

11 January 2023

Work Order: 2212138

Price: \$720.00

Amy Keranen

EGLE-RRD-UP

1504 W. Washington St.

Marquette, MI 49855

RE: CALUMET DRY CLEANER

This is the official environmental laboratory report for testing conducted by the Michigan Department of Environment, Great Lakes, and Energy. Analyses performed by the laboratory were conducted using methods published by the U.S. Environmental Protection Agency, Standard Methods for the Examination of Water and Wastewater, ASTM, or other published or approved reference methods.

Kirby Shane

Laboratory Director

EGLE-RRD-UP
1504 W. Washington St.
Marquette MI, 49855

Project: CALUMET DRY CLEANER
Site Code: 31000530
Project Manager: Amy Keranen

Reported:
01/11/2023

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
22VP01-SS	2212138-01	Air	12/13/2022	12/16/2022	
22VP02-SS	2212138-02	Air	12/13/2022	12/16/2022	
22VP03-SS	2212138-03	Air	12/13/2022	12/16/2022	
22VP04-SS	2212138-04	Air	12/13/2022	12/16/2022	

Notes and Definitions

Y11	Unidentified peaks present in sample.
X1	Method TO-15 is used for the analysis of volatile organic compounds in air. Naphthalene and 2-Methylnaphthalene are semi volatile compounds and results should be considered estimated.
T	Reported value is less than the reporting limit (RL). Result is estimated.
ND	Indicates compound analyzed for but not detected at or above the reporting limit (RL).
RL	Reporting Limit
NA	Not Applicable

Case Narrative

Samples were received **12/16/2022 3:07:00PM** for client **EGLE-RRD-UP** as a part of project **CALUMET DRY CLEANER**.

Samples were logged and designated as Work Order # **2212138** on **12/16/2022 3:19:00PM**.

This Report was created **1/11/2023 11:03:44AM**.

Additional Notes/Narrative (if applicable):



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
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Client ID: 22VP01-SS

Lab ID: 2212138-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
71-55-6	1,1,1-Trichloroethane	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-00-5	1,1,2-Trichloroethane	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-34-3	1,1-Dichloroethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-35-4	1,1-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
87-61-6	1,2,3-Trichlorobenzene	ND	7.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-18-4	1,2,3-Trichloropropane	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
526-73-8	1,2,3-Trimethylbenzene	3.3	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-63-6	1,2,4-Trimethylbenzene	14	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-93-4	1,2-Dibromoethane	ND	2.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
107-06-2	1,2-Dichloroethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-67-8	1,3,5-Trimethylbenzene	3.5	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-99-0	1,3-Butadiene	ND	0.66	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
540-84-1	2,2,4-Trimethylpentane	13	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
78-93-3	2-Butanone (MEK)	ND	15	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
91-57-6	2-Methylnaphthalene	ND	29	ug/m3	1	12/20/22	B2L2210	TO-15	CA	X1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-64-1	Acetone	ND	59	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-05-8	Acetonitrile	ND	1.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
107-13-1	Acrylonitrile	ND	1.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
71-43-2	Benzene	4.3	0.96	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-86-1	Bromobenzene	ND	1.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-27-4	Bromodichloromethane	ND	2.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-25-2	Bromoform	ND	3.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
74-83-9	Bromomethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-15-0	Carbon disulfide	ND	0.93	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
56-23-5	Carbon tetrachloride	ND	1.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-90-7	Chlorobenzene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-00-3	Chloroethane	ND	0.79	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-66-3	Chloroform	ND	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
74-87-3	Chloromethane	ND	0.62	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
156-59-2	cis-1,2-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
110-82-7	Cyclohexane	2.3	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
124-48-1	Dibromochloromethane	ND	2.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	



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Client ID: 22VP01-SS

Lab ID: 2212138-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	2.3	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
60-29-7	Diethyl ether	ND	3.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-20-3	Diisopropyl Ether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
64-17-5	Ethanol	ND	47	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
100-41-4	Ethylbenzene	20	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
637-92-3	Ethyltertiarybutylether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-72-1	Hexachloroethane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
110-54-3	Hexane	4.3	3.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-63-0	Isopropyl Alcohol	ND	61	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
98-82-8	Isopropylbenzene	ND	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
1330-20-7	m & p - Xylene	34	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-37-7	Methylcyclopentane	6.6	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-09-2	Methylene chloride	ND	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
1634-04-4	Methyltertiarybutylether	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
91-20-3	Naphthalene	ND	26	ug/m3	1	12/20/22	B2L2210	TO-15	CA	X1
104-51-8	n-Butylbenzene	ND	5.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
142-82-5	n-Heptane	7.3	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
103-65-1	n-Propylbenzene	3.2	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-47-6	o-Xylene	11	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
109-66-0	Pentane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
135-98-8	sec-Butylbenzene	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
100-42-5	Styrene	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
98-06-6	tert-Butylbenzene	ND	5.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-65-0	tertiary Butyl Alcohol	ND	76	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
994-05-8	tertiaryAmylmethylether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
127-18-4	Tetrachloroethylene	110	2.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
109-99-9	Tetrahydrofuran	0.79	0.88	ug/m3	1	12/20/22	B2L2210	TO-15	CA	T
108-88-3	Toluene	36	1.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
156-60-5	trans-1,2-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-01-6	Trichloroethylene	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-69-4	Trichlorofluoromethane	6.3	1.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-01-4	Vinyl chloride	ND	0.76	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
Surrogate: Bromofluorobenzene			95.3 %	70-130		12/20/22	B2L2210	TO-15	CA	



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P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: 22VP02-SS

Lab ID: 2212138-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
71-55-6	1,1,1-Trichloroethane	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-00-5	1,1,2-Trichloroethane	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-34-3	1,1-Dichloroethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-35-4	1,1-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
87-61-6	1,2,3-Trichlorobenzene	ND	7.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-18-4	1,2,3-Trichloropropane	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
526-73-8	1,2,3-Trimethylbenzene	3.5	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-63-6	1,2,4-Trimethylbenzene	15	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-93-4	1,2-Dibromoethane	ND	2.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
107-06-2	1,2-Dichloroethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-67-8	1,3,5-Trimethylbenzene	3.7	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-99-0	1,3-Butadiene	ND	0.66	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
540-84-1	2,2,4-Trimethylpentane	3.5	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
78-93-3	2-Butanone (MEK)	ND	15	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
91-57-6	2-Methylnaphthalene	ND	29	ug/m3	1	12/20/22	B2L2210	TO-15	CA	X1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-64-1	Acetone	ND	59	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-05-8	Acetonitrile	ND	1.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
107-13-1	Acrylonitrile	ND	1.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
71-43-2	Benzene	1.1	0.96	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-86-1	Bromobenzene	ND	1.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-27-4	Bromodichloromethane	ND	2.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-25-2	Bromoform	ND	3.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
74-83-9	Bromomethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-15-0	Carbon disulfide	2.6	0.93	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
56-23-5	Carbon tetrachloride	ND	1.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-90-7	Chlorobenzene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-00-3	Chloroethane	ND	0.79	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-66-3	Chloroform	4.5	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
74-87-3	Chloromethane	ND	0.62	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
156-59-2	cis-1,2-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
110-82-7	Cyclohexane	ND	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
124-48-1	Dibromochloromethane	ND	2.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	



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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	2.2	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
60-29-7	Diethyl ether	ND	3.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-20-3	Diisopropyl Ether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
64-17-5	Ethanol	ND	47	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
100-41-4	Ethylbenzene	5.5	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
637-92-3	Ethyltertiarybutylether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-72-1	Hexachloroethane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
110-54-3	Hexane	ND	3.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-63-0	Isopropyl Alcohol	ND	61	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
98-82-8	Isopropylbenzene	ND	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
1330-20-7	m & p - Xylene	25	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-37-7	Methylcyclopentane	1.0	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-09-2	Methylene chloride	ND	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
1634-04-4	Methyltertiarybutylether	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
91-20-3	Naphthalene	ND	26	ug/m3	1	12/20/22	B2L2210	TO-15	CA	X1
104-51-8	n-Butylbenzene	ND	5.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
142-82-5	n-Heptane	1.4	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
103-65-1	n-Propylbenzene	2.3	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-47-6	o-Xylene	8.9	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
109-66-0	Pentane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
135-98-8	sec-Butylbenzene	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
100-42-5	Styrene	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
98-06-6	tert-Butylbenzene	ND	5.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-65-0	tertiary Butyl Alcohol	ND	76	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
994-05-8	tertiaryAmylmethylether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
127-18-4	Tetrachloroethylene	65	2.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
109-99-9	Tetrahydrofuran	ND	0.88	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-88-3	Toluene	33	1.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
156-60-5	trans-1,2-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-01-6	Trichloroethylene	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-69-4	Trichlorofluoromethane	ND	1.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-01-4	Vinyl chloride	ND	0.76	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
<i>Surrogate: Bromofluorobenzene</i>			96.8 %	70-130		12/20/22	B2L2210	TO-15	CA	



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
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Client ID: 22VP03-SS

Lab ID: 2212138-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
71-55-6	1,1,1-Trichloroethane	ND	1.6	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
79-00-5	1,1,2-Trichloroethane	ND	1.6	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-34-3	1,1-Dichloroethane	ND	1.2	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-35-4	1,1-Dichloroethylene	ND	1.2	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
87-61-6	1,2,3-Trichlorobenzene	ND	7.4	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
96-18-4	1,2,3-Trichloropropane	ND	1.8	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
526-73-8	1,2,3-Trimethylbenzene	2.8	1.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
95-63-6	1,2,4-Trimethylbenzene	14	1.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.9	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
106-93-4	1,2-Dibromoethane	ND	2.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
107-06-2	1,2-Dichloroethane	ND	1.2	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
108-67-8	1,3,5-Trimethylbenzene	3.3	1.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
106-99-0	1,3-Butadiene	ND	0.66	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
540-84-1	2,2,4-Trimethylpentane	ND	1.4	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
78-93-3	2-Butanone (MEK)	ND	15	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
91-57-6	2-Methylnaphthalene	ND	29	ug/m3	1	12/21/22	B3A0401	TO-15	CA	X1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.1	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
67-64-1	Acetone	ND	59	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-05-8	Acetonitrile	ND	1.7	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
107-13-1	Acrylonitrile	ND	1.1	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
71-43-2	Benzene	2.7	0.96	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
108-86-1	Bromobenzene	ND	1.9	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-27-4	Bromodichloromethane	ND	2.0	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-25-2	Bromoform	ND	3.1	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
74-83-9	Bromomethane	ND	1.2	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-15-0	Carbon disulfide	ND	0.93	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
56-23-5	Carbon tetrachloride	ND	1.9	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
108-90-7	Chlorobenzene	ND	1.4	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-00-3	Chloroethane	ND	0.79	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
67-66-3	Chloroform	ND	1.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
74-87-3	Chloromethane	ND	0.62	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
156-59-2	cis-1,2-Dichloroethylene	ND	1.2	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.4	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
110-82-7	Cyclohexane	ND	1.0	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
124-48-1	Dibromochloromethane	ND	2.6	ug/m3	1	12/21/22	B3A0401	TO-15	CA	



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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
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Client ID: 22VP03-SS

Lab ID: 2212138-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										
75-71-8	Dichlorodifluoromethane	2.2	1.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
60-29-7	Diethyl ether	ND	3.0	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
108-20-3	Diisopropyl Ether	ND	1.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
64-17-5	Ethanol	ND	47	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
100-41-4	Ethylbenzene	5.7	1.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
637-92-3	Ethyltertiarybutylether	ND	1.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
67-72-1	Hexachloroethane	ND	2.9	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
110-54-3	Hexane	ND	3.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
67-63-0	Isopropyl Alcohol	ND	61	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
98-82-8	Isopropylbenzene	ND	1.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
1330-20-7	m & p - Xylene	22	1.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
96-37-7	Methylcyclopentane	ND	1.0	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-09-2	Methylene chloride	ND	1.0	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
1634-04-4	Methyltertiarybutylether	ND	1.8	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
91-20-3	Naphthalene	ND	26	ug/m3	1	12/21/22	B3A0401	TO-15	CA	X1
104-51-8	n-Butylbenzene	ND	5.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
142-82-5	n-Heptane	ND	1.2	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
103-65-1	n-Propylbenzene	2.0	1.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
95-47-6	o-Xylene	8.4	1.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
109-66-0	Pentane	ND	3.0	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
135-98-8	sec-Butylbenzene	ND	1.6	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
100-42-5	Styrene	ND	1.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
98-06-6	tert-Butylbenzene	ND	5.5	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-65-0	tertiary Butyl Alcohol	ND	76	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
994-05-8	tertiaryAmylmethylether	ND	1.3	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
127-18-4	Tetrachloroethylene	80	2.0	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
109-99-9	Tetrahydrofuran	ND	0.89	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
108-88-3	Toluene	37	1.1	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
156-60-5	trans-1,2-Dichloroethylene	ND	1.2	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.4	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
79-01-6	Trichloroethylene	ND	1.6	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-69-4	Trichlorofluoromethane	ND	1.7	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
75-01-4	Vinyl chloride	ND	0.77	ug/m3	1	12/21/22	B3A0401	TO-15	CA	
Surrogate: Bromofluorobenzene			98.0 %	70-130		12/21/22	B3A0401	TO-15	CA	



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P.O. Box 30270
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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: 22VP04-SS

Lab ID: 2212138-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
71-55-6	1,1,1-Trichloroethane	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-00-5	1,1,2-Trichloroethane	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-34-3	1,1-Dichloroethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-35-4	1,1-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
87-61-6	1,2,3-Trichlorobenzene	ND	7.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-18-4	1,2,3-Trichloropropane	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
526-73-8	1,2,3-Trimethylbenzene	3.3	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-63-6	1,2,4-Trimethylbenzene	14	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-93-4	1,2-Dibromoethane	ND	2.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
107-06-2	1,2-Dichloroethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-67-8	1,3,5-Trimethylbenzene	3.3	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-99-0	1,3-Butadiene	ND	0.66	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
540-84-1	2,2,4-Trimethylpentane	2.6	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
78-93-3	2-Butanone (MEK)	ND	15	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
91-57-6	2-Methylnaphthalene	ND	29	ug/m3	1	12/20/22	B2L2210	TO-15	CA	X1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-64-1	Acetone	ND	59	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-05-8	Acetonitrile	ND	1.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
107-13-1	Acrylonitrile	ND	1.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
71-43-2	Benzene	ND	0.96	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-86-1	Bromobenzene	ND	1.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-27-4	Bromodichloromethane	ND	2.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-25-2	Bromoform	ND	3.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
74-83-9	Bromomethane	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-15-0	Carbon disulfide	ND	0.93	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
56-23-5	Carbon tetrachloride	ND	1.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-90-7	Chlorobenzene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-00-3	Chloroethane	ND	0.79	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-66-3	Chloroform	ND	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
74-87-3	Chloromethane	ND	0.62	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
156-59-2	cis-1,2-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
110-82-7	Cyclohexane	ND	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
124-48-1	Dibromochloromethane	ND	2.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	



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Client ID: 22VP04-SS

Lab ID: 2212138-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Analyst	Qualifier
Organics-Volatiles										See note Y11
75-71-8	Dichlorodifluoromethane	2.0	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
60-29-7	Diethyl ether	ND	3.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-20-3	Diisopropyl Ether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
64-17-5	Ethanol	ND	47	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
100-41-4	Ethylbenzene	5.6	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
637-92-3	Ethyltertiarybutylether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-72-1	Hexachloroethane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
110-54-3	Hexane	ND	3.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
67-63-0	Isopropyl Alcohol	ND	61	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
98-82-8	Isopropylbenzene	ND	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
1330-20-7	m & p - Xylene	24	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
96-37-7	Methylcyclopentane	ND	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-09-2	Methylene chloride	ND	1.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
1634-04-4	Methyltertiarybutylether	ND	1.8	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
91-20-3	Naphthalene	ND	26	ug/m3	1	12/20/22	B2L2210	TO-15	CA	X1
104-51-8	n-Butylbenzene	ND	5.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
142-82-5	n-Heptane	1.3	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
103-65-1	n-Propylbenzene	2.2	1.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
95-47-6	o-Xylene	8.1	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
109-66-0	Pentane	ND	2.9	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
135-98-8	sec-Butylbenzene	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
100-42-5	Styrene	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
98-06-6	tert-Butylbenzene	ND	5.5	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-65-0	tertiary Butyl Alcohol	ND	76	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
994-05-8	tertiaryAmylmethylether	ND	1.3	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
127-18-4	Tetrachloroethylene	68	2.0	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
109-99-9	Tetrahydrofuran	ND	0.88	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
108-88-3	Toluene	30	1.1	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
156-60-5	trans-1,2-Dichloroethylene	ND	1.2	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.4	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
79-01-6	Trichloroethylene	ND	1.6	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-69-4	Trichlorofluoromethane	ND	1.7	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
75-01-4	Vinyl chloride	ND	0.76	ug/m3	1	12/20/22	B2L2210	TO-15	CA	
<i>Surrogate: Bromofluorobenzene</i>			95.8 %	70-130		12/20/22	B2L2210	TO-15	CA	



Analysis Request Sheet

Lab Work Order Number

Project Name

Matrix

2212138

Calumet Dry Cleaners

AIR

Location ID

Program

CC Email 1

Project TAT Days

Sample Collector

Dept-Division-District

Activity

CC Email 2

Project Due Date

Sample Collector Phone

Egle RRD Marquette

V100

zedamontk@michigan.gov

pincumbei@michigan.gov

517-243-3174

State Project Manager

Funding Source

CC Email 3

Contract Firm

Amy Keranen

Location Code

Overflow Lab Choice 1

Accept Analysis
hold time codes

Contract Firm Primary Contact

State Project Manager Email

6H66

Keranena@michigan.gov

State Project Manager Phone

9063370389

SUD Location Code

Overflow Lab Choice 2

Primary Contact Phone

Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Bottle Count	Comments	Regulator ID	Canister/Bottle Vac Number
1	01 22VP01-SS	12/13/2022	14:13	1		245	1087
2	02 22VP02-SS	12/13/2022	14:38	1		240	1654
3	03 22VP03-SS	12/13/2022	14:57	1		223	1900
4	04 22VP04-SS	12/13/2022	15:20	1		257	1443
5							
6							
7							
8							
9							
10							

ORGANIC CHEMISTRY

VOA - Volatile Organic Analysis

Bottlevac 1 2 3 4 5 6 7 8 9 10
Canister - AQD 1 2 3 4 5 6 7 8 9 10
Canister - RRD 1 2 3 4 5 6 7 8 9 10
Tedlar - Volatiles 1 2 3 4 5 6 7 8 9 10

METH - Methane, Ethane, Ethene

Methane, Ethane, Ethene 1 2 3 4 5 6 7 8 9 10

Chain of Custody	Relinquished by	Received By	Date / Time
	Print Name & Org. Chris Black EGLE	Print Name & Org. Melissa Smith	12/14/22 1507
	Signature: [Signature]	Signature: [Signature]	
	Print Name & Org.	Print Name & Org.	
	Signature:		
	Print Name		