STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

26 February 2019

Work Order: 1902033

Price: $1,325.00

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

RE: GELMAN SCIENCES, INC

I certify that the analyses performed by the MDEQ Environmental Laboratory were conducted by methods approved by the U.S. Environmental Protection Agency and other appropriate regulatory agencies.

Sincerely,

Kirby Shane
Laboratory Director

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Project Manager: Dan Hamel

Reported:
02/26/2019

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
Allen Creek/West Park SW	1902033-01	Water	02/07/2019	02/07/2019	
Allen Creek/Chapin-West Park	1902033-02	Water	02/07/2019	02/07/2019	
Allen Creek/Maple Ridge-Arborview	1902033-03	Water	02/07/2019	02/07/2019	
Allen Creek/Wildwood-Arborview	1902033-04	Water	02/07/2019	02/07/2019	
Allen Creek/Murray-Washington	1902033-05	Water	02/07/2019	02/07/2019	
Allen Creek/Eighth-Waterworks	1902033-06	Water	02/07/2019	02/07/2019	
Allen Creek-Maryfield-Wildwood Park	1902033-07	Water	02/07/2019	02/07/2019	

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 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
A08	Result(s) and reporting limits(s) are estimated due to low recovery of batch QC.
A06	Result is estimated due to high continuing calibration standard criteria failure.
A04	Result is estimated due to high matrix spike recovery.
ND	Indicates compound analyzed for but not detected
RL	Reporting Limit
NA	Not Applicable

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/West Park SW

Lab ID: 1902033-01

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	02/14/19	B9B1406	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/14/19	B9B1406	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/West Park SW

Lab ID: 1902033-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
100-41-4	**Ethylbenzene**	**1.0**	1.0	ug/L	1	02/14/19	B9B1406	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/14/19	B9B1406	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
100-42-5	**Styrene**	**1.8**	1.0	ug/L	1	02/14/19	B9B1406	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/14/19	B9B1406	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/14/19	B9B1406	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/14/19	B9B1406	8260	
Surrogate: Bromofluorobenzene			*98.3 %*	*85-115*		*02/14/19*	B9B1406	*8260*	
Surrogate: Dibromofluoromethane			*99.3 %*	*82.7-115*		*02/14/19*	B9B1406	*8260*	
Surrogate: Toluene-d8			*99.1 %*	*85-115*		*02/14/19*	B9B1406	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/West Park SW

Lab ID: 1902033-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**15**	1.0	ug/L	1	02/19/19	B9B2002	8260 Modified	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Chapin-West Park

Lab ID: 1902033-02

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	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Chapin-West Park

Lab ID: 1902033-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*107 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*102 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Chapin-West Park

Lab ID: 1902033-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	**1,4-dioxane**	**8.7**	1.0	ug/L	1	02/19/19	B9B2002	8260 Modified	

Page 8 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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: 1902033-03

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	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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: 1902033-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*101 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

Page 10 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Wildwood-Arborview

Lab ID: 1902033-04

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	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

Page 11 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Wildwood-Arborview

Lab ID: 1902033-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*105 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*106 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*99.9 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Murray-Washington

Lab ID: 1902033-05

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	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

Page 13 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek/Murray-Washington

Lab ID: 1902033-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	**Trichloroethylene**	**1.0**	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*102 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*99.3 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

Lab Work Order # 1902033

Page 14 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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: 1902033-06

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	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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: 1902033-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*102 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*100 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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: 1902033-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	02/19/19	B9B2002	8260 Modified	

Page 17 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1902033-07

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	02/12/19	B9B1202	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
540-84-1	2,2,4-Trimethylpentane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	02/12/19	B9B1202	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
74-95-3	Dibromomethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	

Page 18 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1902033-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
100-41-4	**Ethylbenzene**	**14**	1.0	ug/L	1	02/12/19	B9B1202	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
110-54-3	Hexane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	02/12/19	B9B1202	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
100-42-5	**Styrene**	**25**	1.0	ug/L	1	02/12/19	B9B1202	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	02/12/19	B9B1202	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	02/12/19	B9B1202	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	02/12/19	B9B1202	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*02/12/19*	B9B1202	*8260*	
Surrogate: Toluene-d8			*102 %*	*85-115*		*02/12/19*	B9B1202	*8260*	

Page 19 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: Allen Creek-Maryfield-Wildwood Park

Lab ID: 1902033-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									**See note Y28**
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	02/19/19	B9B2002	8260 Modified	

Page 20 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Blank (B9B1202-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							02/12/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							02/12/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							02/12/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							02/12/2019	
1,1-Dichloroethane	ND	1.0	ug/L							02/12/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							02/12/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							02/12/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							02/12/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							02/12/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							02/12/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							02/12/2019	
1,2-Dibromoethane	ND	1.0	ug/L							02/12/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							02/12/2019	
1,2-Dichloroethane	ND	1.0	ug/L							02/12/2019	
1,2-Dichloropropane	ND	1.0	ug/L							02/12/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							02/12/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							02/12/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							02/12/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							02/12/2019	
2-Butanone (MEK)	ND	5.0	ug/L							02/12/2019	
2-Methylnaphthalene	ND	5.0	ug/L							02/12/2019	X
2-Propanone (acetone)	ND	20	ug/L							02/12/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							02/12/2019	
Acrylonitrile	ND	5.0	ug/L							02/12/2019	
Benzene	ND	1.0	ug/L							02/12/2019	
Bromochloromethane	ND	1.0	ug/L							02/12/2019	
Bromodichloromethane	ND	1.0	ug/L							02/12/2019	
Bromoform	ND	1.0	ug/L							02/12/2019	
Bromomethane	ND	5.0	ug/L							02/12/2019	
Carbon disulfide	ND	1.0	ug/L							02/12/2019	
Carbon tetrachloride	ND	1.0	ug/L							02/12/2019	
Chlorobenzene	ND	1.0	ug/L							02/12/2019	
Chloroethane	ND	5.0	ug/L							02/12/2019	
Chloroform	ND	1.0	ug/L							02/12/2019	
Chloromethane	ND	5.0	ug/L							02/12/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							02/12/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							02/12/2019	
Cyclohexane	ND	5.0	ug/L							02/12/2019	
Dibromochloromethane	ND	1.0	ug/L							02/12/2019	
Dibromomethane	ND	1.0	ug/L							02/12/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							02/12/2019	
Diethyl ether	ND	5.0	ug/L							02/12/2019	
Diisopropyl Ether	ND	5.0	ug/L							02/12/2019	
Ethylbenzene	ND	1.0	ug/L							02/12/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							02/12/2019	
Hexachloroethane	ND	5.0	ug/L							02/12/2019	
Hexane	ND	1.0	ug/L							02/12/2019	

Lab Work Order # 1902033

Page 21 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Blank (B9B1202-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							02/12/2019	
m & p - Xylene	ND	2.0	ug/L							02/12/2019	
Methylene chloride	ND	5.0	ug/L							02/12/2019	
Methyltertiarybutylether	ND	1.0	ug/L							02/12/2019	
Naphthalene	ND	5.0	ug/L							02/12/2019	X
n-Butylbenzene	ND	1.0	ug/L							02/12/2019	
n-Propylbenzene	ND	1.0	ug/L							02/12/2019	
o-Xylene	ND	1.0	ug/L							02/12/2019	
sec-Butylbenzene	ND	1.0	ug/L							02/12/2019	
Styrene	ND	1.0	ug/L							02/12/2019	
tert-Butylbenzene	ND	1.0	ug/L							02/12/2019	
tertiary Butyl Alcohol	ND	50	ug/L							02/12/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							02/12/2019	
Tetrachloroethylene	ND	1.0	ug/L							02/12/2019	
Tetrahydrofuran	ND	5.0	ug/L							02/12/2019	
Toluene	ND	1.0	ug/L							02/12/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							02/12/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							02/12/2019	
Trichloroethylene	ND	1.0	ug/L							02/12/2019	
Trichlorofluoromethane	ND	1.0	ug/L							02/12/2019	
Vinyl chloride	ND	1.0	ug/L							02/12/2019	
Surrogate: Bromofluorobenzene	*51.3*		ug/L	*50.00*		*103*	*85-115*			02/12/2019	
Surrogate: Dibromofluoromethane	*51.3*		ug/L	*50.00*		*103*	*82.7-115*			02/12/2019	
Surrogate: Toluene-d8	*50.7*		ug/L	*50.00*		*101*	*85-115*			02/12/2019	
LCS (B9B1202-BS1)											
1,1,1,2-Tetrachloroethane	43.4	1.0	ug/L	50.00		86.7	70-130			02/12/2019	
1,1,1-Trichloroethane	42.2	1.0	ug/L	50.00		84.5	70-130			02/12/2019	
1,1,2,2-Tetrachloroethane	52.4	1.0	ug/L	50.00		105	70-130			02/12/2019	
1,1,2-Trichloroethane	50.3	1.0	ug/L	50.00		101	70-130			02/12/2019	
1,1-Dichloroethane	46.9	1.0	ug/L	50.00		93.7	70-130			02/12/2019	
1,1-Dichloroethylene	35.4	1.0	ug/L	50.00		70.8	70-130			02/12/2019	
1,2,3-Trichlorobenzene	53.3	5.0	ug/L	50.00		107	70-130			02/12/2019	
1,2,3-Trichloropropane	49.8	1.0	ug/L	50.00		99.6	70-130			02/12/2019	
1,2,3-Trimethylbenzene	53.1	1.0	ug/L	50.00		106	70-130			02/12/2019	
1,2,4-Trichlorobenzene	52.7	5.0	ug/L	50.00		105	70-130			02/12/2019	
1,2,4-Trimethylbenzene	52.4	1.0	ug/L	50.00		105	70-130			02/12/2019	
1,2-Dibromoethane	51.6	1.0	ug/L	50.00		103	70-130			02/12/2019	
1,2-Dichlorobenzene	48.4	1.0	ug/L	50.00		96.8	70-130			02/12/2019	
1,2-Dichloroethane	43.0	1.0	ug/L	50.00		86.1	70-130			02/12/2019	
1,2-Dichloropropane	48.7	1.0	ug/L	50.00		97.4	70-130			02/12/2019	
1,3,5-Trimethylbenzene	50.8	1.0	ug/L	50.00		102	70-130			02/12/2019	
1,3-Dichlorobenzene	48.6	1.0	ug/L	50.00		97.2	70-130			02/12/2019	
1,4-Dichlorobenzene	45.7	1.0	ug/L	50.00		91.4	70-130			02/12/2019	
2,2,4-Trimethylpentane	48.3	5.0	ug/L	50.00		96.6	70-130			02/12/2019	
2-Butanone (MEK)	53.6	5.0	ug/L	50.00		107	70-130			02/12/2019	
2-Methylnaphthalene	56.7	5.0	ug/L	50.00		113	70-130			02/12/2019	A06, X

Lab Work Order # 1902033

Page 22 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
LCS (B9B1202-BS1)											
2-Propanone (acetone)	29.4	20	ug/L	50.00		58.7	70-130			02/12/2019	A08
4-Methyl-2-pentanone (MIBK)	51.2	5.0	ug/L	50.00		102	70-130			02/12/2019	
Acrylonitrile	46.6	5.0	ug/L	50.00		93.2	70-130			02/12/2019	
Benzene	45.8	1.0	ug/L	50.00		91.7	70-130			02/12/2019	
Bromochloromethane	44.7	1.0	ug/L	50.00		89.5	70-130			02/12/2019	
Bromodichloromethane	43.8	1.0	ug/L	50.00		87.5	70-130			02/12/2019	
Bromoform	41.1	1.0	ug/L	50.00		82.1	70-130			02/12/2019	
Bromomethane	42.0	5.0	ug/L	50.00		84.0	70-130			02/12/2019	
Carbon disulfide	27.9	1.0	ug/L	50.00		55.7	70-130			02/12/2019	A08
Carbon tetrachloride	39.2	1.0	ug/L	50.00		78.4	70-130			02/12/2019	
Chlorobenzene	48.7	1.0	ug/L	50.00		97.4	70-130			02/12/2019	
Chloroethane	37.8	5.0	ug/L	50.00		75.7	70-130			02/12/2019	
Chloroform	44.4	1.0	ug/L	50.00		88.9	70-130			02/12/2019	
Chloromethane	47.4	5.0	ug/L	50.00		94.8	70-130			02/12/2019	
cis-1,2-Dichloroethylene	46.0	1.0	ug/L	50.00		92.1	70-130			02/12/2019	
cis-1,3-Dichloropropylene	49.0	1.0	ug/L	50.00		98.0	70-130			02/12/2019	
Cyclohexane	51.8	5.0	ug/L	50.00		104	70-130			02/12/2019	
Dibromochloromethane	41.6	1.0	ug/L	50.00		83.1	70-130			02/12/2019	
Dibromomethane	44.5	1.0	ug/L	50.00		89.0	70-130			02/12/2019	
Dichlorodifluoromethane	54.3	5.0	ug/L	50.00		109	70-130			02/12/2019	
Diethyl ether	36.8	5.0	ug/L	50.00		73.6	70-130			02/12/2019	
Diisopropyl Ether	50.3	5.0	ug/L	50.00		101	70-130			02/12/2019	
Ethylbenzene	50.2	1.0	ug/L	50.00		100	70-130			02/12/2019	
Ethyltertiarybutylether	46.5	5.0	ug/L	50.00		93.0	70-130			02/12/2019	
Hexachloroethane	41.6	5.0	ug/L	50.00		83.3	70-130			02/12/2019	
Hexane	46.1	1.0	ug/L	50.00		92.1	70-130			02/12/2019	
Isopropylbenzene	49.5	1.0	ug/L	50.00		99.0	70-130			02/12/2019	
m & p - Xylene	101	2.0	ug/L	100.0		101	70-130			02/12/2019	
Methylene chloride	29.5	5.0	ug/L	50.00		59.0	70-130			02/12/2019	A08
Methyltertiarybutylether	50.3	1.0	ug/L	50.00		101	70-130			02/12/2019	
Naphthalene	62.5	5.0	ug/L	50.00		125	70-130			02/12/2019	X
n-Butylbenzene	52.9	1.0	ug/L	50.00		106	70-130			02/12/2019	
n-Propylbenzene	49.8	1.0	ug/L	50.00		99.5	70-130			02/12/2019	
o-Xylene	50.0	1.0	ug/L	50.00		100	70-130			02/12/2019	
sec-Butylbenzene	55.0	1.0	ug/L	50.00		110	70-130			02/12/2019	
Styrene	52.3	1.0	ug/L	50.00		105	70-130			02/12/2019	
tert-Butylbenzene	48.9	1.0	ug/L	50.00		97.9	70-130			02/12/2019	
tertiary Butyl Alcohol	228	50	ug/L	250.0		91.2	70-130			02/12/2019	
tertiaryAmylmethylether	46.9	5.0	ug/L	50.00		93.8	70-130			02/12/2019	
Tetrachloroethylene	47.2	1.0	ug/L	50.00		94.4	70-130			02/12/2019	
Tetrahydrofuran	51.5	5.0	ug/L	50.00		103	70-130			02/12/2019	
Toluene	50.1	1.0	ug/L	50.00		100	70-130			02/12/2019	
trans-1,2-Dichloroethylene	45.6	1.0	ug/L	50.00		91.3	70-130			02/12/2019	
trans-1,3-Dichloropropylene	46.0	1.0	ug/L	50.00		92.0	70-130			02/12/2019	
Trichloroethylene	43.8	1.0	ug/L	50.00		87.7	70-130			02/12/2019	
Trichlorofluoromethane	37.1	1.0	ug/L	50.00		74.2	70-130			02/12/2019	
Vinyl chloride	44.0	1.0	ug/L	50.00		88.0	70-130			02/12/2019	

Lab Work Order # 1902033

Page 23 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
LCS (B9B1202-BS1)											
Surrogate: Bromofluorobenzene	*50.1*		ug/L	*50.00*		*100*	*85-115*			02/12/2019	
Surrogate: Dibromofluoromethane	*48.0*		ug/L	*50.00*		*96.0*	*82.7-115*			02/12/2019	
Surrogate: Toluene-d8	*52.2*		ug/L	*50.00*		*104*	*85-115*			02/12/2019	
Matrix Spike (B9B1202-MS1)	**Source: 1902033-02**										
1,1,1,2-Tetrachloroethane	48.8	1.0	ug/L	50.00	ND	97.6	70-130			02/12/2019	
1,1,1-Trichloroethane	47.7	1.0	ug/L	50.00	ND	95.4	70-130			02/12/2019	
1,1,2,2-Tetrachloroethane	57.0	1.0	ug/L	50.00	ND	114	70-130			02/12/2019	
1,1,2-Trichloroethane	52.4	1.0	ug/L	50.00	ND	105	70-130			02/12/2019	
1,1-Dichloroethane	51.3	1.0	ug/L	50.00	ND	103	70-130			02/12/2019	
1,1-Dichloroethylene	43.4	1.0	ug/L	50.00	ND	86.8	70-130			02/12/2019	
1,2,3-Trichlorobenzene	59.4	5.0	ug/L	50.00	ND	119	70-130			02/12/2019	
1,2,3-Trichloropropane	52.3	1.0	ug/L	50.00	ND	105	70-130			02/12/2019	
1,2,3-Trimethylbenzene	56.1	1.0	ug/L	50.00	ND	112	70-130			02/12/2019	
1,2,4-Trichlorobenzene	59.1	5.0	ug/L	50.00	ND	118	70-130			02/12/2019	
1,2,4-Trimethylbenzene	54.8	1.0	ug/L	50.00	ND	110	70-130			02/12/2019	
1,2-Dibromoethane	54.7	1.0	ug/L	50.00	ND	109	70-130			02/12/2019	
1,2-Dichlorobenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			02/12/2019	
1,2-Dichloroethane	46.6	1.0	ug/L	50.00	ND	93.1	70-130			02/12/2019	
1,2-Dichloropropane	53.0	1.0	ug/L	50.00	ND	106	70-130			02/12/2019	
1,3,5-Trimethylbenzene	54.0	1.0	ug/L	50.00	ND	108	70-130			02/12/2019	
1,3-Dichlorobenzene	53.4	1.0	ug/L	50.00	ND	107	70-130			02/12/2019	
1,4-Dichlorobenzene	50.5	1.0	ug/L	50.00	ND	101	70-130			02/12/2019	
2,2,4-Trimethylpentane	52.0	5.0	ug/L	50.00	ND	104	70-130			02/12/2019	
2-Butanone (MEK)	60.5	5.0	ug/L	50.00	ND	121	70-130			02/12/2019	
2-Methylnaphthalene	66.4	5.0	ug/L	50.00	ND	133	70-130			02/12/2019	A04, A06, X
2-Propanone (acetone)	39.0	20	ug/L	50.00	ND	77.9	70-130			02/12/2019	
4-Methyl-2-pentanone (MIBK)	55.4	5.0	ug/L	50.00	ND	111	70-130			02/12/2019	
Acrylonitrile	54.0	5.0	ug/L	50.00	ND	108	70-130			02/12/2019	
Benzene	52.4	1.0	ug/L	50.00	ND	105	70-130			02/12/2019	
Bromochloromethane	51.2	1.0	ug/L	50.00	ND	102	70-130			02/12/2019	
Bromodichloromethane	50.1	1.0	ug/L	50.00	ND	100	70-130			02/12/2019	
Bromoform	45.4	1.0	ug/L	50.00	ND	90.8	70-130			02/12/2019	
Bromomethane	43.3	5.0	ug/L	50.00	ND	86.6	70-130			02/12/2019	
Carbon disulfide	44.7	1.0	ug/L	50.00	ND	89.3	70-130			02/12/2019	
Carbon tetrachloride	46.0	1.0	ug/L	50.00	ND	92.0	70-130			02/12/2019	
Chlorobenzene	51.9	1.0	ug/L	50.00	ND	104	70-130			02/12/2019	
Chloroethane	44.8	5.0	ug/L	50.00	ND	89.6	70-130			02/12/2019	
Chloroform	49.0	1.0	ug/L	50.00	ND	98.0	70-130			02/12/2019	
Chloromethane	59.2	5.0	ug/L	50.00	ND	118	70-130			02/12/2019	
cis-1,2-Dichloroethylene	51.8	1.0	ug/L	50.00	ND	104	70-130			02/12/2019	
cis-1,3-Dichloropropylene	55.0	1.0	ug/L	50.00	ND	110	70-130			02/12/2019	
Cyclohexane	57.9	5.0	ug/L	50.00	ND	116	70-130			02/12/2019	
Dibromochloromethane	47.8	1.0	ug/L	50.00	ND	95.7	70-130			02/12/2019	
Dibromomethane	50.0	1.0	ug/L	50.00	ND	99.9	70-130			02/12/2019	
Dichlorodifluoromethane	61.9	5.0	ug/L	50.00	ND	124	70-130			02/12/2019	

Page 24 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Matrix Spike (B9B1202-MS1)	**Source: 1902033-02**										
Diethyl ether	44.1	5.0	ug/L	50.00	ND	88.2	70-130			02/12/2019	
Diisopropyl Ether	57.0	5.0	ug/L	50.00	ND	114	70-130			02/12/2019	
Ethylbenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			02/12/2019	
Ethyltertiarybutylether	53.9	5.0	ug/L	50.00	ND	108	70-130			02/12/2019	
Hexachloroethane	48.5	5.0	ug/L	50.00	ND	97.1	70-130			02/12/2019	
Hexane	54.6	1.0	ug/L	50.00	ND	109	70-130			02/12/2019	
Isopropylbenzene	54.3	1.0	ug/L	50.00	ND	109	70-130			02/12/2019	
m & p - Xylene	105	2.0	ug/L	100.0	ND	105	70-130			02/12/2019	
Methylene chloride	51.9	5.0	ug/L	50.00	ND	104	70-130			02/12/2019	
Methyltertiarybutylether	55.7	1.0	ug/L	50.00	ND	111	70-130			02/12/2019	
Naphthalene	63.7	5.0	ug/L	50.00	ND	127	70-130			02/12/2019	X
n-Butylbenzene	58.5	1.0	ug/L	50.00	ND	117	70-130			02/12/2019	
n-Propylbenzene	54.1	1.0	ug/L	50.00	ND	108	70-130			02/12/2019	
o-Xylene	53.4	1.0	ug/L	50.00	ND	107	70-130			02/12/2019	
sec-Butylbenzene	60.1	1.0	ug/L	50.00	ND	120	70-130			02/12/2019	
Styrene	56.2	1.0	ug/L	50.00	ND	112	70-130			02/12/2019	
tert-Butylbenzene	53.0	1.0	ug/L	50.00	ND	106	70-130			02/12/2019	
tertiary Butyl Alcohol	267	50	ug/L	250.0	ND	107	70-130			02/12/2019	
tertiaryAmylmethylether	53.0	5.0	ug/L	50.00	ND	106	70-130			02/12/2019	
Tetrachloroethylene	49.3	1.0	ug/L	50.00	ND	98.7	70-130			02/12/2019	
Tetrahydrofuran	56.7	5.0	ug/L	50.00	ND	113	70-130			02/12/2019	
Toluene	53.0	1.0	ug/L	50.00	ND	106	70-130			02/12/2019	
trans-1,2-Dichloroethylene	51.5	1.0	ug/L	50.00	ND	103	70-130			02/12/2019	
trans-1,3-Dichloropropylene	51.7	1.0	ug/L	50.00	ND	103	70-130			02/12/2019	
Trichloroethylene	48.6	1.0	ug/L	50.00	ND	97.3	70-130			02/12/2019	
Trichlorofluoromethane	36.3	1.0	ug/L	50.00	ND	72.7	70-130			02/12/2019	
Vinyl chloride	56.4	1.0	ug/L	50.00	ND	113	70-130			02/12/2019	
Surrogate: Bromofluorobenzene	*50.3*		ug/L	*50.00*		*101*	*85-115*			02/12/2019	
Surrogate: Dibromofluoromethane	*48.3*		ug/L	*50.00*		*96.6*	*82.7-115*			02/12/2019	
Surrogate: Toluene-d8	*51.4*		ug/L	*50.00*		*103*	*85-115*			02/12/2019	
Matrix Spike Dup (B9B1202-MSD1)	**Source: 1902033-02**										
1,1,1,2-Tetrachloroethane	48.5	1.0	ug/L	50.00	ND	96.9	70-130	0.701	30	02/12/2019	
1,1,1-Trichloroethane	48.7	1.0	ug/L	50.00	ND	97.4	70-130	2.13	30	02/12/2019	
1,1,2,2-Tetrachloroethane	53.7	1.0	ug/L	50.00	ND	107	70-130	5.95	30	02/12/2019	
1,1,2-Trichloroethane	51.1	1.0	ug/L	50.00	ND	102	70-130	2.58	30	02/12/2019	
1,1-Dichloroethane	52.1	1.0	ug/L	50.00	ND	104	70-130	1.64	30	02/12/2019	
1,1-Dichloroethylene	43.6	1.0	ug/L	50.00	ND	87.2	70-130	0.447	30	02/12/2019	
1,2,3-Trichlorobenzene	57.3	5.0	ug/L	50.00	ND	115	70-130	3.62	30	02/12/2019	
1,2,3-Trichloropropane	50.7	1.0	ug/L	50.00	ND	101	70-130	3.06	30	02/12/2019	
1,2,3-Trimethylbenzene	54.2	1.0	ug/L	50.00	ND	108	70-130	3.33	30	02/12/2019	
1,2,4-Trichlorobenzene	57.3	5.0	ug/L	50.00	ND	115	70-130	3.00	30	02/12/2019	
1,2,4-Trimethylbenzene	52.5	1.0	ug/L	50.00	ND	105	70-130	4.25	30	02/12/2019	
1,2-Dibromoethane	54.6	1.0	ug/L	50.00	ND	109	70-130	0.273	30	02/12/2019	
1,2-Dichlorobenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	5.80	30	02/12/2019	
1,2-Dichloroethane	46.3	1.0	ug/L	50.00	ND	92.7	70-130	0.435	30	02/12/2019	
1,2-Dichloropropane	52.9	1.0	ug/L	50.00	ND	106	70-130	0.319	30	02/12/2019	

Lab Work Order # 1902033

Page 25 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Matrix Spike Dup (B9B1202-MSD1)	**Source: 1902033-02**										
1,3,5-Trimethylbenzene	53.2	1.0	ug/L	50.00	ND	106	70-130	1.43	30	02/12/2019	
1,3-Dichlorobenzene	49.8	1.0	ug/L	50.00	ND	99.7	70-130	6.96	30	02/12/2019	
1,4-Dichlorobenzene	47.7	1.0	ug/L	50.00	ND	95.4	70-130	5.64	30	02/12/2019	
2,2,4-Trimethylpentane	54.6	5.0	ug/L	50.00	ND	109	70-130	4.86	30	02/12/2019	
2-Butanone (MEK)	60.4	5.0	ug/L	50.00	ND	121	70-130	0.190	30	02/12/2019	
2-Methylnaphthalene	68.6	5.0	ug/L	50.00	ND	137	70-130	3.19	30	02/12/2019	A04, A06, X
2-Propanone (acetone)	45.8	20	ug/L	50.00	ND	91.6	70-130	16.2	30	02/12/2019	
4-Methyl-2-pentanone (MIBK)	57.3	5.0	ug/L	50.00	ND	115	70-130	3.37	30	02/12/2019	
Acrylonitrile	53.9	5.0	ug/L	50.00	ND	108	70-130	0.264	30	02/12/2019	
Benzene	51.8	1.0	ug/L	50.00	ND	104	70-130	1.08	30	02/12/2019	
Bromochloromethane	51.1	1.0	ug/L	50.00	ND	102	70-130	0.221	30	02/12/2019	
Bromodichloromethane	50.0	1.0	ug/L	50.00	ND	100	70-130	0.243	30	02/12/2019	
Bromoform	44.3	1.0	ug/L	50.00	ND	88.5	70-130	2.54	30	02/12/2019	
Bromomethane	43.9	5.0	ug/L	50.00	ND	87.8	70-130	1.41	30	02/12/2019	
Carbon disulfide	50.0	1.0	ug/L	50.00	ND	100	70-130	11.3	30	02/12/2019	
Carbon tetrachloride	46.2	1.0	ug/L	50.00	ND	92.4	70-130	0.363	30	02/12/2019	
Chlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130	2.53	30	02/12/2019	
Chloroethane	39.0	5.0	ug/L	50.00	ND	78.0	70-130	13.9	30	02/12/2019	
Chloroform	49.3	1.0	ug/L	50.00	ND	98.7	70-130	0.668	30	02/12/2019	
Chloromethane	60.6	5.0	ug/L	50.00	ND	121	70-130	2.34	30	02/12/2019	
cis-1,2-Dichloroethylene	52.3	1.0	ug/L	50.00	ND	105	70-130	1.04	30	02/12/2019	
cis-1,3-Dichloropropylene	55.0	1.0	ug/L	50.00	ND	110	70-130	0.0697	30	02/12/2019	
Cyclohexane	57.4	5.0	ug/L	50.00	ND	115	70-130	0.791	30	02/12/2019	
Dibromochloromethane	47.6	1.0	ug/L	50.00	ND	95.2	70-130	0.482	30	02/12/2019	
Dibromomethane	49.8	1.0	ug/L	50.00	ND	99.6	70-130	0.317	30	02/12/2019	
Dichlorodifluoromethane	62.8	5.0	ug/L	50.00	ND	126	70-130	1.46	30	02/12/2019	
Diethyl ether	36.0	5.0	ug/L	50.00	ND	72.0	70-130	20.3	30	02/12/2019	
Diisopropyl Ether	56.1	5.0	ug/L	50.00	ND	112	70-130	1.45	30	02/12/2019	
Ethylbenzene	51.4	1.0	ug/L	50.00	ND	103	70-130	4.04	30	02/12/2019	
Ethyltertiarybutylether	53.6	5.0	ug/L	50.00	ND	107	70-130	0.482	30	02/12/2019	
Hexachloroethane	48.8	5.0	ug/L	50.00	ND	97.6	70-130	0.575	30	02/12/2019	
Hexane	50.3	1.0	ug/L	50.00	ND	101	70-130	8.33	30	02/12/2019	
Isopropylbenzene	51.4	1.0	ug/L	50.00	ND	103	70-130	5.50	30	02/12/2019	
m & p - Xylene	103	2.0	ug/L	100.0	ND	103	70-130	1.88	30	02/12/2019	
Methylene chloride	54.0	5.0	ug/L	50.00	ND	108	70-130	3.88	30	02/12/2019	
Methyltertiarybutylether	55.7	1.0	ug/L	50.00	ND	111	70-130	0.0711	30	02/12/2019	
Naphthalene	59.9	5.0	ug/L	50.00	ND	120	70-130	6.10	30	02/12/2019	X
n-Butylbenzene	57.1	1.0	ug/L	50.00	ND	114	70-130	2.36	30	02/12/2019	
n-Propylbenzene	52.2	1.0	ug/L	50.00	ND	104	70-130	3.62	30	02/12/2019	
o-Xylene	53.1	1.0	ug/L	50.00	ND	106	70-130	0.467	30	02/12/2019	
sec-Butylbenzene	58.7	1.0	ug/L	50.00	ND	117	70-130	2.39	30	02/12/2019	
Styrene	55.0	1.0	ug/L	50.00	ND	110	70-130	2.28	30	02/12/2019	
tert-Butylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130	2.35	30	02/12/2019	
tertiary Butyl Alcohol	278	50	ug/L	250.0	ND	111	70-130	4.26	30	02/12/2019	
tertiaryAmylmethylether	51.7	5.0	ug/L	50.00	ND	103	70-130	2.55	30	02/12/2019	
Tetrachloroethylene	49.3	1.0	ug/L	50.00	ND	98.6	70-130	0.0862	30	02/12/2019	

Lab Work Order # 1902033

Page 26 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1202 - Method: 5030				**Prepared: 02/12/2019**							
Matrix Spike Dup (B9B1202-MSD1)	**Source: 1902033-02**										
Tetrahydrofuran	55.8	5.0	ug/L	50.00	ND	112	70-130	1.48	30	02/12/2019	
Toluene	51.0	1.0	ug/L	50.00	ND	102	70-130	3.95	30	02/12/2019	
trans-1,2-Dichloroethylene	51.2	1.0	ug/L	50.00	ND	102	70-130	0.591	30	02/12/2019	
trans-1,3-Dichloropropylene	52.4	1.0	ug/L	50.00	ND	105	70-130	1.34	30	02/12/2019	
Trichloroethylene	49.1	1.0	ug/L	50.00	ND	98.1	70-130	0.839	30	02/12/2019	
Trichlorofluoromethane	36.0	1.0	ug/L	50.00	ND	71.9	70-130	1.01	30	02/12/2019	
Vinyl chloride	57.5	1.0	ug/L	50.00	ND	115	70-130	2.01	30	02/12/2019	
Surrogate: Bromofluorobenzene	*49.2*		ug/L	*50.00*		*98.3*	*85-115*			02/12/2019	
Surrogate: Dibromofluoromethane	*50.2*		ug/L	*50.00*		*100*	*82.7-115*			02/12/2019	
Surrogate: Toluene-d8	*50.5*		ug/L	*50.00*		*101*	*85-115*			02/12/2019	
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Blank (B9B1406-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							02/14/2019	
1,1,1-Trichloroethane	ND	1.0	ug/L							02/14/2019	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							02/14/2019	
1,1,2-Trichloroethane	ND	1.0	ug/L							02/14/2019	
1,1-Dichloroethane	ND	1.0	ug/L							02/14/2019	
1,1-Dichloroethylene	ND	1.0	ug/L							02/14/2019	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							02/14/2019	
1,2,3-Trichloropropane	ND	1.0	ug/L							02/14/2019	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							02/14/2019	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							02/14/2019	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							02/14/2019	
1,2-Dibromoethane	ND	1.0	ug/L							02/14/2019	
1,2-Dichlorobenzene	ND	1.0	ug/L							02/14/2019	
1,2-Dichloroethane	ND	1.0	ug/L							02/14/2019	
1,2-Dichloropropane	ND	1.0	ug/L							02/14/2019	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							02/14/2019	
1,3-Dichlorobenzene	ND	1.0	ug/L							02/14/2019	
1,4-Dichlorobenzene	ND	1.0	ug/L							02/14/2019	
2,2,4-Trimethylpentane	ND	5.0	ug/L							02/14/2019	
2-Butanone (MEK)	ND	5.0	ug/L							02/14/2019	
2-Methylnaphthalene	ND	5.0	ug/L							02/14/2019	X
2-Propanone (acetone)	ND	20	ug/L							02/14/2019	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							02/14/2019	
Acrylonitrile	ND	5.0	ug/L							02/14/2019	
Benzene	ND	1.0	ug/L							02/14/2019	
Bromochloromethane	ND	1.0	ug/L							02/14/2019	
Bromodichloromethane	ND	1.0	ug/L							02/14/2019	
Bromoform	ND	1.0	ug/L							02/14/2019	
Bromomethane	ND	5.0	ug/L							02/14/2019	
Carbon disulfide	ND	1.0	ug/L							02/14/2019	
Carbon tetrachloride	ND	1.0	ug/L							02/14/2019	
Chlorobenzene	ND	1.0	ug/L							02/14/2019	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Blank (B9B1406-BLK1)											
Chloroethane	ND	5.0	ug/L							02/14/2019	
Chloroform	ND	1.0	ug/L							02/14/2019	
Chloromethane	ND	5.0	ug/L							02/14/2019	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							02/14/2019	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							02/14/2019	
Cyclohexane	ND	5.0	ug/L							02/14/2019	
Dibromochloromethane	ND	1.0	ug/L							02/14/2019	
Dibromomethane	ND	1.0	ug/L							02/14/2019	
Dichlorodifluoromethane	ND	5.0	ug/L							02/14/2019	
Diethyl ether	ND	5.0	ug/L							02/14/2019	
Diisopropyl Ether	ND	5.0	ug/L							02/14/2019	
Ethylbenzene	ND	1.0	ug/L							02/14/2019	
Ethyltertiarybutylether	ND	5.0	ug/L							02/14/2019	
Hexachloroethane	ND	5.0	ug/L							02/14/2019	
Hexane	ND	1.0	ug/L							02/14/2019	
Isopropylbenzene	ND	1.0	ug/L							02/14/2019	
m & p - Xylene	ND	2.0	ug/L							02/14/2019	
Methylene chloride	ND	5.0	ug/L							02/14/2019	
Methyltertiarybutylether	ND	1.0	ug/L							02/14/2019	
Naphthalene	ND	5.0	ug/L							02/14/2019	X
n-Butylbenzene	ND	1.0	ug/L							02/14/2019	
n-Propylbenzene	ND	1.0	ug/L							02/14/2019	
o-Xylene	ND	1.0	ug/L							02/14/2019	
sec-Butylbenzene	ND	1.0	ug/L							02/14/2019	
Styrene	ND	1.0	ug/L							02/14/2019	
tert-Butylbenzene	ND	1.0	ug/L							02/14/2019	
tertiary Butyl Alcohol	ND	50	ug/L							02/14/2019	
tertiaryAmylmethylether	ND	5.0	ug/L							02/14/2019	
Tetrachloroethylene	ND	1.0	ug/L							02/14/2019	
Tetrahydrofuran	ND	5.0	ug/L							02/14/2019	
Toluene	ND	1.0	ug/L							02/14/2019	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							02/14/2019	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							02/14/2019	
Trichloroethylene	ND	1.0	ug/L							02/14/2019	
Trichlorofluoromethane	ND	1.0	ug/L							02/14/2019	
Vinyl chloride	ND	1.0	ug/L							02/14/2019	
Surrogate: Bromofluorobenzene	*50.0*		ug/L	*50.00*		*100*	*85-115*			02/14/2019	
Surrogate: Dibromofluoromethane	*51.0*		ug/L	*50.00*		*102*	*82.7-115*			02/14/2019	
Surrogate: Toluene-d8	*49.5*		ug/L	*50.00*		*99.0*	*85-115*			02/14/2019	
LCS (B9B1406-BS1)											
1,1,1,2-Tetrachloroethane	51.3	1.0	ug/L	50.00		103	70-130			02/14/2019	
1,1,1-Trichloroethane	49.0	1.0	ug/L	50.00		98.0	70-130			02/14/2019	
1,1,2,2-Tetrachloroethane	55.0	1.0	ug/L	50.00		110	70-130			02/14/2019	
1,1,2-Trichloroethane	51.0	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,1-Dichloroethane	48.3	1.0	ug/L	50.00		96.5	70-130			02/14/2019	
1,1-Dichloroethylene	46.5	1.0	ug/L	50.00		92.9	70-130			02/14/2019	

Lab Work Order # 1902033

Page 28 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
LCS (B9B1406-BS1)											
1,2,3-Trichlorobenzene	53.2	5.0	ug/L	50.00		106	70-130			02/14/2019	
1,2,3-Trichloropropane	50.8	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,2,3-Trimethylbenzene	53.0	1.0	ug/L	50.00		106	70-130			02/14/2019	
1,2,4-Trichlorobenzene	52.1	5.0	ug/L	50.00		104	70-130			02/14/2019	
1,2,4-Trimethylbenzene	53.1	1.0	ug/L	50.00		106	70-130			02/14/2019	
1,2-Dibromoethane	50.8	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,2-Dichlorobenzene	50.7	1.0	ug/L	50.00		101	70-130			02/14/2019	
1,2-Dichloroethane	51.2	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,2-Dichloropropane	52.6	1.0	ug/L	50.00		105	70-130			02/14/2019	
1,3,5-Trimethylbenzene	52.3	1.0	ug/L	50.00		105	70-130			02/14/2019	
1,3-Dichlorobenzene	50.9	1.0	ug/L	50.00		102	70-130			02/14/2019	
1,4-Dichlorobenzene	49.0	1.0	ug/L	50.00		97.9	70-130			02/14/2019	
2,2,4-Trimethylpentane	49.0	5.0	ug/L	50.00		98.0	70-130			02/14/2019	
2-Butanone (MEK)	60.4	5.0	ug/L	50.00		121	70-130			02/14/2019	
2-Methylnaphthalene	52.0	5.0	ug/L	50.00		104	70-130			02/14/2019	X
2-Propanone (acetone)	49.8	20	ug/L	50.00		99.6	70-130			02/14/2019	
4-Methyl-2-pentanone (MIBK)	55.0	5.0	ug/L	50.00		110	70-130			02/14/2019	
Acrylonitrile	50.9	5.0	ug/L	50.00		102	70-130			02/14/2019	
Benzene	49.8	1.0	ug/L	50.00		99.6	70-130			02/14/2019	
Bromochloromethane	50.5	1.0	ug/L	50.00		101	70-130			02/14/2019	
Bromodichloromethane	52.3	1.0	ug/L	50.00		105	70-130			02/14/2019	
Bromoform	50.8	1.0	ug/L	50.00		102	70-130			02/14/2019	
Bromomethane	51.1	5.0	ug/L	50.00		102	70-130			02/14/2019	
Carbon disulfide	46.7	1.0	ug/L	50.00		93.3	70-130			02/14/2019	
Carbon tetrachloride	47.7	1.0	ug/L	50.00		95.4	70-130			02/14/2019	
Chlorobenzene	49.7	1.0	ug/L	50.00		99.4	70-130			02/14/2019	
Chloroethane	49.8	5.0	ug/L	50.00		99.6	70-130			02/14/2019	
Chloroform	49.8	1.0	ug/L	50.00		99.5	70-130			02/14/2019	
Chloromethane	50.3	5.0	ug/L	50.00		101	70-130			02/14/2019	
cis-1,2-Dichloroethylene	50.0	1.0	ug/L	50.00		100	70-130			02/14/2019	
cis-1,3-Dichloropropylene	53.2	1.0	ug/L	50.00		106	70-130			02/14/2019	
Cyclohexane	52.2	5.0	ug/L	50.00		104	70-130			02/14/2019	
Dibromochloromethane	55.1	1.0	ug/L	50.00		110	70-130			02/14/2019	
Dibromomethane	49.4	1.0	ug/L	50.00		98.8	70-130			02/14/2019	
Dichlorodifluoromethane	51.2	5.0	ug/L	50.00		102	70-130			02/14/2019	A06
Diethyl ether	49.3	5.0	ug/L	50.00		98.6	70-130			02/14/2019	
Diisopropyl Ether	50.8	5.0	ug/L	50.00		102	70-130			02/14/2019	
Ethylbenzene	51.3	1.0	ug/L	50.00		103	70-130			02/14/2019	
Ethyltertiarybutylether	47.8	5.0	ug/L	50.00		95.5	70-130			02/14/2019	
Hexachloroethane	50.0	5.0	ug/L	50.00		99.9	70-130			02/14/2019	
Hexane	48.1	1.0	ug/L	50.00		96.1	70-130			02/14/2019	
Isopropylbenzene	51.6	1.0	ug/L	50.00		103	70-130			02/14/2019	
m & p - Xylene	104	2.0	ug/L	100.0		104	70-130			02/14/2019	
Methylene chloride	49.8	5.0	ug/L	50.00		99.6	70-130			02/14/2019	
Methyltertiarybutylether	55.8	1.0	ug/L	50.00		112	70-130			02/14/2019	
Naphthalene	55.2	5.0	ug/L	50.00		110	70-130			02/14/2019	X
n-Butylbenzene	52.6	1.0	ug/L	50.00		105	70-130			02/14/2019	

Lab Work Order # 1902033

Page 29 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
LCS (B9B1406-BS1)											
n-Propylbenzene	51.4	1.0	ug/L	50.00		103	70-130			02/14/2019	
o-Xylene	52.3	1.0	ug/L	50.00		105	70-130			02/14/2019	
sec-Butylbenzene	56.0	1.0	ug/L	50.00		112	70-130			02/14/2019	
Styrene	55.8	1.0	ug/L	50.00		112	70-130			02/14/2019	
tert-Butylbenzene	52.2	1.0	ug/L	50.00		104	70-130			02/14/2019	
tertiary Butyl Alcohol	276	50	ug/L	250.0		110	70-130			02/14/2019	
tertiaryAmylmethylether	50.8	5.0	ug/L	50.00		102	70-130			02/14/2019	
Tetrachloroethylene	46.5	1.0	ug/L	50.00		93.1	70-130			02/14/2019	
Tetrahydrofuran	53.7	5.0	ug/L	50.00		107	70-130			02/14/2019	
Toluene	49.5	1.0	ug/L	50.00		99.0	70-130			02/14/2019	
trans-1,2-Dichloroethylene	48.4	1.0	ug/L	50.00		96.7	70-130			02/14/2019	
trans-1,3-Dichloropropylene	53.9	1.0	ug/L	50.00		108	70-130			02/14/2019	
Trichloroethylene	48.4	1.0	ug/L	50.00		96.9	70-130			02/14/2019	
Trichlorofluoromethane	49.9	1.0	ug/L	50.00		99.7	70-130			02/14/2019	
Vinyl chloride	50.1	1.0	ug/L	50.00		100	70-130			02/14/2019	
Surrogate: Bromofluorobenzene	*51.0*		ug/L	*50.00*		*102*	*85-115*			02/14/2019	
Surrogate: Dibromofluoromethane	*49.2*		ug/L	*50.00*		*98.3*	*82.7-115*			02/14/2019	
Surrogate: Toluene-d8	*51.3*		ug/L	*50.00*		*103*	*85-115*			02/14/2019	
Matrix Spike (B9B1406-MS1)	**Source: 1902067-04**										
1,1,1,2-Tetrachloroethane	50.6	1.0	ug/L	50.00	ND	101	70-130			02/14/2019	
1,1,1-Trichloroethane	51.3	1.0	ug/L	50.00	ND	103	70-130			02/14/2019	
1,1,2,2-Tetrachloroethane	54.9	1.0	ug/L	50.00	ND	110	70-130			02/14/2019	
1,1,2-Trichloroethane	50.8	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
1,1-Dichloroethane	49.4	1.0	ug/L	50.00	ND	98.9	70-130			02/14/2019	
1,1-Dichloroethylene	51.0	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
1,2,3-Trichlorobenzene	50.7	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
1,2,3-Trichloropropane	49.9	1.0	ug/L	50.00	ND	99.8	70-130			02/14/2019	
1,2,3-Trimethylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
1,2,4-Trichlorobenzene	50.6	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
1,2,4-Trimethylbenzene	52.3	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
1,2-Dibromoethane	50.0	1.0	ug/L	50.00	ND	99.9	70-130			02/14/2019	
1,2-Dichlorobenzene	50.1	1.0	ug/L	50.00	ND	100	70-130			02/14/2019	
1,2-Dichloroethane	52.7	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
1,2-Dichloropropane	53.3	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
1,3,5-Trimethylbenzene	53.3	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
1,3-Dichlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130			02/14/2019	
1,4-Dichlorobenzene	48.5	1.0	ug/L	50.00	ND	97.0	70-130			02/14/2019	
2,2,4-Trimethylpentane	55.6	5.0	ug/L	50.00	ND	111	70-130			02/14/2019	
2-Butanone (MEK)	61.8	5.0	ug/L	50.00	ND	124	70-130			02/14/2019	
2-Methylnaphthalene	49.5	5.0	ug/L	50.00	ND	98.9	70-130			02/14/2019	X
2-Propanone (acetone)	56.4	20	ug/L	50.00	ND	113	70-130			02/14/2019	
4-Methyl-2-pentanone (MIBK)	54.5	5.0	ug/L	50.00	ND	109	70-130			02/14/2019	
Acrylonitrile	55.0	5.0	ug/L	50.00	ND	110	70-130			02/14/2019	
Benzene	51.5	1.0	ug/L	50.00	ND	103	70-130			02/14/2019	
Bromochloromethane	51.0	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
Bromodichloromethane	52.8	1.0	ug/L	50.00	ND	106	70-130			02/14/2019	

Lab Work Order # 1902033

Page 30 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Matrix Spike (B9B1406-MS1)	**Source: 1902067-04**										
Bromoform	50.9	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
Bromomethane	53.1	5.0	ug/L	50.00	ND	106	70-130			02/14/2019	
Carbon disulfide	50.2	1.0	ug/L	50.00	ND	100	70-130			02/14/2019	
Carbon tetrachloride	52.6	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
Chlorobenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			02/14/2019	
Chloroethane	52.0	5.0	ug/L	50.00	ND	104	70-130			02/14/2019	
Chloroform	51.8	1.0	ug/L	50.00	ND	104	70-130			02/14/2019	
Chloromethane	52.1	5.0	ug/L	50.00	ND	104	70-130			02/14/2019	
cis-1,2-Dichloroethylene	51.0	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
cis-1,3-Dichloropropylene	53.1	1.0	ug/L	50.00	ND	106	70-130			02/14/2019	
Cyclohexane	56.6	5.0	ug/L	50.00	ND	113	70-130			02/14/2019	
Dibromochloromethane	53.7	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
Dibromomethane	50.2	1.0	ug/L	50.00	ND	100	70-130			02/14/2019	
Dichlorodifluoromethane	57.4	5.0	ug/L	50.00	ND	115	70-130			02/14/2019	A06
Diethyl ether	50.4	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
Diisopropyl Ether	50.6	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
Ethylbenzene	53.5	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
Ethyltertiarybutylether	46.6	5.0	ug/L	50.00	ND	93.2	70-130			02/14/2019	
Hexachloroethane	52.6	5.0	ug/L	50.00	ND	105	70-130			02/14/2019	
Hexane	52.7	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
Isopropylbenzene	53.6	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
m & p - Xylene	108	2.0	ug/L	100.0	ND	108	70-130			02/14/2019	
Methylene chloride	49.5	5.0	ug/L	50.00	ND	99.0	70-130			02/14/2019	
Methyltertiarybutylether	55.3	1.0	ug/L	50.00	ND	111	70-130			02/14/2019	
Naphthalene	53.9	5.0	ug/L	50.00	ND	108	70-130			02/14/2019	X
n-Butylbenzene	53.2	1.0	ug/L	50.00	ND	106	70-130			02/14/2019	
n-Propylbenzene	52.5	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
o-Xylene	53.2	1.0	ug/L	50.00	ND	106	70-130			02/14/2019	
sec-Butylbenzene	56.8	1.0	ug/L	50.00	ND	114	70-130			02/14/2019	
Styrene	56.3	1.0	ug/L	50.00	ND	113	70-130			02/14/2019	
tert-Butylbenzene	53.4	1.0	ug/L	50.00	ND	107	70-130			02/14/2019	
tertiary Butyl Alcohol	279	50	ug/L	250.0	ND	112	70-130			02/14/2019	
tertiaryAmylmethylether	48.9	5.0	ug/L	50.00	ND	97.7	70-130			02/14/2019	
Tetrachloroethylene	50.9	1.0	ug/L	50.00	ND	102	70-130			02/14/2019	
Tetrahydrofuran	50.7	5.0	ug/L	50.00	ND	101	70-130			02/14/2019	
Toluene	51.3	1.0	ug/L	50.00	ND	103	70-130			02/14/2019	
trans-1,2-Dichloroethylene	50.4	1.0	ug/L	50.00	ND	101	70-130			02/14/2019	
trans-1,3-Dichloropropylene	52.7	1.0	ug/L	50.00	ND	105	70-130			02/14/2019	
Trichloroethylene	79.1	1.0	ug/L	50.00	30.1	98.1	70-130			02/14/2019	
Trichlorofluoromethane	55.1	1.0	ug/L	50.00	ND	110	70-130			02/14/2019	
Vinyl chloride	55.0	1.0	ug/L	50.00	ND	110	70-130			02/14/2019	
Surrogate: Bromofluorobenzene	*49.2*		ug/L	*50.00*		*98.3*	*85-115*			02/14/2019	
Surrogate: Dibromofluoromethane	*49.5*		ug/L	*50.00*		*98.9*	*82.7-115*			02/14/2019	
Surrogate: Toluene-d8	*50.4*		ug/L	*50.00*		*101*	*85-115*			02/14/2019	
Matrix Spike Dup (B9B1406-MSD1)	**Source: 1902067-04**										
1,1,1,2-Tetrachloroethane	48.0	1.0	ug/L	50.00	ND	95.9	70-130	5.42	30	02/14/2019	

Lab Work Order # 1902033

Page 31 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Matrix Spike Dup (B9B1406-MSD1)	**Source: 1902067-04**										
1,1,1-Trichloroethane	47.8	1.0	ug/L	50.00	ND	95.5	70-130	7.15	30	02/14/2019	
1,1,2,2-Tetrachloroethane	53.5	1.0	ug/L	50.00	ND	107	70-130	2.62	30	02/14/2019	
1,1,2-Trichloroethane	49.0	1.0	ug/L	50.00	ND	98.0	70-130	3.52	30	02/14/2019	
1,1-Dichloroethane	47.1	1.0	ug/L	50.00	ND	94.2	70-130	4.82	30	02/14/2019	
1,1-Dichloroethylene	46.6	1.0	ug/L	50.00	ND	93.2	70-130	9.08	30	02/14/2019	
1,2,3-Trichlorobenzene	50.3	5.0	ug/L	50.00	ND	101	70-130	0.832	30	02/14/2019	
1,2,3-Trichloropropane	50.0	1.0	ug/L	50.00	ND	100	70-130	0.172	30	02/14/2019	
1,2,3-Trimethylbenzene	50.8	1.0	ug/L	50.00	ND	102	70-130	3.44	30	02/14/2019	
1,2,4-Trichlorobenzene	48.8	5.0	ug/L	50.00	ND	97.7	70-130	3.47	30	02/14/2019	
1,2,4-Trimethylbenzene	49.9	1.0	ug/L	50.00	ND	99.8	70-130	4.75	30	02/14/2019	
1,2-Dibromoethane	50.3	1.0	ug/L	50.00	ND	101	70-130	0.611	30	02/14/2019	
1,2-Dichlorobenzene	48.1	1.0	ug/L	50.00	ND	96.2	70-130	4.03	30	02/14/2019	
1,2-Dichloroethane	48.7	1.0	ug/L	50.00	ND	97.5	70-130	7.87	30	02/14/2019	
1,2-Dichloropropane	48.7	1.0	ug/L	50.00	ND	97.4	70-130	9.09	30	02/14/2019	
1,3,5-Trimethylbenzene	50.0	1.0	ug/L	50.00	ND	100	70-130	6.46	30	02/14/2019	
1,3-Dichlorobenzene	49.5	1.0	ug/L	50.00	ND	98.9	70-130	2.31	30	02/14/2019	
1,4-Dichlorobenzene	46.9	1.0	ug/L	50.00	ND	93.8	70-130	3.33	30	02/14/2019	
2,2,4-Trimethylpentane	46.3	5.0	ug/L	50.00	ND	92.7	70-130	18.2	30	02/14/2019	
2-Butanone (MEK)	60.8	5.0	ug/L	50.00	ND	122	70-130	1.51	30	02/14/2019	
2-Methylnaphthalene	49.0	5.0	ug/L	50.00	ND	97.9	70-130	0.972	30	02/14/2019	X
2-Propanone (acetone)	56.4	20	ug/L	50.00	ND	113	70-130	0.112	30	02/14/2019	
4-Methyl-2-pentanone (MIBK)	53.5	5.0	ug/L	50.00	ND	107	70-130	1.95	30	02/14/2019	
Acrylonitrile	52.5	5.0	ug/L	50.00	ND	105	70-130	4.65	30	02/14/2019	
Benzene	47.5	1.0	ug/L	50.00	ND	95.1	70-130	8.02	30	02/14/2019	
Bromochloromethane	48.4	1.0	ug/L	50.00	ND	96.9	70-130	5.19	30	02/14/2019	
Bromodichloromethane	49.8	1.0	ug/L	50.00	ND	99.7	70-130	5.81	30	02/14/2019	
Bromoform	50.4	1.0	ug/L	50.00	ND	101	70-130	1.02	30	02/14/2019	
Bromomethane	48.6	5.0	ug/L	50.00	ND	97.3	70-130	8.75	30	02/14/2019	
Carbon disulfide	46.4	1.0	ug/L	50.00	ND	92.7	70-130	8.01	30	02/14/2019	
Carbon tetrachloride	47.8	1.0	ug/L	50.00	ND	95.5	70-130	9.56	30	02/14/2019	
Chlorobenzene	49.1	1.0	ug/L	50.00	ND	98.3	70-130	5.38	30	02/14/2019	
Chloroethane	48.0	5.0	ug/L	50.00	ND	96.0	70-130	8.05	30	02/14/2019	
Chloroform	48.0	1.0	ug/L	50.00	ND	96.0	70-130	7.54	30	02/14/2019	
Chloromethane	48.3	5.0	ug/L	50.00	ND	96.6	70-130	7.54	30	02/14/2019	
cis-1,2-Dichloroethylene	47.6	1.0	ug/L	50.00	ND	95.1	70-130	7.02	30	02/14/2019	
cis-1,3-Dichloropropylene	50.4	1.0	ug/L	50.00	ND	101	70-130	5.15	30	02/14/2019	
Cyclohexane	51.6	5.0	ug/L	50.00	ND	103	70-130	9.24	30	02/14/2019	
Dibromochloromethane	51.8	1.0	ug/L	50.00	ND	104	70-130	3.51	30	02/14/2019	
Dibromomethane	47.4	1.0	ug/L	50.00	ND	94.7	70-130	5.87	30	02/14/2019	
Dichlorodifluoromethane	52.0	5.0	ug/L	50.00	ND	104	70-130	9.90	30	02/14/2019	A06
Diethyl ether	48.0	5.0	ug/L	50.00	ND	96.0	70-130	4.87	30	02/14/2019	
Diisopropyl Ether	48.8	5.0	ug/L	50.00	ND	97.5	70-130	3.70	30	02/14/2019	
Ethylbenzene	50.3	1.0	ug/L	50.00	ND	101	70-130	6.34	30	02/14/2019	
Ethyltertiarybutylether	46.5	5.0	ug/L	50.00	ND	93.1	70-130	0.164	30	02/14/2019	
Hexachloroethane	48.8	5.0	ug/L	50.00	ND	97.7	70-130	7.48	30	02/14/2019	
Hexane	45.9	1.0	ug/L	50.00	ND	91.9	70-130	13.7	30	02/14/2019	
Isopropylbenzene	50.1	1.0	ug/L	50.00	ND	100	70-130	6.70	30	02/14/2019	

Lab Work Order # 1902033

Page 32 of 35

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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
Batch B9B1406 - Method: 5030				**Prepared: 02/14/2019**							
Matrix Spike Dup (B9B1406-MSD1)	**Source: 1902067-04**										
m & p - Xylene	102	2.0	ug/L	100.0	ND	102	70-130	5.50	30	02/14/2019	
Methylene chloride	47.4	5.0	ug/L	50.00	ND	94.7	70-130	4.39	30	02/14/2019	
Methyltertiarybutylether	53.8	1.0	ug/L	50.00	ND	108	70-130	2.86	30	02/14/2019	
Naphthalene	53.2	5.0	ug/L	50.00	ND	106	70-130	1.27	30	02/14/2019	X
n-Butylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	5.21	30	02/14/2019	
n-Propylbenzene	49.3	1.0	ug/L	50.00	ND	98.6	70-130	6.26	30	02/14/2019	
o-Xylene	51.1	1.0	ug/L	50.00	ND	102	70-130	3.97	30	02/14/2019	
sec-Butylbenzene	53.7	1.0	ug/L	50.00	ND	107	70-130	5.70	30	02/14/2019	
Styrene	52.9	1.0	ug/L	50.00	ND	106	70-130	6.27	30	02/14/2019	
tert-Butylbenzene	50.4	1.0	ug/L	50.00	ND	101	70-130	5.68	30	02/14/2019	
tertiary Butyl Alcohol	274	50	ug/L	250.0	ND	110	70-130	1.95	30	02/14/2019	
tertiaryAmylmethylether	48.0	5.0	ug/L	50.00	ND	96.0	70-130	1.77	30	02/14/2019	
Tetrachloroethylene	46.6	1.0	ug/L	50.00	ND	93.2	70-130	8.79	30	02/14/2019	
Tetrahydrofuran	48.8	5.0	ug/L	50.00	ND	97.5	70-130	3.83	30	02/14/2019	
Toluene	48.2	1.0	ug/L	50.00	ND	96.3	70-130	6.27	30	02/14/2019	
trans-1,2-Dichloroethylene	46.7	1.0	ug/L	50.00	ND	93.4	70-130	7.62	30	02/14/2019	
trans-1,3-Dichloropropylene	51.0	1.0	ug/L	50.00	ND	102	70-130	3.27	30	02/14/2019	
Trichloroethylene	72.8	1.0	ug/L	50.00	30.1	85.4	70-130	8.32	30	02/14/2019	
Trichlorofluoromethane	50.5	1.0	ug/L	50.00	ND	101	70-130	8.66	30	02/14/2019	
Vinyl chloride	49.2	1.0	ug/L	50.00	ND	98.4	70-130	11.1	30	02/14/2019	
Surrogate: Bromofluorobenzene	*48.6*		ug/L	*50.00*		*97.3*	*85-115*			02/14/2019	
Surrogate: Dibromofluoromethane	*49.2*		ug/L	*50.00*		*98.5*	*82.7-115*			02/14/2019	
Surrogate: Toluene-d8	*50.0*		ug/L	*50.00*		*100*	*85-115*			02/14/2019	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Organics-Dioxane - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B9B2002 - Method: 5030				**Prepared: 02/19/2019**							
Blank (B9B2002-BLK1)											
1,4-dioxane	ND	1.0	ug/L							02/19/2019	
LCS (B9B2002-BS1)											
1,4-dioxane	9.64	1.0	ug/L	10.00		96.4	70-130			02/19/2019	
Matrix Spike (B9B2002-MS1)	**Source: 1902033-06**										
1,4-dioxane	9.55	1.0	ug/L	10.00	ND	95.5	70-130			02/19/2019	
Matrix Spike Dup (B9B2002-MSD1)	**Source: 1902033-06**										
1,4-dioxane	9.27	1.0	ug/L	10.00	ND	92.7	70-130	2.98	30	02/19/2019	

Michigan Department of Environmental Quality
Laboratory Services Section

Analysis Request Sheet

Lab Work Order Number	Project Name	Matrix
1902033	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				517-745-6595
	PCA	**CC Email 3**		**Contract Firm**
State Project Manager				
Dan Hamel			**Accept Analysis hold time codes**	**Contract Firm Primary Contact**
State Project Manager Email	**Project**	**Overflow Lab Choice 1**		
hameld@michigan.gov	Location-6130			**Primary Contact Phone**
State Project Manager Phone	**Phase**	**Overflow Lab Choice 2**		
517-745-6595				

	Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
1	01	Allen Creek/West Park SW	2/7/19	1004	5	Please include QA/QC with Lab Data Report(s)
2	02	Allen Creek/Chapin-West Park	2/7/19	0941	5	
3	03	Allen Creek/Maple Ridge-Arborview	2/7/19	1024	3	
4	04	Allen Creek/Wildwood-Arborview	2/7/19	1040	3	
5	05	Allen Creek/Murray-Washington	2/7/19	1130	3	
6	06	Allen Creek/Eighth-Waterworks	2/7/19	1110	5	
7	07	Allen Creek-Maryfield-Wildwood Park	2/7/19	1051	5	
8						
9						
10						

ORGANIC 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
METH - Methane, Ethane, Ethene	
Methane, Ethane, Ethene	1 2 3 4 5 6 7 8 9 10
ON - Pesticides, PCBs	
Pesticides & PCBs	1 2 3 4 5 6 7 8 9 10
Pesticides only	1 2 3 4 5 6 7 8 9 10
PCBs only	1 2 3 4 5 6 7 8 9 10
Toxaphene	1 2 3 4 5 6 7 8 9 10
Chlordane	1 2 3 4 5 6 7 8 9 10
BNA - Base Neutral Acids	
BNAs	1 2 3 4 5 6 7 8 9 10
Benzidines	1 2 3 4 5 6 7 8 9 10
PNAs only	1 2 3 4 5 6 7 8 9 10
BNs only	1 2 3 4 5 6 7 8 9 10
Acids only	1 2 3 4 5 6 7 8 9 10
Organic Specialty Requests	
Library search - Volatiles	1 2 3 4 5 6 7 8 9 10
Library search - SemiVols	1 2 3 4 5 6 7 8 9 10
Finger Print	1 2 3 4 5 6 7 8 9 10
DRO / ORO	1 2 3 4 5 6 7 8 9 10

METALS CHEMISTRY PACKAGES

OpMemo2 - Total	1 2 3 4 5 6 7 8 9 10
OpMemo2 - Dissolved	1 2 3 4 5 6 7 8 9 10
(Sb,As,Ba,Be,Cd,Cr,Cu,Co,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn)	
Michigan10 - Total	1 2 3 4 5 6 7 8 9 10
Michigan10 - Dissolved	1 2 3 4 5 6 7 8 9 10
(As,Ba,Cd,Cr,Cu,Pb,Hg,Se,Ag,Zn)	

MAD - DISSOLVED METALS

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
MD - Metals Dissolved	
Lab Filtration	1 2 3 4 5 6 7 8 9 10

MA - TOTAL METALS

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
LHG - Low Level Mercury	
Mercury Low Level - Hg	1 2 3 4 5 6 7 8 9 10

GENERAL CHEMISTRY

GB	Total Cyanide - CN	1 2 3 4 5 6 7 8 9 10
GB	Amenable 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
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 - SO4	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) (Field - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GN	Diss Org Carbon - DOC (LF) (Lab - Filtered & Preserved)	1 2 3 4 5 6 7 8 9 10
GA	Total Org Carbon - TOC	1 2 3 4 5 6 7 8 9 10
GA	Ammonia - NH3	1 2 3 4 5 6 7 8 9 10
GA	Nitrate+Nitrite - NO3+NO2	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	Melissa Smith	
Signature: Dan Hamel		2/7/19 1620
Print Name & Org.		
Signature:		
Print Name & Org.		
Signature:		