

19 August 2019

Work Order: 1907223

Price: \$1,210.00

Dan Hamel
MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson, MI 49201-1556
RE: GELMAN SCIENCES, INC

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



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
FAX: (517) 335-9600

MDEQ-RRD-JACKSON
301 E. Louis Glick Highway
Jackson MI, 49201-1556

Project: GELMAN SCIENCES, INC
Site Code: 81000018/Location 6130
Project Manager: Dan Hamel

Reported:
08/19/2019

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
Allen Creek/West Park SW	1907223-01	Water	07/24/2019	07/24/2019	
Allen Creek/chapin-West Park	1907223-02	Water	07/24/2019	07/24/2019	
Allen Creek/Maple Ridge-Arborview	1907223-03	Water	07/24/2019	07/24/2019	
Allen Creek/Murry-Washington	1907223-04	Water	07/24/2019	07/24/2019	
Allen Creek/Eighth-Waterworks	1907223-05	Water	07/24/2019	07/24/2019	
Allen Creek/Maryfield-Wildwood	1907223-06	Water	07/24/2019	07/24/2019	

Notes and Definitions

- Y28 1,4-dioxane analysis is performed using selective ion monitoring (SIM). Results reported below 5 ug/L (aqueous) or 1000 ug/Kg (solids) are estimated.
- X Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 °C. 2-Methylnaphthalene & naphthalene have boiling points above 200 °C and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
- T Reported value is less than the reporting limit (RL). Result is estimated.
- A11 Result is estimated due to high initial verification standard criteria failure.
- A09 Result is estimated due to high recovery of batch quality control.
- A06 Result is estimated due to high continuing calibration standard criteria failure.
- A05 Result and reporting limit are estimated due to low continuing calibration standard criteria failure.
- A04 Result is estimated due to high matrix spike recovery.
- ND Indicates compound analyzed for but not detected at or above the reporting limit (RL).
- RL Reporting Limit
- NA Not Applicable



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Client ID: Allen Creek/West Park SW

Lab ID: 1907223-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/25/19	B9G2501	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	



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Lab ID: 1907223-01

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Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/25/19	B9G2501	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/25/19	B9G2501	8260	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/25/19	B9G2501	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/25/19	B9G2501	8260	
Surrogate: Bromofluorobenzene			103 %	85-115		07/25/19	B9G2501	8260	
Surrogate: Dibromofluoromethane			96.6 %	82.7-115		07/25/19	B9G2501	8260	
Surrogate: Toluene-d8			102 %	85-115		07/25/19	B9G2501	8260	



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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	1,4-dioxane	22	1.0	ug/L	1	07/26/19	B9G2906	8260 Modified	



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Client ID: Allen Creek/chapin-West Park

Lab ID: 1907223-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2501	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	



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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2501	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2501	8260	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
<i>Surrogate: Bromofluorobenzene</i>			<i>110 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2501</i>	<i>8260</i>	
<i>Surrogate: Dibromofluoromethane</i>			<i>105 %</i>	<i>82.7-115</i>		<i>07/26/19</i>	<i>B9G2501</i>	<i>8260</i>	
<i>Surrogate: Toluene-d8</i>			<i>109 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2501</i>	<i>8260</i>	



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Organics-Dioxane

123-91-1	1,4-dioxane	11	1.0	ug/L	1	07/26/19	B9G2906	8260 Modified	
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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1907223-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2501	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	



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
FAX: (517) 335-9600

Client ID: Allen Creek/Maple Ridge-Arborview

Lab ID: 1907223-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2501	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2501	8260	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2501	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2501	8260	
<i>Surrogate: Bromofluorobenzene</i>			<i>105 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2501</i>	<i>8260</i>	
<i>Surrogate: Dibromofluoromethane</i>			<i>101 %</i>	<i>82.7-115</i>		<i>07/26/19</i>	<i>B9G2501</i>	<i>8260</i>	
<i>Surrogate: Toluene-d8</i>			<i>104 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2501</i>	<i>8260</i>	



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
FAX: (517) 335-9600

Client ID: Allen Creek/Murry-Washington

Lab ID: 1907223-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2602	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	



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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Murry-Washington

Lab ID: 1907223-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2602	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2602	8260	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-01-6	Trichloroethylene	1.4	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
<i>Surrogate: Bromofluorobenzene</i>			<i>102 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	
<i>Surrogate: Dibromofluoromethane</i>			<i>97.1 %</i>	<i>82.7-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	
<i>Surrogate: Toluene-d8</i>			<i>101 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	



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ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
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Client ID: Allen Creek/Murry-Washington

Lab ID: 1907223-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	1,4-dioxane	1.4	1.0	ug/L	1	07/26/19	B9G2906	8260 Modified	Y28



MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1907223-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2602	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1907223-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2602	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2602	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
<i>Surrogate: Bromofluorobenzene</i>			<i>109 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	
<i>Surrogate: Dibromofluoromethane</i>			<i>103 %</i>	<i>82.7-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	
<i>Surrogate: Toluene-d8</i>			<i>108 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	



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 FAX: (517) 335-9600

Client ID: Allen Creek/Eighth-Waterworks

Lab ID: 1907223-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
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Organics-Dioxane

123-91-1	1,4-dioxane	0.96	1.0	ug/L	1	07/26/19	B9G2906	8260 Modified	T, Y28
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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Maryfield-Wildwood

Lab ID: 1907223-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	07/26/19	B9G2602	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	A05
71-43-2	Benzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	



MICHIGAN DEPARTMENT OF
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ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Maryfield-Wildwood

Lab ID: 1907223-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
100-41-4	Ethylbenzene	5.1	1.0	ug/L	1	07/26/19	B9G2602	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	07/26/19	B9G2602	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
100-42-5	Styrene	1.5	1.0	ug/L	1	07/26/19	B9G2602	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	07/26/19	B9G2602	8260	
994-05-8	tertiaryAmylmeylether	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	07/26/19	B9G2602	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	07/26/19	B9G2602	8260	
<i>Surrogate: Bromofluorobenzene</i>			<i>103 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	
<i>Surrogate: Dibromofluoromethane</i>			<i>97.4 %</i>	<i>82.7-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	
<i>Surrogate: Toluene-d8</i>			<i>102 %</i>	<i>85-115</i>		<i>07/26/19</i>	<i>B9G2602</i>	<i>8260</i>	



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
FAX: (517) 335-9600

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2501 - Method: 5030

Prepared: 07/25/2019

Blank (B9G2501-BLK1)

1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							07/25/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							07/25/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							07/25/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							07/25/2019	
1,1-Dichloroethane	ND	1.0	ug/L							07/25/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							07/25/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							07/25/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							07/25/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							07/25/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							07/25/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							07/25/2019	
1,2-Dibromoethane	ND	1.0	ug/L							07/25/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							07/25/2019	
1,2-Dichloroethane	ND	1.0	ug/L							07/25/2019	
1,2-Dichloropropane	ND	1.0	ug/L							07/25/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							07/25/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							07/25/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							07/25/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							07/25/2019	
2-Butanone (MEK)	ND	5.0	ug/L							07/25/2019	
2-Methylnaphthalene	ND	5.0	ug/L							07/25/2019	X
2-Propanone (acetone)	ND	20	ug/L							07/25/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							07/25/2019	
Acrylonitrile	ND	5.0	ug/L							07/25/2019	A05
Benzene	ND	1.0	ug/L							07/25/2019	
Bromochloromethane	ND	1.0	ug/L							07/25/2019	
Bromodichloromethane	ND	1.0	ug/L							07/25/2019	
Bromoform	ND	1.0	ug/L							07/25/2019	
Bromomethane	ND	5.0	ug/L							07/25/2019	
Carbon disulfide	ND	1.0	ug/L							07/25/2019	
Carbon tetrachloride	ND	1.0	ug/L							07/25/2019	
Chlorobenzene	ND	1.0	ug/L							07/25/2019	
Chloroethane	ND	5.0	ug/L							07/25/2019	
Chloroform	ND	1.0	ug/L							07/25/2019	
Chloromethane	ND	5.0	ug/L							07/25/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							07/25/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							07/25/2019	
Cyclohexane	ND	5.0	ug/L							07/25/2019	
Dibromochloromethane	ND	1.0	ug/L							07/25/2019	
Dibromomethane	ND	1.0	ug/L							07/25/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							07/25/2019	
Diethyl ether	ND	5.0	ug/L							07/25/2019	
Diisopropyl Ether	ND	5.0	ug/L							07/25/2019	
Ethylbenzene	ND	1.0	ug/L							07/25/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							07/25/2019	
Hexachloroethane	ND	5.0	ug/L							07/25/2019	
Hexane	ND	1.0	ug/L							07/25/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2501 - Method: 5030

Prepared: 07/25/2019

Blank (B9G2501-BLK1)

Isopropylbenzene	ND	1.0	ug/L							07/25/2019	
m & p - Xylene	ND	2.0	ug/L							07/25/2019	
Methylene chloride	ND	5.0	ug/L							07/25/2019	
Methyltertiarybutylether	ND	1.0	ug/L							07/25/2019	
Naphthalene	ND	5.0	ug/L							07/25/2019	X
n-Butylbenzene	ND	1.0	ug/L							07/25/2019	
n-Propylbenzene	ND	1.0	ug/L							07/25/2019	
o-Xylene	ND	1.0	ug/L							07/25/2019	
sec-Butylbenzene	ND	1.0	ug/L							07/25/2019	
Styrene	ND	1.0	ug/L							07/25/2019	
tert-Butylbenzene	ND	1.0	ug/L							07/25/2019	
tertiary Butyl Alcohol	ND	50	ug/L							07/25/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							07/25/2019	
Tetrachloroethylene	ND	1.0	ug/L							07/25/2019	
Tetrahydrofuran	ND	5.0	ug/L							07/25/2019	
Toluene	ND	1.0	ug/L							07/25/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							07/25/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							07/25/2019	
Trichloroethylene	ND	1.0	ug/L							07/25/2019	
Trichlorofluoromethane	ND	1.0	ug/L							07/25/2019	
Vinyl chloride	ND	1.0	ug/L							07/25/2019	
Surrogate: Bromofluorobenzene	52.0		ug/L	50.00		104	85-115			07/25/2019	
Surrogate: Dibromofluoromethane	50.8		ug/L	50.00		102	82.7-115			07/25/2019	
Surrogate: Toluene-d8	52.3		ug/L	50.00		105	85-115			07/25/2019	

LCS (B9G2501-BS1)

1,1,1,2-Tetrachloroethane	48.6	1.0	ug/L	50.00		97.2	70-130			07/25/2019	
1,1,1-Trichloroethane	47.1	1.0	ug/L	50.00		94.3	70-130			07/25/2019	
1,1,2,2-Tetrachloroethane	48.6	1.0	ug/L	50.00		97.1	70-130			07/25/2019	
1,1,2-Trichloroethane	47.0	1.0	ug/L	50.00		94.0	70-130			07/25/2019	
1,1-Dichloroethane	44.5	1.0	ug/L	50.00		88.9	70-130			07/25/2019	
1,1-Dichloroethylene	44.2	1.0	ug/L	50.00		88.4	70-130			07/25/2019	
1,2,3-Trichlorobenzene	53.9	5.0	ug/L	50.00		108	70-130			07/25/2019	
1,2,3-Trichloropropane	46.2	1.0	ug/L	50.00		92.3	70-130			07/25/2019	
1,2,3-Trimethylbenzene	48.6	1.0	ug/L	50.00		97.2	70-130			07/25/2019	
1,2,4-Trichlorobenzene	55.2	5.0	ug/L	50.00		110	70-130			07/25/2019	
1,2,4-Trimethylbenzene	48.2	1.0	ug/L	50.00		96.4	70-130			07/25/2019	
1,2-Dibromoethane	47.3	1.0	ug/L	50.00		94.6	70-130			07/25/2019	
1,2-Dichlorobenzene	50.8	1.0	ug/L	50.00		102	70-130			07/25/2019	
1,2-Dichloroethane	45.5	1.0	ug/L	50.00		91.0	70-130			07/25/2019	
1,2-Dichloropropane	47.9	1.0	ug/L	50.00		95.8	70-130			07/25/2019	
1,3,5-Trimethylbenzene	48.6	1.0	ug/L	50.00		97.1	70-130			07/25/2019	
1,3-Dichlorobenzene	49.1	1.0	ug/L	50.00		98.2	70-130			07/25/2019	
1,4-Dichlorobenzene	47.6	1.0	ug/L	50.00		95.2	70-130			07/25/2019	
2,2,4-Trimethylpentane	49.9	5.0	ug/L	50.00		99.8	70-130			07/25/2019	
2-Butanone (MEK)	42.0	5.0	ug/L	50.00		84.1	70-130			07/25/2019	
2-Methylnaphthalene	54.8	5.0	ug/L	50.00		110	70-130			07/25/2019	X



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

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ENVIRONMENTAL LABORATORY

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2501 - Method: 5030

Prepared: 07/25/2019

LCS (B9G2501-BS1)

2-Propanone (acetone)	41.5	20	ug/L	50.00		83.1	70-130			07/25/2019	
4-Methyl-2-pentanone (MIBK)	46.1	5.0	ug/L	50.00		92.3	70-130			07/25/2019	
Acrylonitrile	37.9	5.0	ug/L	50.00		75.7	70-130			07/25/2019	A05
Benzene	47.5	1.0	ug/L	50.00		95.1	70-130			07/25/2019	
Bromochloromethane	49.0	1.0	ug/L	50.00		98.0	70-130			07/25/2019	
Bromodichloromethane	48.1	1.0	ug/L	50.00		96.2	70-130			07/25/2019	
Bromoform	47.9	1.0	ug/L	50.00		95.8	70-130			07/25/2019	
Bromomethane	53.6	5.0	ug/L	50.00		107	70-130			07/25/2019	
Carbon disulfide	43.7	1.0	ug/L	50.00		87.4	70-130			07/25/2019	
Carbon tetrachloride	48.0	1.0	ug/L	50.00		95.9	70-130			07/25/2019	
Chlorobenzene	48.9	1.0	ug/L	50.00		97.8	70-130			07/25/2019	
Chloroethane	62.9	5.0	ug/L	50.00		126	70-130			07/25/2019	
Chloroform	45.7	1.0	ug/L	50.00		91.5	70-130			07/25/2019	
Chloromethane	55.7	5.0	ug/L	50.00		111	70-130			07/25/2019	
cis-1,2-Dichloroethylene	45.2	1.0	ug/L	50.00		90.3	70-130			07/25/2019	
cis-1,3-Dichloropropylene	49.9	1.0	ug/L	50.00		99.7	70-130			07/25/2019	
Cyclohexane	49.5	5.0	ug/L	50.00		99.0	70-130			07/25/2019	
Dibromochloromethane	48.8	1.0	ug/L	50.00		97.6	70-130			07/25/2019	
Dibromomethane	47.0	1.0	ug/L	50.00		94.0	70-130			07/25/2019	
Dichlorodifluoromethane	66.4	5.0	ug/L	50.00		133	70-130			07/25/2019	A09, A11
Diethyl ether	42.3	5.0	ug/L	50.00		84.5	70-130			07/25/2019	
Diisopropyl Ether	41.3	5.0	ug/L	50.00		82.5	70-130			07/25/2019	
Ethylbenzene	47.9	1.0	ug/L	50.00		95.8	70-130			07/25/2019	
Ethyltertiarybutylether	43.1	5.0	ug/L	50.00		86.1	70-130			07/25/2019	
Hexachloroethane	46.6	5.0	ug/L	50.00		93.2	70-130			07/25/2019	
Hexane	45.0	1.0	ug/L	50.00		90.0	70-130			07/25/2019	
Isopropylbenzene	47.8	1.0	ug/L	50.00		95.6	70-130			07/25/2019	
m & p - Xylene	94.6	2.0	ug/L	100.0		94.6	70-130			07/25/2019	
Methylene chloride	45.2	5.0	ug/L	50.00		90.4	70-130			07/25/2019	
Methyltertiarybutylether	45.4	1.0	ug/L	50.00		90.8	70-130			07/25/2019	
Naphthalene	53.2	5.0	ug/L	50.00		106	70-130			07/25/2019	X
n-Butylbenzene	51.6	1.0	ug/L	50.00		103	70-130			07/25/2019	
n-Propylbenzene	48.5	1.0	ug/L	50.00		97.1	70-130			07/25/2019	
o-Xylene	48.4	1.0	ug/L	50.00		96.8	70-130			07/25/2019	
sec-Butylbenzene	52.9	1.0	ug/L	50.00		106	70-130			07/25/2019	
Styrene	49.3	1.0	ug/L	50.00		98.5	70-130			07/25/2019	
tert-Butylbenzene	48.4	1.0	ug/L	50.00		96.8	70-130			07/25/2019	
tertiary Butyl Alcohol	215	50	ug/L	250.0		86.1	70-130			07/25/2019	
tertiaryAmylmethylether	45.4	5.0	ug/L	50.00		90.8	70-130			07/25/2019	
Tetrachloroethylene	46.0	1.0	ug/L	50.00		92.0	70-130			07/25/2019	
Tetrahydrofuran	42.2	5.0	ug/L	50.00		84.4	70-130			07/25/2019	
Toluene	47.3	1.0	ug/L	50.00		94.6	70-130			07/25/2019	
trans-1,2-Dichloroethylene	45.4	1.0	ug/L	50.00		90.8	70-130			07/25/2019	
trans-1,3-Dichloropropylene	48.5	1.0	ug/L	50.00		96.9	70-130			07/25/2019	
Trichloroethylene	48.7	1.0	ug/L	50.00		97.4	70-130			07/25/2019	
Trichlorofluoromethane	47.0	1.0	ug/L	50.00		94.0	70-130			07/25/2019	
Vinyl chloride	50.7	1.0	ug/L	50.00		101	70-130			07/25/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2501 - Method: 5030

Prepared: 07/25/2019

LCS (B9G2501-BS1)

Surrogate: Bromofluorobenzene	47.4		ug/L	50.00		94.7	85-115			07/25/2019	
Surrogate: Dibromofluoromethane	48.0		ug/L	50.00		96.1	82.7-115			07/25/2019	
Surrogate: Toluene-d8	48.5		ug/L	50.00		97.0	85-115			07/25/2019	

Matrix Spike (B9G2501-MS1)

Source: 1907223-03

1,1,1,2-Tetrachloroethane	49.9	1.0	ug/L	50.00	ND	99.7	70-130			07/26/2019	
1,1,1-Trichloroethane	50.3	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,1,2,2-Tetrachloroethane	49.4	1.0	ug/L	50.00	ND	98.9	70-130			07/26/2019	
1,1,2-Trichloroethane	48.9	1.0	ug/L	50.00	ND	97.8	70-130			07/26/2019	
1,1-Dichloroethane	48.1	1.0	ug/L	50.00	ND	96.2	70-130			07/26/2019	
1,1-Dichloroethylene	49.3	1.0	ug/L	50.00	ND	98.6	70-130			07/26/2019	
1,2,3-Trichlorobenzene	51.6	5.0	ug/L	50.00	ND	103	70-130			07/26/2019	
1,2,3-Trichloropropane	47.6	1.0	ug/L	50.00	ND	95.1	70-130			07/26/2019	
1,2,3-Trimethylbenzene	49.3	1.0	ug/L	50.00	ND	98.5	70-130			07/26/2019	
1,2,4-Trichlorobenzene	52.3	5.0	ug/L	50.00	ND	105	70-130			07/26/2019	
1,2,4-Trimethylbenzene	48.8	1.0	ug/L	50.00	ND	97.6	70-130			07/26/2019	
1,2-Dibromoethane	48.3	1.0	ug/L	50.00	ND	96.7	70-130			07/26/2019	
1,2-Dichlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,2-Dichloroethane	47.7	1.0	ug/L	50.00	ND	95.4	70-130			07/26/2019	
1,2-Dichloropropane	49.8	1.0	ug/L	50.00	ND	99.7	70-130			07/26/2019	
1,3,5-Trimethylbenzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			07/26/2019	
1,3-Dichlorobenzene	49.1	1.0	ug/L	50.00	ND	98.3	70-130			07/26/2019	
1,4-Dichlorobenzene	48.1	1.0	ug/L	50.00	ND	96.2	70-130			07/26/2019	
2,2,4-Trimethylpentane	52.2	5.0	ug/L	50.00	ND	104	70-130			07/26/2019	
2-Butanone (MEK)	44.4	5.0	ug/L	50.00	ND	88.7	70-130			07/26/2019	
2-Methylnaphthalene	46.1	5.0	ug/L	50.00	ND	92.2	70-130			07/26/2019	X
2-Propanone (acetone)	47.1	20	ug/L	50.00	ND	94.3	70-130			07/26/2019	
4-Methyl-2-pentanone (MIBK)	48.7	5.0	ug/L	50.00	ND	97.4	70-130			07/26/2019	
Acrylonitrile	40.2	5.0	ug/L	50.00	ND	80.4	70-130			07/26/2019	A05
Benzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			07/26/2019	
Bromochloromethane	49.7	1.0	ug/L	50.00	ND	99.4	70-130			07/26/2019	
Bromodichloromethane	48.8	1.0	ug/L	50.00	ND	97.5	70-130			07/26/2019	
Bromoform	46.6	1.0	ug/L	50.00	ND	93.2	70-130			07/26/2019	
Bromomethane	56.3	5.0	ug/L	50.00	ND	113	70-130			07/26/2019	
Carbon disulfide	46.5	1.0	ug/L	50.00	ND	92.9	70-130			07/26/2019	
Carbon tetrachloride	51.7	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
Chlorobenzene	51.2	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Chloroethane	66.9	5.0	ug/L	50.00	ND	134	70-130			07/26/2019	A04
Chloroform	48.5	1.0	ug/L	50.00	ND	96.9	70-130			07/26/2019	
Chloromethane	59.3	5.0	ug/L	50.00	ND	119	70-130			07/26/2019	
cis-1,2-Dichloroethylene	48.5	1.0	ug/L	50.00	ND	97.1	70-130			07/26/2019	
cis-1,3-Dichloropropylene	50.3	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
Cyclohexane	53.3	5.0	ug/L	50.00	ND	107	70-130			07/26/2019	
Dibromochloromethane	49.1	1.0	ug/L	50.00	ND	98.3	70-130			07/26/2019	
Dibromomethane	48.0	1.0	ug/L	50.00	ND	96.0	70-130			07/26/2019	
Dichlorodifluoromethane	69.8	5.0	ug/L	50.00	ND	140	70-130			07/26/2019	A04, A11
Diethyl ether	46.9	5.0	ug/L	50.00	ND	93.7	70-130			07/26/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2501 - Method: 5030

Prepared: 07/26/2019

Matrix Spike (B9G2501-MS1)

Source: 1907223-03

Diisopropyl Ether	43.0	5.0	ug/L	50.00	ND	86.0	70-130			07/26/2019	
Ethylbenzene	51.0	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Ethyltertiarybutylether	44.0	5.0	ug/L	50.00	ND	88.0	70-130			07/26/2019	
Hexachloroethane	47.7	5.0	ug/L	50.00	ND	95.3	70-130			07/26/2019	
Hexane	48.3	1.0	ug/L	50.00	ND	96.6	70-130			07/26/2019	
Isopropylbenzene	49.7	1.0	ug/L	50.00	ND	99.4	70-130			07/26/2019	
m & p - Xylene	100	2.0	ug/L	100.0	ND	100	70-130			07/26/2019	
Methylene chloride	50.1	5.0	ug/L	50.00	ND	100	70-130			07/26/2019	
Methyltertiarybutylether	46.0	1.0	ug/L	50.00	ND	92.0	70-130			07/26/2019	
Naphthalene	48.8	5.0	ug/L	50.00	ND	97.7	70-130			07/26/2019	X
n-Butylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
n-Propylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
o-Xylene	51.3	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
sec-Butylbenzene	54.3	1.0	ug/L	50.00	ND	109	70-130			07/26/2019	
Styrene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
tert-Butylbenzene	49.5	1.0	ug/L	50.00	ND	98.9	70-130			07/26/2019	
tertiary Butyl Alcohol	220	50	ug/L	250.0	ND	88.0	70-130			07/26/2019	
tertiaryAmylmethylether	45.4	5.0	ug/L	50.00	ND	90.9	70-130			07/26/2019	
Tetrachloroethylene	48.1	1.0	ug/L	50.00	ND	96.3	70-130			07/26/2019	
Tetrahydrofuran	45.0	5.0	ug/L	50.00	ND	90.0	70-130			07/26/2019	
Toluene	51.0	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
trans-1,2-Dichloroethylene	48.6	1.0	ug/L	50.00	ND	97.3	70-130			07/26/2019	
trans-1,3-Dichloropropylene	47.5	1.0	ug/L	50.00	ND	95.1	70-130			07/26/2019	
Trichloroethylene	50.9	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Trichlorofluoromethane	51.4	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
Vinyl chloride	55.7	1.0	ug/L	50.00	ND	111	70-130			07/26/2019	
Surrogate: Bromofluorobenzene	46.0		ug/L	50.00		92.0	85-115			07/26/2019	
Surrogate: Dibromofluoromethane	47.4		ug/L	50.00		94.9	82.7-115			07/26/2019	
Surrogate: Toluene-d8	48.9		ug/L	50.00		97.8	85-115			07/26/2019	

Matrix Spike Dup (B9G2501-MSD1)

Source: 1907223-03

1,1,1,2-Tetrachloroethane	45.6	1.0	ug/L	50.00	ND	91.1	70-130	9.04	30	07/26/2019	
1,1,1-Trichloroethane	44.1	1.0	ug/L	50.00	ND	88.2	70-130	13.2	30	07/26/2019	
1,1,2,2-Tetrachloroethane	48.7	1.0	ug/L	50.00	ND	97.4	70-130	1.45	30	07/26/2019	
1,1,2-Trichloroethane	46.6	1.0	ug/L	50.00	ND	93.2	70-130	4.78	30	07/26/2019	
1,1-Dichloroethane	43.2	1.0	ug/L	50.00	ND	86.5	70-130	10.7	30	07/26/2019	
1,1-Dichloroethylene	43.0	1.0	ug/L	50.00	ND	85.9	70-130	13.8	30	07/26/2019	
1,2,3-Trichlorobenzene	49.4	5.0	ug/L	50.00	ND	98.8	70-130	4.31	30	07/26/2019	
1,2,3-Trichloropropane	46.5	1.0	ug/L	50.00	ND	92.9	70-130	2.37	30	07/26/2019	
1,2,3-Trimethylbenzene	45.6	1.0	ug/L	50.00	ND	91.1	70-130	7.81	30	07/26/2019	
1,2,4-Trichlorobenzene	49.0	5.0	ug/L	50.00	ND	98.0	70-130	6.54	30	07/26/2019	
1,2,4-Trimethylbenzene	45.3	1.0	ug/L	50.00	ND	90.6	70-130	7.51	30	07/26/2019	
1,2-Dibromoethane	46.3	1.0	ug/L	50.00	ND	92.6	70-130	4.32	30	07/26/2019	
1,2-Dichlorobenzene	47.1	1.0	ug/L	50.00	ND	94.2	70-130	7.30	30	07/26/2019	
1,2-Dichloroethane	45.3	1.0	ug/L	50.00	ND	90.5	70-130	5.26	30	07/26/2019	
1,2-Dichloropropane	46.1	1.0	ug/L	50.00	ND	92.2	70-130	7.78	30	07/26/2019	
1,3,5-Trimethylbenzene	45.1	1.0	ug/L	50.00	ND	90.3	70-130	9.56	30	07/26/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2501 - Method: 5030

Prepared: 07/26/2019

Matrix Spike Dup (B9G2501-MSD1)

Source: 1907223-03

1,3-Dichlorobenzene	45.5	1.0	ug/L	50.00	ND	90.9	70-130	7.76	30	07/26/2019	
1,4-Dichlorobenzene	44.7	1.0	ug/L	50.00	ND	89.4	70-130	7.32	30	07/26/2019	
2,2,4-Trimethylpentane	44.2	5.0	ug/L	50.00	ND	88.4	70-130	16.6	30	07/26/2019	
2-Butanone (MEK)	46.3	5.0	ug/L	50.00	ND	92.5	70-130	4.23	30	07/26/2019	
2-Methylnaphthalene	46.7	5.0	ug/L	50.00	ND	93.4	70-130	1.25	30	07/26/2019	X
2-Propanone (acetone)	49.9	20	ug/L	50.00	ND	99.8	70-130	5.72	30	07/26/2019	
4-Methyl-2-pentanone (MIBK)	47.7	5.0	ug/L	50.00	ND	95.4	70-130	1.99	30	07/26/2019	
Acrylonitrile	40.2	5.0	ug/L	50.00	ND	80.5	70-130	0.0679	30	07/26/2019	A05
Benzene	45.1	1.0	ug/L	50.00	ND	90.3	70-130	9.53	30	07/26/2019	
Bromochloromethane	46.7	1.0	ug/L	50.00	ND	93.4	70-130	6.18	30	07/26/2019	
Bromodichloromethane	44.9	1.0	ug/L	50.00	ND	89.8	70-130	8.23	30	07/26/2019	
Bromoform	45.2	1.0	ug/L	50.00	ND	90.4	70-130	3.08	30	07/26/2019	
Bromomethane	49.8	5.0	ug/L	50.00	ND	99.5	70-130	12.3	30	07/26/2019	
Carbon disulfide	39.8	1.0	ug/L	50.00	ND	79.6	70-130	15.4	30	07/26/2019	
Carbon tetrachloride	45.0	1.0	ug/L	50.00	ND	89.9	70-130	14.0	30	07/26/2019	
Chlorobenzene	46.3	1.0	ug/L	50.00	ND	92.6	70-130	10.2	30	07/26/2019	
Chloroethane	57.1	5.0	ug/L	50.00	ND	114	70-130	15.8	30	07/26/2019	
Chloroform	44.2	1.0	ug/L	50.00	ND	88.4	70-130	9.23	30	07/26/2019	
Chloromethane	51.1	5.0	ug/L	50.00	ND	102	70-130	15.0	30	07/26/2019	
cis-1,2-Dichloroethylene	43.7	1.0	ug/L	50.00	ND	87.4	70-130	10.5	30	07/26/2019	
cis-1,3-Dichloropropylene	46.2	1.0	ug/L	50.00	ND	92.5	70-130	8.39	30	07/26/2019	
Cyclohexane	46.1	5.0	ug/L	50.00	ND	92.1	70-130	14.5	30	07/26/2019	
Dibromochloromethane	46.5	1.0	ug/L	50.00	ND	92.9	70-130	5.59	30	07/26/2019	
Dibromomethane	46.0	1.0	ug/L	50.00	ND	92.0	70-130	4.23	30	07/26/2019	
Dichlorodifluoromethane	57.7	5.0	ug/L	50.00	ND	115	70-130	18.9	30	07/26/2019	A11
Diethyl ether	45.5	5.0	ug/L	50.00	ND	91.0	70-130	3.02	30	07/26/2019	
Diisopropyl Ether	40.6	5.0	ug/L	50.00	ND	81.2	70-130	5.73	30	07/26/2019	
Ethylbenzene	45.1	1.0	ug/L	50.00	ND	90.1	70-130	12.4	30	07/26/2019	
Ethyltertiarybutylether	42.5	5.0	ug/L	50.00	ND	85.0	70-130	3.48	30	07/26/2019	
Hexachloroethane	42.9	5.0	ug/L	50.00	ND	85.7	70-130	10.6	30	07/26/2019	
Hexane	40.3	1.0	ug/L	50.00	ND	80.6	70-130	18.2	30	07/26/2019	
Isopropylbenzene	44.8	1.0	ug/L	50.00	ND	89.6	70-130	10.4	30	07/26/2019	
m & p - Xylene	89.6	2.0	ug/L	100.0	ND	89.6	70-130	11.3	30	07/26/2019	
Methylene chloride	44.8	5.0	ug/L	50.00	ND	89.7	70-130	11.1	30	07/26/2019	
Methyltertiarybutylether	44.7	1.0	ug/L	50.00	ND	89.3	70-130	3.00	30	07/26/2019	
Naphthalene	49.5	5.0	ug/L	50.00	ND	98.9	70-130	1.25	30	07/26/2019	X
n-Butylbenzene	46.9	1.0	ug/L	50.00	ND	93.7	70-130	11.5	30	07/26/2019	
n-Propylbenzene	45.2	1.0	ug/L	50.00	ND	90.4	70-130	11.1	30	07/26/2019	
o-Xylene	45.9	1.0	ug/L	50.00	ND	91.8	70-130	11.1	30	07/26/2019	
sec-Butylbenzene	49.0	1.0	ug/L	50.00	ND	98.1	70-130	10.2	30	07/26/2019	
Styrene	46.9	1.0	ug/L	50.00	ND	93.9	70-130	10.4	30	07/26/2019	
tert-Butylbenzene	45.3	1.0	ug/L	50.00	ND	90.6	70-130	8.79	30	07/26/2019	
tertiary Butyl Alcohol	213	50	ug/L	250.0	ND	85.0	70-130	3.48	30	07/26/2019	
tertiaryAmylmethylether	43.6	5.0	ug/L	50.00	ND	87.2	70-130	4.16	30	07/26/2019	
Tetrachloroethylene	42.2	1.0	ug/L	50.00	ND	84.3	70-130	13.2	30	07/26/2019	
Tetrahydrofuran	45.1	5.0	ug/L	50.00	ND	90.1	70-130	0.0655	30	07/26/2019	
Toluene	45.3	1.0	ug/L	50.00	ND	90.7	70-130	11.8	30	07/26/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2501 - Method: 5030

Prepared: 07/26/2019

Matrix Spike Dup (B9G2501-MSD1)

Source: 1907223-03

trans-1,2-Dichloroethylene	42.4	1.0	ug/L	50.00	ND	84.7	70-130	13.8	30	07/26/2019	
trans-1,3-Dichloropropylene	44.9	1.0	ug/L	50.00	ND	89.8	70-130	5.73	30	07/26/2019	
Trichloroethylene	45.0	1.0	ug/L	50.00	ND	90.0	70-130	12.3	30	07/26/2019	
Trichlorofluoromethane	44.0	1.0	ug/L	50.00	ND	88.0	70-130	15.6	30	07/26/2019	
Vinyl chloride	48.5	1.0	ug/L	50.00	ND	97.0	70-130	13.8	30	07/26/2019	
Surrogate: Bromofluorobenzene	45.9		ug/L	50.00		91.9	85-115			07/26/2019	
Surrogate: Dibromofluoromethane	46.5		ug/L	50.00		93.1	82.7-115			07/26/2019	
Surrogate: Toluene-d8	47.2		ug/L	50.00		94.4	85-115			07/26/2019	

Batch B9G2602 - Method: 5030

Prepared: 07/26/2019

Blank (B9G2602-BLK1)

1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							07/26/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							07/26/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							07/26/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							07/26/2019	
1,1-Dichloroethane	ND	1.0	ug/L							07/26/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							07/26/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							07/26/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							07/26/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							07/26/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							07/26/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							07/26/2019	
1,2-Dibromoethane	ND	1.0	ug/L							07/26/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							07/26/2019	
1,2-Dichloroethane	ND	1.0	ug/L							07/26/2019	
1,2-Dichloropropane	ND	1.0	ug/L							07/26/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							07/26/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							07/26/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							07/26/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							07/26/2019	
2-Butanone (MEK)	ND	5.0	ug/L							07/26/2019	
2-Methylnaphthalene	ND	5.0	ug/L							07/26/2019	X
2-Propanone (acetone)	ND	20	ug/L							07/26/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							07/26/2019	
Acrylonitrile	ND	5.0	ug/L							07/26/2019	A05
Benzene	ND	1.0	ug/L							07/26/2019	
Bromochloromethane	ND	1.0	ug/L							07/26/2019	
Bromodichloromethane	ND	1.0	ug/L							07/26/2019	
Bromoform	ND	1.0	ug/L							07/26/2019	
Bromomethane	ND	5.0	ug/L							07/26/2019	
Carbon disulfide	ND	1.0	ug/L							07/26/2019	
Carbon tetrachloride	ND	1.0	ug/L							07/26/2019	
Chlorobenzene	ND	1.0	ug/L							07/26/2019	
Chloroethane	ND	5.0	ug/L							07/26/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2602 - Method: 5030

Prepared: 07/26/2019

Blank (B9G2602-BLK1)

Chloroform	ND	1.0	ug/L							07/26/2019	
Chloromethane	ND	5.0	ug/L							07/26/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							07/26/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							07/26/2019	
Cyclohexane	ND	5.0	ug/L							07/26/2019	
Dibromochloromethane	ND	1.0	ug/L							07/26/2019	
Dibromomethane	ND	1.0	ug/L							07/26/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							07/26/2019	
Diethyl ether	ND	5.0	ug/L							07/26/2019	
Diisopropyl Ether	ND	5.0	ug/L							07/26/2019	
Ethylbenzene	ND	1.0	ug/L							07/26/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							07/26/2019	
Hexachloroethane	ND	5.0	ug/L							07/26/2019	
Hexane	ND	1.0	ug/L							07/26/2019	
Isopropylbenzene	ND	1.0	ug/L							07/26/2019	
m & p - Xylene	ND	2.0	ug/L							07/26/2019	
Methylene chloride	ND	5.0	ug/L							07/26/2019	
Methyltertiarybutylether	ND	1.0	ug/L							07/26/2019	
Naphthalene	ND	5.0	ug/L							07/26/2019	X
n-Butylbenzene	ND	1.0	ug/L							07/26/2019	
n-Propylbenzene	ND	1.0	ug/L							07/26/2019	
o-Xylene	ND	1.0	ug/L							07/26/2019	
sec-Butylbenzene	ND	1.0	ug/L							07/26/2019	
Styrene	ND	1.0	ug/L							07/26/2019	
tert-Butylbenzene	ND	1.0	ug/L							07/26/2019	
tertiary Butyl Alcohol	ND	50	ug/L							07/26/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							07/26/2019	
Tetrachloroethylene	ND	1.0	ug/L							07/26/2019	
Tetrahydrofuran	ND	5.0	ug/L							07/26/2019	
Toluene	ND	1.0	ug/L							07/26/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							07/26/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							07/26/2019	
Trichloroethylene	ND	1.0	ug/L							07/26/2019	
Trichlorofluoromethane	ND	1.0	ug/L							07/26/2019	
Vinyl chloride	ND	1.0	ug/L							07/26/2019	
Surrogate: Bromofluorobenzene	49.0		ug/L	50.00		98.0	85-115			07/26/2019	
Surrogate: Dibromofluoromethane	46.7		ug/L	50.00		93.5	82.7-115			07/26/2019	
Surrogate: Toluene-d8	49.1		ug/L	50.00		98.1	85-115			07/26/2019	

LCS (B9G2602-BS1)

1,1,1,2-Tetrachloroethane	47.5	1.0	ug/L	50.00		95.1	70-130			07/26/2019	
1,1,1-Trichloroethane	45.9	1.0	ug/L	50.00		91.8	70-130			07/26/2019	
1,1,2,2-Tetrachloroethane	48.3	1.0	ug/L	50.00		96.5	70-130			07/26/2019	
1,1,2-Trichloroethane	47.0	1.0	ug/L	50.00		94.1	70-130			07/26/2019	
1,1-Dichloroethane	44.5	1.0	ug/L	50.00		89.0	70-130			07/26/2019	
1,1-Dichloroethylene	45.5	1.0	ug/L	50.00		90.9	70-130			07/26/2019	
1,2,3-Trichlorobenzene	52.0	5.0	ug/L	50.00		104	70-130			07/26/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2602 - Method: 5030

Prepared: 07/26/2019

LCS (B9G2602-BS1)

1,2,3-Trichloropropane	46.4	1.0	ug/L	50.00		92.8	70-130			07/26/2019	
1,2,3-Trimethylbenzene	47.0	1.0	ug/L	50.00		94.1	70-130			07/26/2019	
1,2,4-Trichlorobenzene	52.3	5.0	ug/L	50.00		105	70-130			07/26/2019	
1,2,4-Trimethylbenzene	47.0	1.0	ug/L	50.00		94.1	70-130			07/26/2019	
1,2-Dibromoethane	47.2	1.0	ug/L	50.00		94.3	70-130			07/26/2019	
1,2-Dichlorobenzene	49.2	1.0	ug/L	50.00		98.4	70-130			07/26/2019	
1,2-Dichloroethane	44.7	1.0	ug/L	50.00		89.3	70-130			07/26/2019	
1,2-Dichloropropane	46.8	1.0	ug/L	50.00		93.6	70-130			07/26/2019	
1,3,5-Trimethylbenzene	47.4	1.0	ug/L	50.00		94.9	70-130			07/26/2019	
1,3-Dichlorobenzene	47.7	1.0	ug/L	50.00		95.4	70-130			07/26/2019	
1,4-Dichlorobenzene	47.1	1.0	ug/L	50.00		94.2	70-130			07/26/2019	
2,2,4-Trimethylpentane	50.1	5.0	ug/L	50.00		100	70-130			07/26/2019	
2-Butanone (MEK)	44.6	5.0	ug/L	50.00		89.2	70-130			07/26/2019	
2-Methylnaphthalene	48.9	5.0	ug/L	50.00		97.8	70-130			07/26/2019	X
2-Propanone (acetone)	44.4	20	ug/L	50.00		88.9	70-130			07/26/2019	
4-Methyl-2-pentanone (MIBK)	45.5	5.0	ug/L	50.00		91.0	70-130			07/26/2019	
Acrylonitrile	39.4	5.0	ug/L	50.00		78.8	70-130			07/26/2019	A05
Benzene	46.2	1.0	ug/L	50.00		92.4	70-130			07/26/2019	
Bromochloromethane	47.5	1.0	ug/L	50.00		94.9	70-130			07/26/2019	
Bromodichloromethane	46.2	1.0	ug/L	50.00		92.5	70-130			07/26/2019	
Bromoform	46.4	1.0	ug/L	50.00		92.8	70-130			07/26/2019	
Bromomethane	53.9	5.0	ug/L	50.00		108	70-130			07/26/2019	
Carbon disulfide	43.2	1.0	ug/L	50.00		86.3	70-130			07/26/2019	
Carbon tetrachloride	47.3	1.0	ug/L	50.00		94.7	70-130			07/26/2019	
Chlorobenzene	48.4	1.0	ug/L	50.00		96.8	70-130			07/26/2019	
Chloroethane	60.9	5.0	ug/L	50.00		122	70-130			07/26/2019	A06
Chloroform	45.3	1.0	ug/L	50.00		90.5	70-130			07/26/2019	
Chloromethane	57.2	5.0	ug/L	50.00		114	70-130			07/26/2019	
cis-1,2-Dichloroethylene	45.2	1.0	ug/L	50.00		90.3	70-130			07/26/2019	
cis-1,3-Dichloropropylene	47.9	1.0	ug/L	50.00		95.7	70-130			07/26/2019	
Cyclohexane	48.6	5.0	ug/L	50.00		97.1	70-130			07/26/2019	
Dibromochloromethane	47.7	1.0	ug/L	50.00		95.4	70-130			07/26/2019	
Dibromomethane	46.6	1.0	ug/L	50.00		93.2	70-130			07/26/2019	
Dichlorodifluoromethane	69.3	5.0	ug/L	50.00		139	70-130			07/26/2019	A06, A09, A11
Diethyl ether	44.4	5.0	ug/L	50.00		88.8	70-130			07/26/2019	
Diisopropyl Ether	40.8	5.0	ug/L	50.00		81.5	70-130			07/26/2019	
Ethylbenzene	47.4	1.0	ug/L	50.00		94.9	70-130			07/26/2019	
Ethyltertiarybutylether	42.8	5.0	ug/L	50.00		85.7	70-130			07/26/2019	
Hexachloroethane	45.5	5.0	ug/L	50.00		90.9	70-130			07/26/2019	
Hexane	46.1	1.0	ug/L	50.00		92.1	70-130			07/26/2019	
Isopropylbenzene	47.3	1.0	ug/L	50.00		94.7	70-130			07/26/2019	
m & p - Xylene	94.2	2.0	ug/L	100.0		94.2	70-130			07/26/2019	
Methylene chloride	46.1	5.0	ug/L	50.00		92.2	70-130			07/26/2019	
Methyltertiarybutylether	44.4	1.0	ug/L	50.00		88.9	70-130			07/26/2019	
Naphthalene	51.2	5.0	ug/L	50.00		102	70-130			07/26/2019	X
n-Butylbenzene	50.5	1.0	ug/L	50.00		101	70-130			07/26/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2602 - Method: 5030

Prepared: 07/26/2019

LCS (B9G2602-BS1)

n-Propylbenzene	48.0	1.0	ug/L	50.00		96.0	70-130			07/26/2019	
o-Xylene	48.1	1.0	ug/L	50.00		96.2	70-130			07/26/2019	
sec-Butylbenzene	51.0	1.0	ug/L	50.00		102	70-130			07/26/2019	
Styrene	48.8	1.0	ug/L	50.00		97.5	70-130			07/26/2019	
tert-Butylbenzene	47.4	1.0	ug/L	50.00		94.8	70-130			07/26/2019	
tertiary Butyl Alcohol	214	50	ug/L	250.0		85.7	70-130			07/26/2019	
tertiaryAmylmethylether	43.4	5.0	ug/L	50.00		86.8	70-130			07/26/2019	
Tetrachloroethylene	45.3	1.0	ug/L	50.00		90.6	70-130			07/26/2019	
Tetrahydrofuran	43.1	5.0	ug/L	50.00		86.2	70-130			07/26/2019	
Toluene	47.1	1.0	ug/L	50.00		94.1	70-130			07/26/2019	
trans-1,2-Dichloroethylene	44.9	1.0	ug/L	50.00		89.8	70-130			07/26/2019	
trans-1,3-Dichloropropylene	46.5	1.0	ug/L	50.00		93.1	70-130			07/26/2019	
Trichloroethylene	47.2	1.0	ug/L	50.00		94.4	70-130			07/26/2019	
Trichlorofluoromethane	45.9	1.0	ug/L	50.00		91.9	70-130			07/26/2019	
Vinyl chloride	52.3	1.0	ug/L	50.00		105	70-130			07/26/2019	
Surrogate: Bromofluorobenzene	46.5		ug/L	50.00		93.0	85-115			07/26/2019	
Surrogate: Dibromofluoromethane	46.7		ug/L	50.00		93.3	82.7-115			07/26/2019	
Surrogate: Toluene-d8	47.8		ug/L	50.00		95.7	85-115			07/26/2019	

Matrix Spike (B9G2602-MS1)

Source: 1907226-09

1,1,1,2-Tetrachloroethane	51.5	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
1,1,1-Trichloroethane	52.2	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,1,2,2-Tetrachloroethane	52.0	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,1,2-Trichloroethane	50.4	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,1-Dichloroethane	50.2	1.0	ug/L	50.00	ND	100	70-130			07/26/2019	
1,1-Dichloroethylene	52.3	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
1,2,3-Trichlorobenzene	54.3	5.0	ug/L	50.00	ND	109	70-130			07/26/2019	
1,2,3-Trichloropropane	49.5	1.0	ug/L	50.00	ND	98.9	70-130			07/26/2019	
1,2,3-Trimethylbenzene	51.9	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,2,4-Trichlorobenzene	54.1	5.0	ug/L	50.00	ND	108	70-130			07/26/2019	
1,2,4-Trimethylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,2-Dibromoethane	50.3	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,2-Dichlorobenzene	52.2	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,2-Dichloroethane	50.7	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
1,2-Dichloropropane	52.2	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
1,3,5-Trimethylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
1,3-Dichlorobenzene	51.6	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
1,4-Dichlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
2,2,4-Trimethylpentane	55.6	5.0	ug/L	50.00	ND	111	70-130			07/26/2019	
2-Butanone (MEK)	50.5	5.0	ug/L	50.00	ND	101	70-130			07/26/2019	
2-Methylnaphthalene	46.7	5.0	ug/L	50.00	ND	93.3	70-130			07/26/2019	X
2-Propanone (acetone)	53.0	20	ug/L	50.00	ND	106	70-130			07/26/2019	
4-Methyl-2-pentanone (MIBK)	49.7	5.0	ug/L	50.00	ND	99.3	70-130			07/26/2019	
Acrylonitrile	42.3	5.0	ug/L	50.00	ND	84.7	70-130			07/26/2019	A05
Benzene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
Bromochloromethane	51.6	1.0	ug/L	50.00	ND	103	70-130			07/26/2019	
Bromodichloromethane	51.0	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2602 - Method: 5030

Prepared: 07/26/2019

Matrix Spike (B9G2602-MS1)

Source: 1907226-09

Bromoform	47.9	1.0	ug/L	50.00	ND	95.7	70-130			07/26/2019	
Bromomethane	59.9	5.0	ug/L	50.00	ND	120	70-130			07/26/2019	
Carbon disulfide	48.7	1.0	ug/L	50.00	ND	97.5	70-130			07/26/2019	
Carbon tetrachloride	54.6	1.0	ug/L	50.00	ND	109	70-130			07/26/2019	
Chlorobenzene	53.6	1.0	ug/L	50.00	ND	107	70-130			07/26/2019	
Chloroethane	71.3	5.0	ug/L	50.00	ND	143	70-130			07/26/2019	A04, A06
Chloroform	51.0	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Chloromethane	64.9	5.0	ug/L	50.00	ND	130	70-130			07/26/2019	
cis-1,2-Dichloroethylene	50.9	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
cis-1,3-Dichloropropylene	51.1	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Cyclohexane	56.3	5.0	ug/L	50.00	ND	113	70-130			07/26/2019	
Dibromochloromethane	49.9	1.0	ug/L	50.00	ND	99.7	70-130			07/26/2019	
Dibromomethane	50.8	1.0	ug/L	50.00	ND	102	70-130			07/26/2019	
Dichlorodifluoromethane	79.0	5.0	ug/L	50.00	ND	158	70-130			07/26/2019	A04, A06, A11
Diethyl ether	49.3	5.0	ug/L	50.00	ND	98.6	70-130			07/26/2019	
Diisopropyl Ether	45.2	5.0	ug/L	50.00	ND	90.3	70-130			07/26/2019	
Ethylbenzene	52.8	1.0	ug/L	50.00	ND	106	70-130			07/26/2019	
Ethyltertiarybutylether	45.4	5.0	ug/L	50.00	ND	90.9	70-130			07/26/2019	
Hexachloroethane	49.2	5.0	ug/L	50.00	ND	98.4	70-130			07/26/2019	
Hexane	52.3	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
Isopropylbenzene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
m & p - Xylene	104	2.0	ug/L	100.0	ND	104	70-130			07/26/2019	
Methylene chloride	52.4	5.0	ug/L	50.00	ND	105	70-130			07/26/2019	
Methyltertiarybutylether	47.8	1.0	ug/L	50.00	ND	95.7	70-130			07/26/2019	
Naphthalene	50.5	5.0	ug/L	50.00	ND	101	70-130			07/26/2019	X
n-Butylbenzene	55.5	1.0	ug/L	50.00	ND	111	70-130			07/26/2019	
n-Propylbenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			07/26/2019	
o-Xylene	53.1	1.0	ug/L	50.00	ND	106	70-130			07/26/2019	
sec-Butylbenzene	57.3	1.0	ug/L	50.00	ND	115	70-130			07/26/2019	
Styrene	53.5	1.0	ug/L	50.00	ND	107	70-130			07/26/2019	
tert-Butylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
tertiary Butyl Alcohol	227	50	ug/L	250.0	ND	90.9	70-130			07/26/2019	
tertiaryAmylmethylether	46.6	5.0	ug/L	50.00	ND	93.2	70-130			07/26/2019	
Tetrachloroethylene	50.4	1.0	ug/L	50.00	ND	101	70-130			07/26/2019	
Tetrahydrofuran	46.2	5.0	ug/L	50.00	ND	92.4	70-130			07/26/2019	
Toluene	52.3	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
trans-1,2-Dichloroethylene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/26/2019	
trans-1,3-Dichloropropylene	49.2	1.0	ug/L	50.00	ND	98.4	70-130			07/26/2019	
Trichloroethylene	52.7	1.0	ug/L	50.00	ND	105	70-130			07/26/2019	
Trichlorofluoromethane	54.1	1.0	ug/L	50.00	ND	108	70-130			07/26/2019	
Vinyl chloride	61.2	1.0	ug/L	50.00	ND	122	70-130			07/26/2019	
Surrogate: Bromofluorobenzene	47.9		ug/L	50.00		95.9	85-115			07/26/2019	
Surrogate: Dibromofluoromethane	49.9		ug/L	50.00		99.8	82.7-115			07/26/2019	
Surrogate: Toluene-d8	50.2		ug/L	50.00		100	85-115			07/26/2019	

Matrix Spike Dup (B9G2602-MSD1)

Source: 1907226-09



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2602 - Method: 5030

Prepared: 07/26/2019

Matrix Spike Dup (B9G2602-MSD1)

Source: 1907226-09

1,1,1,2-Tetrachloroethane	46.9	1.0	ug/L	50.00	ND	93.8	70-130	9.43	30	07/26/2019	
1,1,1-Trichloroethane	45.4	1.0	ug/L	50.00	ND	90.7	70-130	14.1	30	07/26/2019	
1,1,2,2-Tetrachloroethane	50.0	1.0	ug/L	50.00	ND	100	70-130	3.94	30	07/26/2019	
1,1,2-Trichloroethane	46.9	1.0	ug/L	50.00	ND	93.8	70-130	7.32	30	07/26/2019	
1,1-Dichloroethane	43.9	1.0	ug/L	50.00	ND	87.8	70-130	13.4	30	07/26/2019	
1,1-Dichloroethylene	44.6	1.0	ug/L	50.00	ND	89.3	70-130	15.8	30	07/26/2019	
1,2,3-Trichlorobenzene	50.8	5.0	ug/L	50.00	ND	102	70-130	6.59	30	07/26/2019	
1,2,3-Trichloropropane	47.7	1.0	ug/L	50.00	ND	95.3	70-130	3.67	30	07/26/2019	
1,2,3-Trimethylbenzene	47.5	1.0	ug/L	50.00	ND	95.1	70-130	8.88	30	07/26/2019	
1,2,4-Trichlorobenzene	51.1	5.0	ug/L	50.00	ND	102	70-130	5.68	30	07/26/2019	
1,2,4-Trimethylbenzene	46.7	1.0	ug/L	50.00	ND	93.3	70-130	10.4	30	07/26/2019	
1,2-Dibromoethane	47.9	1.0	ug/L	50.00	ND	95.8	70-130	4.97	30	07/26/2019	
1,2-Dichlorobenzene	49.0	1.0	ug/L	50.00	ND	98.0	70-130	6.42	30	07/26/2019	
1,2-Dichloroethane	46.4	1.0	ug/L	50.00	ND	92.8	70-130	8.80	30	07/26/2019	
1,2-Dichloropropane	46.9	1.0	ug/L	50.00	ND	93.9	70-130	10.5	30	07/26/2019	
1,3,5-Trimethylbenzene	46.8	1.0	ug/L	50.00	ND	93.7	70-130	11.5	30	07/26/2019	
1,3-Dichlorobenzene	46.9	1.0	ug/L	50.00	ND	93.7	70-130	9.62	30	07/26/2019	
1,4-Dichlorobenzene	46.6	1.0	ug/L	50.00	ND	93.1	70-130	8.37	30	07/26/2019	
2,2,4-Trimethylpentane	46.4	5.0	ug/L	50.00	ND	92.8	70-130	18.1	30	07/26/2019	
2-Butanone (MEK)	47.6	5.0	ug/L	50.00	ND	95.1	70-130	5.94	30	07/26/2019	
2-Methylnaphthalene	48.2	5.0	ug/L	50.00	ND	96.3	70-130	3.17	30	07/26/2019	X
2-Propanone (acetone)	49.8	20	ug/L	50.00	ND	99.5	70-130	6.22	30	07/26/2019	
4-Methyl-2-pentanone (MIBK)	49.0	5.0	ug/L	50.00	ND	98.1	70-130	1.27	30	07/26/2019	
Acrylonitrile	40.6	5.0	ug/L	50.00	ND	81.2	70-130	4.14	30	07/26/2019	A05
Benzene	45.8	1.0	ug/L	50.00	ND	91.5	70-130	13.0	30	07/26/2019	
Bromochloromethane	48.4	1.0	ug/L	50.00	ND	96.8	70-130	6.31	30	07/26/2019	
Bromodichloromethane	45.5	1.0	ug/L	50.00	ND	91.1	70-130	11.2	30	07/26/2019	
Bromoform	45.4	1.0	ug/L	50.00	ND	90.8	70-130	5.34	30	07/26/2019	
Bromomethane	53.0	5.0	ug/L	50.00	ND	106	70-130	12.1	30	07/26/2019	
Carbon disulfide	40.9	1.0	ug/L	50.00	ND	81.9	70-130	17.4	30	07/26/2019	
Carbon tetrachloride	46.2	1.0	ug/L	50.00	ND	92.5	70-130	16.5	30	07/26/2019	
Chlorobenzene	48.0	1.0	ug/L	50.00	ND	95.9	70-130	11.1	30	07/26/2019	
Chloroethane	61.4	5.0	ug/L	50.00	ND	123	70-130	15.0	30	07/26/2019	A06
Chloroform	45.1	1.0	ug/L	50.00	ND	90.2	70-130	12.3	30	07/26/2019	
Chloromethane	56.6	5.0	ug/L	50.00	ND	113	70-130	13.7	30	07/26/2019	
cis-1,2-Dichloroethylene	45.4	1.0	ug/L	50.00	ND	90.8	70-130	11.4	30	07/26/2019	
cis-1,3-Dichloropropylene	47.2	1.0	ug/L	50.00	ND	94.3	70-130	8.06	30	07/26/2019	
Cyclohexane	47.7	5.0	ug/L	50.00	ND	95.4	70-130	16.5	30	07/26/2019	
Dibromochloromethane	47.1	1.0	ug/L	50.00	ND	94.3	70-130	5.62	30	07/26/2019	
Dibromomethane	47.4	1.0	ug/L	50.00	ND	94.8	70-130	6.89	30	07/26/2019	
Dichlorodifluoromethane	66.8	5.0	ug/L	50.00	ND	134	70-130	16.7	30	07/26/2019	A04, A06, A11
Diethyl ether	46.5	5.0	ug/L	50.00	ND	93.0	70-130	5.80	30	07/26/2019	
Diisopropyl Ether	41.0	5.0	ug/L	50.00	ND	82.1	70-130	9.55	30	07/26/2019	
Ethylbenzene	46.5	1.0	ug/L	50.00	ND	92.9	70-130	12.8	30	07/26/2019	
Ethyltertiarybutylether	43.5	5.0	ug/L	50.00	ND	86.9	70-130	4.43	30	07/26/2019	
Hexachloroethane	42.6	5.0	ug/L	50.00	ND	85.2	70-130	14.3	30	07/26/2019	



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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
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Batch B9G2602 - Method: 5030

Prepared: 07/26/2019

Matrix Spike Dup (B9G2602-MSD1)

Source: 1907226-09

Hexane	43.1	1.0	ug/L	50.00	ND	86.2	70-130	19.2	30	07/26/2019	
Isopropylbenzene	46.3	1.0	ug/L	50.00	ND	92.5	70-130	11.8	30	07/26/2019	
m & p - Xylene	92.0	2.0	ug/L	100.0	ND	92.0	70-130	12.4	30	07/26/2019	
Methylene chloride	47.3	5.0	ug/L	50.00	ND	94.5	70-130	10.3	30	07/26/2019	
Methyltertiarybutylether	45.5	1.0	ug/L	50.00	ND	90.9	70-130	5.11	30	07/26/2019	
Naphthalene	51.1	5.0	ug/L	50.00	ND	102	70-130	1.18	30	07/26/2019	X
n-Butylbenzene	49.8	1.0	ug/L	50.00	ND	99.6	70-130	10.9	30	07/26/2019	
n-Propylbenzene	47.2	1.0	ug/L	50.00	ND	94.4	70-130	12.5	30	07/26/2019	
o-Xylene	47.3	1.0	ug/L	50.00	ND	94.5	70-130	11.6	30	07/26/2019	
sec-Butylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	12.6	30	07/26/2019	
Styrene	48.4	1.0	ug/L	50.00	ND	96.8	70-130	10.1	30	07/26/2019	
tert-Butylbenzene	46.1	1.0	ug/L	50.00	ND	92.2	70-130	11.8	30	07/26/2019	
tertiary Butyl Alcohol	217	50	ug/L	250.0	ND	86.9	70-130	4.43	30	07/26/2019	
tertiaryAmylmeylether	44.7	5.0	ug/L	50.00	ND	89.4	70-130	4.16	30	07/26/2019	
Tetrachloroethylene	44.0	1.0	ug/L	50.00	ND	88.0	70-130	13.6	30	07/26/2019	
Tetrahydrofuran	45.9	5.0	ug/L	50.00	ND	91.8	70-130	0.691	30	07/26/2019	
Toluene	46.5	1.0	ug/L	50.00	ND	93.0	70-130	11.8	30	07/26/2019	
trans-1,2-Dichloroethylene	44.6	1.0	ug/L	50.00	ND	89.1	70-130	15.7	30	07/26/2019	
trans-1,3-Dichloropropylene	45.5	1.0	ug/L	50.00	ND	90.9	70-130	7.88	30	07/26/2019	
Trichloroethylene	46.0	1.0	ug/L	50.00	ND	92.0	70-130	13.6	30	07/26/2019	
Trichlorofluoromethane	45.8	1.0	ug/L	50.00	ND	91.7	70-130	16.5	30	07/26/2019	
Vinyl chloride	50.3	1.0	ug/L	50.00	ND	101	70-130	19.5	30	07/26/2019	
Surrogate: Bromofluorobenzene	46.5		ug/L	50.00		93.1	85-115			07/26/2019	
Surrogate: Dibromofluoromethane	47.5		ug/L	50.00		94.9	82.7-115			07/26/2019	
Surrogate: Toluene-d8	48.5		ug/L	50.00		97.0	85-115			07/26/2019	



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Organics-Dioxane - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9G2906 - Method: 5030				Prepared: 07/26/2019							
Blank (B9G2906-BLK1)											
1,4-dioxane	ND	1.0	ug/L							07/26/2019	
LCS (B9G2906-BS1)											
1,4-dioxane	10.5	1.0	ug/L	10.00		105	70-130			07/26/2019	
Matrix Spike (B9G2906-MS1) Source: 1907223-04											
1,4-dioxane	11.5	1.0	ug/L	10.00	1.40	101	70-130			07/26/2019	
Matrix Spike Dup (B9G2906-MSD1) Source: 1907223-04											
1,4-dioxane	11.6	1.0	ug/L	10.00	1.40	102	70-130	0.605	30	07/26/2019	



Analysis Request Sheet

Lab Work Order Number

Project Name

Matrix

1907223

Gelman Sciences

WATER

Site Code/Project Number

AY

CC Email 1

Project TAT Days

Sample Collector

81000018/Location 6130

19

lundk@michigan.gov

Dan Hamel

Dept-Division-District

Index

CC Email 2

Project Due Date

Sample Collector Phone

DEQ-RRD-Jackson

nedrichs@michigan.gov

517-745-6595

State Project Manager

PCA

CC Email 3

Accept Analysis hold time codes

Contract Firm

Dan Hamel

State Project Manager Email

Project

Overflow Lab Choice 1

Contract Firm Primary Contact

hameld@michigan.gov

Location-6130

State Project Manager Phone

Phase

Overflow Lab Choice 2

Primary Contact Phone

(517)745-6595

Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
01	Allen Creek/West Park SW	7/24/2019	0946	5	Please include QA/QC with Lab Data Report(s)
02	Allen Creek/chapin-West Park	7/24/2019	0933	5	
03	Allen Creek/Maple Ridge-Arborview	7/24/2019	1000	3	
04	Allen Creek/Wildwood-Arborview	7/24/2019	/	3	DRY - NO SAMPLE
05	Allen Creek/Murry-Washington	7/24/2019	1040	5	
05	Allen Creek/Eighth-Waterworks	7/24/2019	1028	5	
06	Allen Creek/Maryfield-Wildwood	7/24/2019	1015	3	

ORGANIC CHEMISTRY	MAD - DISSOLVED METALS	MA - TOTAL METALS	GENERAL CHEMISTRY
VOA - Volatile Organic Acidic Volatiles - Full List 1 2 3 4 5 6 7 8 9 10 BTEX/MTBE/TMB only 1 2 3 4 5 6 7 8 9 10 Chlorinated only 1 2 3 4 5 6 7 8 9 10 GRO 1 2 3 4 5 6 7 8 9 10 1,4 Dioxane 1 2 3 4 5 6 7 8 9 10	Diss - Silver - Ag 1 2 3 4 5 6 7 8 9 10 Diss - Aluminum - Al 1 2 3 4 5 6 7 8 9 10 Diss - Arsenic - As 1 2 3 4 5 6 7 8 9 10 Diss - Boron - B 1 2 3 4 5 6 7 8 9 10 Diss - Barium - Ba 1 2 3 4 5 6 7 8 9 10 Diss - Beryllium - Be 1 2 3 4 5 6 7 8 9 10 Diss - Cadmium - Cd 1 2 3 4 5 6 7 8 9 10 Diss - Cobalt - Co 1 2 3 4 5 6 7 8 9 10 Diss - Chromium - Cr 1 2 3 4 5 6 7 8 9 10 Diss - Copper - Cu 1 2 3 4 5 6 7 8 9 10 Diss - Iron - Fe 1 2 3 4 5 6 7 8 9 10 Diss - Mercury - Hg 1 2 3 4 5 6 7 8 9 10 Diss - Lithium - Li 1 2 3 4 5 6 7 8 9 10 Diss - Manganese - Mn 1 2 3 4 5 6 7 8 9 10 Diss - Molybdenum - Mo 1 2 3 4 5 6 7 8 9 10 Diss - Nickel - Ni 1 2 3 4 5 6 7 8 9 10 Diss - Lead - Pb 1 2 3 4 5 6 7 8 9 10 Diss - Antimony - Sb 1 2 3 4 5 6 7 8 9 10 Diss - Selenium - Se 1 2 3 4 5 6 7 8 9 10 Diss - Strontium - Sr 1 2 3 4 5 6 7 8 9 10 Diss - Titanium - Ti 1 2 3 4 5 6 7 8 9 10 Diss - Thallium - Tl 1 2 3 4 5 6 7 8 9 10 Diss - Uranium - U 1 2 3 4 5 6 7 8 9 10 Diss - Vanadium - V 1 2 3 4 5 6 7 8 9 10 Diss - Zinc - Zn 1 2 3 4 5 6 7 8 9 10 Diss - Calcium - Ca 1 2 3 4 5 6 7 8 9 10 Diss - Potassium - K 1 2 3 4 5 6 7 8 9 10 Diss - Magnesium - Mg 1 2 3 4 5 6 7 8 9 10 Diss - Sodium - Na 1 2 3 4 5 6 7 8 9 10 Diss - Hardness - Ca, Mg 1 2 3 4 5 6 7 8 9 10	Silver - Ag 1 2 3 4 5 6 7 8 9 10 Aluminum - Al 1 2 3 4 5 6 7 8 9 10 Arsenic - As 1 2 3 4 5 6 7 8 9 10 Boron - B 1 2 3 4 5 6 7 8 9 10 Barium - Ba 1 2 3 4 5 6 7 8 9 10 Beryllium - Be 1 2 3 4 5 6 7 8 9 10 Cadmium - Cd 1 2 3 4 5 6 7 8 9 10 Cobalt - Co 1 2 3 4 5 6 7 8 9 10 Chromium - Cr 1 2 3 4 5 6 7 8 9 10 Copper - Cu 1 2 3 4 5 6 7 8 9 10 Iron - Fe 1 2 3 4 5 6 7 8 9 10 Mercury - Hg 1 2 3 4 5 6 7 8 9 10 Lithium - Li 1 2 3 4 5 6 7 8 9 10 Manganese - Mn 1 2 3 4 5 6 7 8 9 10 Molybdenum - Mo 1 2 3 4 5 6 7 8 9 10 Nickel - Ni 1 2 3 4 5 6 7 8 9 10 Lead - Pb 1 2 3 4 5 6 7 8 9 10 Antimony - Sb 1 2 3 4 5 6 7 8 9 10 Selenium - Se 1 2 3 4 5 6 7 8 9 10 Strontium - Sr 1 2 3 4 5 6 7 8 9 10 Titanium - Ti 1 2 3 4 5 6 7 8 9 10 Thallium - Tl 1 2 3 4 5 6 7 8 9 10 Uranium - U 1 2 3 4 5 6 7 8 9 10 Vanadium - V 1 2 3 4 5 6 7 8 9 10 Zinc - Zn 1 2 3 4 5 6 7 8 9 10 Calcium - Ca 1 2 3 4 5 6 7 8 9 10 Potassium - K 1 2 3 4 5 6 7 8 9 10 Magnesium - Mg 1 2 3 4 5 6 7 8 9 10 Sodium - Na 1 2 3 4 5 6 7 8 9 10 Hardness - Ca, Mg 1 2 3 4 5 6 7 8 9 10	GB Total Cyanide - CN 1 2 3 4 5 6 7 8 9 10 GCN Available Cyanide - CN 1 2 3 4 5 6 7 8 9 10 (Amenable / Weak Acid Dissociable) CA Chlorophyll 1 2 3 4 5 6 7 8 9 10 GN Ortho Phosphate - OP 1 2 3 4 5 6 7 8 9 10 GN Nitrite - NO ₂ 1 2 3 4 5 6 7 8 9 10 GN Nitrate - NO ₃ (Calc.) 1 2 3 4 5 6 7 8 9 10 GN Suspended Solids - SS 1 2 3 4 5 6 7 8 9 10 GN Dissolved Solids - TDS 1 2 3 4 5 6 7 8 9 10 MN Diss Solids - TDS (Calc.) 1 2 3 4 5 6 7 8 9 10 GN Turbidity 1 2 3 4 5 6 7 8 9 10 MN Total Alkalinity 1 2 3 4 5 6 7 8 9 10 MN Bicarb/Carb Alkalinity (Includes Total Alkalinity) 1 2 3 4 5 6 7 8 9 10 MN Chloride - Cl 1 2 3 4 5 6 7 8 9 10 MN Fluoride - F 1 2 3 4 5 6 7 8 9 10 MN Sulfate - SO ₄ 1 2 3 4 5 6 7 8 9 10 MN Chromium 6 - Cr+6 1 2 3 4 5 6 7 8 9 10 MN Conductivity 1 2 3 4 5 6 7 8 9 10 MN pH 1 2 3 4 5 6 7 8 9 10 GA Chem Oxyg Dem - COD 1 2 3 4 5 6 7 8 9 10 GA Diss Org Carbon - DOC (FF) 1 2 3 4 5 6 7 8 9 10 (Field - Filtered & Preserved) GN Diss Org Carbon - DOC (LF) 1 2 3 4 5 6 7 8 9 10 (Lab - Filtered & Preserved) GA Total Org Carbon - TOC 1 2 3 4 5 6 7 8 9 10 GA Ammonia - NH ₃ 1 2 3 4 5 6 7 8 9 10 GA Nitrate+Nitrite - NO ₃ +NO ₂ 1 2 3 4 5 6 7 8 9 10 GA Kjeldahl Nitrogen - KN 1 2 3 4 5 6 7 8 9 10 GA Total Phosphorus - TP 1 2 3 4 5 6 7 8 9 10

Chain of Custody	Relinquished by	Received By	Date / Time
	Print Name & Org. DAN HAMEL DEQ-RRD-JACKSON DISTRICT	Melissa Lunte	7/24/19 1653
	Signature: [Signature]	[Signature]	
	Print Name & Org.		
Print Name & Org.			
Print Name & Org.			