ARCADIS

ZF Active Safety US Inc.

PROGRESS REPORT NO. 8

Former Kelsey-Hayes Company Site, Milford, Michigan

Administrative Order for Response Activity, EGLE Docket No. AO-RRD-22-001

December 15, 2022

PROGRESS REPORT NO. 8
FORMER KELSEY-HAYES COMPANY
MILFORD, MICHIGAN
ADMINISTRATIVE ORDER FOR RESPONSE ACTIVITY EGLE
DOCKET NO. AO-RRD-22-001

This progress report has been prepared and is being submitted pursuant to Section XII of the Administrative Order for Response Activity, Docket No. AO-RRD-22-001 (AO) issued by the Department of Environment, Great Lakes, and Energy (EGLE) to ZF Active Safety US Inc. (ZF or Respondent) on March 16, 2022 (effective date), with respect to the former Kelsey-Hayes site in Milford, Michigan (the Site). This progress report provides information regarding response activities and other matters related to the AO that occurred from November 15, 2022 through December 14, 2022.

Chronological Description of Activities Conducted during the Specified Reporting Period:

- Observation Wells OW-16D2, OW-16D2R1, and OW-16D2R2 were sampled on December 7, 2022. The samples were submitted to Eurofins Canton, Ohio (Eurofins) for analysis of volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Test Method 8260D. Laboratory analytical results will be submitted to EGLE and the VOM when available.

Results of Sampling and Tests and Other Data

- The laboratory analytical report for the samples collected on November 3, 2022 at Observation Wells OW-16D2, OW-16D2R1, and OW-16D2R2 was submitted to EGLE and VOM on November 22, 2022 and is included in **Attachment 1**. Vinyl chloride was not detected at or above the reporting limit of 1.0 microgram per liter (µg/L) in any of the November 3, 2022 samples.
- Observation Wells OW-16D2, OW-16D2R1, and OW-16D2R2 were sampled on December 7, 2022. The samples were submitted to Eurofins for analysis of VOCs using USEPA Test Method 8260D. Laboratory analytical results will be submitted to EGLE and the VOM when available.

Status of Access Issues

- There have been no issues with access during the reporting period.

Scheduled for the Next Reporting Period

- Submit laboratory analytical results from the samples collected on December 7, 2022 at Observation Wells OW-16D2, OW-16D2R1, and OW-16D2R2 to EGLE and the VOM.
- Conduct sampling at Observation Well OW-16D2 during the month of January 2023, with analysis conducted by Eurofins within 10 to 14 days.

- Conduct sampling at Observation Wells OW-16D2R1 and OW-16D2R2 during the month of January 2023, with analysis conducted by Eurofins within 10 to 14 days.
- Continue to work with Ms. Yusko-Kotimko (EGLE) on ZF's Permit Application for Water Supply Systems pursuant to Act 399 for construction of the VOM treatment system improvements.

Other Relevant Information

- No other relevant information was identified during this reporting period.

Attachments

1. Laboratory Analytical Report (Observation Wells OW-16D2, OW-16D2R1, and OW-16D2R2)

ATTACHMENT 1

Laboratory Analytical Report (Observation Wells OW-16D2, OW-16D2R1, and OW-16D2R2)

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Scott Detwiler
ZF Active Safety and Electronics LLC
Tech 2
12025 Tech Center Drive
Livonia Michigan 48150

Generated 11/22/2022 11:24:26 AM Revision 1

JOB DESCRIPTION

TRW Milford

JOB NUMBER

240-175885-1

Eurofins Canton
180 S. Van Buren Avenue
Barberton OH 44203

myEOL

Table of Contents

Definitions/Glossary

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Job ID: 240-175885-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-175885-1

Receipt
Report revised on 11/22/2022 to report TCL list for VOCs.

The samples were received on 11/4/2022 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

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

Method Summary

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CAN
5030C	Purge and Trap	SW846	EET CAN

Protocol References:

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

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-175885-1	OW-16D2	Water	11/03/22 09:05	11/04/22 09:40
240-175885-2	OW-16D2R1	Water	11/03/22 09:42	11/04/22 09:40
240-175885-3	OW-16D2R2	Water	11/03/22 10:20	11/04/22 09:40

Detection Summary

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Client Sample ID: OW-16D2 — Lab Sample ID: 240-175885-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.9		1.0		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	12		1.0		ug/L	1		8260D	Total/NA

Client Sample ID: OW-16D2R1 — Lab Sample ID: 240-175885-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.9		1.0		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	17		1.0		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.0		1.0		ug/L	1		8260D	Total/NA

Client Sample ID: OW-16D2R2 — Lab Sample ID: 240-175885-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	8.3		1.0		ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Client Sample ID: OW-16D2

Date Collected: 11/03/22 09:05
Date Received: 11/04/22 09:40

Lab Sample ID: 240-175885-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,1-Dichloroethane	**2.9**		1.0		ug/L			11/15/22 13:58	1
cis-1,2-Dichloroethene	**12**		1.0		ug/L			11/15/22 13:58	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/15/22 13:58	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/15/22 13:58	1
Trichloroethene	1.0	U	1.0		ug/L			11/15/22 13:58	1
Benzene	1.0	U	1.0		ug/L			11/15/22 13:58	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/15/22 13:58	1
Carbon disulfide	1.0	U	1.0		ug/L			11/15/22 13:58	1
Bromoform	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
Acetone	10	U	10		ug/L			11/15/22 13:58	1
Methyl acetate	10	U	10		ug/L			11/15/22 13:58	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10		ug/L			11/15/22 13:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
Methylene Chloride	5.0	U	5.0		ug/L			11/15/22 13:58	1
Chloromethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
Bromomethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
Chlorodibromomethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
Toluene	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			11/15/22 13:58	1
o-Xylene	1.0	U	1.0		ug/L			11/15/22 13:58	1
Chlorobenzene	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0		ug/L			11/15/22 13:58	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 13:58	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/15/22 13:58	1
Styrene	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
Chloroethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 13:58	1
2-Hexanone	10	U	10		ug/L			11/15/22 13:58	1
2-Butanone (MEK)	10	U	10		ug/L			11/15/22 13:58	1
Ethylbenzene	1.0	U	1.0		ug/L			11/15/22 13:58	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/15/22 13:58	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/15/22 13:58	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/15/22 13:58	1
Xylenes, Total	2.0	U	2.0		ug/L			11/15/22 13:58	1
Cyclohexane	1.0	U	1.0		ug/L			11/15/22 13:58	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/15/22 13:58	1
Chloroform	1.0	U	1.0		ug/L			11/15/22 13:58	1
m-Xylene & p-Xylene	2.0	U	2.0		ug/L			11/15/22 13:58	1
Vinyl chloride	1.0	U	1.0		ug/L			11/15/22 13:58	1
Ethylene Dibromide	1.0	U	1.0		ug/L			11/15/22 13:58	1
Carbon tetrachloride	1.0	U	1.0		ug/L			11/15/22 13:58	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 13:58	1

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Client Sample ID: OW-16D2
Date Collected: 11/03/22 09:05
Date Received: 11/04/22 09:40

Lab Sample ID: 240-175885-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0		ug/L			11/15/22 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*78 - 122*		*11/15/22 13:58*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*11/15/22 13:58*	*1*
4-Bromofluorobenzene (Surr)	*92*		*56 - 136*		*11/15/22 13:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*11/15/22 13:58*	*1*

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Client Sample ID: OW-16D2R1

Date Collected: 11/03/22 09:42
Date Received: 11/04/22 09:40

Lab Sample ID: 240-175885-2

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,1-Dichloroethane	**1.9**		1.0		ug/L			11/15/22 14:21	1
cis-1,2-Dichloroethene	**17**		1.0		ug/L			11/15/22 14:21	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/15/22 14:21	1
trans-1,2-Dichloroethene	**1.0**		1.0		ug/L			11/15/22 14:21	1
Trichloroethene	1.0	U	1.0		ug/L			11/15/22 14:21	1
Benzene	1.0	U	1.0		ug/L			11/15/22 14:21	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/15/22 14:21	1
Carbon disulfide	1.0	U	1.0		ug/L			11/15/22 14:21	1
Bromoform	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
Acetone	10	U	10		ug/L			11/15/22 14:21	1
Methyl acetate	10	U	10		ug/L			11/15/22 14:21	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10		ug/L			11/15/22 14:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
Methylene Chloride	5.0	U	5.0		ug/L			11/15/22 14:21	1
Chloromethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
Bromomethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
Chlorodibromomethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
Toluene	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:21	1
o-Xylene	1.0	U	1.0		ug/L			11/15/22 14:21	1
Chlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0		ug/L			11/15/22 14:21	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:21	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/15/22 14:21	1
Styrene	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
Chloroethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:21	1
2-Hexanone	10	U	10		ug/L			11/15/22 14:21	1
2-Butanone (MEK)	10	U	10		ug/L			11/15/22 14:21	1
Ethylbenzene	1.0	U	1.0		ug/L			11/15/22 14:21	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/15/22 14:21	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/15/22 14:21	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/15/22 14:21	1
Xylenes, Total	2.0	U	2.0		ug/L			11/15/22 14:21	1
Cyclohexane	1.0	U	1.0		ug/L			11/15/22 14:21	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/15/22 14:21	1
Chloroform	1.0	U	1.0		ug/L			11/15/22 14:21	1
m-Xylene & p-Xylene	2.0	U	2.0		ug/L			11/15/22 14:21	1
Vinyl chloride	1.0	U	1.0		ug/L			11/15/22 14:21	1
Ethylene Dibromide	1.0	U	1.0		ug/L			11/15/22 14:21	1
Carbon tetrachloride	1.0	U	1.0		ug/L			11/15/22 14:21	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:21	1

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Client Sample ID: OW-16D2R1
Date Collected: 11/03/22 09:42
Date Received: 11/04/22 09:40

Lab Sample ID: 240-175885-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0		ug/L			11/15/22 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*78 - 122*		*11/15/22 14:21*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*11/15/22 14:21*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*11/15/22 14:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*11/15/22 14:21*	*1*

Client Sample ID: OW-16D2R2
Lab Sample ID: 240-175885-3

Date Collected: 11/03/22 10:20
Matrix: Water
Date Received: 11/04/22 09:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
cis-1,2-Dichloroethene	**8.3**		1.0		ug/L			11/15/22 14:44	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/15/22 14:44	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/15/22 14:44	1
Trichloroethene	1.0	U	1.0		ug/L			11/15/22 14:44	1
Benzene	1.0	U	1.0		ug/L			11/15/22 14:44	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/15/22 14:44	1
Carbon disulfide	1.0	U	1.0		ug/L			11/15/22 14:44	1
Bromoform	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
Acetone	10	U	10		ug/L			11/15/22 14:44	1
Methyl acetate	10	U	10		ug/L			11/15/22 14:44	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10		ug/L			11/15/22 14:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
Methylene Chloride	5.0	U	5.0		ug/L			11/15/22 14:44	1
Chloromethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
Bromomethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
Chlorodibromomethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
Toluene	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:44	1
o-Xylene	1.0	U	1.0		ug/L			11/15/22 14:44	1
Chlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0		ug/L			11/15/22 14:44	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:44	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/15/22 14:44	1
Styrene	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
Chloroethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:44	1
2-Hexanone	10	U	10		ug/L			11/15/22 14:44	1
2-Butanone (MEK)	10	U	10		ug/L			11/15/22 14:44	1
Ethylbenzene	1.0	U	1.0		ug/L			11/15/22 14:44	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/15/22 14:44	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/15/22 14:44	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/15/22 14:44	1
Xylenes, Total	2.0	U	2.0		ug/L			11/15/22 14:44	1
Cyclohexane	1.0	U	1.0		ug/L			11/15/22 14:44	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/15/22 14:44	1
Chloroform	1.0	U	1.0		ug/L			11/15/22 14:44	1
m-Xylene & p-Xylene	2.0	U	2.0		ug/L			11/15/22 14:44	1
Vinyl chloride	1.0	U	1.0		ug/L			11/15/22 14:44	1
Ethylene Dibromide	1.0	U	1.0		ug/L			11/15/22 14:44	1
Carbon tetrachloride	1.0	U	1.0		ug/L			11/15/22 14:44	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 14:44	1

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Client Sample ID: OW-16D2R2
Date Collected: 11/03/22 10:20
Date Received: 11/04/22 09:40

Lab Sample ID: 240-175885-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0		ug/L			11/15/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*78 - 122*		*11/15/22 14:44*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*11/15/22 14:44*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*11/15/22 14:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*62 - 137*		*11/15/22 14:44*	*1*

Surrogate Summary

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	DCA
Lab Sample ID	Client Sample ID	(78-122)	(73-120)	(56-136)	(62-137)
240-175885-1	OW-16D2	106	98	92	105
240-175885-2	OW-16D2R1	104	98	95	105
240-175885-3	OW-16D2R2	106	98	91	105
LCS 240-551976/5	Lab Control Sample	108	96	103	99
MB 240-551976/8	Method Blank	106	98	93	104

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

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

Lab Sample ID: MB 240-551976/8
Matrix: Water
Analysis Batch: 551976

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/15/22 11:15	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Trichloroethene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Benzene	1.0	U	1.0		ug/L			11/15/22 11:15	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Carbon disulfide	1.0	U	1.0		ug/L			11/15/22 11:15	1
Bromoform	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
Acetone	10	U	10		ug/L			11/15/22 11:15	1
Methyl acetate	10	U	10		ug/L			11/15/22 11:15	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
4-Methyl-2-pentanone (MIBK)	10	U	10		ug/L			11/15/22 11:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
Methylene Chloride	5.0	U	5.0		ug/L			11/15/22 11:15	1
Chloromethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
Bromomethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
Chlorodibromomethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
Toluene	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			11/15/22 11:15	1
o-Xylene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Chlorobenzene	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0		ug/L			11/15/22 11:15	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/15/22 11:15	1
Styrene	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
Chloroethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			11/15/22 11:15	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 11:15	1
2-Hexanone	10	U	10		ug/L			11/15/22 11:15	1
2-Butanone (MEK)	10	U	10		ug/L			11/15/22 11:15	1
Ethylbenzene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/15/22 11:15	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/15/22 11:15	1
Xylenes, Total	2.0	U	2.0		ug/L			11/15/22 11:15	1
Cyclohexane	1.0	U	1.0		ug/L			11/15/22 11:15	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Chloroform	1.0	U	1.0		ug/L			11/15/22 11:15	1
m-Xylene & p-Xylene	2.0	U	2.0		ug/L			11/15/22 11:15	1
Vinyl chloride	1.0	U	1.0		ug/L			11/15/22 11:15	1
Ethylene Dibromide	1.0	U	1.0		ug/L			11/15/22 11:15	1
Carbon tetrachloride	1.0	U	1.0		ug/L			11/15/22 11:15	1

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

Lab Sample ID: MB 240-551976/8
Matrix: Water
Analysis Batch: 551976

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			11/15/22 11:15	1
Dichlorobromomethane	1.0	U	1.0		ug/L			11/15/22 11:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*78 - 122*		*11/15/22 11:15*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*11/15/22 11:15*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*11/15/22 11:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*62 - 137*		*11/15/22 11:15*	*1*

Lab Sample ID: LCS 240-551976/5
Matrix: Water
Analysis Batch: 551976

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	17.7		ug/L		89	64 - 131
1,1-Dichloroethane	20.0	17.2		ug/L		86	72 - 127
cis-1,2-Dichloroethene	20.0	16.9		ug/L		85	77 - 123
Tetrachloroethene	20.0	19.8		ug/L		99	76 - 123
trans-1,2-Dichloroethene	20.0	17.1		ug/L		86	75 - 124
Trichloroethene	20.0	17.4		ug/L		87	70 - 122
Benzene	20.0	17.8		ug/L		89	77 - 123
cis-1,3-Dichloropropene	20.0	17.8		ug/L		89	64 - 130
Carbon disulfide	20.0	16.7		ug/L		83	43 - 140
Bromoform	20.0	19.0		ug/L		95	57 - 129
1,2-Dichloroethane	20.0	17.4		ug/L		87	66 - 128
1,2-Dichloropropane	20.0	18.2		ug/L		91	75 - 133
1,1,2-Trichloroethane	20.0	20.3		ug/L		101	70 - 138
Acetone	40.0	39.7		ug/L		99	50 - 149
Methyl acetate	40.0	34.2		ug/L		86	42 - 169
Dichlorodifluoromethane	20.0	14.1		ug/L		70	34 - 153
4-Methyl-2-pentanone (MIBK)	40.0	37.1		ug/L		93	46 - 158
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.5		ug/L		88	51 - 146
Methylene Chloride	20.0	17.8		ug/L		89	71 - 125
Chloromethane	20.0	15.7		ug/L		79	47 - 143
Bromomethane	20.0	15.1		ug/L		76	36 - 142
Chlorodibromomethane	20.0	19.7		ug/L		99	70 - 124
Toluene	20.0	20.3		ug/L		102	80 - 123
1,2,4-Trichlorobenzene	20.0	15.6		ug/L		78	44 - 147
o-Xylene	20.0	18.6		ug/L		93	80 - 123
Chlorobenzene	20.0	18.8		ug/L		94	80 - 121
1,2-Dibromo-3-Chloropropane	20.0	18.6		ug/L		93	53 - 135
1,3-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 120
Methyl tert-butyl ether	20.0	16.7		ug/L		84	65 - 126
Styrene	20.0	19.7		ug/L		99	80 - 135
1,1,2,2-Tetrachloroethane	20.0	21.6		ug/L		108	58 - 157
Chloroethane	20.0	15.5		ug/L		77	38 - 152
1,1-Dichloroethene	20.0	17.2		ug/L		86	63 - 134
1,2-Dichlorobenzene	20.0	18.6		ug/L		93	78 - 120

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

Lab Sample ID: LCS 240-551976/5
Matrix: Water
Analysis Batch: 551976

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Hexanone	40.0	42.4		ug/L		106	43 - 167
2-Butanone (MEK)	40.0	37.0		ug/L		93	54 - 156
Ethylbenzene	20.0	19.3		ug/L		97	80 - 121
Isopropylbenzene	20.0	18.9		ug/L		95	74 - 128
Methylcyclohexane	20.0	17.7		ug/L		88	62 - 136
Trichlorofluoromethane	20.0	16.2		ug/L		81	30 - 170
Xylenes, Total	40.0	38.1		ug/L		95	80 - 121
Cyclohexane	20.0	18.0		ug/L		90	58 - 146
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	57 - 129
Chloroform	20.0	17.6		ug/L		88	74 - 122
m-Xylene & p-Xylene	20.0	19.5		ug/L		98	80 - 120
Vinyl chloride	20.0	16.7		ug/L		84	60 - 144
Ethylene Dibromide	20.0	19.9		ug/L		100	71 - 134
Carbon tetrachloride	20.0	17.4		ug/L		87	55 - 137
1,4-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120
Dichlorobromomethane	20.0	18.0		ug/L		90	69 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*108*		*78 - 122*
Dibromofluoromethane (Surr)	*96*		*73 - 120*
4-Bromofluorobenzene (Surr)	*103*		*56 - 136*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*

QC Association Summary

Client: ZF Active Safety and Electronics LLC
Job ID: 240-175885-1
Project/Site: TRW Milford

GC/MS VOA

Analysis Batch: 551976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-175885-1	OW-16D2	Total/NA	Water	8260D	
240-175885-2	OW-16D2R1	Total/NA	Water	8260D	
240-175885-3	OW-16D2R2	Total/NA	Water	8260D	
MB 240-551976/8	Method Blank	Total/NA	Water	8260D	
LCS 240-551976/5	Lab Control Sample	Total/NA	Water	8260D	

Lab Chronicle

Client: ZF Active Safety and Electronics LLC
Project/Site: TRW Milford

Job ID: 240-175885-1

Client Sample ID: OW-16D2
Date Collected: 11/03/22 09:05
Date Received: 11/04/22 09:40

Lab Sample ID: 240-175885-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	551976	TJL1	EET CAN	11/15/22 13:58

Client Sample ID: OW-16D2R1
Date Collected: 11/03/22 09:42
Date Received: 11/04/22 09:40

Lab Sample ID: 240-175885-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	551976	TJL1	EET CAN	11/15/22 14:21

Client Sample ID: OW-16D2R2
Date Collected: 11/03/22 10:20
Date Received: 11/04/22 09:40

Lab Sample ID: 240-175885-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	551976	TJL1	EET CAN	11/15/22 14:44

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ZF Active Safety and Electronics LLC
Job ID: 240-175885-1
Project/Site: TRW Milford

Laboratory: Eurofins Canton

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

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

MICHIGAN
190

0.1/0.8

STL North Canton 4101 Shuffel Drive NW North Canton, OH 44720 Attn: Michael DelMonico	TRW Chain Of Custody / Analysis Request	LAB USE ONLY Laboratory ID No. (Lot No.)

Project Type:	Groundwater Sampling - IZ	Privileged & Confidential	Yes	Site Name:	Milford
		TRW PO No.	30126485.000IZ	Site Location:	Milford, Michigan
TRW PM: (name, company, address, e-mail)		Database Manager: (name, company, address, E-mail)			
Bob Bleazard		Marina Samp and Sharon Clouse			
11202 East Germann Road		28550 Cabot Drive, Suite 500			
Mesa, AZ 85212		Novi, MI 48377			
bob.bleazard@trw.com		~~stacey.hannula@arcadis.com~~	chris.mcharris@arcadis.com		
		sclouse@arcadis-us.com			
Analysis Level	Level 1 (Routine Report)	Sampler	S. Hannula		
TAT	10 Business Days (Standard - Level 1)	Deliverable	EDD/PDF (e-mail)		

Sample Identification and Information

Preservatives Code (see below): 1

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	No. of Cont.	Grab or Composite	Field Filtered	VOC 8260	Lab Sample Numbers
1	OW-16D2	--	--	OW-16D2_110322	11-3-22	0905	GW	WATER	REG	9	G	N	X	
2	OW-16D2R1	--	--	OW-16D2R1_110322	11-3-22	0942	GW	WATER	REG	3	G	N	X	
3	OW-16D2R2	--	--	OW-16D2R2_110322	11-3-22	1020	GW	WATER	REG	3	G	N	X	
4														
5														
6														
7														
8														
9														
10														

Special Instructions:

Relinquished by	Company / Date/Time	Received by	Company / Date/Time	Condition / Cooler Temp	Custody Seals Intact
Stacey Hannula	Company: Arcadis Date/Time: 11/3/22 1345	[signature]	Company: EEIA Date/Time: 11/3/22	Condition: Cooler Temp:	Custody Seals Intact:
[signature]	Company: EEIA Date/Time: 11/3/22	[signature]	Company: EETNC Date/Time: 11/4/22 940	Condition: Cooler Temp:	Custody Seals Intact:
Relinquished by	Company: Date/Time:	Received by	Company: Date/Time:	Condition: Cooler Temp:	Custody Seals Intact:
Relinquished by	Company: Date/Time:	Received by	Company: Date/Time:	Condition: Cooler Temp:	Custody Seals Intact:

Preservatives Code: 0 = None; 1 = HCL; 2 = HNO3; 3 = H2SO4; 4 = NaOH; 5 = Zn. Acetate; 6 = MeOH; 7 = NaHSO4; 8 = Other (specify):

240-175885 Chain of Custody

pg 1/1

Eurofins - Canton Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client TRW Site Name _____ Cooler unpacked by: Tammy Hoffman

Cooler Received on 11-4-22 Opened on 11-4-22

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other

Receipt After-Hours: Drop-off Date/Time **Storage Location**

Eurofins Cooler # 1A Foam Box Client Cooler Box Other _____

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

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-13 (CF +0.7 °C) Observed Cooler Temp. 0.1 °C Corrected Cooler Temp. 0.8 °C
   IR GUN #IR-15 (CF 0.0°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC286777
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⇐ Larger than this. TR	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 220716	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

Sample OV-16D2 only has 3 containers, not 9.

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WT-NC-099

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

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