

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

Analytical Report

**Client:** ShaleTest  
**Project:** TO-15  
**Sample Matrix:** Air  
**Sample Name:** XXXXXXXXXX  
**Lab Code:** R1204655-002

**Service Request:** R1204655  
**Date Collected:** 7/6/12 1135  
**Date Received:** 7/19/12

**Analytical Method:** TO-15

**Date Analyzed:** 7/24/12 1441  
**Canister Dilution Factor:** 1.92

Initial Pressure (psig): -5.21      Final Pressure (psig): 3.50

CAS #	Analyte Name	Sample Amount mL	Result $\mu\text{g}/\text{m}^3$	MRL $\mu\text{g}/\text{m}^3$	Data Qualifier
74-87-3	Chloromethane	1000	1.1	0.86	
75-01-4	Vinyl Chloride	1000	0.12	0.12	U
74-83-9	Bromomethane	1000	0.83	0.83	U
75-00-3	Chloroethane	1000	1.1	1.1	U
67-64-1	Acetone	1000	12	9.6	
75-69-4	Trichlorofluoromethane (CFC 11)	1000	1.3	1.2	
75-35-4	1,1-Dichloroethene	1000	0.84	0.84	U
75-09-2	Methylene Chloride	1000	0.73	0.73	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1000	0.54	0.33	
75-15-0	Carbon Disulfide	1000	0.65	0.65	U
156-60-5	trans-1,2-Dichloroethene	1000	0.84	0.84	U
75-34-3	1,1-Dichloroethane (1,1-DCA)	1000	0.86	0.86	U
1634-04-4	Methyl tert-Butyl Ether	1000	1.5	1.5	U
108-05-4	Vinyl Acetate	1000	9.6	9.6	U
78-93-3	2-Butanone (MEK)	1000	1.6	1.2	
156-59-2	cis-1,2-Dichloroethene	1000	0.84	0.84	U
67-66-3	Chloroform	1000	1.0	1.0	U
107-06-2	1,2-Dichloroethane	1000	0.86	0.86	U
71-55-6	1,1,1-Trichloroethane (TCA)	1000	1.2	1.2	U
71-43-2	Benzene	1000	0.67	0.67	U
56-23-5	Carbon Tetrachloride	1000	0.61	0.13	
78-87-5	1,2-Dichloropropane	1000	0.98	0.98	U
75-27-4	Bromodichloromethane	1000	0.29	0.29	U
79-01-6	Trichloroethene (TCE)	1000	0.12	0.12	U
10061-01-5	cis-1,3-Dichloropropene	1000	1.9	1.9	U
108-10-1	4-Methyl-2-pentanone	1000	1.7	1.7	U
10061-02-6	trans-1,3-Dichloropropene	1000	0.96	0.96	U
79-00-5	1,1,2-Trichloroethane	1000	1.2	1.2	U
108-88-3	Toluene	1000	0.79	0.79	U
591-78-6	2-Hexanone	1000	0.86	0.86	U
124-48-1	Dibromochloromethane	1000	0.36	0.36	U
106-93-4	1,2-Dibromoethane	1000	0.33	0.33	U
127-18-4	Tetrachloroethene (PCE)	1000	0.15	0.15	U
108-90-7	Chlorobenzene	1000	0.98	0.98	U
100-41-4	Ethylbenzene	1000	1.8	1.8	U
179601-23-1	m,p-Xylenes	1000	3.7	3.7	U

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CAS #	Analyte Name	Sample Amount mL	Result $\mu\text{g}/\text{m}^3$	MRL $\mu\text{g}/\text{m}^3$	Data Qualifier
75-25-2	Bromoform	1000	2.2	2.2	U
100-42-5	Styrene	1000	1.8	1.8	U
95-47-6	o-Xylene	1000	1.8	1.8	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	0.29	0.29	U
541-73-1	1,3-Dichlorobenzene	1000	2.5	2.5	U
106-46-7	1,4-Dichlorobenzene	1000	2.5	2.5	U
95-50-1	1,2-Dichlorobenzene	1000	2.5	2.5	U

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	107	70-130	7/24/12 1441	