



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

02 March 2016

Work Order: 1602153

Price: \$1,160.00

Diane Kavanaugh Vetort
MDEQ-AQD-JACKSON
301 E. Louis Glick Highway
Jackson, MI 49201-1556
RE: ARBOR HILLS LF

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



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

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

Project: ARBOR HILLS LF
Site Code: LB041660
Project Manager: Diane Kavanaugh Vetort

Reported:
03/02/2016

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
S.Glacier Rd (subdivision)	1602153-01	Air	02/26/2016	02/26/2016	

Notes and Definitions

- Y11 Unidentified peaks present in sample.
- T Reported value is less than the reporting limit (RL). Result is estimated.
- ND Indicates compound analyzed for but not detected
- RL Reporting Limit
- NA Not Applicable

Case Narrative

Priority Samples



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 ENVIRONMENTAL LABORATORY

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

Client ID: S.Glacier Rd (subdivision)
 Lab ID: 1602153-01

CAS #	Analyte	Result	RL	Units	MDL	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
									See note Y11
71-55-6	1,1,1-Trichloroethane	ND	1.6	ug/m3	0.21	03/01/2016	B6C0104	TO-15	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/m3	0.32	03/01/2016	B6C0104	TO-15	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.3	ug/m3	0.22	03/01/2016	B6C0104	TO-15	
79-00-5	1,1,2-Trichloroethane	ND	1.6	ug/m3	0.097	03/01/2016	B6C0104	TO-15	
75-34-3	1,1-Dichloroethane	ND	1.2	ug/m3	0.17	03/01/2016	B6C0104	TO-15	
75-35-4	1,1-Dichloroethylene	ND	1.2	ug/m3	0.15	03/01/2016	B6C0104	TO-15	
120-82-1	1,2,4-Trichlorobenzene	ND	2.2	ug/m3	1.4	03/01/2016	B6C0104	TO-15	
95-63-6	1,2,4-Trimethylbenzene	ND	1.5	ug/m3	0.30	03/01/2016	B6C0104	TO-15	
106-93-4	1,2-Dibromoethane	ND	2.3	ug/m3	0.30	03/01/2016	B6C0104	TO-15	
76-14-2	1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.1	ug/m3	0.34	03/01/2016	B6C0104	TO-15	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ug/m3	0.37	03/01/2016	B6C0104	TO-15	
107-06-2	1,2-Dichloroethane	ND	1.2	ug/m3	0.19	03/01/2016	B6C0104	TO-15	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/m3	1.1	03/01/2016	B6C0104	TO-15	
108-67-8	1,3,5-Trimethylbenzene	ND	1.5	ug/m3	0.24	03/01/2016	B6C0104	TO-15	
106-99-0	1,3-Butadiene	ND	0.66	ug/m3	0.12	03/01/2016	B6C0104	TO-15	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ug/m3	0.28	03/01/2016	B6C0104	TO-15	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ug/m3	0.38	03/01/2016	B6C0104	TO-15	
540-84-1	2,2,4-Trimethylpentane	ND	1.4	ug/m3	0.15	03/01/2016	B6C0104	TO-15	
78-93-3	2-Butanone (MEK)	1.7	15	ug/m3	1.1	03/01/2016	B6C0104	TO-15	T
126-99-8	2-Chloro-1,3-butadiene	ND	1.1	ug/m3	0.11	03/01/2016	B6C0104	TO-15	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.1	ug/m3	0.86	03/01/2016	B6C0104	TO-15	
75-05-8	Acetonitrile	ND	1.7	ug/m3	0.50	03/01/2016	B6C0104	TO-15	
107-13-1	Acrylonitrile	ND	1.1	ug/m3	0.79	03/01/2016	B6C0104	TO-15	
71-43-2	Benzene	0.69	0.95	ug/m3	0.095	03/01/2016	B6C0104	TO-15	T
75-27-4	Bromodichloromethane	ND	2.0	ug/m3	0.15	03/01/2016	B6C0104	TO-15	
75-25-2	Bromoform	ND	3.1	ug/m3	0.35	03/01/2016	B6C0104	TO-15	
74-83-9	Bromomethane	ND	1.2	ug/m3	0.22	03/01/2016	B6C0104	TO-15	
56-23-5	Carbon tetrachloride	ND	1.9	ug/m3	0.23	03/01/2016	B6C0104	TO-15	
108-90-7	Chlorobenzene	ND	1.4	ug/m3	0.21	03/01/2016	B6C0104	TO-15	
75-00-3	Chloroethane	ND	0.78	ug/m3	0.12	03/01/2016	B6C0104	TO-15	
67-66-3	Chloroform	ND	1.4	ug/m3	0.12	03/01/2016	B6C0104	TO-15	
74-87-3	Chloromethane	1.6	0.61	ug/m3	0.16	03/01/2016	B6C0104	TO-15	
156-59-2	cis-1,2-Dichloroethylene	ND	1.2	ug/m3	0.12	03/01/2016	B6C0104	TO-15	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.3	ug/m3	0.13	03/01/2016	B6C0104	TO-15	
124-48-1	Dibromochloromethane	ND	2.5	ug/m3	0.29	03/01/2016	B6C0104	TO-15	



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

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

Client ID: S.Glacier Rd (subdivision)
Lab ID: 1602153-01

CAS #	Analyte	Result	RL	Units	MDL	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									See note Y11
75-71-8	Dichlorodifluoromethane	2.1	1.5	ug/m3	0.25	03/01/2016	B6C0104	TO-15	
100-41-4	Ethylbenzene	0.54	1.3	ug/m3	0.29	03/01/2016	B6C0104	TO-15	T
87-68-3	Hexachlorobutadiene	ND	3.2	ug/m3	0.89	03/01/2016	B6C0104	TO-15	
110-54-3	Hexane	0.47	3.5	ug/m3	0.086	03/01/2016	B6C0104	TO-15	T
1330-20-7	m & p - Xylene	1.2	1.3	ug/m3	0.73	03/01/2016	B6C0104	TO-15	T
75-09-2	Methylene chloride	0.70	1.0	ug/m3	0.34	03/01/2016	B6C0104	TO-15	T
1634-04-4	Methyltertiarybutylether	ND	1.8	ug/m3	0.19	03/01/2016	B6C0104	TO-15	
95-47-6	o-Xylene	ND	1.3	ug/m3	0.33	03/01/2016	B6C0104	TO-15	
100-42-5	Styrene	ND	1.3	ug/m3	0.76	03/01/2016	B6C0104	TO-15	
127-18-4	Tetrachloroethylene	ND	2.0	ug/m3	0.23	03/01/2016	B6C0104	TO-15	
108-88-3	Toluene	3.2	1.1	ug/m3	0.44	03/01/2016	B6C0104	TO-15	
156-60-5	trans-1,2-Dichloroethylene	ND	1.2	ug/m3	0.15	03/01/2016	B6C0104	TO-15	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.3	ug/m3	0.089	03/01/2016	B6C0104	TO-15	
79-01-6	Trichloroethylene	ND	1.6	ug/m3	0.17	03/01/2016	B6C0104	TO-15	
75-69-4	Trichlorofluoromethane	1.5	1.7	ug/m3	0.23	03/01/2016	B6C0104	TO-15	T
75-01-4	Vinyl chloride	ND	0.76	ug/m3	0.13	03/01/2016	B6C0104	TO-15	
Organics-Methane									
74-84-0	Ethane	ND	20	ppmv	18	03/01/2016	B6C0105	8015	
74-85-1	Ethylene	ND	20	ppmv	18	03/01/2016	B6C0105	8015	
74-82-8	Methane	ND	20	ppmv	18	03/01/2016	B6C0105	8015	



Analysis Request Sheet

Lab Work Order Number

Project Name

Matrix

11602153

ARBOR HILLS LF

AIR

Site Code/Project Number

AY

CC Email 1

Project TAT Days

Sample Collector

D. Kavanaugh Vefort

Dept-Division-District

Index

CC Email 2

Project Due Date

Sample Collector Phone

DEQ-ARD-Jackson

41110

KavanaughL@michigan.gov

517 780-7864

State Project Manager

PCA

CC Email 3

Accept Analysis hold time codes

Contract Firm

Diane Kavanaugh Vefort

State Project Manager Email

Project

Overflow Lab Choice 1

Contract Firm Primary Contact

KavanaughL@michigan.gov

State Project Manager Phone

Phase

Overflow Lab Choice 2

Primary Contact Phone

517 780 7864

Lab Use Only	Field Sample Identification	Collection Date	Collection Time	Container Count	Comments	Regulator ID	Canister/Bottle Vac Number
1	S. Glacier Rd (Subdivision)	2-26/16	8:23AM		TAG Anderson No. 03614	NA	3614
2							
3							
4							
5							
6							
7							
8							
9							
10							

ORGANIC CHEMISTRY

VOA - Volatile Organic Analysis

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

METH - Methane, Ethane, Ethene

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

To-15 List

Grab Sample

Chain of Custody	Relinquished by	Received By	Date / Time
	Print Name & Org. <i>Diane Kavanaugh Vefort</i>	<i>Alex Whitehead</i>	<i>2/26/16</i>
	Signature: <i>Diane Kavanaugh Vefort</i>	<i>Alex Whitehead</i>	
	Print Name & Org. <i>Alex Whitehead DEQ, DWHRP</i>	<i>Susan Kilmer</i>	<i>2/26/16</i>
Signature: <i>Alex Whitehead</i>	<i>Susan Kilmer</i>	<i>3:30</i>	
Print Name & Org. <i>Susan Kilmer DEQ-AQD</i>	<i>Melissa Smith</i>	<i>2/26/16 11:10</i>	
Signature: <i>Susan Kilmer</i>	<i>Melissa Smith</i>		