

## RESULTS OF ANALYSIS

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**Client:** ShaleTest  
**Client Sample ID:** TXOCT201201-FTW

CAS Project ID: P1204506  
 CAS Sample ID: P1204506-001

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3  
 Analyst: Elsa Moctezuma  
 Sample Type: 6.0 L Summa Canister  
 Test Notes:  
 Container ID: AS00172

Date Collected: 10/28/12  
 Date Received: 11/1/12  
 Date Analyzed: 11/5/12  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.90      Final Pressure (psig): 3.52

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.71	ND	0.41	
75-71-8	Dichlorodifluoromethane (CFC 12)	<b>2.2</b>	0.71	<b>0.45</b>	0.14	
74-87-3	Chloromethane	ND	0.71	ND	0.34	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.71	ND	0.10	
75-01-4	Vinyl Chloride	ND	0.71	ND	0.28	
106-99-0	1,3-Butadiene	ND	0.71	ND	0.32	
74-83-9	Bromomethane	ND	0.71	ND	0.18	
75-00-3	Chloroethane	ND	0.71	ND	0.27	
64-17-5	Ethanol	ND	7.1	ND	3.8	
75-05-8	Acetonitrile	ND	0.71	ND	0.42	
107-02-8	Acrolein	ND	2.8	ND	1.2	
67-64-1	Acetone	ND	7.1	ND	3.0	
75-69-4	Trichlorofluoromethane	<b>1.1</b>	0.71	<b>0.20</b>	0.13	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	7.1	ND	2.9	
107-13-1	Acrylonitrile	ND	0.71	ND	0.33	
75-35-4	1,1-Dichloroethene	ND	0.71	ND	0.18	
75-09-2	Methylene Chloride	ND	0.71	ND	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.71	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.71	ND	0.093	
75-15-0	Carbon Disulfide	ND	7.1	ND	2.3	
156-60-5	trans-1,2-Dichloroethene	ND	0.71	ND	0.18	
75-34-3	1,1-Dichloroethane	ND	0.71	ND	0.18	
1634-04-4	Methyl tert-Butyl Ether	ND	0.71	ND	0.20	
108-05-4	Vinyl Acetate	ND	7.1	ND	2.0	
78-93-3	2-Butanone (MEK)	ND	7.1	ND	2.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

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156-59-2	cis-1,2-Dichloroethene	ND	0.71	ND	0.18	
141-78-6	Ethyl Acetate	ND	1.4	ND	0.39	
110-54-3	n-Hexane	ND	0.71	ND	0.20	
67-66-3	Chloroform	ND	0.71	ND	0.15	
109-99-9	Tetrahydrofuran (THF)	ND	0.71	ND	0.24	
107-06-2	1,2-Dichloroethane	ND	0.71	ND	0.18	
71-55-6	1,1,1-Trichloroethane	ND	0.71	ND	0.13	
71-43-2	Benzene	0.72	0.71	0.22	0.22	
56-23-5	Carbon Tetrachloride	ND	0.71	ND	0.11	
110-82-7	Cyclohexane	ND	1.4	ND	0.41	
78-87-5	1,2-Dichloropropane	ND	0.71	ND	0.15	
75-27-4	Bromodichloromethane	ND	0.71	ND	0.11	
79-01-6	Trichloroethene	ND	0.71	ND	0.13	
123-91-1	1,4-Dioxane	ND	0.71	ND	0.20	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.35	
142-82-5	n-Heptane	ND	0.71	ND	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.71	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.71	ND	0.17	
10061-02-6	trans-1,3-Dichloropropene	ND	0.71	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.71	ND	0.13	
108-88-3	Toluene	ND	0.71	ND	0.19	
591-78-6	2-Hexanone	ND	0.71	ND	0.17	
124-48-1	Dibromochloromethane	ND	0.71	ND	0.083	
106-93-4	1,2-Dibromoethane	ND	0.71	ND	0.092	
123-86-4	n-Butyl Acetate	ND	0.71	ND	0.15	

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111-65-9	n-Octane	ND	0.71	ND	0.15	
127-18-4	Tetrachloroethene	ND	0.71	ND	0.10	
108-90-7	Chlorobenzene	ND	0.71	ND	0.15	
100-41-4	Ethylbenzene	ND	0.71	ND	0.16	
179601-23-1	m,p-Xylenes	ND	1.4	ND	0.33	
75-25-2	Bromoform	ND	0.71	ND	0.069	
100-42-5	Styrene	ND	0.71	ND	0.17	
95-47-6	o-Xylene	ND	0.71	ND	0.16	
111-84-2	n-Nonane	ND	0.71	ND	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.71	ND	0.10	
98-82-8	Cumene	ND	0.71	ND	0.14	
80-56-8	alpha-Pinene	ND	0.71	ND	0.13	
103-65-1	n-Propylbenzene	ND	0.71	ND	0.14	
622-96-8	4-Ethyltoluene	ND	0.71	ND	0.14	
108-67-8	1,3,5-Trimethylbenzene	ND	0.71	ND	0.14	
95-63-6	1,2,4-Trimethylbenzene	ND	0.71	ND	0.14	
100-44-7	Benzyl Chloride	ND	0.71	ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.71	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.71	ND	0.12	
95-50-1	1,2-Dichlorobenzene	ND	0.71	ND	0.12	
5989-27-5	d-Limonene	ND	0.71	ND	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.71	ND	0.073	
120-82-1	1,2,4-Trichlorobenzene	ND	0.71	ND	0.096	
91-20-3	Naphthalene	ND	0.71	ND	0.14	
87-68-3	Hexachlorobutadiene	ND	0.71	ND	0.067	

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