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LABORATORY REPORT

July 11, 2013

John Cleary
Washington State Department of Ecology
Eastern regional Office
4601 N Monroe St
Spokane, WA 99205

RE: Site L / PIC #9NWRR

Dear John:

Enclosed are the results of the samples submitted to our laboratory on June 27, 2013. For your reference, these analyses have been assigned our service request number P1302773.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Samantha Henningsen at 3:55 pm, Jul 11, 2013

Samantha Henningsen
Project Manager



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Client: Washington State Department of Ecology
Project: Site L / PIC #9NWRR

Service Request No: P1302773

CASE NARRATIVE

The samples were received intact under chain of custody on June 27, 2013 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Helium Analysis

The samples were analyzed for helium according to modified EPA Method 3C (single injection) using a gas chromatograph equipped with a thermal conductivity detector (TCD). This method is not included on the laboratory's NELAP, DoD-ELAP, or AIHA-LAP scope of accreditation.

Volatile Organic Compound Analysis

The samples were also analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation. Any analytes flagged with an X are not included on the laboratory's NELAP or DoD-ELAP scope of accreditation.

The Summa canisters were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



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ALS Environmental – Simi Valley
Certifications, Accreditations, and Registrations

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L11-203
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2012039
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	494864
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-12-3
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA01527201 2-2
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Washington State Department of Ecology
Project ID: Site L / PIC #9NWRR

Service Request: P1302773

Date Received: 6/27/2013
Time Received: 07:35

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)		
								3C Modified - Helium Can	TO-15 Modified - VOC Cans
ASP Biofilter	P1302773-001	Air	6/26/2013	08:15	SC00982	0.29	3.53	X	X
Tipping & ASP Biofilter	P1302773-002	Air	6/26/2013	09:25	SC00929	0.17	3.54	X	X
Tipping & ASP Biofilter Dup.	P1302773-003	Air	6/26/2013	09:45	SC00166	0.22	3.50	X	X
Fresh ASP	P1302773-004	Air	6/26/2013	11:20	SC01082	-0.08	3.56	X	X
7 Day ASP	P1302773-005	Air	6/26/2013	12:35	SC00994	-0.29	3.50	X	X
Finished	P1302773-006	Air	6/26/2013	15:00	SC01015	-0.16	3.53	X	X



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Phone (805) 526-7161
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Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1[illegible]

ALS Environmental Sample Acceptance Check Form

Client: Washington State Department of Ecology

Work order: P1302773

Project: Site L / PIC #9NWRR

Sample(s) received on: 6/27/13

Date opened: 6/27/13

by: MZAMORA

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

	Yes	No	N/A
1 Were sample containers properly marked with client sample ID?	☒	☐	☐
2 Container(s) supplied by ALS ?	☒	☐	☐
3 Did sample containers arrive in good condition?	☒	☐	☐
4 Were chain-of-custody papers used and filled out?	☒	☐	☐
5 Did sample container labels and/or tags agree with custody papers?	☒	☐	☐
6 Was sample volume received adequate for analysis?	☒	☐	☐
7 Are samples within specified holding times?	☒	☐	☐
8 Was proper temperature (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9 Was a trip blank received?	☐	☒	☐
10 Were custody seals on outside of cooler/Box?	☐	☒	☐
Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
Were signature and date included?	☐	☐	☒
Were seals intact?	☐	☐	☒
Were custody seals on outside of sample container?	☐	☒	☐
Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
Were signature and date included?	☐	☐	☒
Were seals intact?	☐	☐	☒
11 Do containers have appropriate preservation , according to method/SOP or Client specified information?	☐	☐	☒
Is there a client indication that the submitted samples are pH preserved?	☐	☐	☒
Were VOA vials checked for presence/absence of air bubbles?	☐	☐	☒
Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?	☐	☐	☒
12 Tubes: Are the tubes capped and intact?	☐	☐	☒
Do they contain moisture?	☐	☐	☒
13 Badges: Are the badges properly capped and intact?	☐	☐	☒
Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1302773-001.01	6.0 L Source Can					
P1302773-002.01	6.0 L Source Can					
P1302773-003.01	6.0 L Source Can					
P1302773-004.01	6.0 L Source Can					
P1302773-005.01	6.0 L Source Can					
P1302773-006.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Washington State Department of Ecology
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

Helium

Test Code: EPA 3C Modified
Instrument ID: HP5890 II/GC8/TCD
Analyst: Wade Henton
Sample Type: 6.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/9/13

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	Result ppmV	MRL ppmV	Data Qualifier
ASP Biofilter	P1302773-001	1.00	1.22	1,800	31	
Tipping & ASP Biofilter	P1302773-002	1.00	1.23	4,700	31	
Tipping & ASP Biofilter Dup.	P1302773-003	1.00	1.22	5,100	31	
Fresh ASP	P1302773-004	1.00	1.25	3,100	31	
7 Day ASP	P1302773-005	0.10	1.26	23,000	320	
Finished	P1302773-006	0.10	1.25	41,000	310	
Method Blank	P130709-MB	1.00	1.00	ND	25	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: Washington State Department of Ecology

Client Sample ID: Lab Control Sample

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P130709-LCS

Test Code: EPA 3C Modified

Instrument ID: HP5890 II/GC8/TCD

Analyst: Wade Henton

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/09/13

Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount ppmV	Result ppmV	% Recovery	ALS Acceptance Limits	Data Qualifier
7440-59-7	Helium	10,000	9,120	91	70-127	

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 4

Client: Washington State Department of Ecology
Client Sample ID: ASP Biofilter
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00982

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/3/13
Volume(s) Analyzed: 0.080 Liter(s)

Initial Pressure (psig): 0.29 Final Pressure (psig): 3.53

Canister Dilution Factor: 1.22

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	54	7.6	32	4.4	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	7.6	ND	1.5	
74-87-3	Chloromethane	ND	7.6	ND	3.7	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	7.6	ND	1.1	
75-01-4	Vinyl Chloride	ND	7.6	ND	3.0	
106-99-0	1,3-Butadiene	ND	7.6	ND	3.4	
74-83-9	Bromomethane	ND	7.6	ND	2.0	
75-00-3	Chloroethane	ND	7.6	ND	2.9	
64-17-5	Ethanol	ND	76	ND	40	
75-05-8	Acetonitrile	ND	7.6	ND	4.5	
107-02-8	Acrolein	ND	31	ND	13	
67-64-1	Acetone	ND	76	ND	32	
75-69-4	Trichlorofluoromethane	ND	7.6	ND	1.4	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	76	ND	31	
107-13-1	Acrylonitrile	ND	7.6	ND	3.5	
75-35-4	1,1-Dichloroethene	ND	7.6	ND	1.9	
75-09-2	Methylene Chloride	ND	7.6	ND	2.2	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	7.6	ND	2.4	
76-13-1	Trichlorotrifluoroethane	ND	7.6	ND	1.0	
75-15-0	Carbon Disulfide	ND	76	ND	24	
156-60-5	trans-1,2-Dichloroethene	ND	7.6	ND	1.9	
75-34-3	1,1-Dichloroethane	ND	7.6	ND	1.9	
1634-04-4	Methyl tert-Butyl Ether	ND	7.6	ND	2.1	
108-05-4	Vinyl Acetate	ND	76	ND	22	
78-93-3	2-Butanone (MEK)	ND	76	ND	26	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 4

Client: Washington State Department of Ecology
Client Sample ID: ASP Biofilter
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00982

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/3/13
Volume(s) Analyzed: 0.080 Liter(s)

Initial Pressure (psig): 0.29 Final Pressure (psig): 3.53

Canister Dilution Factor: 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	7.6	ND	1.9	
141-78-6	Ethyl Acetate	ND	15	ND	4.2	
110-54-3	n-Hexane	ND	7.6	ND	2.2	
67-66-3	Chloroform	ND	7.6	ND	1.6	
109-99-9	Tetrahydrofuran (THF)	ND	7.6	ND	2.6	
107-06-2	1,2-Dichloroethane	ND	7.6	ND	1.9	
71-55-6	1,1,1-Trichloroethane	ND	7.6	ND	1.4	
71-43-2	Benzene	ND	7.6	ND	2.4	
56-23-5	Carbon Tetrachloride	ND	7.6	ND	1.2	
110-82-7	Cyclohexane	ND	15	ND	4.4	
78-87-5	1,2-Dichloropropane	ND	7.6	ND	1.7	
75-27-4	Bromodichloromethane	ND	7.6	ND	1.1	
79-01-6	Trichloroethene	ND	7.6	ND	1.4	
123-91-1	1,4-Dioxane	ND	7.6	ND	2.1	
80-62-6	Methyl Methacrylate	ND	15	ND	3.7	
142-82-5	n-Heptane	ND	7.6	ND	1.9	
10061-01-5	cis-1,3-Dichloropropene	ND	7.6	ND	1.7	
108-10-1	4-Methyl-2-pentanone	ND	7.6	ND	1.9	
10061-02-6	trans-1,3-Dichloropropene	ND	7.6	ND	1.7	
79-00-5	1,1,2-Trichloroethane	ND	7.6	ND	1.4	
108-88-3	Toluene	12	7.6	3.3	2.0	
591-78-6	2-Hexanone	ND	7.6	ND	1.9	
124-48-1	Dibromochloromethane	ND	7.6	ND	0.90	
106-93-4	1,2-Dibromoethane	ND	7.6	ND	0.99	
123-86-4	n-Butyl Acetate	ND	7.6	ND	1.6	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: ASP Biofilter
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00982

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/3/13
Volume(s) Analyzed: 0.080 Liter(s)

Initial Pressure (psig): 0.29 Final Pressure (psig): 3.53

Canister Dilution Factor: 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	7.6	ND	1.6	
127-18-4	Tetrachloroethene	ND	7.6	ND	1.1	
108-90-7	Chlorobenzene	ND	7.6	ND	1.7	
100-41-4	Ethylbenzene	ND	7.6	ND	1.8	
179601-23-1	m,p-Xylenes	ND	15	ND	3.5	
75-25-2	Bromoform	ND	7.6	ND	0.74	
100-42-5	Styrene	ND	7.6	ND	1.8	
95-47-6	o-Xylene	ND	7.6	ND	1.8	
111-84-2	n-Nonane	ND	7.6	ND	1.5	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.6	ND	1.1	
98-82-8	Cumene	ND	7.6	ND	1.6	
80-56-8	alpha-Pinene	1,100	7.6	190	1.4	
103-65-1	n-Propylbenzene	ND	7.6	ND	1.6	
622-96-8	4-Ethyltoluene	ND	7.6	ND	1.6	
108-67-8	1,3,5-Trimethylbenzene	ND	7.6	ND	1.6	
95-63-6	1,2,4-Trimethylbenzene	ND	7.6	ND	1.6	
100-44-7	Benzyl Chloride	ND	7.6	ND	1.5	
541-73-1	1,3-Dichlorobenzene	ND	7.6	ND	1.3	
106-46-7	1,4-Dichlorobenzene	ND	7.6	ND	1.3	
95-50-1	1,2-Dichlorobenzene	ND	7.6	ND	1.3	
5989-27-5	d-Limonene	670	7.6	120	1.4	
96-12-8	1,2-Dibromo-3-chloropropane	ND	7.6	ND	0.79	
120-82-1	1,2,4-Trichlorobenzene	ND	7.6	ND	1.0	
91-20-3	Naphthalene	ND	7.6	ND	1.5	
87-68-3	Hexachlorobutadiene	ND	7.6	ND	0.72	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 4 of 4

Client: Washington State Department of Ecology
Client Sample ID: ASP Biofilter
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-001

Tentatively Identified Compounds

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: John Rice
 Sample Type: 6.0 L Summa Canister
 Test Notes: **T**
 Container ID: SC00982

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/3/13
 Volume(s) Analyzed: 0.080 Liter(s)

Initial Pressure (psig): 0.29 Final Pressure (psig): 3.53

Canister Dilution Factor: 1.22

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	10,000	

T = Analyte is a tentatively identified compound, result is estimated.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 4

Client: Washington State Department of Ecology
Client Sample ID: Tipping & ASP Biofilter
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00929

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/5/13
Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): 0.17 **Final Pressure (psig):** 3.54

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	56	6.2	32	3.6	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	6.2	ND	1.2	
74-87-3	Chloromethane	ND	6.2	ND	3.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	6.2	ND	0.88	
75-01-4	Vinyl Chloride	ND	6.2	ND	2.4	
106-99-0	1,3-Butadiene	ND	6.2	ND	2.8	
74-83-9	Bromomethane	ND	6.2	ND	1.6	
75-00-3	Chloroethane	ND	6.2	ND	2.3	
64-17-5	Ethanol	ND	62	ND	33	
75-05-8	Acetonitrile	ND	6.2	ND	3.7	
107-02-8	Acrolein	ND	25	ND	11	
67-64-1	Acetone	ND	62	ND	26	
75-69-4	Trichlorofluoromethane	ND	6.2	ND	1.1	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	62	ND	25	
107-13-1	Acrylonitrile	ND	6.2	ND	2.8	
75-35-4	1,1-Dichloroethene	ND	6.2	ND	1.6	
75-09-2	Methylene Chloride	ND	6.2	ND	1.8	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	6.2	ND	2.0	
76-13-1	Trichlorotrifluoroethane	ND	6.2	ND	0.80	
75-15-0	Carbon Disulfide	ND	62	ND	20	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	ND	1.6	
75-34-3	1,1-Dichloroethane	ND	6.2	ND	1.5	
1634-04-4	Methyl tert-Butyl Ether	ND	6.2	ND	1.7	
108-05-4	Vinyl Acetate	ND	62	ND	17	
78-93-3	2-Butanone (MEK)	ND	62	ND	21	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 4

Client: Washington State Department of Ecology
Client Sample ID: Tipping & ASP Biofilter
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00929

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/5/13
Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): 0.17 **Final Pressure (psig):** 3.54

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	6.2	ND	1.6	
141-78-6	Ethyl Acetate	ND	12	ND	3.4	
110-54-3	n-Hexane	ND	6.2	ND	1.7	
67-66-3	Chloroform	ND	6.2	ND	1.3	
109-99-9	Tetrahydrofuran (THF)	ND	6.2	ND	2.1	
107-06-2	1,2-Dichloroethane	ND	6.2	ND	1.5	
71-55-6	1,1,1-Trichloroethane	ND	6.2	ND	1.1	
71-43-2	Benzene	ND	6.2	ND	1.9	
56-23-5	Carbon Tetrachloride	ND	6.2	ND	0.98	
110-82-7	Cyclohexane	ND	12	ND	3.6	
78-87-5	1,2-Dichloropropane	ND	6.2	ND	1.3	
75-27-4	Bromodichloromethane	ND	6.2	ND	0.92	
79-01-6	Trichloroethene	ND	6.2	ND	1.1	
123-91-1	1,4-Dioxane	ND	6.2	ND	1.7	
80-62-6	Methyl Methacrylate	ND	12	ND	3.0	
142-82-5	n-Heptane	ND	6.2	ND	1.5	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	ND	1.4	
108-10-1	4-Methyl-2-pentanone	ND	6.2	ND	1.5	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	ND	1.4	
79-00-5	1,1,2-Trichloroethane	ND	6.2	ND	1.1	
108-88-3	Toluene	6.6	6.2	1.8	1.6	
591-78-6	2-Hexanone	ND	6.2	ND	1.5	
124-48-1	Dibromochloromethane	ND	6.2	ND	0.72	
106-93-4	1,2-Dibromoethane	ND	6.2	ND	0.80	
123-86-4	n-Butyl Acetate	ND	6.2	ND	1.3	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Tipping & ASP Biofilter
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00929

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/5/13
Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): 0.17 Final Pressure (psig): 3.54

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	6.2	ND	1.3	
127-18-4	Tetrachloroethene	ND	6.2	ND	0.91	
108-90-7	Chlorobenzene	ND	6.2	ND	1.3	
100-41-4	Ethylbenzene	ND	6.2	ND	1.4	
179601-23-1	m,p-Xylenes	ND	12	ND	2.8	
75-25-2	Bromoform	ND	6.2	ND	0.60	
100-42-5	Styrene	ND	6.2	ND	1.4	
95-47-6	o-Xylene	ND	6.2	ND	1.4	
111-84-2	n-Nonane	ND	6.2	ND	1.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	ND	0.90	
98-82-8	Cumene	ND	6.2	ND	1.3	
80-56-8	alpha-Pinene	800	6.2	140	1.1	
103-65-1	n-Propylbenzene	ND	6.2	ND	1.3	
622-96-8	4-Ethyltoluene	ND	6.2	ND	1.3	
108-67-8	1,3,5-Trimethylbenzene	ND	6.2	ND	1.3	
95-63-6	1,2,4-Trimethylbenzene	ND	6.2	ND	1.3	
100-44-7	Benzyl Chloride	ND	6.2	ND	1.2	
541-73-1	1,3-Dichlorobenzene	ND	6.2	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	6.2	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	6.2	ND	1.0	
5989-27-5	d-Limonene	600	6.2	110	1.1	
96-12-8	1,2-Dibromo-3-chloropropane	ND	6.2	ND	0.64	
120-82-1	1,2,4-Trichlorobenzene	ND	6.2	ND	0.83	
91-20-3	Naphthalene	ND	6.2	ND	1.2	
87-68-3	Hexachlorobutadiene	ND	6.2	ND	0.58	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Tipping & ASP Biofilter
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-002

Tentatively Identified Compounds

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
 Analyst: Simon Cao
 Sample Type: 6.0 L Summa Canister
 Test Notes: **T**
 Container ID: SC00929

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/5/13
 Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): 0.17 Final Pressure (psig): 3.54

Canister Dilution Factor: 1.23

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	5,200	

T = Analyte is a tentatively identified compound, result is estimated.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Tipping & ASP Biofilter Dup.
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00166

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/5/13
Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): 0.22 Final Pressure (psig): 3.50

Canister Dilution Factor: 1.22

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	53	6.1	31	3.5	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	6.1	ND	1.2	
74-87-3	Chloromethane	ND	6.1	ND	3.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	6.1	ND	0.87	
75-01-4	Vinyl Chloride	ND	6.1	ND	2.4	
106-99-0	1,3-Butadiene	ND	6.1	ND	2.8	
74-83-9	Bromomethane	ND	6.1	ND	1.6	
75-00-3	Chloroethane	ND	6.1	ND	2.3	
64-17-5	Ethanol	ND	61	ND	32	
75-05-8	Acetonitrile	14	6.1	8.1	3.6	
107-02-8	Acrolein	ND	24	ND	11	
67-64-1	Acetone	ND	61	ND	26	
75-69-4	Trichlorofluoromethane	ND	6.1	ND	1.1	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	61	ND	25	
107-13-1	Acrylonitrile	ND	6.1	ND	2.8	
75-35-4	1,1-Dichloroethene	ND	6.1	ND	1.5	
75-09-2	Methylene Chloride	ND	6.1	ND	1.8	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	6.1	ND	1.9	
76-13-1	Trichlorotrifluoroethane	ND	6.1	ND	0.80	
75-15-0	Carbon Disulfide	ND	61	ND	20	
156-60-5	trans-1,2-Dichloroethene	ND	6.1	ND	1.5	
75-34-3	1,1-Dichloroethane	ND	6.1	ND	1.5	
1634-04-4	Methyl tert-Butyl Ether	ND	6.1	ND	1.7	
108-05-4	Vinyl Acetate	ND	61	ND	17	
78-93-3	2-Butanone (MEK)	ND	61	ND	21	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology

Client Sample ID: Tipping & ASP Biofilter Dup.

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P1302773-003

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst: Simon Cao

Sample Type: 6.0 L Summa Canister

Test Notes:

Container ID: SC00166

Date Collected: 6/26/13

Date Received: 6/27/13

Date Analyzed: 7/5/13

Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): 0.22 Final Pressure (psig): 3.50

Canister Dilution Factor: 1.22

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	6.1	ND	1.5	
141-78-6	Ethyl Acetate	ND	12	ND	3.4	
110-54-3	n-Hexane	ND	6.1	ND	1.7	
67-66-3	Chloroform	ND	6.1	ND	1.2	
109-99-9	Tetrahydrofuran (THF)	ND	6.1	ND	2.1	
107-06-2	1,2-Dichloroethane	ND	6.1	ND	1.5	
71-55-6	1,1,1-Trichloroethane	ND	6.1	ND	1.1	
71-43-2	Benzene	ND	6.1	ND	1.9	
56-23-5	Carbon Tetrachloride	ND	6.1	ND	0.97	
110-82-7	Cyclohexane	ND	12	ND	3.5	
78-87-5	1,2-Dichloropropane	ND	6.1	ND	1.3	
75-27-4	Bromodichloromethane	ND	6.1	ND	0.91	
79-01-6	Trichloroethene	ND	6.1	ND	1.1	
123-91-1	1,4-Dioxane	ND	6.1	ND	1.7	
80-62-6	Methyl Methacrylate	ND	12	ND	3.0	
142-82-5	n-Heptane	ND	6.1	ND	1.5	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	ND	1.3	
108-10-1	4-Methyl-2-pentanone	ND	6.1	ND	1.5	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	ND	1.3	
79-00-5	1,1,2-Trichloroethane	ND	6.1	ND	1.1	
108-88-3	Toluene	ND	6.1	ND	1.6	
591-78-6	2-Hexanone	ND	6.1	ND	1.5	
124-48-1	Dibromochloromethane	ND	6.1	ND	0.72	
106-93-4	1,2-Dibromoethane	ND	6.1	ND	0.79	
123-86-4	n-Butyl Acetate	ND	6.1	ND	1.3	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Tipping & ASP Biofilter Dup.
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-003

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
 Analyst: Simon Cao
 Sample Type: 6.0 L Summa Canister
 Test Notes:
 Container ID: SC00166

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/5/13
 Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): 0.22 Final Pressure (psig): 3.50

Canister Dilution Factor: 1.22

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	6.1	ND	1.3	
127-18-4	Tetrachloroethene	ND	6.1	ND	0.90	
108-90-7	Chlorobenzene	ND	6.1	ND	1.3	
100-41-4	Ethylbenzene	ND	6.1	ND	1.4	
179601-23-1	m,p-Xylenes	ND	12	ND	2.8	
75-25-2	Bromoform	ND	6.1	ND	0.59	
100-42-5	Styrene	ND	6.1	ND	1.4	
95-47-6	o-Xylene	ND	6.1	ND	1.4	
111-84-2	n-Nonane	ND	6.1	ND	1.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	ND	0.89	
98-82-8	Cumene	ND	6.1	ND	1.2	
80-56-8	alpha-Pinene	900	6.1	160	1.1	
103-65-1	n-Propylbenzene	ND	6.1	ND	1.2	
622-96-8	4-Ethyltoluene	ND	6.1	ND	1.2	
108-67-8	1,3,5-Trimethylbenzene	ND	6.1	ND	1.2	
95-63-6	1,2,4-Trimethylbenzene	ND	6.1	ND	1.2	
100-44-7	Benzyl Chloride	ND	6.1	ND	1.2	
541-73-1	1,3-Dichlorobenzene	ND	6.1	ND	1.0	
106-46-7	1,4-Dichlorobenzene	ND	6.1	ND	1.0	
95-50-1	1,2-Dichlorobenzene	ND	6.1	ND	1.0	
5989-27-5	d-Limonene	630	6.1	110	1.1	
96-12-8	1,2-Dibromo-3-chloropropane	ND	6.1	ND	0.63	
120-82-1	1,2,4-Trichlorobenzene	ND	6.1	ND	0.82	
91-20-3	Naphthalene	ND	6.1	ND	1.2	
87-68-3	Hexachlorobutadiene	ND	6.1	ND	0.57	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Tipping & ASP Biofilter Dup.
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-003

Tentatively Identified Compounds

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
 Analyst: Simon Cao
 Sample Type: 6.0 L Summa Canister
 Test Notes: **T**
 Container ID: SC00166

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/5/13
 Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): 0.22 Final Pressure (psig): 3.50

Canister Dilution Factor: 1.22

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	5,000	

T = Analyte is a tentatively identified compound, result is estimated.

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RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Fresh ASP
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC01082

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/2/13
Volume(s) Analyzed: 0.0025 Liter(s)

Initial Pressure (psig): -0.08 **Final Pressure (psig):** 3.56

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	370	250	210	150	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	250	ND	51	
74-87-3	Chloromethane	ND	250	ND	120	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	250	ND	36	
75-01-4	Vinyl Chloride	ND	250	ND	98	
106-99-0	1,3-Butadiene	ND	250	ND	110	
74-83-9	Bromomethane	ND	250	ND	64	
75-00-3	Chloroethane	ND	250	ND	95	
64-17-5	Ethanol	ND	2,500	ND	1,300	
75-05-8	Acetonitrile	ND	250	ND	150	
107-02-8	Acrolein	ND	1,000	ND	440	
67-64-1	Acetone	ND	2,500	ND	1,100	
75-69-4	Trichlorofluoromethane	ND	250	ND	45	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2,500	ND	1,000	
107-13-1	Acrylonitrile	ND	250	ND	120	
75-35-4	1,1-Dichloroethene	ND	250	ND	63	
75-09-2	Methylene Chloride	ND	250	ND	72	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	250	ND	80	
76-13-1	Trichlorotrifluoroethane	ND	250	ND	33	
75-15-0	Carbon Disulfide	ND	2,500	ND	800	
156-60-5	trans-1,2-Dichloroethene	ND	250	ND	63	
75-34-3	1,1-Dichloroethane	ND	250	ND	62	
1634-04-4	Methyl tert-Butyl Ether	ND	250	ND	69	
108-05-4	Vinyl Acetate	ND	2,500	ND	710	
78-93-3	2-Butanone (MEK)	ND	2,500	ND	850	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Fresh ASP
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC01082

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/2/13
Volume(s) Analyzed: 0.0025 Liter(s)

Initial Pressure (psig): -0.08 **Final Pressure (psig):** 3.56

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	250	ND	63	
141-78-6	Ethyl Acetate	580	500	160	140	
110-54-3	n-Hexane	ND	250	ND	71	
67-66-3	Chloroform	ND	250	ND	51	
109-99-9	Tetrahydrofuran (THF)	ND	250	ND	85	
107-06-2	1,2-Dichloroethane	ND	250	ND	62	
71-55-6	1,1,1-Trichloroethane	ND	250	ND	46	
71-43-2	Benzene	ND	250	ND	78	
56-23-5	Carbon Tetrachloride	ND	250	ND	40	
110-82-7	Cyclohexane	ND	500	ND	150	
78-87-5	1,2-Dichloropropane	ND	250	ND	54	
75-27-4	Bromodichloromethane	ND	250	ND	37	
79-01-6	Trichloroethene	ND	250	ND	47	
123-91-1	1,4-Dioxane	ND	250	ND	69	
80-62-6	Methyl Methacrylate	ND	500	ND	120	
142-82-5	n-Heptane	ND	250	ND	61	
10061-01-5	cis-1,3-Dichloropropene	ND	250	ND	55	
108-10-1	4-Methyl-2-pentanone	ND	250	ND	61	
10061-02-6	trans-1,3-Dichloropropene	ND	250	ND	55	
79-00-5	1,1,2-Trichloroethane	ND	250	ND	46	
108-88-3	Toluene	370	250	98	66	
591-78-6	2-Hexanone	ND	250	ND	61	
124-48-1	Dibromochloromethane	ND	250	ND	29	
106-93-4	1,2-Dibromoethane	ND	250	ND	33	
123-86-4	n-Butyl Acetate	ND	250	ND	53	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Fresh ASP
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC01082

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/2/13
Volume(s) Analyzed: 0.0025 Liter(s)

Initial Pressure (psig): -0.08 Final Pressure (psig): 3.56

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	250	ND	54	
127-18-4	Tetrachloroethene	ND	250	ND	37	
108-90-7	Chlorobenzene	ND	250	ND	54	
100-41-4	Ethylbenzene	ND	250	ND	58	
179601-23-1	m,p-Xylenes	ND	500	ND	120	
75-25-2	Bromoform	ND	250	ND	24	
100-42-5	Styrene	ND	250	ND	59	
95-47-6	o-Xylene	ND	250	ND	58	
111-84-2	n-Nonane	ND	250	ND	48	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	ND	36	
98-82-8	Cumene	ND	250	ND	51	
80-56-8	alpha-Pinene	45,000	250	8,100	45	
103-65-1	n-Propylbenzene	ND	250	ND	51	
622-96-8	4-Ethyltoluene	ND	250	ND	51	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ND	51	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ND	51	
100-44-7	Benzyl Chloride	ND	250	ND	48	
541-73-1	1,3-Dichlorobenzene	ND	250	ND	42	
106-46-7	1,4-Dichlorobenzene	ND	250	ND	42	
95-50-1	1,2-Dichlorobenzene	ND	250	ND	42	
5989-27-5	d-Limonene	34,000	250	6,000	45	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ND	26	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ND	34	
91-20-3	Naphthalene	ND	250	ND	48	
87-68-3	Hexachlorobutadiene	ND	250	ND	23	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Fresh ASP
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-004

Tentatively Identified Compounds

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: John Rice
 Sample Type: 6.0 L Summa Canister
 Test Notes: **T**
 Container ID: SC01082

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/2/13
 Volume(s) Analyzed: 0.0025 Liter(s)

Initial Pressure (psig): -0.08 Final Pressure (psig): 3.56

Canister Dilution Factor: 1.25

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	130,000	

T = Analyte is a tentatively identified compound, result is estimated.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: 7 Day ASP
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00994

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/6/13
Volume(s) Analyzed: 0.60 Liter(s)

Initial Pressure (psig): -0.29 **Final Pressure (psig):** 3.50

Canister Dilution Factor: 1.26

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	3.3	1.1	1.9	0.61	
75-71-8	Dichlorodifluoromethane (CFC 12)	1.6	1.1	0.33	0.21	
74-87-3	Chloromethane	1.1	1.1	0.52	0.51	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.1	ND	0.15	
75-01-4	Vinyl Chloride	ND	1.1	ND	0.41	
106-99-0	1,3-Butadiene	ND	1.1	ND	0.47	
74-83-9	Bromomethane	ND	1.1	ND	0.27	
75-00-3	Chloroethane	ND	1.1	ND	0.40	
64-17-5	Ethanol	ND	11	ND	5.6	
75-05-8	Acetonitrile	24	1.1	14	0.63	
107-02-8	Acrolein	ND	4.2	ND	1.8	
67-64-1	Acetone	13	11	5.6	4.4	
75-69-4	Trichlorofluoromethane	ND	1.1	ND	0.19	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	11	ND	4.3	
107-13-1	Acrylonitrile	ND	1.1	ND	0.48	
75-35-4	1,1-Dichloroethene	ND	1.1	ND	0.26	
75-09-2	Methylene Chloride	1.1	1.1	0.33	0.30	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.1	ND	0.34	
76-13-1	Trichlorotrifluoroethane	ND	1.1	ND	0.14	
75-15-0	Carbon Disulfide	ND	11	ND	3.4	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	ND	0.26	
75-34-3	1,1-Dichloroethane	ND	1.1	ND	0.26	
1634-04-4	Methyl tert-Butyl Ether	ND	1.1	ND	0.29	
108-05-4	Vinyl Acetate	ND	11	ND	3.0	
78-93-3	2-Butanone (MEK)	ND	11	ND	3.6	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: 7 Day ASP
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00994

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/6/13
Volume(s) Analyzed: 0.60 Liter(s)

Initial Pressure (psig): -0.29 **Final Pressure (psig):** 3.50

Canister Dilution Factor: 1.26

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.1	ND	0.26	
141-78-6	Ethyl Acetate	130	2.1	37	0.58	
110-54-3	n-Hexane	ND	1.1	ND	0.30	
67-66-3	Chloroform	ND	1.1	ND	0.22	
109-99-9	Tetrahydrofuran (THF)	ND	1.1	ND	0.36	
107-06-2	1,2-Dichloroethane	ND	1.1	ND	0.26	
71-55-6	1,1,1-Trichloroethane	ND	1.1	ND	0.19	
71-43-2	Benzene	ND	1.1	ND	0.33	
56-23-5	Carbon Tetrachloride	ND	1.1	ND	0.17	
110-82-7	Cyclohexane	ND	2.1	ND	0.61	
78-87-5	1,2-Dichloropropane	ND	1.1	ND	0.23	
75-27-4	Bromodichloromethane	ND	1.1	ND	0.16	
79-01-6	Trichloroethene	ND	1.1	ND	0.20	
123-91-1	1,4-Dioxane	ND	1.1	ND	0.29	
80-62-6	Methyl Methacrylate	ND	2.1	ND	0.51	
142-82-5	n-Heptane	1.4	1.1	0.35	0.26	
10061-01-5	cis-1,3-Dichloropropene	ND	1.1	ND	0.23	
108-10-1	4-Methyl-2-pentanone	ND	1.1	ND	0.26	
10061-02-6	trans-1,3-Dichloropropene	ND	1.1	ND	0.23	
79-00-5	1,1,2-Trichloroethane	ND	1.1	ND	0.19	
108-88-3	Toluene	8.6	1.1	2.3	0.28	
591-78-6	2-Hexanone	ND	1.1	ND	0.26	
124-48-1	Dibromochloromethane	ND	1.1	ND	0.12	
106-93-4	1,2-Dibromoethane	ND	1.1	ND	0.14	
123-86-4	n-Butyl Acetate	ND	1.1	ND	0.22	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: 7 Day ASP
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC00994

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/6/13
Volume(s) Analyzed: 0.60 Liter(s)

Initial Pressure (psig): -0.29 **Final Pressure (psig):** 3.50

Canister Dilution Factor: 1.26

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	1.1	ND	0.22	
127-18-4	Tetrachloroethene	ND	1.1	ND	0.15	
108-90-7	Chlorobenzene	ND	1.1	ND	0.23	
100-41-4	Ethylbenzene	ND	1.1	ND	0.24	
179601-23-1	m,p-Xylenes	ND	2.1	ND	0.48	
75-25-2	Bromoform	ND	1.1	ND	0.10	
100-42-5	Styrene	ND	1.1	ND	0.25	
95-47-6	o-Xylene	ND	1.1	ND	0.24	
111-84-2	n-Nonane	ND	1.1	ND	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.1	ND	0.15	
98-82-8	Cumene	ND	1.1	ND	0.21	
80-56-8	alpha-Pinene	75	1.1	14	0.19	
103-65-1	n-Propylbenzene	ND	1.1	ND	0.21	
622-96-8	4-Ethyltoluene	ND	1.1	ND	0.21	
108-67-8	1,3,5-Trimethylbenzene	ND	1.1	ND	0.21	
95-63-6	1,2,4-Trimethylbenzene	ND	1.1	ND	0.21	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.20	
541-73-1	1,3-Dichlorobenzene	ND	1.1	ND	0.17	
106-46-7	1,4-Dichlorobenzene	ND	1.1	ND	0.17	
95-50-1	1,2-Dichlorobenzene	ND	1.1	ND	0.17	
5989-27-5	d-Limonene	160	1.1	28	0.19	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.1	ND	0.11	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	ND	0.14	
91-20-3	Naphthalene	ND	1.1	ND	0.20	
87-68-3	Hexachlorobutadiene	ND	1.1	ND	0.098	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: 7 Day ASP
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-005

Tentatively Identified Compounds

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
 Analyst: Simon Cao
 Sample Type: 6.0 L Summa Canister
 Test Notes: T
 Container ID: SC00994

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/6/13
 Volume(s) Analyzed: 0.60 Liter(s)

Initial Pressure (psig): -0.29 Final Pressure (psig): 3.50

Canister Dilution Factor: 1.26

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	930	

T = Analyte is a tentatively identified compound, result is estimated.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Finished
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-006

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: John Rice
 Sample Type: 6.0 L Summa Canister
 Test Notes:
 Container ID: SC01015

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/2/13
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -0.16 Final Pressure (psig): 3.53

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	14	0.63	8.3	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	1.1	0.63	0.22	0.13	
74-87-3	Chloromethane	ND	0.63	ND	0.30	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.63	ND	0.089	
75-01-4	Vinyl Chloride	ND	0.63	ND	0.24	
106-99-0	1,3-Butadiene	ND	0.63	ND	0.28	
74-83-9	Bromomethane	ND	0.63	ND	0.16	
75-00-3	Chloroethane	ND	0.63	ND	0.24	
64-17-5	Ethanol	ND	6.3	ND	3.3	
75-05-8	Acetonitrile	6.7	0.63	4.0	0.37	
107-02-8	Acrolein	ND	2.5	ND	1.1	
67-64-1	Acetone	16	6.3	6.6	2.6	
75-69-4	Trichlorofluoromethane	2.0	0.63	0.35	0.11	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	6.3	ND	2.5	
107-13-1	Acrylonitrile	ND	0.63	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.63	ND	0.16	
75-09-2	Methylene Chloride	ND	0.63	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.63	ND	0.20	
76-13-1	Trichlorotrifluoroethane	ND	0.63	ND	0.082	
75-15-0	Carbon Disulfide	ND	6.3	ND	2.0	
156-60-5	trans-1,2-Dichloroethene	ND	0.63	ND	0.16	
75-34-3	1,1-Dichloroethane	ND	0.63	ND	0.15	
1634-04-4	Methyl tert-Butyl Ether	ND	0.63	ND	0.17	
108-05-4	Vinyl Acetate	ND	6.3	ND	1.8	
78-93-3	2-Butanone (MEK)	ND	6.3	ND	2.1	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Finished
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-006

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC01015

Date Collected: 6/26/13
Date Received: 6/27/13
Date Analyzed: 7/2/13
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -0.16 **Final Pressure (psig):** 3.53

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.63	ND	0.16	
141-78-6	Ethyl Acetate	ND	1.3	ND	0.35	
110-54-3	n-Hexane	1.3	0.63	0.36	0.18	
67-66-3	Chloroform	ND	0.63	ND	0.13	
109-99-9	Tetrahydrofuran (THF)	ND	0.63	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.63	ND	0.15	
71-55-6	1,1,1-Trichloroethane	ND	0.63	ND	0.11	
71-43-2	Benzene	1.5	0.63	0.47	0.20	
56-23-5	Carbon Tetrachloride	ND	0.63	ND	0.099	
110-82-7	Cyclohexane	ND	1.3	ND	0.36	
78-87-5	1,2-Dichloropropane	ND	0.63	ND	0.14	
75-27-4	Bromodichloromethane	ND	0.63	ND	0.093	
79-01-6	Trichloroethene	ND	0.63	ND	0.12	
123-91-1	1,4-Dioxane	ND	0.63	ND	0.17	
80-62-6	Methyl Methacrylate	ND	1.3	ND	0.31	
142-82-5	n-Heptane	ND	0.63	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.63	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	0.63	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.63	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.63	ND	0.11	
108-88-3	Toluene	ND	0.63	ND	0.17	
591-78-6	2-Hexanone	ND	0.63	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.63	ND	0.073	
106-93-4	1,2-Dibromoethane	ND	0.63	ND	0.081	
123-86-4	n-Butyl Acetate	ND	0.63	ND	0.13	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Finished
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-006

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: John Rice
 Sample Type: 6.0 L Summa Canister
 Test Notes:
 Container ID: SC01015

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/2/13
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -0.16 Final Pressure (psig): 3.53

Canister Dilution Factor: 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.63	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.63	ND	0.092	
108-90-7	Chlorobenzene	ND	0.63	ND	0.14	
100-41-4	Ethylbenzene	ND	0.63	ND	0.14	
179601-23-1	m,p-Xylenes	ND	1.3	ND	0.29	
75-25-2	Bromoform	ND	0.63	ND	0.060	
100-42-5	Styrene	ND	0.63	ND	0.15	
95-47-6	o-Xylene	ND	0.63	ND	0.14	
111-84-2	n-Nonane	ND	0.63	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.63	ND	0.091	
98-82-8	Cumene	ND	0.63	ND	0.13	
80-56-8	alpha-Pinene	1.7	0.63	0.31	0.11	
103-65-1	n-Propylbenzene	ND	0.63	ND	0.13	
622-96-8	4-Ethyltoluene	ND	0.63	ND	0.13	
108-67-8	1,3,5-Trimethylbenzene	ND	0.63	ND	0.13	
95-63-6	1,2,4-Trimethylbenzene	ND	0.63	ND	0.13	
100-44-7	Benzyl Chloride	ND	0.63	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.63	ND	0.10	
106-46-7	1,4-Dichlorobenzene	ND	0.63	ND	0.10	
95-50-1	1,2-Dichlorobenzene	ND	0.63	ND	0.10	
5989-27-5	d-Limonene	0.90	0.63	0.16	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.63	ND	0.065	
120-82-1	1,2,4-Trichlorobenzene	ND	0.63	ND	0.084	
91-20-3	Naphthalene	ND	0.63	ND	0.12	
87-68-3	Hexachlorobutadiene	ND	0.63	ND	0.059	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Finished
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P1302773-006

Tentatively Identified Compounds

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: John Rice
 Sample Type: 6.0 L Summa Canister
 Test Notes: **T**
 Container ID: SC01015

Date Collected: 6/26/13
 Date Received: 6/27/13
 Date Analyzed: 7/2/13
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -0.16 Final Pressure (psig): 3.53

Canister Dilution Factor: 1.25

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	200	

T = Analyte is a tentatively identified compound, result is estimated.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology

Client Sample ID: Method Blank

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P130702-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/2/13

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology

Client Sample ID: Method Blank

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P130702-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/2/13

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 4

Client: Washington State Department of Ecology
Client Sample ID: Method Blank
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130702-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/2/13
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Method Blank
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130702-MB

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/2/13
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	NF	

NF = Compound was searched for, but not found.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 4

Client: Washington State Department of Ecology

Client Sample ID: Method Blank

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P130703-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/3/13

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 4

Client: Washington State Department of Ecology

Client Sample ID: Method Blank

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P130703-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/3/13

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 4

Client: Washington State Department of Ecology
Client Sample ID: Method Blank
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130703-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: John Rice
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/3/13
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Washington State Department of Ecology
Client Sample ID: Method Blank
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130703-MB

Tentatively Identified Compounds

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: John Rice
 Sample Type: 6.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 7/3/13
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	NF	

NF = Compound was searched for, but not found.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 4

Client: Washington State Department of Ecology
Client Sample ID: Method Blank
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130705-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/5/13
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 4

Client: Washington State Department of Ecology

Client Sample ID: Method Blank

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P130705-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst: Simon Cao

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/5/13

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 4

Client: Washington State Department of Ecology
Client Sample ID: Method Blank
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130705-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/5/13
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

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

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 4 of 4

Client: Washington State Department of Ecology
Client Sample ID: Method Blank
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130705-MB

Tentatively Identified Compounds

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/5/13
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

GC/MS Retention Time	Compound Identification	Concentration µg/m ³	Data Qualifier
	TVOC as Toluene	NF	

NF = Compound was searched for, but not found.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client: Washington State Department of Ecology
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
 Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Simon Cao/John Rice
Sample Type: 6.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 6/26/13
Date(s) Received: 6/27/13
Date(s) Analyzed: 7/2 - 7/6/13

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P130702-MB	96	101	101	70-130	
Method Blank	P130703-MB	96	101	95	70-130	
Method Blank	P130705-MB	99	101	96	70-130	
Lab Control Sample	P130702-LCS	94	102	102	70-130	
Lab Control Sample	P130703-LCS	95	100	95	70-130	
Lab Control Sample	P130705-LCS	97	98	98	70-130	
ASP Biofilter	P1302773-001	94	100	94	70-130	
Tipping & ASP Biofilter	P1302773-002	99	97	100	70-130	
Tipping & ASP Biofilter Dup.	P1302773-003	96	97	103	70-130	
Fresh ASP	P1302773-004	95	100	101	70-130	
Fresh ASP	P1302773-004DUP	95	100	101	70-130	
7 Day ASP	P1302773-005	98	97	103	70-130	
Finished	P1302773-006	97	100	101	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Washington State Department of Ecology

Client Sample ID: Lab Control Sample

Client Project ID: Site L / PIC #9NWR

ALS Project ID: P1302773

ALS Sample ID: P130702-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/2/13

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	204	176	86	58-139	
75-71-8	Dichlorodifluoromethane (CFC 12)	202	172	85	63-115	
74-87-3	Chloromethane	196	154	79	58-122	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	206	151	73	65-115	
75-01-4	Vinyl Chloride	200	144	72	64-122	
106-99-0	1,3-Butadiene	210	182	87	57-141	
74-83-9	Bromomethane	200	154	77	68-122	
75-00-3	Chloroethane	202	173	86	66-120	
64-17-5	Ethanol	958	816	85	58-126	
75-05-8	Acetonitrile	202	202	100	64-136	
107-02-8	Acrolein	204	189	93	58-129	
67-64-1	Acetone	1,040	875	84	60-114	
75-69-4	Trichlorofluoromethane	210	171	81	62-107	
67-63-0	2-Propanol (Isopropyl Alcohol)	396	366	92	54-118	
107-13-1	Acrylonitrile	206	203	99	72-143	
75-35-4	1,1-Dichloroethene	218	203	93	69-119	
75-09-2	Methylene Chloride	212	176	83	64-113	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	214	193	90	59-131	
76-13-1	Trichlorotrifluoroethane	212	188	89	69-117	
75-15-0	Carbon Disulfide	208	176	85	65-115	
156-60-5	trans-1,2-Dichloroethene	202	187	93	70-126	
75-34-3	1,1-Dichloroethane	206	190	92	68-116	
1634-04-4	Methyl tert-Butyl Ether	204	195	96	69-120	
108-05-4	Vinyl Acetate	988	901	91	58-160	
78-93-3	2-Butanone (MEK)	212	172	81	70-127	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: Washington State Department of Ecology

Client Sample ID: Lab Control Sample

Client Project ID: Site L / PIC #9NWR

ALS Project ID: P1302773

ALS Sample ID: P130702-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/2/13

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	214	199	93	70-119	
141-78-6	Ethyl Acetate	412	383	93	72-129	
110-54-3	n-Hexane	206	184	89	63-115	
67-66-3	Chloroform	222	191	86	68-110	
109-99-9	Tetrahydrofuran (THF)	208	177	85	60-126	
107-06-2	1,2-Dichloroethane	208	179	86	69-118	
71-55-6	1,1,1-Trichloroethane	204	184	90	68-120	
71-43-2	Benzene	208	194	93	69-117	
56-23-5	Carbon Tetrachloride	212	199	94	65-134	
110-82-7	Cyclohexane	402	371	92	69-114	
78-87-5	1,2-Dichloropropane	204	186	91	70-116	
75-27-4	Bromodichloromethane	204	190	93	71-126	
79-01-6	Trichloroethene	198	183	92	71-119	
123-91-1	1,4-Dioxane	206	186	90	72-126	
80-62-6	Methyl Methacrylate	414	412	100	75-136	
142-82-5	n-Heptane	202	189	94	70-117	
10061-01-5	cis-1,3-Dichloropropene	196	185	94	75-132	
108-10-1	4-Methyl-2-pentanone	210	201	96	70-133	
10061-02-6	trans-1,3-Dichloropropene	218	209	96	78-136	
79-00-5	1,1,2-Trichloroethane	202	185	92	72-119	
108-88-3	Toluene	208	186	89	65-116	
591-78-6	2-Hexanone	228	205	90	62-132	
124-48-1	Dibromochloromethane	216	223	103	66-140	
106-93-4	1,2-Dibromoethane	208	197	95	69-130	
123-86-4	n-Butyl Acetate	228	215	94	63-136	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: Washington State Department of Ecology

Client Sample ID: Lab Control Sample

Client Project ID: Site L / PIC #9NWR

ALS Project ID: P1302773

ALS Sample ID: P130702-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/2/13

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	206	201	98	66-118	
127-18-4	Tetrachloroethene	190	183	96	63-123	
108-90-7	Chlorobenzene	208	195	94	66-118	
100-41-4	Ethylbenzene	206	191	93	66-119	
179601-23-1	m,p-Xylenes	412	372	90	64-118	
75-25-2	Bromoform	216	217	100	64-140	
100-42-5	Styrene	208	206	99	68-132	
95-47-6	o-Xylene	200	185	93	65-120	
111-84-2	n-Nonane	202	183	91	64-117	
79-34-5	1,1,2,2-Tetrachloroethane	198	180	91	63-128	
98-82-8	Cumene	196	183	93	65-121	
80-56-8	alpha-Pinene	192	197	103	66-123	
103-65-1	n-Propylbenzene	198	175	88	65-121	
622-96-8	4-Ethyltoluene	204	185	91	64-122	
108-67-8	1,3,5-Trimethylbenzene	208	194	93	64-125	
95-63-6	1,2,4-Trimethylbenzene	200	184	92	64-131	
100-44-7	Benzyl Chloride	206	191	93	67-146	
541-73-1	1,3-Dichlorobenzene	206	182	88	64-130	
106-46-7	1,4-Dichlorobenzene	212	185	87	61-124	
95-50-1	1,2-Dichlorobenzene	204	178	87	63-126	
5989-27-5	d-Limonene	206	209	101	62-133	
96-12-8	1,2-Dibromo-3-chloropropane	202	196	97	62-155	
120-82-1	1,2,4-Trichlorobenzene	200	166	83	59-146	
91-20-3	Naphthalene	178	148	83	56-143	
87-68-3	Hexachlorobutadiene	208	177	85	58-133	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Washington State Department of Ecology

Client Sample ID: Lab Control Sample

Client Project ID: Site L / PIC #9NWR

ALS Project ID: P1302773

ALS Sample ID: P130703-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/3/13

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	204	173	85	58-139	
75-71-8	Dichlorodifluoromethane (CFC 12)	202	162	80	63-115	
74-87-3	Chloromethane	196	152	78	58-122	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	206	186	90	65-115	
75-01-4	Vinyl Chloride	200	179	90	64-122	
106-99-0	1,3-Butadiene	210	204	97	57-141	
74-83-9	Bromomethane	200	154	77	68-122	
75-00-3	Chloroethane	202	190	94	66-120	
64-17-5	Ethanol	958	820	86	58-126	
75-05-8	Acetonitrile	202	200	99	64-136	
107-02-8	Acrolein	204	176	86	58-129	
67-64-1	Acetone	1,040	860	83	60-114	
75-69-4	Trichlorofluoromethane	210	157	75	62-107	
67-63-0	2-Propanol (Isopropyl Alcohol)	396	286	72	54-118	
107-13-1	Acrylonitrile	206	214	104	72-143	
75-35-4	1,1-Dichloroethene	218	195	89	69-119	
75-09-2	Methylene Chloride	212	171	81	64-113	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	214	157	73	59-131	
76-13-1	Trichlorotrifluoroethane	212	183	86	69-117	
75-15-0	Carbon Disulfide	208	170	82	65-115	
156-60-5	trans-1,2-Dichloroethene	202	188	93	70-126	
75-34-3	1,1-Dichloroethane	206	175	85	68-116	
1634-04-4	Methyl tert-Butyl Ether	204	147	72	69-120	
108-05-4	Vinyl Acetate	988	879	89	58-160	
78-93-3	2-Butanone (MEK)	212	195	92	70-127	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: Washington State Department of Ecology

Client Sample ID: Lab Control Sample

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P130703-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/3/13

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	214	185	86	70-119	
141-78-6	Ethyl Acetate	412	379	92	72-129	
110-54-3	n-Hexane	206	175	85	63-115	
67-66-3	Chloroform	222	178	80	68-110	
109-99-9	Tetrahydrofuran (THF)	208	197	95	60-126	
107-06-2	1,2-Dichloroethane	208	173	83	69-118	
71-55-6	1,1,1-Trichloroethane	204	166	81	68-120	
71-43-2	Benzene	208	178	86	69-117	
56-23-5	Carbon Tetrachloride	212	177	83	65-134	
110-82-7	Cyclohexane	402	347	86	69-114	
78-87-5	1,2-Dichloropropane	204	175	86	70-116	
75-27-4	Bromodichloromethane	204	178	87	71-126	
79-01-6	Trichloroethene	198	174	88	71-119	
123-91-1	1,4-Dioxane	206	196	95	72-126	
80-62-6	Methyl Methacrylate	414	394	95	75-136	
142-82-5	n-Heptane	202	179	89	70-117	
10061-01-5	cis-1,3-Dichloropropene	196	181	92	75-132	
108-10-1	4-Methyl-2-pentanone	210	179	85	70-133	
10061-02-6	trans-1,3-Dichloropropene	218	207	95	78-136	
79-00-5	1,1,2-Trichloroethane	202	180	89	72-119	
108-88-3	Toluene	208	177	85	65-116	
591-78-6	2-Hexanone	228	174	76	62-132	
124-48-1	Dibromochloromethane	216	190	88	66-140	
106-93-4	1,2-Dibromoethane	208	182	88	69-130	
123-86-4	n-Butyl Acetate	228	163	71	63-136	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: Washington State Department of Ecology

Client Sample ID: Lab Control Sample

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P130703-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/3/13

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	206	175	85	66-118	
127-18-4	Tetrachloroethene	190	161	85	63-123	
108-90-7	Chlorobenzene	208	175	84	66-118	
100-41-4	Ethylbenzene	206	178	86	66-119	
179601-23-1	m,p-Xylenes	412	349	85	64-118	
75-25-2	Bromoform	216	180	83	64-140	
100-42-5	Styrene	208	176	85	68-132	
95-47-6	o-Xylene	200	171	86	65-120	
111-84-2	n-Nonane	202	164	81	64-117	
79-34-5	1,1,2,2-Tetrachloroethane	198	168	85	63-128	
98-82-8	Cumene	196	168	86	65-121	
80-56-8	alpha-Pinene	192	157	82	66-123	
103-65-1	n-Propylbenzene	198	157	79	65-121	
622-96-8	4-Ethyltoluene	204	169	83	64-122	
108-67-8	1,3,5-Trimethylbenzene	208	178	86	64-125	
95-63-6	1,2,4-Trimethylbenzene	200	177	89	64-131	
100-44-7	Benzyl Chloride	206	156	76	67-146	
541-73-1	1,3-Dichlorobenzene	206	178	86	64-130	
106-46-7	1,4-Dichlorobenzene	212	178	84	61-124	
95-50-1	1,2-Dichlorobenzene	204	172	84	63-126	
5989-27-5	d-Limonene	206	156	76	62-133	
96-12-8	1,2-Dibromo-3-chloropropane	202	176	87	62-155	
120-82-1	1,2,4-Trichlorobenzene	200	168	84	59-146	
91-20-3	Naphthalene	178	147	83	56-143	
87-68-3	Hexachlorobutadiene	208	152	73	58-133	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Washington State Department of Ecology
Client Sample ID: Lab Control Sample
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130705-LCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/5/13
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	204	151	74	58-139	
75-71-8	Dichlorodifluoromethane (CFC 12)	202	154	76	63-115	
74-87-3	Chloromethane	196	144	73	58-122	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	206	161	78	65-115	
75-01-4	Vinyl Chloride	200	160	80	64-122	
106-99-0	1,3-Butadiene	210	188	90	57-141	
74-83-9	Bromomethane	200	142	71	68-122	
75-00-3	Chloroethane	202	167	83	66-120	
64-17-5	Ethanol	958	766	80	58-126	
75-05-8	Acetonitrile	202	182	90	64-136	
107-02-8	Acrolein	204	175	86	58-129	
67-64-1	Acetone	1,040	800	77	60-114	
75-69-4	Trichlorofluoromethane	210	146	70	62-107	
67-63-0	2-Propanol (Isopropyl Alcohol)	396	329	83	54-118	
107-13-1	Acrylonitrile	206	200	97	72-143	
75-35-4	1,1-Dichloroethene	218	188	86	69-119	
75-09-2	Methylene Chloride	212	154	73	64-113	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	214	193	90	59-131	
76-13-1	Trichlorotrifluoroethane	212	165	78	69-117	
75-15-0	Carbon Disulfide	208	170	82	65-115	
156-60-5	trans-1,2-Dichloroethene	202	167	83	70-126	
75-34-3	1,1-Dichloroethane	206	156	76	68-116	
1634-04-4	Methyl tert-Butyl Ether	204	167	82	69-120	
108-05-4	Vinyl Acetate	988	773	78	58-160	
78-93-3	2-Butanone (MEK)	212	191	90	70-127	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: Washington State Department of Ecology

Client Sample ID: Lab Control Sample

Client Project ID: Site L / PIC #9NWR

ALS Project ID: P1302773

ALS Sample ID: P130705-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3

Analyst: Simon Cao

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 7/5/13

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	214	175	82	70-119	
141-78-6	Ethyl Acetate	412	342	83	72-129	
110-54-3	n-Hexane	206	129	63	63-115	
67-66-3	Chloroform	222	169	76	68-110	
109-99-9	Tetrahydrofuran (THF)	208	184	88	60-126	
107-06-2	1,2-Dichloroethane	208	163	78	69-118	
71-55-6	1,1,1-Trichloroethane	204	172	84	68-120	
71-43-2	Benzene	208	166	80	69-117	
56-23-5	Carbon Tetrachloride	212	181	85	65-134	
110-82-7	Cyclohexane	402	325	81	69-114	
78-87-5	1,2-Dichloropropane	204	164	80	70-116	
75-27-4	Bromodichloromethane	204	187	92	71-126	
79-01-6	Trichloroethene	198	171	86	71-119	
123-91-1	1,4-Dioxane	206	188	91	72-126	
80-62-6	Methyl Methacrylate	414	397	96	75-136	
142-82-5	n-Heptane	202	159	79	70-117	
10061-01-5	cis-1,3-Dichloropropene	196	188	96	75-132	
108-10-1	4-Methyl-2-pentanone	210	196	93	70-133	
10061-02-6	trans-1,3-Dichloropropene	218	219	100	78-136	
79-00-5	1,1,2-Trichloroethane	202	173	86	72-119	
108-88-3	Toluene	208	163	78	65-116	
591-78-6	2-Hexanone	228	208	91	62-132	
124-48-1	Dibromochloromethane	216	208	96	66-140	
106-93-4	1,2-Dibromoethane	208	185	89	69-130	
123-86-4	n-Butyl Acetate	228	206	90	63-136	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: Washington State Department of Ecology
Client Sample ID: Lab Control Sample
Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773
 ALS Sample ID: P130705-LCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Simon Cao
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/5/13
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	206	159	77	66-118	
127-18-4	Tetrachloroethene	190	151	79	63-123	
108-90-7	Chlorobenzene	208	164	79	66-118	
100-41-4	Ethylbenzene	206	168	82	66-119	
179601-23-1	m,p-Xylenes	412	327	79	64-118	
75-25-2	Bromoform	216	204	94	64-140	
100-42-5	Styrene	208	200	96	68-132	
95-47-6	o-Xylene	200	161	81	65-120	
111-84-2	n-Nonane	202	158	78	64-117	
79-34-5	1,1,2,2-Tetrachloroethane	198	164	83	63-128	
98-82-8	Cumene	196	160	82	65-121	
80-56-8	alpha-Pinene	192	162	84	66-123	
103-65-1	n-Propylbenzene	198	164	83	65-121	
622-96-8	4-Ethyltoluene	204	166	81	64-122	
108-67-8	1,3,5-Trimethylbenzene	208	172	83	64-125	
95-63-6	1,2,4-Trimethylbenzene	200	177	89	64-131	
100-44-7	Benzyl Chloride	206	199	97	67-146	
541-73-1	1,3-Dichlorobenzene	206	175	85	64-130	
106-46-7	1,4-Dichlorobenzene	212	172	81	61-124	
95-50-1	1,2-Dichlorobenzene	204	170	83	63-126	
5989-27-5	d-Limonene	206	199	97	62-133	
96-12-8	1,2-Dibromo-3-chloropropane	202	203	100	62-155	
120-82-1	1,2,4-Trichlorobenzene	200	202	101	59-146	
91-20-3	Naphthalene	178	178	100	56-143	
87-68-3	Hexachlorobutadiene	208	178	86	58-133	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY DUPLICATE SUMMARY RESULTS

Page 1 of 3

Client: Washington State Department of Ecology

Client Sample ID: Fresh ASP

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P1302773-004DUP

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Container ID: SC01082

Date Collected: 6/26/13

Date Received: 6/27/13

Date Analyzed: 7/2/13

Volume(s) Analyzed: 0.0025 Liter(s)

Initial Pressure (psig): -0.08

Final Pressure (psig): 3.56

Canister Dilution Factor: 1.25

Compound	Sample Result		Duplicate Sample Result		Average µg/m³	% RPD	RPD Limit	Data Qualifier
	µg/m³	ppbV	µg/m³	ppbV				
Propene	369	214	ND	ND	-	-	25	
Dichlorodifluoromethane (CFC 12)	ND	ND	ND	ND	-	-	25	
Chloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	ND	ND	ND	-	-	25	
Vinyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Butadiene	ND	ND	ND	ND	-	-	25	
Bromomethane	ND	ND	ND	ND	-	-	25	
Chloroethane	ND	ND	ND	ND	-	-	25	
Ethanol	ND	ND	ND	ND	-	-	25	
Acetonitrile	ND	ND	ND	ND	-	-	25	
Acrolein	ND	ND	ND	ND	-	-	25	
Acetone	ND	ND	ND	ND	-	-	25	
Trichlorofluoromethane	ND	ND	ND	ND	-	-	25	
2-Propanol (Isopropyl Alcohol)	ND	ND	ND	ND	-	-	25	
Acrylonitrile	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
Methylene Chloride	ND	ND	ND	ND	-	-	25	
3-Chloro-1-propene (Allyl Chloride)	ND	ND	ND	ND	-	-	25	
Trichlorotrifluoroethane	ND	ND	ND	ND	-	-	25	
Carbon Disulfide	ND	ND	ND	ND	-	-	25	
trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethane	ND	ND	ND	ND	-	-	25	
Methyl tert-Butyl Ether	ND	ND	ND	ND	-	-	25	
Vinyl Acetate	ND	ND	ND	ND	-	-	25	
2-Butanone (MEK)	ND	ND	ND	ND	-	-	25	

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

ALS ENVIRONMENTAL

LABORATORY DUPLICATE SUMMARY RESULTS

Page 2 of 3

Client: Washington State Department of Ecology

Client Sample ID: Fresh ASP

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P1302773-004DUP

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Container ID: SC01082

Date Collected: 6/26/13

Date Received: 6/27/13

Date Analyzed: 7/2/13

Volume(s) Analyzed: 0.0025 Liter(s)

Initial Pressure (psig): -0.08

Final Pressure (psig): 3.56

Canister Dilution Factor: 1.25

Compound	Sample Result		Duplicate Sample Result		Average	% RPD	RPD Limit	Data Qualifier
	µg/m³	ppbV	µg/m³	ppbV				
cis-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
Ethyl Acetate	582	162	567	157	574.5	3	25	
n-Hexane	ND	ND	ND	ND	-	-	25	
Chloroform	ND	ND	ND	ND	-	-	25	
Tetrahydrofuran (THF)	ND	ND	ND	ND	-	-	25	
1,2-Dichloroethane	ND	ND	ND	ND	-	-	25	
1,1,1-Trichloroethane	ND	ND	ND	ND	-	-	25	
Benzene	ND	ND	ND	ND	-	-	25	
Carbon Tetrachloride	ND	ND	ND	ND	-	-	25	
Cyclohexane	ND	ND	ND	ND	-	-	25	
1,2-Dichloropropane	ND	ND	ND	ND	-	-	25	
Bromodichloromethane	ND	ND	ND	ND	-	-	25	
Trichloroethene	ND	ND	ND	ND	-	-	25	
1,4-Dioxane	ND	ND	ND	ND	-	-	25	
Methyl Methacrylate	ND	ND	ND	ND	-	-	25	
n-Heptane	ND	ND	ND	ND	-	-	25	
cis-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
4-Methyl-2-pentanone	ND	ND	ND	ND	-	-	25	
trans-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
1,1,2-Trichloroethane	ND	ND	ND	ND	-	-	25	
Toluene	369	98.0	363	96.4	366	2	25	
2-Hexanone	ND	ND	ND	ND	-	-	25	
Dibromochloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dibromoethane	ND	ND	ND	ND	-	-	25	
n-Butyl Acetate	ND	ND	ND	ND	-	-	25	

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

ALS ENVIRONMENTAL

LABORATORY DUPLICATE SUMMARY RESULTS

Page 3 of 3

Client: Washington State Department of Ecology

Client Sample ID: Fresh ASP

Client Project ID: Site L / PIC #9NWRR

ALS Project ID: P1302773

ALS Sample ID: P1302773-004DUP

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: John Rice

Sample Type: 6.0 L Summa Canister

Test Notes:

Container ID: SC01082

Date Collected: 6/26/13

Date Received: 6/27/13

Date Analyzed: 7/2/13

Volume(s) Analyzed: 0.0025 Liter(s)

Initial Pressure (psig): -0.08

Final Pressure (psig): 3.56

Canister Dilution Factor: 1.25

Compound	Sample Result		Duplicate Sample Result		Average µg/m ³	% RPD	RPD Limit	Data Qualifier
	µg/m ³	ppbV	µg/m ³	ppbV				
n-Octane	ND	ND	ND	ND	-	-	25	
Tetrachloroethene	ND	ND	ND	ND	-	-	25	
Chlorobenzene	ND	ND	ND	ND	-	-	25	
Ethylbenzene	ND	ND	ND	ND	-	-	25	
m,p-Xylenes	ND	ND	ND	ND	-	-	25	
Bromoform	ND	ND	ND	ND	-	-	25	
Styrene	ND	ND	ND	ND	-	-	25	
o-Xylene	ND	ND	ND	ND	-	-	25	
n-Nonane	ND	ND	ND	ND	-	-	25	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	-	-	25	
Cumene	ND	ND	ND	ND	-	-	25	
alpha-Pinene	45,100	8,090	47,000	8,440	46050	4	25	
n-Propylbenzene	ND	ND	ND	ND	-	-	25	
4-Ethyltoluene	ND	ND	ND	ND	-	-	25	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
1,2,4-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
Benzyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,4-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,2-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
d-Limonene	33,600	6,030	38,000	6,830	35800	12	25	
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	-	-	25	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	-	-	25	
Naphthalene	ND	ND	ND	ND	-	-	25	
Hexachlorobutadiene	ND	ND	ND	ND	-	-	25	

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