Mitchell, Brian

From: Arnold, Doug <Doug.Arnold@alston.com>
Sent: Monday, September 18, 2017 7:21 AM
To: Mitchell, Brian
Subject: Electrolux: Jefferson, Iowa
Attachments: J111525-1 UDS Level 2 Report Final Report.pdf; J110886-1 UDS Level 2 Report Final Report.pdf; Golder 23471.pdf; Golder 23392.pdf

Brian:

I hope that you are doing well.

The results of Electrolux's most recent groundwater sampling event are attached. The Fall sampling event will likely occur in early November.

Regards, Doug

Douglas S. Arnold | Alston & Bird LLP
Partner and Co-Chair,
Environmental, Energy & Natural Resources Practice Group
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RCRA 09/18/2017
569427

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Tel: (319)277-2401

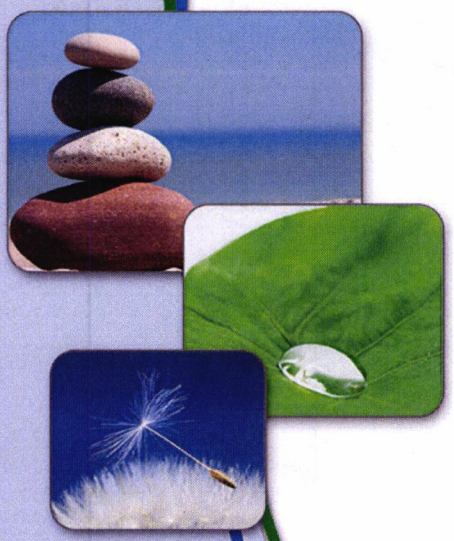
TestAmerica Job ID: 310-111525-1
TestAmerica Sample Delivery Group: 103-87305.01
Client Project/Site: Electrolux - Jefferson, IA

For:
Golder Associates Inc.
670 North Commercial Street
Suite 103
Manchester, New Hampshire 03101

Attn: James Peace

Authorized for release by:
8/17/2017 2:48:00 PM

Shawn Hayes, Senior Project Manager
(319)277-2401
shawn.hayes@testamericainc.com



LINKS

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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.

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Job ID: 310-111525-1

Laboratory: TestAmerica Cedar Falls

Narrative

Job Narrative
310-111525-1

Comments
No additional comments.

Receipt
The samples were received on 8/4/2017 5:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8° C.

Receipt Exceptions

Due to a delay in FedX delivery the following samples was received at TestAmerican Nashville Laboratory for sulfide outside the required temperature criteria: MW-43I (310-111525-6), MW-44 (310-111525-7) and Field Duplicate Q2 (310-111525-8). The client was contacted regarding this issue. Three sulfide samples were received 8/9/17 9:35 AM. The temperature of the cooler at receipt was 13.8° C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 310-174725 recovered above the upper control limit for Bromochloromethane (22.3 %D). The LCS associated with this CCV passes using CCV criteria for the affected analyte; therefore, the data have been reported. The following sample is impacted: (CCV 310-174725/3).

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

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

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

General Chemistry
Method(s) 9034 Sulfide: The laboratory had insufficient time remaining to perform the analysis within holding time: MW-43I (310-111525-6), MW-44 (310-111525-7) and Field Duplicate Q2 (310-111525-8).

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

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

Sample Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-111525-1	MW-24	Water	08/03/17 15:10	08/04/17 17:25
310-111525-2	MW-28	Water	08/03/17 15:50	08/04/17 17:25
310-111525-3	MW-29	Water	08/03/17 16:40	08/04/17 17:25
310-111525-4	MW-31	Water	08/03/17 17:10	08/04/17 17:25
310-111525-5	MW-26S	Water	08/03/17 18:45	08/04/17 17:25
310-111525-6	MW-43I	Water	08/02/17 17:00	08/04/17 17:25
310-111525-7	MW-44	Water	08/02/17 20:00	08/04/17 17:25
310-111525-8	Field Duplicate Q2	Water	08/02/17 12:00	08/04/17 17:25
310-111525-9	Trip Blank	Water	08/02/17 00:00	08/04/17 17:25

Detection Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-24 — Lab Sample ID: 310-111525-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.35		1.00		ug/L	1		8260C	Total/NA
Total Organic Carbon	2.43		1.00		mg/L	1		9060A	Total/NA

Client Sample ID: MW-28 — Lab Sample ID: 310-111525-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	89800		1000		ug/L	1000		8260C	Total/NA
trans-1,2-Dichloroethene	613		100		ug/L	100		8260C	Total/NA
Trichloroethene	29100		100		ug/L	100		8260C	Total/NA
Vinyl chloride	6840		100		ug/L	100		8260C	Total/NA

Client Sample ID: MW-29 — Lab Sample ID: 310-111525-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	247		200		ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene	802		100		ug/L	100		8260C	Total/NA
Trichloroethene	62300		1000		ug/L	1000		8260C	Total/NA

Client Sample ID: MW-31 — Lab Sample ID: 310-111525-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6870		100		ug/L	100		8260C	Total/NA
trans-1,2-Dichloroethene	66.5		10.0		ug/L	10		8260C	Total/NA
Trichloroethene	3220		10.0		ug/L	10		8260C	Total/NA
Vinyl chloride	46.2		10.0		ug/L	10		8260C	Total/NA

Client Sample ID: MW-26S — Lab Sample ID: 310-111525-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2300		100		ug/L	100		8260C	Total/NA
Trichloroethene	40400		100		ug/L	100		8260C	Total/NA

Client Sample ID: MW-43I — Lab Sample ID: 310-111525-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	108		5.00		mg/L	5		9056A	Total/NA
Chloride	15.5		5.00		mg/L	5		9056A	Total/NA
Iron	1.45		0.500		mg/L	1		6010C	Total/NA
Manganese	0.300		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	1.38		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	301		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	301		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-44 — Lab Sample ID: 310-111525-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	59.6		5.00		mg/L	5		9056A	Total/NA
Chloride	74.5		5.00		mg/L	5		9056A	Total/NA
Iron	1.00		0.500		mg/L	1		6010C	Total/NA
Manganese	0.402		0.0100		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-44 (Continued) — Lab Sample ID: 310-111525-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	7.02		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	385		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	385		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: Field Duplicate Q2 — Lab Sample ID: 310-111525-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	107		5.00		mg/L	5		9056A	Total/NA
Chloride	15.3		5.00		mg/L	5		9056A	Total/NA
Iron	2.04		0.500		mg/L	1		6010C	Total/NA
Manganese	0.313		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	1.38		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	306		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	306		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 310-111525-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-24

Date Collected: 08/03/17 15:10
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/07/17 11:05	1
Benzene	<0.500		0.500		ug/L			08/07/17 11:05	1
Bromobenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
Bromochloromethane	<5.00		5.00		ug/L			08/07/17 11:05	1
Bromodichloromethane	<1.00		1.00		ug/L			08/07/17 11:05	1
Bromoform	<5.00		5.00		ug/L			08/07/17 11:05	1
Bromomethane	<4.00		4.00		ug/L			08/07/17 11:05	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/07/17 11:05	1
n-Butylbenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
Carbon disulfide	<1.00		1.00		ug/L			08/07/17 11:05	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/07/17 11:05	1
Chlorobenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/07/17 11:05	1
Chloroethane	<4.00		4.00		ug/L			08/07/17 11:05	1
Chloroform	<1.00		1.00		ug/L			08/07/17 11:05	1
Chloromethane	<3.00		3.00		ug/L			08/07/17 11:05	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/07/17 11:05	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/07/17 11:05	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/07/17 11:05	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/07/17 11:05	1
Dibromomethane	<1.00		1.00		ug/L			08/07/17 11:05	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/07/17 11:05	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/07/17 11:05	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/07/17 11:05	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/07/17 11:05	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/07/17 11:05	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/07/17 11:05	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/07/17 11:05	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/07/17 11:05	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/07/17 11:05	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/07/17 11:05	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/07/17 11:05	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/07/17 11:05	1
Ethylbenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/07/17 11:05	1
Hexane	<1.00		1.00		ug/L			08/07/17 11:05	1
Isopropylbenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/07/17 11:05	1
Methylene Chloride	<5.00		5.00		ug/L			08/07/17 11:05	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/07/17 11:05	1
Naphthalene	<5.00		5.00		ug/L			08/07/17 11:05	1
N-Propylbenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
Styrene	<1.00		1.00		ug/L			08/07/17 11:05	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/07/17 11:05	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-24

Date Collected: 08/03/17 15:10
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/07/17 11:05	1
Tetrachloroethene	<1.00		1.00		ug/L			08/07/17 11:05	1
Toluene	<1.00		1.00		ug/L			08/07/17 11:05	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/07/17 11:05	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/07/17 11:05	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/07/17 11:05	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/07/17 11:05	1
Trichloroethene	**1.35**		1.00		ug/L			08/07/17 11:05	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/07/17 11:05	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/07/17 11:05	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/07/17 11:05	1
Vinyl chloride	<1.00		1.00		ug/L			08/07/17 11:05	1
Xylenes, Total	<3.00		3.00		ug/L			08/07/17 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*82 - 122*		*08/07/17 11:05*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 119*		*08/07/17 11:05*	*1*
Toluene-d8 (Surr)	*94*		*77 - 117*		*08/07/17 11:05*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**2.43**		1.00		mg/L			08/14/17 23:10	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-28

Date Collected: 08/03/17 15:50
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1000		1000		ug/L			08/07/17 14:14	100
Benzene	<50.0		50.0		ug/L			08/07/17 14:14	100
Bromobenzene	<100		100		ug/L			08/07/17 14:14	100
Bromochloromethane	<500		500		ug/L			08/07/17 14:14	100
Bromodichloromethane	<100		100		ug/L			08/07/17 14:14	100
Bromoform	<500		500		ug/L			08/07/17 14:14	100
Bromomethane	<400		400		ug/L			08/07/17 14:14	100
2-Butanone (MEK)	<1000		1000		ug/L			08/07/17 14:14	100
n-Butylbenzene	<100		100		ug/L			08/07/17 14:14	100
sec-Butylbenzene	<100		100		ug/L			08/07/17 14:14	100
tert-Butylbenzene	<100		100		ug/L			08/07/17 14:14	100
Carbon disulfide	<100		100		ug/L			08/07/17 14:14	100
Carbon tetrachloride	<200		200		ug/L			08/07/17 14:14	100
Chlorobenzene	<100		100		ug/L			08/07/17 14:14	100
Chlorodibromomethane	<500		500		ug/L			08/07/17 14:14	100
Chloroethane	<400		400		ug/L			08/07/17 14:14	100
Chloroform	<100		100		ug/L			08/07/17 14:14	100
Chloromethane	<300		300		ug/L			08/07/17 14:14	100
2-Chlorotoluene	<100		100		ug/L			08/07/17 14:14	100
4-Chlorotoluene	<100		100		ug/L			08/07/17 14:14	100
1,2-Dibromo-3-Chloropropane	<500		500		ug/L			08/07/17 14:14	100
1,2-Dibromoethane (EDB)	<100		100		ug/L			08/07/17 14:14	100
Dibromomethane	<100		100		ug/L			08/07/17 14:14	100
1,2-Dichlorobenzene	<100		100		ug/L			08/07/17 14:14	100
1,3-Dichlorobenzene	<100		100		ug/L			08/07/17 14:14	100
1,4-Dichlorobenzene	<100		100		ug/L			08/07/17 14:14	100
Dichlorodifluoromethane	<300		300		ug/L			08/07/17 14:14	100
1,1-Dichloroethane	<100		100		ug/L			08/07/17 14:14	100
1,2-Dichloroethane	<100		100		ug/L			08/07/17 14:14	100
1,1-Dichloroethene	<200		200		ug/L			08/07/17 14:14	100
cis-1,2-Dichloroethene	**89800**		1000		ug/L			08/07/17 12:15	1000
trans-1,2-Dichloroethene	**613**		100		ug/L			08/07/17 14:14	100
1,2-Dichloropropane	<100		100		ug/L			08/07/17 14:14	100
1,3-Dichloropropane	<100		100		ug/L			08/07/17 14:14	100
2,2-Dichloropropane	<400		400		ug/L			08/07/17 14:14	100
1,1-Dichloropropene	<100		100		ug/L			08/07/17 14:14	100
cis-1,3-Dichloropropene	<500		500		ug/L			08/07/17 14:14	100
trans-1,3-Dichloropropene	<500		500		ug/L			08/07/17 14:14	100
Ethylbenzene	<100		100		ug/L			08/07/17 14:14	100
Hexachlorobutadiene	<500		500		ug/L			08/07/17 14:14	100
Hexane	<100		100		ug/L			08/07/17 14:14	100
Isopropylbenzene	<100		100		ug/L			08/07/17 14:14	100
p-Isopropyltoluene	<100		100		ug/L			08/07/17 14:14	100
Methylene Chloride	<500		500		ug/L			08/07/17 14:14	100
Methyl tert-butyl ether	<100		100		ug/L			08/07/17 14:14	100
Naphthalene	<500		500		ug/L			08/07/17 14:14	100
N-Propylbenzene	<100		100		ug/L			08/07/17 14:14	100
Styrene	<100		100		ug/L			08/07/17 14:14	100
1,1,1,2-Tetrachloroethane	<100		100		ug/L			08/07/17 14:14	100

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-28

Date Collected: 08/03/17 15:50
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<100		100		ug/L			08/07/17 14:14	100
Tetrachloroethene	<100		100		ug/L			08/07/17 14:14	100
Toluene	<100		100		ug/L			08/07/17 14:14	100
1,2,3-Trichlorobenzene	<500		500		ug/L			08/07/17 14:14	100
1,2,4-Trichlorobenzene	<500		500		ug/L			08/07/17 14:14	100
1,1,1-Trichloroethane	<100		100		ug/L			08/07/17 14:14	100
1,1,2-Trichloroethane	<100		100		ug/L			08/07/17 14:14	100
Trichloroethene	**29100**		100		ug/L			08/07/17 14:14	100
Trichlorofluoromethane	<400		400		ug/L			08/07/17 14:14	100
1,2,3-Trichloropropane	<100		100		ug/L			08/07/17 14:14	100
1,2,4-Trimethylbenzene	<100		100		ug/L			08/07/17 14:14	100
1,3,5-Trimethylbenzene	<100		100		ug/L			08/07/17 14:14	100
Vinyl chloride	**6840**		100		ug/L			08/07/17 14:14	100
Xylenes, Total	<300		300		ug/L			08/07/17 14:14	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*82 - 122*		*08/07/17 12:15*	*1000*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*		*08/07/17 14:14*	*100*
Dibromofluoromethane (Surr)	*106*		*79 - 119*		*08/07/17 12:15*	*1000*
Dibromofluoromethane (Surr)	*102*		*79 - 119*		*08/07/17 14:14*	*100*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/07/17 12:15*	*1000*
Toluene-d8 (Surr)	*96*		*77 - 117*		*08/07/17 14:14*	*100*

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-29
Date Collected: 08/03/17 16:40
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1000		1000		ug/L			08/07/17 14:37	100
Benzene	<50.0		50.0		ug/L			08/07/17 14:37	100
Bromobenzene	<100		100		ug/L			08/07/17 14:37	100
Bromochloromethane	<500		500		ug/L			08/07/17 14:37	100
Bromodichloromethane	<100		100		ug/L			08/07/17 14:37	100
Bromoform	<500		500		ug/L			08/07/17 14:37	100
Bromomethane	<400		400		ug/L			08/07/17 14:37	100
2-Butanone (MEK)	<1000		1000		ug/L			08/07/17 14:37	100
n-Butylbenzene	<100		100		ug/L			08/07/17 14:37	100
sec-Butylbenzene	<100		100		ug/L			08/07/17 14:37	100
tert-Butylbenzene	<100		100		ug/L			08/07/17 14:37	100
Carbon disulfide	<100		100		ug/L			08/07/17 14:37	100
Carbon tetrachloride	<200		200		ug/L			08/07/17 14:37	100
Chlorobenzene	<100		100		ug/L			08/07/17 14:37	100
Chlorodibromomethane	<500		500		ug/L			08/07/17 14:37	100
Chloroethane	<400		400		ug/L			08/07/17 14:37	100
Chloroform	<100		100		ug/L			08/07/17 14:37	100
Chloromethane	<300		300		ug/L			08/07/17 14:37	100
2-Chlorotoluene	<100		100		ug/L			08/07/17 14:37	100
4-Chlorotoluene	<100		100		ug/L			08/07/17 14:37	100
1,2-Dibromo-3-Chloropropane	<500		500		ug/L			08/07/17 14:37	100
1,2-Dibromoethane (EDB)	<100		100		ug/L			08/07/17 14:37	100
Dibromomethane	<100		100		ug/L			08/07/17 14:37	100
1,2-Dichlorobenzene	<100		100		ug/L			08/07/17 14:37	100
1,3-Dichlorobenzene	<100		100		ug/L			08/07/17 14:37	100
1,4-Dichlorobenzene	<100		100		ug/L			08/07/17 14:37	100
Dichlorodifluoromethane	<300		300		ug/L			08/07/17 14:37	100
1,1-Dichloroethane	<100		100		ug/L			08/07/17 14:37	100
1,2-Dichloroethane	<100		100		ug/L			08/07/17 14:37	100
1,1-Dichloroethene	**247**		200		ug/L			08/07/17 14:37	100
cis-1,2-Dichloroethene	**802**		100		ug/L			08/07/17 14:37	100
trans-1,2-Dichloroethene	<100		100		ug/L			08/07/17 14:37	100
1,2-Dichloropropane	<100		100		ug/L			08/07/17 14:37	100
1,3-Dichloropropane	<100		100		ug/L			08/07/17 14:37	100
2,2-Dichloropropane	<400		400		ug/L			08/07/17 14:37	100
1,1-Dichloropropene	<100		100		ug/L			08/07/17 14:37	100
cis-1,3-Dichloropropene	<500		500		ug/L			08/07/17 14:37	100
trans-1,3-Dichloropropene	<500		500		ug/L			08/07/17 14:37	100
Ethylbenzene	<100		100		ug/L			08/07/17 14:37	100
Hexachlorobutadiene	<500		500		ug/L			08/07/17 14:37	100
Hexane	<100		100		ug/L			08/07/17 14:37	100
Isopropylbenzene	<100		100		ug/L			08/07/17 14:37	100
p-Isopropyltoluene	<100		100		ug/L			08/07/17 14:37	100
Methylene Chloride	<500		500		ug/L			08/07/17 14:37	100
Methyl tert-butyl ether	<100		100		ug/L			08/07/17 14:37	100
Naphthalene	<500		500		ug/L			08/07/17 14:37	100
N-Propylbenzene	<100		100		ug/L			08/07/17 14:37	100
Styrene	<100		100		ug/L			08/07/17 14:37	100
1,1,1,2-Tetrachloroethane	<100		100		ug/L			08/07/17 14:37	100

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-29

Date Collected: 08/03/17 16:40
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<100		100		ug/L			08/07/17 14:37	100
Tetrachloroethene	<100		100		ug/L			08/07/17 14:37	100
Toluene	<100		100		ug/L			08/07/17 14:37	100
1,2,3-Trichlorobenzene	<500		500		ug/L			08/07/17 14:37	100
1,2,4-Trichlorobenzene	<500		500		ug/L			08/07/17 14:37	100
1,1,1-Trichloroethane	<100		100		ug/L			08/07/17 14:37	100
1,1,2-Trichloroethane	<100		100		ug/L			08/07/17 14:37	100
Trichloroethene	**62300**		1000		ug/L			08/07/17 12:39	1000
Trichlorofluoromethane	<400		400		ug/L			08/07/17 14:37	100
1,2,3-Trichloropropane	<100		100		ug/L			08/07/17 14:37	100
1,2,4-Trimethylbenzene	<100		100		ug/L			08/07/17 14:37	100
1,3,5-Trimethylbenzene	<100		100		ug/L			08/07/17 14:37	100
Vinyl chloride	<100		100		ug/L			08/07/17 14:37	100
Xylenes, Total	<300		300		ug/L			08/07/17 14:37	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*82 - 122*		*08/07/17 12:39*	*1000*
4-Bromofluorobenzene (Surr)	*104*		*82 - 122*		*08/07/17 14:37*	*100*
Dibromofluoromethane (Surr)	*106*		*79 - 119*		*08/07/17 12:39*	*1000*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/07/17 14:37*	*100*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/07/17 12:39*	*1000*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/07/17 14:37*	*100*

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-31

Date Collected: 08/03/17 17:10
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<100		100		ug/L			08/07/17 16:58	10
Benzene	<5.00		5.00		ug/L			08/07/17 16:58	10
Bromobenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
Bromochloromethane	<50.0		50.0		ug/L			08/07/17 16:58	10
Bromodichloromethane	<10.0		10.0		ug/L			08/07/17 16:58	10
Bromoform	<50.0		50.0		ug/L			08/07/17 16:58	10
Bromomethane	<40.0		40.0		ug/L			08/07/17 16:58	10
2-Butanone (MEK)	<100		100		ug/L			08/07/17 16:58	10
n-Butylbenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
sec-Butylbenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
tert-Butylbenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
Carbon disulfide	<10.0		10.0		ug/L			08/07/17 16:58	10
Carbon tetrachloride	<20.0		20.0		ug/L			08/07/17 16:58	10
Chlorobenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
Chlorodibromomethane	<50.0		50.0		ug/L			08/07/17 16:58	10
Chloroethane	<40.0		40.0		ug/L			08/07/17 16:58	10
Chloroform	<10.0		10.0		ug/L			08/07/17 16:58	10
Chloromethane	<30.0		30.0		ug/L			08/07/17 16:58	10
2-Chlorotoluene	<10.0		10.0		ug/L			08/07/17 16:58	10
4-Chlorotoluene	<10.0		10.0		ug/L			08/07/17 16:58	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0		ug/L			08/07/17 16:58	10
1,2-Dibromoethane (EDB)	<10.0		10.0		ug/L			08/07/17 16:58	10
Dibromomethane	<10.0		10.0		ug/L			08/07/17 16:58	10
1,2-Dichlorobenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
1,3-Dichlorobenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
1,4-Dichlorobenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
Dichlorodifluoromethane	<30.0		30.0		ug/L			08/07/17 16:58	10
1,1-Dichloroethane	<10.0		10.0		ug/L			08/07/17 16:58	10
1,2-Dichloroethane	<10.0		10.0		ug/L			08/07/17 16:58	10
1,1-Dichloroethene	<20.0		20.0		ug/L			08/07/17 16:58	10
cis-1,2-Dichloroethene	**6870**		100		ug/L			08/07/17 11:28	100
trans-1,2-Dichloroethene	**66.5**		10.0		ug/L			08/07/17 16:58	10
1,2-Dichloropropane	<10.0		10.0		ug/L			08/07/17 16:58	10
1,3-Dichloropropane	<10.0		10.0		ug/L			08/07/17 16:58	10
2,2-Dichloropropane	<40.0		40.0		ug/L			08/07/17 16:58	10
1,1-Dichloropropene	<10.0		10.0		ug/L			08/07/17 16:58	10
cis-1,3-Dichloropropene	<50.0		50.0		ug/L			08/07/17 16:58	10
trans-1,3-Dichloropropene	<50.0		50.0		ug/L			08/07/17 16:58	10
Ethylbenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
Hexachlorobutadiene	<50.0		50.0		ug/L			08/07/17 16:58	10
Hexane	<10.0		10.0		ug/L			08/07/17 16:58	10
Isopropylbenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
p-Isopropyltoluene	<10.0		10.0		ug/L			08/07/17 16:58	10
Methylene Chloride	<50.0		50.0		ug/L			08/07/17 16:58	10
Methyl tert-butyl ether	<10.0		10.0		ug/L			08/07/17 16:58	10
Naphthalene	<50.0		50.0		ug/L			08/07/17 16:58	10
N-Propylbenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
Styrene	<10.0		10.0		ug/L			08/07/17 16:58	10
1,1,1,2-Tetrachloroethane	<10.0		10.0		ug/L			08/07/17 16:58	10

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-31

Date Collected: 08/03/17 17:10
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<10.0		10.0		ug/L			08/07/17 16:58	10
Tetrachloroethene	<10.0		10.0		ug/L			08/07/17 16:58	10
Toluene	<10.0		10.0		ug/L			08/07/17 16:58	10
1,2,3-Trichlorobenzene	<50.0		50.0		ug/L			08/07/17 16:58	10
1,2,4-Trichlorobenzene	<50.0		50.0		ug/L			08/07/17 16:58	10
1,1,1-Trichloroethane	<10.0		10.0		ug/L			08/07/17 16:58	10
1,1,2-Trichloroethane	<10.0		10.0		ug/L			08/07/17 16:58	10
Trichloroethene	**3220**		10.0		ug/L			08/07/17 16:58	10
Trichlorofluoromethane	<40.0		40.0		ug/L			08/07/17 16:58	10
1,2,3-Trichloropropane	<10.0		10.0		ug/L			08/07/17 16:58	10
1,2,4-Trimethylbenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
1,3,5-Trimethylbenzene	<10.0		10.0		ug/L			08/07/17 16:58	10
Vinyl chloride	**46.2**		10.0		ug/L			08/07/17 16:58	10
Xylenes, Total	<30.0		30.0		ug/L			08/07/17 16:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*82 - 122*		*08/07/17 11:28*	*100*
4-Bromofluorobenzene (Surr)	*104*		*82 - 122*		*08/07/17 16:58*	*10*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/07/17 11:28*	*100*
Dibromofluoromethane (Surr)	*104*		*79 - 119*		*08/07/17 16:58*	*10*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/07/17 11:28*	*100*
Toluene-d8 (Surr)	*95*		*77 - 117*		*08/07/17 16:58*	*10*

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-26S

Date Collected: 08/03/17 18:45
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1000		1000		ug/L			08/07/17 11:52	100
Benzene	<50.0		50.0		ug/L			08/07/17 11:52	100
Bromobenzene	<100		100		ug/L			08/07/17 11:52	100
Bromochloromethane	<500		500		ug/L			08/07/17 11:52	100
Bromodichloromethane	<100		100		ug/L			08/07/17 11:52	100
Bromoform	<500		500		ug/L			08/07/17 11:52	100
Bromomethane	<400		400		ug/L			08/07/17 11:52	100
2-Butanone (MEK)	<1000		1000		ug/L			08/07/17 11:52	100
n-Butylbenzene	<100		100		ug/L			08/07/17 11:52	100
sec-Butylbenzene	<100		100		ug/L			08/07/17 11:52	100
tert-Butylbenzene	<100		100		ug/L			08/07/17 11:52	100
Carbon disulfide	<100		100		ug/L			08/07/17 11:52	100
Carbon tetrachloride	<200		200		ug/L			08/07/17 11:52	100
Chlorobenzene	<100		100		ug/L			08/07/17 11:52	100
Chlorodibromomethane	<500		500		ug/L			08/07/17 11:52	100
Chloroethane	<400		400		ug/L			08/07/17 11:52	100
Chloroform	<100		100		ug/L			08/07/17 11:52	100
Chloromethane	<300		300		ug/L			08/07/17 11:52	100
2-Chlorotoluene	<100		100		ug/L			08/07/17 11:52	100
4-Chlorotoluene	<100		100		ug/L			08/07/17 11:52	100
1,2-Dibromo-3-Chloropropane	<500		500		ug/L			08/07/17 11:52	100
1,2-Dibromoethane (EDB)	<100		100		ug/L			08/07/17 11:52	100
Dibromomethane	<100		100		ug/L			08/07/17 11:52	100
1,2-Dichlorobenzene	<100		100		ug/L			08/07/17 11:52	100
1,3-Dichlorobenzene	<100		100		ug/L			08/07/17 11:52	100
1,4-Dichlorobenzene	<100		100		ug/L			08/07/17 11:52	100
Dichlorodifluoromethane	<300		300		ug/L			08/07/17 11:52	100
1,1-Dichloroethane	<100		100		ug/L			08/07/17 11:52	100
1,2-Dichloroethane	<100		100		ug/L			08/07/17 11:52	100
1,1-Dichloroethene	<200		200		ug/L			08/07/17 11:52	100
cis-1,2-Dichloroethene	**2300**		100		ug/L			08/07/17 11:52	100
trans-1,2-Dichloroethene	<100		100		ug/L			08/07/17 11:52	100
1,2-Dichloropropane	<100		100		ug/L			08/07/17 11:52	100
1,3-Dichloropropane	<100		100		ug/L			08/07/17 11:52	100
2,2-Dichloropropane	<400		400		ug/L			08/07/17 11:52	100
1,1-Dichloropropene	<100		100		ug/L			08/07/17 11:52	100
cis-1,3-Dichloropropene	<500		500		ug/L			08/07/17 11:52	100
trans-1,3-Dichloropropene	<500		500		ug/L			08/07/17 11:52	100
Ethylbenzene	<100		100		ug/L			08/07/17 11:52	100
Hexachlorobutadiene	<500		500		ug/L			08/07/17 11:52	100
Hexane	<100		100		ug/L			08/07/17 11:52	100
Isopropylbenzene	<100		100		ug/L			08/07/17 11:52	100
p-Isopropyltoluene	<100		100		ug/L			08/07/17 11:52	100
Methylene Chloride	<500		500		ug/L			08/07/17 11:52	100
Methyl tert-butyl ether	<100		100		ug/L			08/07/17 11:52	100
Naphthalene	<500		500		ug/L			08/07/17 11:52	100
N-Propylbenzene	<100		100		ug/L			08/07/17 11:52	100
Styrene	<100		100		ug/L			08/07/17 11:52	100
1,1,1,2-Tetrachloroethane	<100		100		ug/L			08/07/17 11:52	100

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-26S

Date Collected: 08/03/17 18:45
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<100		100		ug/L			08/07/17 11:52	100
Tetrachloroethene	<100		100		ug/L			08/07/17 11:52	100
Toluene	<100		100		ug/L			08/07/17 11:52	100
1,2,3-Trichlorobenzene	<500		500		ug/L			08/07/17 11:52	100
1,2,4-Trichlorobenzene	<500		500		ug/L			08/07/17 11:52	100
1,1,1-Trichloroethane	<100		100		ug/L			08/07/17 11:52	100
1,1,2-Trichloroethane	<100		100		ug/L			08/07/17 11:52	100
Trichloroethene	**40400**		100		ug/L			08/07/17 11:52	100
Trichlorofluoromethane	<400		400		ug/L			08/07/17 11:52	100
1,2,3-Trichloropropane	<100		100		ug/L			08/07/17 11:52	100
1,2,4-Trimethylbenzene	<100		100		ug/L			08/07/17 11:52	100
1,3,5-Trimethylbenzene	<100		100		ug/L			08/07/17 11:52	100
Vinyl chloride	<100		100		ug/L			08/07/17 11:52	100
Xylenes, Total	<300		300		ug/L			08/07/17 11:52	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*82 - 122*		*08/07/17 11:52*	*100*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/07/17 11:52*	*100*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/07/17 11:52*	*100*

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-43I

Date Collected: 08/02/17 17:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/08/17 23:01	1
Benzene	<0.500		0.500		ug/L			08/08/17 23:01	1
Bromobenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
Bromochloromethane	<5.00		5.00		ug/L			08/09/17 07:29	1
Bromodichloromethane	<1.00		1.00		ug/L			08/08/17 23:01	1
Bromoform	<5.00		5.00		ug/L			08/08/17 23:01	1
Bromomethane	<4.00		4.00		ug/L			08/08/17 23:01	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/08/17 23:01	1
n-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
Carbon disulfide	<1.00		1.00		ug/L			08/08/17 23:01	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/09/17 07:29	1
Chlorobenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/08/17 23:01	1
Chloroethane	<4.00		4.00		ug/L			08/08/17 23:01	1
Chloroform	<1.00		1.00		ug/L			08/08/17 23:01	1
Chloromethane	<3.00		3.00		ug/L			08/08/17 23:01	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/08/17 23:01	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/08/17 23:01	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/08/17 23:01	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/08/17 23:01	1
Dibromomethane	<1.00		1.00		ug/L			08/08/17 23:01	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/08/17 23:01	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/08/17 23:01	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/08/17 23:01	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/08/17 23:01	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/08/17 23:01	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/08/17 23:01	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/08/17 23:01	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/08/17 23:01	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/08/17 23:01	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/08/17 23:01	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/08/17 23:01	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/08/17 23:01	1
Ethylbenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/08/17 23:01	1
Hexane	<1.00		1.00		ug/L			08/08/17 23:01	1
Isopropylbenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/08/17 23:01	1
Methylene Chloride	<5.00		5.00		ug/L			08/08/17 23:01	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/08/17 23:01	1
Naphthalene	<5.00		5.00		ug/L			08/08/17 23:01	1
N-Propylbenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
Styrene	<1.00		1.00		ug/L			08/08/17 23:01	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/08/17 23:01	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-43I

Date Collected: 08/02/17 17:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/08/17 23:01	1
Tetrachloroethene	<1.00		1.00		ug/L			08/08/17 23:01	1
Toluene	<1.00		1.00		ug/L			08/08/17 23:01	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/08/17 23:01	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/09/17 07:29	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/08/17 23:01	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/08/17 23:01	1
Trichloroethene	<1.00		1.00		ug/L			08/08/17 23:01	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/08/17 23:01	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/08/17 23:01	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/08/17 23:01	1
Vinyl chloride	<1.00		1.00		ug/L			08/08/17 23:01	1
Xylenes, Total	<3.00		3.00		ug/L			08/08/17 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*		*08/08/17 23:01*	*1*
4-Bromofluorobenzene (Surr)	*101*		*82 - 122*		*08/09/17 07:29*	*1*
Dibromofluoromethane (Surr)	*106*		*79 - 119*		*08/08/17 23:01*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 119*		*08/09/17 07:29*	*1*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/08/17 23:01*	*1*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/09/17 07:29*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**108**		5.00		mg/L			08/07/17 15:31	5
Chloride	**15.5**		5.00		mg/L			08/07/17 15:31	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.45**		0.500		mg/L		08/07/17 07:46	08/07/17 18:32	1
Manganese	**0.300**		0.0100		mg/L		08/07/17 07:46	08/07/17 18:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/10/17 06:30	08/10/17 08:30	1
Total Organic Carbon	**1.38**		1.00		mg/L			08/14/17 23:26	1
Alkalinity as CaCO3	**301**		5.00		mg/L			08/11/17 14:10	1
Bicarbonate Alkalinity as CaCO3	**301**		5.00		mg/L			08/11/17 14:10	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-44

Date Collected: 08/02/17 20:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/08/17 23:24	1
Benzene	<0.500		0.500		ug/L			08/08/17 23:24	1
Bromobenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
Bromochloromethane	<5.00		5.00		ug/L			08/09/17 07:51	1
Bromodichloromethane	<1.00		1.00		ug/L			08/08/17 23:24	1
Bromoform	<5.00		5.00		ug/L			08/08/17 23:24	1
Bromomethane	<4.00		4.00		ug/L			08/08/17 23:24	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/08/17 23:24	1
n-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
Carbon disulfide	<1.00		1.00		ug/L			08/08/17 23:24	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/09/17 07:51	1
Chlorobenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/08/17 23:24	1
Chloroethane	<4.00		4.00		ug/L			08/08/17 23:24	1
Chloroform	<1.00		1.00		ug/L			08/08/17 23:24	1
Chloromethane	<3.00		3.00		ug/L			08/08/17 23:24	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/08/17 23:24	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/08/17 23:24	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/08/17 23:24	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/08/17 23:24	1
Dibromomethane	<1.00		1.00		ug/L			08/08/17 23:24	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/08/17 23:24	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/08/17 23:24	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/08/17 23:24	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/08/17 23:24	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/08/17 23:24	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/08/17 23:24	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/08/17 23:24	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/08/17 23:24	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/08/17 23:24	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/08/17 23:24	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/08/17 23:24	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/08/17 23:24	1
Ethylbenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/08/17 23:24	1
Hexane	<1.00		1.00		ug/L			08/08/17 23:24	1
Isopropylbenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/08/17 23:24	1
Methylene Chloride	<5.00		5.00		ug/L			08/08/17 23:24	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/08/17 23:24	1
Naphthalene	<5.00		5.00		ug/L			08/08/17 23:24	1
N-Propylbenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
Styrene	<1.00		1.00		ug/L			08/08/17 23:24	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/08/17 23:24	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-44

Date Collected: 08/02/17 20:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/08/17 23:24	1
Tetrachloroethene	<1.00		1.00		ug/L			08/08/17 23:24	1
Toluene	<1.00		1.00		ug/L			08/08/17 23:24	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/08/17 23:24	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/09/17 07:51	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/08/17 23:24	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/08/17 23:24	1
Trichloroethene	<1.00		1.00		ug/L			08/08/17 23:24	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/08/17 23:24	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/08/17 23:24	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/08/17 23:24	1
Vinyl chloride	<1.00		1.00		ug/L			08/08/17 23:24	1
Xylenes, Total	<3.00		3.00		ug/L			08/08/17 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*		*08/08/17 23:24*	*1*
4-Bromofluorobenzene (Surr)	*98*		*82 - 122*		*08/09/17 07:51*	*1*
Dibromofluoromethane (Surr)	*106*		*79 - 119*		*08/08/17 23:24*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/09/17 07:51*	*1*
Toluene-d8 (Surr)	*90*		*77 - 117*		*08/08/17 23:24*	*1*
Toluene-d8 (Surr)	*94*		*77 - 117*		*08/09/17 07:51*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**59.6**		5.00		mg/L			08/07/17 15:45	5
Chloride	**74.5**		5.00		mg/L			08/07/17 15:45	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.00**		0.500		mg/L		08/07/17 07:46	08/07/17 18:34	1
Manganese	**0.402**		0.0100		mg/L		08/07/17 07:46	08/07/17 18:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/10/17 06:30	08/10/17 08:30	1
Total Organic Carbon	**7.02**		1.00		mg/L			08/14/17 23:44	1
Alkalinity as CaCO3	**385**		5.00		mg/L			08/11/17 14:10	1
Bicarbonate Alkalinity as CaCO3	**385**		5.00		mg/L			08/11/17 14:10	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: Field Duplicate Q2

Date Collected: 08/02/17 12:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/08/17 23:48	1
Benzene	<0.500		0.500		ug/L			08/08/17 23:48	1
Bromobenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
Bromochloromethane	<5.00		5.00		ug/L			08/09/17 08:13	1
Bromodichloromethane	<1.00		1.00		ug/L			08/08/17 23:48	1
Bromoform	<5.00		5.00		ug/L			08/08/17 23:48	1
Bromomethane	<4.00		4.00		ug/L			08/08/17 23:48	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/08/17 23:48	1
n-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
Carbon disulfide	<1.00		1.00		ug/L			08/08/17 23:48	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/09/17 08:13	1
Chlorobenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/08/17 23:48	1
Chloroethane	<4.00		4.00		ug/L			08/08/17 23:48	1
Chloroform	<1.00		1.00		ug/L			08/08/17 23:48	1
Chloromethane	<3.00		3.00		ug/L			08/08/17 23:48	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/08/17 23:48	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/08/17 23:48	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/08/17 23:48	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/08/17 23:48	1
Dibromomethane	<1.00		1.00		ug/L			08/08/17 23:48	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/08/17 23:48	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/08/17 23:48	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/08/17 23:48	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/08/17 23:48	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/08/17 23:48	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/08/17 23:48	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/08/17 23:48	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/08/17 23:48	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/08/17 23:48	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/08/17 23:48	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/08/17 23:48	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/08/17 23:48	1
Ethylbenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/08/17 23:48	1
Hexane	<1.00		1.00		ug/L			08/08/17 23:48	1
Isopropylbenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/08/17 23:48	1
Methylene Chloride	<5.00		5.00		ug/L			08/08/17 23:48	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/08/17 23:48	1
Naphthalene	<5.00		5.00		ug/L			08/08/17 23:48	1
N-Propylbenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
Styrene	<1.00		1.00		ug/L			08/08/17 23:48	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/08/17 23:48	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: Field Duplicate Q2

Date Collected: 08/02/17 12:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/08/17 23:48	1
Tetrachloroethene	<1.00		1.00		ug/L			08/08/17 23:48	1
Toluene	<1.00		1.00		ug/L			08/08/17 23:48	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/08/17 23:48	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/09/17 08:13	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/08/17 23:48	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/08/17 23:48	1
Trichloroethene	<1.00		1.00		ug/L			08/08/17 23:48	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/08/17 23:48	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/08/17 23:48	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/08/17 23:48	1
Vinyl chloride	<1.00		1.00		ug/L			08/08/17 23:48	1
Xylenes, Total	<3.00		3.00		ug/L			08/08/17 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*		*08/08/17 23:48*	*1*
4-Bromofluorobenzene (Surr)	*100*		*82 - 122*		*08/09/17 08:13*	*1*
Dibromofluoromethane (Surr)	*107*		*79 - 119*		*08/08/17 23:48*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 119*		*08/09/17 08:13*	*1*
Toluene-d8 (Surr)	*90*		*77 - 117*		*08/08/17 23:48*	*1*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/09/17 08:13*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**107**		5.00		mg/L			08/07/17 16:00	5
Chloride	**15.3**		5.00		mg/L			08/07/17 16:00	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.04**		0.500		mg/L		08/07/17 07:46	08/07/17 18:36	1
Manganese	**0.313**		0.0100		mg/L		08/07/17 07:46	08/07/17 18:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/10/17 06:30	08/10/17 08:30	1
Total Organic Carbon	**1.38**		1.00		mg/L			08/15/17 00:02	1
Alkalinity as CaCO3	**306**		5.00		mg/L			08/11/17 14:10	1
Bicarbonate Alkalinity as CaCO3	**306**		5.00		mg/L			08/11/17 14:10	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: Trip Blank

Date Collected: 08/02/17 00:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/07/17 10:41	1
Benzene	<0.500		0.500		ug/L			08/07/17 10:41	1
Bromobenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
Bromochloromethane	<5.00		5.00		ug/L			08/07/17 10:41	1
Bromodichloromethane	<1.00		1.00		ug/L			08/07/17 10:41	1
Bromoform	<5.00		5.00		ug/L			08/07/17 10:41	1
Bromomethane	<4.00		4.00		ug/L			08/07/17 10:41	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/07/17 10:41	1
n-Butylbenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
Carbon disulfide	<1.00		1.00		ug/L			08/07/17 10:41	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/07/17 10:41	1
Chlorobenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/07/17 10:41	1
Chloroethane	<4.00		4.00		ug/L			08/07/17 10:41	1
Chloroform	<1.00		1.00		ug/L			08/07/17 10:41	1
Chloromethane	<3.00		3.00		ug/L			08/07/17 10:41	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/07/17 10:41	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/07/17 10:41	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/07/17 10:41	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/07/17 10:41	1
Dibromomethane	<1.00		1.00		ug/L			08/07/17 10:41	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/07/17 10:41	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/07/17 10:41	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/07/17 10:41	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/07/17 10:41	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/07/17 10:41	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/07/17 10:41	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/07/17 10:41	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/07/17 10:41	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/07/17 10:41	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/07/17 10:41	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/07/17 10:41	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/07/17 10:41	1
Ethylbenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/07/17 10:41	1
Hexane	<1.00		1.00		ug/L			08/07/17 10:41	1
Isopropylbenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/07/17 10:41	1
Methylene Chloride	<5.00		5.00		ug/L			08/07/17 10:41	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/07/17 10:41	1
Naphthalene	<5.00		5.00		ug/L			08/07/17 10:41	1
N-Propylbenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
Styrene	<1.00		1.00		ug/L			08/07/17 10:41	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/07/17 10:41	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: Trip Blank

Date Collected: 08/02/17 00:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/07/17 10:41	1
Tetrachloroethene	<1.00		1.00		ug/L			08/07/17 10:41	1
Toluene	<1.00		1.00		ug/L			08/07/17 10:41	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/07/17 10:41	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/07/17 10:41	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/07/17 10:41	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/07/17 10:41	1
Trichloroethene	<1.00		1.00		ug/L			08/07/17 10:41	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/07/17 10:41	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/07/17 10:41	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/07/17 10:41	1
Vinyl chloride	<1.00		1.00		ug/L			08/07/17 10:41	1
Xylenes, Total	<3.00		3.00		ug/L			08/07/17 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*82 - 122*		*08/07/17 10:41*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 119*		*08/07/17 10:41*	*1*
Toluene-d8 (Surr)	*96*		*77 - 117*		*08/07/17 10:41*	*1*

Qualifiers

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(82-122)	(79-119)	(77-117)
310-111525-1	MW-24	104	105	94
310-111525-2	MW-28	102	106	93
310-111525-2	MW-28	103	102	96
310-111525-3	MW-29	104	106	93
310-111525-3	MW-29	104	103	93
310-111525-4	MW-31	101	103	93
310-111525-4	MW-31	104	104	95
310-111525-5	MW-26S	108	103	93
310-111525-6	MW-43I	101	105	93
310-111525-6	MW-43I	103	106	93
310-111525-7	MW-44	98	103	94
310-111525-7	MW-44	103	106	90
310-111525-8	Field Duplicate Q2	100	105	93
310-111525-8	Field Duplicate Q2	103	107	90
310-111525-9	Trip Blank	104	105	96
LCS 310-174725/5	Lab Control Sample	100	102	93
LCS 310-174725/6	Lab Control Sample	107	103	97
LCS 310-174863/5	Lab Control Sample	98	104	98
LCS 310-174869/6	Lab Control Sample	103	104	91
LCS 310-174869/7	Lab Control Sample	106	106	90
MB 310-174725/7	Method Blank	116	103	92
MB 310-174863/7	Method Blank	101	101	94
MB 310-174869/8	Method Blank	110	106	91

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-174725/7
Matrix: Water
Analysis Batch: 174725

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/07/17 10:18	1
Benzene	<0.500		0.500		ug/L			08/07/17 10:18	1
Bromobenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
Bromochloromethane	<5.00		5.00		ug/L			08/07/17 10:18	1
Bromodichloromethane	<1.00		1.00		ug/L			08/07/17 10:18	1
Bromoform	<5.00		5.00		ug/L			08/07/17 10:18	1
Bromomethane	<4.00		4.00		ug/L			08/07/17 10:18	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/07/17 10:18	1
n-Butylbenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
Carbon disulfide	<1.00		1.00		ug/L			08/07/17 10:18	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/07/17 10:18	1
Chlorobenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/07/17 10:18	1
Chloroethane	<4.00		4.00		ug/L			08/07/17 10:18	1
Chloroform	<1.00		1.00		ug/L			08/07/17 10:18	1
Chloromethane	<3.00		3.00		ug/L			08/07/17 10:18	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/07/17 10:18	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/07/17 10:18	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/07/17 10:18	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/07/17 10:18	1
Dibromomethane	<1.00		1.00		ug/L			08/07/17 10:18	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/07/17 10:18	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/07/17 10:18	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/07/17 10:18	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/07/17 10:18	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/07/17 10:18	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/07/17 10:18	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/07/17 10:18	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/07/17 10:18	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/07/17 10:18	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/07/17 10:18	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/07/17 10:18	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/07/17 10:18	1
Ethylbenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/07/17 10:18	1
Hexane	<1.00		1.00		ug/L			08/07/17 10:18	1
Isopropylbenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/07/17 10:18	1
Methylene Chloride	<5.00		5.00		ug/L			08/07/17 10:18	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/07/17 10:18	1
Naphthalene	<5.00		5.00		ug/L			08/07/17 10:18	1
N-Propylbenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
Styrene	<1.00		1.00		ug/L			08/07/17 10:18	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-174725/7
Matrix: Water
Analysis Batch: 174725

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/07/17 10:18	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/07/17 10:18	1
Tetrachloroethene	<1.00		1.00		ug/L			08/07/17 10:18	1
Toluene	<1.00		1.00		ug/L			08/07/17 10:18	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/07/17 10:18	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/07/17 10:18	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/07/17 10:18	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/07/17 10:18	1
Trichloroethene	<1.00		1.00		ug/L			08/07/17 10:18	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/07/17 10:18	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/07/17 10:18	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/07/17 10:18	1
Vinyl chloride	<1.00		1.00		ug/L			08/07/17 10:18	1
Xylenes, Total	<3.00		3.00		ug/L			08/07/17 10:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*82 - 122*		*08/07/17 10:18*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/07/17 10:18*	*1*
Toluene-d8 (Surr)	*92*		*77 - 117*		*08/07/17 10:18*	*1*

Lab Sample ID: LCS 310-174725/5
Matrix: Water
Analysis Batch: 174725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	41.63		ug/L		104	55 - 150
Benzene	20.0	20.19		ug/L		101	74 - 127
Bromobenzene	20.0	17.64		ug/L		88	72 - 122
Bromochloromethane	20.0	23.55		ug/L		118	73 - 142
Bromodichloromethane	20.0	19.84		ug/L		99	71 - 118
Bromoform	20.0	16.59		ug/L		83	56 - 123
2-Butanone (MEK)	40.0	36.50		ug/L		91	51 - 150
n-Butylbenzene	20.0	14.84		ug/L		74	62 - 126
sec-Butylbenzene	20.0	15.22		ug/L		76	61 - 133
tert-Butylbenzene	20.0	15.96		ug/L		80	64 - 128
Carbon disulfide	20.0	19.16		ug/L		96	63 - 132
Carbon tetrachloride	20.0	20.75		ug/L		104	71 - 131
Chlorobenzene	20.0	19.01		ug/L		95	74 - 120
Chlorodibromomethane	20.0	19.75		ug/L		99	59 - 125
Chloroform	20.0	19.80		ug/L		99	72 - 129
2-Chlorotoluene	20.0	16.82		ug/L		84	67 - 127
4-Chlorotoluene	20.0	16.30		ug/L		82	69 - 123
1,2-Dibromo-3-Chloropropane	20.0	15.46		ug/L		77	45 - 131
1,2-Dibromoethane (EDB)	20.0	21.46		ug/L		107	69 - 127
Dibromomethane	20.0	21.81		ug/L		109	72 - 135
1,2-Dichlorobenzene	20.0	17.80		ug/L		89	68 - 121
1,3-Dichlorobenzene	20.0	18.14		ug/L		91	66 - 128

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-174725/5
Matrix: Water
Analysis Batch: 174725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	20.0	18.74		ug/L		94	67 - 120
1,1-Dichloroethane	20.0	21.64		ug/L		108	71 - 135
1,2-Dichloroethane	20.0	19.98		ug/L		100	71 - 131
1,1-Dichloroethene	20.0	20.39		ug/L		102	71 - 137
cis-1,2-Dichloroethene	20.0	20.53		ug/L		103	72 - 130
trans-1,2-Dichloroethene	20.0	20.64		ug/L		103	73 - 132
1,2-Dichloropropane	20.0	21.95		ug/L		110	72 - 126
1,3-Dichloropropane	20.0	21.14		ug/L		106	73 - 129
2,2-Dichloropropane	20.0	20.05		ug/L		100	50 - 150
1,1-Dichloropropene	20.0	20.00		ug/L		100	72 - 131
cis-1,3-Dichloropropene	20.0	19.18		ug/L		96	66 - 124
trans-1,3-Dichloropropene	20.0	19.02		ug/L		95	59 - 129
Ethylbenzene	20.0	17.63		ug/L		88	71 - 122
Hexachlorobutadiene	20.0	16.40		ug/L		82	62 - 134
Hexane	20.0	18.46		ug/L		92	50 - 150
Isopropylbenzene	20.0	15.70		ug/L		79	70 - 125
p-Isopropyltoluene	20.0	16.38		ug/L		82	65 - 124
Methylene Chloride	20.0	20.22		ug/L		101	66 - 129
Methyl tert-butyl ether	20.0	18.45		ug/L		92	72 - 128
Naphthalene	20.0	13.99		ug/L		70	50 - 129
N-Propylbenzene	20.0	16.31		ug/L		82	70 - 125
Styrene	20.0	17.18		ug/L		86	71 - 121
1,1,1,2-Tetrachloroethane	20.0	18.84		ug/L		94	72 - 117
1,1,2,2-Tetrachloroethane	20.0	17.98		ug/L		90	62 - 123
Tetrachloroethene	20.0	22.13		ug/L		111	68 - 138
Toluene	20.0	19.91		ug/L		100	69 - 128
1,2,3-Trichlorobenzene	20.0	15.65		ug/L		78	62 - 131
1,2,4-Trichlorobenzene	20.0	15.07		ug/L		75	61 - 127
1,1,1-Trichloroethane	20.0	21.49		ug/L		107	73 - 132
1,1,2-Trichloroethane	20.0	21.59		ug/L		108	65 - 131
Trichloroethene	20.0	20.77		ug/L		104	73 - 132
1,2,3-Trichloropropane	20.0	17.77		ug/L		89	66 - 124
1,2,4-Trimethylbenzene	20.0	16.40		ug/L		82	66 - 126
1,3,5-Trimethylbenzene	20.0	17.11		ug/L		86	69 - 128
Xylenes, Total	40.0	33.07		ug/L		83	72 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*82 - 122*
Dibromofluoromethane (Surr)	*102*		*79 - 119*
Toluene-d8 (Surr)	*93*		*77 - 117*

Lab Sample ID: LCS 310-174725/6
Matrix: Water
Analysis Batch: 174725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	20.0	14.26		ug/L		71	18 - 128
Chloroethane	20.0	17.97		ug/L		90	66 - 140

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-174725/6
Matrix: Water
Analysis Batch: 174725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	20.0	16.01		ug/L		80	55 - 141
Dichlorodifluoromethane	20.0	20.55		ug/L		103	49 - 150
Trichlorofluoromethane	20.0	19.32		ug/L		97	69 - 139
Vinyl chloride	20.0	17.67		ug/L		88	67 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*82 - 122*
Dibromofluoromethane (Surr)	*103*		*79 - 119*
Toluene-d8 (Surr)	*97*		*77 - 117*

Lab Sample ID: MB 310-174863/7
Matrix: Water
Analysis Batch: 174863

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	<5.00		5.00		ug/L			08/09/17 04:59	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/09/17 04:59	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/09/17 04:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*82 - 122*		*08/09/17 04:59*	*1*
Dibromofluoromethane (Surr)	*101*		*79 - 119*		*08/09/17 04:59*	*1*
Toluene-d8 (Surr)	*94*		*77 - 117*		*08/09/17 04:59*	*1*

Lab Sample ID: LCS 310-174863/5
Matrix: Water
Analysis Batch: 174863

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromochloromethane	20.0	19.47		ug/L		97	73 - 142
Carbon tetrachloride	20.0	17.11		ug/L		86	71 - 131
1,2,4-Trichlorobenzene	20.0	15.48		ug/L		77	61 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*82 - 122*
Dibromofluoromethane (Surr)	*104*		*79 - 119*
Toluene-d8 (Surr)	*98*		*77 - 117*

Lab Sample ID: MB 310-174869/8
Matrix: Water
Analysis Batch: 174869

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/08/17 19:52	1
Benzene	<0.500		0.500		ug/L			08/08/17 19:52	1
Bromobenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
Bromodichloromethane	<1.00		1.00		ug/L			08/08/17 19:52	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-174869/8
Matrix: Water
Analysis Batch: 174869

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<5.00		5.00		ug/L			08/08/17 19:52	1
Bromomethane	<4.00		4.00		ug/L			08/08/17 19:52	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/08/17 19:52	1
n-Butylbenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
Carbon disulfide	<1.00		1.00		ug/L			08/08/17 19:52	1
Chlorobenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/08/17 19:52	1
Chloroethane	<4.00		4.00		ug/L			08/08/17 19:52	1
Chloroform	<1.00		1.00		ug/L			08/08/17 19:52	1
Chloromethane	<3.00		3.00		ug/L			08/08/17 19:52	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/08/17 19:52	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/08/17 19:52	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/08/17 19:52	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/08/17 19:52	1
Dibromomethane	<1.00		1.00		ug/L			08/08/17 19:52	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/08/17 19:52	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/08/17 19:52	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/08/17 19:52	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/08/17 19:52	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/08/17 19:52	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/08/17 19:52	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/08/17 19:52	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/08/17 19:52	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/08/17 19:52	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/08/17 19:52	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/08/17 19:52	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/08/17 19:52	1
Ethylbenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/08/17 19:52	1
Hexane	<1.00		1.00		ug/L			08/08/17 19:52	1
Isopropylbenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/08/17 19:52	1
Methylene Chloride	<5.00		5.00		ug/L			08/08/17 19:52	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/08/17 19:52	1
Naphthalene	<5.00		5.00		ug/L			08/08/17 19:52	1
N-Propylbenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
Styrene	<1.00		1.00		ug/L			08/08/17 19:52	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/08/17 19:52	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/08/17 19:52	1
Tetrachloroethene	<1.00		1.00		ug/L			08/08/17 19:52	1
Toluene	<1.00		1.00		ug/L			08/08/17 19:52	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/08/17 19:52	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/08/17 19:52	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-174869/8
Matrix: Water
Analysis Batch: 174869

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/08/17 19:52	1
Trichloroethene	<1.00		1.00		ug/L			08/08/17 19:52	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/08/17 19:52	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/08/17 19:52	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/08/17 19:52	1
Vinyl chloride	<1.00		1.00		ug/L			08/08/17 19:52	1
Xylenes, Total	<3.00		3.00		ug/L			08/08/17 19:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*82 - 122*		*08/08/17 19:52*	*1*
Dibromofluoromethane (Surr)	*106*		*79 - 119*		*08/08/17 19:52*	*1*
Toluene-d8 (Surr)	*91*		*77 - 117*		*08/08/17 19:52*	*1*

Lab Sample ID: LCS 310-174869/6
Matrix: Water
Analysis Batch: 174869

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	42.43		ug/L		106	55 - 150
Benzene	20.0	20.78		ug/L		104	74 - 127
Bromobenzene	20.0	18.78		ug/L		94	72 - 122
Bromodichloromethane	20.0	20.74		ug/L		104	71 - 118
Bromoform	20.0	16.73		ug/L		84	56 - 123
2-Butanone (MEK)	40.0	38.75		ug/L		97	51 - 150
n-Butylbenzene	20.0	13.99		ug/L		70	62 - 126
sec-Butylbenzene	20.0	14.68		ug/L		73	61 - 133
tert-Butylbenzene	20.0	14.96		ug/L		75	64 - 128
Carbon disulfide	20.0	19.18		ug/L		96	63 - 132
Chlorobenzene	20.0	19.05		ug/L		95	74 - 120
Chlorodibromomethane	20.0	21.35		ug/L		107	59 - 125
Chloroform	20.0	20.92		ug/L		105	72 - 129
2-Chlorotoluene	20.0	16.41		ug/L		82	67 - 127
4-Chlorotoluene	20.0	16.22		ug/L		81	69 - 123
1,2-Dibromo-3-Chloropropane	20.0	15.38		ug/L		77	45 - 131
1,2-Dibromoethane (EDB)	20.0	22.24		ug/L		111	69 - 127
Dibromomethane	20.0	23.26		ug/L		116	72 - 135
1,2-Dichlorobenzene	20.0	16.79		ug/L		84	68 - 121
1,3-Dichlorobenzene	20.0	17.25		ug/L		86	66 - 128
1,4-Dichlorobenzene	20.0	17.71		ug/L		89	67 - 120
1,1-Dichloroethane	20.0	22.06		ug/L		110	71 - 135
1,2-Dichloroethane	20.0	21.16		ug/L		106	71 - 131
1,1-Dichloroethene	20.0	20.54		ug/L		103	71 - 137
cis-1,2-Dichloroethene	20.0	21.13		ug/L		106	72 - 130
trans-1,2-Dichloroethene	20.0	20.76		ug/L		104	73 - 132
1,2-Dichloropropane	20.0	21.36		ug/L		107	72 - 126
1,3-Dichloropropane	20.0	21.58		ug/L		108	73 - 129
2,2-Dichloropropane	20.0	18.22		ug/L		91	50 - 150

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-174869/6
Matrix: Water
Analysis Batch: 174869

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	20.0	20.44		ug/L		102	72 - 131
cis-1,3-Dichloropropene	20.0	18.97		ug/L		95	66 - 124
trans-1,3-Dichloropropene	20.0	19.02		ug/L		95	59 - 129
Ethylbenzene	20.0	17.24		ug/L		86	71 - 122
Hexachlorobutadiene	20.0	14.73		ug/L		74	62 - 134
Hexane	20.0	16.18		ug/L		81	50 - 150
Isopropylbenzene	20.0	16.14		ug/L		81	70 - 125
p-Isopropyltoluene	20.0	15.71		ug/L		79	65 - 124
Methylene Chloride	20.0	20.43		ug/L		102	66 - 129
Methyl tert-butyl ether	20.0	18.97		ug/L		95	72 - 128
Naphthalene	20.0	12.15		ug/L		61	50 - 129
N-Propylbenzene	20.0	16.27		ug/L		81	70 - 125
Styrene	20.0	17.64		ug/L		88	71 - 121
1,1,1,2-Tetrachloroethane	20.0	19.12		ug/L		96	72 - 117
1,1,2,2-Tetrachloroethane	20.0	18.77		ug/L		94	62 - 123
Tetrachloroethene	20.0	21.57		ug/L		108	68 - 138
Toluene	20.0	20.28		ug/L		101	69 - 128
1,2,3-Trichlorobenzene	20.0	12.53		ug/L		63	62 - 131
1,1,1-Trichloroethane	20.0	22.08		ug/L		110	73 - 132
1,1,2-Trichloroethane	20.0	22.54		ug/L		113	65 - 131
Trichloroethene	20.0	20.97		ug/L		105	73 - 132
1,2,3-Trichloropropane	20.0	18.88		ug/L		94	66 - 124
1,2,4-Trimethylbenzene	20.0	15.76		ug/L		79	66 - 126
1,3,5-Trimethylbenzene	20.0	16.33		ug/L		82	69 - 128
Xylenes, Total	40.0	33.23		ug/L		83	72 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*
Dibromofluoromethane (Surr)	*104*		*79 - 119*
Toluene-d8 (Surr)	*91*		*77 - 117*

Lab Sample ID: LCS 310-174869/7
Matrix: Water
Analysis Batch: 174869

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	20.0	14.63		ug/L		73	18 - 128
Chloroethane	20.0	21.08		ug/L		105	66 - 140
Chloromethane	20.0	20.00		ug/L		100	55 - 141
Dichlorodifluoromethane	20.0	21.44		ug/L		107	49 - 150
Trichlorofluoromethane	20.0	22.61		ug/L		113	69 - 139
Vinyl chloride	20.0	19.35		ug/L		97	67 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*82 - 122*
Dibromofluoromethane (Surr)	*106*		*79 - 119*
Toluene-d8 (Surr)	*90*		*77 - 117*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-174938/3
Matrix: Water
Analysis Batch: 174938

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.00		1.00		mg/L			08/07/17 09:25	1
Chloride	<1.00		1.00		mg/L			08/07/17 09:25	1

Lab Sample ID: LCS 310-174938/4
Matrix: Water
Analysis Batch: 174938

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	7.50	7.144		mg/L		95	90 - 110
Chloride	7.50	7.602		mg/L		101	90 - 110

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-174684/1-A
Matrix: Water
Analysis Batch: 174882

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 174684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.500		0.500		mg/L		08/07/17 10:00	08/07/17 17:42	1
Manganese	<0.0100		0.0100		mg/L		08/07/17 10:00	08/07/17 17:42	1

Lab Sample ID: LCS 310-174684/2-A
Matrix: Water
Analysis Batch: 174882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 174684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	1.871		mg/L		94	80 - 120
Manganese	1.00	0.9594		mg/L		96	80 - 120

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

Lab Sample ID: MB 490-451867/1-A
Matrix: Water
Analysis Batch: 453091

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 451867

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00		5.00		mg/L		08/10/17 06:30	08/10/17 08:30	1

Lab Sample ID: LCS 490-451867/2-A
Matrix: Water
Analysis Batch: 453091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 451867

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	20.0	19.36		mg/L		97	70 - 130

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

Lab Sample ID: 310-111525-8 MS
Matrix: Water
Analysis Batch: 453091

Client Sample ID: Field Duplicate Q2
Prep Type: Total/NA
Prep Batch: 451867

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	<5.00	H	20.0	19.12		mg/L		95	70 - 130

Lab Sample ID: 310-111525-8 MSD
Matrix: Water
Analysis Batch: 453091

Client Sample ID: Field Duplicate Q2
Prep Type: Total/NA
Prep Batch: 451867

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	<5.00	H	20.0	18.96		mg/L		95	70 - 130	1	10

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 310-175644/5
Matrix: Water
Analysis Batch: 175644

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00		mg/L			08/14/17 18:23	1

Lab Sample ID: LCS 310-175644/7
Matrix: Water
Analysis Batch: 175644

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	4.99	4.864		mg/L		97	85 - 113

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 310-175371/1
Matrix: Water
Analysis Batch: 175371

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Bicarbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/11/17 14:10	1

Lab Sample ID: LCS 310-175371/2
Matrix: Water
Analysis Batch: 175371

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	1060	1012		mg/L		95	90 - 110

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

GC/MS VOA

Analysis Batch: 174725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-1	MW-24	Total/NA	Water	8260C	
310-111525-2	MW-28	Total/NA	Water	8260C	
310-111525-2	MW-28	Total/NA	Water	8260C	
310-111525-3	MW-29	Total/NA	Water	8260C	
310-111525-3	MW-29	Total/NA	Water	8260C	
310-111525-4	MW-31	Total/NA	Water	8260C	
310-111525-4	MW-31	Total/NA	Water	8260C	
310-111525-5	MW-26S	Total/NA	Water	8260C	
310-111525-9	Trip Blank	Total/NA	Water	8260C	
MB 310-174725/7	Method Blank	Total/NA	Water	8260C	
LCS 310-174725/5	Lab Control Sample	Total/NA	Water	8260C	
LCS 310-174725/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 174863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-6	MW-43I	Total/NA	Water	8260C	
310-111525-7	MW-44	Total/NA	Water	8260C	
310-111525-8	Field Duplicate Q2	Total/NA	Water	8260C	
MB 310-174863/7	Method Blank	Total/NA	Water	8260C	
LCS 310-174863/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 174869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-6	MW-43I	Total/NA	Water	8260C	
310-111525-7	MW-44	Total/NA	Water	8260C	
310-111525-8	Field Duplicate Q2	Total/NA	Water	8260C	
MB 310-174869/8	Method Blank	Total/NA	Water	8260C	
LCS 310-174869/6	Lab Control Sample	Total/NA	Water	8260C	
LCS 310-174869/7	Lab Control Sample	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 174938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-6	MW-43I	Total/NA	Water	9056A	
310-111525-7	MW-44	Total/NA	Water	9056A	
310-111525-8	Field Duplicate Q2	Total/NA	Water	9056A	
MB 310-174938/3	Method Blank	Total/NA	Water	9056A	
LCS 310-174938/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 174684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-6	MW-43I	Total/NA	Water	3010A	
310-111525-7	MW-44	Total/NA	Water	3010A	
310-111525-8	Field Duplicate Q2	Total/NA	Water	3010A	
MB 310-174684/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-174684/2-A	Lab Control Sample	Total/NA	Water	3010A	

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Metals (Continued)

Analysis Batch: 174882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-6	MW-43I	Total/NA	Water	6010C	174684
310-111525-7	MW-44	Total/NA	Water	6010C	174684
310-111525-8	Field Duplicate Q2	Total/NA	Water	6010C	174684
MB 310-174684/1-A	Method Blank	Total/NA	Water	6010C	174684
LCS 310-174684/2-A	Lab Control Sample	Total/NA	Water	6010C	174684

General Chemistry

Analysis Batch: 175371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-6	MW-43I	Total/NA	Water	SM 2320B	
310-111525-7	MW-44	Total/NA	Water	SM 2320B	
310-111525-8	Field Duplicate Q2	Total/NA	Water	SM 2320B	
MB 310-175371/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 310-175371/2	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 175644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-1	MW-24	Total/NA	Water	9060A	
310-111525-6	MW-43I	Total/NA	Water	9060A	
310-111525-7	MW-44	Total/NA	Water	9060A	
310-111525-8	Field Duplicate Q2	Total/NA	Water	9060A	
MB 310-175644/5	Method Blank	Total/NA	Water	9060A	
LCS 310-175644/7	Lab Control Sample	Total/NA	Water	9060A	

Prep Batch: 451867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-6	MW-43I	Total/NA	Water	9030B	
310-111525-7	MW-44	Total/NA	Water	9030B	
310-111525-8	Field Duplicate Q2	Total/NA	Water	9030B	
MB 490-451867/1-A	Method Blank	Total/NA	Water	9030B	
LCS 490-451867/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-111525-8 MS	Field Duplicate Q2	Total/NA	Water	9030B	
310-111525-8 MSD	Field Duplicate Q2	Total/NA	Water	9030B	

Analysis Batch: 453091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-111525-6	MW-43I	Total/NA	Water	9034	451867
310-111525-7	MW-44	Total/NA	Water	9034	451867
310-111525-8	Field Duplicate Q2	Total/NA	Water	9034	451867
MB 490-451867/1-A	Method Blank	Total/NA	Water	9034	451867
LCS 490-451867/2-A	Lab Control Sample	Total/NA	Water	9034	451867
310-111525-8 MS	Field Duplicate Q2	Total/NA	Water	9034	451867
310-111525-8 MSD	Field Duplicate Q2	Total/NA	Water	9034	451867

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-24
Date Collected: 08/03/17 15:10
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174725	08/07/17 11:05	SJN	TAL CF
Total/NA	Analysis	9060A		1	175644	08/14/17 23:10	MDK	TAL CF

Client Sample ID: MW-28
Date Collected: 08/03/17 15:50
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	174725	08/07/17 12:15	SJN	TAL CF
Total/NA	Analysis	8260C		100	174725	08/07/17 14:14	SJN	TAL CF

Client Sample ID: MW-29
Date Collected: 08/03/17 16:40
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1000	174725	08/07/17 12:39	SJN	TAL CF
Total/NA	Analysis	8260C		100	174725	08/07/17 14:37	SJN	TAL CF

Client Sample ID: MW-31
Date Collected: 08/03/17 17:10
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	174725	08/07/17 11:28	SJN	TAL CF
Total/NA	Analysis	8260C		10	174725	08/07/17 16:58	SJN	TAL CF

Client Sample ID: MW-26S
Date Collected: 08/03/17 18:45
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	174725	08/07/17 11:52	SJN	TAL CF

Client Sample ID: MW-43I
Date Collected: 08/02/17 17:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174869	08/08/17 23:01	SJN	TAL CF
Total/NA	Analysis	8260C		1	174863	08/09/17 07:29	SJN	TAL CF

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: MW-43I
Date Collected: 08/02/17 17:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	174938	08/07/17 15:31	SAD	TAL CF
Total/NA	Prep	3010A			174684	08/07/17 07:46	JNR	TAL CF
Total/NA	Analysis	6010C		1	174882	08/07/17 18:32	OAD	TAL CF
Total/NA	Prep	9030B			451867	08/10/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	453091	08/10/17 08:30	REM	TAL NSH
Total/NA	Analysis	9060A		1	175644	08/14/17 23:26	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	175371	08/11/17 14:10	WJF	TAL CF

Client Sample ID: MW-44
Date Collected: 08/02/17 20:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174869	08/08/17 23:24	SJN	TAL CF
Total/NA	Analysis	8260C		1	174863	08/09/17 07:51	SJN	TAL CF
Total/NA	Analysis	9056A		5	174938	08/07/17 15:45	SAD	TAL CF
Total/NA	Prep	3010A			174684	08/07/17 07:46	JNR	TAL CF
Total/NA	Analysis	6010C		1	174882	08/07/17 18:34	OAD	TAL CF
Total/NA	Prep	9030B			451867	08/10/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	453091	08/10/17 08:30	REM	TAL NSH
Total/NA	Analysis	9060A		1	175644	08/14/17 23:44	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	175371	08/11/17 14:10	WJF	TAL CF

Client Sample ID: Field Duplicate Q2
Date Collected: 08/02/17 12:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174869	08/08/17 23:48	SJN	TAL CF
Total/NA	Analysis	8260C		1	174863	08/09/17 08:13	SJN	TAL CF
Total/NA	Analysis	9056A		5	174938	08/07/17 16:00	SAD	TAL CF
Total/NA	Prep	3010A			174684	08/07/17 07:46	JNR	TAL CF
Total/NA	Analysis	6010C		1	174882	08/07/17 18:36	OAD	TAL CF
Total/NA	Prep	9030B			451867	08/10/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	453091	08/10/17 08:30	REM	TAL NSH
Total/NA	Analysis	9060A		1	175644	08/15/17 00:02	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	175371	08/11/17 14:10	WJF	TAL CF

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Client Sample ID: Trip Blank

Date Collected: 08/02/17 00:00
Date Received: 08/04/17 17:25

Lab Sample ID: 310-111525-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174725	08/07/17 10:41	SJN	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Laboratory: TestAmerica Cedar Falls

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
AIHA-LAP, LLC	IHLAP		101044	11-01-18
Georgia	State Program	4	IA100001 (OR)	09-29-17
Illinois	NELAP	5	200024	11-29-17
Iowa	State Program	7	007	12-01-17
Kansas	NELAP	7	E-10341	01-31-18
Minnesota	NELAP	5	019-999-319	12-31-17
Minnesota (Petrofund)	State Program	1	3349	08-22-17
North Dakota	State Program	8	R-186	09-29-17
Oregon	NELAP	10	IA100001	09-29-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	01-01-18
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2LA)	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17 *
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-17 *
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17 *
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17 *
Wyoming (UST)	A2LA	8	453.07	12-31-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-111525-1
SDG: 103-87305.01

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CF
9056A	Anions, Ion Chromatography	SW846	TAL CF
6010C	Metals (ICP)	SW846	TAL CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL NSH
9060A	Organic Carbon, Total (TOC)	SW846	TAL CF
SM 2320B	Alkalinity	SM	TAL CF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

310-111525 Chain of Custody

Cooler/Sample Receipt and Temperature Log

Client Information

Client: Golder Associates

City/State: Manchester NH | Project:

Receipt Information

Date/Time Received: 8/14/17 1725 | Received By: [illegible]

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ TA Courier ☐ TA Field Services ☐ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID: 24610

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 1 of 2

Cooler Custody Seals Present? ☒ Yes ☐ No *If yes:* Cooler custody seals intact? ☒ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☒ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: H | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.8 | Corrected Temp (°C): 1.8

• Sample Container Temperature

Sample ID(s) & bottle type used: CONTAINER 1 | CONTAINER 2

Uncorrected Temp (°C): TEMP 1 TEMP 2 | Corrected Temp (°C): TEMP 1 TEMP 2

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

TestAmerica Cedar Falls
704 E[illegible]rise Drive
Cedar Falls, IA 50613
Phone (319) 277-2401 Fax (319) 277-2425

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Alan Phillips	Lab PM: Hayes, Shawn M	Carrier Tracking No(s):	COC No:
Client Contact: James Peace	Phone:	E-Mail: shawn.hayes@testamericainc.com		Page:
Company: Golder Associates Inc.				Job #:
Address: 670 North Commercial Street Suite 103	Due Date Requested:			
City: Manchester	TAT Requested (days):			
State, Zip: NH, 03101				
Phone:	PO #:			
Email: jpeace@golder.com	WO #:			
Project Name: Electrolux - Jefferson, IA	TestAmerica Project #: 31002428			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C Volatile Standard Sublist	9060A Total Organic Carbon	2320B Alkalinities All and 9056A Chloride and Sulfate	6010C Iron and Manganese	9034 Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	S	N	D	CB		
MW-24	8/3/17	1510	G	W			X	X					
MW-28	8/3/17	1550	↓	↓			X						
MW-29	8/3/17	1640	↓	↓			X						
MW-31	8/3/17	1710	↓	↓			X						
MW-26S	8/3/17	1945	↓	↓			X						
MW-43I	8/2/17	1700	↓	↓			X	X	X	X	X		
MW-44	8/2/17	2000	↓	↓			X	X	X	X	X		
Field Duplicate 02	8/2/17	1200	↓	↓			X	X	X	X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Alan Phillips	8/3/17 22:39				
			[signature]	8/4/17 1725	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MW-24	310-111525-D-1	Plastic 250ml - with Sulfuric Acid	<2	_____	_____
MW-43I	310-111525-D-6	Plastic 250ml - with Sulfuric Acid	<2	_____	_____
MW-43I	310-111525-E-6	Plastic 250ml - with Nitric Acid	<2	_____	_____
MW-43I	310-111525-F-6	Plastic 500ml - with Zn Acetate and	>12	_____	_____
MW-44	310-111525-D-7	Plastic 250ml - with Sulfuric Acid	<2	_____	_____
MW-44	310-111525-E-7	Plastic 250ml - with Nitric Acid	<2	_____	_____
MW-44	310-111525-F-7	Plastic 500ml - with Zn Acetate and	>12	_____	_____
Field Duplicate Q2	310-111525-D-8	Plastic 250ml - with Sulfuric Acid	<2	_____	_____
Field Duplicate Q2	310-111525-E-8	Plastic 250ml - with Nitric Acid	<2	_____	_____
Field Duplicate Q2	310-111525-F-8	Plastic 500ml - with Zn Acetate and	>12	_____	_____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

310-111525 Chain of Custody

Cooler Received/Opened On 08-09-2017 @ 09:35

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 3969 (last 4 digits, FedEx) Courier: _FedEx_

   IR Gun ID 31470366 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 3.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) KD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) es

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) es

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) es

I certify that I attached a label with the unique LIMS number to each container (initial) es

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# es

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Phone (319) 277-2401 Fax (319) 277-2425

Chain of Custody Record

310-111525 TestAmerica

8/17/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Hayes, Shawn M	No: 310-10197.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: shawn.hayes@testamericainc.com	State of Origin: Iowa	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Job #: 310-111525-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/16/2017		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Electrolux - Jefferson, IA	Project #: 31002428		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030B Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-43I (310-111525-6)	8/3/17	17:00 Central		Water			X	1	
MW-44 (310-111525-7)	8/2/17	20:00 Central		Water			X	1	
Field Duplicate Q2 (310-111525-8)	8/2/17	12:00 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 8 7 17 1446	Company	Received by:	Date/Time: 8-9-17 9:35	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 13.8		

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 310-111525-1
SDG Number: 103-87305.01

Login Number: 111525
List Number: 1
Creator: Marzen, Brita K

List Source: TestAmerica Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 310-111525-1
SDG Number: 103-87305.01

Login Number: 111525
List Number: 2
Creator: Stewart, Eric S

List Source: TestAmerica Nashville
List Creation: 08/09/17 11:57 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

August 15, 2017

Jim Peace
Golder Associates
670 N Commercial St
Suite 103
Manchester, NH 03101

RE: **ELECTROLUX-JEFFERSON, IA**
Pace Workorder: 23471

Dear Jim Peace:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, August 07, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ruth Welsh 08/15/2017
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 16

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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SAMPLE SUMMARY

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

Lab ID	Sample ID	Matrix	Date Collected	Date Received
234710001	MW-43I	Water	8/2/2017 17:00	8/7/2017 08:30
234710002	MW-44	Water	8/2/2017 20:00	8/7/2017 08:30
234710003	FIELD DUPLICATE 02	Water	8/2/2017 12:00	8/7/2017 08:30
234710004	MW-24	Water	8/3/2017 15:10	8/7/2017 08:30
234710005	MW-28	Water	8/3/2017 15:50	8/7/2017 08:30

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PROJECT SUMMARY

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

Workorder Comments

The container pH for samples 23471 (0005) were measured as below the expected pH (< 10) for those samples preserved with trisodium phosphate, as assigned to PAES method AM20GAx.

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ANALYTICAL RESULTS

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

Lab ID: **234710001** Date Received: 8/7/2017 08:30 Matrix: Water
Sample ID: **MW-43I** Date Collected: 8/2/2017 17:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**0.11J**	ug/l	0.50	0.027	1	8/9/2017 12:23	BW	n
Ethane	**0.0073J**	ug/l	0.10	0.0030	1	8/9/2017 12:23	BW	n
Ethene	**0.023J**	ug/l	0.10	0.0010	1	8/9/2017 12:23	BW	n

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ANALYTICAL RESULTS

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

Lab ID: **234710002** Date Received: 8/7/2017 08:30 Matrix: Water

Sample ID: **MW-44** Date Collected: 8/2/2017 20:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**86**	ug/l	0.50	0.027	1	8/9/2017 12:32	BW	n
Ethane	**0.013J**	ug/l	0.10	0.0030	1	8/9/2017 12:32	BW	n
Ethene	**0.058J**	ug/l	0.10	0.0010	1	8/9/2017 12:32	BW	n

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ANALYTICAL RESULTS

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

Lab ID: **234710003** Date Received: 8/7/2017 08:30 Matrix: Water
Sample ID: **FIELD DUPLICATE 02** Date Collected: 8/2/2017 12:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**0.10J**	ug/l	0.50	0.027	1	8/9/2017 12:45	BW	n
Ethane	**0.0083J**	ug/l	0.10	0.0030	1	8/9/2017 12:45	BW	n
Ethene	**0.026J**	ug/l	0.10	0.0010	1	8/9/2017 12:45	BW	n

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ANALYTICAL RESULTS

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

Lab ID: **234710004** Date Received: 8/7/2017 08:30 Matrix: Water

Sample ID: **MW-24** Date Collected: 8/3/2017 15:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**69**	ug/l	0.50	0.027	1	8/9/2017 12:54	BW	n
Ethane	**0.019J**	ug/l	0.10	0.0030	1	8/9/2017 12:54	BW	n
Ethene	**0.091J**	ug/l	0.10	0.0010	1	8/9/2017 12:54	BW	n

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ANALYTICAL RESULTS

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

Lab ID: **234710005** Date Received: 8/7/2017 08:30 Matrix: Water
Sample ID: **MW-28** Date Collected: 8/3/2017 15:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**2100**	ug/l	0.50	0.027	1	8/11/2017 07:40	BW	n
Ethane	**1.4**	ug/l	0.10	0.0030	1	8/11/2017 07:40	BW	n
Ethene	**1700**	ug/l	0.10	0.0010	1	8/11/2017 07:40	BW	n

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

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QUALITY CONTROL DATA

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

QC Batch: DISG/6269 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 234710001, 234710002, 234710003, 234710004

METHOD BLANK: 50246

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.50 U	0.50	n
Ethane	ug/l	0.10 U	0.10	n
Ethene	ug/l	0.10 U	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 50247 50248

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	740	740	99	99	80-120	0	20	n
Ethane	ug/l	38	37	38	98	99	80-120	1	20	n
Ethene	ug/l	35	34	34	97	98	80-120	1	20	n

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QUALITY CONTROL DATA

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

QC Batch: DISG/6277 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 234710005

METHOD BLANK: 50343

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.50 U	0.50	n
Ethane	ug/l	0.10 U	0.10	n
Ethene	ug/l	0.10 U	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 50344 50345

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	700	700	94	93	80-120	1.1	20	n
Ethane	ug/l	38	38	38	101	101	80-120	0	20	n
Ethene	ug/l	35	35	35	100	100	80-120	0	20	n

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QUALITY CONTROL DATA QUALIFIERS

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

QUALITY CONTROL PARAMETER QUALIFIERS

n The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 23471 ELECTROLUX-JEFFERSON, IA

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
234710001	MW-43I			AM20GAX	DISG/6269
234710002	MW-44			AM20GAX	DISG/6269
234710003	FIELD DUPLICATE 02			AM20GAX	DISG/6269
234710004	MW-24			AM20GAX	DISG/6269
234710005	MW-28			AM20GAX	DISG/6277

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23471

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company: Golder Associates
Address: 670 North Commercial St. Ste 103, Manchester, NH 03101
Email To: jpeace@golder.com
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: James Peace
Copy To:
Purchase Order No.:
Project Name: Electrolux - Jefferson, IA
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: IA

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other TSP	Analysis Test Y/N	MBE	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-43I	WT	G			8/2/17	1700		3								X		X		
2	MW-44	↓	↓			8/2/17	2000		3								X		X		
3	Field Duplicate 02	↓	↓			8/2/17	1200		3								X		X		
4	MW-24	↓	↓			8/3/17	1510		3								X		X		
5	MW-28	↓	↓			8/3/17	1550		3								X		X		
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Alan Phillips/Golder	8/4/17	1010	~~[illegible]~~ PAS	8/7/17	0850

SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Alan Phillips
SIGNATURE of SAMPLER: Alan Phillips
DATE Signed (MM/DD/YY): 8/3/17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Cooler Receipt Form

Client Name: Golder Project: Electrolux Lab Work Order: 23471

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 779813739355

Custody Seal on Cooler/Box Present: (Yes) No Seals Intact: (Yes) No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 5°C Radiation Screened: Yes (N) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC	✓			
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
PAES containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: CG Date: 8.7.17

Project Manager Review: Jon Date: 8/7/17

F-PAE-Q-009-rev.00, 20 Nov2014

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August 7, 2017

Jim Peace
Golder Associates
670 N Commercial St
Suite 103
Manchester, NH 03101

RE: **ELECTROLUX - JEFFERSON, IA**
Pace Workorder: 23392

Dear Jim Peace:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, July 31, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ruth Welsh 08/07/2017
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 23

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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SAMPLE SUMMARY

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID	Sample ID	Matrix	Date Collected	Date Received
233920001	MW-67	Water	7/25/2017 16:50	7/31/2017 09:50
233920002	FIELD DUPLICATE 01	Water	7/25/2017 12:00	7/31/2017 09:50
233920003	MW-66	Water	7/25/2017 19:12	7/31/2017 09:50
233920004	MW-66-MS	Water	7/25/2017 19:12	7/31/2017 09:50
233920005	MW-66-MSD	Water	7/25/2017 19:12	7/31/2017 09:50
233920006	MW-56D	Water	7/26/2017 12:00	7/31/2017 09:50
233920007	MW-65	Water	7/26/2017 14:15	7/31/2017 09:50
233920008	MW-43D	Water	7/26/2017 18:20	7/31/2017 09:50
233920009	MW-57	Water	7/26/2017 21:05	7/31/2017 09:50
233920010	MW-47D	Water	7/27/2017 10:20	7/31/2017 09:50
233920011	MW-46	Water	7/27/2017 12:05	7/31/2017 09:50
233920012	MW-56S	Water	7/27/2017 13:50	7/31/2017 09:50
233920013	FIELD BLANK	Water	7/27/2017 13:15	7/31/2017 09:50

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920001** Date Received: 7/31/2017 09:50 Matrix: Water

Sample ID: **MW-67** Date Collected: 7/25/2017 16:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**2.1**	ug/l	0.50	0.027	1	8/5/2017 10:36	TD	n
Ethane	**0.038J**	ug/l	0.10	0.0070	1	8/5/2017 10:36	TD	n
Ethene	**0.096J**	ug/l	0.10	0.0090	1	8/5/2017 10:36	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920002** Date Received: 7/31/2017 09:50 Matrix: Water

Sample ID: **FIELD DUPLICATE 01** Date Collected: 7/25/2017 12:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**2.1**	ug/l	0.50	0.027	1	8/5/2017 10:49	TD	n
Ethane	**0.041J**	ug/l	0.10	0.0070	1	8/5/2017 10:49	TD	n
Ethene	**0.10**	ug/l	0.10	0.0090	1	8/5/2017 10:49	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920003** Date Received: 7/31/2017 09:50 Matrix: Water

Sample ID: **MW-66** Date Collected: 7/25/2017 19:12

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**1.8**	ug/l	0.50	0.027	1	8/5/2017 11:04	TD	n
Ethane	**0.046J**	ug/l	0.10	0.0070	1	8/5/2017 11:04	TD	n
Ethene	**0.50**	ug/l	0.10	0.0090	1	8/5/2017 11:04	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920004** Date Received: 7/31/2017 09:50 Matrix: Water
Sample ID: **MW-66-MS** Date Collected: 7/25/2017 19:12

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**48**	ug/l	0.50	0.027	1	8/5/2017 11:23	TD	n
Ethane	**85**	ug/l	0.10	0.0070	1	8/5/2017 11:23	TD	n
Ethene	**81**	ug/l	0.10	0.0090	1	8/5/2017 11:23	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920005** Date Received: 7/31/2017 09:50 Matrix: Water

Sample ID: **MW-66-MSD** Date Collected: 7/25/2017 19:12

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**48**	ug/l	0.50	0.027	1	8/5/2017 11:45	TD	n
Ethane	**84**	ug/l	0.10	0.0070	1	8/5/2017 11:45	TD	n
Ethene	**80**	ug/l	0.10	0.0090	1	8/5/2017 11:45	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920006** Date Received: 7/31/2017 09:50 Matrix: Water
Sample ID: **MW-56D** Date Collected: 7/26/2017 12:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**0.35J**	ug/l	0.50	0.027	1	8/5/2017 11:57	TD	n
Ethane	**0.013J**	ug/l	0.10	0.0070	1	8/5/2017 11:57	TD	n
Ethene	**0.029J**	ug/l	0.10	0.0090	1	8/5/2017 11:57	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920007** Date Received: 7/31/2017 09:50 , Matrix: Water

Sample ID: **MW-65** Date Collected: 7/26/2017 14:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**890**	ug/l	0.50	0.027	1	8/5/2017 12:10	TD	n
Ethane	**0.33**	ug/l	0.10	0.0070	1	8/5/2017 12:10	TD	n
Ethene	**4.0**	ug/l	0.10	0.0090	1	8/5/2017 12:10	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920008** Date Received: 7/31/2017 09:50 Matrix: Water
Sample ID: **MW-43D** Date Collected: 7/26/2017 18:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**1.1**	ug/l	0.50	0.027	1	8/5/2017 12:23	TD	n
Ethane	**0.13**	ug/l	0.10	0.0070	1	8/5/2017 12:23	TD	n
Ethene	**0.011J**	ug/l	0.10	0.0090	1	8/5/2017 12:23	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920009** Date Received: 7/31/2017 09:50 Matrix: Water
Sample ID: **MW-57** Date Collected: 7/26/2017 21:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**2.8**	ug/l	0.50	0.027	1	8/5/2017 12:36	TD	n
Ethane	**0.024J**	ug/l	0.10	0.0070	1	8/5/2017 12:36	TD	n
Ethene	**0.050J**	ug/l	0.10	0.0090	1	8/5/2017 12:36	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920010** Date Received: 7/31/2017 09:50 Matrix: Water
Sample ID: **MW-47D** Date Collected: 7/27/2017 10:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**450**	ug/l	0.50	0.027	1	8/5/2017 12:48	TD	n
Ethane	**5.7**	ug/l	0.10	0.0070	1	8/5/2017 12:48	TD	n
Ethene	**540**	ug/l	0.10	0.0090	1	8/5/2017 12:48	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920011** Date Received: 7/31/2017 09:50 Matrix: Water

Sample ID: **MW-46** Date Collected: 7/27/2017 12:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**2.8**	ug/l	0.50	0.027	1	8/5/2017 13:00	TD	n
Ethane	**2.0**	ug/l	0.10	0.0070	1	8/5/2017 13:00	TD	n
Ethene	**1.2**	ug/l	0.10	0.0090	1	8/5/2017 13:00	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920012** Date Received: 7/31/2017 09:50 Matrix: Water
Sample ID: **MW-56S** Date Collected: 7/27/2017 13:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**0.12J**	ug/l	0.50	0.027	1	8/5/2017 13:20	TD	n
Ethane	**0.10 U**	ug/l	0.10	0.0070	1	8/5/2017 13:20	TD	n
Ethene	**0.038J**	ug/l	0.10	0.0090	1	8/5/2017 13:20	TD	n

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ANALYTICAL RESULTS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID: **233920013** Date Received: 7/31/2017 09:50 Matrix: Water

Sample ID: **FIELD BLANK** Date Collected: 7/27/2017 13:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - PAES								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**0.052J**	ug/l	0.50	0.027	1	8/5/2017 13:37	TD	n
Ethane	**0.10 U**	ug/l	0.10	0.0070	1	8/5/2017 13:37	TD	n
Ethene	**0.016J**	ug/l	0.10	0.0090	1	8/5/2017 13:37	TD	n

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Pace Analytical Energy Services LLC
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Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS QUALIFIERS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

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QUALITY CONTROL DATA

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

QC Batch: DISG/6264 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 233920001, 233920002, 233920003, 233920004, 233920005, 233920006, 233920007, 233920008, 233920009, 233920010, 233920011, 233920012, 233920013

METHOD BLANK: 50208

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.50 U	0.50	n
Ethane	ug/l	0.10 U	0.10	n
Ethene	ug/l	0.10 U	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 50210 50212

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	840	810	112	108	80-120	3.6	20	n
Ethane	ug/l	38	41	40	108	106	80-120	1.9	20	n
Ethene	ug/l	35	39	38	110	107	80-120	2.8	20	n

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 50214 50215 Original: 233920003

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK											
Methane	ug/l	1.8	40	48	48	114	113	70-130	0.88	20	n
Ethane	ug/l	0.046	76	85	84	112	111	70-130	0.9	20	n
Ethene	ug/l	0.5	71	81	80	114	113	70-130	0.88	20	n

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QUALITY CONTROL DATA QUALIFIERS

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

QUALITY CONTROL PARAMETER QUALIFIERS

n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 23392 ELECTROLUX - JEFFERSON, IA

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
233920001	MW-67			AM20GAX	DISG/6264
233920002	FIELD DUPLICATE 01			AM20GAX	DISG/6264
233920003	MW-66			AM20GAX	DISG/6264
233920004	MW-66-MS			AM20GAX	DISG/6264
233920005	MW-66-MSD			AM20GAX	DISG/6264
233920006	MW-56D			AM20GAX	DISG/6264
233920007	MW-65			AM20GAX	DISG/6264
233920008	MW-43D			AM20GAX	DISG/6264
233920009	MW-57			AM20GAX	DISG/6264
233920010	MW-47D			AM20GAX	DISG/6264
233920011	MW-46			AM20GAX	DISG/6264
233920012	MW-56S			AM20GAX	DISG/6264
233920013	FIELD BLANK			AM20GAX	DISG/6264

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

23392

Page: 1 of 2

009353

Section A Required Client Information:

Company: Golder Associates
Address: 620 North Commercial St. Suite 103 Manchester NH
Email To: jpeace@golder.com
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: James Peace
Copy To:
Purchase Order No.:
Project Name: Electralux - Jefferson, IA
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER _____

Site Location STATE: IA

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test: MEE	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-67	WT	G	7/25/17	1650				3					X				X		
2	Field Duplicate 01				1200									X				X		
3	MW-66				1912									X				X		
4	MW-66-MS				1912									X				X		
5	MW-66-MSD				1912									X				X		
6	MW-56D			7/26/17	1200									X				X		
7	MW-65				1415									X				X		
8	MW-43D				1820									X				X		
9	MW-57				2105									X				X		
10	MW-47D			7/27/17	1020									X				X		
11	MW-46				1205									X				X		
12	MW-56S				1350									X				X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Alan Phillips / Golder	7/27/17	1900	[illegible] PAS	7.31.17	0230	2 Y Y

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Alan Phillips
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7/27/17

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

23392

Page: 2 of 2

009352

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Golder Associates	Report To: James Peace	Attention:
Address: 670 North Commercial St Ste 103	Copy To:	Company Name:
Manchester NH, 03101		Address:
Email To: jpeace@golder.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Electrolux - Jefferson, IA	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER _____

Site Location STATE: IA

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/GRAB DATE	COLLECTED Composite End/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test: MEE (Requested Analysis Filtered Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Field Blank	WT	G			7/27/17	1315		3					X				X		
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Alan Phillips / Golder	7/27/17	1900	[illegible]	7/31/17	0930	2	Y	Y	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Alan Phillips

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7/27/17

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Tel: (319)277-2401

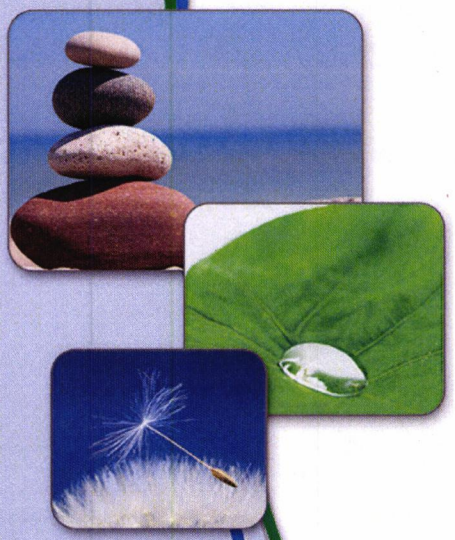
TestAmerica Job ID: 310-110886-1
TestAmerica Sample Delivery Group: 103-87305.1
Client Project/Site: Electrolux - Jefferson, IA

For:
Golder Associates Inc.
670 North Commercial Street
Suite 103
Manchester, New Hampshire 03101

Attn: James Peace

Authorized for release by:
8/11/2017 12:51:37 PM

Shawn Hayes, Senior Project Manager
(319)277-2401
shawn.hayes@testamericainc.com



LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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.

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Job ID: 310-110886-1

Laboratory: TestAmerica Cedar Falls

Narrative

Job Narrative
310-110886-1

Comments
No additional comments.

Receipt
The samples were received on 7/27/2017 6:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.4° C, 3.9° C and 5.7° C.

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

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

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

General Chemistry
Method(s) 9034 Sulfide: The laboratory had insufficient time remaining to perform the analysis within holding time: MW-67 (310-110886-1), Field Duplicate 01 (310-110886-2), MW-66 (310-110886-3), MW-56D (310-110886-4), MW-65 (310-110886-5), MW-43D (310-110886-6) and MW-57 (310-110886-7).

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

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

Sample Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-110886-1	MW-67	Water	07/25/17 16:50	07/27/17 18:00
310-110886-2	Field Duplicate 01	Water	07/25/17 12:00	07/27/17 18:00
310-110886-3	MW-66	Water	07/25/17 19:12	07/27/17 18:00
310-110886-4	MW-56D	Water	07/26/17 12:00	07/27/17 18:00
310-110886-5	MW-65	Water	07/26/17 14:15	07/27/17 18:00
310-110886-6	MW-43D	Water	07/26/17 18:20	07/27/17 18:00
310-110886-7	MW-57	Water	07/26/17 21:05	07/27/17 18:00
310-110886-8	MW-47D	Water	07/27/17 10:20	07/27/17 18:00
310-110886-9	MW-46	Water	07/27/17 12:05	07/27/17 18:00
310-110886-10	MW-56S	Water	07/27/17 13:50	07/27/17 18:00
310-110886-11	Field Blank	Water	07/27/17 13:15	07/27/17 18:00
310-110886-12	Trip Blank	Water	07/25/17 00:00	07/27/17 18:00

Detection Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-67 — Lab Sample ID: 310-110886-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	71.8		5.00		mg/L	5		9056A	Total/NA
Iron	0.630		0.500		mg/L	1		6010C	Total/NA
Manganese	1.93		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	1.68		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	489		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	489		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: Field Duplicate 01 — Lab Sample ID: 310-110886-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	73.4		5.00		mg/L	5		9056A	Total/NA
Iron	0.643		0.500		mg/L	1		6010C	Total/NA
Manganese	1.99		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	1.71		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	484		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	484		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-66 — Lab Sample ID: 310-110886-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.85		1.00		ug/L	1		8260C	Total/NA
Sulfate	46.4		5.00		mg/L	5		9056A	Total/NA
Manganese	0.621		0.0100		mg/L	1		6010C	Total/NA
Alkalinity as CaCO3	443		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	443		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-56D — Lab Sample ID: 310-110886-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	137		5.00		mg/L	5		9056A	Total/NA
Manganese	0.278		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	2.12		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	350		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	350		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-65 — Lab Sample ID: 310-110886-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	760		1.00		ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	11.3		1.00		ug/L	1		8260C	Total/NA
Trichloroethene	1670		20.0		ug/L	20		8260C	Total/NA
Vinyl chloride	1.53		1.00		ug/L	1		8260C	Total/NA
Iron	2.84		0.500		mg/L	1		6010C	Total/NA
Manganese	0.299		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	3.74		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	567		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	567		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-43D — Lab Sample ID: 310-110886-6

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-43D (Continued) — Lab Sample ID: 310-110886-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	15.4		5.00		mg/L	5		9056A	Total/NA
Chloride	9.54		5.00		mg/L	5		9056A	Total/NA
Manganese	0.676		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	1.48		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	386		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	386		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-57 — Lab Sample ID: 310-110886-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.53		1.00		ug/L	1		8260C	Total/NA
Tetrachloroethene	1.02		1.00		ug/L	1		8260C	Total/NA
Trichloroethene	919		10.0		ug/L	10		8260C	Total/NA
Sulfate	55.2		5.00		mg/L	5		9056A	Total/NA
Chloride	17.4		5.00		mg/L	5		9056A	Total/NA
Iron	1.33		0.500		mg/L	1		6010C	Total/NA
Manganese	0.619		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	2.02		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	391		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	391		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-47D — Lab Sample ID: 310-110886-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	158		2.00		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	94400		1000		ug/L	1000		8260C	Total/NA
trans-1,2-Dichloroethene	417		100		ug/L	100		8260C	Total/NA
Tetrachloroethene	3.91		1.00		ug/L	1		8260C	Total/NA
Trichloroethene	25800		100		ug/L	100		8260C	Total/NA
Vinyl chloride	1500		100		ug/L	100		8260C	Total/NA
Sulfate	9.29		5.00		mg/L	5		9056A	Total/NA
Chloride	228		5.00		mg/L	5		9056A	Total/NA
Iron	5.60		0.500		mg/L	1		6010C	Total/NA
Manganese	0.755		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	3.12		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	391		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	391		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-46 — Lab Sample ID: 310-110886-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	12.3		2.00		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1230		10.0		ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	15.3		10.0		ug/L	10		8260C	Total/NA
Tetrachloroethene	23.4		1.00		ug/L	1		8260C	Total/NA
Trichloroethene	19700		1000		ug/L	1000		8260C	Total/NA
Sulfate	24.1		5.00		mg/L	5		9056A	Total/NA
Manganese	0.792		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	1.16		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	427		5.00		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-46 (Continued) — Lab Sample ID: 310-110886-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	427		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-56S — Lab Sample ID: 310-110886-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.08		1.00		ug/L	1		8260C	Total/NA
Trichloroethene	1.74		1.00		ug/L	1		8260C	Total/NA
Sulfate	22.1		5.00		mg/L	5		9056A	Total/NA
Chloride	6.80		5.00		mg/L	5		9056A	Total/NA
Manganese	0.203		0.0100		mg/L	1		6010C	Total/NA
Total Organic Carbon	2.47		1.00		mg/L	1		9060A	Total/NA
Alkalinity as CaCO3	355		5.00		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	355		5.00		mg/L	1		SM 2320B	Total/NA

Client Sample ID: Field Blank — Lab Sample ID: 310-110886-11

No Detections.

Client Sample ID: Trip Blank — Lab Sample ID: 310-110886-12

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-67

Date Collected: 07/25/17 16:50
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 21:31	1
Benzene	<0.500		0.500		ug/L			08/01/17 21:31	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 21:31	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 21:31	1
Bromoform	<5.00		5.00		ug/L			08/01/17 21:31	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 21:31	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 21:31	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 21:31	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 21:31	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 21:31	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 21:31	1
Chloroform	<1.00		1.00		ug/L			08/01/17 21:31	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 21:31	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 21:31	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 21:31	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 21:31	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 21:31	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 21:31	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 21:31	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 21:31	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 21:31	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 21:31	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 21:31	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 21:31	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 21:31	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 21:31	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 21:31	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 21:31	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 21:31	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 21:31	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 21:31	1
Hexane	<1.00		1.00		ug/L			08/01/17 21:31	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 21:31	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 21:31	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 21:31	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 21:31	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
Styrene	<1.00		1.00		ug/L			08/01/17 21:31	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 21:31	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-67

Date Collected: 07/25/17 16:50
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 21:31	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 21:31	1
Toluene	<1.00		1.00		ug/L			08/01/17 21:31	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 21:31	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 21:31	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 21:31	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 21:31	1
Trichloroethene	<1.00		1.00		ug/L			08/01/17 21:31	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 21:31	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 21:31	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 21:31	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 21:31	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*82 - 122*		*08/01/17 21:31*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 119*		*08/01/17 21:31*	*1*
Toluene-d8 (Surr)	*99*		*77 - 117*		*08/01/17 21:31*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**71.8**		5.00		mg/L			07/31/17 17:06	5
Chloride	<5.00		5.00		mg/L			07/31/17 17:06	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.630**		0.500		mg/L		07/31/17 10:00	07/31/17 22:14	1
Manganese	**1.93**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/03/17 06:30	08/03/17 08:15	1
Total Organic Carbon	**1.68**		1.00		mg/L			08/03/17 20:31	1
Alkalinity as CaCO3	**489**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**489**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: Field Duplicate 01

Date Collected: 07/25/17 12:00
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 21:53	1
Benzene	<0.500		0.500		ug/L			08/01/17 21:53	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 21:53	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 21:53	1
Bromoform	<5.00		5.00		ug/L			08/01/17 21:53	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 21:53	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 21:53	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 21:53	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 21:53	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 21:53	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 21:53	1
Chloroform	<1.00		1.00		ug/L			08/01/17 21:53	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 21:53	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 21:53	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 21:53	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 21:53	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 21:53	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 21:53	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 21:53	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 21:53	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 21:53	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 21:53	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 21:53	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 21:53	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 21:53	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 21:53	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 21:53	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 21:53	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 21:53	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 21:53	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 21:53	1
Hexane	<1.00		1.00		ug/L			08/01/17 21:53	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 21:53	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 21:53	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 21:53	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 21:53	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
Styrene	<1.00		1.00		ug/L			08/01/17 21:53	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 21:53	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: Field Duplicate 01

Date Collected: 07/25/17 12:00
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 21:53	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 21:53	1
Toluene	<1.00		1.00		ug/L			08/01/17 21:53	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 21:53	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 21:53	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 21:53	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 21:53	1
Trichloroethene	<1.00		1.00		ug/L			08/01/17 21:53	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 21:53	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 21:53	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 21:53	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 21:53	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*82 - 122*		*08/01/17 21:53*	*1*
Dibromofluoromethane (Surr)	*98*		*79 - 119*		*08/01/17 21:53*	*1*
Toluene-d8 (Surr)	*96*		*77 - 117*		*08/01/17 21:53*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**73.4**		5.00		mg/L			07/31/17 17:23	5
Chloride	<5.00		5.00		mg/L			07/31/17 17:23	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.643**		0.500		mg/L		07/31/17 10:00	07/31/17 22:17	1
Manganese	**1.99**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/03/17 06:30	08/03/17 08:15	1
Total Organic Carbon	**1.71**		1.00		mg/L			08/03/17 20:47	1
Alkalinity as CaCO3	**484**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**484**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-66

Date Collected: 07/25/17 19:12
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 22:14	1
Benzene	<0.500		0.500		ug/L			08/01/17 22:14	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 22:14	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 22:14	1
Bromoform	<5.00		5.00		ug/L			08/01/17 22:14	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 22:14	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 22:14	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 22:14	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 22:14	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 22:14	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 22:14	1
Chloroform	<1.00		1.00		ug/L			08/01/17 22:14	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 22:14	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 22:14	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 22:14	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 22:14	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 22:14	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 22:14	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 22:14	1
1,1-Dichloroethane	<1.00	F2	1.00		ug/L			08/01/17 22:14	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 22:14	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 22:14	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 22:14	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 22:14	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 22:14	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 22:14	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 22:14	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 22:14	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 22:14	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 22:14	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 22:14	1
Hexane	<1.00		1.00		ug/L			08/01/17 22:14	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 22:14	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 22:14	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 22:14	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 22:14	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
Styrene	<1.00		1.00		ug/L			08/01/17 22:14	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 22:14	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-66

Date Collected: 07/25/17 19:12
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 22:14	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 22:14	1
Toluene	<1.00		1.00		ug/L			08/01/17 22:14	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 22:14	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 22:14	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 22:14	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 22:14	1
Trichloroethene	**7.85**		1.00		ug/L			08/01/17 22:14	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 22:14	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 22:14	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 22:14	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 22:14	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*82 - 122*		*08/01/17 22:14*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 119*		*08/01/17 22:14*	*1*
Toluene-d8 (Surr)	*99*		*77 - 117*		*08/01/17 22:14*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**46.4**		5.00		mg/L			07/31/17 17:40	5
Chloride	<5.00		5.00		mg/L			07/31/17 17:40	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.500		0.500		mg/L		07/31/17 10:00	07/31/17 22:19	1
Manganese	**0.621**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/03/17 06:30	08/03/17 08:15	1
Total Organic Carbon	<1.00		1.00		mg/L			08/03/17 21:02	1
Alkalinity as CaCO3	**443**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**443**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-56D

Date Collected: 07/26/17 12:00
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 22:36	1
Benzene	<0.500		0.500		ug/L			08/01/17 22:36	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 22:36	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 22:36	1
Bromoform	<5.00		5.00		ug/L			08/01/17 22:36	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 22:36	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 22:36	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 22:36	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 22:36	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 22:36	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 22:36	1
Chloroform	<1.00		1.00		ug/L			08/01/17 22:36	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 22:36	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 22:36	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 22:36	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 22:36	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 22:36	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 22:36	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 22:36	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 22:36	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 22:36	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 22:36	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 22:36	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 22:36	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 22:36	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 22:36	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 22:36	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 22:36	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 22:36	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 22:36	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 22:36	1
Hexane	<1.00		1.00		ug/L			08/01/17 22:36	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 22:36	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 22:36	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 22:36	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 22:36	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
Styrene	<1.00		1.00		ug/L			08/01/17 22:36	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 22:36	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-56D

Date Collected: 07/26/17 12:00
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 22:36	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 22:36	1
Toluene	<1.00		1.00		ug/L			08/01/17 22:36	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 22:36	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 22:36	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 22:36	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 22:36	1
Trichloroethene	<1.00		1.00		ug/L			08/01/17 22:36	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 22:36	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 22:36	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 22:36	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 22:36	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*82 - 122*		*08/01/17 22:36*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 119*		*08/01/17 22:36*	*1*
Toluene-d8 (Surr)	*98*		*77 - 117*		*08/01/17 22:36*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**137**		5.00		mg/L			07/31/17 19:05	5
Chloride	<5.00		5.00		mg/L			07/31/17 19:05	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.500		0.500		mg/L		07/31/17 10:00	07/31/17 22:27	1
Manganese	**0.278**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/03/17 06:30	08/03/17 08:15	1
Total Organic Carbon	**2.12**		1.00		mg/L			08/03/17 21:54	1
Alkalinity as CaCO3	**350**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**350**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-65

Date Collected: 07/26/17 14:15
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 22:58	1
Benzene	<0.500		0.500		ug/L			08/01/17 22:58	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 22:58	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 22:58	1
Bromoform	<5.00		5.00		ug/L			08/01/17 22:58	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 22:58	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 22:58	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 22:58	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 22:58	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 22:58	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 22:58	1
Chloroform	<1.00		1.00		ug/L			08/01/17 22:58	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 22:58	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 22:58	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 22:58	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 22:58	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 22:58	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 22:58	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 22:58	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 22:58	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 22:58	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 22:58	1
cis-1,2-Dichloroethene	**760**		1.00		ug/L			08/01/17 22:58	1
trans-1,2-Dichloroethene	**11.3**		1.00		ug/L			08/01/17 22:58	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 22:58	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 22:58	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 22:58	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 22:58	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 22:58	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 22:58	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 22:58	1
Hexane	<1.00		1.00		ug/L			08/01/17 22:58	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 22:58	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 22:58	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 22:58	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 22:58	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
Styrene	<1.00		1.00		ug/L			08/01/17 22:58	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 22:58	1

Client Sample ID: MW-65

Date Collected: 07/26/17 14:15
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 22:58	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 22:58	1
Toluene	<1.00		1.00		ug/L			08/01/17 22:58	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 22:58	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 22:58	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 22:58	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 22:58	1
Trichloroethene	**1670**		20.0		ug/L			08/03/17 08:49	20
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 22:58	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 22:58	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 22:58	1
Vinyl chloride	**1.53**		1.00		ug/L			08/01/17 22:58	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*82 - 122*		*08/01/17 22:58*	*1*
4-Bromofluorobenzene (Surr)	*101*		*82 - 122*		*08/03/17 08:49*	*20*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/01/17 22:58*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 119*		*08/03/17 08:49*	*20*
Toluene-d8 (Surr)	*97*		*77 - 117*		*08/01/17 22:58*	*1*
Toluene-d8 (Surr)	*97*		*77 - 117*		*08/03/17 08:49*	*20*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.00		5.00		mg/L			07/31/17 19:22	5
Chloride	<5.00		5.00		mg/L			07/31/17 19:22	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.84**		0.500		mg/L		07/31/17 10:00	07/31/17 22:29	1
Manganese	**0.299**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/03/17 06:30	08/03/17 08:15	1
Total Organic Carbon	**3.74**		1.00		mg/L			08/03/17 22:11	1
Alkalinity as CaCO3	**567**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**567**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-43D

Date Collected: 07/26/17 18:20
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 23:20	1
Benzene	<0.500		0.500		ug/L			08/01/17 23:20	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 23:20	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 23:20	1
Bromoform	<5.00		5.00		ug/L			08/01/17 23:20	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 23:20	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 23:20	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 23:20	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 23:20	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 23:20	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 23:20	1
Chloroform	<1.00		1.00		ug/L			08/01/17 23:20	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 23:20	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 23:20	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 23:20	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 23:20	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 23:20	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 23:20	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 23:20	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 23:20	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 23:20	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 23:20	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 23:20	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 23:20	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 23:20	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 23:20	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 23:20	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 23:20	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 23:20	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 23:20	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 23:20	1
Hexane	<1.00		1.00		ug/L			08/01/17 23:20	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 23:20	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 23:20	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 23:20	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 23:20	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
Styrene	<1.00		1.00		ug/L			08/01/17 23:20	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 23:20	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-43D

Date Collected: 07/26/17 18:20
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 23:20	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 23:20	1
Toluene	<1.00		1.00		ug/L			08/01/17 23:20	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 23:20	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 23:20	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 23:20	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 23:20	1
Trichloroethene	<1.00		1.00		ug/L			08/02/17 09:12	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 23:20	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 23:20	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 23:20	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 23:20	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*82 - 122*		*08/01/17 23:20*	*1*
4-Bromofluorobenzene (Surr)	*108*		*82 - 122*		*08/02/17 09:12*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 119*		*08/01/17 23:20*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/02/17 09:12*	*1*
Toluene-d8 (Surr)	*98*		*77 - 117*		*08/01/17 23:20*	*1*
Toluene-d8 (Surr)	*93*		*77 - 117*		*08/02/17 09:12*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**15.4**		5.00		mg/L			07/31/17 19:39	5
Chloride	**9.54**		5.00		mg/L			07/31/17 19:39	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.500		0.500		mg/L		07/31/17 10:00	07/31/17 22:35	1
Manganese	**0.676**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/03/17 06:30	08/03/17 08:15	1
Total Organic Carbon	**1.48**		1.00		mg/L			08/03/17 22:28	1
Alkalinity as CaCO3	**386**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**386**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-57

Date Collected: 07/26/17 21:05
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 23:41	1
Benzene	<0.500		0.500		ug/L			08/01/17 23:41	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 23:41	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 23:41	1
Bromoform	<5.00		5.00		ug/L			08/01/17 23:41	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 23:41	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 23:41	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 23:41	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 23:41	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 23:41	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 23:41	1
Chloroform	<1.00		1.00		ug/L			08/01/17 23:41	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 23:41	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 23:41	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 23:41	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 23:41	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 23:41	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 23:41	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 23:41	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 23:41	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 23:41	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 23:41	1
cis-1,2-Dichloroethene	**6.53**		1.00		ug/L			08/01/17 23:41	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 23:41	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 23:41	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 23:41	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 23:41	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 23:41	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 23:41	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 23:41	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 23:41	1
Hexane	<1.00		1.00		ug/L			08/01/17 23:41	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 23:41	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 23:41	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 23:41	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 23:41	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
Styrene	<1.00		1.00		ug/L			08/01/17 23:41	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 23:41	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-57

Date Collected: 07/26/17 21:05
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 23:41	1
Tetrachloroethene	**1.02**		1.00		ug/L			08/01/17 23:41	1
Toluene	<1.00		1.00		ug/L			08/01/17 23:41	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 23:41	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 23:41	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 23:41	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 23:41	1
Trichloroethene	**919**		10.0		ug/L			08/02/17 10:23	10
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 23:41	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 23:41	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 23:41	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 23:41	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*		*08/01/17 23:41*	*1*
4-Bromofluorobenzene (Surr)	*105*		*82 - 122*		*08/02/17 10:23*	*10*
Dibromofluoromethane (Surr)	*102*		*79 - 119*		*08/01/17 23:41*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/02/17 10:23*	*10*
Toluene-d8 (Surr)	*97*		*77 - 117*		*08/01/17 23:41*	*1*
Toluene-d8 (Surr)	*94*		*77 - 117*		*08/02/17 10:23*	*10*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**55.2**		5.00		mg/L			07/31/17 19:56	5
Chloride	**17.4**		5.00		mg/L			07/31/17 19:56	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.33**		0.500		mg/L		07/31/17 10:00	07/31/17 22:37	1
Manganese	**0.619**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	H	5.00		mg/L		08/03/17 06:30	08/03/17 08:15	1
Total Organic Carbon	**2.02**		1.00		mg/L			08/03/17 22:44	1
Alkalinity as CaCO3	**391**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**391**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-47D

Date Collected: 07/27/17 10:20
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/02/17 00:03	1
Benzene	<0.500		0.500		ug/L			08/02/17 00:03	1
Bromobenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
Bromochloromethane	<5.00		5.00		ug/L			08/02/17 00:03	1
Bromodichloromethane	<1.00		1.00		ug/L			08/02/17 00:03	1
Bromoform	<5.00		5.00		ug/L			08/02/17 00:03	1
Bromomethane	<4.00		4.00		ug/L			08/02/17 00:03	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/02/17 00:03	1
n-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
Carbon disulfide	<1.00		1.00		ug/L			08/02/17 00:03	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/02/17 00:03	1
Chlorobenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/02/17 00:03	1
Chloroethane	<4.00		4.00		ug/L			08/02/17 00:03	1
Chloroform	<1.00		1.00		ug/L			08/02/17 00:03	1
Chloromethane	<3.00		3.00		ug/L			08/02/17 00:03	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/02/17 00:03	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/02/17 00:03	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/02/17 00:03	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/02/17 00:03	1
Dibromomethane	<1.00		1.00		ug/L			08/02/17 00:03	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/02/17 00:03	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/02/17 00:03	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/02/17 00:03	1
1,1-Dichloroethene	**158**		2.00		ug/L			08/02/17 00:03	1
cis-1,2-Dichloroethene	**94400**		1000		ug/L			08/03/17 09:10	1000
trans-1,2-Dichloroethene	**417**		100		ug/L			08/02/17 11:34	100
1,2-Dichloropropane	<1.00		1.00		ug/L			08/02/17 00:03	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/02/17 00:03	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/02/17 00:03	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/02/17 00:03	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/02/17 00:03	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/02/17 00:03	1
Ethylbenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/02/17 00:03	1
Hexane	<1.00		1.00		ug/L			08/02/17 00:03	1
Isopropylbenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/02/17 00:03	1
Methylene Chloride	<5.00		5.00		ug/L			08/02/17 00:03	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/02/17 00:03	1
Naphthalene	<5.00		5.00		ug/L			08/02/17 00:03	1
N-Propylbenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
Styrene	<1.00		1.00		ug/L			08/02/17 00:03	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/02/17 00:03	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-47D

Date Collected: 07/27/17 10:20
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/02/17 00:03	1
Tetrachloroethene	**3.91**		1.00		ug/L			08/02/17 00:03	1
Toluene	<1.00		1.00		ug/L			08/02/17 00:03	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/02/17 00:03	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/02/17 00:03	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/02/17 00:03	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/02/17 00:03	1
Trichloroethene	**25800**		100		ug/L			08/02/17 11:34	100
Trichlorofluoromethane	<4.00		4.00		ug/L			08/02/17 00:03	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/02/17 00:03	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/02/17 00:03	1
Vinyl chloride	**1500**		100		ug/L			08/02/17 11:34	100
Xylenes, Total	<3.00		3.00		ug/L			08/02/17 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*82 - 122*		*08/02/17 00:03*	*1*
4-Bromofluorobenzene (Surr)	*107*		*82 - 122*		*08/02/17 11:34*	*100*
4-Bromofluorobenzene (Surr)	*112*		*82 - 122*		*08/03/17 09:10*	*1000*
Dibromofluoromethane (Surr)	*80*		*79 - 119*		*08/02/17 00:03*	*1*
Dibromofluoromethane (Surr)	*104*		*79 - 119*		*08/02/17 11:34*	*100*
Dibromofluoromethane (Surr)	*112*		*79 - 119*		*08/03/17 09:10*	*1000*
Toluene-d8 (Surr)	*103*		*77 - 117*		*08/02/17 00:03*	*1*
Toluene-d8 (Surr)	*94*		*77 - 117*		*08/02/17 11:34*	*100*
Toluene-d8 (Surr)	*102*		*77 - 117*		*08/03/17 09:10*	*1000*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**9.29**		5.00		mg/L			07/31/17 20:13	5
Chloride	**228**		5.00		mg/L			07/31/17 20:13	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5.60**		0.500		mg/L		07/31/17 10:00	07/31/17 22:39	1
Manganese	**0.755**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00		5.00		mg/L		08/03/17 06:15	08/03/17 08:15	1
Total Organic Carbon	**3.12**		1.00		mg/L			08/03/17 23:02	1
Alkalinity as CaCO3	**391**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**391**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-46

Date Collected: 07/27/17 12:05
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/02/17 00:24	1
Benzene	<0.500		0.500		ug/L			08/02/17 00:24	1
Bromobenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
Bromochloromethane	<5.00		5.00		ug/L			08/02/17 00:24	1
Bromodichloromethane	<1.00		1.00		ug/L			08/02/17 00:24	1
Bromoform	<5.00		5.00		ug/L			08/02/17 00:24	1
Bromomethane	<4.00		4.00		ug/L			08/02/17 00:24	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/02/17 00:24	1
n-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
Carbon disulfide	<1.00		1.00		ug/L			08/02/17 00:24	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/02/17 00:24	1
Chlorobenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/02/17 00:24	1
Chloroethane	<4.00		4.00		ug/L			08/02/17 00:24	1
Chloroform	<1.00		1.00		ug/L			08/02/17 00:24	1
Chloromethane	<3.00		3.00		ug/L			08/02/17 00:24	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/02/17 00:24	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/02/17 00:24	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/02/17 00:24	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/02/17 00:24	1
Dibromomethane	<1.00		1.00		ug/L			08/02/17 00:24	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/02/17 00:24	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/02/17 00:24	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/02/17 00:24	1
1,1-Dichloroethene	**12.3**		2.00		ug/L			08/02/17 00:24	1
cis-1,2-Dichloroethene	**1230**		10.0		ug/L			08/02/17 10:46	10
trans-1,2-Dichloroethene	**15.3**		10.0		ug/L			08/02/17 10:46	10
1,2-Dichloropropane	<1.00		1.00		ug/L			08/02/17 00:24	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/02/17 00:24	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/02/17 00:24	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/02/17 00:24	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/02/17 00:24	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/02/17 00:24	1
Ethylbenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/02/17 00:24	1
Hexane	<1.00		1.00		ug/L			08/02/17 00:24	1
Isopropylbenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/02/17 00:24	1
Methylene Chloride	<5.00		5.00		ug/L			08/02/17 00:24	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/02/17 00:24	1
Naphthalene	<5.00		5.00		ug/L			08/02/17 00:24	1
N-Propylbenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
Styrene	<1.00		1.00		ug/L			08/02/17 00:24	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/02/17 00:24	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-46

Date Collected: 07/27/17 12:05
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/02/17 00:24	1
Tetrachloroethene	**23.4**		1.00		ug/L			08/02/17 00:24	1
Toluene	<1.00		1.00		ug/L			08/02/17 00:24	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/02/17 00:24	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/02/17 00:24	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/02/17 00:24	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/02/17 00:24	1
Trichloroethene	**19700**		1000		ug/L			08/03/17 09:32	1000
Trichlorofluoromethane	<4.00		4.00		ug/L			08/02/17 00:24	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/02/17 00:24	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/02/17 00:24	1
Vinyl chloride	<10.0		10.0		ug/L			08/02/17 10:46	10
Xylenes, Total	<3.00		3.00		ug/L			08/02/17 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*		*08/02/17 00:24*	*1*
4-Bromofluorobenzene (Surr)	*106*		*82 - 122*		*08/02/17 10:46*	*10*
4-Bromofluorobenzene (Surr)	*105*		*82 - 122*		*08/03/17 09:32*	*1000*
Dibromofluoromethane (Surr)	*106*		*79 - 119*		*08/02/17 00:24*	*1*
Dibromofluoromethane (Surr)	*104*		*79 - 119*		*08/02/17 10:46*	*10*
Dibromofluoromethane (Surr)	*98*		*79 - 119*		*08/03/17 09:32*	*1000*
Toluene-d8 (Surr)	*101*		*77 - 117*		*08/02/17 00:24*	*1*
Toluene-d8 (Surr)	*96*		*77 - 117*		*08/02/17 10:46*	*10*
Toluene-d8 (Surr)	*95*		*77 - 117*		*08/03/17 09:32*	*1000*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**24.1**		5.00		mg/L			07/31/17 20:30	5
Chloride	<5.00		5.00		mg/L			07/31/17 20:30	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.500		0.500		mg/L		07/31/17 10:00	07/31/17 22:41	1
Manganese	**0.792**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00		5.00		mg/L		08/03/17 06:15	08/03/17 08:15	1
Total Organic Carbon	**1.16**		1.00		mg/L			08/03/17 23:51	1
Alkalinity as CaCO3	**427**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**427**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-56S

Date Collected: 07/27/17 13:50
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/02/17 00:46	1
Benzene	<0.500		0.500		ug/L			08/02/17 00:46	1
Bromobenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
Bromochloromethane	<5.00		5.00		ug/L			08/02/17 00:46	1
Bromodichloromethane	<1.00		1.00		ug/L			08/02/17 00:46	1
Bromoform	<5.00		5.00		ug/L			08/02/17 00:46	1
Bromomethane	<4.00		4.00		ug/L			08/02/17 00:46	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/02/17 00:46	1
n-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
Carbon disulfide	<1.00		1.00		ug/L			08/02/17 00:46	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/02/17 00:46	1
Chlorobenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/02/17 00:46	1
Chloroethane	<4.00		4.00		ug/L			08/02/17 00:46	1
Chloroform	<1.00		1.00		ug/L			08/02/17 00:46	1
Chloromethane	<3.00		3.00		ug/L			08/02/17 00:46	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/02/17 00:46	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/02/17 00:46	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/02/17 00:46	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/02/17 00:46	1
Dibromomethane	<1.00		1.00		ug/L			08/02/17 00:46	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/02/17 00:46	1
1,1-Dichloroethane	**3.08**		1.00		ug/L			08/02/17 09:36	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/02/17 00:46	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/02/17 00:46	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/02/17 09:36	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/02/17 00:46	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/02/17 00:46	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/02/17 00:46	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/02/17 00:46	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/02/17 00:46	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/02/17 00:46	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/02/17 00:46	1
Ethylbenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/02/17 00:46	1
Hexane	<1.00		1.00		ug/L			08/02/17 00:46	1
Isopropylbenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/02/17 00:46	1
Methylene Chloride	<5.00		5.00		ug/L			08/02/17 00:46	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/02/17 00:46	1
Naphthalene	<5.00		5.00		ug/L			08/02/17 00:46	1
N-Propylbenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
Styrene	<1.00		1.00		ug/L			08/02/17 00:46	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/02/17 00:46	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-56S

Date Collected: 07/27/17 13:50
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/02/17 00:46	1
Tetrachloroethene	<1.00		1.00		ug/L			08/02/17 00:46	1
Toluene	<1.00		1.00		ug/L			08/02/17 00:46	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/02/17 00:46	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/02/17 00:46	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/02/17 00:46	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/02/17 00:46	1
Trichloroethene	**1.74**		1.00		ug/L			08/02/17 09:36	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/02/17 00:46	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/02/17 00:46	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/02/17 00:46	1
Vinyl chloride	<1.00		1.00		ug/L			08/02/17 00:46	1
Xylenes, Total	<3.00		3.00		ug/L			08/02/17 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*82 - 122*		*08/02/17 00:46*	*1*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*		*08/02/17 09:36*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 119*		*08/02/17 00:46*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 119*		*08/02/17 09:36*	*1*
Toluene-d8 (Surr)	*97*		*77 - 117*		*08/02/17 00:46*	*1*
Toluene-d8 (Surr)	*97*		*77 - 117*		*08/02/17 09:36*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**22.1**		5.00		mg/L			07/31/17 20:47	5
Chloride	**6.80**		5.00		mg/L			07/31/17 20:47	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.500		0.500		mg/L		07/31/17 10:00	07/31/17 22:44	1
Manganese	**0.203**		0.0100		mg/L		07/31/17 10:00	07/31/17 22:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00		5.00		mg/L		08/03/17 06:15	08/03/17 08:15	1
Total Organic Carbon	**2.47**		1.00		mg/L			08/04/17 00:06	1
Alkalinity as CaCO3	**355**		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	**355**		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: Field Blank

Date Collected: 07/27/17 13:15
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 19:00	1
Benzene	<0.500		0.500		ug/L			08/01/17 19:00	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 19:00	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 19:00	1
Bromoform	<5.00		5.00		ug/L			08/01/17 19:00	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 19:00	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 19:00	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 19:00	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 19:00	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 19:00	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 19:00	1
Chloroform	<1.00		1.00		ug/L			08/01/17 19:00	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 19:00	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 19:00	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 19:00	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 19:00	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 19:00	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 19:00	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 19:00	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 19:00	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 19:00	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 19:00	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 19:00	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 19:00	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 19:00	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 19:00	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 19:00	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 19:00	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 19:00	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 19:00	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 19:00	1
Hexane	<1.00		1.00		ug/L			08/01/17 19:00	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 19:00	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 19:00	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 19:00	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 19:00	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
Styrene	<1.00		1.00		ug/L			08/01/17 19:00	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 19:00	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: Field Blank

Date Collected: 07/27/17 13:15
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 19:00	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 19:00	1
Toluene	<1.00		1.00		ug/L			08/01/17 19:00	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 19:00	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 19:00	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 19:00	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 19:00	1
Trichloroethene	<1.00		1.00		ug/L			08/01/17 19:00	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 19:00	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 19:00	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 19:00	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 19:00	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*82 - 122*		*08/01/17 19:00*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 119*		*08/01/17 19:00*	*1*
Toluene-d8 (Surr)	*95*		*77 - 117*		*08/01/17 19:00*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.00		1.00		mg/L			07/31/17 21:04	1
Chloride	<1.00		1.00		mg/L			07/31/17 21:04	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.500		0.500		mg/L		07/31/17 10:00	07/31/17 22:46	1
Manganese	<0.0100		0.0100		mg/L		07/31/17 10:00	07/31/17 22:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	<5.00		5.00		mg/L			08/02/17 16:41	1
Sulfide	<5.00		5.00		mg/L		08/03/17 06:15	08/03/17 08:15	1
Total Organic Carbon	<1.00		1.00		mg/L			08/04/17 00:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: Trip Blank

Date Collected: 07/25/17 00:00
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 18:39	1
Benzene	<0.500		0.500		ug/L			08/01/17 18:39	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 18:39	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 18:39	1
Bromoform	<5.00		5.00		ug/L			08/01/17 18:39	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 18:39	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 18:39	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 18:39	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 18:39	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 18:39	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 18:39	1
Chloroform	<1.00		1.00		ug/L			08/01/17 18:39	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 18:39	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 18:39	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 18:39	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 18:39	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 18:39	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 18:39	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 18:39	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 18:39	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 18:39	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 18:39	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 18:39	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 18:39	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 18:39	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 18:39	1
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 18:39	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 18:39	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 18:39	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 18:39	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 18:39	1
Hexane	<1.00		1.00		ug/L			08/01/17 18:39	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 18:39	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 18:39	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 18:39	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 18:39	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
Styrene	<1.00		1.00		ug/L			08/01/17 18:39	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 18:39	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: Trip Blank

Date Collected: 07/25/17 00:00
Date Received: 07/27/17 18:00

Lab Sample ID: 310-110886-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 18:39	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 18:39	1
Toluene	<1.00		1.00		ug/L			08/01/17 18:39	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 18:39	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 18:39	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 18:39	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 18:39	1
Trichloroethene	<1.00		1.00		ug/L			08/01/17 18:39	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 18:39	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 18:39	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 18:39	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 18:39	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*		*08/01/17 18:39*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 119*		*08/01/17 18:39*	*1*
Toluene-d8 (Surr)	*98*		*77 - 117*		*08/01/17 18:39*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds 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.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(82-122)	(79-119)	(77-117)
310-110886-1	MW-67	110	97	99
310-110886-2	Field Duplicate 01	107	98	96
310-110886-3	MW-66	107	100	99
310-110886-3 MS	MW-66	98	103	102
310-110886-3 MSD	MW-66	105	103	101
310-110886-4	MW-56D	108	100	98
310-110886-5	MW-65	106	103	97
310-110886-5	MW-65	101	102	97
310-110886-5 MS	MW-65	105	102	101
310-110886-5 MSD	MW-65	105	102	102
310-110886-6	MW-43D	108	103	93
310-110886-6	MW-43D	100	100	98
310-110886-7	MW-57	105	103	94
310-110886-7	MW-57	103	102	97
310-110886-8	MW-47D	107	104	94
310-110886-8	MW-47D	108	80	103
310-110886-8	MW-47D	112	112	102
310-110886-8 MS	MW-47D	99	104	94
310-110886-8 MSD	MW-47D	100	105	95
310-110886-9	MW-46	106	104	96
310-110886-9	MW-46	103	106	101
310-110886-9	MW-46	105	98	95
310-110886-10	MW-56S	103	102	97
310-110886-10	MW-56S	106	100	97
310-110886-11	Field Blank	101	100	95
310-110886-12	Trip Blank	103	100	98
LCS 310-174001/6	Lab Control Sample	106	104	95
LCS 310-174117/5	Lab Control Sample	104	103	100
LCS 310-174117/6	Lab Control Sample	107	97	96
LCS 310-174292/5	Lab Control Sample	103	104	98
MB 310-174001/8	Method Blank	108	103	95
MB 310-174117/7	Method Blank	106	100	100
MB 310-174292/7	Method Blank	104	104	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-174001/8
Matrix: Water
Analysis Batch: 174001

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.00		1.00		ug/L			08/02/17 08:48	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/02/17 08:48	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/02/17 08:48	1
Trichloroethene	<1.00		1.00		ug/L			08/02/17 08:48	1
Vinyl chloride	<1.00		1.00		ug/L			08/02/17 08:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*82 - 122*		*08/02/17 08:48*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 119*		*08/02/17 08:48*	*1*
Toluene-d8 (Surr)	*95*		*77 - 117*		*08/02/17 08:48*	*1*

Lab Sample ID: LCS 310-174001/6
Matrix: Water
Analysis Batch: 174001

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	20.0	22.01		ug/L		110	71 - 135
cis-1,2-Dichloroethene	20.0	20.85		ug/L		104	72 - 130
trans-1,2-Dichloroethene	20.0	21.12		ug/L		106	73 - 132
Trichloroethene	20.0	21.69		ug/L		108	73 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*82 - 122*
Dibromofluoromethane (Surr)	*104*		*79 - 119*
Toluene-d8 (Surr)	*95*		*77 - 117*

Lab Sample ID: 310-110886-8 MS
Matrix: Water
Analysis Batch: 174001

Client Sample ID: MW-47D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	<100		2000	2269		ug/L		113	56 - 135
cis-1,2-Dichloroethene	117000	E	2000	105000	E 4	ug/L		-580	57 - 130
trans-1,2-Dichloroethene	417		2000	2563		ug/L		107	55 - 132
Trichloroethene	25800		2000	25200	4	ug/L		-29	49 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*82 - 122*
Dibromofluoromethane (Surr)	*104*		*79 - 119*
Toluene-d8 (Surr)	*94*		*77 - 117*

Lab Sample ID: 310-110886-8 MSD
Matrix: Water
Analysis Batch: 174001

Client Sample ID: MW-47D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	<100		2000	2270		ug/L		114	56 - 135	0	17

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-110886-8 MSD
Matrix: Water
Analysis Batch: 174001

Client Sample ID: MW-47D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	117000	E	2000	102500	E 4	ug/L		-705	57 - 130	2	16
trans-1,2-Dichloroethene	417		2000	2593		ug/L		109	55 - 132	1	20
Trichloroethene	25800		2000	24490	4	ug/L		-64	49 - 132	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*82 - 122*
Dibromofluoromethane (Surr)	*105*		*79 - 119*
Toluene-d8 (Surr)	*95*		*77 - 117*

Lab Sample ID: MB 310-174117/7
Matrix: Water
Analysis Batch: 174117

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			08/01/17 18:17	1
Benzene	<0.500		0.500		ug/L			08/01/17 18:17	1
Bromobenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
Bromochloromethane	<5.00		5.00		ug/L			08/01/17 18:17	1
Bromodichloromethane	<1.00		1.00		ug/L			08/01/17 18:17	1
Bromoform	<5.00		5.00		ug/L			08/01/17 18:17	1
Bromomethane	<4.00		4.00		ug/L			08/01/17 18:17	1
2-Butanone (MEK)	<10.0		10.0		ug/L			08/01/17 18:17	1
n-Butylbenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
sec-Butylbenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
tert-Butylbenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
Carbon disulfide	<1.00		1.00		ug/L			08/01/17 18:17	1
Carbon tetrachloride	<2.00		2.00		ug/L			08/01/17 18:17	1
Chlorobenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
Chlorodibromomethane	<5.00		5.00		ug/L			08/01/17 18:17	1
Chloroethane	<4.00		4.00		ug/L			08/01/17 18:17	1
Chloroform	<1.00		1.00		ug/L			08/01/17 18:17	1
Chloromethane	<3.00		3.00		ug/L			08/01/17 18:17	1
2-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 18:17	1
4-Chlorotoluene	<1.00		1.00		ug/L			08/01/17 18:17	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			08/01/17 18:17	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			08/01/17 18:17	1
Dibromomethane	<1.00		1.00		ug/L			08/01/17 18:17	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
1,3-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
Dichlorodifluoromethane	<3.00		3.00		ug/L			08/01/17 18:17	1
1,1-Dichloroethane	<1.00		1.00		ug/L			08/01/17 18:17	1
1,2-Dichloroethane	<1.00		1.00		ug/L			08/01/17 18:17	1
1,1-Dichloroethene	<2.00		2.00		ug/L			08/01/17 18:17	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 18:17	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			08/01/17 18:17	1
1,2-Dichloropropane	<1.00		1.00		ug/L			08/01/17 18:17	1
1,3-Dichloropropane	<1.00		1.00		ug/L			08/01/17 18:17	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-174117/7
Matrix: Water
Analysis Batch: 174117

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	<4.00		4.00		ug/L			08/01/17 18:17	1
1,1-Dichloropropene	<1.00		1.00		ug/L			08/01/17 18:17	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 18:17	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			08/01/17 18:17	1
Ethylbenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
Hexachlorobutadiene	<5.00		5.00		ug/L			08/01/17 18:17	1
Hexane	<1.00		1.00		ug/L			08/01/17 18:17	1
Isopropylbenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
p-Isopropyltoluene	<1.00		1.00		ug/L			08/01/17 18:17	1
Methylene Chloride	<5.00		5.00		ug/L			08/01/17 18:17	1
Methyl tert-butyl ether	<1.00		1.00		ug/L			08/01/17 18:17	1
Naphthalene	<5.00		5.00		ug/L			08/01/17 18:17	1
N-Propylbenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
Styrene	<1.00		1.00		ug/L			08/01/17 18:17	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 18:17	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			08/01/17 18:17	1
Tetrachloroethene	<1.00		1.00		ug/L			08/01/17 18:17	1
Toluene	<1.00		1.00		ug/L			08/01/17 18:17	1
1,2,3-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 18:17	1
1,2,4-Trichlorobenzene	<5.00		5.00		ug/L			08/01/17 18:17	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			08/01/17 18:17	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			08/01/17 18:17	1
Trichloroethene	<1.00		1.00		ug/L			08/01/17 18:17	1
Trichlorofluoromethane	<4.00		4.00		ug/L			08/01/17 18:17	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			08/01/17 18:17	1
1,2,4-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
1,3,5-Trimethylbenzene	<1.00		1.00		ug/L			08/01/17 18:17	1
Vinyl chloride	<1.00		1.00		ug/L			08/01/17 18:17	1
Xylenes, Total	<3.00		3.00		ug/L			08/01/17 18:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*82 - 122*		*08/01/17 18:17*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 119*		*08/01/17 18:17*	*1*
Toluene-d8 (Surr)	*100*		*77 - 117*		*08/01/17 18:17*	*1*

Lab Sample ID: LCS 310-174117/5
Matrix: Water
Analysis Batch: 174117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	33.80		ug/L		84	55 - 150
Benzene	20.0	18.76		ug/L		94	74 - 127
Bromobenzene	20.0	17.11		ug/L		86	72 - 122
Bromochloromethane	20.0	17.58		ug/L		88	73 - 142
Bromodichloromethane	20.0	16.82		ug/L		84	71 - 118
Bromoform	20.0	14.38		ug/L		72	56 - 123
2-Butanone (MEK)	40.0	33.94		ug/L		85	51 - 150
n-Butylbenzene	20.0	19.18		ug/L		96	62 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-174117/5
Matrix: Water
Analysis Batch: 174117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
sec-Butylbenzene	20.0	16.34		ug/L		82	61 - 133
tert-Butylbenzene	20.0	17.44		ug/L		87	64 - 128
Carbon disulfide	20.0	18.77		ug/L		94	63 - 132
Carbon tetrachloride	20.0	18.77		ug/L		94	71 - 131
Chlorobenzene	20.0	18.22		ug/L		91	74 - 120
Chlorodibromomethane	20.0	16.03		ug/L		80	59 - 125
Chloroform	20.0	19.31		ug/L		97	72 - 129
2-Chlorotoluene	20.0	17.96		ug/L		90	67 - 127
4-Chlorotoluene	20.0	17.34		ug/L		87	69 - 123
1,2-Dibromo-3-Chloropropane	20.0	16.44		ug/L		82	45 - 131
1,2-Dibromoethane (EDB)	20.0	17.44		ug/L		87	69 - 127
Dibromomethane	20.0	17.92		ug/L		90	72 - 135
1,2-Dichlorobenzene	20.0	17.43		ug/L		87	68 - 121
1,3-Dichlorobenzene	20.0	16.10		ug/L		81	66 - 128
1,4-Dichlorobenzene	20.0	17.15		ug/L		86	67 - 120
1,1-Dichloroethane	20.0	19.37		ug/L		97	71 - 135
1,2-Dichloroethane	20.0	18.54		ug/L		93	71 - 131
1,1-Dichloroethene	20.0	19.38		ug/L		97	71 - 137
cis-1,2-Dichloroethene	20.0	18.97		ug/L		95	72 - 130
trans-1,2-Dichloroethene	20.0	18.78		ug/L		94	73 - 132
1,2-Dichloropropane	20.0	19.01		ug/L		95	72 - 126
1,3-Dichloropropane	20.0	17.69		ug/L		88	73 - 129
2,2-Dichloropropane	20.0	19.08		ug/L		95	50 - 150
1,1-Dichloropropene	20.0	20.70		ug/L		104	72 - 131
cis-1,3-Dichloropropene	20.0	17.97		ug/L		90	66 - 124
trans-1,3-Dichloropropene	20.0	17.19		ug/L		86	59 - 129
Ethylbenzene	20.0	19.39		ug/L		97	71 - 122
Hexachlorobutadiene	20.0	18.02		ug/L		90	62 - 134
Hexane	20.0	17.03		ug/L		85	50 - 150
Isopropylbenzene	20.0	18.55		ug/L		93	70 - 125
p-Isopropyltoluene	20.0	18.92		ug/L		95	65 - 124
Methylene Chloride	20.0	18.90		ug/L		95	66 - 129
Methyl tert-butyl ether	20.0	18.08		ug/L		90	72 - 128
Naphthalene	20.0	16.55		ug/L		83	50 - 129
N-Propylbenzene	20.0	17.95		ug/L		90	70 - 125
Styrene	20.0	17.56		ug/L		88	71 - 121
1,1,1,2-Tetrachloroethane	20.0	18.54		ug/L		93	72 - 117
1,1,2,2-Tetrachloroethane	20.0	16.23		ug/L		81	62 - 123
Tetrachloroethene	20.0	19.08		ug/L		95	68 - 138
Toluene	20.0	18.80		ug/L		94	69 - 128
1,2,3-Trichlorobenzene	20.0	16.72		ug/L		84	62 - 131
1,2,4-Trichlorobenzene	20.0	16.57		ug/L		83	61 - 127
1,1,1-Trichloroethane	20.0	20.38		ug/L		102	73 - 132
1,1,2-Trichloroethane	20.0	17.76		ug/L		89	65 - 131
Trichloroethene	20.0	18.74		ug/L		94	73 - 132
1,2,3-Trichloropropane	20.0	16.22		ug/L		81	66 - 124
1,2,4-Trimethylbenzene	20.0	16.90		ug/L		85	66 - 126
1,3,5-Trimethylbenzene	20.0	17.35		ug/L		87	69 - 128

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-174117/5
Matrix: Water
Analysis Batch: 174117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	40.0	36.66		ug/L		92	72 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*82 - 122*
Dibromofluoromethane (Surr)	*103*		*79 - 119*
Toluene-d8 (Surr)	*100*		*77 - 117*

Lab Sample ID: LCS 310-174117/6
Matrix: Water
Analysis Batch: 174117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	20.0	13.86		ug/L		69	18 - 128
Chloroethane	20.0	22.76		ug/L		114	66 - 140
Chloromethane	20.0	21.35		ug/L		107	55 - 141
Dichlorodifluoromethane	20.0	23.73		ug/L		119	49 - 150
Trichlorofluoromethane	20.0	24.19		ug/L		121	69 - 139
Vinyl chloride	20.0	22.47		ug/L		112	67 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*82 - 122*
Dibromofluoromethane (Surr)	*97*		*79 - 119*
Toluene-d8 (Surr)	*96*		*77 - 117*

Lab Sample ID: 310-110886-3 MS
Matrix: Water
Analysis Batch: 174117

Client Sample ID: MW-66
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	<10.0		40.0	30.70		ug/L		68	36 - 150
Benzene	<0.500		20.0	14.78		ug/L		74	53 - 128
Bromobenzene	<1.00		20.0	16.46		ug/L		82	54 - 123
Bromochloromethane	<5.00		20.0	16.95		ug/L		85	60 - 142
Bromodichloromethane	<1.00		20.0	15.79		ug/L		79	56 - 119
Bromoform	<5.00		20.0	13.84		ug/L		69	42 - 123
2-Butanone (MEK)	<10.0		40.0	32.07		ug/L		80	38 - 150
n-Butylbenzene	<1.00		20.0	9.866		ug/L		49	31 - 126
sec-Butylbenzene	<1.00		20.0	9.221		ug/L		46	28 - 133
tert-Butylbenzene	<1.00		20.0	10.16		ug/L		51	38 - 128
Carbon disulfide	<1.00		20.0	10.80		ug/L		53	41 - 132
Carbon tetrachloride	<2.00		20.0	9.564		ug/L		48	40 - 131
Chlorobenzene	<1.00		20.0	15.52		ug/L		78	57 - 120
Chlorodibromomethane	<5.00		20.0	15.07		ug/L		75	46 - 125
Chloroform	<1.00		20.0	16.13		ug/L		81	53 - 130
2-Chlorotoluene	<1.00		20.0	14.37		ug/L		72	45 - 127
4-Chlorotoluene	<1.00		20.0	14.50		ug/L		72	47 - 123
1,2-Dibromo-3-Chloropropane	<5.00		20.0	14.67		ug/L		73	28 - 143
1,2-Dibromoethane (EDB)	<1.00		20.0	16.64		ug/L		83	54 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-110886-3 MS
Matrix: Water
Analysis Batch: 174117

Client Sample ID: MW-66
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	<1.00		20.0	17.58		ug/L		88	60 - 135
1,2-Dichlorobenzene	<1.00		20.0	17.00		ug/L		85	50 - 122
1,3-Dichlorobenzene	<1.00		20.0	15.71		ug/L		79	47 - 128
1,4-Dichlorobenzene	<1.00		20.0	16.40		ug/L		82	50 - 120
1,1-Dichloroethane	<1.00	F2	20.0	14.87		ug/L		74	56 - 135
1,2-Dichloroethane	<1.00		20.0	17.50		ug/L		88	52 - 138
1,1-Dichloroethene	<2.00		20.0	10.78		ug/L		54	46 - 137
cis-1,2-Dichloroethene	<1.00		20.0	17.94		ug/L		90	57 - 130
trans-1,2-Dichloroethene	<1.00		20.0	12.92		ug/L		65	55 - 132
1,2-Dichloropropane	<1.00		20.0	16.89		ug/L		84	57 - 127
1,3-Dichloropropane	<1.00		20.0	17.74		ug/L		89	59 - 133
2,2-Dichloropropane	<4.00		20.0	10.46		ug/L		52	32 - 150
1,1-Dichloropropene	<1.00		20.0	10.85		ug/L		54	45 - 131
cis-1,3-Dichloropropene	<5.00		20.0	15.46		ug/L		77	51 - 124
trans-1,3-Dichloropropene	<5.00		20.0	15.45		ug/L		77	43 - 129
Ethylbenzene	<1.00		20.0	13.00		ug/L		65	49 - 122
Hexachlorobutadiene	<5.00		20.0	9.551		ug/L		48	16 - 134
Hexane	<1.00		20.0	5.329		ug/L		23	11 - 150
Isopropylbenzene	<1.00		20.0	11.04		ug/L		55	38 - 125
p-Isopropyltoluene	<1.00		20.0	10.64		ug/L		53	34 - 124
Methylene Chloride	<5.00		20.0	16.95		ug/L		85	51 - 134
Methyl tert-butyl ether	<1.00		20.0	16.65		ug/L		83	59 - 131
Naphthalene	<5.00		20.0	15.59		ug/L		78	33 - 134
N-Propylbenzene	<1.00		20.0	11.33		ug/L		57	32 - 125
Styrene	<1.00		20.0	15.46		ug/L		77	45 - 121
1,1,1,2-Tetrachloroethane	<1.00		20.0	16.41		ug/L		82	56 - 117
1,1,2,2-Tetrachloroethane	<1.00		20.0	17.94		ug/L		90	48 - 133
Tetrachloroethene	<1.00		20.0	10.55		ug/L		53	33 - 138
Toluene	<1.00		20.0	13.92		ug/L		70	46 - 128
1,2,3-Trichlorobenzene	<5.00		20.0	16.82		ug/L		84	42 - 131
1,2,4-Trichlorobenzene	<5.00		20.0	15.57		ug/L		78	41 - 127
1,1,1-Trichloroethane	<1.00		20.0	11.58		ug/L		58	48 - 132
1,1,2-Trichloroethane	<1.00		20.0	17.30		ug/L		86	51 - 137
Trichloroethene	7.85		20.0	20.31		ug/L		62	49 - 132
1,2,3-Trichloropropane	<1.00		20.0	17.68		ug/L		88	47 - 135
1,2,4-Trimethylbenzene	<1.00		20.0	13.80		ug/L		69	41 - 126
1,3,5-Trimethylbenzene	<1.00		20.0	12.55		ug/L		63	41 - 128
Xylenes, Total	<3.00		40.0	26.88		ug/L		67	49 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*82 - 122*
Dibromofluoromethane (Surr)	*103*		*79 - 119*
Toluene-d8 (Surr)	*102*		*77 - 117*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-110886-3 MSD
Matrix: Water
Analysis Batch: 174117

Client Sample ID: MW-66
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	<10.0		40.0	32.11		ug/L		71	36 - 150	4	35
Benzene	<0.500		20.0	15.69		ug/L		78	53 - 128	6	15
Bromobenzene	<1.00		20.0	16.19		ug/L		81	54 - 123	2	16
Bromochloromethane	<5.00		20.0	16.63		ug/L		83	60 - 142	2	20
Bromodichloromethane	<1.00		20.0	15.54		ug/L		78	56 - 119	2	15
Bromoform	<5.00		20.0	14.09		ug/L		70	42 - 123	2	20
2-Butanone (MEK)	<10.0		40.0	39.57		ug/L		99	38 - 150	21	25
n-Butylbenzene	<1.00		20.0	10.87		ug/L		54	31 - 126	10	25
sec-Butylbenzene	<1.00		20.0	9.193		ug/L		46	28 - 133	0	25
tert-Butylbenzene	<1.00		20.0	10.87		ug/L		54	38 - 128	7	25
Carbon disulfide	<1.00		20.0	12.15		ug/L		60	41 - 132	12	35
Carbon tetrachloride	<2.00		20.0	10.02		ug/L		50	40 - 131	5	32
Chlorobenzene	<1.00		20.0	16.78		ug/L		84	57 - 120	8	20
Chlorodibromomethane	<5.00		20.0	15.84		ug/L		79	46 - 125	5	17
Chloroform	<1.00		20.0	16.88		ug/L		84	53 - 130	5	15
2-Chlorotoluene	<1.00		20.0	14.83		ug/L		74	45 - 127	3	20
4-Chlorotoluene	<1.00		20.0	14.92		ug/L		75	47 - 123	3	20
1,2-Dibromo-3-Chloropropane	<5.00		20.0	14.68		ug/L		73	28 - 143	0	29
1,2-Dibromoethane (EDB)	<1.00		20.0	16.66		ug/L		83	54 - 133	0	18
Dibromomethane	<1.00		20.0	17.00		ug/L		85	60 - 135	3	16
1,2-Dichlorobenzene	<1.00		20.0	17.44		ug/L		87	50 - 122	3	17
1,3-Dichlorobenzene	<1.00		20.0	15.30		ug/L		76	47 - 128	3	20
1,4-Dichlorobenzene	<1.00		20.0	16.84		ug/L		84	50 - 120	3	20
1,1-Dichloroethane	<1.00	F2	20.0	17.95	F2	ug/L		90	56 - 135	19	17
1,2-Dichloroethane	<1.00		20.0	17.84		ug/L		89	52 - 138	2	15
1,1-Dichloroethene	<2.00		20.0	12.19		ug/L		61	46 - 137	12	21
cis-1,2-Dichloroethene	<1.00		20.0	20.86		ug/L		104	57 - 130	15	16
trans-1,2-Dichloroethene	<1.00		20.0	15.25		ug/L		76	55 - 132	17	20
1,2-Dichloropropane	<1.00		20.0	17.06		ug/L		85	57 - 127	1	35
1,3-Dichloropropane	<1.00		20.0	17.30		ug/L		86	59 - 133	3	16
2,2-Dichloropropane	<4.00		20.0	12.28		ug/L		61	32 - 150	16	20
1,1-Dichloropropene	<1.00		20.0	11.61		ug/L		58	45 - 131	7	20
cis-1,3-Dichloropropene	<5.00		20.0	16.10		ug/L		81	51 - 124	4	15
trans-1,3-Dichloropropene	<5.00		20.0	16.14		ug/L		81	43 - 129	4	19
Ethylbenzene	<1.00		20.0	14.65		ug/L		73	49 - 122	12	20
Hexachlorobutadiene	<5.00		20.0	9.943		ug/L		50	16 - 134	4	29
Hexane	<1.00		20.0	6.236		ug/L		28	11 - 150	16	30
Isopropylbenzene	<1.00		20.0	12.14		ug/L		61	38 - 125	10	20
p-Isopropyltoluene	<1.00		20.0	11.86		ug/L		59	34 - 124	11	20
Methylene Chloride	<5.00		20.0	18.14		ug/L		91	51 - 134	7	20
Methyl tert-butyl ether	<1.00		20.0	17.86		ug/L		89	59 - 131	7	19
Naphthalene	<5.00		20.0	16.79		ug/L		84	33 - 134	7	34
N-Propylbenzene	<1.00		20.0	11.96		ug/L		60	32 - 125	5	34
Styrene	<1.00		20.0	16.54		ug/L		83	45 - 121	7	20
1,1,1,2-Tetrachloroethane	<1.00		20.0	16.71		ug/L		84	56 - 117	2	16
1,1,2,2-Tetrachloroethane	<1.00		20.0	17.03		ug/L		85	48 - 133	5	18
Tetrachloroethene	<1.00		20.0	11.91		ug/L		60	33 - 138	12	20
Toluene	<1.00		20.0	15.14		ug/L		76	46 - 128	8	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-110886-3 MSD — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174117

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene	<5.00		20.0	17.19		ug/L		86	42 - 131	2	25
1,2,4-Trichlorobenzene	<5.00		20.0	16.17		ug/L		81	41 - 127	4	20
1,1,1-Trichloroethane	<1.00		20.0	12.46		ug/L		62	48 - 132	7	16
1,1,2-Trichloroethane	<1.00		20.0	16.93		ug/L		85	51 - 137	2	18
Trichloroethene	7.85		20.0	21.30		ug/L		67	49 - 132	5	15
1,2,3-Trichloropropane	<1.00		20.0	17.18		ug/L		86	47 - 135	3	21
1,2,4-Trimethylbenzene	<1.00		20.0	13.77		ug/L		69	41 - 126	0	20
1,3,5-Trimethylbenzene	<1.00		20.0	13.00		ug/L		65	41 - 128	3	35
Xylenes, Total	<3.00		40.0	28.53		ug/L		71	49 - 121	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*82 - 122*
Dibromofluoromethane (Surr)	*103*		*79 - 119*
Toluene-d8 (Surr)	*101*		*77 - 117*

Lab Sample ID: MB 310-174292/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			08/03/17 07:44	1
Trichloroethene	<1.00		1.00		ug/L			08/03/17 07:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*82 - 122*		*08/03/17 07:44*	*1*
Dibromofluoromethane (Surr)	*104*		*79 - 119*		*08/03/17 07:44*	*1*
Toluene-d8 (Surr)	*96*		*77 - 117*		*08/03/17 07:44*	*1*

Lab Sample ID: LCS 310-174292/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	20.0	18.64		ug/L		93	72 - 130
Trichloroethene	20.0	19.32		ug/L		97	73 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*82 - 122*
Dibromofluoromethane (Surr)	*104*		*79 - 119*
Toluene-d8 (Surr)	*98*		*77 - 117*

Lab Sample ID: 310-110886-5 MS — **Client Sample ID: MW-65**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	653		400	999.7		ug/L		87	57 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-110886-5 MS — **Client Sample ID: MW-65**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	1670		400	1980	4	ug/L		76	49 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*82 - 122*
Dibromofluoromethane (Surr)	*102*		*79 - 119*
Toluene-d8 (Surr)	*101*		*77 - 117*

Lab Sample ID: 310-110886-5 MSD — **Client Sample ID: MW-65**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	653		400	1004		ug/L		88	57 - 130	0	16
Trichloroethene	1670		400	1962	4	ug/L		72	49 - 132	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*82 - 122*
Dibromofluoromethane (Surr)	*102*		*79 - 119*
Toluene-d8 (Surr)	*102*		*77 - 117*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-174195/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174195

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.00		1.00		mg/L			07/31/17 16:32	1
Chloride	<1.00		1.00		mg/L			07/31/17 16:32	1

Lab Sample ID: LCS 310-174195/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	7.50	6.952		mg/L		93	90 - 110
Chloride	7.50	7.401		mg/L		99	90 - 110

Lab Sample ID: 310-110886-3 MS — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174195

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	46.4		25.0	68.06		mg/L		87	80 - 120
Chloride	<5.00		25.0	24.76		mg/L		93	80 - 120

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 310-110886-3 MSD — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174195

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	46.4		25.0	68.02		mg/L		87	80 - 120	0	15
Chloride	<5.00		25.0	25.06		mg/L		94	80 - 120	1	15

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-173910/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174133 — **Prep Batch: 173910**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.500		0.500		mg/L		07/31/17 10:00	07/31/17 22:11	1
Manganese	<0.0100		0.0100		mg/L		07/31/17 10:00	07/31/17 22:11	1

Lab Sample ID: LCS 310-173910/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174133 — **Prep Batch: 173910**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	2.00	1.865		mg/L		93	80 - 120
Manganese	1.00	0.9593		mg/L		96	80 - 120

Lab Sample ID: 310-110886-3 MS — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174133 — **Prep Batch: 173910**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	<0.500		2.00	2.045		mg/L		102	75 - 125
Manganese	0.621		1.00	1.593		mg/L		97	75 - 125

Lab Sample ID: 310-110886-3 MSD — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174133 — **Prep Batch: 173910**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	<0.500		2.00	1.997		mg/L		100	75 - 125	2	20
Manganese	0.621		1.00	1.554		mg/L		93	75 - 125	2	20

Lab Sample ID: 310-110886-11 DU — **Client Sample ID: Field Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174133 — **Prep Batch: 173910**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	<0.500		<0.500		mg/L		NC	20
Manganese	<0.0100		<0.0100		mg/L		NC	20

Method: 2320B - Alkalinity (Low Level)

Lab Sample ID: MB 310-174431/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174431

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	<5.00		5.00		mg/L			08/02/17 16:41	1

Lab Sample ID: LCS 310-174431/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174431

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	1060	1009		mg/L		95	90 - 110

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

Lab Sample ID: MB 490-451056/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451065 — **Prep Batch: 451056**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00		5.00		mg/L		08/03/17 06:15	08/03/17 08:15	1

Lab Sample ID: LCS 490-451056/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451065 — **Prep Batch: 451056**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	20.0	19.55		mg/L		98	70 - 130

Lab Sample ID: 310-110886-8 MS — **Client Sample ID: MW-47D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451065 — **Prep Batch: 451056**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	<5.00		20.0	19.24		mg/L		96	70 - 130

Lab Sample ID: 310-110886-8 MSD — **Client Sample ID: MW-47D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451065 — **Prep Batch: 451056**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	<5.00		20.0	19.00		mg/L		95	70 - 130	1	10

Lab Sample ID: MB 490-451868/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451869 — **Prep Batch: 451868**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00		5.00		mg/L		08/03/17 06:30	08/03/17 08:15	1

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

Lab Sample ID: LCS 490-451868/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451869 — **Prep Batch: 451868**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	20.0	19.55		mg/L		98	70 - 130

Lab Sample ID: 310-110886-3 MS — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451869 — **Prep Batch: 451868**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	<5.00	H	20.0	18.76	H	mg/L		94	70 - 130

Lab Sample ID: 310-110886-3 MSD — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451869 — **Prep Batch: 451868**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	<5.00	H	20.0	18.68	H	mg/L		93	70 - 130	0	10

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 310-174688/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174688

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00		mg/L			08/03/17 17:28	1

Lab Sample ID: LCS 310-174688/10 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174688

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	4.99	4.682		mg/L		94	85 - 113

Lab Sample ID: 310-110886-3 MS — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174688

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	<1.00		4.99	5.826		mg/L		97	61 - 128

Lab Sample ID: 310-110886-3 MSD — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174688

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	<1.00		4.99	5.775		mg/L		96	61 - 128	1	10

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 310-174238/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Bicarbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Carbonate Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Hydroxide Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1
Phenolphthalein Alkalinity as CaCO3	<5.00		5.00		mg/L			08/01/17 14:22	1

Lab Sample ID: LCS 310-174238/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	1060	1030		mg/L		97	90 - 110

Lab Sample ID: 310-110886-1 MS — **Client Sample ID: MW-67**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174238

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	489		106	597.4	4	mg/L		102	66 - 124

Lab Sample ID: 310-110886-1 MSD — **Client Sample ID: MW-67**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174238

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity as CaCO3	489		106	592.3	4	mg/L		97	66 - 124	1	17

Lab Sample ID: 310-110886-3 MS — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174238

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	443		106	545.9	4	mg/L		97	66 - 124

Lab Sample ID: 310-110886-3 MSD — **Client Sample ID: MW-66**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 174238

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity as CaCO3	443		106	540.8	4	mg/L		92	66 - 124	1	17

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

GC/MS VOA

Analysis Batch: 174001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-6	MW-43D	Total/NA	Water	8260C	
310-110886-7	MW-57	Total/NA	Water	8260C	
310-110886-8	MW-47D	Total/NA	Water	8260C	
310-110886-9	MW-46	Total/NA	Water	8260C	
310-110886-10	MW-56S	Total/NA	Water	8260C	
MB 310-174001/8	Method Blank	Total/NA	Water	8260C	
LCS 310-174001/6	Lab Control Sample	Total/NA	Water	8260C	
310-110886-8 MS	MW-47D	Total/NA	Water	8260C	
310-110886-8 MSD	MW-47D	Total/NA	Water	8260C	

Analysis Batch: 174117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-1	MW-67	Total/NA	Water	8260C	
310-110886-2	Field Duplicate 01	Total/NA	Water	8260C	
310-110886-3	MW-66	Total/NA	Water	8260C	
310-110886-4	MW-56D	Total/NA	Water	8260C	
310-110886-5	MW-65	Total/NA	Water	8260C	
310-110886-6	MW-43D	Total/NA	Water	8260C	
310-110886-7	MW-57	Total/NA	Water	8260C	
310-110886-8	MW-47D	Total/NA	Water	8260C	
310-110886-9	MW-46	Total/NA	Water	8260C	
310-110886-10	MW-56S	Total/NA	Water	8260C	
310-110886-11	Field Blank	Total/NA	Water	8260C	
310-110886-12	Trip Blank	Total/NA	Water	8260C	
MB 310-174117/7	Method Blank	Total/NA	Water	8260C	
LCS 310-174117/5	Lab Control Sample	Total/NA	Water	8260C	
LCS 310-174117/6	Lab Control Sample	Total/NA	Water	8260C	
310-110886-3 MS	MW-66	Total/NA	Water	8260C	
310-110886-3 MSD	MW-66	Total/NA	Water	8260C	

Analysis Batch: 174292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-5	MW-65	Total/NA	Water	8260C	
310-110886-8	MW-47D	Total/NA	Water	8260C	
310-110886-9	MW-46	Total/NA	Water	8260C	
MB 310-174292/7	Method Blank	Total/NA	Water	8260C	
LCS 310-174292/5	Lab Control Sample	Total/NA	Water	8260C	
310-110886-5 MS	MW-65	Total/NA	Water	8260C	
310-110886-5 MSD	MW-65	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 174195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-1	MW-67	Total/NA	Water	9056A	
310-110886-2	Field Duplicate 01	Total/NA	Water	9056A	
310-110886-3	MW-66	Total/NA	Water	9056A	
310-110886-4	MW-56D	Total/NA	Water	9056A	
310-110886-5	MW-65	Total/NA	Water	9056A	
310-110886-6	MW-43D	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 174195 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-7	MW-57	Total/NA	Water	9056A	
310-110886-8	MW-47D	Total/NA	Water	9056A	
310-110886-9	MW-46	Total/NA	Water	9056A	
310-110886-10	MW-56S	Total/NA	Water	9056A	
310-110886-11	Field Blank	Total/NA	Water	9056A	
MB 310-174195/3	Method Blank	Total/NA	Water	9056A	
LCS 310-174195/4	Lab Control Sample	Total/NA	Water	9056A	
310-110886-3 MS	MW-66	Total/NA	Water	9056A	
310-110886-3 MSD	MW-66	Total/NA	Water	9056A	

Metals

Prep Batch: 173910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-1	MW-67	Total/NA	Water	3010A	
310-110886-2	Field Duplicate 01	Total/NA	Water	3010A	
310-110886-3	MW-66	Total/NA	Water	3010A	
310-110886-4	MW-56D	Total/NA	Water	3010A	
310-110886-5	MW-65	Total/NA	Water	3010A	
310-110886-6	MW-43D	Total/NA	Water	3010A	
310-110886-7	MW-57	Total/NA	Water	3010A	
310-110886-8	MW-47D	Total/NA	Water	3010A	
310-110886-9	MW-46	Total/NA	Water	3010A	
310-110886-10	MW-56S	Total/NA	Water	3010A	
310-110886-11	Field Blank	Total/NA	Water	3010A	
MB 310-173910/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-173910/2-A	Lab Control Sample	Total/NA	Water	3010A	
310-110886-3 MS	MW-66	Total/NA	Water	3010A	
310-110886-3 MSD	MW-66	Total/NA	Water	3010A	
310-110886-11 DU	Field Blank	Total/NA	Water	3010A	

Analysis Batch: 174133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-1	MW-67	Total/NA	Water	6010C	173910
310-110886-2	Field Duplicate 01	Total/NA	Water	6010C	173910
310-110886-3	MW-66	Total/NA	Water	6010C	173910
310-110886-4	MW-56D	Total/NA	Water	6010C	173910
310-110886-5	MW-65	Total/NA	Water	6010C	173910
310-110886-6	MW-43D	Total/NA	Water	6010C	173910
310-110886-7	MW-57	Total/NA	Water	6010C	173910
310-110886-8	MW-47D	Total/NA	Water	6010C	173910
310-110886-9	MW-46	Total/NA	Water	6010C	173910
310-110886-10	MW-56S	Total/NA	Water	6010C	173910
310-110886-11	Field Blank	Total/NA	Water	6010C	173910
MB 310-173910/1-A	Method Blank	Total/NA	Water	6010C	173910
LCS 310-173910/2-A	Lab Control Sample	Total/NA	Water	6010C	173910
310-110886-3 MS	MW-66	Total/NA	Water	6010C	173910
310-110886-3 MSD	MW-66	Total/NA	Water	6010C	173910
310-110886-11 DU	Field Blank	Total/NA	Water	6010C	173910

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

General Chemistry

Analysis Batch: 174238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-1	MW-67	Total/NA	Water	SM 2320B	
310-110886-2	Field Duplicate 01	Total/NA	Water	SM 2320B	
310-110886-3	MW-66	Total/NA	Water	SM 2320B	
310-110886-4	MW-56D	Total/NA	Water	SM 2320B	
310-110886-5	MW-65	Total/NA	Water	SM 2320B	
310-110886-6	MW-43D	Total/NA	Water	SM 2320B	
310-110886-7	MW-57	Total/NA	Water	SM 2320B	
310-110886-8	MW-47D	Total/NA	Water	SM 2320B	
310-110886-9	MW-46	Total/NA	Water	SM 2320B	
310-110886-10	MW-56S	Total/NA	Water	SM 2320B	
MB 310-174238/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 310-174238/2	Lab Control Sample	Total/NA	Water	SM 2320B	
310-110886-1 MS	MW-67	Total/NA	Water	SM 2320B	
310-110886-1 MSD	MW-67	Total/NA	Water	SM 2320B	
310-110886-3 MS	MW-66	Total/NA	Water	SM 2320B	
310-110886-3 MSD	MW-66	Total/NA	Water	SM 2320B	

Analysis Batch: 174431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-11	Field Blank	Total/NA	Water	2320B	
MB 310-174431/1	Method Blank	Total/NA	Water	2320B	
LCS 310-174431/2	Lab Control Sample	Total/NA	Water	2320B	

Analysis Batch: 174688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-1	MW-67	Total/NA	Water	9060A	
310-110886-2	Field Duplicate 01	Total/NA	Water	9060A	
310-110886-3	MW-66	Total/NA	Water	9060A	
310-110886-4	MW-56D	Total/NA	Water	9060A	
310-110886-5	MW-65	Total/NA	Water	9060A	
310-110886-6	MW-43D	Total/NA	Water	9060A	
310-110886-7	MW-57	Total/NA	Water	9060A	
310-110886-8	MW-47D	Total/NA	Water	9060A	
310-110886-9	MW-46	Total/NA	Water	9060A	
310-110886-10	MW-56S	Total/NA	Water	9060A	
310-110886-11	Field Blank	Total/NA	Water	9060A	
MB 310-174688/4	Method Blank	Total/NA	Water	9060A	
LCS 310-174688/10	Lab Control Sample	Total/NA	Water	9060A	
310-110886-3 MS	MW-66	Total/NA	Water	9060A	
310-110886-3 MSD	MW-66	Total/NA	Water	9060A	

Prep Batch: 451056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-8	MW-47D	Total/NA	Water	9030B	
310-110886-9	MW-46	Total/NA	Water	9030B	
310-110886-10	MW-56S	Total/NA	Water	9030B	
310-110886-11	Field Blank	Total/NA	Water	9030B	
MB 490-451056/1-A	Method Blank	Total/NA	Water	9030B	
LCS 490-451056/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-110886-8 MS	MW-47D	Total/NA	Water	9030B	
310-110886-8 MSD	MW-47D	Total/NA	Water	9030B	

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Analysis Batch: 451065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-8	MW-47D	Total/NA	Water	9034	451056
310-110886-9	MW-46	Total/NA	Water	9034	451056
310-110886-10	MW-56S	Total/NA	Water	9034	451056
310-110886-11	Field Blank	Total/NA	Water	9034	451056
MB 490-451056/1-A	Method Blank	Total/NA	Water	9034	451056
LCS 490-451056/2-A	Lab Control Sample	Total/NA	Water	9034	451056
310-110886-8 MS	MW-47D	Total/NA	Water	9034	451056
310-110886-8 MSD	MW-47D	Total/NA	Water	9034	451056

Prep Batch: 451868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-1	MW-67	Total/NA	Water	9030B	
310-110886-2	Field Duplicate 01	Total/NA	Water	9030B	
310-110886-3	MW-66	Total/NA	Water	9030B	
310-110886-4	MW-56D	Total/NA	Water	9030B	
310-110886-5	MW-65	Total/NA	Water	9030B	
310-110886-6	MW-43D	Total/NA	Water	9030B	
310-110886-7	MW-57	Total/NA	Water	9030B	
MB 490-451868/1-A	Method Blank	Total/NA	Water	9030B	
LCS 490-451868/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-110886-3 MS	MW-66	Total/NA	Water	9030B	
310-110886-3 MSD	MW-66	Total/NA	Water	9030B	

Analysis Batch: 451869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-110886-1	MW-67	Total/NA	Water	9034	451868
310-110886-2	Field Duplicate 01	Total/NA	Water	9034	451868
310-110886-3	MW-66	Total/NA	Water	9034	451868
310-110886-4	MW-56D	Total/NA	Water	9034	451868
310-110886-5	MW-65	Total/NA	Water	9034	451868
310-110886-6	MW-43D	Total/NA	Water	9034	451868
310-110886-7	MW-57	Total/NA	Water	9034	451868
MB 490-451868/1-A	Method Blank	Total/NA	Water	9034	451868
LCS 490-451868/2-A	Lab Control Sample	Total/NA	Water	9034	451868
310-110886-3 MS	MW-66	Total/NA	Water	9034	451868
310-110886-3 MSD	MW-66	Total/NA	Water	9034	451868

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-67

Lab Sample ID: 310-110886-1
Date Collected: 07/25/17 16:50
Matrix: Water
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174117	08/01/17 21:31	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 17:06	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:14	OAD	TAL CF
Total/NA	Prep	9030B			451868	08/03/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	451869	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 20:31	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Client Sample ID: Field Duplicate 01

Lab Sample ID: 310-110886-2
Date Collected: 07/25/17 12:00
Matrix: Water
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174117	08/01/17 21:53	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 17:23	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:17	OAD	TAL CF
Total/NA	Prep	9030B			451868	08/03/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	451869	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 20:47	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Client Sample ID: MW-66

Lab Sample ID: 310-110886-3
Date Collected: 07/25/17 19:12
Matrix: Water
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174117	08/01/17 22:14	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 17:40	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:19	OAD	TAL CF
Total/NA	Prep	9030B			451868	08/03/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	451869	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 21:02	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-56D

Lab Sample ID: 310-110886-4
Matrix: Water

Date Collected: 07/26/17 12:00
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174117	08/01/17 22:36	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 19:05	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:27	OAD	TAL CF
Total/NA	Prep	9030B			451868	08/03/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	451869	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 21:54	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Client Sample ID: MW-65

Lab Sample ID: 310-110886-5
Matrix: Water

Date Collected: 07/26/17 14:15
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174117	08/01/17 22:58	SJN	TAL CF
Total/NA	Analysis	8260C		20	174292	08/03/17 08:49	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 19:22	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:29	OAD	TAL CF
Total/NA	Prep	9030B			451868	08/03/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	451869	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 22:11	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Client Sample ID: MW-43D

Lab Sample ID: 310-110886-6
Matrix: Water

Date Collected: 07/26/17 18:20
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174001	08/02/17 09:12	SJN	TAL CF
Total/NA	Analysis	8260C		1	174117	08/01/17 23:20	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 19:39	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:35	OAD	TAL CF
Total/NA	Prep	9030B			451868	08/03/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	451869	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 22:28	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-57

Lab Sample ID: 310-110886-7
Matrix: Water

Date Collected: 07/26/17 21:05
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	174001	08/02/17 10:23	SJN	TAL CF
Total/NA	Analysis	8260C		1	174117	08/01/17 23:41	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 19:56	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:37	OAD	TAL CF
Total/NA	Prep	9030B			451868	08/03/17 06:30	REM	TAL NSH
Total/NA	Analysis	9034		1	451869	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 22:44	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Client Sample ID: MW-47D

Lab Sample ID: 310-110886-8
Matrix: Water

Date Collected: 07/27/17 10:20
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	174001	08/02/17 11:34	SJN	TAL CF
Total/NA	Analysis	8260C		1	174117	08/02/17 00:03	SJN	TAL CF
Total/NA	Analysis	8260C		1000	174292	08/03/17 09:10	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 20:13	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:39	OAD	TAL CF
Total/NA	Prep	9030B			451056	08/03/17 06:15	REM	TAL NSH
Total/NA	Analysis	9034		1	451065	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 23:02	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Client Sample ID: MW-46

Lab Sample ID: 310-110886-9
Matrix: Water

Date Collected: 07/27/17 12:05
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	174001	08/02/17 10:46	SJN	TAL CF
Total/NA	Analysis	8260C		1	174117	08/02/17 00:24	SJN	TAL CF
Total/NA	Analysis	8260C		1000	174292	08/03/17 09:32	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 20:30	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:41	OAD	TAL CF
Total/NA	Prep	9030B			451056	08/03/17 06:15	REM	TAL NSH
Total/NA	Analysis	9034		1	451065	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/03/17 23:51	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Client Sample ID: MW-56S

Lab Sample ID: 310-110886-10
Date Collected: 07/27/17 13:50
Matrix: Water
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174001	08/02/17 09:36	SJN	TAL CF
Total/NA	Analysis	8260C		1	174117	08/02/17 00:46	SJN	TAL CF
Total/NA	Analysis	9056A		5	174195	07/31/17 20:47	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:44	OAD	TAL CF
Total/NA	Prep	9030B			451056	08/03/17 06:15	REM	TAL NSH
Total/NA	Analysis	9034		1	451065	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/04/17 00:06	MDK	TAL CF
Total/NA	Analysis	SM 2320B		1	174238	08/01/17 14:22	WJF	TAL CF

Client Sample ID: Field Blank

Lab Sample ID: 310-110886-11
Date Collected: 07/27/17 13:15
Matrix: Water
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174117	08/01/17 19:00	SJN	TAL CF
Total/NA	Analysis	9056A		1	174195	07/31/17 21:04	SAD	TAL CF
Total/NA	Prep	3010A			173910	07/31/17 10:00	JNR	TAL CF
Total/NA	Analysis	6010C		1	174133	07/31/17 22:46	OAD	TAL CF
Total/NA	Analysis	2320B		1	174431	08/02/17 16:41	MDK	TAL CF
Total/NA	Prep	9030B			451056	08/03/17 06:15	REM	TAL NSH
Total/NA	Analysis	9034		1	451065	08/03/17 08:15	REM	TAL NSH
Total/NA	Analysis	9060A		1	174688	08/04/17 00:22	MDK	TAL CF

Client Sample ID: Trip Blank

Lab Sample ID: 310-110886-12
Date Collected: 07/25/17 00:00
Matrix: Water
Date Received: 07/27/17 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	174117	08/01/17 18:39	SJN	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Laboratory: TestAmerica Cedar Falls

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
AIHA-LAP, LLC	IHLAP		101044	11-01-18
Georgia	State Program	4	IA100001 (OR)	09-29-17
Illinois	NELAP	5	200024	11-29-17
Iowa	State Program	7	007	12-01-17
Kansas	NELAP	7	E-10341	01-31-18
Minnesota	NELAP	5	019-999-319	12-31-17
Minnesota (Petrofund)	State Program	1	3349	08-22-17
North Dakota	State Program	8	R-186	09-29-17
Oregon	NELAP	10	IA100001	09-29-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	01-01-18
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2LA)	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17 *
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17 *
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Golder Associates Inc.
Project/Site: Electrolux - Jefferson, IA

TestAmerica Job ID: 310-110886-1
SDG: 103-87305.1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CF
9056A	Anions, Ion Chromatography	SW846	TAL CF
6010C	Metals (ICP)	SW846	TAL CF
2320B	Alkalinity (Low Level)	SM	TAL CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL NSH
9060A	Organic Carbon, Total (TOC)	SW846	TAL CF
SM 2320B	Alkalinity	SM	TAL CF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

310-1 0886 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form 310503

Client Information

Client: Golder Associates Inc

City/State: Manchester, NH | Project:

Receipt Information

Date/Time Received: 7/27/17 1800 | Received By: [signature]

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ TA Courier ☐ TA Field Services ☐ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID: J-12

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 1 of 3

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☒ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: H | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.4 | Corrected Temp (°C): 2.4

• Sample Container Temperature

Sample ID(s) & bottle type used: CONTAINER 1 | CONTAINER 2

Uncorrected Temp (°C): TEMP 1 TEMP 2 | Corrected Temp (°C): TEMP 1 TEMP 2

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Cooler/Sample Receipt and Temperature Log

Client Information

Client: Golder Associates

City/State: Manchester NH | Project:

Receipt Information

Date/Time Received: 7/27/17 1900 | Received By: [illegible]

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ TA Courier ☐ TA Field Services ☐ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID: 24610

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 3 of 3

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☒ No *If yes:* Which VOA samples are in cooler? ↓

[illegible] 7.28.17 All

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: H | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 5.7 | Corrected Temp (°C): 5.7

• Sample Container Temperature

Sample ID(s) & bottle type used: CONTAINER 1 | CONTAINER 2

Uncorrected Temp (°C): TEMP 1 TEMP 2 | Corrected Temp (°C): TEMP 1 TEMP 2

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Cooler/Sample Receipt and Temperature Log Form - 310503

Client Information			
Client:	Golder Associates Inc		
City/State:	Manchester NH	Project:	
Receipt Information			
Date/Time Received:	7/27/17 1800	Received By:	

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ TA Courier ☐ TA Field Services ☐ Client Drop-off ☐ Other:

Condition of Cooler/Containers			
Sample(s) received in Cooler?	☒ Yes ☐ No	*If yes:* Cooler ID:	TD-1
Multiple Coolers?	☒ Yes ☐ No	*If yes:* Cooler #	2 of 3
Cooler Custody Seals Present?	☐ Yes ☒ No	*If yes:* Cooler custody seals intact?	☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes ☒ No	*If yes:* Sample custody seals intact?	☐ Yes ☐ No
Trip Blank Present?	☐ Yes ☒ No	*If yes:* Which VOA samples are in cooler? ↓	

Temperature Record			
Coolant:	☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE		
Thermometer ID:	H	Correction Factor (°C):	0
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	3.9	Corrected Temp (°C):	3.9
• Sample Container Temperature			
Sample ID(s) & bottle type used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):	TEMP 1 TEMP 2	Corrected Temp (°C):	TEMP 1 TEMP 2

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Phone (319) 277-2401 Fax (319) 277-2425

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: James Peace
Company: Golder Associates Inc.
Address: 670 North Commercial Street Suite 103
City: Manchester
State, Zip: NH, 03101
Phone:
Email: jpeace@golder.com
Project Name: Electrolux - Jefferson, IA
Site:

Sampler: Alan Phillips (AP)
Phone:
Due Date Requested:
TAT Requested (days):
PO #:
WO #:
TestAmerica Project #: 31002428
SSOW#:

Lab PM: Hayes, Shawn M
E-Mail: shawn.hayes@testamericainc.com
Carrier Tracking No(s):
COC No:
Page:
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C Volatile Standard Sublist	9060A Total Organic Carbon	2320B Alkalinities All and 9056A Chloride and Sulfate	6010C Iron and Manganese	9034 Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	S	N	D	CB		
MW-67	7/25/17	1650	G	W			X	X	X	X	X		
Field Duplicate 01	7/25/17	1200	G	W			X	X	X	X	X		
MW-66	7/25/17	1912					X	X	X	X	X		
MW-66-MS	7/25/17	1912					X	X	X	X	X		
MW-66-MSD	7/25/17	1912					X	X	X	X	X		
MW-56D	7/26/17	1200					X	X	X	X	X		
MW-65	7/26/17	1415					X	X	X	X	X		
MW-43D	7/26/17	1820					X	X	X	X	X		
MW-57	7/26/17	2105					X	X	X	X	X		
MW-47D	7/27/17	1020					X	X	X	X	X		
MW-46	7/27/17	1205					X	X	X	X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Alan Phillips	7/27/17 1628	Golder	James Yaux	7/27/17 1628	TA
				7/27/17 1800	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Phone (319) 277-2401 Fax (319) 277-2425

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Alan Phillips	Lab PM: Hayes, Shawn M	Carrier Tracking No(s):	COC No:
Client Contact: James Peace	Phone:	E-Mail: shawn.hayes@testamericainc.com		Page:
Company: Golder Associates Inc.				Job #:
Address: 670 North Commercial Street Suite 103	Due Date Requested:			
City: Manchester	TAT Requested (days):			
State, Zip: NH, 03101				
Phone:	PO #:			
Email: jpeace@golder.com	WO #:			
Project Name: Electrolux - Jefferson, IA	TestAmerica Project #: 31002428			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C Volatile Standard Sublist	9060A Total Organic Carbon	2320B Alkalinities All and 9056A Chloride and Sulfate	6010C Iron and Manganese	9034 Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	S	N	D	CB		
MW-56S	7/27/17	1350	G	W			X	X	X	X	X		
Field Blank	7/27/17	13:15		W									Added per Alan Phillips SH 7/28/17

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Alan Phillips	7/27/16 1628	Golder	James Vaux	7/27/17 1628	TA
			[illegible]	7/27/17 1800	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

310-110886 Chain of Custody

Cooler Received/Opened On 07-29-2017 @ 09:30

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 1348 (last 4 digits, FedEx) Courier: _FedEx_

   IR Gun ID 31470368 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 1.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) KD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) es

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) es

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) es

I certify that I attached a label with the unique LIMS number to each container (initial) es

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# es

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

8/11/2017

TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Phone (319) 277-2401 Fax (319) 277-2425

Chain of Custody Record

310-110886

TestAmerica

8/11/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Hayes, Shawn M	No: 10127.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: shawn.hayes@testamericainc.com	Iowa
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Page 1 of 2
Address: 2960 Foster Creighton Drive,	Due Date Requested: 8/8/2017		Job #: 310-110886-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Electrolux - Jefferson, IA	Project #: 31002428		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030B Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-67 (310-110886-1)	7/25/17	16:50 Central		Water			X	1	
Field Duplicate 01 (310-110886-2)	7/25/17	12:00 Central		Water			X	1	
MW-66 (310-110886-3)	7/25/17	19:12 Central		Water			X	1	
MW-66 (310-110886-3MS)	7/25/17	19:12 Central	MS	Water			X	1	
MW-66 (310-110886-3MSD)	7/25/17	19:12 Central	MSD	Water			X	1	
MW-56D (310-110886-4)	7/26/17	12:00 Central		Water			X	1	
MW-65 (310-110886-5)	7/26/17	14:15 Central		Water			X	1	
MW-43D (310-110886-6)	7/26/17	18:20 Central		Water			X	1	
MW-57 (310-110886-7)	7/26/17	21:05 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 7-28-17 1622	Company	Received by:	Date/Time: 7-29-17 9:30	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.1		

TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Phone (319) 277-2401 Fax (319) 277-2425

Chain of Custody Record

TestAmerica

8/11/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Hayes, Shawn M	Carrier Tracking No(s):	COC No: 310-10127.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: shawn.hayes@testamericainc.com	State of Origin: Iowa	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 310-110886-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/8/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Electrolux - Jefferson, IA	Project #: 31002428			
Site:	SSOW#:			

Analysis Requested

Loc: 310
110886

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030B Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-47D (310-110886-8)	7/27/17	10:20 Central		Water			X	1	
MW-46 (310-110886-9)	7/27/17	12:05 Central		Water			X	1	
MW-56S (310-110886-10)	7/27/17	13:50 Central		Water			X	1	
Field Blank (310-110886-11)	7/27/17	13:15 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 7/28/17 1622	Company	Received by:	Date/Time: 7-29-17 9:30	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.1		

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 310-110886-1
SDG Number: 103-87305.1

Login Number: 110886
List Number: 1
Creator: Tuladhar, Sushil X

List Source: TestAmerica Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 310-110886-1
SDG Number: 103-87305.1

Login Number: 110886
List Number: 2
Creator: Stewart, Eric S

List Source: TestAmerica Nashville
List Creation: 07/29/17 03:03 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	