09	09/08/16 20:45	1
Aroclor-1254	69	U	69	ug/Kg	☼	09/07/16 12:09	09/08/16 20:45	1
Aroclor-1260	94		69	ug/Kg	☼	09/07/16 12:09	09/08/16 20:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		14 - 128			09/07/16 12:09	09/08/16 20:45	1
DCB Decachlorobiphenyl	399	X	10 - 132			09/07/16 12:09	09/08/16 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.91		0.66	mg/Kg	☼	09/07/16 14:15	09/07/16 16:26	1
Sulfide	71		42	mg/Kg	☼	09/12/16 08:40	09/12/16 12:17	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DCE (73-120)	BFB (69-120)	TOL (76-120)	DBFM (80-120)
LCS 240-246206/9	Lab Control Sample	93	93	94	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DCE (73-120)	BFB (69-120)	TOL (76-120)	DBFM (80-120)
240-69122-1	ST-090616-JN-003	94	97	92	96
LB 240-246129/1-A MB	Method Blank	91	92	92	91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	FBP (42-120)	2FP (10-120)	TBP (35-125)	NBZ (36-120)	PHL (10-120)	TPH (17-120)
LCS 240-246167/10-A	Lab Control Sample	71	67	85	70	54	78
MB 240-246167/9-A	Method Blank	66	63	72	58	53	76

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: TCLP

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	FBP (42-120)	2FP (10-120)	TBP (35-125)	NBZ (36-120)	PHL (10-120)	TPH (17-120)
240-69122-1	ST-090616-JN-003	63	57	70	58	55	75

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

TestAmerica Canton

Surrogate Summary

Client: GHD Services Inc.
 Project/Site: 58505, Janesville WI, SSOW 108020
 TBP = 2,4,6-Tribromophenol (Surr)
 NBZ = Nitrobenzene-d5 (Surr)
 PHL = Phenol-d5 (Surr)
 TPH = Terphenyl-d14 (Surr)

TestAmerica Job ID: 240-69122-1

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFT2 (43-120)
240-69122-1	ST-090616-JN-003	61
LCS 240-245898/2-A	Lab Control Sample	85
MB 240-245898/1-A	Method Blank	64

Surrogate Legend

TFT = Trifluorotoluene (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTPH1 (40-160)
240-69122-1	ST-090616-JN-003	48
240-69122-1 MS	ST-090616-JN-003	51
240-69122-1 MSD	ST-090616-JN-003	54
LCS 240-245819/5-A	Lab Control Sample	88
MB 240-245819/4-A	Method Blank	81

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2 (14-128)	DCB2 (10-132)
240-69122-1	ST-090616-JN-003	68	399 X
LCS 240-245734/7-A	Lab Control Sample	58	63
MB 240-245734/6-A	Method Blank	56	70

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 240-246206/9
Matrix: Solid
Analysis Batch: 246206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.00	1.14		mg/L		114	76 - 143
1,2-Dichloroethane	1.00	1.03		mg/L		103	74 - 128
2-Butanone (MEK)	2.00	1.89		mg/L		94	57 - 122
Benzene	1.00	1.04		mg/L		104	80 - 122
Carbon tetrachloride	1.00	1.20		mg/L		120	60 - 154
Chlorobenzene	1.00	0.996		mg/L		100	80 - 120
Chloroform	1.00	1.06		mg/L		106	80 - 126
Tetrachloroethene	1.00	1.13		mg/L		113	80 - 122
Trichloroethene	1.00	1.10		mg/L		110	80 - 126
Vinyl chloride	1.00	0.911		mg/L		91	65 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		73 - 120
4-Bromofluorobenzene (Surr)	93		69 - 120
Toluene-d8 (Surr)	94		76 - 120
Dibromofluoromethane (Surr)	95		80 - 120

Lab Sample ID: LB 240-246129/1-A MB
Matrix: Solid
Analysis Batch: 246206

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	mg/L			09/09/16 18:50	1
1,2-Dichloroethane	0.025	U	0.025	mg/L			09/09/16 18:50	1
2-Butanone (MEK)	0.25	U	0.25	mg/L			09/09/16 18:50	1
Benzene	0.025	U	0.025	mg/L			09/09/16 18:50	1
Carbon tetrachloride	0.025	U	0.025	mg/L			09/09/16 18:50	1
Chlorobenzene	0.025	U	0.025	mg/L			09/09/16 18:50	1
Chloroform	0.025	U	0.025	mg/L			09/09/16 18:50	1
Tetrachloroethene	0.025	U	0.025	mg/L			09/09/16 18:50	1
Trichloroethene	0.025	U	0.025	mg/L			09/09/16 18:50	1
Vinyl chloride	0.025	U	0.025	mg/L			09/09/16 18:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		73 - 120		09/09/16 18:50	1
4-Bromofluorobenzene (Surr)	92		69 - 120		09/09/16 18:50	1
Toluene-d8 (Surr)	92		76 - 120		09/09/16 18:50	1
Dibromofluoromethane (Surr)	91		80 - 120		09/09/16 18:50	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-246167/9-A
Matrix: Solid
Analysis Batch: 246291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 246167

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1

TestAmerica Canton

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-246167/9-A
Matrix: Solid
Analysis Batch: 246291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 246167

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1
2,4-Dinitrotoluene	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1
Hexachlorobenzene	0.00080	U	0.00080	mg/L		09/09/16 12:13	09/12/16 10:41	1
Hexachlorobutadiene	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1
Hexachloroethane	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1
3 & 4 Methylphenol	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1
2-Methylphenol	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1
Nitrobenzene	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1
Pentachlorophenol	0.016	U	0.016	mg/L		09/09/16 12:13	09/12/16 10:41	1
Pyridine	0.0040	U	0.0040	mg/L		09/09/16 12:13	09/12/16 10:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	66		42 - 120	09/09/16 12:13	09/12/16 10:41	1
2-Fluorophenol (Surr)	63		10 - 120	09/09/16 12:13	09/12/16 10:41	1
2,4,6-Tribromophenol (Surr)	72		35 - 125	09/09/16 12:13	09/12/16 10:41	1
Nitrobenzene-d5 (Surr)	58		36 - 120	09/09/16 12:13	09/12/16 10:41	1
Phenol-d5 (Surr)	53		10 - 120	09/09/16 12:13	09/12/16 10:41	1
Terphenyl-d14 (Surr)	76		17 - 120	09/09/16 12:13	09/12/16 10:41	1

Lab Sample ID: LCS 240-246167/10-A
Matrix: Solid
Analysis Batch: 246291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 246167

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,4-Dichlorobenzene	0.0800	0.0537		mg/L		67	48 - 120
2,4,5-Trichlorophenol	0.0800	0.0601		mg/L		75	57 - 120
2,4,6-Trichlorophenol	0.0800	0.0600		mg/L		75	60 - 120
2,4-Dinitrotoluene	0.0800	0.0612		mg/L		76	65 - 120
Hexachlorobenzene	0.0800	0.0586		mg/L		73	47 - 127
Hexachlorobutadiene	0.0800	0.0527		mg/L		66	50 - 120
Hexachloroethane	0.0800	0.0540		mg/L		67	50 - 120
3 & 4 Methylphenol	0.0800	0.0544		mg/L		68	46 - 120
2-Methylphenol	0.0800	0.0575		mg/L		72	52 - 120
Nitrobenzene	0.0800	0.0572		mg/L		72	58 - 120
Pentachlorophenol	0.160	0.104		mg/L		65	35 - 121
Pyridine	0.0800	0.0533		mg/L		67	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	71		42 - 120
2-Fluorophenol (Surr)	67		10 - 120
2,4,6-Tribromophenol (Surr)	85		35 - 125
Nitrobenzene-d5 (Surr)	70		36 - 120
Phenol-d5 (Surr)	54		10 - 120
Terphenyl-d14 (Surr)	78		17 - 120

TestAmerica Canton

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 240-245898/1-A
Matrix: Solid
Analysis Batch: 245899

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245898

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	100	U	100	ug/Kg		09/09/16 04:45	09/09/16 07:23	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	64		43 - 120			09/09/16 04:45	09/09/16 07:23	1

Lab Sample ID: LCS 240-245898/2-A
Matrix: Solid
Analysis Batch: 245899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245898

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics [C6 - C10]	800	849		ug/Kg		106	76 - 120	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Trifluorotoluene (Surr)	85		43 - 120					

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 240-245819/4-A
Matrix: Solid
Analysis Batch: 246031

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245819

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C20	50	U	50	mg/Kg		09/07/16 12:36	09/08/16 22:04	1
C20-C34	50	U	50	mg/Kg		09/07/16 12:36	09/08/16 22:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		40 - 160			09/07/16 12:36	09/08/16 22:04	1

Lab Sample ID: LCS 240-245819/5-A
Matrix: Solid
Analysis Batch: 246031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics [C10 - C28]	250	206		mg/Kg		82	52 - 120	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
o-Terphenyl (Surr)	88		40 - 160					

Lab Sample ID: 240-69122-1 MS
Matrix: Solid
Analysis Batch: 246187

Client Sample ID: ST-090616-JN-003
Prep Type: Total/NA
Prep Batch: 245819

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10 - C28]	1700	F2	346	5150	4	mg/Kg	☼	982	10 - 124

TestAmerica Canton

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 240-69122-1 MS
Matrix: Solid
Analysis Batch: 246187

Client Sample ID: ST-090616-JN-003
Prep Type: Total/NA
Prep Batch: 245819

Surrogate	MS %Recovery	MS Qualifier	Limits
<i>o</i> -Terphenyl (Surr)	51		40 - 160

Lab Sample ID: 240-69122-1 MSD
Matrix: Solid
Analysis Batch: 246187

Client Sample ID: ST-090616-JN-003
Prep Type: Total/NA
Prep Batch: 245819

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10 - C28]	1700	F2	343	1950	4 F2	mg/Kg	☼	60	10 - 124	90	40

Surrogate	MSD %Recovery	MSD Qualifier	Limits
<i>o</i> -Terphenyl (Surr)	54		40 - 160

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-245734/6-A
Matrix: Solid
Analysis Batch: 246011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245734

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	ug/Kg		09/07/16 07:48	09/08/16 21:03	1
Aroclor-1221	50	U	50	ug/Kg		09/07/16 07:48	09/08/16 21:03	1
Aroclor-1232	50	U	50	ug/Kg		09/07/16 07:48	09/08/16 21:03	1
Aroclor-1242	50	U	50	ug/Kg		09/07/16 07:48	09/08/16 21:03	1
Aroclor-1248	50	U	50	ug/Kg		09/07/16 07:48	09/08/16 21:03	1
Aroclor-1254	50	U	50	ug/Kg		09/07/16 07:48	09/08/16 21:03	1
Aroclor-1260	50	U	50	ug/Kg		09/07/16 07:48	09/08/16 21:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro- <i>m</i> -xylene	56		14 - 128	09/07/16 07:48	09/08/16 21:03	1
DCB Decachlorobiphenyl	70		10 - 132	09/07/16 07:48	09/08/16 21:03	1

Lab Sample ID: LCS 240-245734/7-A
Matrix: Solid
Analysis Batch: 246011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	601		ug/Kg		60	47 - 120
Aroclor-1260	1000	635		ug/Kg		64	46 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro- <i>m</i> -xylene	58		14 - 128
DCB Decachlorobiphenyl	63		10 - 132

TestAmerica Canton

QC Sample Results

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-246176/2-A
Matrix: Solid
Analysis Batch: 246374

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 246176

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:26	1
Barium	0.50	U	0.50	mg/L		09/09/16 14:00	09/12/16 10:26	1
Cadmium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:26	1
Chromium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:26	1
Lead	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:26	1
Selenium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:26	1
Silver	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:26	1

Lab Sample ID: LCS 240-246176/3-A
Matrix: Solid
Analysis Batch: 246374

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 246176

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	2.00	2.43		mg/L		122	50 - 150
Barium	2.00	2.15		mg/L		107	50 - 150
Cadmium	0.0500	0.0590		mg/L		118	50 - 150
Chromium	0.200	0.218		mg/L		109	50 - 150
Lead	0.500	0.500		mg/L		100	50 - 150
Selenium	2.00	2.50		mg/L		125	50 - 150
Silver	0.0500	0.0578		mg/L		116	50 - 150

Lab Sample ID: LB 240-246049/1-B
Matrix: Solid
Analysis Batch: 246374

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 246176

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:22	1
Barium	0.50	U	0.50	mg/L		09/09/16 14:00	09/12/16 10:22	1
Cadmium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:22	1
Chromium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:22	1
Lead	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:22	1
Selenium	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:22	1
Silver	0.050	U	0.050	mg/L		09/09/16 14:00	09/12/16 10:22	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-246178/2-A
Matrix: Solid
Analysis Batch: 246417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 246178

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	mg/L		09/09/16 13:00	09/12/16 13:40	1

Lab Sample ID: LCS 240-246178/3-A
Matrix: Solid
Analysis Batch: 246417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 246178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00500	0.00515		mg/L		103	80 - 120

TestAmerica Canton

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Lab Sample ID: LB 240-246049/1-C
Matrix: Solid
Analysis Batch: 246417

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 246178

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	mg/L		09/09/16 13:00	09/12/16 13:38	1

Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 240-245874/1
Matrix: Solid
Analysis Batch: 245874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	81.00		Degrees F		100	97 - 103

Lab Sample ID: 240-69122-1 DU
Matrix: Solid
Analysis Batch: 245874

Client Sample ID: ST-090616-JN-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Flashpoint	>200		>200		Degrees F		NC	20

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 240-245846/1-A
Matrix: Solid
Analysis Batch: 245873

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245846

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.48	U	0.48	mg/Kg		09/07/16 14:15	09/07/16 16:26	1

Lab Sample ID: LCS 240-245846/2-A
Matrix: Solid
Analysis Batch: 245873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	3.77	3.29		mg/Kg		87	68 - 123

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-246305/1-A
Matrix: Solid
Analysis Batch: 246364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 246305

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	30	U	30	mg/Kg		09/12/16 08:40	09/12/16 12:01	1

Lab Sample ID: LCS 240-246305/2-A
Matrix: Solid
Analysis Batch: 246364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 246305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	96.8	83.3		mg/Kg		86	70 - 130

TestAmerica Canton

QC Sample Results

Client: GHD Services Inc.
 Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: 240-69122-1 MS
Matrix: Solid
Analysis Batch: 246364

Client Sample ID: ST-090616-JN-003
Prep Type: Total/NA
Prep Batch: 246305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Sulfide	71		135	162		mg/Kg	☼	67	10 - 154

Lab Sample ID: 240-69122-1 MSD
Matrix: Solid
Analysis Batch: 246364

Client Sample ID: ST-090616-JN-003
Prep Type: Total/NA
Prep Batch: 246305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sulfide	71		134	149		mg/Kg	☼	58	10 - 154	8	20

Method: 9095A - Paint Filter

Lab Sample ID: 240-69122-1 DU
Matrix: Solid
Analysis Batch: 246266

Client Sample ID: ST-090616-JN-003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Free Liquid	CNF		CNF		NONE		NC	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Association Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

GC/MS VOA

Leach Batch: 246129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	1311	
LB 240-246129/1-A MB	Method Blank	TCLP	Solid	1311	

Analysis Batch: 246206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	8260B	246129
LB 240-246129/1-A MB	Method Blank	TCLP	Solid	8260B	246129
LCS 240-246206/9	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 246049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	1311	

Prep Batch: 246167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	3510C	246049
MB 240-246167/9-A	Method Blank	Total/NA	Solid	3510C	
LCS 240-246167/10-A	Lab Control Sample	Total/NA	Solid	3510C	

Analysis Batch: 246291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	8270C	246167
MB 240-246167/9-A	Method Blank	Total/NA	Solid	8270C	246167
LCS 240-246167/10-A	Lab Control Sample	Total/NA	Solid	8270C	246167

GC VOA

Prep Batch: 245898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	5030A	
MB 240-245898/1-A	Method Blank	Total/NA	Solid	5030A	
LCS 240-245898/2-A	Lab Control Sample	Total/NA	Solid	5030A	

Analysis Batch: 245899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	8015B	245898
MB 240-245898/1-A	Method Blank	Total/NA	Solid	8015B	245898
LCS 240-245898/2-A	Lab Control Sample	Total/NA	Solid	8015B	245898

GC Semi VOA

Prep Batch: 245734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	3540C	
MB 240-245734/6-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-245734/7-A	Lab Control Sample	Total/NA	Solid	3540C	

TestAmerica Canton

QC Association Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

GC Semi VOA (Continued)

Prep Batch: 245819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	3546	
MB 240-245819/4-A	Method Blank	Total/NA	Solid	3546	
LCS 240-245819/5-A	Lab Control Sample	Total/NA	Solid	3546	
240-69122-1 MS	ST-090616-JN-003	Total/NA	Solid	3546	
240-69122-1 MSD	ST-090616-JN-003	Total/NA	Solid	3546	

Analysis Batch: 246011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	8082	245734
MB 240-245734/6-A	Method Blank	Total/NA	Solid	8082	245734
LCS 240-245734/7-A	Lab Control Sample	Total/NA	Solid	8082	245734

Analysis Batch: 246031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-245819/4-A	Method Blank	Total/NA	Solid	8015B	245819
LCS 240-245819/5-A	Lab Control Sample	Total/NA	Solid	8015B	245819

Analysis Batch: 246187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	8015B	245819
240-69122-1 MS	ST-090616-JN-003	Total/NA	Solid	8015B	245819
240-69122-1 MSD	ST-090616-JN-003	Total/NA	Solid	8015B	245819

Metals

Leach Batch: 246049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	1311	
LB 240-246049/1-B	Method Blank	TCLP	Solid	1311	
LB 240-246049/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 246176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	3010A	246049
LB 240-246049/1-B	Method Blank	TCLP	Solid	3010A	246049
MB 240-246176/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 240-246176/3-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 246178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	7470A	246049
LB 240-246049/1-C	Method Blank	TCLP	Solid	7470A	246049
MB 240-246178/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 240-246178/3-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 246374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	6010B	246176
LB 240-246049/1-B	Method Blank	TCLP	Solid	6010B	246176
MB 240-246176/2-A	Method Blank	Total/NA	Solid	6010B	246176

TestAmerica Canton

QC Association Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Metals (Continued)

Analysis Batch: 246374 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-246176/3-A	Lab Control Sample	Total/NA	Solid	6010B	246176

Analysis Batch: 246417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	TCLP	Solid	7470A	246178
LB 240-246049/1-C	Method Blank	TCLP	Solid	7470A	246178
MB 240-246178/2-A	Method Blank	Total/NA	Solid	7470A	246178
LCS 240-246178/3-A	Lab Control Sample	Total/NA	Solid	7470A	246178

General Chemistry

Analysis Batch: 245784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	Moisture	

Prep Batch: 245846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	9012A	
MB 240-245846/1-A	Method Blank	Total/NA	Solid	9012A	
LCS 240-245846/2-A	Lab Control Sample	Total/NA	Solid	9012A	

Analysis Batch: 245873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	9012A	245846
MB 240-245846/1-A	Method Blank	Total/NA	Solid	9012A	245846
LCS 240-245846/2-A	Lab Control Sample	Total/NA	Solid	9012A	245846

Analysis Batch: 245874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	1010	
LCS 240-245874/1	Lab Control Sample	Total/NA	Solid	1010	
240-69122-1 DU	ST-090616-JN-003	Total/NA	Solid	1010	

Analysis Batch: 246266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	9095A	
240-69122-1 DU	ST-090616-JN-003	Total/NA	Solid	9095A	

Prep Batch: 246305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	9030B	
MB 240-246305/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 240-246305/2-A	Lab Control Sample	Total/NA	Solid	9030B	
240-69122-1 MS	ST-090616-JN-003	Total/NA	Solid	9030B	
240-69122-1 MSD	ST-090616-JN-003	Total/NA	Solid	9030B	

Analysis Batch: 246364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-69122-1	ST-090616-JN-003	Total/NA	Solid	9034	246305
MB 240-246305/1-A	Method Blank	Total/NA	Solid	9034	246305

TestAmerica Canton

QC Association Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

General Chemistry (Continued)

Analysis Batch: 246364 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-246305/2-A	Lab Control Sample	Total/NA	Solid	9034	246305
240-69122-1 MS	ST-090616-JN-003	Total/NA	Solid	9034	246305
240-69122-1 MSD	ST-090616-JN-003	Total/NA	Solid	9034	246305

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Client Sample ID: ST-090616-JN-003

Lab Sample ID: 240-69122-1

Date Collected: 09/06/16 14:00

Matrix: Solid

Date Received: 09/07/16 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			246129	09/08/16 19:55	DRJ	TAL CAN
TCLP	Analysis	8260B		1	246206	09/09/16 20:46	TJL1	TAL CAN
TCLP	Leach	1311			246049	09/08/16 17:25	DRJ	TAL CAN
TCLP	Prep	3510C			246167	09/09/16 12:13	CS	TAL CAN
TCLP	Analysis	8270C		1	246291	09/12/16 12:17	JMG	TAL CAN
TCLP	Leach	1311			246049	09/08/16 17:25	DRJ	TAL CAN
TCLP	Prep	3010A			246176	09/09/16 14:00	AJC	TAL CAN
TCLP	Analysis	6010B		1	246374	09/12/16 11:01	RKT	TAL CAN
TCLP	Leach	1311			246049	09/08/16 17:25	DRJ	TAL CAN
TCLP	Prep	7470A			246178	09/09/16 13:00	AJC	TAL CAN
TCLP	Analysis	7470A		1	246417	09/12/16 14:00	DSH	TAL CAN
Total/NA	Analysis	1010		1	245874	09/07/16 16:21	JWW	TAL CAN
Total/NA	Analysis	9095A		1	246266	09/12/16 05:11	TPH	TAL CAN
Total/NA	Analysis	Moisture		1	245784	09/07/16 10:11	JMB	TAL CAN

Client Sample ID: ST-090616-JN-003

Lab Sample ID: 240-69122-1

Date Collected: 09/06/16 14:00

Matrix: Solid

Date Received: 09/07/16 09:40

Percent Solids: 71.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			245898	09/09/16 04:45	RTR	TAL CAN
Total/NA	Analysis	8015B		1	245899	09/09/16 08:37	RTR	TAL CAN
Total/NA	Prep	3546			245819	09/07/16 12:36	SDE	TAL CAN
Total/NA	Analysis	8015B		10	246187	09/09/16 21:59	DEB	TAL CAN
Total/NA	Prep	3540C			245734	09/07/16 12:09	DT	TAL CAN
Total/NA	Analysis	8082		1	246011	09/08/16 20:45	LSH	TAL CAN
Total/NA	Prep	9012A			245846	09/07/16 14:15	JWW	TAL CAN
Total/NA	Analysis	9012A		1	245873	09/07/16 16:26	JWW	TAL CAN
Total/NA	Prep	9030B			246305	09/12/16 08:40	JMB	TAL CAN
Total/NA	Analysis	9034		1	246364	09/12/16 12:17	JMB	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: GHD Services Inc.
Project/Site: 58505, Janesville WI, SSOW 108020

TestAmerica Job ID: 240-69122-1

Laboratory: TestAmerica Canton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999518190	08-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
7470A	7470A	Solid	Mercury
8015B	3546	Solid	C10-C20
8015B	3546	Solid	C20-C34
8015B	5030A	Solid	Gasoline Range Organics [C6 - C10]
9095A		Solid	Free Liquid
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

1.6/20

SSOW = 058507-108020

ASMP TAG

6400 Shafer Court - Suite 400
Rosemont, Illinois, 60018
773 380 9933 phone
WWW.GHD.COM

GHD

SHIPPED TO
(Laboratory Name):

TEST ANDEBGA - NORTH CANTON

REFERENCE NUMBER:

058505-01-20465

PROJECT NAME:

GM - JAMESVILLE

CHAIN-OF-CUSTODY-RECORD

SAMPLER'S SIGNATURE:

[Signature]

PRINTED NAME:

JEFF NICHOLS

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS	REMARKS
----------	------	------	---------------------------	---------------	-------------------	------------	---------

1	9/6/16	1400	ST-090616-JN-003	ST	2	CLP WLS CLP SIDS RFB TRX-670 TRX-670-DRG PKMS FALCON TOML TANKS TOML SURFBS	① HIGH THT
---	--------	------	------------------	----	---	--	------------

SAMPLE IDENTIFICATION No.

SAMPLE MATRIX

No. OF CONTAINERS

PARAMETERS

REMARKS



FINGER PRINTS
279543
278573
279567

TOTAL NUMBER OF CONTAINERS

2

RELINQUISHED BY:

①

DATE: 9/6/16

TIME: 1430

RECEIVED BY:

② *[Signature]* TANK

DATE: 9/15/16

TIME: 9:40

RELINQUISHED BY:

②

RECEIVED BY:

③

DATE:

TIME:

RELINQUISHED BY:

③

RECEIVED BY:

④

DATE:

TIME:

METHOD OF SHIPMENT:

Fed Ex

TRACKING No.

8742 2219 3975

White

Yellow

Pink

Goldenrod

- Fully Executed Copy

- Receiving Laboratory Copy

- Shipper Copy

- Sampler Copy

SAMPLE TEAM:

NJ11025

RECEIVED FOR LABORATORY BY:

[Signature] TANK

DATE:

TIME:

8026

1
2
3
4
5
6
7
8
9
10
11
12
13
14

TestAmerica Canton Sample Receipt Form/Narrative Login # : 69122

Canton Facility

Client SHD Site Name _____ Cooler unpacked by: [Signature]

Cooler Received on 9/7/10 Opened on 9/7/10

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Elkent Cooler Box _____ Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form

IR GUN# IR-8 (CF +0.4 °C) Observed Cooler Temp. 1.6 °C Corrected Cooler Temp. 2.0 °C

IR GUN #36 (CF +1.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No

7. Did all bottles arrive in good condition (Unbroken)? Yes No

8. Could all bottle labels be reconciled with the COC? Yes No

9. Were correct bottle(s) used for the test(s) indicated? Yes No

10. Sufficient quantity received to perform indicated analyses? Yes No

11. Are these work share samples? Yes No

If yes, Questions 11-15 have been checked at the originating laboratory.

11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC574756

12. Were VOAs on the COC? Yes No NA

13. Were air bubbles >6 mm in any VOA vials? Yes No NA

14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

15. Was a LL Hg or Me Hg trip blank present? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: _____

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____