Golder Associates

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AUG 04 2014
MDEQ-RRD
GRAND RAPIDS DISTRICT

August 1, 2014

Project No. 1406182

(*Via Electronic Transmission*)

David O'Donnell
District Supervisor
Michigan Department of Environmental Quality
Grand Rapids District
350 Ottawa, NW
Grand Rapids, Michigan 49503

RE: FORMER BELDING PRODUCTS SITE, BELDING, MICHIGAN
UPDATE ON JULY SITE CHARACTERIZATION ACTIVITIES

Dear Mr. O'Donnell:

On June 6, 2014, Electrolux representatives met with the Michigan Department of Environmental Quality (MDEQ) to discuss potential additional site characterization work in support of Electrolux's prior request for mixing zone-based groundwater surface water interface (GSI) Criteria for the former Belding Products Facility located in Belding, Michigan. Several members of the MDEQ Remediation and Redevelopment Division GSI Technical and Program Support (TAPS) team were conferenced in during the meeting. The following scope of characterization was agreed to during the meeting:

- Advance two, 45-foot deep borings: one near former catch basin #10 (source area), and one at the northwest corner of the site, near the former "North Well."
- Complete the borings as monitoring wells if a "deep" water bearing zone is encountered. A water-bearing zone was encountered at depth in both borings and therefore, the borings were completed as monitoring wells (MW-12 and MW-13).
- Collect groundwater samples from the wells for analysis of the parameters included in previous annual groundwater monitoring events for the site.

Golder Associates conducted these field activities from July 7 through July 10, 2014. Mr. Paul Knoerr and Mr. Matt Gamble of the MDEQ were onsite during advancement of the boreholes and well installation. This letter summarizes the characterization activities, findings, and recommendations.

1.0 CHARACTERIZATION ACTIVITIES

Rotosonic drilling methods were used to advance the two deep borings. The following summarizes the findings in the two borings:

SB-12/MW-12: This boring/well is located near piezometer PZ-1 at the northwest corner of the site near the former North Well. A perched groundwater zone was encountered at approximately 10 feet below the ground surface (bgs). PZ-1 is screened from 7 to 12 feet bgs, within the perched zone. Dense, glacial till described variously as a clayey silt or silty clay (depending on depth) was encountered below the perched zone to a depth of approximately 30 feet bgs. A silty sand was encountered from 30 to 35 feet bgs and coarse sand was encountered from 35 to 36 feet bgs. The remainder of the borehole contained glacial till to a depth of 45 feet bgs. The sand from 30 to 36 feet bgs was saturated and therefore, with the MDEQ's concurrence, a well was set with a screened interval of 31 to 36 feet bgs after backfilling the lower portion of the borehole.

SB-13/MW-13: This boring/well is located immediately north of MW-6 near the former source area. After drilling through fill and a concrete slab at 4.5 feet, the saturated zone that MW-6 is screened in (from 6 to

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11 feet bgs) was encountered. A dense glacial till described as clayey silt was encountered from 11 feet to 42 feet bgs. One-foot thick sand seams were encountered from 42 to 43 feet bgs and from 44 to 45 feet bgs. The lower sand seam was saturated. The MDEQ requested setting a well screened across the two sand seams, which was done.

The wells were developed upon completion using a submersible pump with surging. Golder sampled the wells on July 10, 2014 using the low-flow sampling method. Sampling included collection of a blind field duplicate sample from MW-12 (MW-FD). The samples were submitted to TriMatrix Laboratories for analysis of the parameters included in previous annual groundwater monitoring events for the site. The TriMatrix analytical report for the groundwater samples is included in Attachment A.

The groundwater analytical results are summarized on Table 1. No volatile organic compounds (VOCs) were detected above the laboratory reporting limits in the sample from MW-12 or in the associated duplicate sample. Three VOCs, *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, and trichloroethene (TCE), were detected at concentrations above the laboratory reporting limits, but well below the generic GSI criteria in the sample from monitoring well MW-13 (former source area).

2.0 FINDINGS AND RECOMMENDATIONS

Golder advanced borings and installed and sampled monitoring wells at the two locations specified by MDEQ. Sampling results from monitoring well MW-12 (North Well area) detected no VOC concentrations in deeper groundwater at this location. Sampling results from monitoring well MW-13 (former source area) detected three VOCs at concentrations well below the generic GSI criteria in deeper groundwater at this location. Based on these findings, and consistent with the approach discussed with the GSI TAPS team at the June 6th meeting, it is Golder's opinion that no further investigation of the deep water-bearing zones is necessary.

Further, it is Golder's opinion that these sampling results support the previously presented conceptual site model and mixing zone determination. Therefore, Golder has recommended to Electrolux submittal of an updated mixing zone determination incorporating the findings presented in this letter for MDEQ's review.

3.0 CLOSING

Please contact Brad Johnson (517-318-3250) if you have any questions regarding this letter.

GOLDER ASSOCIATES INC.

Bradley S. Johnson, Ph.D.
Senior Consultant

Alistair Macdonald, CPG, LSP
Program Leader and Principal

Attachments:

Figure 1	Monitoring Well Locations
Table 1	Groundwater Analytical Results for New, Deep Monitoring Wells
Attachment A	TriMatrix Laboratories Analytical report

cc: Andrew Stienecker, Electrolux Home Products, Inc.
Carol Parnell, Electrolux Home Products, Inc.
Doug Arnold, Alston & Bird LLP

BSJ/APTM/bsj

TABLE

TABLE 1: GROUNDWATER ANALYTICAL RESULTS FOR NEW, DEEP MONITORING WELLS
FORMER BELDING PRODUCTS SITE, BELDING, MICHIGAN

Parameter	GSI [1]	units	MW-12 7/10/14	MW-FD (MW-12) 7/10/14	MW-13 7/10/14
Volatile Organic Compounds					
Benzene	200 (X)	µg/L	<1.0	<1.0	<1.0
Chloroethane	1,100 (X)	µg/L	<1.0	<1.0	<1.0
Chloromethane	ID	µg/L	<1.0	<1.0	<1.0
1,1-Dichloroethane	740	µg/L	<1.0	<1.0	<1.0
1,1-Dichloroethene	130	µg/L	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	620	µg/L	<1.0	<1.0	**86**
trans-1,2-Dichloroethene	1,500 (X)	µg/L	<1.0	<1.0	**11**
2-Butanone (MEK)	2,200	µg/L	<5.0	<5.0	<5.0
Tetrachloroethene	60 (X)	µg/L	<1.0	<1.0	<1.0
Toluene	270	µg/L	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	89	µg/L	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	330 (X)	µg/L	<1.0	<1.0	<1.0
Trichloroethene	200 (X)	µg/L	<1.0	<1.0	**26**
Vinyl Chloride [2]	1,600	µg/L	<1.0	<1.0	<1.0
Xylene (Total)	41	µg/L	<3.0	<3.0	<3.0
Field Parameters					
Dissolved Oxygen	NA	mg/L	0.72	0.72	0.52
Eh	NA	mV	-87.5	-87.5	-81.7
Conductivity	NA	mS/cm	2.48	2.48	0.513
pH	NA	s.u.	7.12	7.12	7.54
Temperature	NA	C	13.29	13.29	12.6

NOTES:

[1] GSI = Groundwater surface water interface criteria (Table 1. Groundwater: Residential and Non-Residential Part 201 Generic Cleanup Criteria and Screening Levels/Part 213 Risk-Based Screening Levels. December 30, 2013).

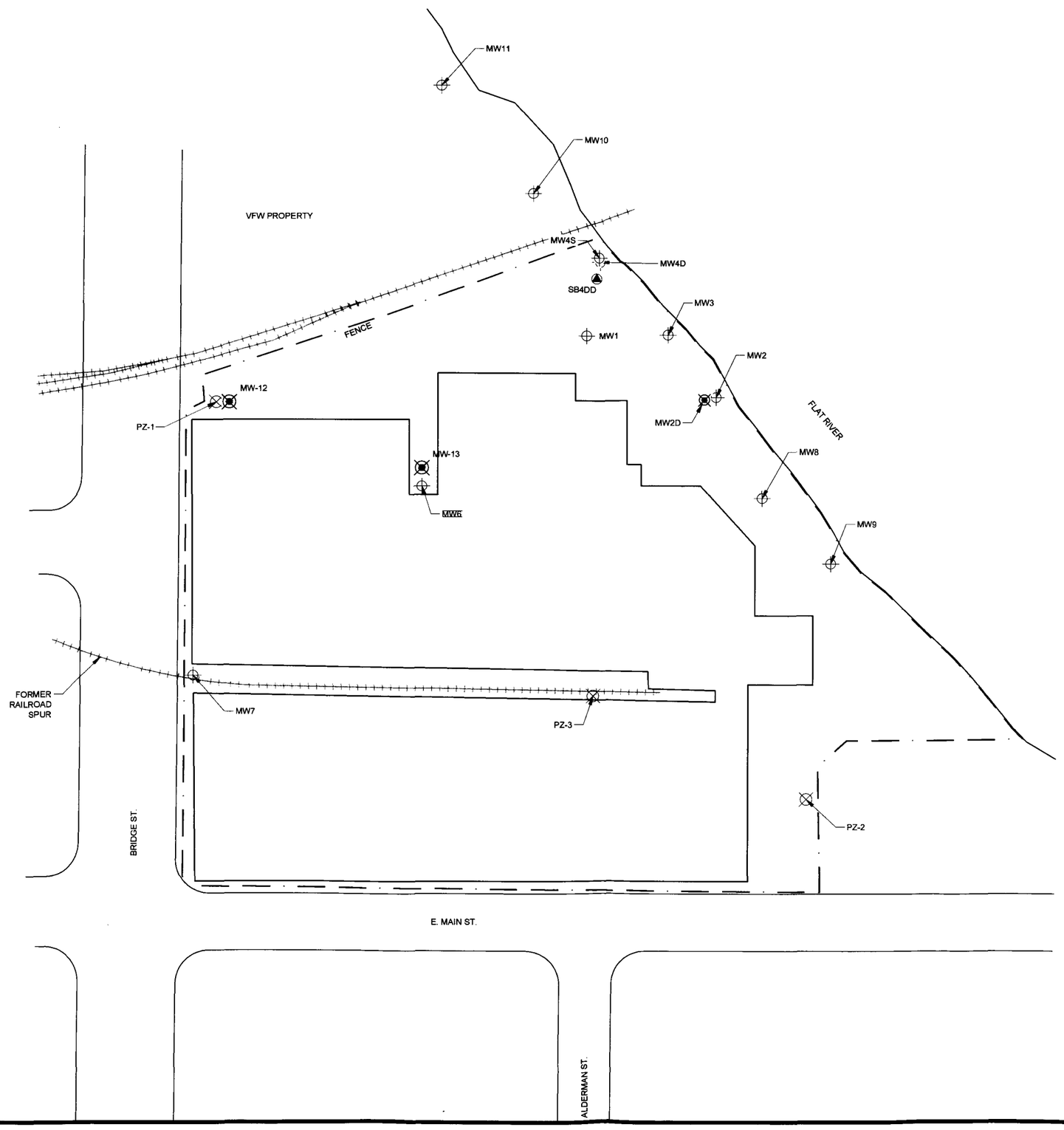
[2] For Vinyl Chloride, a mixing zone-based GSI value of 1,600 µg/L, respectively were presented in the July 2013 Revised Mixing Zone Determination for the site (submitted to the MDEQ on July 9, 2013).

[3] "NA" criterion not available and "ID" indicates inadequate data to develop a criterion.

Part 201 Cleanup Criteria Footnotes:

(X) The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

FIGURE



LEGEND

	PROPERTY BOUNDARY
	FORMER RAILROAD TRACK
MW1	MONITORING WELL
PZ-1	PIEZOMETER
SB4DD	SOIL BORING
MW-12	DEEP BORING/MONITORING WELL

NOTES

1. BASE DRAWING ADAPTED FROM "MONITOR WELL & PIEZOMETER LOCATIONS," PREPARED BY GOWER PROFESSIONAL SERVEYING, P.C., DATED 3/12/2013.

0 40 80 120
SCALE FEET

PROJECT
ELECTROLUX
FORMER WHITE CONSOLIDATED INDUSTRIES
BELDING, MICHIGAN

TITLE
MONITORING WELL LOCATIONS

Golder Associates

PROJECT No.		1406182	FILE No.	1406182A001
DESIGN	BPE	2014-07-17	SCALE	AS SHOWN
CADD	JJS	2014-07-17	FIGURE	
CHECK				
REVIEW				

K:\Projects\14x-Projects\1406182_Belding Mixing Zone\PRODUCTION\A\1406182A001.dwg | Layout: MONITORING WELLS | Modified: JSchmaecker 07/17/2014 10:51 AM | Plotted: JSchmaecker 07/17/2014

ATTACHMENT A

TRIMATRIX LABORATORIES

July 16, 2014

Golder Associates, Inc. - MI
Attn: Mr. Brad Johnson
15851 S. US 27, Suite 50
Lansing, MI 48906

Project: Electrolux - Belding

Dear Mr. Brad Johnson,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	Received	Description
1407178	07/10/2014	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003329); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#103068); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-14-4); Virginia DCLS (#460153/2592); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

James D. McFadden
Project Chemist

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PROJECT TECHNICAL NARRATIVE(s)

No Project Narrative is associated with this report.

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STATEMENT OF DATA QUALIFICATIONS

All analyses have been validated and comply with our Quality Control Program.
No Qualification is required.

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Golder Associates, Inc. - MI**	Work Order:	**1407178**		
Project:	Electrolux - Belding	Description:	Laboratory Services		
Client Sample ID:	**MW-12**	Sampled:	7/10/14 11:35		
Lab Sample ID:	**1407178-01**	Sampled By:	Brian Eustice		
Matrix:	Water	Received:	7/10/14 14:45		
Unit:	ug/L	Prepared:	7/14/14 7:00	By:	DLV
Dilution Factor:	1	Analyzed:	7/14/14 17:06	By:	DLV
QC Batch:	1406843	Analytical Batch:	4G14040		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
71-43-2	Benzene	<1.0	1.0
75-00-3	Chloroethane	<1.0	1.0
74-87-3	Chloromethane	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*109*	*85-118*
1,2-Dichloroethane-d4	*105*	*87-122*
Toluene-d8	*96*	*85-113*
4-Bromofluorobenzene	*91*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Golder Associates, Inc. - MI**	Work Order:	**1407178**		
Project:	Electrolux - Belding	Description:	Laboratory Services		
Client Sample ID:	**MW-13**	Sampled:	7/10/14 12:55		
Lab Sample ID:	**1407178-02**	Sampled By:	Brian Eustice		
Matrix:	Water	Received:	7/10/14 14:45		
Unit:	ug/L	Prepared:	7/14/14 7:00	By:	DLV
Dilution Factor:	1	Analyzed:	7/14/14 17:33	By:	DLV
QC Batch:	1406843	Analytical Batch:	4G14040		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
71-43-2	Benzene	<1.0	1.0
75-00-3	Chloroethane	<1.0	1.0
74-87-3	Chloromethane	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**86**	1.0
156-60-5	trans-1,2-Dichloroethene	**11**	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**26**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*105*	*85-118*
1,2-Dichloroethane-d4	*105*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*94*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Golder Associates, Inc. - MI**	Work Order:	**1407178**		
Project:	Electrolux - Belding	Description:	Laboratory Services		
Client Sample ID:	**MW-FD**	Sampled:	7/10/14 0:00		
Lab Sample ID:	**1407178-03**	Sampled By:	Brian Eustice		
Matrix:	Water	Received:	7/10/14 14:45		
Unit:	ug/L	Prepared:	7/14/14 7:00	By:	DLV
Dilution Factor:	1	Analyzed:	7/14/14 17:59	By:	DLV
QC Batch:	1406843	Analytical Batch:	4G14040		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
71-43-2	Benzene	<1.0	1.0
75-00-3	Chloroethane	<1.0	1.0
74-87-3	Chloromethane	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*105*	*85-118*
1,2-Dichloroethane-d4	*105*	*87-122*
Toluene-d8	*97*	*85-113*
4-Bromofluorobenzene	*92*	*82-110*

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B

QC Batch: 1406843 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank — Analyzed: 07/14/2014 By: DLV
Unit: ug/L — Analytical Batch: 4G14040

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Benzene			<1.0					1.0
Chloroethane			<1.0					1.0
Chloromethane			<1.0					1.0
1,1-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
2-Butanone (MEK)			<5.0					5.0
Tetrachloroethene			<1.0					1.0
Toluene			<1.0					1.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene (Total)			<3.0			--		3.0
Surrogates:								
Dibromofluoromethane				*103*	*85-118*			
1,2-Dichloroethane-d4				*100*	*87-122*			
Toluene-d8				*96*	*85-113*			
4-Bromofluorobenzene				*96*	*82-110*			

Laboratory Control Sample — Analyzed: 07/14/2014 By: DLV
Unit: ug/L — Analytical Batch: 4G14040

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Benzene		40.0	**41.9**	105	84-119	--		1.0
Chloroethane		40.0	**41.2**	103	76-124	--		1.0
Chloromethane		40.0	**42.3**	106	73-125	--		1.0
1,1-Dichloroethane		40.0	**42.2**	106	80-118	--		1.0
1,1-Dichloroethene		40.0	**41.5**	104	77-123	--		1.0
cis-1,2-Dichloroethene		40.0	**42.2**	105	84-119	--		1.0
trans-1,2-Dichloroethene		40.0	**41.2**	103	76-126	--		1.0
2-Butanone (MEK)		40.0	**38.9**	97	52-142	--		5.0
Tetrachloroethene		40.0	**37.7**	94	81-117	--		1.0
Toluene		40.0	**42.1**	105	85-118	--		1.0

Continued on next page

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1406843 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued) Analyzed: 07/14/2014 By: DLV
Unit: ug/L Analytical Batch: 4G14040

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
1,1,1-Trichloroethane		40.0	**41.5**	104	81-122	--		1.0
1,1,2-Trichloroethane		40.0	**42.2**	106	83-121	--		1.0
Trichloroethene		40.0	**37.6**	94	82-119	--		1.0
Vinyl Chloride		40.0	**42.2**	106	77-123	--		1.0
Surrogates:								
Dibromofluoromethane				*100*	*85-118*			
1,2-Dichloroethane-d4				*104*	*87-122*			
Toluene-d8				*102*	*85-113*			
4-Bromofluorobenzene				*103*	*82-110*			

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TRIMATRIX LABORATORIES

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Chain of Custody Record

COC No. 12951

Pg. 1 of 1

For Lab Use Only

Cart —

VOA Rack/Tray 660-G

Receipt Log No. 42-22

Project Chemist Jim McFadden

Work Order No. 1407178

Client Name: Golder Associates, Inc., MI

Address: 15851S. US 27, Suite 50

City, State Zip: Lansing, MI 48906

Phone/Fax: D: 517-318-3250, F: 517-482-2460

Email: Brad Johnson (brad_johnson@golder.com)

Project Name: Electolux

Client Project No. / P.O. No.:

Invoice To: (●) Client ( ) Other (comments)

Contact/Report To: Brad Johnson

Analyses Requested

Schedule	Matrix Code	Sample Number		Field Sample ID	Cooler ID	Sample Date	Sample Time	COMP	GRAB	Matrix	D Volatiles - Water	A Volatiles - Liquid Waste	C	B	C						Total	Sample Comments
											1	17										
		01	1	MW-12	3393	7/10/14	1135		X	GW	2											
		02	2	MW-13	↓	7/10/14	1255		X	GW	2											
		03	3	MW-FD	↓	7/10/14	—		X	GW	2											
			4																			
			5																			
			6																			
			7																			
			8																			
			9																			
			10																			

Container Type (corresponds to Container Packing List)

Number of Containers Submitted

⇦ PRESERVATIVES
- A NONE pH~7
- B HNO_3 pH<2
- C H_2SO_4 pH<2
- D 1+1 HCl pH<2
- E NaOH pH>12
- F ZnAc/NaOH pH>9
- G MeOH
- H Other (note below)

Sampled By (print): Brian Evitlee

Sampler's Signature: [signature]

Company: Golder

How Shipped? Hand ✓ Carrier ____

Tracking No.

1. Relinquished By	Date	Time	2. Relinquished By	Date	Time	3. Relinquished By	Date	Time
[signature]	7/10/14	1445				[signature]		
1. Received By	**Date**	**Time**	**2. Received By**	**Date**	**Time**	**3. Received For Lab By**	**Date**	**Time**
						[signature]	7.10.14	1445

ORIGINAL - LABORATORY COPY - FIELD/SAMPLER

SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: GOLDER
Receipt Record Page/Line #: 42-22
Work Order #: 1407178
New / Add To
Project Chemist: JDR
Sample #s

Recorded by (initials/date): DN 7/10/14

Qty Received: ☑ Cooler ☐ Box ☐ Other ____ 1

Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (#____)

☐ See Additional Cooler Information Form

Cooler #	Time	Custody Seals	Coolant Type	Coolant Location	Temp Blank Present	If Present, Temperature Blank Location is
1123931	1725	☑ None ☐ Present / Intact ☐ Present / Not Intact	☐ Loose Ice ☑ Bagged Ice ☐ Blue Ice ☐ None	Dispersed / Top / Middle / Bottom	☐ Yes ☑ No	☐ Representative ☐ Not Representative
		☐ None ☐ Present / Intact ☐ Present / Not Intact	☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None	Dispersed / Top / Middle / Bottom	☐ Yes ☐ No	☐ Representative ☐ Not Representative
		☐ None ☐ Present / Intact ☐ Present / Not Intact	☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None	Dispersed / Top / Middle / Bottom	☐ Yes ☐ No	☐ Representative ☐ Not Representative
		☐ None ☐ Present / Intact ☐ Present / Not Intact	☐ Loose Ice ☐ Bagged Ice ☐ Blue Ice ☐ None	Dispersed / Top / Middle / Bottom	☐ Yes ☐ No	☐ Representative ☐ Not Representative

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:	11.9	0	11.9
Sample 2:	12.9	0	12.9
Sample 3:	11.1	0	11.1
3 Sample Average °C:	12.0		

☑ Cooler ID on COC? ☐ VOC Trip Blank received?

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:			
Sample 2:			
Sample 3:			
3 Sample Average °C:			

☐ Cooler ID on COC? ☐ VOC Trip Blank received?

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:			
Sample 2:			
Sample 3:			
3 Sample Average °C:			

☐ Cooler ID on COC? ☐ VOC Trip Blank received?

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:			
Sample 2:			
Sample 3:			
3 Sample Average °C:			

☐ Cooler ID on COC? ☐ VOC Trip Blank received?

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes	No	
☑	☐	Chain of Custody record(s)? If No, Initiated By ____
☑	☐	Received for Lab Signed/Date/Time?
☐	☑	Shipping document?
☐	☑	Other ____

COC Information

☑ TriMatrix COC ☐ Other ____

COC ID Numbers: 12951

Check COC for Accuracy

Yes	No	
☑	☐	Analysis Requested?
☑	☐	Sample ID matches COC?
☑	☐	Sample Date and Time matches COC?
☑		Container type completed on COC?
☑	☐	All container types indicated are received?

Check Sample Preservation

N/A	Yes	No	
	☑	☐	Temperature Blank OR average sample temperature, ≥6° C?
☐	☐	☐	If either is ≥6° C, was thermal preservation required?
☐	☑	☐	If "Yes", Project Chemist Approval Initials: ____
☑	☐	☐	If "Yes" Completed Non Con Cooler - Cont Inventory Form?
☑	☐	☐	Completed Sample Preservation Verification Form?
☑	☐	☐	Samples chemically preserved correctly?
☑	☐	☐	If "No", added orange tag?
	☐	☑	Received pre-preserved VOC soils? ☐ MeOH ☐ Na_2SO_4

Check for Short Hold-Time Prep/Analyses

☐ Bacteriological
☐ Air Bags
☐ EnCores / Methanol Pre-Preserved
☐ Formaldehyde/Aldehyde
☐ Green-tagged containers
☐ Yellow/White-tagged 1 L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
☑ NONE RECEIVED
☐ RECEIVED, COCs TO LAB(S)

Sample Condition Summary

N/A	Yes	No	
	☐	☑	Broken containers/lids?
	☐	☑	Missing or incomplete labels?
	☐	☑	Illegible information on labels?
	☐	☑	Low volume received?
	☐	☑	Inappropriate or non-TriMatrix containers received?
☐	☐	☑	VOC vials / TOX containers have headspace?
☑	☐	☐	Extra sample locations / containers not listed on COC?

Notes

☐ Trip Blank received ☐ Trip Blank not listed on COC

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
DN 7/10/14	7/10/14	Yes / No