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

07 September 2016

Work Order: 1608057

Price: $735.00

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,

George Krisztian
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:
09/07/2016

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
SEEP-401 7TH	1608057-01	Water	08/01/2016	08/03/2016	
SEEP-719 WASHINGTON	1608057-02	Water	08/01/2016	08/03/2016	
WEST PARK POND	1608057-03	Water	08/01/2016	08/03/2016	

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.
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.
A04	Result is estimated due to high matrix spike recovery.
A03	Result(s) and reporting limit(s) are estimated due to low 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: SEEP-401 7TH

Lab ID: 1608057-01

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	08/09/16	B6H0905	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	08/09/16	B6H0905	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/09/16	B6H0905	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: SEEP-401 7TH

Lab ID: 1608057-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	08/09/16	B6H0905	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/09/16	B6H0905	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	08/09/16	B6H0905	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/09/16	B6H0905	8260	
Surrogate: Bromofluorobenzene			*97.5 %*	*85-115*		*08/09/16*	B6H0905	*8260*	
Surrogate: Dibromofluoromethane			*100 %*	*82.7-115*		*08/09/16*	B6H0905	*8260*	
Surrogate: Toluene-d8			*103 %*	*85-115*		*08/09/16*	B6H0905	*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: SEEP-401 7TH

Lab ID: 1608057-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	08/09/16	B6H1205	8260 Modified	Y28

Lab Work Order # 1608057

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: SEEP-719 WASHINGTON

Lab ID: 1608057-02

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	08/09/16	B6H0803	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	08/09/16	B6H0803	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/09/16	B6H0803	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: SEEP-719 WASHINGTON

Lab ID: 1608057-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	08/09/16	B6H0803	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/09/16	B6H0803	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
Surrogate: Bromofluorobenzene			*95.9 %*	*85-115*		*08/09/16*	B6H0803	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*08/09/16*	B6H0803	*8260*	
Surrogate: Toluene-d8			*102 %*	*85-115*		*08/09/16*	B6H0803	*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: SEEP-719 WASHINGTON

Lab ID: 1608057-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	08/09/16	B6H1205	8260 Modified	Y28

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: WEST PARK POND

Lab ID: 1608057-03

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	08/09/16	B6H0803	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	08/09/16	B6H0803	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	08/09/16	B6H0803	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: WEST PARK POND

Lab ID: 1608057-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	08/09/16	B6H0803	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	08/09/16	B6H0803	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	08/09/16	B6H0803	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	08/09/16	B6H0803	8260	
Surrogate: Bromofluorobenzene			*97.7 %*	*85-115*		*08/09/16*	B6H0803	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*08/09/16*	B6H0803	*8260*	
Surrogate: Toluene-d8			*103 %*	*85-115*		*08/09/16*	B6H0803	*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: WEST PARK POND

Lab ID: 1608057-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Dioxane									
123-91-1	1,4-dioxane	ND	1.0	ug/L	1	08/09/16	B6H1205	8260 Modified	Y28

Lab Work Order # 1608057

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 B6H0803 - Method: 5030				**Prepared: 08/08/2016**							
Blank (B6H0803-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							08/08/2016	
1,1,1-Trichloroethane	ND	1.0	ug/L							08/08/2016	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							08/08/2016	
1,1,2-Trichloroethane	ND	1.0	ug/L							08/08/2016	
1,1-Dichloroethane	ND	1.0	ug/L							08/08/2016	
1,1-Dichloroethylene	ND	1.0	ug/L							08/08/2016	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							08/08/2016	
1,2,3-Trichloropropane	ND	1.0	ug/L							08/08/2016	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							08/08/2016	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							08/08/2016	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							08/08/2016	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L							08/08/2016	
1,2-Dibromoethane	ND	1.0	ug/L							08/08/2016	
1,2-Dichlorobenzene	ND	1.0	ug/L							08/08/2016	
1,2-Dichloroethane	ND	1.0	ug/L							08/08/2016	
1,2-Dichloropropane	ND	1.0	ug/L							08/08/2016	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							08/08/2016	
1,3-Dichlorobenzene	ND	1.0	ug/L							08/08/2016	
1,4-Dichlorobenzene	ND	1.0	ug/L							08/08/2016	
2-Butanone (MEK)	ND	5.0	ug/L							08/08/2016	
2-Hexanone	ND	5.0	ug/L							08/08/2016	
2-Methylnaphthalene	ND	5.0	ug/L							08/08/2016	X
2-Propanone (acetone)	ND	20	ug/L							08/08/2016	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							08/08/2016	
Acrylonitrile	ND	5.0	ug/L							08/08/2016	
Benzene	ND	1.0	ug/L							08/08/2016	
Bromobenzene	ND	1.0	ug/L							08/08/2016	
Bromochloromethane	ND	1.0	ug/L							08/08/2016	
Bromodichloromethane	ND	1.0	ug/L							08/08/2016	
Bromoform	ND	1.0	ug/L							08/08/2016	
Bromomethane	ND	5.0	ug/L							08/08/2016	
Carbon disulfide	ND	1.0	ug/L							08/08/2016	
Carbon tetrachloride	ND	1.0	ug/L							08/08/2016	
Chlorobenzene	ND	1.0	ug/L							08/08/2016	
Chloroethane	ND	5.0	ug/L							08/08/2016	
Chloroform	ND	1.0	ug/L							08/08/2016	
Chloromethane	ND	5.0	ug/L							08/08/2016	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							08/08/2016	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							08/08/2016	
Cyclohexane	ND	5.0	ug/L							08/08/2016	
Dibromochloromethane	ND	1.0	ug/L							08/08/2016	
Dibromomethane	ND	1.0	ug/L							08/08/2016	
Dichlorodifluoromethane	ND	5.0	ug/L							08/08/2016	
Diethyl ether	ND	5.0	ug/L							08/08/2016	
Diisopropyl Ether	ND	5.0	ug/L							08/08/2016	
Ethylbenzene	ND	1.0	ug/L							08/08/2016	
Ethyltertiarybutylether	ND	5.0	ug/L							08/08/2016	
Hexachloroethane	ND	5.0	ug/L							08/08/2016	

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 B6H0803 - Method: 5030				**Prepared: 08/08/2016**							
Blank (B6H0803-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							08/08/2016	
m & p - Xylene	ND	2.0	ug/L							08/08/2016	
Methyl iodide	ND	1.0	ug/L							08/08/2016	
Methylene chloride	ND	5.0	ug/L							08/08/2016	
Methyltertiarybutylether	ND	1.0	ug/L							08/08/2016	
Naphthalene	ND	5.0	ug/L							08/08/2016	X
n-Butylbenzene	ND	1.0	ug/L							08/08/2016	
n-Propylbenzene	ND	1.0	ug/L							08/08/2016	
o-Xylene	ND	1.0	ug/L							08/08/2016	
p-Isopropyl toluene	ND	1.0	ug/L							08/08/2016	
sec-Butylbenzene	ND	1.0	ug/L							08/08/2016	
Styrene	ND	1.0	ug/L							08/08/2016	
tert-Butylbenzene	ND	1.0	ug/L							08/08/2016	
tertiary Butyl Alcohol	ND	50	ug/L							08/08/2016	
tertiaryAmylmethylether	ND	5.0	ug/L							08/08/2016	
Tetrachloroethylene	ND	1.0	ug/L							08/08/2016	
Tetrahydrofuran	ND	5.0	ug/L							08/08/2016	
Toluene	ND	1.0	ug/L							08/08/2016	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							08/08/2016	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							08/08/2016	
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							08/08/2016	
Trichloroethylene	ND	1.0	ug/L							08/08/2016	
Trichlorofluoromethane	ND	1.0	ug/L							08/08/2016	
Vinyl chloride	ND	1.0	ug/L							08/08/2016	
Surrogate: Bromofluorobenzene	*48.3*		ug/L	*50.00*		*96.6*	*85-115*			08/08/2016	
Surrogate: Dibromofluoromethane	*50.7*		ug/L	*50.00*		*101*	*82.7-115*			08/08/2016	
Surrogate: Toluene-d8	*50.8*		ug/L	*50.00*		*102*	*85-115*			08/08/2016	
LCS (B6H0803-BS1)											
1,1,1,2-Tetrachloroethane	50.5	1.0	ug/L	50.00		101	70-130			08/08/2016	
1,1,1-Trichloroethane	47.1	1.0	ug/L	50.00		94.2	70-130			08/08/2016	
1,1,2,2-Tetrachloroethane	50.4	1.0	ug/L	50.00		101	70-130			08/08/2016	
1,1,2-Trichloroethane	49.7	1.0	ug/L	50.00		99.4	70-130			08/08/2016	
1,1-Dichloroethane	51.1	1.0	ug/L	50.00		102	70-130			08/08/2016	
1,1-Dichloroethylene	46.2	1.0	ug/L	50.00		92.3	70-130			08/08/2016	
1,2,3-Trichlorobenzene	54.1	5.0	ug/L	50.00		108	70-130			08/08/2016	
1,2,3-Trichloropropane	46.0	1.0	ug/L	50.00		92.1	70-130			08/08/2016	
1,2,3-Trimethylbenzene	50.7	1.0	ug/L	50.00		101	70-130			08/08/2016	
1,2,4-Trichlorobenzene	57.2	5.0	ug/L	50.00		114	70-130			08/08/2016	
1,2,4-Trimethylbenzene	50.3	1.0	ug/L	50.00		101	70-130			08/08/2016	
1,2-Dibromo-3-chloropropane	52.5	5.0	ug/L	50.00		105	70-130			08/08/2016	
1,2-Dibromoethane	50.2	1.0	ug/L	50.00		100	70-130			08/08/2016	
1,2-Dichlorobenzene	51.8	1.0	ug/L	50.00		104	70-130			08/08/2016	
1,2-Dichloroethane	50.6	1.0	ug/L	50.00		101	70-130			08/08/2016	
1,2-Dichloropropane	48.9	1.0	ug/L	50.00		97.9	70-130			08/08/2016	
1,3,5-Trimethylbenzene	52.3	1.0	ug/L	50.00		105	70-130			08/08/2016	
1,3-Dichlorobenzene	52.1	1.0	ug/L	50.00		104	70-130			08/08/2016	
1,4-Dichlorobenzene	52.1	1.0	ug/L	50.00		104	70-130			08/08/2016	

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 B6H0803 - Method: 5030				**Prepared: 08/08/2016**							
LCS (B6H0803-BS1)											
2-Butanone (MEK)	55.5	5.0	ug/L	50.00		111	70-130			08/08/2016	
2-Hexanone	52.7	5.0	ug/L	50.00		105	70-130			08/08/2016	
2-Methylnaphthalene	48.0	5.0	ug/L	50.00		95.9	70-130			08/08/2016	X
2-Propanone (acetone)	46.9	20	ug/L	50.00		93.8	70-130			08/08/2016	
4-Methyl-2-pentanone (MIBK)	54.5	5.0	ug/L	50.00		109	70-130			08/08/2016	
Acrylonitrile	51.1	5.0	ug/L	50.00		102	70-130			08/08/2016	
Benzene	49.4	1.0	ug/L	50.00		98.7	70-130			08/08/2016	
Bromobenzene	50.3	1.0	ug/L	50.00		101	70-130			08/08/2016	
Bromochloromethane	49.1	1.0	ug/L	50.00		98.3	70-130			08/08/2016	
Bromodichloromethane	50.5	1.0	ug/L	50.00		101	70-130			08/08/2016	
Bromoform	48.4	1.0	ug/L	50.00		96.9	70-130			08/08/2016	
Bromomethane	53.9	5.0	ug/L	50.00		108	70-130			08/08/2016	
Carbon disulfide	45.3	1.0	ug/L	50.00		90.6	70-130			08/08/2016	
Carbon tetrachloride	48.5	1.0	ug/L	50.00		97.0	70-130			08/08/2016	
Chlorobenzene	49.9	1.0	ug/L	50.00		99.8	70-130			08/08/2016	
Chloroethane	49.9	5.0	ug/L	50.00		99.7	70-130			08/08/2016	
Chloroform	47.5	1.0	ug/L	50.00		95.0	70-130			08/08/2016	
Chloromethane	61.5	5.0	ug/L	50.00		123	70-130			08/08/2016	A06, A11
cis-1,2-Dichloroethylene	49.5	1.0	ug/L	50.00		99.1	70-130			08/08/2016	
cis-1,3-Dichloropropylene	51.7	1.0	ug/L	50.00		103	70-130			08/08/2016	
Cyclohexane	50.1	5.0	ug/L	50.00		100	70-130			08/08/2016	
Dibromochloromethane	51.4	1.0	ug/L	50.00		103	70-130			08/08/2016	
Dibromomethane	50.5	1.0	ug/L	50.00		101	70-130			08/08/2016	
Dichlorodifluoromethane	57.9	5.0	ug/L	50.00		116	70-130			08/08/2016	A11
Diethyl ether	51.1	5.0	ug/L	50.00		102	70-130			08/08/2016	
Diisopropyl Ether	54.1	5.0	ug/L	50.00		108	70-130			08/08/2016	
Ethylbenzene	50.1	1.0	ug/L	50.00		100	70-130			08/08/2016	
Ethyltertiarybutylether	47.9	5.0	ug/L	50.00		95.9	70-130			08/08/2016	
Hexachloroethane	49.8	5.0	ug/L	50.00		99.5	70-130			08/08/2016	
Isopropylbenzene	53.3	1.0	ug/L	50.00		107	70-130			08/08/2016	
m & p - Xylene	98.5	2.0	ug/L	100.0		98.5	70-130			08/08/2016	
Methyl iodide	41.3	1.0	ug/L	50.00		82.6	70-130			08/08/2016	
Methylene chloride	49.4	5.0	ug/L	50.00		98.7	70-130			08/08/2016	
Methyltertiarybutylether	46.7	1.0	ug/L	50.00		93.5	70-130			08/08/2016	
Naphthalene	60.3	5.0	ug/L	50.00		121	70-130			08/08/2016	X
n-Butylbenzene	53.5	1.0	ug/L	50.00		107	70-130			08/08/2016	
n-Propylbenzene	52.8	1.0	ug/L	50.00		106	70-130			08/08/2016	
o-Xylene	49.2	1.0	ug/L	50.00		98.3	70-130			08/08/2016	
p-Isopropyl toluene	51.1	1.0	ug/L	50.00		102	70-130			08/08/2016	
sec-Butylbenzene	52.0	1.0	ug/L	50.00		104	70-130			08/08/2016	
Styrene	49.7	1.0	ug/L	50.00		99.3	70-130			08/08/2016	
tert-Butylbenzene	55.1	1.0	ug/L	50.00		110	70-130			08/08/2016	
tertiary Butyl Alcohol	264	50	ug/L	250.0		105	70-130			08/08/2016	
tertiaryAmylmethylether	48.4	5.0	ug/L	50.00		96.9	70-130			08/08/2016	
Tetrachloroethylene	47.2	1.0	ug/L	50.00		94.3	70-130			08/08/2016	
Tetrahydrofuran	57.2	5.0	ug/L	50.00		114	70-130			08/08/2016	
Toluene	49.3	1.0	ug/L	50.00		98.5	70-130			08/08/2016	
trans-1,2-Dichloroethylene	48.1	1.0	ug/L	50.00		96.2	70-130			08/08/2016	

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 B6H0803 - Method: 5030				**Prepared: 08/08/2016**							
LCS (B6H0803-BS1)											
trans-1,3-Dichloropropylene	51.3	1.0	ug/L	50.00		103	70-130			08/08/2016	
trans-1,4-Dichloro-2-butene	50.4	5.0	ug/L	50.00		101	70-130			08/08/2016	
Trichloroethylene	49.8	1.0	ug/L	50.00		99.5	70-130			08/08/2016	
Trichlorofluoromethane	46.8	1.0	ug/L	50.00		93.6	70-130			08/08/2016	
Vinyl chloride	52.5	1.0	ug/L	50.00		105	70-130			08/08/2016	
Surrogate: Bromofluorobenzene	*51.0*		ug/L	*50.00*		*102*	*85-115*			08/08/2016	
Surrogate: Dibromofluoromethane	*49.7*		ug/L	*50.00*		*99.3*	*82.7-115*			08/08/2016	
Surrogate: Toluene-d8	*49.8*		ug/L	*50.00*		*99.5*	*85-115*			08/08/2016	
Matrix Spike (B6H0803-MS1)	**Source: 1608058-08**										
1,1,1,2-Tetrachloroethane	50.8	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
1,1,1-Trichloroethane	47.3	1.0	ug/L	50.00	ND	94.5	70-130			08/09/2016	
1,1,2,2-Tetrachloroethane	53.9	1.0	ug/L	50.00	ND	108	70-130			08/09/2016	
1,1,2-Trichloroethane	50.8	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
1,1-Dichloroethane	47.7	1.0	ug/L	50.00	ND	95.3	70-130			08/09/2016	
1,1-Dichloroethylene	48.9	1.0	ug/L	50.00	ND	97.8	70-130			08/09/2016	
1,2,3-Trichlorobenzene	52.4	5.0	ug/L	50.00	ND	105	70-130			08/09/2016	
1,2,3-Trichloropropane	44.5	1.0	ug/L	50.00	ND	88.9	70-130			08/09/2016	
1,2,3-Trimethylbenzene	51.1	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
1,2,4-Trichlorobenzene	53.7	5.0	ug/L	50.00	ND	107	70-130			08/09/2016	
1,2,4-Trimethylbenzene	50.0	1.0	ug/L	50.00	ND	100	70-130			08/09/2016	
1,2-Dibromo-3-chloropropane	49.3	5.0	ug/L	50.00	ND	98.7	70-130			08/09/2016	
1,2-Dibromoethane	51.8	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
1,2-Dichlorobenzene	52.0	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
1,2-Dichloroethane	51.6	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
1,2-Dichloropropane	49.7	1.0	ug/L	50.00	ND	99.4	70-130			08/09/2016	
1,3,5-Trimethylbenzene	52.0	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
1,3-Dichlorobenzene	51.6	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
1,4-Dichlorobenzene	50.8	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
2-Butanone (MEK)	44.3	5.0	ug/L	50.00	ND	88.6	70-130			08/09/2016	
2-Hexanone	46.8	5.0	ug/L	50.00	ND	93.6	70-130			08/09/2016	
2-Methylnaphthalene	41.6	5.0	ug/L	50.00	ND	83.2	70-130			08/09/2016	X
2-Propanone (acetone)	30.1	20	ug/L	50.00	ND	60.1	70-130			08/09/2016	A03
4-Methyl-2-pentanone (MIBK)	53.4	5.0	ug/L	50.00	ND	107	70-130			08/09/2016	
Acrylonitrile	51.2	5.0	ug/L	50.00	ND	102	70-130			08/09/2016	
Benzene	50.5	1.0	ug/L	50.00	ND	101	70-130			08/09/2016	
Bromobenzene	51.3	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Bromochloromethane	48.9	1.0	ug/L	50.00	ND	97.9	70-130			08/09/2016	
Bromodichloromethane	49.8	1.0	ug/L	50.00	ND	99.5	70-130			08/09/2016	
Bromoform	46.5	1.0	ug/L	50.00	ND	93.1	70-130			08/09/2016	
Bromomethane	59.6	5.0	ug/L	50.00	ND	119	70-130			08/09/2016	
Carbon disulfide	47.4	1.0	ug/L	50.00	ND	94.7	70-130			08/09/2016	
Carbon tetrachloride	48.7	1.0	ug/L	50.00	ND	97.4	70-130			08/09/2016	
Chlorobenzene	51.4	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Chloroethane	54.1	5.0	ug/L	50.00	ND	108	70-130			08/09/2016	
Chloroform	48.8	1.0	ug/L	50.00	ND	97.6	70-130			08/09/2016	
Chloromethane	70.6	5.0	ug/L	50.00	ND	141	70-130			08/09/2016	A04, A06, A11

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 B6H0803 - Method: 5030				**Prepared: 08/09/2016**							
Matrix Spike (B6H0803-MS1)	**Source: 1608058-08**										
cis-1,2-Dichloroethylene	51.0	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
cis-1,3-Dichloropropylene	50.6	1.0	ug/L	50.00	ND	101	70-130			08/09/2016	
Cyclohexane	49.0	5.0	ug/L	50.00	ND	98.1	70-130			08/09/2016	
Dibromochloromethane	51.5	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Dibromomethane	49.8	1.0	ug/L	50.00	ND	99.7	70-130			08/09/2016	
Dichlorodifluoromethane	73.4	5.0	ug/L	50.00	ND	147	70-130			08/09/2016	A04, A11
Diethyl ether	50.9	5.0	ug/L	50.00	ND	102	70-130			08/09/2016	
Diisopropyl Ether	54.1	5.0	ug/L	50.00	ND	108	70-130			08/09/2016	
Ethylbenzene	51.7	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Ethyltertiarybutylether	47.8	5.0	ug/L	50.00	ND	95.7	70-130			08/09/2016	
Hexachloroethane	48.2	5.0	ug/L	50.00	ND	96.5	70-130			08/09/2016	
Isopropylbenzene	53.2	1.0	ug/L	50.00	ND	106	70-130			08/09/2016	
m & p - Xylene	100	2.0	ug/L	100.0	ND	100	70-130			08/09/2016	
Methyl iodide	38.8	1.0	ug/L	50.00	ND	77.6	70-130			08/09/2016	
Methylene chloride	51.5	5.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Methyltertiarybutylether	47.6	1.0	ug/L	50.00	ND	95.1	70-130			08/09/2016	
Naphthalene	56.7	5.0	ug/L	50.00	ND	113	70-130			08/09/2016	X
n-Butylbenzene	51.3	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
n-Propylbenzene	52.3	1.0	ug/L	50.00	ND	105	70-130			08/09/2016	
o-Xylene	50.3	1.0	ug/L	50.00	ND	101	70-130			08/09/2016	
p-Isopropyl toluene	50.1	1.0	ug/L	50.00	ND	100	70-130			08/09/2016	
sec-Butylbenzene	51.6	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Styrene	50.4	1.0	ug/L	50.00	ND	101	70-130			08/09/2016	
tert-Butylbenzene	55.0	1.0	ug/L	50.00	ND	110	70-130			08/09/2016	
tertiary Butyl Alcohol	267	50	ug/L	250.0	ND	107	70-130			08/09/2016	
tertiaryAmylmethylether	48.1	5.0	ug/L	50.00	ND	96.2	70-130			08/09/2016	
Tetrachloroethylene	48.5	1.0	ug/L	50.00	ND	97.1	70-130			08/09/2016	
Tetrahydrofuran	55.4	5.0	ug/L	50.00	ND	111	70-130			08/09/2016	
Toluene	50.8	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
trans-1,2-Dichloroethylene	50.2	1.0	ug/L	50.00	ND	100	70-130			08/09/2016	
trans-1,3-Dichloropropylene	48.7	1.0	ug/L	50.00	ND	97.4	70-130			08/09/2016	
trans-1,4-Dichloro-2-butene	49.1	5.0	ug/L	50.00	ND	98.1	70-130			08/09/2016	
Trichloroethylene	49.8	1.0	ug/L	50.00	ND	99.6	70-130			08/09/2016	
Trichlorofluoromethane	52.7	1.0	ug/L	50.00	ND	105	70-130			08/09/2016	
Vinyl chloride	59.3	1.0	ug/L	50.00	ND	119	70-130			08/09/2016	
Surrogate: Bromofluorobenzene	*49.3*		ug/L	*50.00*		*98.6*	*85-115*			08/09/2016	
Surrogate: Dibromofluoromethane	*48.7*		ug/L	*50.00*		*97.4*	*82.7-115*			08/09/2016	
Surrogate: Toluene-d8	*48.9*		ug/L	*50.00*		*97.9*	*85-115*			08/09/2016	
Matrix Spike Dup (B6H0803-MSD1)	**Source: 1608058-08**										
1,1,1,2-Tetrachloroethane	48.8	1.0	ug/L	50.00	ND	97.6	70-130	4.07	30	08/09/2016	
1,1,1-Trichloroethane	44.6	1.0	ug/L	50.00	ND	89.3	70-130	5.71	30	08/09/2016	
1,1,2,2-Tetrachloroethane	53.4	1.0	ug/L	50.00	ND	107	70-130	0.973	30	08/09/2016	
1,1,2-Trichloroethane	49.5	1.0	ug/L	50.00	ND	98.9	70-130	2.72	30	08/09/2016	
1,1-Dichloroethane	45.2	1.0	ug/L	50.00	ND	90.5	70-130	5.23	30	08/09/2016	
1,1-Dichloroethylene	44.9	1.0	ug/L	50.00	ND	89.9	70-130	8.43	30	08/09/2016	
1,2,3-Trichlorobenzene	51.7	5.0	ug/L	50.00	ND	103	70-130	1.37	30	08/09/2016	
1,2,3-Trichloropropane	48.0	1.0	ug/L	50.00	ND	96.0	70-130	7.62	30	08/09/2016	

Lab Work Order # 1608057

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 B6H0803 - Method: 5030				**Prepared: 08/09/2016**							
Matrix Spike Dup (B6H0803-MSD1)	**Source: 1608058-08**										
1,2,3-Trimethylbenzene	48.8	1.0	ug/L	50.00	ND	97.6	70-130	4.56	30	08/09/2016	
1,2,4-Trichlorobenzene	52.4	5.0	ug/L	50.00	ND	105	70-130	2.43	30	08/09/2016	
1,2,4-Trimethylbenzene	48.3	1.0	ug/L	50.00	ND	96.6	70-130	3.50	30	08/09/2016	
1,2-Dibromo-3-chloropropane	52.0	5.0	ug/L	50.00	ND	104	70-130	5.18	30	08/09/2016	
1,2-Dibromoethane	50.6	1.0	ug/L	50.00	ND	101	70-130	2.22	30	08/09/2016	
1,2-Dichlorobenzene	50.0	1.0	ug/L	50.00	ND	100	70-130	3.99	30	08/09/2016	
1,2-Dichloroethane	51.5	1.0	ug/L	50.00	ND	103	70-130	0.337	30	08/09/2016	
1,2-Dichloropropane	47.9	1.0	ug/L	50.00	ND	95.8	70-130	3.72	30	08/09/2016	
1,3,5-Trimethylbenzene	49.8	1.0	ug/L	50.00	ND	99.5	70-130	4.38	30	08/09/2016	
1,3-Dichlorobenzene	49.5	1.0	ug/L	50.00	ND	99.0	70-130	4.16	30	08/09/2016	
1,4-Dichlorobenzene	49.2	1.0	ug/L	50.00	ND	98.4	70-130	3.21	30	08/09/2016	
2-Butanone (MEK)	47.1	5.0	ug/L	50.00	ND	94.1	70-130	6.04	30	08/09/2016	
2-Hexanone	49.4	5.0	ug/L	50.00	ND	98.8	70-130	5.42	30	08/09/2016	
2-Methylnaphthalene	45.3	5.0	ug/L	50.00	ND	90.6	70-130	8.54	30	08/09/2016	X
2-Propanone (acetone)	34.4	20	ug/L	50.00	ND	68.9	70-130	13.6	30	08/09/2016	A03
4-Methyl-2-pentanone (MIBK)	55.2	5.0	ug/L	50.00	ND	110	70-130	3.43	30	08/09/2016	
Acrylonitrile	53.5	5.0	ug/L	50.00	ND	107	70-130	4.46	30	08/09/2016	
Benzene	48.5	1.0	ug/L	50.00	ND	96.9	70-130	4.19	30	08/09/2016	
Bromobenzene	49.6	1.0	ug/L	50.00	ND	99.2	70-130	3.33	30	08/09/2016	
Bromochloromethane	47.9	1.0	ug/L	50.00	ND	95.8	70-130	2.15	30	08/09/2016	
Bromodichloromethane	49.1	1.0	ug/L	50.00	ND	98.1	70-130	1.39	30	08/09/2016	
Bromoform	46.4	1.0	ug/L	50.00	ND	92.7	70-130	0.355	30	08/09/2016	
Bromomethane	58.0	5.0	ug/L	50.00	ND	116	70-130	2.71	30	08/09/2016	
Carbon disulfide	44.1	1.0	ug/L	50.00	ND	88.2	70-130	7.17	30	08/09/2016	
Carbon tetrachloride	45.7	1.0	ug/L	50.00	ND	91.5	70-130	6.23	30	08/09/2016	
Chlorobenzene	49.0	1.0	ug/L	50.00	ND	98.0	70-130	4.71	30	08/09/2016	
Chloroethane	51.9	5.0	ug/L	50.00	ND	104	70-130	4.10	30	08/09/2016	
Chloroform	47.1	1.0	ug/L	50.00	ND	94.2	70-130	3.51	30	08/09/2016	
Chloromethane	66.5	5.0	ug/L	50.00	ND	133	70-130	5.95	30	08/09/2016	A04, A06, A11
cis-1,2-Dichloroethylene	48.9	1.0	ug/L	50.00	ND	97.8	70-130	4.14	30	08/09/2016	
cis-1,3-Dichloropropylene	49.5	1.0	ug/L	50.00	ND	99.0	70-130	2.31	30	08/09/2016	
Cyclohexane	46.1	5.0	ug/L	50.00	ND	92.3	70-130	6.10	30	08/09/2016	
Dibromochloromethane	50.9	1.0	ug/L	50.00	ND	102	70-130	1.21	30	08/09/2016	
Dibromomethane	49.3	1.0	ug/L	50.00	ND	98.5	70-130	1.20	30	08/09/2016	
Dichlorodifluoromethane	75.0	5.0	ug/L	50.00	ND	150	70-130	2.16	30	08/09/2016	A04, A11
Diethyl ether	51.4	5.0	ug/L	50.00	ND	103	70-130	0.895	30	08/09/2016	
Diisopropyl Ether	53.2	5.0	ug/L	50.00	ND	106	70-130	1.72	30	08/09/2016	
Ethylbenzene	48.7	1.0	ug/L	50.00	ND	97.3	70-130	6.00	30	08/09/2016	
Ethyltertiarybutylether	47.0	5.0	ug/L	50.00	ND	93.9	70-130	1.86	30	08/09/2016	
Hexachloroethane	45.2	5.0	ug/L	50.00	ND	90.4	70-130	6.52	30	08/09/2016	
Isopropylbenzene	50.8	1.0	ug/L	50.00	ND	102	70-130	4.58	30	08/09/2016	
m & p - Xylene	95.0	2.0	ug/L	100.0	ND	95.0	70-130	5.12	30	08/09/2016	
Methyl iodide	38.8	1.0	ug/L	50.00	ND	77.5	70-130	0.0902	30	08/09/2016	
Methylene chloride	49.9	5.0	ug/L	50.00	ND	99.9	70-130	3.13	30	08/09/2016	
Methyltertiarybutylether	48.0	1.0	ug/L	50.00	ND	95.9	70-130	0.845	30	08/09/2016	
Naphthalene	58.9	5.0	ug/L	50.00	ND	118	70-130	3.75	30	08/09/2016	X
n-Butylbenzene	48.5	1.0	ug/L	50.00	ND	97.0	70-130	5.66	30	08/09/2016	

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 B6H0803 - Method: 5030				**Prepared: 08/09/2016**							
Matrix Spike Dup (B6H0803-MSD1)	**Source: 1608058-08**										
n-Propylbenzene	49.5	1.0	ug/L	50.00	ND	99.1	70-130	5.46	30	08/09/2016	
o-Xylene	47.8	1.0	ug/L	50.00	ND	95.6	70-130	5.16	30	08/09/2016	
p-Isopropyl toluene	47.6	1.0	ug/L	50.00	ND	95.1	70-130	5.19	30	08/09/2016	
sec-Butylbenzene	48.8	1.0	ug/L	50.00	ND	97.6	70-130	5.64	30	08/09/2016	
Styrene	48.3	1.0	ug/L	50.00	ND	96.6	70-130	4.30	30	08/09/2016	
tert-Butylbenzene	46.2	1.0	ug/L	50.00	ND	92.5	70-130	17.4	30	08/09/2016	
tertiary Butyl Alcohol	308	50	ug/L	250.0	ND	123	70-130	14.5	30	08/09/2016	
tertiaryAmylmethylether	47.5	5.0	ug/L	50.00	ND	95.0	70-130	1.27	30	08/09/2016	
Tetrachloroethylene	44.5	1.0	ug/L	50.00	ND	89.0	70-130	8.62	30	08/09/2016	
Tetrahydrofuran	58.7	5.0	ug/L	50.00	ND	117	70-130	5.88	30	08/09/2016	
Toluene	47.4	1.0	ug/L	50.00	ND	94.9	70-130	6.75	30	08/09/2016	
trans-1,2-Dichloroethylene	47.2	1.0	ug/L	50.00	ND	94.4	70-130	6.18	30	08/09/2016	
trans-1,3-Dichloropropylene	49.1	1.0	ug/L	50.00	ND	98.1	70-130	0.755	30	08/09/2016	
trans-1,4-Dichloro-2-butene	49.1	5.0	ug/L	50.00	ND	98.1	70-130	0.0302	30	08/09/2016	
Trichloroethylene	46.0	1.0	ug/L	50.00	ND	91.9	70-130	8.04	30	08/09/2016	
Trichlorofluoromethane	49.6	1.0	ug/L	50.00	ND	99.2	70-130	6.05	30	08/09/2016	
Vinyl chloride	54.3	1.0	ug/L	50.00	ND	109	70-130	8.74	30	08/09/2016	
Surrogate: Bromofluorobenzene	*49.0*		ug/L	*50.00*		*98.0*	*85-115*			08/09/2016	
Surrogate: Dibromofluoromethane	*48.9*		ug/L	*50.00*		*97.8*	*82.7-115*			08/09/2016	
Surrogate: Toluene-d8	*48.7*		ug/L	*50.00*		*97.4*	*85-115*			08/09/2016	
Batch B6H0905 - Method: 5030				**Prepared: 08/09/2016**							
Blank (B6H0905-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							08/09/2016	
1,1,1-Trichloroethane	ND	1.0	ug/L							08/09/2016	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							08/09/2016	
1,1,2-Trichloroethane	ND	1.0	ug/L							08/09/2016	
1,1-Dichloroethane	ND	1.0	ug/L							08/09/2016	
1,1-Dichloroethylene	ND	1.0	ug/L							08/09/2016	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							08/09/2016	
1,2,3-Trichloropropane	ND	1.0	ug/L							08/09/2016	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							08/09/2016	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							08/09/2016	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							08/09/2016	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L							08/09/2016	
1,2-Dibromoethane	ND	1.0	ug/L							08/09/2016	
1,2-Dichlorobenzene	ND	1.0	ug/L							08/09/2016	
1,2-Dichloroethane	ND	1.0	ug/L							08/09/2016	
1,2-Dichloropropane	ND	1.0	ug/L							08/09/2016	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							08/09/2016	
1,3-Dichlorobenzene	ND	1.0	ug/L							08/09/2016	
1,4-Dichlorobenzene	ND	1.0	ug/L							08/09/2016	
2-Butanone (MEK)	ND	5.0	ug/L							08/09/2016	
2-Hexanone	ND	5.0	ug/L							08/09/2016	
2-Methylnaphthalene	ND	5.0	ug/L							08/09/2016	X

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 B6H0905 - Method: 5030				**Prepared: 08/09/2016**							
Blank (B6H0905-BLK1)											
2-Propanone (acetone)	ND	20	ug/L							08/09/2016	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							08/09/2016	
Acrylonitrile	ND	5.0	ug/L							08/09/2016	
Benzene	ND	1.0	ug/L							08/09/2016	
Bromobenzene	ND	1.0	ug/L							08/09/2016	
Bromochloromethane	ND	1.0	ug/L							08/09/2016	
Bromodichloromethane	ND	1.0	ug/L							08/09/2016	
Bromoform	ND	1.0	ug/L							08/09/2016	
Bromomethane	ND	5.0	ug/L							08/09/2016	
Carbon disulfide	ND	1.0	ug/L							08/09/2016	
Carbon tetrachloride	ND	1.0	ug/L							08/09/2016	
Chlorobenzene	ND	1.0	ug/L							08/09/2016	
Chloroethane	ND	5.0	ug/L							08/09/2016	
Chloroform	ND	1.0	ug/L							08/09/2016	
Chloromethane	ND	5.0	ug/L							08/09/2016	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							08/09/2016	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							08/09/2016	
Cyclohexane	ND	5.0	ug/L							08/09/2016	
Dibromochloromethane	ND	1.0	ug/L							08/09/2016	
Dibromomethane	ND	1.0	ug/L							08/09/2016	
Dichlorodifluoromethane	ND	5.0	ug/L							08/09/2016	
Diethyl ether	ND	5.0	ug/L							08/09/2016	
Diisopropyl Ether	ND	5.0	ug/L							08/09/2016	
Ethylbenzene	ND	1.0	ug/L							08/09/2016	
Ethyltertiarybutylether	ND	5.0	ug/L							08/09/2016	
Hexachloroethane	ND	5.0	ug/L							08/09/2016	
Isopropylbenzene	ND	1.0	ug/L							08/09/2016	
m & p - Xylene	ND	2.0	ug/L							08/09/2016	
Methyl iodide	ND	1.0	ug/L							08/09/2016	
Methylene chloride	ND	5.0	ug/L							08/09/2016	
Methyltertiarybutylether	ND	1.0	ug/L							08/09/2016	
Naphthalene	ND	5.0	ug/L							08/09/2016	X
n-Butylbenzene	ND	1.0	ug/L							08/09/2016	
n-Propylbenzene	ND	1.0	ug/L							08/09/2016	
o-Xylene	ND	1.0	ug/L							08/09/2016	
p-Isopropyl toluene	ND	1.0	ug/L							08/09/2016	
sec-Butylbenzene	ND	1.0	ug/L							08/09/2016	
Styrene	ND	1.0	ug/L							08/09/2016	
tert-Butylbenzene	ND	1.0	ug/L							08/09/2016	
tertiary Butyl Alcohol	ND	50	ug/L							08/09/2016	
tertiaryAmylmethylether	ND	5.0	ug/L							08/09/2016	
Tetrachloroethylene	ND	1.0	ug/L							08/09/2016	
Tetrahydrofuran	ND	5.0	ug/L							08/09/2016	
Toluene	ND	1.0	ug/L							08/09/2016	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							08/09/2016	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							08/09/2016	
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							08/09/2016	
Trichloroethylene	ND	1.0	ug/L							08/09/2016	

Lab Work Order # 1608057

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 B6H0905 - Method: 5030				**Prepared: 08/09/2016**							
Blank (B6H0905-BLK1)											
Trichlorofluoromethane	ND	1.0	ug/L							08/09/2016	
Vinyl chloride	ND	1.0	ug/L							08/09/2016	
Surrogate: Bromofluorobenzene	*48.4*		ug/L	*50.00*		*96.9*	*85-115*			08/09/2016	
Surrogate: Dibromofluoromethane	*49.0*		ug/L	*50.00*		*98.0*	*82.7-115*			08/09/2016	
Surrogate: Toluene-d8	*50.7*		ug/L	*50.00*		*101*	*85-115*			08/09/2016	
LCS (B6H0905-BS1)											
1,1,1,2-Tetrachloroethane	51.8	1.0	ug/L	50.00		104	70-130			08/09/2016	
1,1,1-Trichloroethane	48.6	1.0	ug/L	50.00		97.1	70-130			08/09/2016	
1,1,2,2-Tetrachloroethane	51.1	1.0	ug/L	50.00		102	70-130			08/09/2016	
1,1,2-Trichloroethane	51.4	1.0	ug/L	50.00		103	70-130			08/09/2016	
1,1-Dichloroethane	48.6	1.0	ug/L	50.00		97.2	70-130			08/09/2016	
1,1-Dichloroethylene	48.7	1.0	ug/L	50.00		97.5	70-130			08/09/2016	
1,2,3-Trichlorobenzene	54.4	5.0	ug/L	50.00		109	70-130			08/09/2016	
1,2,3-Trichloropropane	45.9	1.0	ug/L	50.00		91.8	70-130			08/09/2016	
1,2,3-Trimethylbenzene	52.2	1.0	ug/L	50.00		104	70-130			08/09/2016	
1,2,4-Trichlorobenzene	57.1	5.0	ug/L	50.00		114	70-130			08/09/2016	
1,2,4-Trimethylbenzene	51.6	1.0	ug/L	50.00		103	70-130			08/09/2016	
1,2-Dibromo-3-chloropropane	51.3	5.0	ug/L	50.00		103	70-130			08/09/2016	
1,2-Dibromoethane	52.5	1.0	ug/L	50.00		105	70-130			08/09/2016	
1,2-Dichlorobenzene	52.7	1.0	ug/L	50.00		105	70-130			08/09/2016	
1,2-Dichloroethane	52.3	1.0	ug/L	50.00		105	70-130			08/09/2016	
1,2-Dichloropropane	50.2	1.0	ug/L	50.00		100	70-130			08/09/2016	
1,3,5-Trimethylbenzene	53.4	1.0	ug/L	50.00		107	70-130			08/09/2016	
1,3-Dichlorobenzene	53.1	1.0	ug/L	50.00		106	70-130			08/09/2016	
1,4-Dichlorobenzene	52.7	1.0	ug/L	50.00		105	70-130			08/09/2016	
2-Butanone (MEK)	72.9	5.0	ug/L	50.00		146	70-130			08/09/2016	A06, A09
2-Hexanone	65.1	5.0	ug/L	50.00		130	70-130			08/09/2016	A09
2-Methylnaphthalene	49.6	5.0	ug/L	50.00		99.3	70-130			08/09/2016	X
2-Propanone (acetone)	66.1	20	ug/L	50.00		132	70-130			08/09/2016	A09
4-Methyl-2-pentanone (MIBK)	54.9	5.0	ug/L	50.00		110	70-130			08/09/2016	
Acrylonitrile	51.8	5.0	ug/L	50.00		104	70-130			08/09/2016	
Benzene	51.5	1.0	ug/L	50.00		103	70-130			08/09/2016	
Bromobenzene	52.1	1.0	ug/L	50.00		104	70-130			08/09/2016	
Bromochloromethane	49.4	1.0	ug/L	50.00		98.9	70-130			08/09/2016	
Bromodichloromethane	51.4	1.0	ug/L	50.00		103	70-130			08/09/2016	
Bromoform	48.2	1.0	ug/L	50.00		96.4	70-130			08/09/2016	
Bromomethane	62.1	5.0	ug/L	50.00		124	70-130			08/09/2016	
Carbon disulfide	48.7	1.0	ug/L	50.00		97.4	70-130			08/09/2016	
Carbon tetrachloride	49.1	1.0	ug/L	50.00		98.3	70-130			08/09/2016	
Chlorobenzene	51.3	1.0	ug/L	50.00		103	70-130			08/09/2016	
Chloroethane	55.7	5.0	ug/L	50.00		111	70-130			08/09/2016	
Chloroform	49.5	1.0	ug/L	50.00		98.9	70-130			08/09/2016	
Chloromethane	73.4	5.0	ug/L	50.00		147	70-130			08/09/2016	A06, A09, A11
cis-1,2-Dichloroethylene	51.4	1.0	ug/L	50.00		103	70-130			08/09/2016	
cis-1,3-Dichloropropylene	52.3	1.0	ug/L	50.00		105	70-130			08/09/2016	
Cyclohexane	49.3	5.0	ug/L	50.00		98.6	70-130			08/09/2016	

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 B6H0905 - Method: 5030				**Prepared: 08/09/2016**							
LCS (B6H0905-BS1)											
Dibromochloromethane	52.1	1.0	ug/L	50.00		104	70-130			08/09/2016	
Dibromomethane	50.7	1.0	ug/L	50.00		101	70-130			08/09/2016	
Dichlorodifluoromethane	77.7	5.0	ug/L	50.00		155	70-130			08/09/2016	A09, A11
Diethyl ether	50.9	5.0	ug/L	50.00		102	70-130			08/09/2016	
Diisopropyl Ether	48.0	5.0	ug/L	50.00		95.9	70-130			08/09/2016	
Ethylbenzene	51.8	1.0	ug/L	50.00		104	70-130			08/09/2016	
Ethyltertiarybutylether	48.4	5.0	ug/L	50.00		96.8	70-130			08/09/2016	
Hexachloroethane	50.0	5.0	ug/L	50.00		100	70-130			08/09/2016	
Isopropylbenzene	54.4	1.0	ug/L	50.00		109	70-130			08/09/2016	
m & p - Xylene	103	2.0	ug/L	100.0		103	70-130			08/09/2016	
Methyl iodide	42.4	1.0	ug/L	50.00		84.9	70-130			08/09/2016	
Methylene chloride	51.8	5.0	ug/L	50.00		104	70-130			08/09/2016	
Methyltertiarybutylether	48.3	1.0	ug/L	50.00		96.7	70-130			08/09/2016	
Naphthalene	60.4	5.0	ug/L	50.00		121	70-130			08/09/2016	X
n-Butylbenzene	53.9	1.0	ug/L	50.00		108	70-130			08/09/2016	
n-Propylbenzene	54.6	1.0	ug/L	50.00		109	70-130			08/09/2016	
o-Xylene	50.8	1.0	ug/L	50.00		102	70-130			08/09/2016	
p-Isopropyl toluene	51.8	1.0	ug/L	50.00		104	70-130			08/09/2016	
sec-Butylbenzene	53.2	1.0	ug/L	50.00		106	70-130			08/09/2016	
Styrene	51.6	1.0	ug/L	50.00		103	70-130			08/09/2016	
tert-Butylbenzene	56.4	1.0	ug/L	50.00		113	70-130			08/09/2016	
tertiary Butyl Alcohol	253	50	ug/L	250.0		101	70-130			08/09/2016	
tertiaryAmylmethylether	48.8	5.0	ug/L	50.00		97.7	70-130			08/09/2016	
Tetrachloroethylene	49.8	1.0	ug/L	50.00		99.5	70-130			08/09/2016	
Tetrahydrofuran	59.7	5.0	ug/L	50.00		119	70-130			08/09/2016	
Toluene	51.4	1.0	ug/L	50.00		103	70-130			08/09/2016	
trans-1,2-Dichloroethylene	50.9	1.0	ug/L	50.00		102	70-130			08/09/2016	
trans-1,3-Dichloropropylene	51.3	1.0	ug/L	50.00		103	70-130			08/09/2016	
trans-1,4-Dichloro-2-butene	52.3	5.0	ug/L	50.00		105	70-130			08/09/2016	
Trichloroethylene	51.4	1.0	ug/L	50.00		103	70-130			08/09/2016	
Trichlorofluoromethane	53.5	1.0	ug/L	50.00		107	70-130			08/09/2016	
Vinyl chloride	60.8	1.0	ug/L	50.00		122	70-130			08/09/2016	
Surrogate: Bromofluorobenzene	*50.0*		ug/L	*50.00*		*100*	*85-115*			08/09/2016	
Surrogate: Dibromofluoromethane	*48.4*		ug/L	*50.00*		*96.7*	*82.7-115*			08/09/2016	
Surrogate: Toluene-d8	*49.2*		ug/L	*50.00*		*98.5*	*85-115*			08/09/2016	
Matrix Spike (B6H0905-MS1)	**Source: 1608040-02**										
1,1,1,2-Tetrachloroethane	51.1	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
1,1,1-Trichloroethane	49.7	1.0	ug/L	50.00	1.75	95.9	70-130			08/09/2016	
1,1,2,2-Tetrachloroethane	55.5	1.0	ug/L	50.00	ND	111	70-130			08/09/2016	
1,1,2-Trichloroethane	51.8	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
1,1-Dichloroethane	49.7	1.0	ug/L	50.00	ND	99.4	70-130			08/09/2016	
1,1-Dichloroethylene	49.6	1.0	ug/L	50.00	ND	99.1	70-130			08/09/2016	
1,2,3-Trichlorobenzene	49.9	5.0	ug/L	50.00	ND	99.8	70-130			08/09/2016	
1,2,3-Trichloropropane	46.0	1.0	ug/L	50.00	ND	92.0	70-130			08/09/2016	
1,2,3-Trimethylbenzene	51.6	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
1,2,4-Trichlorobenzene	51.1	5.0	ug/L	50.00	ND	102	70-130			08/09/2016	
1,2,4-Trimethylbenzene	51.9	1.0	ug/L	50.00	1.47	101	70-130			08/09/2016	

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 B6H0905 - Method: 5030				**Prepared: 08/09/2016**							
Matrix Spike (B6H0905-MS1)	**Source: 1608040-02**										
1,2-Dibromo-3-chloropropane	51.9	5.0	ug/L	50.00	ND	104	70-130			08/09/2016	
1,2-Dibromoethane	52.9	1.0	ug/L	50.00	ND	106	70-130			08/09/2016	
1,2-Dichlorobenzene	51.3	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
1,2-Dichloroethane	52.7	1.0	ug/L	50.00	ND	105	70-130			08/09/2016	
1,2-Dichloropropane	51.0	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
1,3,5-Trimethylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			08/09/2016	
1,3-Dichlorobenzene	50.8	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
1,4-Dichlorobenzene	51.1	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
2-Butanone (MEK)	48.8	5.0	ug/L	50.00	ND	97.7	70-130			08/09/2016	A06
2-Hexanone	50.0	5.0	ug/L	50.00	ND	100	70-130			08/09/2016	
2-Methylnaphthalene	40.1	5.0	ug/L	50.00	ND	80.2	70-130			08/09/2016	X
2-Propanone (acetone)	36.6	20	ug/L	50.00	ND	73.2	70-130			08/09/2016	
4-Methyl-2-pentanone (MIBK)	56.6	5.0	ug/L	50.00	ND	113	70-130			08/09/2016	
Acrylonitrile	53.8	5.0	ug/L	50.00	ND	108	70-130			08/09/2016	
Benzene	52.2	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
Bromobenzene	51.4	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Bromochloromethane	50.0	1.0	ug/L	50.00	ND	100	70-130			08/09/2016	
Bromodichloromethane	51.0	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
Bromoform	47.8	1.0	ug/L	50.00	ND	95.6	70-130			08/09/2016	
Bromomethane	59.5	5.0	ug/L	50.00	ND	119	70-130			08/09/2016	
Carbon disulfide	48.8	1.0	ug/L	50.00	ND	97.6	70-130			08/09/2016	
Carbon tetrachloride	49.4	1.0	ug/L	50.00	ND	98.8	70-130			08/09/2016	
Chlorobenzene	52.5	1.0	ug/L	50.00	ND	105	70-130			08/09/2016	
Chloroethane	56.1	5.0	ug/L	50.00	ND	112	70-130			08/09/2016	
Chloroform	50.6	1.0	ug/L	50.00	ND	101	70-130			08/09/2016	
Chloromethane	72.5	5.0	ug/L	50.00	ND	145	70-130			08/09/2016	A04, A06, A11
cis-1,2-Dichloroethylene	52.8	1.0	ug/L	50.00	ND	106	70-130			08/09/2016	
cis-1,3-Dichloropropylene	51.7	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Cyclohexane	52.4	5.0	ug/L	50.00	ND	105	70-130			08/09/2016	
Dibromochloromethane	52.2	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
Dibromomethane	51.5	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
Dichlorodifluoromethane	73.0	5.0	ug/L	50.00	ND	146	70-130			08/09/2016	A04, A11
Diethyl ether	51.9	5.0	ug/L	50.00	ND	104	70-130			08/09/2016	
Diisopropyl Ether	55.8	5.0	ug/L	50.00	ND	112	70-130			08/09/2016	
Ethylbenzene	52.1	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
Ethyltertiarybutylether	49.2	5.0	ug/L	50.00	ND	98.5	70-130			08/09/2016	
Hexachloroethane	48.0	5.0	ug/L	50.00	ND	96.0	70-130			08/09/2016	
Isopropylbenzene	54.0	1.0	ug/L	50.00	ND	108	70-130			08/09/2016	
m & p - Xylene	103	2.0	ug/L	100.0	ND	103	70-130			08/09/2016	
Methyl iodide	32.9	1.0	ug/L	50.00	ND	65.8	70-130			08/09/2016	A03
Methylene chloride	54.2	5.0	ug/L	50.00	ND	108	70-130			08/09/2016	
Methyltertiarybutylether	50.0	1.0	ug/L	50.00	ND	100	70-130			08/09/2016	
Naphthalene	57.8	5.0	ug/L	50.00	ND	116	70-130			08/09/2016	X
n-Butylbenzene	50.0	1.0	ug/L	50.00	ND	100	70-130			08/09/2016	
n-Propylbenzene	53.4	1.0	ug/L	50.00	ND	107	70-130			08/09/2016	
o-Xylene	51.8	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
p-Isopropyl toluene	49.8	1.0	ug/L	50.00	ND	99.6	70-130			08/09/2016	

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 B6H0905 - Method: 5030				**Prepared: 08/09/2016**							
Matrix Spike (B6H0905-MS1)	**Source: 1608040-02**										
sec-Butylbenzene	50.8	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
Styrene	50.9	1.0	ug/L	50.00	ND	102	70-130			08/09/2016	
tert-Butylbenzene	55.4	1.0	ug/L	50.00	ND	111	70-130			08/09/2016	
tertiary Butyl Alcohol	304	50	ug/L	250.0	ND	121	70-130			08/09/2016	
tertiaryAmylmethylether	49.3	5.0	ug/L	50.00	ND	98.6	70-130			08/09/2016	
Tetrachloroethylene	48.0	1.0	ug/L	50.00	ND	96.1	70-130			08/09/2016	
Tetrahydrofuran	64.1	5.0	ug/L	50.00	ND	128	70-130			08/09/2016	
Toluene	51.6	1.0	ug/L	50.00	ND	103	70-130			08/09/2016	
trans-1,2-Dichloroethylene	52.0	1.0	ug/L	50.00	ND	104	70-130			08/09/2016	
trans-1,3-Dichloropropylene	50.7	1.0	ug/L	50.00	ND	101	70-130			08/09/2016	
trans-1,4-Dichloro-2-butene	51.9	5.0	ug/L	50.00	ND	104	70-130			08/09/2016	
Trichloroethylene	50.0	1.0	ug/L	50.00	ND	100	70-130			08/09/2016	
Trichlorofluoromethane	53.8	1.0	ug/L	50.00	ND	108	70-130			08/09/2016	
Vinyl chloride	59.3	1.0	ug/L	50.00	ND	119	70-130			08/09/2016	
Surrogate: Bromofluorobenzene	*50.8*		ug/L	*50.00*		*102*	*85-115*			08/09/2016	
Surrogate: Dibromofluoromethane	*49.6*		ug/L	*50.00*		*99.2*	*82.7-115*			08/09/2016	
Surrogate: Toluene-d8	*49.9*		ug/L	*50.00*		*99.9*	*85-115*			08/09/2016	
Matrix Spike Dup (B6H0905-MSD1)	**Source: 1608040-02**										
1,1,1,2-Tetrachloroethane	50.7	1.0	ug/L	50.00	ND	101	70-130	0.800	30	08/09/2016	
1,1,1-Trichloroethane	48.0	1.0	ug/L	50.00	1.75	92.4	70-130	3.61	30	08/09/2016	
1,1,2,2-Tetrachloroethane	54.9	1.0	ug/L	50.00	ND	110	70-130	1.14	30	08/09/2016	
1,1,2-Trichloroethane	51.4	1.0	ug/L	50.00	ND	103	70-130	0.722	30	08/09/2016	
1,1-Dichloroethane	47.9	1.0	ug/L	50.00	ND	95.9	70-130	3.64	30	08/09/2016	
1,1-Dichloroethylene	46.7	1.0	ug/L	50.00	ND	93.4	70-130	5.94	30	08/09/2016	
1,2,3-Trichlorobenzene	50.4	5.0	ug/L	50.00	ND	101	70-130	0.938	30	08/09/2016	
1,2,3-Trichloropropane	46.5	1.0	ug/L	50.00	ND	92.9	70-130	1.05	30	08/09/2016	
1,2,3-Trimethylbenzene	51.7	1.0	ug/L	50.00	ND	103	70-130	0.0345	30	08/09/2016	
1,2,4-Trichlorobenzene	52.6	5.0	ug/L	50.00	ND	105	70-130	2.79	30	08/09/2016	
1,2,4-Trimethylbenzene	51.8	1.0	ug/L	50.00	1.47	101	70-130	0.210	30	08/09/2016	
1,2-Dibromo-3-chloropropane	51.8	5.0	ug/L	50.00	ND	104	70-130	0.197	30	08/09/2016	
1,2-Dibromoethane	51.8	1.0	ug/L	50.00	ND	104	70-130	2.01	30	08/09/2016	
1,2-Dichlorobenzene	51.6	1.0	ug/L	50.00	ND	103	70-130	0.644	30	08/09/2016	
1,2-Dichloroethane	52.4	1.0	ug/L	50.00	ND	105	70-130	0.546	30	08/09/2016	
1,2-Dichloropropane	50.0	1.0	ug/L	50.00	ND	100	70-130	1.84	30	08/09/2016	
1,3,5-Trimethylbenzene	52.7	1.0	ug/L	50.00	ND	105	70-130	0.107	30	08/09/2016	
1,3-Dichlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130	0.488	30	08/09/2016	
1,4-Dichlorobenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	1.17	30	08/09/2016	
2-Butanone (MEK)	47.9	5.0	ug/L	50.00	ND	95.7	70-130	2.02	30	08/09/2016	A06
2-Hexanone	50.2	5.0	ug/L	50.00	ND	100	70-130	0.284	30	08/09/2016	
2-Methylnaphthalene	45.7	5.0	ug/L	50.00	ND	91.3	70-130	12.9	30	08/09/2016	X
2-Propanone (acetone)	35.1	20	ug/L	50.00	ND	70.3	70-130	4.01	30	08/09/2016	
4-Methyl-2-pentanone (MIBK)	55.4	5.0	ug/L	50.00	ND	111	70-130	2.12	30	08/09/2016	
Acrylonitrile	52.1	5.0	ug/L	50.00	ND	104	70-130	3.25	30	08/09/2016	
Benzene	50.2	1.0	ug/L	50.00	ND	100	70-130	3.94	30	08/09/2016	
Bromobenzene	52.4	1.0	ug/L	50.00	ND	105	70-130	1.85	30	08/09/2016	
Bromochloromethane	48.2	1.0	ug/L	50.00	ND	96.5	70-130	3.64	30	08/09/2016	
Bromodichloromethane	51.2	1.0	ug/L	50.00	ND	102	70-130	0.515	30	08/09/2016	

Lab Work Order # 1608057

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 B6H0905 - Method: 5030				**Prepared: 08/09/2016**							
Matrix Spike Dup (B6H0905-MSD1)	**Source: 1608040-02**										
Bromoform	48.1	1.0	ug/L	50.00	ND	96.3	70-130	0.677	30	08/09/2016	
Bromomethane	58.4	5.0	ug/L	50.00	ND	117	70-130	1.87	30	08/09/2016	
Carbon disulfide	46.9	1.0	ug/L	50.00	ND	93.8	70-130	4.01	30	08/09/2016	
Carbon tetrachloride	47.1	1.0	ug/L	50.00	ND	94.3	70-130	4.71	30	08/09/2016	
Chlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130	3.60	30	08/09/2016	
Chloroethane	54.0	5.0	ug/L	50.00	ND	108	70-130	3.83	30	08/09/2016	
Chloroform	48.5	1.0	ug/L	50.00	ND	97.0	70-130	4.23	30	08/09/2016	
Chloromethane	70.5	5.0	ug/L	50.00	ND	141	70-130	2.72	30	08/09/2016	A04, A06, A11
cis-1,2-Dichloroethylene	51.1	1.0	ug/L	50.00	ND	102	70-130	3.27	30	08/09/2016	
cis-1,3-Dichloropropylene	51.2	1.0	ug/L	50.00	ND	102	70-130	1.11	30	08/09/2016	
Cyclohexane	47.6	5.0	ug/L	50.00	ND	95.1	70-130	9.71	30	08/09/2016	
Dibromochloromethane	52.1	1.0	ug/L	50.00	ND	104	70-130	0.177	30	08/09/2016	
Dibromomethane	50.6	1.0	ug/L	50.00	ND	101	70-130	1.69	30	08/09/2016	
Dichlorodifluoromethane	76.7	5.0	ug/L	50.00	ND	153	70-130	4.99	30	08/09/2016	A04, A11
Diethyl ether	51.5	5.0	ug/L	50.00	ND	103	70-130	0.697	30	08/09/2016	
Diisopropyl Ether	50.6	5.0	ug/L	50.00	ND	101	70-130	9.67	30	08/09/2016	
Ethylbenzene	51.3	1.0	ug/L	50.00	ND	103	70-130	1.55	30	08/09/2016	
Ethyltertiarybutylether	48.6	5.0	ug/L	50.00	ND	97.2	70-130	1.26	30	08/09/2016	
Hexachloroethane	48.0	5.0	ug/L	50.00	ND	96.0	70-130	0.000207	30	08/09/2016	
Isopropylbenzene	53.3	1.0	ug/L	50.00	ND	107	70-130	1.33	30	08/09/2016	
m & p - Xylene	99.3	2.0	ug/L	100.0	ND	99.3	70-130	3.25	30	08/09/2016	
Methyl iodide	36.9	1.0	ug/L	50.00	ND	73.8	70-130	11.5	30	08/09/2016	
Methylene chloride	52.4	5.0	ug/L	50.00	ND	105	70-130	3.41	30	08/09/2016	
Methyltertiarybutylether	48.7	1.0	ug/L	50.00	ND	97.4	70-130	2.65	30	08/09/2016	
Naphthalene	59.8	5.0	ug/L	50.00	ND	120	70-130	3.49	30	08/09/2016	X
n-Butylbenzene	48.4	1.0	ug/L	50.00	ND	96.7	70-130	3.31	30	08/09/2016	
n-Propylbenzene	52.8	1.0	ug/L	50.00	ND	106	70-130	1.10	30	08/09/2016	
o-Xylene	50.4	1.0	ug/L	50.00	ND	101	70-130	2.75	30	08/09/2016	
p-Isopropyl toluene	48.5	1.0	ug/L	50.00	ND	97.1	70-130	2.61	30	08/09/2016	
sec-Butylbenzene	49.9	1.0	ug/L	50.00	ND	99.8	70-130	1.67	30	08/09/2016	
Styrene	50.0	1.0	ug/L	50.00	ND	99.9	70-130	1.89	30	08/09/2016	
tert-Butylbenzene	55.0	1.0	ug/L	50.00	ND	110	70-130	0.806	30	08/09/2016	
tertiary Butyl Alcohol	312	50	ug/L	250.0	ND	125	70-130	2.59	30	08/09/2016	
tertiaryAmylmethylether	48.7	5.0	ug/L	50.00	ND	97.5	70-130	1.21	30	08/09/2016	
Tetrachloroethylene	46.6	1.0	ug/L	50.00	ND	93.2	70-130	3.02	30	08/09/2016	
Tetrahydrofuran	59.2	5.0	ug/L	50.00	ND	118	70-130	7.81	30	08/09/2016	
Toluene	50.3	1.0	ug/L	50.00	ND	101	70-130	2.50	30	08/09/2016	
trans-1,2-Dichloroethylene	50.2	1.0	ug/L	50.00	ND	100	70-130	3.55	30	08/09/2016	
trans-1,3-Dichloropropylene	50.1	1.0	ug/L	50.00	ND	100	70-130	1.26	30	08/09/2016	
trans-1,4-Dichloro-2-butene	51.7	5.0	ug/L	50.00	ND	103	70-130	0.238	30	08/09/2016	
Trichloroethylene	48.2	1.0	ug/L	50.00	ND	96.3	70-130	3.72	30	08/09/2016	
Trichlorofluoromethane	52.0	1.0	ug/L	50.00	ND	104	70-130	3.33	30	08/09/2016	
Vinyl chloride	58.6	1.0	ug/L	50.00	ND	117	70-130	1.21	30	08/09/2016	
Surrogate: Bromofluorobenzene	*50.5*		ug/L	*50.00*		*101*	*85-115*			08/09/2016	
Surrogate: Dibromofluoromethane	*49.8*		ug/L	*50.00*		*99.7*	*82.7-115*			08/09/2016	
Surrogate: Toluene-d8	*49.6*		ug/L	*50.00*		*99.2*	*85-115*			08/09/2016	

Lab Work Order # 1608057

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

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 B6H1205 - Method: 5030				**Prepared: 08/09/2016**							
Blank (B6H1205-BLK1)											
1,4-dioxane	ND	1.0	ug/L							08/09/2016	
LCS (B6H1205-BS1)											
1,4-dioxane	9.58	1.0	ug/L	10.00		95.8	70-130			08/09/2016	
Matrix Spike (B6H1205-MS1)	**Source: 1608057-02**										
1,4-dioxane	8.63	1.0	ug/L	10.00	ND	86.3	70-130			08/09/2016	
Matrix Spike Dup (B6H1205-MSD1)	**Source: 1608057-02**										
1,4-dioxane	10.2	1.0	ug/L	10.00	ND	102	70-130	16.6	30	08/09/2016	

Michigan Department of Environmental Quality
Laboratory Services Section

Analysis Request Sheet

Lab Work Order Number	Project Name	Matrix
1608057	Gelman Sciences	WATER

Site Code/Project Number	AY	CC Email 1	Project TAT Days	Sample Collector
81000018	16	adelmanm@michigan.gov		DAN HAMEL
Dept-Division-District	**Index**	**CC Email 2**	**Project Due Date**	**Sample Collector Phone**
DEQ-RRD-Jackson	44410			517-780-7832
State Project Manager	**PCA**	**CC Email 3**		**Contract Firm**
Dan Hamel	30740			
State Project Manager Email	**Project**	**Overflow Lab Choice 1**	**Accept Analysis hold time codes**	**Contract Firm Primary Contact**
hameld@michigan.gov	451586			
State Project Manager Phone	**Phase**	**Overflow Lab Choice 2**		**Primary Contact Phone**
517-780-7832	00			

	Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments
1	01	SEEP - 401 7th	8/1/16	1056	6	HCL PRESERVED VOA VIALS
2	02	SEEP - 719 WASHINTON	8/1/16	1147	6	HCL PRESERVED VOA VIALS
3	03	WEST PARK POND	8/1/16	1247	6	HCL PRESERVED VOA VIALS
4						
5						
6						
7						
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
GCN	Available Cyanide - CN (Amenable / Weak Acid Dissociable)	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.	DANIEL HAMEL	Terry Hyde DEQ	8/3/16 1200
Signature:	Daniel Hamel	Terry Hyde DEQ	
Print Name & Org.	Terry Hyde DEQ	Melissa M. DEQ	8/3/16 1610
Signature:	Terry Hyde		
Print Name & Org.			
Signature:			