



PARAGON
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ATTACHMENT E8
DTW Deicing Pad
Runoff Representative
Analytical Data

12649 Richfield Ct.
Livonia, MI 48150
P: 734.462.3900
paragonlaboratories.com

Friday, March 5, 2021

Bryan Wagoner
Mead & Hunt
906 Rose Avenue
Ann Arbor, MI 48104

DEPARTMENT OF ECOLOGY
CENTRAL REGIONAL OFFICE

RECEIVED

October 6, 2022

Workorder: 367749
Project Name: SBN/SBN-1

Bryan Wagoner,
Paragon Laboratories, Inc. received the samples associated with the workorder listed above for the analyses presented in the following report. The analyses pertain only to the aliquot of sample received.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number below.

Please note that any unused portion of the sample(s) will be discarded 40 days after sample receipt, unless requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact me at 734-469-5625.

Sincerely,

Margaret Snyder
Senior Account Coordinator

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GLOSSARY

Abbreviation	Meaning	Explanation
ID	Identification	Preceded by "Lab", it describes the unique 10-digit sample number assigned by the laboratory. Preceded by "Sample", it describes the client-specified sample identifier.
Qual	Qualifier	Column that populates with an asterisk (*) when a related narrative comment appears in the Workorder Summary.
RL	Reporting Limit	The value at or above which a result is routinely reported.
MDL	Method Detection Limit	The minimum measured concentration that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results.
DF	Dilution Factor	The dilution applied to the sample during analysis to arrive at the final reported analyte result.
Min	Minimum	The minimum value that a result can be to meet the applicable specification, regulatory, permit, or client-specified limit.
Max	Maximum	The maximum value that a result can be to meet the applicable specification, regulatory, permit, or client-specified limit.
(S)	Surrogate	A compound that is added to the sample to mimic one or more compounds of interest. Its recovery is used to evaluate the efficiency of recovering the compound(s) of interest.
<	Less Than	Symbol that indicates that a result is less than the value following it.
>	Greater Than	Symbol that indicates that a result is greater than the value following it.



SAMPLE SUMMARY

Lab ID	Sample ID	Sample Description	Matrix	Date Collected	Date Received	Collector
3677490001	SBN-1	Composite	WW	02/25/2021 14:30	02/25/2021 14:59	BW

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WORKORDER SUMMARY

Accreditations

Paragon Laboratories, Inc. is certified by the Michigan Department of Environment, Great Lakes, and Energy to analyze Drinking Water. (EGLE Lab No. 9901 Expires 2/25/2023)

Analysis Results Narrative

3677490001 - SBN-1 - 4-Methylphenol (p-Cresol)

C[3-Methylphenol (m-Cresol) and 4-Methylphenol (p-Cresol) cannot be separated chromatographically, and are calibrated and reported as 4-Methylphenol (p-Cresol).

Task Narrative

3677490001 - 414219 - 1563

PQL's were changed due to low 608.3 sample volume.

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ANALYTICAL RESULTS

Lab ID: 3677490001
Sample ID: SBN-1
Description: Composite

Date Collected: 02/25/2021 14:30
Date Received: 02/25/2021 14:59

Matrix: Wastewater
Collector: BW

Parameter	Result	Qual	Unit	RL	MDL	DF	Min	Max	Analyzed	By
Individual Parameters by ASTM D7511										
Cyanide, Total	963		µg/L	50.0	23.4	10			03/01/2021 14:30	RLC
Metals by EPA 200.8										
Antimony, Total	0.0016		mg/L	0.0010		1			03/04/2021 09:53	MKK
Arsenic, Total	0.016		mg/L	0.0010		1			03/04/2021 09:53	MKK
Beryllium, Total	<0.0040		mg/L	0.0040		1			03/04/2021 09:53	MKK
Cadmium, Total	0.0015		mg/L	0.00020		1			03/04/2021 09:53	MKK
Chromium, Total	0.35		mg/L	0.0010		1			03/04/2021 09:53	MKK
Copper, Total	0.062		mg/L	0.0010		1			03/04/2021 09:53	MKK
Lead, Total	<0.0010		mg/L	0.0010		1			03/04/2021 09:53	MKK
Nickel, Total	0.010		mg/L	0.0010		1			03/04/2021 09:53	MKK
Selenium, Total	0.0098		mg/L	0.0050		1			03/04/2021 09:53	MKK
Silver, Total	<0.00020		mg/L	0.00020		1			03/04/2021 09:53	MKK
Thallium, Total	<0.00040		mg/L	0.00040		1			03/04/2021 09:53	MKK
Zinc, Total	0.24		mg/L	0.0040		1			03/04/2021 09:53	MKK
Metals by EPA 245.1										
Mercury, Total	<0.00020		mg/L	0.00020	0.00012	1			03/02/2021 16:08	RLC

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ANALYTICAL RESULTS

Pesticides and PCBs by EPA 608.3

Aldrin	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
alpha-BHC	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
beta-BHC	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
delta-BHC	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Chlordane (as alpha- + gamma-)	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Chlordane, Technical, as sum	<0.10	µg/L	0.10	4	03/04/2021 10:42	GFM
alpha-Chlordane	<0.012	µg/L	0.012	4	03/04/2021 10:42	GFM
gamma-Chlordane	<0.012	µg/L	0.012	4	03/04/2021 10:42	GFM
4,4'-DDD	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
4,4'-DDE	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
4,4'-DDT	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Dieldrin	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Endosulfan I	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Endosulfan II	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Endosulfan sulfate	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Endrin	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Endrin aldehyde	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Endrin ketone	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Heptachlor	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Heptachlor epoxide	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Lindane (gamma-BHC)	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Methoxychlor	<0.025	µg/L	0.025	4	03/04/2021 10:42	GFM
Toxaphene	<0.50	µg/L	0.50	4	03/04/2021 10:42	GFM
PCB Aroclor 1016	<0.25	µg/L	0.25	4	03/04/2021 10:42	GFM
PCB Aroclor 1221	<0.25	µg/L	0.25	4	03/04/2021 10:42	GFM
PCB Aroclor 1232	<0.25	µg/L	0.25	4	03/04/2021 10:42	GFM
PCB Aroclor 1242	<0.25	µg/L	0.25	4	03/04/2021 10:42	GFM
PCB Aroclor 1248	<0.25	µg/L	0.25	4	03/04/2021 10:42	GFM
PCB Aroclor 1254	<0.25	µg/L	0.25	4	03/04/2021 10:42	GFM
PCB Aroclor 1260	<0.25	µg/L	0.25	4	03/04/2021 10:42	GFM
Total PCBs	<0.25	µg/L	0.25	4	03/04/2021 10:42	GFM

Sample Preparation by EPA 625.1

Extraction for Semivolatiles	Complete			1	03/02/2021 07:30	DTM
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Semivolatiles by EPA 625.1

Acenaphthene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Acenaphthylene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Aniline	<10	µg/L	10	1	03/04/2021 17:24	DTM
Anthracene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Azobenzene (for 1,2-DPH)	<10	µg/L	10	1	03/04/2021 17:24	DTM
Benzidine	<10	µg/L	10	1	03/04/2021 17:24	DTM
Benzo(a)anthracene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Benzo(a)pyrene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Benzo(b)fluoranthene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Benzo(ghi)perylene	<10	µg/L	10	1	03/04/2021 17:24	DTM

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ANALYTICAL RESULTS

Benzo(k)fluoranthene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Benzoic acid	<10	µg/L	10	1	03/04/2021 17:24	DTM
Benzyl alcohol	<10	µg/L	10	1	03/04/2021 17:24	DTM
Bis(2-chloroethoxy)methane	<10	µg/L	10	1	03/04/2021 17:24	DTM
Bis(2-chloroethyl)ether	<10	µg/L	10	1	03/04/2021 17:24	DTM
Bis(2-chloroisopropyl) ether	<10	µg/L	10	1	03/04/2021 17:24	DTM
Bis(2-ethylhexyl)phthalate	23	µg/L	10	1	03/04/2021 17:24	DTM
4-Bromophenyl phenyl ether	<10	µg/L	10	1	03/04/2021 17:24	DTM
Butyl benzyl phthalate	<10	µg/L	10	1	03/04/2021 17:24	DTM
Carbazole	<10	µg/L	10	1	03/04/2021 17:24	DTM
4-Chloro-3-methylphenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
4-Chloroaniline	<10	µg/L	10	1	03/04/2021 17:24	DTM
2-Chloronaphthalene	<10	µg/L	10	1	03/04/2021 17:24	DTM
2-Chlorophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
4-Chlorophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
4-Chlorophenyl phenyl ether	<10	µg/L	10	1	03/04/2021 17:24	DTM
Chrysene	<10	µg/L	10	1	03/04/2021 17:24	DTM
n-Decane	<10	µg/L	10	1	03/04/2021 17:24	DTM
Di-n-butyl phthalate	<10	µg/L	10	1	03/04/2021 17:24	DTM
Di-n-octyl phthalate	<10	µg/L	10	1	03/04/2021 17:24	DTM
Dibenzo(ah)anthracene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Dibenzofuran	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,3-Dichloroaniline	<10	µg/L	10	1	03/04/2021 17:24	DTM
1,2-Dichlorobenzene	<10	µg/L	10	1	03/04/2021 17:24	DTM
1,3-Dichlorobenzene	<10	µg/L	10	1	03/04/2021 17:24	DTM
1,4-Dichlorobenzene	<10	µg/L	10	1	03/04/2021 17:24	DTM
3,3'-Dichlorobenzidine	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,4-Dichlorophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
Diethyl phthalate	<10	µg/L	10	1	03/04/2021 17:24	DTM
Dimethyl phthalate	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,4-Dimethylphenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,4-Dinitrophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,4-Dinitrotoluene	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,6-Dinitrotoluene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Fluoranthene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Fluorene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Hexachlorobenzene (HCB)	<10	µg/L	10	1	03/04/2021 17:24	DTM
Hexachlorobutadiene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Hexachlorocyclopentadiene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Hexachloroethane	<10	µg/L	10	1	03/04/2021 17:24	DTM
Indeno(1,2,3-cd)pyrene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Isophorone	<10	µg/L	10	1	03/04/2021 17:24	DTM
2-Methyl-4,6-dinitrophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
2-Methylnaphthalene	<10	µg/L	10	1	03/04/2021 17:24	DTM
2-Methylphenol (o-Cresol)	<10	µg/L	10	1	03/04/2021 17:24	DTM
4-Methylphenol (p-Cresol)	<10	* µg/L	10	1	03/04/2021 17:24	DTM

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ANALYTICAL RESULTS

Naphthalene	<10	µg/L	10	1	03/04/2021 17:24	DTM
2-Nitroaniline	<10	µg/L	10	1	03/04/2021 17:24	DTM
3-Nitroaniline	<10	µg/L	10	1	03/04/2021 17:24	DTM
4-Nitroaniline	<10	µg/L	10	1	03/04/2021 17:24	DTM
Nitrobenzene	<10	µg/L	10	1	03/04/2021 17:24	DTM
2-Nitrophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
4-Nitrophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
N-Nitrosodi-n-propylamine	<10	µg/L	10	1	03/04/2021 17:24	DTM
N-Nitrosodimethylamine	<10	µg/L	10	1	03/04/2021 17:24	DTM
N-Nitrosodiphenylamine	<10	µg/L	10	1	03/04/2021 17:24	DTM
n-Octadecane	22	µg/L	10	1	03/04/2021 17:24	DTM
Pentachlorophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
Phenanthrene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Phenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
Pyrene	<10	µg/L	10	1	03/04/2021 17:24	DTM
Pyridine	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,3,7,8-TCDD (as TIC)	<10	µg/L	10	1	03/04/2021 17:24	DTM
1,2,4-Trichlorobenzene	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,4,5-Trichlorophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM
2,4,6-Trichlorophenol	<10	µg/L	10	1	03/04/2021 17:24	DTM

Volatiles by EPA 624.1

Acetone	2100	µg/L	50	10	02/26/2021 13:13	DTM
Acetonitrile	<50	µg/L	50	10	02/26/2021 13:13	DTM
Acrolein	<50	µg/L	50	10	02/26/2021 13:13	DTM
Acrylonitrile	<50	µg/L	50	10	02/26/2021 13:13	DTM
Benzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Bromobenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Bromochloromethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
Bromodichloromethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
Bromoform	<10	µg/L	10	10	02/26/2021 13:13	DTM
Bromomethane (Methyl bromide)	<10	µg/L	10	10	02/26/2021 13:13	DTM
2-Butanone (MEK)	<50	µg/L	50	10	02/26/2021 13:13	DTM
n-Butylbenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
sec-Butylbenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
tert-Butylbenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Carbon disulfide	<10	µg/L	10	10	02/26/2021 13:13	DTM
Carbon tetrachloride	<10	µg/L	10	10	02/26/2021 13:13	DTM
Chlorobenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Chloroethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
2-Chloroethyl vinyl ether	<10	µg/L	10	10	02/26/2021 13:13	DTM
Chloroform	<10	µg/L	10	10	02/26/2021 13:13	DTM
Chloromethane(Methyl chloride)	<10	µg/L	10	10	02/26/2021 13:13	DTM
2-Chlorotoluene	<10	µg/L	10	10	02/26/2021 13:13	DTM
4-Chlorotoluene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Dibromochloromethane	<10	µg/L	10	10	02/26/2021 13:13	DTM

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ANALYTICAL RESULTS

1,2-Dibromo-3-chloropropane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,2-Dibromoethane (EDB)	<10	µg/L	10	10	02/26/2021 13:13	DTM
Dibromomethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,2-Dichlorobenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,3-Dichlorobenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,4-Dichlorobenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
trans-1,4-Dichloro-2-butene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Dichlorodifluoromethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,1-Dichloroethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,2-Dichloroethane (EDC)	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,1-Dichloroethene	<10	µg/L	10	10	02/26/2021 13:13	DTM
cis-1,2-Dichloroethene	<10	µg/L	10	10	02/26/2021 13:13	DTM
trans-1,2-Dichloroethene	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,2-Dichloropropane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,3-Dichloropropane	<10	µg/L	10	10	02/26/2021 13:13	DTM
2,2-Dichloropropane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,1-Dichloropropene	<10	µg/L	10	10	02/26/2021 13:13	DTM
cis-1,3-Dichloropropene	<10	µg/L	10	10	02/26/2021 13:13	DTM
trans-1,3-Dichloropropene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Ethylbenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Hexachlorobutadiene	<10	µg/L	10	10	02/26/2021 13:13	DTM
2-Hexanone	<50	µg/L	50	10	02/26/2021 13:13	DTM
Iodomethane (Methyl iodide)	<10	µg/L	10	10	02/26/2021 13:13	DTM
Isopropylbenzene (Cumene)	<10	µg/L	10	10	02/26/2021 13:13	DTM
4-Isopropyltoluene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Methyl tert-butyl ether (MTBE)	<10	µg/L	10	10	02/26/2021 13:13	DTM
Methylene chloride (DCM)	<10	µg/L	10	10	02/26/2021 13:13	DTM
2-Methylnaphthalene	<50	µg/L	50	10	02/26/2021 13:13	DTM
4-Methyl-2-pentanone (MIBK)	<50	µg/L	50	10	02/26/2021 13:13	DTM
Naphthalene	<50	µg/L	50	10	02/26/2021 13:13	DTM
n-Propylbenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Styrene	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,1,1,2-Tetrachloroethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,1,2,2-Tetrachloroethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
Tetrachloroethene (PCE)	<10	µg/L	10	10	02/26/2021 13:13	DTM
Toluene	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,1,2-Trichloro-1,2,2-trifluor	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,2,3-Trichlorobenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,2,4-Trichlorobenzene	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,1,1-Trichloroethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,1,2-Trichloroethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
Trichloroethene (TCE)	<10	µg/L	10	10	02/26/2021 13:13	DTM
Trichlorofluoromethane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,2,3-Trichloropropane	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,2,4-Trimethylbenzene (TMB)	<10	µg/L	10	10	02/26/2021 13:13	DTM
1,3,5-Trimethylbenzene (TMB)	<10	µg/L	10	10	02/26/2021 13:13	DTM

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ANALYTICAL RESULTS

Vinyl acetate	<10	µg/L	10	10	02/26/2021 13:13	DTM
Vinyl chloride	<10	µg/L	10	10	02/26/2021 13:13	DTM
m- & p-Xylene	<20	µg/L	20	10	02/26/2021 13:13	DTM
o-Xylene	<10	µg/L	10	10	02/26/2021 13:13	DTM
Xylenes, Total	<30	µg/L	30	10	02/26/2021 13:13	DTM

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