Laboratory Analysis Report

CLIENT : Montrose Air Quality Services, LLC
PROJECT NO : 190197
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 02/06/2019
DATE REPORTED : 02/07/2019

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	2A-West			Sample Reporting Limit (PQL) (MRLxDF's)	1-North			Sample Reporting Limit (SRL) (PQLxDF's)	Practical Quantitation Limit (PQL)
AAC ID	190197-116236				190197-116237				
Date Sampled	02/02/2019				02/02/2019				
Date Analyzed	02/06/2019				02/06/2019				
Can Dilution Factor	1.72				1.69				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.29	J	1.0	0.43	0.24	J	1.0	0.42	0.25
Propene	0.47	J	1.0	0.86	1.33		1.0	0.84	0.50
Dichlorodifluoromethane	0.45		1.0	0.43	0.46		1.0	0.42	0.25
Chloromethane	0.60		1.0	0.43	0.56		1.0	0.42	0.25
Dichlorotetrafluoroethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Vinyl Chloride	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,3-Butadiene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Bromomethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Chloroethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Dichlorofluoromethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Ethanol	<SQL	U	1.0	1.72	2.91		1.0	1.69	1.00
Vinyl Bromide	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Acrolein	0.19	J	1.0	0.90	<SQL	U	1.0	0.84	0.50
Acetone	9.72		1.0	1.72	4.00		1.0	1.69	1.00
Trichlorofluoromethane	0.21	J	1.0	0.43	0.20	J	1.0	0.42	0.25
2-Propanol (IPA)	<SQL	U	1.0	1.72	0.22	J	1.0	1.69	1.00
Acrylonitrile	<SQL	U	1.0	1.72	<SQL	U	1.0	1.69	1.00
1,1-Dichloroethene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Methylene Chloride (DCM)	<SQL	U	1.0	0.86	0.25	J	1.0	0.84	0.50
Tert Butanol (TBA)	3.12		1.0	0.43	0.25	J	1.0	0.42	0.25
Allyl Chloride	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Carbon Disulfide	<SQL	U	1.0	0.86	0.30	J	1.0	0.84	0.50
Trichlorotrifluoroethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
trans-1,2-Dichloroethene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,1-Dichloroethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Methyl Tert Butyl Ether (MTBE)	0.22	J	1.0	0.43	<SQL	U	1.0	0.42	0.25
Vinyl Acetate	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
2-Butanone (MEK)	0.43	J	1.0	0.86	0.59	J	1.0	0.84	0.50
cis-1,2-Dichloroethene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Hexane	0.24	J	1.0	0.86	0.39	J	1.0	0.84	0.50
Chloroform	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Ethyl Acetate	<SQL	U	1.0	0.86	<SQL	U	1.0	0.84	0.50
Tetrahydrofuran	0.21	J	1.0	0.86	<SQL	U	1.0	0.84	0.50
1,2-Dichloroethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,1,1-Trichloroethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25

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VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

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AAC ID	190197-116236				190197-116237				
Date Sampled	02/02/2019				02/02/2019				
Date Analyzed	02/06/2019				02/06/2019				
Can Dilution Factor	1.72				1.69				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	0.33	J	1.0	0.86	0.30	J	1.0	0.84	0.50
Carbon Tetrachloride	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Cyclohexane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,2-Dichloropropane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Bromodichloromethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,4-Dioxane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Trichloroethene (TCE)	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
2,2,4-Trimethylpentane	<SQL	U	1.0	0.43	0.19	J	1.0	0.42	0.25
Methyl Methacrylate	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Heptane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
cis-1,3-Dichloropropene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
4-Methyl-2-pentanone (MiBK)	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
trans-1,3-Dichloropropene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,1,2-Trichloroethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Toluene	0.40	J	1.0	0.86	0.37	J	1.0	0.84	0.50
2-Hexanone (MBK)	<SQL	U	1.0	0.86	<SQL	U	1.0	0.84	0.50
Dibromochloromethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,2-Dibromoethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Tetrachloroethene (PCE)	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Chlorobenzene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Ethylbenzene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
m & p-Xylenes	<SQL	U	1.0	0.86	<SQL	U	1.0	0.84	0.50
Bromoform	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Styrene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,1,2,2-Tetrachloroethane	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
o-Xylene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Isopropylbenzene (Cumene)	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
2-Chlorotoluene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
4-Ethyltoluene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,3,5-Trimethylbenzene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,2,4-Trimethylbenzene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
Benzyl Chloride (a-Chlorotoluene)	<SQL	U	1.0	0.86	<SQL	U	1.0	0.84	0.50
1,3-Dichlorobenzene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,4-Dichlorobenzene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,2-Dichlorobenzene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
1,2,4-Trichlorobenzene	<SQL	U	1.0	0.86	<SQL	U	1.0	0.84	0.50
Naphthalene	<SQL	U	1.0	0.86	<SQL	U	1.0	0.84	0.50
Hexachlorobutadiene	<SQL	U	1.0	0.43	<SQL	U	1.0	0.42	0.25
BFB-Surrogate Std. % Recovery	98%				98%				70-130%

U - Compound was analyzed for, but was not detected at or above the SQL (Sample Quantitation Limit).
J - Analyte was detected. However the analyte concentration is an estimated value,
which is between the Sample Reporting Limit (SRL) and the Sample Quantitation Limit (SQL).
SQL - Sample Quantitation Limit is the Method Detection Limit (MDL) x Dilution Factors.

Marcus Hueppe
Laboratory Director

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VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	4-East			Sample Reporting Limit (PQL) (MRLxDF's)	MTMS			Sample Reporting Limit (SRL) (PQLxDF's)	Practical Quantitation Limit (PQL)
AAC ID	190197-116238				190197-116239				
Date Sampled	02/02/2019				02/02/2019				
Date Analyzed	02/06/2019				02/06/2019				
Can Dilution Factor	1.46				1.72				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Chlorodifluoromethane	0.22	J	1.0	0.37	0.19	J	1.0	0.43	0.25
Propene	0.42	J	1.0	0.73	0.26	J	1.0	0.86	0.50
Dichlorodifluoromethane	0.47		1.0	0.37	0.46		1.0	0.43	0.25
Chloromethane	0.48		1.0	0.37	0.57		1.0	0.43	0.25
Dichlorotetrafluoroethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Vinyl Chloride	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,3-Butadiene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Bromomethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Chloroethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Dichlorofluoromethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Ethanol	3.73		1.0	1.46	2.76		1.0	1.72	1.00
Vinyl Bromide	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Acrolein	<SQL	U	1.0	0.70	<SQL	U	1.0	0.86	0.50
Acetone	2.46		1.0	1.46	2.81		1.0	1.72	1.00
Trichlorofluoromethane	0.20	J	1.0	0.37	0.22	J	1.0	0.43	0.25
2-Propanol (IPA)	0.31	J	1.0	1.46	0.36	J	1.0	1.72	1.00
Acrylonitrile	<SQL	U	1.0	1.46	<SQL	U	1.0	1.72	1.00
1,1-Dichloroethene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Methylene Chloride (DCM)	<SQL	U	1.0	0.73	<SQL	U	1.0	0.86	0.50
Tert Butanol (TBA)	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Allyl Chloride	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Carbon Disulfide	<SQL	U	1.0	0.73	<SQL	U	1.0	0.86	0.50
Trichlorotrifluoroethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
trans-1,2-Dichloroethene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,1-Dichloroethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Methyl Tert Butyl Ether (MTBE)	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Vinyl Acetate	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
2-Butanone (MEK)	0.39	J	1.0	0.73	0.40	J	1.0	0.86	0.50
cis-1,2-Dichloroethene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Hexane	0.54	J	1.0	0.73	0.19	J	1.0	0.86	0.50
Chloroform	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Ethyl Acetate	<SQL	U	1.0	0.73	<SQL	U	1.0	0.86	0.50
Tetrahydrofuran	<SQL	U	1.0	0.73	<SQL	U	1.0	0.86	0.50
1,2-Dichloroethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,1,1-Trichloroethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25

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AAC ID	190197-116238				190197-116239				
Date Sampled	02/02/2019				02/02/2019				
Date Analyzed	02/06/2019				02/06/2019				
Can Dilution Factor	1.46				1.72				
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Benzene	0.37	J	1.0	0.73	0.28	J	1.0	0.86	0.50
Carbon Tetrachloride	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Cyclohexane	0.13	J	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,2-Dichloropropane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Bromodichloromethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,4-Dioxane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Trichloroethene (TCE)	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
2,2,4-Trimethylpentane	0.89		1.0	0.37	<SQL	U	1.0	0.43	0.25
Methyl Methacrylate	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Heptane	0.22	J	1.0	0.37	<SQL	U	1.0	0.43	0.25
cis-1,3-Dichloropropene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
4-Methyl-2-pentanone (MiBK)	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
trans-1,3-Dichloropropene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,1,2-Trichloroethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Toluene	0.94		1.0	0.73	0.38	J	1.0	0.86	0.50
2-Hexanone (MBK)	<SQL	U	1.0	0.73	<SQL	U	1.0	0.86	0.50
Dibromochloromethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,2-Dibromoethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Tetrachloroethene (PCE)	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Chlorobenzene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Ethylbenzene	0.09	J	1.0	0.37	<SQL	U	1.0	0.43	0.25
m & p-Xylenes	0.26	J	1.0	0.73	<SQL	U	1.0	0.86	0.50
Bromoform	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
Styrene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,1,2,2-Tetrachloroethane	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
o-Xylene	0.10	J	1.0	0.37	<SQL	U	1.0	0.43	0.25
Isopropylbenzene (Cumene)	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
2-Chlorotoluene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
4-Ethyltoluene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,3,5-Trimethylbenzene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,2,4-Trimethylbenzene	0.09	J	1.0	0.37	<SQL	U	1.0	0.43	0.25
Benzyl Chloride (a-Chlorotoluene)	<SQL	U	1.0	0.73	<SQL	U	1.0	0.86	0.50
1,3-Dichlorobenzene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,4-Dichlorobenzene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,2-Dichlorobenzene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
1,2,4-Trichlorobenzene	<SQL	U	1.0	0.73	<SQL	U	1.0	0.86	0.50
Naphthalene	<SQL	U	1.0	0.73	<SQL	U	1.0	0.86	0.50
Hexachlorobutadiene	<SQL	U	1.0	0.37	<SQL	U	1.0	0.43	0.25
BFB-Surrogate Std. % Recovery	97%				97%				70-130%

U - Compound was analyzed for, but was not detected at or above the SQL (Sample Quantitation Limit).
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