



## LABORATORY REPORT

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May 23, 2023

██████████  
Stantec  
27280 Haggerty Road, Suite C-11  
Farmington, MI 48331

**RE: Bristol, VA / 182603807**

Dear ██████:

Enclosed are the results of the samples submitted to our laboratory on May 12, 2023. For your reference, these analyses have been assigned our service request number P2302140.

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](http://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.

ALS | Environmental

Shaarazetta Robinson  
Project Manager



Client: Stantec  
Project: Bristol, VA / 182603807

Service Request No: P2302140

## CASE NARRATIVE

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The samples were received intact under chain of custody on May 12, 2023 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.

### Fixed Gases Analysis

The samples were analyzed for fixed gases (hydrogen, oxygen, nitrogen, carbon monoxide, methane and carbon dioxide) according to modified EPA Method 3C (single injection) using a gas chromatograph equipped with a thermal conductivity detector (TCD). This procedure is described in laboratory SOP VOA-EPA3C. This method is not included on the laboratory's NELAP or DoD-ELAP scope of accreditation.

### Sulfur Analysis

The samples were analyzed for twenty sulfur compounds per ASTM D 5504-20 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). All compounds with the exception of hydrogen sulfide and carbonyl sulfide are quantitated against the initial calibration curve for methyl mercaptan. This method is included on the laboratory's NELAP scope of accreditation, however it is not part of the DoD-ELAP 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. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph/mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. The method was modified to include the use of helium as a diluent gas in the place of zero-grade air for container pressurization for P2302140-008 through P3202140-010. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The minimum criteria for Tetrachloroethene and 1,2-Dichlorobenzene were not met in the Continuing Calibration Verification (CCV) and Chlorobenzene in the Laboratory Control Samples (LCS/DLCS) analyzed on May 19, 2023. In accordance with ALS Environmental standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verified that instrument sensitivity was adequate to detect the analytes at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compounds in question and the compounds were not detected in the field samples above the method reporting limit, the data quality has not been significantly affected. This procedure is a quantitative confirmation of non-detect results at or below the MRL. The data has been flagged accordingly. No further corrective action was necessary.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.4 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

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*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.*



## CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	<a href="https://dec.alaska.gov/spar/csp/lab-approval/list-of-approved-labs">https://dec.alaska.gov/spar/csp/lab-approval/list-of-approved-labs</a>	17-019
Arizona DHS	<a href="http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home">http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home</a>	AZ0694
Florida DOH (NELAP)	<a href="http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html">http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html</a>	E871020
Louisiana DEQ (NELAP)	<a href="https://internet.deq.louisiana.gov/portal/divisions/lelap/accredited-laboratories">https://internet.deq.louisiana.gov/portal/divisions/lelap/accredited-laboratories</a>	05071
Maine DHHS	<a href="http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtm">http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtm</a>	2022028
Minnesota DOH (NELAP)	<a href="http://www.health.state.mn.us/accreditation">http://www.health.state.mn.us/accreditation</a>	006-999-456
New Jersey DEP (NELAP)	<a href="https://dep.nj.gov/dsr/oqa/certified-laboratories/">https://dep.nj.gov/dsr/oqa/certified-laboratories/</a>	CA009
New York DOH (NELAP)	<a href="http://www.wadsworth.org/labcert/elap/elap.html">http://www.wadsworth.org/labcert/elap/elap.html</a>	11221
Oregon PHD (NELAP)	<a href="http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx">http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx</a>	4068-011
Pennsylvania DEP	<a href="http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx">http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx</a>	68-03307 (Registration)
PJLA (DoD ELAP)	<a href="http://www.pjlabs.com/search-accredited-labs">http://www.pjlabs.com/search-accredited-labs</a>	65818 (Testing)
Texas CEQ (NELAP)	<a href="http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html">http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html</a>	T104704413- 22-13
Utah DOH (NELAP)	<a href="https://uphl.utah.gov/certifications/environmental-laboratory-certification/">https://uphl.utah.gov/certifications/environmental-laboratory-certification/</a>	CA016272022 -14
Washington DOE	<a href="http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html">http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html</a>	C946
<p>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 <a href="http://www.alsglobal.com">www.alsglobal.com</a>, or at the accreditation body's website.</p> <p>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.</p>		

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Stantec  
 Project ID: Bristol, VA / 182603807

Service Request: P2302140

Date Received: 5/12/2023  
 Time Received: 09:37

ASTM D 5504-20 - Sulfur Can	TO-15 - VOC Cans 62	3C Modified - Fxd Gases Can	TO-15 Modified - VOC Cans 62
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Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	ASTM D 5504-20 - Sulfur Can	TO-15 - VOC Cans 62	3C Modified - Fxd Gases Can	TO-15 Modified - VOC Cans 62
MP-1	P2302140-001	Air	5/11/2023	08:20	AS01009	-1.78	4.00	X	X		
MP-2	P2302140-002	Air	5/11/2023	07:55	AS01763	-1.88	3.99	X	X		
MP-3	P2302140-003	Air	5/11/2023	05:14	AS01756	-2.00	3.91	X	X		
MP-4	P2302140-004	Air	5/11/2023	08:05	AS00640	-2.60	3.64	X	X		
MP-5	P2302140-005	Air	5/11/2023	07:00	AS01743	-1.49	3.86	X	X		
MP-6	P2302140-006	Air	5/11/2023	07:13	AS01717	-1.15	3.85	X	X		
MP-7	P2302140-007	Air	5/11/2023	09:45	AS01077	-1.34	3.71	X	X		
SW-2U	P2302140-008	Air	5/10/2023	15:34	AS01226	-2.52	4.70	X		X	X
SW-2L	P2302140-009	Air	5/10/2023	15:34	AS01001	-2.74	4.00	X		X	X
SW-1U	P2302140-010	Air	5/10/2023	16:05	AS01256	-3.01	3.98	X		X	X



# Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A  
 Simi Valley, California 93065  
 Phone (805) 526-7161  
 Fax (805) 526-7270

**Requested Turnaround Time in Business Days (Surcharges) please circle**  
 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. 72302140

Company Name & Address (Reporting Information) Stantec Consulting Services Inc. 27280 Haggerty Road, Suite C-11 Farmington Hills, MI 48331						Project Name Bristol, VA						ALS Contact			<b>Comments</b> TC-15 Full Scan + TICs; report results down to MDL for TO-15 and ASTM D5504; individually certified Silco canisters & regulators
						Project Number 182603807						<b>Analysis Method</b>			
P.O. # / Billing Information						Sampler (Print & Sign)									
Phone						Fax									
Email Address for Result Reporting															

Client Sample ID	Laboratory ID Number	Start Date	End Date	Start Time	End Time	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	USEPA Method TO-15 + TICs	ASTM-D5504	USEPA Method 3C
MP-1	1	5/10/2023	5/11/2023	1020	0820	AS01009	SFC00039	30	4	5.20	X	X	
MP-2	2	5/10/2023	5/11/2023	1055	0755	AS01763	SFC00721	29	4.5	4.98	X	X	
MP-3	3	5/10/2023	5/11/2023	1030	0514	AS01756	SFC00565	29	5	4.97	X	X	
MP-4	4	5/10/2023	5/11/2023	1105	0805	AS00640	SFC00680	28	4	5.14	X	X	
MP-5	5	5/10/2023	5/11/2023	1000	0700	AS01743	SFC00518	29	4	5.17	X	X	
MP-6	6	5/10/2023	5/11/2023	1013	0713	AS01717	SFC00645	30	4	5.20	X	X	
MP-7	7	5/10/2023	5/11/2023	1045	0945	AS01077	SFC00560	29.5	3	5.39	X	X	
SW-2U	8	5/10/2023	5/10/2023	1519	1534	AS01226	SOA00254	29	5	4.97	X	X	X
SW-2L	9	5/10/2023	5/10/2023	1519	1534	AS01001	SOA00248	29	4	5.17	X	X	X
SW-1U	10	5/10/2023	5/10/2023	1550	1605	AS01256	SOA00360	29	5	4.97	X	X	X

<b>Report Tier Levels - please select</b>						EDD required Yes / No			Chain of Custody Seal: (Circle)			Project Requirements (MRLs, QAPP)	
Tier I - Results (Default if not specified) _____		Tier III (Results + QC & Calibration Summaries) _____		Type: _____ Units: _____		INTACT			BROKEN				Cooler / Blank Temperature ____ °C
Tier II (Results + QC Summaries) <u>X</u>		Tier IV (Data Validation Package) 10% Surcharge _____		Date: 5/11/2023		Time: 1300		Received by: (Signature)		Date: 5/11/2023		Time: 0937	
				Date: _____		Time: _____		Received by: (Signature)		Date: _____		Time: _____	

## ALS Environmental Sample Acceptance Check Form

Client: Stantec

Work order: P2302140

Project: Bristol, VA / 182603807

Sample(s) received on: 5/12/23

Date opened: 5/12/23

by: ADAVID

**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 <b>sample containers</b> properly marked with client sample ID?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 2 Did <b>sample containers</b> arrive in good condition?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3 Were <b>chain-of-custody</b> papers used and filled out?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 4 Did <b>sample container labels</b> and/or tags agree with custody papers?                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5 Was <b>sample volume</b> received adequate for analysis?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 6 Are samples within specified holding times?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 7 Was proper <b>temperature</b> (thermal preservation) of cooler at receipt adhered to?                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 8 Were <b>custody seals</b> on outside of cooler/Box/Container?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Location of seal(s)? _____ Sealing Lid?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were signature and date included?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were seals intact?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 9 Do containers have appropriate <b>preservation</b> , according to method/SOP or Client specified information? | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Is there a client indication that the submitted samples are <b>pH</b> preserved?                                | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were <b>VOA vials</b> checked for presence/absence of air bubbles?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10 <b>Tubes:</b> Are the tubes capped and intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 11 <b>Badges:</b> Are the badges properly capped and intact?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Are dual bed badges separated and individually capped and intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2302140-001.01	6.0 L Silonite Can					
P2302140-002.01	6.0 L Silonite Can					
P2302140-003.01	6.0 L Silonite Can					
P2302140-004.01	6.0 L Silonite Can					
P2302140-005.01	6.0 L Silonite Can					
P2302140-006.01	6.0 L Silonite Can					
P2302140-007.01	6.0 L Silonite Can					
P2302140-008.01	6.0 L Silonite Can					
P2302140-009.01	6.0 L Silonite Can					
P2302140-010.01	6.0 L Silonite Can					

Explain any discrepancies: (include lab sample ID numbers): \_\_\_\_\_

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** Stantec  
**Client Sample ID:** SW-2U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-008

Test Code: EPA Method 3C Modified  
 Instrument ID: Agilent 8890/GC38/TCD  
 Analyst: Kylan Malloy  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01226

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -2.52      Final Pressure (psig): 4.70

Container Dilution Factor: 1.59

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	<b>Hydrogen</b>	<b>0.663</b>	0.16	
7782-44-7	<b>Oxygen*</b>	<b>19.1</b>	0.16	
7727-37-9	<b>Nitrogen</b>	<b>69.1</b>	0.16	
630-08-0	Carbon Monoxide	ND	0.16	
74-82-8	<b>Methane</b>	<b>2.35</b>	0.16	
124-38-9	<b>Carbon Dioxide</b>	<b>8.83</b>	0.16	

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.

\* = The oxygen result may include argon due to coelution. Ambient air includes 0.93% argon.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** Stantec  
**Client Sample ID:** SW-2L  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-009

Test Code: EPA Method 3C Modified  
 Instrument ID: Agilent 8890/GC38/TCD  
 Analyst: Kylan Malloy  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01001

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -2.74      Final Pressure (psig): 4.00

Container Dilution Factor: 1.56

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	<b>Hydrogen</b>	<b>0.254</b>	0.16	
7782-44-7	<b>Oxygen*</b>	<b>9.79</b>	0.16	
7727-37-9	<b>Nitrogen</b>	<b>41.2</b>	0.16	
630-08-0	Carbon Monoxide	ND	0.16	
74-82-8	<b>Methane</b>	<b>15.2</b>	0.16	
124-38-9	<b>Carbon Dioxide</b>	<b>33.5</b>	0.16	

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# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-1U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-010

Test Code: EPA Method 3C Modified  
 Instrument ID: Agilent 8890/GC38/TCD  
 Analyst: Kylan Malloy  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01256

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -3.01      Final Pressure (psig): 3.98

Container Dilution Factor: 1.60

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	<b>Hydrogen</b>	<b>1.58</b>	0.16	
7782-44-7	<b>Oxygen*</b>	<b>18.1</b>	0.16	
7727-37-9	<b>Nitrogen</b>	<b>64.1</b>	0.16	
630-08-0	Carbon Monoxide	ND	0.16	
74-82-8	<b>Methane</b>	<b>3.54</b>	0.16	
124-38-9	<b>Carbon Dioxide</b>	<b>12.7</b>	0.16	

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

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# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** Stantec  
**Client Sample ID:** Method Blank  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230515-MB

Test Code: EPA Method 3C Modified  
 Instrument ID: Agilent 8890/GC38/TCD  
 Analyst: Kylan Malloy  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/15/23  
 Volume(s) Analyzed: 0.10 ml(s)

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	ND	0.10	
7782-44-7	Oxygen*	ND	0.10	
7727-37-9	Nitrogen	ND	0.10	
630-08-0	Carbon Monoxide	ND	0.10	
74-82-8	Methane	ND	0.10	
124-38-9	Carbon Dioxide	ND	0.10	

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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# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

**Client:** Stantec  
**Client Sample ID:** Duplicate Lab Control Sample  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230515-DLCS

Test Code: EPA Method 3C Modified  
 Instrument ID: Agilent 8890/GC38/TCD  
 Analyst: Kylan Malloy  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/15/23  
 Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount	Result		% Recovery		ALS	RPD	RPD	Data
		LCS / DLCS ppmV	LCS ppmV	DLCS ppmV	LCS	DLCS	Acceptance Limits			
1333-74-0	Hydrogen	39,700	43,500	44,600	<b>110</b>	<b>112</b>	96-117	2	5	
7782-44-7	Oxygen*	25,100	26,000	26,800	<b>104</b>	<b>107</b>	92-112	3	7	
7727-37-9	Nitrogen	49,800	51,200	52,700	<b>103</b>	<b>106</b>	89-113	3	7	
630-08-0	Carbon Monoxide	49,600	53,100	54,400	<b>107</b>	<b>110</b>	96-113	3	5	
74-82-8	Methane	40,000	42,100	43,100	<b>105</b>	<b>108</b>	95-111	3	5	
124-38-9	Carbon Dioxide	49,600	52,300	53,300	<b>105</b>	<b>107</b>	93-112	2	6	

\* = The oxygen result may include argon due to coelution. Ambient air includes 0.93% argon.

**ALS ENVIRONMENTAL**

RESULTS OF ANALYSIS

Page 1 of 1

**Client:** Stantec  
**Client Sample ID:** MP-1  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-001

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01009

Date Collected: 5/11/23  
 Time Collected: 08:20  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 09:53  
 Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -1.78      Final Pressure (psig): 4.00

Container Dilution Factor: 1.45

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	10	ND	7.3	
463-58-1	Carbonyl Sulfide	ND	18	ND	7.3	
74-93-1	Methyl Mercaptan	ND	14	ND	7.3	
75-08-1	Ethyl Mercaptan	ND	18	ND	7.3	
75-18-3	Dimethyl Sulfide	ND	18	ND	7.3	
75-15-0	Carbon Disulfide	ND	11	ND	3.6	
75-33-2	Isopropyl Mercaptan	ND	23	ND	7.3	
75-66-1	tert-Butyl Mercaptan	ND	27	ND	7.3	
107-03-9	n-Propyl Mercaptan	ND	23	ND	7.3	
624-89-5	Ethyl Methyl Sulfide	ND	23	ND	7.3	
110-02-1	Thiophene	ND	25	ND	7.3	
513-44-0	Isobutyl Mercaptan	ND	27	ND	7.3	
352-93-2	Diethyl Sulfide	ND	27	ND	7.3	
109-79-5	n-Butyl Mercaptan	ND	27	ND	7.3	
624-92-0	Dimethyl Disulfide	ND	14	ND	3.6	
616-44-4	3-Methylthiophene	ND	29	ND	7.3	
110-01-0	Tetrahydrothiophene	ND	26	ND	7.3	
638-02-8	2,5-Dimethylthiophene	ND	33	ND	7.3	
872-55-9	2-Ethylthiophene	ND	33	ND	7.3	
110-81-6	Diethyl Disulfide	ND	18	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:** Stantec  
**Client Sample ID:** MP-2  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-002

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01763

Date Collected: 5/11/23  
 Time Collected: 07:55  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 11:02  
 Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -1.88      Final Pressure (psig): 3.99

Container Dilution Factor: 1.46

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	10	ND	7.3	
463-58-1	Carbonyl Sulfide	ND	18	ND	7.3	
74-93-1	Methyl Mercaptan	ND	14	ND	7.3	
75-08-1	Ethyl Mercaptan	ND	19	ND	7.3	
75-18-3	Dimethyl Sulfide	ND	19	ND	7.3	
75-15-0	Carbon Disulfide	ND	11	ND	3.7	
75-33-2	Isopropyl Mercaptan	ND	23	ND	7.3	
75-66-1	tert-Butyl Mercaptan	ND	27	ND	7.3	
107-03-9	n-Propyl Mercaptan	ND	23	ND	7.3	
624-89-5	Ethyl Methyl Sulfide	ND	23	ND	7.3	
110-02-1	Thiophene	ND	25	ND	7.3	
513-44-0	Isobutyl Mercaptan	ND	27	ND	7.3	
352-93-2	Diethyl Sulfide	ND	27	ND	7.3	
109-79-5	n-Butyl Mercaptan	ND	27	ND	7.3	
624-92-0	Dimethyl Disulfide	ND	14	ND	3.7	
616-44-4	3-Methylthiophene	ND	29	ND	7.3	
110-01-0	Tetrahydrothiophene	ND	26	ND	7.3	
638-02-8	2,5-Dimethylthiophene	ND	33	ND	7.3	
872-55-9	2-Ethylthiophene	ND	33	ND	7.3	
110-81-6	Diethyl Disulfide	ND	18	ND	3.7	

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:** Stantec  
**Client Sample ID:** MP-3  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-003

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01756

Date Collected: 5/11/23  
 Time Collected: 05:14  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 11:40  
 Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -2.00      Final Pressure (psig): 3.91

Container Dilution Factor: 1.47

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	10	ND	7.4	
463-58-1	Carbonyl Sulfide	ND	18	ND	7.4	
74-93-1	Methyl Mercaptan	ND	14	ND	7.4	
75-08-1	Ethyl Mercaptan	ND	19	ND	7.4	
75-18-3	Dimethyl Sulfide	ND	19	ND	7.4	
75-15-0	Carbon Disulfide	ND	11	ND	3.7	
75-33-2	Isopropyl Mercaptan	ND	23	ND	7.4	
75-66-1	tert-Butyl Mercaptan	ND	27	ND	7.4	
107-03-9	n-Propyl Mercaptan	ND	23	ND	7.4	
624-89-5	Ethyl Methyl Sulfide	ND	23	ND	7.4	
110-02-1	Thiophene	ND	25	ND	7.4	
513-44-0	Isobutyl Mercaptan	ND	27	ND	7.4	
352-93-2	Diethyl Sulfide	ND	27	ND	7.4	
109-79-5	n-Butyl Mercaptan	ND	27	ND	7.4	
624-92-0	Dimethyl Disulfide	ND	14	ND	3.7	
616-44-4	3-Methylthiophene	ND	29	ND	7.4	
110-01-0	Tetrahydrothiophene	ND	26	ND	7.4	
638-02-8	2,5-Dimethylthiophene	ND	34	ND	7.4	
872-55-9	2-Ethylthiophene	ND	34	ND	7.4	
110-81-6	Diethyl Disulfide	ND	18	ND	3.7	

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:** Stantec  
**Client Sample ID:** MP-4  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-004

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS00640

Date Collected: 5/11/23  
 Time Collected: 08:05  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 12:18  
 Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -2.60      Final Pressure (psig): 3.64

Container Dilution Factor: 1.52

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	11	ND	7.6	
463-58-1	Carbonyl Sulfide	ND	19	ND	7.6	
74-93-1	Methyl Mercaptan	ND	15	ND	7.6	
75-08-1	Ethyl Mercaptan	ND	19	ND	7.6	
75-18-3	Dimethyl Sulfide	ND	19	ND	7.6	
75-15-0	Carbon Disulfide	ND	12	ND	3.8	
75-33-2	Isopropyl Mercaptan	ND	24	ND	7.6	
75-66-1	tert-Butyl Mercaptan	ND	28	ND	7.6	
107-03-9	n-Propyl Mercaptan	ND	24	ND	7.6	
624-89-5	Ethyl Methyl Sulfide	ND	24	ND	7.6	
110-02-1	Thiophene	ND	26	ND	7.6	
513-44-0	Isobutyl Mercaptan	ND	28	ND	7.6	
352-93-2	Diethyl Sulfide	ND	28	ND	7.6	
109-79-5	n-Butyl Mercaptan	ND	28	ND	7.6	
624-92-0	Dimethyl Disulfide	ND	15	ND	3.8	
616-44-4	3-Methylthiophene	ND	31	ND	7.6	
110-01-0	Tetrahydrothiophene	ND	27	ND	7.6	
638-02-8	2,5-Dimethylthiophene	ND	35	ND	7.6	
872-55-9	2-Ethylthiophene	ND	35	ND	7.6	
110-81-6	Diethyl Disulfide	ND	19	ND	3.8	

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**

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**Client:** Stantec  
**Client Sample ID:** MP-5  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-005

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01743

Date Collected: 5/11/23  
 Time Collected: 07:00  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 12:37  
 Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -1.49      Final Pressure (psig): 3.86

Container Dilution Factor: 1.40

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	9.8	ND	7.0	
463-58-1	Carbonyl Sulfide	ND	17	ND	7.0	
74-93-1	Methyl Mercaptan	ND	14	ND	7.0	
75-08-1	Ethyl Mercaptan	ND	18	ND	7.0	
75-18-3	Dimethyl Sulfide	ND	18	ND	7.0	
75-15-0	Carbon Disulfide	ND	11	ND	3.5	
75-33-2	Isopropyl Mercaptan	ND	22	ND	7.0	
75-66-1	tert-Butyl Mercaptan	ND	26	ND	7.0	
107-03-9	n-Propyl Mercaptan	ND	22	ND	7.0	
624-89-5	Ethyl Methyl Sulfide	ND	22	ND	7.0	
110-02-1	Thiophene	ND	24	ND	7.0	
513-44-0	Isobutyl Mercaptan	ND	26	ND	7.0	
352-93-2	Diethyl Sulfide	ND	26	ND	7.0	
109-79-5	n-Butyl Mercaptan	ND	26	ND	7.0	
624-92-0	Dimethyl Disulfide	ND	13	ND	3.5	
616-44-4	3-Methylthiophene	ND	28	ND	7.0	
110-01-0	Tetrahydrothiophene	ND	25	ND	7.0	
638-02-8	2,5-Dimethylthiophene	ND	32	ND	7.0	
872-55-9	2-Ethylthiophene	ND	32	ND	7.0	
110-81-6	Diethyl Disulfide	ND	17	ND	3.5	

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:** Stantec  
**Client Sample ID:** MP-6  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-006

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01717

Date Collected: 5/11/23  
 Time Collected: 07:13  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 12:58  
 Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -1.15      Final Pressure (psig): 3.85

Container Dilution Factor: 1.37

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	9.5	ND	6.9	
463-58-1	Carbonyl Sulfide	ND	17	ND	6.9	
74-93-1	Methyl Mercaptan	ND	13	ND	6.9	
75-08-1	Ethyl Mercaptan	ND	17	ND	6.9	
75-18-3	Dimethyl Sulfide	ND	17	ND	6.9	
75-15-0	Carbon Disulfide	ND	11	ND	3.4	
75-33-2	Isopropyl Mercaptan	ND	21	ND	6.9	
75-66-1	tert-Butyl Mercaptan	ND	25	ND	6.9	
107-03-9	n-Propyl Mercaptan	ND	21	ND	6.9	
624-89-5	Ethyl Methyl Sulfide	ND	21	ND	6.9	
110-02-1	Thiophene	ND	24	ND	6.9	
513-44-0	Isobutyl Mercaptan	ND	25	ND	6.9	
352-93-2	Diethyl Sulfide	ND	25	ND	6.9	
109-79-5	n-Butyl Mercaptan	ND	25	ND	6.9	
624-92-0	Dimethyl Disulfide	ND	13	ND	3.4	
616-44-4	3-Methylthiophene	ND	27	ND	6.9	
110-01-0	Tetrahydrothiophene	ND	25	ND	6.9	
638-02-8	2,5-Dimethylthiophene	ND	31	ND	6.9	
872-55-9	2-Ethylthiophene	ND	31	ND	6.9	
110-81-6	Diethyl Disulfide	ND	17	ND	3.4	

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:** Stantec  
**Client Sample ID:** MP-7  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-007

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01077

Date Collected: 5/11/23  
 Time Collected: 09:45  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 13:22  
 Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -1.34      Final Pressure (psig): 3.71

Container Dilution Factor: 1.38

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	9.6	ND	6.9	
463-58-1	Carbonyl Sulfide	ND	17	ND	6.9	
74-93-1	Methyl Mercaptan	ND	14	ND	6.9	
75-08-1	Ethyl Mercaptan	ND	18	ND	6.9	
75-18-3	Dimethyl Sulfide	ND	18	ND	6.9	
75-15-0	Carbon Disulfide	ND	11	ND	3.5	
75-33-2	Isopropyl Mercaptan	ND	21	ND	6.9	
75-66-1	tert-Butyl Mercaptan	ND	25	ND	6.9	
107-03-9	n-Propyl Mercaptan	ND	21	ND	6.9	
624-89-5	Ethyl Methyl Sulfide	ND	21	ND	6.9	
110-02-1	Thiophene	ND	24	ND	6.9	
513-44-0	Isobutyl Mercaptan	ND	25	ND	6.9	
352-93-2	Diethyl Sulfide	ND	25	ND	6.9	
109-79-5	n-Butyl Mercaptan	ND	25	ND	6.9	
624-92-0	Dimethyl Disulfide	ND	13	ND	3.5	
616-44-4	3-Methylthiophene	ND	28	ND	6.9	
110-01-0	Tetrahydrothiophene	ND	25	ND	6.9	
638-02-8	2,5-Dimethylthiophene	ND	32	ND	6.9	
872-55-9	2-Ethylthiophene	ND	32	ND	6.9	
110-81-6	Diethyl Disulfide	ND	17	ND	3.5	

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:** Stantec  
**Client Sample ID:** SW-2U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-008

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01226

Date Collected: 5/10/23  
 Time Collected: 15:34  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 14:02  
 Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -2.52      Final Pressure (psig): 4.70

Container Dilution Factor: 1.59

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	110	ND	80	
463-58-1	Carbonyl Sulfide	<b>1,300</b>	200	<b>540</b>	80	
74-93-1	Methyl Mercaptan	ND	160	ND	80	
75-08-1	Ethyl Mercaptan	ND	200	ND	80	
75-18-3	Dimethyl Sulfide	<b>910,000</b>	200	<b>360,000</b>	80	
75-15-0	Carbon Disulfide	<b>2,300</b>	120	<b>750</b>	40	
75-33-2	Isopropyl Mercaptan	ND	250	ND	80	
75-66-1	tert-Butyl Mercaptan	ND	290	ND	80	
107-03-9	n-Propyl Mercaptan	ND	250	ND	80	
624-89-5	Ethyl Methyl Sulfide	<b>11,000</b>	250	<b>3,700</b>	80	
110-02-1	Thiophene	<b>19,000</b>	270	<b>5,500</b>	80	
513-44-0	Isobutyl Mercaptan	ND	290	ND	80	
352-93-2	Diethyl Sulfide	ND	290	ND	80	
109-79-5	n-Butyl Mercaptan	<b>3,200</b>	290	<b>870</b>	80	
624-92-0	Dimethyl Disulfide	<b>310,000</b>	150	<b>80,000</b>	40	
616-44-4	3-Methylthiophene	<b>2,900</b>	320	<b>720</b>	80	
110-01-0	Tetrahydrothiophene	<b>4,200</b>	290	<b>1,200</b>	80	
638-02-8	2,5-Dimethylthiophene	<b>1,300</b>	360	<b>280</b>	80	
872-55-9	2-Ethylthiophene	<b>1,200</b>	360	<b>260</b>	80	
110-81-6	Diethyl Disulfide	ND	200	ND	40	

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:** Stantec  
**Client Sample ID:** SW-2L  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-009

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01001

Date Collected: 5/10/23  
 Time Collected: 15:34  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 14:24  
 Volume(s) Analyzed: 0.050 ml(s)

Initial Pressure (psig): -2.74      Final Pressure (psig): 4.00

Container Dilution Factor: 1.56

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	220	ND	160	
463-58-1	Carbonyl Sulfide	<b>1,200</b>	380	<b>490</b>	160	
74-93-1	Methyl Mercaptan	ND	310	ND	160	
75-08-1	Ethyl Mercaptan	ND	400	ND	160	
75-18-3	Dimethyl Sulfide	<b>1,000,000</b>	400	<b>400,000</b>	160	
75-15-0	Carbon Disulfide	<b>1,300</b>	240	<b>420</b>	78	
75-33-2	Isopropyl Mercaptan	ND	490	ND	160	
75-66-1	tert-Butyl Mercaptan	ND	580	ND	160	
107-03-9	n-Propyl Mercaptan	ND	490	ND	160	
624-89-5	Ethyl Methyl Sulfide	<b>32,000</b>	490	<b>10,000</b>	160	
110-02-1	Thiophene	<b>49,000</b>	540	<b>14,000</b>	160	
513-44-0	Isobutyl Mercaptan	ND	580	ND	160	
352-93-2	Diethyl Sulfide	ND	580	ND	160	
109-79-5	n-Butyl Mercaptan	<b>7,700</b>	580	<b>2,100</b>	160	
624-92-0	Dimethyl Disulfide	<b>280,000</b>	300	<b>73,000</b>	78	
616-44-4	3-Methylthiophene	<b>7,400</b>	630	<b>1,800</b>	160	
110-01-0	Tetrahydrothiophene	<b>7,600</b>	560	<b>2,100</b>	160	
638-02-8	2,5-Dimethylthiophene	<b>2,400</b>	720	<b>530</b>	160	
872-55-9	2-Ethylthiophene	<b>2,900</b>	720	<b>630</b>	160	
110-81-6	Diethyl Disulfide	<b>650</b>	390	<b>130</b>	78	

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**

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**Client:** Stantec  
**Client Sample ID:** SW-1U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-010

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01256

Date Collected: 5/10/23  
 Time Collected: 16:05  
 Date Received: 5/12/23  
 Date Analyzed: 5/15/23  
 Time Analyzed: 15:02, 15:22  
 Volume(s) Analyzed: 1.0 ml(s)  
 0.0050 ml(s)

Initial Pressure (psig): -3.01      Final Pressure (psig): 3.98

Container Dilution Factor: 1.60

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	13	11	9.5	8.0	
463-58-1	Carbonyl Sulfide	2,200	20	890	8.0	
74-93-1	Methyl Mercaptan	25	16	13	8.0	
75-08-1	Ethyl Mercaptan	ND	20	ND	8.0	
75-18-3	Dimethyl Sulfide	860,000	4,100	340,000	1,600	D
75-15-0	Carbon Disulfide	2,600	12	840	4.0	
75-33-2	Isopropyl Mercaptan	ND	25	ND	8.0	
75-66-1	tert-Butyl Mercaptan	ND	29	ND	8.0	
107-03-9	n-Propyl Mercaptan	ND	25	ND	8.0	
624-89-5	Ethyl Methyl Sulfide	15,000	25	4,800	8.0	
110-02-1	Thiophene	24,000	28	6,900	8.0	
513-44-0	Isobutyl Mercaptan	ND	29	ND	8.0	
352-93-2	Diethyl Sulfide	ND	29	ND	8.0	
109-79-5	n-Butyl Mercaptan	4,600	29	1,300	8.0	
624-92-0	Dimethyl Disulfide	260,000	3,100	68,000	800	D
616-44-4	3-Methylthiophene	3,300	32	820	8.0	
110-01-0	Tetrahydrothiophene	5,900	29	1,600	8.0	
638-02-8	2,5-Dimethylthiophene	1,800	37	400	8.0	
872-55-9	2-Ethylthiophene	1,700	37	370	8.0	
110-81-6	Diethyl Disulfide	ND	20	ND	4.0	

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.

D = The reported result is from a dilution.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** Stantec  
**Client Sample ID:** Method Blank  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230515-MB

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Time Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/15/23  
 Time Analyzed: 09:07  
 Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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 / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

**Client:** Stantec  
**Client Sample ID:** Duplicate Lab Control Sample  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230515-DLCS

Test Code: ASTM D 5504-20  
 Instrument ID: Agilent 7890A/GC22/SCD  
 Analyst: Gilbert Gutierrez  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/15/23  
 Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount LCS / DLCS ppbV	Result		% Recovery		ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
			LCS ppbV	DLCS ppbV	LCS	DLCS				
7783-06-4	Hydrogen Sulfide	1,000	898	785	<b>90</b>	<b>79</b>	72-122	13	18	
463-58-1	Carbonyl Sulfide	1,000	1,110	991	<b>111</b>	<b>99</b>	72-121	11	17	
74-93-1	Methyl Mercaptan	1,000	1,160	1,060	<b>116</b>	<b>106</b>	74-127	9	18	

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Stantec  
**Client Sample ID:** MP-1  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-001

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01009

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.78      Final Pressure (psig): 4.00

Canister Dilution Factor: 1.45

CAS #	Compound	Result	MRL	MDL	Result	MRL	MDL	Data
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	ppbV	Qualifier
115-07-1	Propene	1.4	0.77	0.19	0.80	0.45	0.11	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.0	0.77	0.13	0.39	0.16	0.026	
74-87-3	Chloromethane	0.38	0.75	0.12	0.19	0.37	0.060	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.75	0.12	ND	0.11	0.017	
75-01-4	Vinyl Chloride	ND	0.74	0.083	ND	0.29	0.032	
106-99-0	1,3-Butadiene	ND	0.77	0.13	ND	0.35	0.058	
74-83-9	Bromomethane	ND	0.74	0.11	ND	0.19	0.028	
75-00-3	Chloroethane	ND	0.75	0.096	ND	0.29	0.036	
67-64-1	Acetone	6.2	7.6	1.7	2.6	3.2	0.73	J
75-69-4	Trichlorofluoromethane (CFC 11)	0.98	0.75	0.12	0.18	0.13	0.021	
67-63-0	2-Propanol (Isopropyl Alcohol)	0.86	1.5	0.32	0.35	0.60	0.13	J
75-35-4	1,1-Dichloroethene	ND	0.78	0.11	ND	0.20	0.027	
75-09-2	Methylene Chloride	0.29	0.77	0.22	0.085	0.22	0.063	J
76-13-1	Trichlorotrifluoroethane (CFC 113)	0.43	0.78	0.11	0.057	0.10	0.014	J
75-15-0	Carbon Disulfide	0.36	1.6	0.23	0.12	0.50	0.075	J
156-60-5	trans-1,2-Dichloroethene	ND	0.78	0.11	ND	0.20	0.027	
75-34-3	1,1-Dichloroethane	ND	0.78	0.11	ND	0.19	0.028	
1634-04-4	Methyl tert-Butyl Ether	ND	0.78	0.091	ND	0.22	0.025	
108-05-4	Vinyl Acetate	ND	7.3	1.7	ND	2.1	0.49	
78-93-3	2-Butanone (MEK)	0.82	1.5	0.16	0.28	0.51	0.054	J
156-59-2	cis-1,2-Dichloroethene	ND	0.77	0.11	ND	0.19	0.027	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.



# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Stantec  
**Client Sample ID:** MP-1  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-001

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01009

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.78      Final Pressure (psig): 4.00

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	<b>14</b>	3.0	0.41	<b>4.0</b>	0.85	0.11	
110-54-3	n-Hexane	<b>0.30</b>	0.77	0.16	<b>0.085</b>	0.22	0.045	<b>J</b>
67-66-3	Chloroform	ND	0.77	0.10	ND	0.16	0.021	
109-99-9	Tetrahydrofuran (THF)	ND	1.5	0.097	ND	0.49	0.033	
107-06-2	1,2-Dichloroethane	<b>0.10</b>	0.78	0.086	<b>0.025</b>	0.19	0.021	<b>J</b>
71-55-6	1,1,1-Trichloroethane	ND	0.77	0.096	ND	0.14	0.018	
71-43-2	Benzene	<b>0.47</b>	0.78	0.11	<b>0.15</b>	0.25	0.035	<b>J</b>
56-23-5	Carbon Tetrachloride	<b>0.35</b>	0.75	0.11	<b>0.056</b>	0.12	0.017	<b>J</b>
110-82-7	Cyclohexane	ND	1.5	0.22	ND	0.44	0.063	
78-87-5	1,2-Dichloropropane	ND	0.77	0.096	ND	0.17	0.021	
75-27-4	Bromodichloromethane	ND	0.78	0.11	ND	0.12	0.017	
79-01-6	Trichloroethene	ND	0.77	0.10	ND	0.14	0.019	
123-91-1	1,4-Dioxane	ND	0.77	0.091	ND	0.21	0.025	
142-82-5	n-Heptane	<b>0.15</b>	0.77	0.12	<b>0.035</b>	0.19	0.030	<b>J</b>
10061-01-5	cis-1,3-Dichloropropene	ND	0.78	0.12	ND	0.17	0.027	
108-10-1	4-Methyl-2-pentanone	<b>0.12</b>	1.6	0.11	<b>0.030</b>	0.39	0.026	<b>J</b>
10061-02-6	trans-1,3-Dichloropropene	ND	0.74	0.16	ND	0.16	0.035	
79-00-5	1,1,2-Trichloroethane	ND	0.77	0.078	ND	0.14	0.014	
108-88-3	Toluene	<b>0.83</b>	0.77	0.094	<b>0.22</b>	0.20	0.025	
591-78-6	2-Hexanone	<b>0.19</b>	1.6	0.096	<b>0.047</b>	0.39	0.023	<b>J</b>

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Stantec  
**Client Sample ID:** MP-1  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-001

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01009

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.78      Final Pressure (psig): 4.00

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.78	0.10	ND	0.092	0.012	
106-93-4	1,2-Dibromoethane	ND	0.75	0.090	ND	0.098	0.012	
127-18-4	Tetrachloroethene	ND	0.77	0.10	ND	0.11	0.015	V
108-90-7	Chlorobenzene	ND	0.77	0.10	ND	0.17	0.022	
100-41-4	Ethylbenzene	<b>0.19</b>	0.77	0.11	<b>0.045</b>	0.18	0.025	J
179601-23-1	m,p-Xylenes	<b>0.62</b>	1.6	0.20	<b>0.14</b>	0.37	0.047	J
75-25-2	Bromoform	ND	0.78	0.16	ND	0.076	0.015	
100-42-5	Styrene	ND	0.77	0.12	ND	0.18	0.029	
95-47-6	o-Xylene	<b>0.24</b>	0.77	0.11	<b>0.055</b>	0.18	0.026	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.77	0.11	ND	0.11	0.016	
98-82-8	Cumene	ND	0.78	0.11	ND	0.16	0.023	
622-96-8	4-Ethyltoluene	ND	0.80	0.12	ND	0.16	0.025	
108-67-8	1,3,5-Trimethylbenzene	ND	0.77	0.11	ND	0.16	0.023	
95-63-6	1,2,4-Trimethylbenzene	<b>0.16</b>	0.77	0.11	<b>0.032</b>	0.16	0.022	J
100-44-7	Benzyl Chloride	ND	3.0	0.17	ND	0.59	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.77	0.12	ND	0.13	0.019	
106-46-7	1,4-Dichlorobenzene	ND	0.77	0.12	ND	0.13	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.78	0.11	ND	0.13	0.019	V
120-82-1	1,2,4-Trichlorobenzene	<b>0.23</b>	1.6	0.19	<b>0.031</b>	0.21	0.025	J
91-20-3	Naphthalene	<b>0.28</b>	0.80	0.19	<b>0.054</b>	0.15	0.036	J
87-68-3	Hexachlorobutadiene	ND	0.77	0.16	ND	0.072	0.015	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Stantec  
**Client Sample ID:** MP-2  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-002

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01763

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.88      Final Pressure (psig): 3.99

Canister Dilution Factor: 1.46

CAS #	Compound	Result	MRL	MDL	Result	MRL	MDL	Data
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	ppbV	Qualifier
115-07-1	Propene	1.3	0.77	0.19	0.78	0.45	0.11	
75-71-8	Dichlorodifluoromethane (CFC 12)	1.9	0.77	0.13	0.39	0.16	0.026	
74-87-3	Chloromethane	0.38	0.76	0.13	0.19	0.37	0.061	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.76	0.12	ND	0.11	0.018	
75-01-4	Vinyl Chloride	ND	0.74	0.083	ND	0.29	0.033	
106-99-0	1,3-Butadiene	ND	0.77	0.13	ND	0.35	0.058	
74-83-9	Bromomethane	ND	0.74	0.11	ND	0.19	0.028	
75-00-3	Chloroethane	ND	0.76	0.096	ND	0.29	0.037	
67-64-1	Acetone	7.2	7.7	1.8	3.1	3.2	0.74	J
75-69-4	Trichlorofluoromethane (CFC 11)	0.99	0.76	0.12	0.18	0.14	0.021	
67-63-0	2-Propanol (Isopropyl Alcohol)	0.86	1.5	0.32	0.35	0.61	0.13	J
75-35-4	1,1-Dichloroethene	ND	0.79	0.11	ND	0.20	0.027	
75-09-2	Methylene Chloride	0.29	0.77	0.22	0.085	0.22	0.063	J
76-13-1	Trichlorotrifluoroethane (CFC 113)	0.42	0.79	0.11	0.055	0.10	0.014	J
75-15-0	Carbon Disulfide	ND	1.6	0.23	ND	0.50	0.075	
156-60-5	trans-1,2-Dichloroethene	ND	0.79	0.11	ND	0.20	0.027	
75-34-3	1,1-Dichloroethane	ND	0.79	0.11	ND	0.19	0.028	
1634-04-4	Methyl tert-Butyl Ether	ND	0.79	0.092	ND	0.22	0.026	
108-05-4	Vinyl Acetate	ND	7.3	1.8	ND	2.1	0.50	
78-93-3	2-Butanone (MEK)	1.4	1.5	0.16	0.46	0.52	0.054	J
156-59-2	cis-1,2-Dichloroethene	ND	0.77	0.11	ND	0.20	0.028	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** Stantec  
**Client Sample ID:** MP-2  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-002

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01763

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.88      Final Pressure (psig): 3.99

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	<b>25</b>	3.1	0.41	<b>6.9</b>	0.85	0.11	
110-54-3	n-Hexane	<b>0.22</b>	0.77	0.16	<b>0.063</b>	0.22	0.046	<b>J</b>
67-66-3	Chloroform	ND	0.77	0.10	ND	0.16	0.021	
109-99-9	Tetrahydrofuran (THF)	<b>0.43</b>	1.5	0.098	<b>0.15</b>	0.50	0.033	<b>J</b>
107-06-2	1,2-Dichloroethane	<b>0.092</b>	0.79	0.086	<b>0.023</b>	0.19	0.021	<b>J</b>
71-55-6	1,1,1-Trichloroethane	ND	0.77	0.096	ND	0.14	0.018	
71-43-2	Benzene	<b>4.5</b>	0.79	0.11	<b>1.4</b>	0.25	0.035	
56-23-5	Carbon Tetrachloride	<b>0.36</b>	0.76	0.11	<b>0.058</b>	0.12	0.017	<b>J</b>
110-82-7	Cyclohexane	ND	1.5	0.22	ND	0.45	0.064	
78-87-5	1,2-Dichloropropane	ND	0.77	0.096	ND	0.17	0.021	
75-27-4	Bromodichloromethane	ND	0.79	0.11	ND	0.12	0.017	
79-01-6	Trichloroethene	ND	0.77	0.11	ND	0.14	0.020	
123-91-1	1,4-Dioxane	ND	0.77	0.092	ND	0.21	0.026	
142-82-5	n-Heptane	<b>0.13</b>	0.77	0.12	<b>0.032</b>	0.19	0.030	<b>J</b>
10061-01-5	cis-1,3-Dichloropropene	ND	0.79	0.12	ND	0.17	0.027	
108-10-1	4-Methyl-2-pentanone	<b>0.16</b>	1.6	0.11	<b>0.039</b>	0.39	0.026	<b>J</b>
10061-02-6	trans-1,3-Dichloropropene	ND	0.74	0.16	ND	0.16	0.035	
79-00-5	1,1,2-Trichloroethane	ND	0.77	0.079	ND	0.14	0.014	
108-88-3	Toluene	<b>1.0</b>	0.77	0.095	<b>0.27</b>	0.21	0.025	
591-78-6	2-Hexanone	<b>0.26</b>	1.6	0.096	<b>0.063</b>	0.39	0.024	<b>J</b>

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** Stantec  
**Client Sample ID:** MP-2  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-002

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01763

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.88      Final Pressure (psig): 3.99

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.79	0.10	ND	0.093	0.012	
106-93-4	1,2-Dibromoethane	ND	0.76	0.091	ND	0.099	0.012	
127-18-4	Tetrachloroethene	ND	0.77	0.10	ND	0.11	0.015	V
108-90-7	Chlorobenzene	ND	0.77	0.10	ND	0.17	0.023	
100-41-4	Ethylbenzene	<b>0.58</b>	0.77	0.11	<b>0.13</b>	0.18	0.025	J
179601-23-1	m,p-Xylenes	<b>0.73</b>	1.6	0.20	<b>0.17</b>	0.37	0.047	J
75-25-2	Bromoform	ND	0.79	0.16	ND	0.076	0.016	
100-42-5	Styrene	ND	0.77	0.13	ND	0.18	0.030	
95-47-6	o-Xylene	<b>0.29</b>	0.77	0.11	<b>0.066</b>	0.18	0.026	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.77	0.11	ND	0.11	0.016	
98-82-8	Cumene	ND	0.79	0.11	ND	0.16	0.023	
622-96-8	4-Ethyltoluene	ND	0.80	0.12	ND	0.16	0.025	
108-67-8	1,3,5-Trimethylbenzene	ND	0.77	0.11	ND	0.16	0.023	
95-63-6	1,2,4-Trimethylbenzene	<b>0.25</b>	0.77	0.11	<b>0.051</b>	0.16	0.022	J
100-44-7	Benzyl Chloride	ND	3.1	0.18	ND	0.59	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.77	0.12	ND	0.13	0.019	
106-46-7	1,4-Dichlorobenzene	ND	0.77	0.12	ND	0.13	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.79	0.12	ND	0.13	0.019	V
120-82-1	1,2,4-Trichlorobenzene	ND	1.6	0.19	ND	0.22	0.026	
91-20-3	Naphthalene	ND	0.80	0.19	ND	0.15	0.036	
87-68-3	Hexachlorobutadiene	ND	0.77	0.16	ND	0.073	0.015	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-3  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-003

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01756

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.00      Final Pressure (psig): 3.91

Canister Dilution Factor: 1.47

CAS #	Compound	Result	MRL	MDL	Result	MRL	MDL	Data
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	ppbV	Qualifier
115-07-1	Propene	1.6	0.78	0.19	0.92	0.45	0.11	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.0	0.78	0.13	0.40	0.16	0.026	
74-87-3	Chloromethane	0.40	0.76	0.13	0.19	0.37	0.061	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.76	0.12	ND	0.11	0.018	
75-01-4	Vinyl Chloride	ND	0.75	0.084	ND	0.29	0.033	
106-99-0	1,3-Butadiene	ND	0.78	0.13	ND	0.35	0.058	
74-83-9	Bromomethane	ND	0.75	0.11	ND	0.19	0.028	
75-00-3	Chloroethane	ND	0.76	0.097	ND	0.29	0.037	
67-64-1	Acetone	6.9	7.7	1.8	2.9	3.3	0.74	J
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	0.76	0.12	0.18	0.14	0.021	
67-63-0	2-Propanol (Isopropyl Alcohol)	1.7	1.5	0.32	0.70	0.61	0.13	
75-35-4	1,1-Dichloroethene	ND	0.79	0.11	ND	0.20	0.027	
75-09-2	Methylene Chloride	0.30	0.78	0.22	0.086	0.22	0.063	J
76-13-1	Trichlorotrifluoroethane (CFC 113)	0.44	0.79	0.11	0.057	0.10	0.015	J
75-15-0	Carbon Disulfide	ND	1.6	0.24	ND	0.51	0.076	
156-60-5	trans-1,2-Dichloroethene	ND	0.79	0.11	ND	0.20	0.027	
75-34-3	1,1-Dichloroethane	ND	0.79	0.11	ND	0.20	0.028	
1634-04-4	Methyl tert-Butyl Ether	ND	0.79	0.093	ND	0.22	0.026	
108-05-4	Vinyl Acetate	ND	7.4	1.8	ND	2.1	0.50	
78-93-3	2-Butanone (MEK)	1.2	1.5	0.16	0.41	0.52	0.055	J
156-59-2	cis-1,2-Dichloroethene	ND	0.78	0.11	ND	0.20	0.028	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-3  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-003

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01756

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.00      Final Pressure (psig): 3.91

Canister Dilution Factor: 1.47

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	<b>40</b>	3.1	0.41	<b>11</b>	0.86	0.11	
110-54-3	n-Hexane	<b>0.27</b>	0.78	0.16	<b>0.076</b>	0.22	0.046	<b>J</b>
67-66-3	Chloroform	ND	0.78	0.10	ND	0.16	0.021	
109-99-9	Tetrahydrofuran (THF)	<b>0.40</b>	1.5	0.098	<b>0.13</b>	0.50	0.033	<b>J</b>
107-06-2	1,2-Dichloroethane	<b>0.10</b>	0.79	0.087	<b>0.025</b>	0.20	0.021	<b>J</b>
71-55-6	1,1,1-Trichloroethane	ND	0.78	0.097	ND	0.14	0.018	
71-43-2	Benzene	<b>5.0</b>	0.79	0.11	<b>1.6</b>	0.25	0.035	
56-23-5	Carbon Tetrachloride	<b>0.37</b>	0.76	0.11	<b>0.059</b>	0.12	0.017	<b>J</b>
110-82-7	Cyclohexane	ND	1.5	0.22	ND	0.45	0.064	
78-87-5	1,2-Dichloropropane	ND	0.78	0.097	ND	0.17	0.021	
75-27-4	Bromodichloromethane	ND	0.79	0.11	ND	0.12	0.017	
79-01-6	Trichloroethene	ND	0.78	0.11	ND	0.15	0.020	
123-91-1	1,4-Dioxane	ND	0.78	0.093	ND	0.22	0.026	
142-82-5	n-Heptane	<b>0.16</b>	0.78	0.12	<b>0.040</b>	0.19	0.031	<b>J</b>
10061-01-5	cis-1,3-Dichloropropene	ND	0.79	0.12	ND	0.17	0.027	
108-10-1	4-Methyl-2-pentanone	<b>0.17</b>	1.6	0.11	<b>0.043</b>	0.39	0.026	<b>J</b>
10061-02-6	trans-1,3-Dichloropropene	ND	0.75	0.16	ND	0.17	0.036	
79-00-5	1,1,2-Trichloroethane	ND	0.78	0.079	ND	0.14	0.015	
108-88-3	Toluene	<b>1.1</b>	0.78	0.096	<b>0.29</b>	0.21	0.025	
591-78-6	2-Hexanone	<b>0.22</b>	1.6	0.097	<b>0.053</b>	0.39	0.024	<b>J</b>

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-3  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-003

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01756

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.00      Final Pressure (psig): 3.91

Canister Dilution Factor: 1.47

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.79	0.10	ND	0.093	0.012	
106-93-4	1,2-Dibromoethane	ND	0.76	0.091	ND	0.10	0.012	
127-18-4	Tetrachloroethene	ND	0.78	0.10	ND	0.11	0.015	V
108-90-7	Chlorobenzene	ND	0.78	0.10	ND	0.17	0.023	
100-41-4	Ethylbenzene	<b>0.56</b>	0.78	0.11	<b>0.13</b>	0.18	0.025	J
179601-23-1	m,p-Xylenes	<b>0.84</b>	1.6	0.21	<b>0.19</b>	0.37	0.047	J
75-25-2	Bromoform	ND	0.79	0.16	ND	0.077	0.016	
100-42-5	Styrene	ND	0.78	0.13	ND	0.18	0.030	
95-47-6	o-Xylene	<b>0.31</b>	0.78	0.11	<b>0.071</b>	0.18	0.026	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.78	0.11	ND	0.11	0.016	
98-82-8	Cumene	ND	0.79	0.11	ND	0.16	0.023	
622-96-8	4-Ethyltoluene	ND	0.81	0.12	ND	0.16	0.025	
108-67-8	1,3,5-Trimethylbenzene	ND	0.78	0.11	ND	0.16	0.023	
95-63-6	1,2,4-Trimethylbenzene	<b>0.24</b>	0.78	0.11	<b>0.049</b>	0.16	0.022	J
100-44-7	Benzyl Chloride	ND	3.1	0.18	ND	0.60	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.78	0.12	ND	0.13	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.78	0.12	ND	0.13	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.79	0.12	ND	0.13	0.019	V
120-82-1	1,2,4-Trichlorobenzene	ND	1.6	0.19	ND	0.22	0.026	
91-20-3	Naphthalene	ND	0.81	0.19	ND	0.15	0.036	
87-68-3	Hexachlorobutadiene	ND	0.78	0.16	ND	0.073	0.015	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.



# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-4  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-004

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS00640

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.60      Final Pressure (psig): 3.64

Canister Dilution Factor: 1.52

CAS #	Compound	Result	MRL	MDL	Result	MRL	MDL	Data
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	ppbV	Qualifier
115-07-1	Propene	2.0	0.81	0.20	1.2	0.47	0.11	
75-71-8	Dichlorodifluoromethane (CFC 12)	1.9	0.81	0.13	0.38	0.16	0.027	
74-87-3	Chloromethane	0.38	0.79	0.13	0.19	0.38	0.063	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.79	0.13	ND	0.11	0.018	
75-01-4	Vinyl Chloride	ND	0.78	0.087	ND	0.30	0.034	
106-99-0	1,3-Butadiene	ND	0.81	0.13	ND	0.36	0.060	
74-83-9	Bromomethane	ND	0.78	0.11	ND	0.20	0.029	
75-00-3	Chloroethane	0.19	0.79	0.10	0.072	0.30	0.038	J
67-64-1	Acetone	11	8.0	1.8	4.8	3.4	0.77	
75-69-4	Trichlorofluoromethane (CFC 11)	0.94	0.79	0.12	0.17	0.14	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	3.0	1.6	0.33	1.2	0.63	0.14	
75-35-4	1,1-Dichloroethene	ND	0.82	0.11	ND	0.21	0.028	
75-09-2	Methylene Chloride	0.30	0.81	0.23	0.086	0.23	0.066	J
76-13-1	Trichlorotrifluoroethane (CFC 113)	0.39	0.82	0.12	0.051	0.11	0.015	J
75-15-0	Carbon Disulfide	ND	1.6	0.24	ND	0.52	0.078	
156-60-5	trans-1,2-Dichloroethene	ND	0.82	0.11	ND	0.21	0.028	
75-34-3	1,1-Dichloroethane	ND	0.82	0.12	ND	0.20	0.029	
1634-04-4	Methyl tert-Butyl Ether	ND	0.82	0.096	ND	0.23	0.027	
108-05-4	Vinyl Acetate	ND	7.6	1.8	ND	2.2	0.52	
78-93-3	2-Butanone (MEK)	4.9	1.6	0.17	1.7	0.54	0.057	
156-59-2	cis-1,2-Dichloroethene	ND	0.81	0.11	ND	0.20	0.029	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-4  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-004

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS00640

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.60      Final Pressure (psig): 3.64

Canister Dilution Factor: 1.52

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	7.8	3.2	0.43	2.2	0.89	0.12	
110-54-3	n-Hexane	0.36	0.81	0.17	0.10	0.23	0.047	J
67-66-3	Chloroform	ND	0.81	0.11	ND	0.17	0.022	
109-99-9	Tetrahydrofuran (THF)	2.9	1.5	0.10	0.98	0.52	0.035	
107-06-2	1,2-Dichloroethane	0.11	0.82	0.090	0.027	0.20	0.022	J
71-55-6	1,1,1-Trichloroethane	ND	0.81	0.10	ND	0.15	0.018	
71-43-2	Benzene	30	0.82	0.12	9.3	0.26	0.037	
56-23-5	Carbon Tetrachloride	0.33	0.79	0.11	0.052	0.13	0.018	J
110-82-7	Cyclohexane	ND	1.6	0.23	ND	0.46	0.066	
78-87-5	1,2-Dichloropropane	ND	0.81	0.10	ND	0.17	0.022	
75-27-4	Bromodichloromethane	ND	0.82	0.12	ND	0.12	0.017	
79-01-6	Trichloroethene	ND	0.81	0.11	ND	0.15	0.020	
123-91-1	1,4-Dioxane	0.51	0.81	0.096	0.14	0.22	0.027	J
142-82-5	n-Heptane	0.35	0.81	0.13	0.086	0.20	0.032	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.82	0.13	ND	0.18	0.028	
108-10-1	4-Methyl-2-pentanone	0.47	1.7	0.11	0.11	0.41	0.027	J
10061-02-6	trans-1,3-Dichloropropene	ND	0.78	0.17	ND	0.17	0.037	
79-00-5	1,1,2-Trichloroethane	ND	0.81	0.082	ND	0.15	0.015	
108-88-3	Toluene	3.3	0.81	0.099	0.87	0.21	0.026	
591-78-6	2-Hexanone	0.44	1.7	0.10	0.11	0.41	0.024	J

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-4  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-004

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS00640

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.60      Final Pressure (psig): 3.64

Canister Dilution Factor: 1.52

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.82	0.11	ND	0.096	0.012	
106-93-4	1,2-Dibromoethane	ND	0.79	0.094	ND	0.10	0.012	
127-18-4	Tetrachloroethene	<b>0.12</b>	0.81	0.10	<b>0.018</b>	0.12	0.015	<b>J, V</b>
108-90-7	Chlorobenzene	ND	0.81	0.11	ND	0.17	0.023	
100-41-4	Ethylbenzene	<b>3.6</b>	0.81	0.11	<b>0.83</b>	0.19	0.026	
179601-23-1	m,p-Xylenes	<b>3.1</b>	1.7	0.21	<b>0.71</b>	0.39	0.049	
75-25-2	Bromoform	ND	0.82	0.17	ND	0.079	0.016	
100-42-5	Styrene	<b>0.16</b>	0.81	0.13	<b>0.037</b>	0.19	0.031	<b>J</b>
95-47-6	o-Xylene	<b>1.2</b>	0.81	0.12	<b>0.27</b>	0.19	0.027	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.81	0.11	ND	0.12	0.016	
98-82-8	Cumene	<b>0.45</b>	0.82	0.12	<b>0.092</b>	0.17	0.024	<b>J</b>
622-96-8	4-Ethyltoluene	<b>0.44</b>	0.84	0.13	<b>0.089</b>	0.17	0.026	<b>J</b>
108-67-8	1,3,5-Trimethylbenzene	<b>0.50</b>	0.81	0.12	<b>0.10</b>	0.16	0.024	<b>J</b>
95-63-6	1,2,4-Trimethylbenzene	<b>1.2</b>	0.81	0.11	<b>0.24</b>	0.16	0.023	
100-44-7	Benzyl Chloride	ND	3.2	0.18	ND	0.62	0.035	
541-73-1	1,3-Dichlorobenzene	ND	0.81	0.12	ND	0.13	0.020	
106-46-7	1,4-Dichlorobenzene	<b>0.21</b>	0.81	0.12	<b>0.035</b>	0.13	0.021	<b>J</b>
95-50-1	1,2-Dichlorobenzene	ND	0.82	0.12	ND	0.14	0.020	<b>V</b>
120-82-1	1,2,4-Trichlorobenzene	ND	1.7	0.20	ND	0.23	0.027	
91-20-3	Naphthalene	ND	0.84	0.20	ND	0.16	0.038	
87-68-3	Hexachlorobutadiene	ND	0.81	0.17	ND	0.076	0.016	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-5  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-005

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01743

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.49      Final Pressure (psig): 3.86

Canister Dilution Factor: 1.40

CAS #	Compound	Result	MRL	MDL	Result	MRL	MDL	Data
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	ppbV	Qualifier
115-07-1	Propene	1.4	0.74	0.18	0.82	0.43	0.11	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.0	0.74	0.12	0.40	0.15	0.025	
74-87-3	Chloromethane	0.40	0.73	0.12	0.19	0.35	0.058	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.73	0.12	ND	0.10	0.017	
75-01-4	Vinyl Chloride	ND	0.71	0.080	ND	0.28	0.031	
106-99-0	1,3-Butadiene	ND	0.74	0.12	ND	0.34	0.056	
74-83-9	Bromomethane	ND	0.71	0.10	ND	0.18	0.027	
75-00-3	Chloroethane	ND	0.73	0.092	ND	0.28	0.035	
67-64-1	Acetone	7.4	7.4	1.7	3.1	3.1	0.71	
75-69-4	Trichlorofluoromethane (CFC 11)	0.99	0.73	0.11	0.18	0.13	0.020	
67-63-0	2-Propanol (Isopropyl Alcohol)	0.82	1.4	0.31	0.33	0.58	0.13	J
75-35-4	1,1-Dichloroethene	ND	0.76	0.10	ND	0.19	0.026	
75-09-2	Methylene Chloride	0.28	0.74	0.21	0.080	0.21	0.060	J
76-13-1	Trichlorotrifluoroethane (CFC 113)	0.40	0.76	0.11	0.052	0.099	0.014	J
75-15-0	Carbon Disulfide	ND	1.5	0.22	ND	0.48	0.072	
156-60-5	trans-1,2-Dichloroethene	ND	0.76	0.10	ND	0.19	0.026	
75-34-3	1,1-Dichloroethane	ND	0.76	0.11	ND	0.19	0.027	
1634-04-4	Methyl tert-Butyl Ether	ND	0.76	0.088	ND	0.21	0.024	
108-05-4	Vinyl Acetate	ND	7.0	1.7	ND	2.0	0.48	
78-93-3	2-Butanone (MEK)	1.5	1.5	0.15	0.50	0.49	0.052	
156-59-2	cis-1,2-Dichloroethene	ND	0.74	0.11	ND	0.19	0.026	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-5  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-005

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01743

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.49      Final Pressure (psig): 3.86

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	<b>9.1</b>	2.9	0.39	<b>2.5</b>	0.82	0.11	
110-54-3	n-Hexane	<b>0.27</b>	0.74	0.15	<b>0.077</b>	0.21	0.044	<b>J</b>
67-66-3	Chloroform	ND	0.74	0.099	ND	0.15	0.020	
109-99-9	Tetrahydrofuran (THF)	<b>0.48</b>	1.4	0.094	<b>0.16</b>	0.47	0.032	<b>J</b>
107-06-2	1,2-Dichloroethane	<b>0.11</b>	0.76	0.083	<b>0.026</b>	0.19	0.020	<b>J</b>
71-55-6	1,1,1-Trichloroethane	ND	0.74	0.092	ND	0.14	0.017	
71-43-2	Benzene	<b>5.1</b>	0.76	0.11	<b>1.6</b>	0.24	0.034	
56-23-5	Carbon Tetrachloride	<b>0.36</b>	0.73	0.10	<b>0.057</b>	0.12	0.016	<b>J</b>
110-82-7	Cyclohexane	ND	1.5	0.21	ND	0.43	0.061	
78-87-5	1,2-Dichloropropane	ND	0.74	0.092	ND	0.16	0.020	
75-27-4	Bromodichloromethane	ND	0.76	0.11	ND	0.11	0.016	
79-01-6	Trichloroethene	ND	0.74	0.10	ND	0.14	0.019	
123-91-1	1,4-Dioxane	ND	0.74	0.088	ND	0.21	0.024	
142-82-5	n-Heptane	<b>0.16</b>	0.74	0.12	<b>0.038</b>	0.18	0.029	<b>J</b>
10061-01-5	cis-1,3-Dichloropropene	ND	0.76	0.12	ND	0.17	0.026	
108-10-1	4-Methyl-2-pentanone	<b>0.17</b>	1.5	0.10	<b>0.042</b>	0.38	0.025	<b>J</b>
10061-02-6	trans-1,3-Dichloropropene	ND	0.71	0.15	ND	0.16	0.034	
79-00-5	1,1,2-Trichloroethane	ND	0.74	0.076	ND	0.14	0.014	
108-88-3	Toluene	<b>1.1</b>	0.74	0.091	<b>0.29</b>	0.20	0.024	
591-78-6	2-Hexanone	<b>0.28</b>	1.5	0.092	<b>0.069</b>	0.38	0.023	<b>J</b>

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-5  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-005

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01743

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.49      Final Pressure (psig): 3.86

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.76	0.098	ND	0.089	0.012	
106-93-4	1,2-Dibromoethane	ND	0.73	0.087	ND	0.095	0.011	
127-18-4	Tetrachloroethene	ND	0.74	0.097	ND	0.11	0.014	V
108-90-7	Chlorobenzene	ND	0.74	0.099	ND	0.16	0.022	
100-41-4	Ethylbenzene	<b>0.68</b>	0.74	0.11	<b>0.16</b>	0.17	0.024	J
179601-23-1	m,p-Xylenes	<b>0.83</b>	1.5	0.20	<b>0.19</b>	0.35	0.045	J
75-25-2	Bromoform	ND	0.76	0.15	ND	0.073	0.015	
100-42-5	Styrene	ND	0.74	0.12	ND	0.17	0.028	
95-47-6	o-Xylene	<b>0.33</b>	0.74	0.11	<b>0.075</b>	0.17	0.025	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.74	0.10	ND	0.11	0.015	
98-82-8	Cumene	ND	0.76	0.11	ND	0.15	0.022	
622-96-8	4-Ethyltoluene	<b>0.12</b>	0.77	0.12	<b>0.024</b>	0.16	0.024	J
108-67-8	1,3,5-Trimethylbenzene	ND	0.74	0.11	ND	0.15	0.022	
95-63-6	1,2,4-Trimethylbenzene	<b>0.27</b>	0.74	0.10	<b>0.055</b>	0.15	0.021	J
100-44-7	Benzyl Chloride	ND	2.9	0.17	ND	0.57	0.032	
541-73-1	1,3-Dichlorobenzene	ND	0.74	0.11	ND	0.12	0.019	
106-46-7	1,4-Dichlorobenzene	ND	0.74	0.11	ND	0.12	0.019	
95-50-1	1,2-Dichlorobenzene	ND	0.76	0.11	ND	0.13	0.018	V
120-82-1	1,2,4-Trichlorobenzene	ND	1.5	0.18	ND	0.21	0.025	
91-20-3	Naphthalene	ND	0.77	0.18	ND	0.15	0.035	
87-68-3	Hexachlorobutadiene	ND	0.74	0.15	ND	0.070	0.014	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-6  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-006

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01717

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.15      Final Pressure (psig): 3.85

Canister Dilution Factor: 1.37

CAS #	Compound	Result	MRL	MDL	Result	MRL	MDL	Data
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	ppbV	Qualifier
115-07-1	Propene	2.1	0.73	0.18	1.2	0.42	0.10	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.0	0.73	0.12	0.40	0.15	0.024	
74-87-3	Chloromethane	0.39	0.71	0.12	0.19	0.35	0.057	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.71	0.12	ND	0.10	0.016	
75-01-4	Vinyl Chloride	ND	0.70	0.078	ND	0.27	0.031	
106-99-0	1,3-Butadiene	ND	0.73	0.12	ND	0.33	0.055	
74-83-9	Bromomethane	ND	0.70	0.10	ND	0.18	0.026	
75-00-3	Chloroethane	ND	0.71	0.090	ND	0.27	0.034	
67-64-1	Acetone	8.6	7.2	1.6	3.6	3.0	0.69	
75-69-4	Trichlorofluoromethane (CFC 11)	0.99	0.71	0.11	0.18	0.13	0.020	
67-63-0	2-Propanol (Isopropyl Alcohol)	1.8	1.4	0.30	0.74	0.57	0.12	
75-35-4	1,1-Dichloroethene	ND	0.74	0.10	ND	0.19	0.026	
75-09-2	Methylene Chloride	0.29	0.73	0.21	0.085	0.21	0.059	J
76-13-1	Trichlorotrifluoroethane (CFC 113)	0.42	0.74	0.10	0.055	0.097	0.014	J
75-15-0	Carbon Disulfide	ND	1.5	0.22	ND	0.47	0.070	
156-60-5	trans-1,2-Dichloroethene	ND	0.74	0.10	ND	0.19	0.026	
75-34-3	1,1-Dichloroethane	ND	0.74	0.11	ND	0.18	0.026	
1634-04-4	Methyl tert-Butyl Ether	ND	0.74	0.086	ND	0.21	0.024	
108-05-4	Vinyl Acetate	ND	6.9	1.6	ND	1.9	0.47	
78-93-3	2-Butanone (MEK)	2.3	1.4	0.15	0.77	0.48	0.051	
156-59-2	cis-1,2-Dichloroethene	ND	0.73	0.10	ND	0.18	0.026	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-6  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-006

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01717

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.15      Final Pressure (psig): 3.85

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	26	2.9	0.38	7.1	0.80	0.11	
110-54-3	n-Hexane	0.29	0.73	0.15	0.083	0.21	0.043	J
67-66-3	Chloroform	ND	0.73	0.097	ND	0.15	0.020	
109-99-9	Tetrahydrofuran (THF)	1.3	1.4	0.092	0.46	0.46	0.031	J
107-06-2	1,2-Dichloroethane	0.10	0.74	0.081	0.025	0.18	0.020	J
71-55-6	1,1,1-Trichloroethane	ND	0.73	0.090	ND	0.13	0.017	
71-43-2	Benzene	13	0.74	0.11	4.0	0.23	0.033	
56-23-5	Carbon Tetrachloride	0.36	0.71	0.10	0.057	0.11	0.016	J
110-82-7	Cyclohexane	ND	1.4	0.21	ND	0.42	0.060	
78-87-5	1,2-Dichloropropane	ND	0.73	0.090	ND	0.16	0.020	
75-27-4	Bromodichloromethane	ND	0.74	0.11	ND	0.11	0.016	
79-01-6	Trichloroethene	ND	0.73	0.099	ND	0.14	0.018	
123-91-1	1,4-Dioxane	ND	0.73	0.086	ND	0.20	0.024	
142-82-5	n-Heptane	0.21	0.73	0.12	0.051	0.18	0.028	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.74	0.11	ND	0.16	0.025	
108-10-1	4-Methyl-2-pentanone	0.27	1.5	0.10	0.066	0.37	0.024	J
10061-02-6	trans-1,3-Dichloropropene	ND	0.70	0.15	ND	0.15	0.033	
79-00-5	1,1,2-Trichloroethane	ND	0.73	0.074	ND	0.13	0.014	
108-88-3	Toluene	1.7	0.73	0.089	0.46	0.19	0.024	
591-78-6	2-Hexanone	0.30	1.5	0.090	0.074	0.37	0.022	J

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.



# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-6  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-006

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01717

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.15      Final Pressure (psig): 3.85

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.74	0.096	ND	0.087	0.011	
106-93-4	1,2-Dibromoethane	ND	0.71	0.085	ND	0.093	0.011	
127-18-4	Tetrachloroethene	ND	0.73	0.095	ND	0.11	0.014	V
108-90-7	Chlorobenzene	ND	0.73	0.097	ND	0.16	0.021	
100-41-4	Ethylbenzene	<b>1.6</b>	0.73	0.10	<b>0.37</b>	0.17	0.024	
179601-23-1	m,p-Xylenes	<b>1.5</b>	1.5	0.19	<b>0.34</b>	0.35	0.044	J
75-25-2	Bromoform	ND	0.74	0.15	ND	0.072	0.015	
100-42-5	Styrene	ND	0.73	0.12	ND	0.17	0.028	
95-47-6	o-Xylene	<b>0.55</b>	0.73	0.11	<b>0.13</b>	0.17	0.024	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.73	0.10	ND	0.11	0.015	
98-82-8	Cumene	<b>0.21</b>	0.74	0.11	<b>0.043</b>	0.15	0.021	J
622-96-8	4-Ethyltoluene	<b>0.21</b>	0.75	0.12	<b>0.043</b>	0.15	0.024	J
108-67-8	1,3,5-Trimethylbenzene	<b>0.20</b>	0.73	0.11	<b>0.041</b>	0.15	0.021	J
95-63-6	1,2,4-Trimethylbenzene	<b>0.51</b>	0.73	0.10	<b>0.10</b>	0.15	0.021	J
100-44-7	Benzyl Chloride	ND	2.9	0.16	ND	0.56	0.032	
541-73-1	1,3-Dichlorobenzene	ND	0.73	0.11	ND	0.12	0.018	
106-46-7	1,4-Dichlorobenzene	<b>0.12</b>	0.73	0.11	<b>0.020</b>	0.12	0.019	J
95-50-1	1,2-Dichlorobenzene	ND	0.74	0.11	ND	0.12	0.018	V
120-82-1	1,2,4-Trichlorobenzene	ND	1.5	0.18	ND	0.20	0.024	
91-20-3	Naphthalene	ND	0.75	0.18	ND	0.14	0.034	
87-68-3	Hexachlorobutadiene	ND	0.73	0.15	ND	0.068	0.014	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-7  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-007

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01077

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.34      Final Pressure (psig): 3.71

Canister Dilution Factor: 1.38

CAS #	Compound	Result	MRL	MDL	Result	MRL	MDL	Data
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	ppbV	Qualifier
115-07-1	Propene	2.5	0.73	0.18	1.4	0.43	0.10	
75-71-8	Dichlorodifluoromethane (CFC 12)	1.9	0.73	0.12	0.39	0.15	0.024	
74-87-3	Chloromethane	0.35	0.72	0.12	0.17	0.35	0.057	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.72	0.12	ND	0.10	0.017	
75-01-4	Vinyl Chloride	ND	0.70	0.079	ND	0.28	0.031	
106-99-0	1,3-Butadiene	ND	0.73	0.12	ND	0.33	0.055	
74-83-9	Bromomethane	ND	0.70	0.10	ND	0.18	0.026	
75-00-3	Chloroethane	ND	0.72	0.091	ND	0.27	0.035	
67-64-1	Acetone	7.6	7.3	1.7	3.2	3.1	0.70	
75-69-4	Trichlorofluoromethane (CFC 11)	0.95	0.72	0.11	0.17	0.13	0.020	
67-63-0	2-Propanol (Isopropyl Alcohol)	1.3	1.4	0.30	0.54	0.58	0.12	J
75-35-4	1,1-Dichloroethene	ND	0.75	0.10	ND	0.19	0.026	
75-09-2	Methylene Chloride	0.29	0.73	0.21	0.083	0.21	0.060	J
76-13-1	Trichlorotrifluoroethane (CFC 113)	0.41	0.75	0.10	0.054	0.097	0.014	J
75-15-0	Carbon Disulfide	ND	1.5	0.22	ND	0.47	0.071	
156-60-5	trans-1,2-Dichloroethene	ND	0.75	0.10	ND	0.19	0.026	
75-34-3	1,1-Dichloroethane	ND	0.75	0.11	ND	0.18	0.027	
1634-04-4	Methyl tert-Butyl Ether	ND	0.75	0.087	ND	0.21	0.024	
108-05-4	Vinyl Acetate	ND	6.9	1.7	ND	2.0	0.47	
78-93-3	2-Butanone (MEK)	2.1	1.4	0.15	0.70	0.49	0.051	
156-59-2	cis-1,2-Dichloroethene	ND	0.73	0.10	ND	0.18	0.026	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-7  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-007

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01077

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.34      Final Pressure (psig): 3.71

Canister Dilution Factor: 1.38

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	22	2.9	0.39	6.2	0.80	0.11	
110-54-3	n-Hexane	0.29	0.73	0.15	0.083	0.21	0.043	J
67-66-3	Chloroform	ND	0.73	0.098	ND	0.15	0.020	
109-99-9	Tetrahydrofuran (THF)	1.1	1.4	0.092	0.37	0.47	0.031	J
107-06-2	1,2-Dichloroethane	0.099	0.75	0.081	0.025	0.18	0.020	J
71-55-6	1,1,1-Trichloroethane	ND	0.73	0.091	ND	0.13	0.017	
71-43-2	Benzene	14	0.75	0.11	4.4	0.23	0.033	
56-23-5	Carbon Tetrachloride	0.33	0.72	0.10	0.053	0.11	0.016	J
110-82-7	Cyclohexane	ND	1.4	0.21	ND	0.42	0.060	
78-87-5	1,2-Dichloropropane	ND	0.73	0.091	ND	0.16	0.020	
75-27-4	Bromodichloromethane	ND	0.75	0.11	ND	0.11	0.016	
79-01-6	Trichloroethene	ND	0.73	0.099	ND	0.14	0.018	
123-91-1	1,4-Dioxane	ND	0.73	0.087	ND	0.20	0.024	
142-82-5	n-Heptane	0.22	0.73	0.12	0.054	0.18	0.029	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.75	0.11	ND	0.16	0.025	
108-10-1	4-Methyl-2-pentanone	0.26	1.5	0.10	0.064	0.37	0.025	J
10061-02-6	trans-1,3-Dichloropropene	ND	0.70	0.15	ND	0.16	0.033	
79-00-5	1,1,2-Trichloroethane	ND	0.73	0.075	ND	0.13	0.014	
108-88-3	Toluene	2.0	0.73	0.090	0.52	0.19	0.024	
591-78-6	2-Hexanone	0.34	1.5	0.091	0.083	0.37	0.022	J

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** MP-7  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-007

Test Code: EPA TO-15  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01077

Date Collected: 5/11/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.34      Final Pressure (psig): 3.71

Canister Dilution Factor: 1.38

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.75	0.097	ND	0.088	0.011	
106-93-4	1,2-Dibromoethane	ND	0.72	0.086	ND	0.093	0.011	
127-18-4	Tetrachloroethene	ND	0.73	0.095	ND	0.11	0.014	V
108-90-7	Chlorobenzene	ND	0.73	0.098	ND	0.16	0.021	
100-41-4	Ethylbenzene	<b>1.6</b>	0.73	0.10	<b>0.36</b>	0.17	0.024	
179601-23-1	m,p-Xylenes	<b>1.7</b>	1.5	0.19	<b>0.38</b>	0.35	0.044	
75-25-2	Bromoform	ND	0.75	0.15	ND	0.072	0.015	
100-42-5	Styrene	<b>0.14</b>	0.73	0.12	<b>0.033</b>	0.17	0.028	J
95-47-6	o-Xylene	<b>0.61</b>	0.73	0.11	<b>0.14</b>	0.17	0.024	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.73	0.10	ND	0.11	0.015	
98-82-8	Cumene	<b>0.20</b>	0.75	0.11	<b>0.041</b>	0.15	0.022	J
622-96-8	4-Ethyltoluene	<b>0.21</b>	0.76	0.12	<b>0.042</b>	0.15	0.024	J
108-67-8	1,3,5-Trimethylbenzene	<b>0.22</b>	0.73	0.11	<b>0.045</b>	0.15	0.022	J
95-63-6	1,2,4-Trimethylbenzene	<b>0.57</b>	0.73	0.10	<b>0.12</b>	0.15	0.021	J
100-44-7	Benzyl Chloride	ND	2.9	0.17	ND	0.56	0.032	
541-73-1	1,3-Dichlorobenzene	ND	0.73	0.11	ND	0.12	0.018	
106-46-7	1,4-Dichlorobenzene	<b>0.11</b>	0.73	0.11	<b>0.019</b>	0.12	0.019	J
95-50-1	1,2-Dichlorobenzene	ND	0.75	0.11	ND	0.12	0.018	V
120-82-1	1,2,4-Trichlorobenzene	ND	1.5	0.18	ND	0.20	0.024	
91-20-3	Naphthalene	ND	0.76	0.18	ND	0.14	0.034	
87-68-3	Hexachlorobutadiene	ND	0.73	0.15	ND	0.069	0.014	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-2U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-008

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01226

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0020 Liter(s)  
 0.00020 Liter(s)

Initial Pressure (psig): -2.52      Final Pressure (psig): 4.70

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	<b>29,000</b>	420	100	<b>17,000</b>	240	60	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	420	69	ND	85	14	
74-87-3	Chloromethane	<b>1,400</b>	410	68	<b>660</b>	200	33	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	410	67	ND	59	9.6	
75-01-4	Vinyl Chloride	<b>81</b>	410	45	<b>32</b>	160	18	<b>J</b>
106-99-0	1,3-Butadiene	<b>860</b>	420	70	<b>390</b>	190	32	
74-83-9	Bromomethane	ND	410	59	ND	100	15	
75-00-3	Chloroethane	<b>1,400</b>	410	52	<b>550</b>	160	20	
67-64-1	Acetone	<b>160,000</b>	4,200	950	<b>66,000</b>	1,800	400	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	410	64	ND	74	11	
67-63-0	2-Propanol (Isopropyl Alcohol)	<b>48,000</b>	810	170	<b>19,000</b>	330	71	
75-35-4	1,1-Dichloroethene	ND	430	59	ND	110	15	
75-09-2	Methylene Chloride	ND	420	120	ND	120	34	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	430	60	ND	56	7.9	
75-15-0	Carbon Disulfide	<b>1,100</b>	850	130	<b>360</b>	270	41	
156-60-5	trans-1,2-Dichloroethene	ND	430	59	ND	110	15	
75-34-3	1,1-Dichloroethane	ND	430	62	ND	110	15	
1634-04-4	Methyl tert-Butyl Ether	ND	430	50	ND	120	14	
108-05-4	Vinyl Acetate	ND	4,000	950	ND	1,100	270	
78-93-3	2-Butanone (MEK)	<b>120,000</b>	830	87	<b>42,000</b>	280	30	
156-59-2	cis-1,2-Dichloroethene	ND	420	60	ND	110	15	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-2U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-008

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01226

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0020 Liter(s)  
 0.00020 Liter(s)

Initial Pressure (psig): -2.52      Final Pressure (psig): 4.70

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	2,400	1,700	220	650	460	62	
110-54-3	n-Hexane	1,000	420	87	290	120	25	
67-66-3	Chloroform	ND	420	56	ND	86	12	
109-99-9	Tetrahydrofuran (THF)	83,000	800	53	28,000	270	18	
107-06-2	1,2-Dichloroethane	390	430	47	97	110	12	J
71-55-6	1,1,1-Trichloroethane	ND	420	52	ND	77	9.6	
71-43-2	Benzene	410,000	4,300	610	130,000	1,300	190	D
56-23-5	Carbon Tetrachloride	ND	410	59	ND	66	9.4	
110-82-7	Cyclohexane	610	830	120	180	240	35	J
78-87-5	1,2-Dichloropropane	ND	420	52	ND	91	11	
75-27-4	Bromodichloromethane	ND	430	61	ND	64	9.1	
79-01-6	Trichloroethene	ND	420	57	ND	78	11	
123-91-1	1,4-Dioxane	13,000	420	50	3,700	120	14	
142-82-5	n-Heptane	1,400	420	68	350	100	16	
10061-01-5	cis-1,3-Dichloropropene	ND	430	66	ND	95	15	
108-10-1	4-Methyl-2-pentanone	10,000	870	58	2,500	210	14	
10061-02-6	trans-1,3-Dichloropropene	ND	410	87	ND	89	19	
79-00-5	1,1,2-Trichloroethane	ND	420	43	ND	77	7.9	
108-88-3	Toluene	34,000	420	52	8,900	110	14	
591-78-6	2-Hexanone	4,100	870	52	1,000	210	13	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

D = The reported result is from a dilution.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-2U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-008

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01226

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0020 Liter(s)  
 0.00020 Liter(s)

Initial Pressure (psig): -2.52      Final Pressure (psig): 4.70

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	430	56	ND	50	6.5	
106-93-4	1,2-Dibromoethane	ND	410	49	ND	54	6.4	
127-18-4	Tetrachloroethene	ND	420	55	ND	62	8.1	
108-90-7	Chlorobenzene	<b>570</b>	420	56	<b>120</b>	92	12	
100-41-4	Ethylbenzene	<b>46,000</b>	420	60	<b>11,000</b>	97	14	
179601-23-1	m,p-Xylenes	<b>31,000</b>	870	110	<b>7,200</b>	200	26	
75-25-2	Bromoform	ND	430	87	ND	42	8.5	
100-42-5	Styrene	<b>1,000</b>	420	68	<b>250</b>	99	16	
95-47-6	o-Xylene	<b>12,000</b>	420	61	<b>2,700</b>	97	14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	420	59	ND	61	8.6	
98-82-8	Cumene	<b>5,600</b>	430	61	<b>1,100</b>	87	12	
622-96-8	4-Ethyltoluene	<b>4,300</b>	440	68	<b>870</b>	89	14	
108-67-8	1,3,5-Trimethylbenzene	<b>4,700</b>	420	61	<b>960</b>	86	12	
95-63-6	1,2,4-Trimethylbenzene	<b>12,000</b>	420	59	<b>2,500</b>	86	12	
100-44-7	Benzyl Chloride	ND	1,700	95	ND	320	18	
541-73-1	1,3-Dichlorobenzene	<b>66</b>	420	64	<b>11</b>	70	11	<b>J</b>
106-46-7	1,4-Dichlorobenzene	<b>2,200</b>	420	65	<b>370</b>	70	11	
95-50-1	1,2-Dichlorobenzene	<b>140</b>	430	63	<b>23</b>	71	10	<b>J</b>
120-82-1	1,2,4-Trichlorobenzene	ND	870	100	ND	120	14	
91-20-3	Naphthalene	<b>640</b>	440	100	<b>120</b>	83	20	
87-68-3	Hexachlorobutadiene	ND	420	87	ND	40	8.2	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-2L  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-009

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01001

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0010 Liter(s)  
 0.00010 Liter(s)

Initial Pressure (psig): -2.74      Final Pressure (psig): 4.00

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	84,000	830	200	49,000	480	120	
75-71-8	Dichlorodifluoromethane (CFC 12)	250	830	140	51	170	27	J
74-87-3	Chloromethane	1,400	810	130	660	390	65	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	810	130	ND	120	19	
75-01-4	Vinyl Chloride	310	800	89	120	310	35	J
106-99-0	1,3-Butadiene	1,700	830	140	750	370	62	
74-83-9	Bromomethane	ND	800	120	ND	200	30	
75-00-3	Chloroethane	5,400	810	100	2,000	310	39	
67-64-1	Acetone	150,000	8,200	1,900	62,000	3,500	790	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	810	130	ND	140	22	
67-63-0	2-Propanol (Isopropyl Alcohol)	25,000	1,600	340	10,000	650	140	
75-35-4	1,1-Dichloroethene	ND	840	120	ND	210	29	
75-09-2	Methylene Chloride	ND	830	230	ND	240	67	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	840	120	ND	110	15	
75-15-0	Carbon Disulfide	860	1,700	250	280	540	80	J
156-60-5	trans-1,2-Dichloroethene	ND	840	120	ND	210	29	
75-34-3	1,1-Dichloroethane	ND	840	120	ND	210	30	
1634-04-4	Methyl tert-Butyl Ether	ND	840	98	ND	230	27	
108-05-4	Vinyl Acetate	ND	7,800	1,900	ND	2,200	530	
78-93-3	2-Butanone (MEK)	140,000	1,600	170	46,000	550	58	
156-59-2	cis-1,2-Dichloroethene	370	830	120	94	210	30	J

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.



# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-2L  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-009

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01001

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0010 Liter(s)  
 0.00010 Liter(s)

Initial Pressure (psig): -2.74      Final Pressure (psig): 4.00

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	1,100	3,300	440	300	910	120	J
110-54-3	n-Hexane	2,800	830	170	790	230	49	
67-66-3	Chloroform	ND	830	110	ND	170	23	
109-99-9	Tetrahydrofuran (THF)	91,000	1,600	100	31,000	530	35	
107-06-2	1,2-Dichloroethane	840	840	92	210	210	23	J
71-55-6	1,1,1-Trichloroethane	ND	830	100	ND	150	19	
71-43-2	Benzene	1,100,000	8,400	1,200	330,000	2,600	380	D
56-23-5	Carbon Tetrachloride	ND	810	120	ND	130	18	
110-82-7	Cyclohexane	2,300	1,600	230	680	480	68	
78-87-5	1,2-Dichloropropane	ND	830	100	ND	180	22	
75-27-4	Bromodichloromethane	ND	840	120	ND	130	18	
79-01-6	Trichloroethene	ND	830	110	ND	150	21	
123-91-1	1,4-Dioxane	ND	830	98	ND	230	27	
142-82-5	n-Heptane	5,000	830	130	1,200	200	32	
10061-01-5	cis-1,3-Dichloropropene	ND	840	130	ND	190	29	
108-10-1	4-Methyl-2-pentanone	12,000	1,700	110	2,800	420	28	
10061-02-6	trans-1,3-Dichloropropene	ND	800	170	ND	180	38	
79-00-5	1,1,2-Trichloroethane	ND	830	84	ND	150	15	
108-88-3	Toluene	84,000	830	100	22,000	220	27	
591-78-6	2-Hexanone	3,700	1,700	100	890	420	25	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

D = The reported result is from a dilution.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-2L  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-009

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01001

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0010 Liter(s)  
 0.00010 Liter(s)

Initial Pressure (psig): -2.74      Final Pressure (psig): 4.00

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	840	110	ND	99	13	
106-93-4	1,2-Dibromoethane	ND	810	97	ND	110	13	
127-18-4	Tetrachloroethene	<b>230</b>	830	110	<b>34</b>	120	16	<b>J</b>
108-90-7	Chlorobenzene	<b>1,300</b>	830	110	<b>280</b>	180	24	
100-41-4	Ethylbenzene	<b>110,000</b>	830	120	<b>26,000</b>	190	27	
179601-23-1	m,p-Xylenes	<b>75,000</b>	1,700	220	<b>17,000</b>	400	50	
75-25-2	Bromoform	ND	840	170	ND	82	17	
100-42-5	Styrene	<b>3,100</b>	830	130	<b>730</b>	190	32	
95-47-6	o-Xylene	<b>28,000</b>	830	120	<b>6,400</b>	190	28	
79-34-5	1,1,2,2-Tetrachloroethane	ND	830	120	ND	120	17	
98-82-8	Cumene	<b>12,000</b>	840	120	<b>2,300</b>	170	24	
622-96-8	4-Ethyltoluene	<b>8,600</b>	860	130	<b>1,700</b>	170	27	
108-67-8	1,3,5-Trimethylbenzene	<b>9,500</b>	830	120	<b>1,900</b>	170	24	
95-63-6	1,2,4-Trimethylbenzene	<b>23,000</b>	830	120	<b>4,600</b>	170	23	
100-44-7	Benzyl Chloride	ND	3,300	190	ND	630	36	
541-73-1	1,3-Dichlorobenzene	ND	830	120	ND	140	21	
106-46-7	1,4-Dichlorobenzene	<b>3,500</b>	830	130	<b>590</b>	140	21	
95-50-1	1,2-Dichlorobenzene	<b>190</b>	840	120	<b>31</b>	140	21	<b>J</b>
120-82-1	1,2,4-Trichlorobenzene	ND	1,700	200	ND	230	27	
91-20-3	Naphthalene	<b>560</b>	860	200	<b>110</b>	160	39	<b>J</b>
87-68-3	Hexachlorobutadiene	ND	830	170	ND	78	16	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-1U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-010

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01256

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0010 Liter(s)  
 0.00020 Liter(s)

Initial Pressure (psig): -3.01      Final Pressure (psig): 3.98

Canister Dilution Factor: 1.60

CAS #	Compound	Result	MRL	MDL	Result	MRL	MDL	Data
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ppbV	ppbV	ppbV	Qualifier
115-07-1	Propene	<b>43,000</b>	850	210	<b>25,000</b>	490	120	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	850	140	ND	170	28	
74-87-3	Chloromethane	<b>2,200</b>	830	140	<b>1,000</b>	400	67	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	830	130	ND	120	19	
75-01-4	Vinyl Chloride	<b>230</b>	820	91	<b>89</b>	320	36	<b>J</b>
106-99-0	1,3-Butadiene	<b>1,200</b>	850	140	<b>560</b>	380	64	
74-83-9	Bromomethane	ND	820	120	ND	210	31	
75-00-3	Chloroethane	<b>2,300</b>	830	110	<b>860</b>	320	40	
67-64-1	Acetone	<b>300,000</b>	8,400	1,900	<b>130,000</b>	3,600	810	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	830	130	ND	150	23	
67-63-0	2-Propanol (Isopropyl Alcohol)	<b>130,000</b>	1,600	350	<b>55,000</b>	670	140	
75-35-4	1,1-Dichloroethene	ND	860	120	ND	220	30	
75-09-2	Methylene Chloride	ND	850	240	ND	240	69	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	860	120	ND	110	16	
75-15-0	Carbon Disulfide	<b>1,900</b>	1,700	260	<b>600</b>	550	82	
156-60-5	trans-1,2-Dichloroethene	ND	860	120	ND	220	30	
75-34-3	1,1-Dichloroethane	ND	860	120	ND	210	31	
1634-04-4	Methyl tert-Butyl Ether	ND	860	100	ND	240	28	
108-05-4	Vinyl Acetate	ND	8,000	1,900	ND	2,300	550	
78-93-3	2-Butanone (MEK)	<b>230,000</b>	1,700	180	<b>79,000</b>	560	60	
156-59-2	cis-1,2-Dichloroethene	ND	850	120	ND	210	30	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-1U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-010

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01256

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0010 Liter(s)  
 0.00020 Liter(s)

Initial Pressure (psig): -3.01      Final Pressure (psig): 3.98

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	5,800	3,400	450	1,600	930	120	
110-54-3	n-Hexane	1,700	850	180	490	240	50	
67-66-3	Chloroform	ND	850	110	ND	170	23	
109-99-9	Tetrahydrofuran (THF)	140,000	1,600	110	49,000	540	36	
107-06-2	1,2-Dichloroethane	680	860	94	170	210	23	J
71-55-6	1,1,1-Trichloroethane	ND	850	110	ND	160	19	
71-43-2	Benzene	510,000	4,300	620	160,000	1,400	190	D
56-23-5	Carbon Tetrachloride	ND	830	120	ND	130	19	
110-82-7	Cyclohexane	1,000	1,700	240	300	490	70	J
78-87-5	1,2-Dichloropropane	ND	850	110	ND	180	23	
75-27-4	Bromodichloromethane	ND	860	120	ND	130	18	
79-01-6	Trichloroethene	ND	850	120	ND	160	21	
123-91-1	1,4-Dioxane	ND	850	100	ND	240	28	
142-82-5	n-Heptane	ND	850	140	ND	210	33	
10061-01-5	cis-1,3-Dichloropropene	ND	860	130	ND	190	29	
108-10-1	4-Methyl-2-pentanone	17,000	1,800	120	4,200	430	29	
10061-02-6	trans-1,3-Dichloropropene	ND	820	180	ND	180	39	
79-00-5	1,1,2-Trichloroethane	ND	850	86	ND	160	16	
108-88-3	Toluene	57,000	850	100	15,000	230	28	
591-78-6	2-Hexanone	7,300	1,800	110	1,800	430	26	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

D = The reported result is from a dilution.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

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**Client:** Stantec  
**Client Sample ID:** SW-1U  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P2302140-010

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:  
 Container ID: AS01256

Date Collected: 5/10/23  
 Date Received: 5/12/23  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.0010 Liter(s)  
 0.00020 Liter(s)

Initial Pressure (psig): -3.01      Final Pressure (psig): 3.98

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	860	110	ND	100	13	
106-93-4	1,2-Dibromoethane	ND	830	99	ND	110	13	
127-18-4	Tetrachloroethene	180	850	110	27	130	16	J
108-90-7	Chlorobenzene	970	850	110	210	180	25	
100-41-4	Ethylbenzene	75,000	850	120	17,000	200	28	
179601-23-1	m,p-Xylenes	50,000	1,800	220	11,000	410	52	
75-25-2	Bromoform	ND	860	180	ND	84	17	
100-42-5	Styrene	1,800	850	140	410	200	32	
95-47-6	o-Xylene	18,000	850	120	4,200	200	28	
79-34-5	1,1,2,2-Tetrachloroethane	ND	850	120	ND	120	17	
98-82-8	Cumene	8,900	860	120	1,800	180	25	
622-96-8	4-Ethyltoluene	6,300	880	140	1,300	180	28	
108-67-8	1,3,5-Trimethylbenzene	6,900	850	120	1,400	170	25	
95-63-6	1,2,4-Trimethylbenzene	19,000	850	120	3,800	170	24	
100-44-7	Benzyl Chloride	ND	3,400	190	ND	650	37	
541-73-1	1,3-Dichlorobenzene	ND	850	130	ND	140	21	
106-46-7	1,4-Dichlorobenzene	3,200	850	130	540	140	22	
95-50-1	1,2-Dichlorobenzene	270	860	130	45	140	21	J
120-82-1	1,2,4-Trichlorobenzene	ND	1,800	210	ND	240	28	
91-20-3	Naphthalene	910	880	210	170	170	40	
87-68-3	Hexachlorobutadiene	ND	850	180	ND	80	17	

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

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

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Stantec  
**Client Sample ID:** Method Blank  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230519-MB

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

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.53	0.13	ND	0.31	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.52	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.52	0.084	ND	0.074	0.012	
75-01-4	Vinyl Chloride	ND	0.51	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.53	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.52	0.066	ND	0.20	0.025	
67-64-1	Acetone	ND	5.3	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.42	0.090	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.53	0.15	ND	0.15	0.043	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.34	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-34-3	1,1-Dichloroethane	ND	0.54	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.35	0.037	
156-59-2	cis-1,2-Dichloroethene	ND	0.53	0.075	ND	0.13	0.019	

ND = Compound was analyzed for, but not detected above the laboratory detection 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:** Stantec  
**Client Sample ID:** Method Blank  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230519-MB

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

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.53	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.54	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.53	0.066	ND	0.097	0.012	
71-43-2	Benzene	ND	0.54	0.077	ND	0.17	0.024	
56-23-5	Carbon Tetrachloride	ND	0.52	0.074	ND	0.083	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.31	0.044	
78-87-5	1,2-Dichloropropane	ND	0.53	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.54	0.077	ND	0.081	0.011	
79-01-6	Trichloroethene	ND	0.53	0.072	ND	0.099	0.013	
123-91-1	1,4-Dioxane	ND	0.53	0.063	ND	0.15	0.017	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.54	0.083	ND	0.12	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.53	0.054	ND	0.097	0.0099	
108-88-3	Toluene	ND	0.53	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	

ND = Compound was analyzed for, but not detected above the laboratory detection 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:** Stantec  
**Client Sample ID:** Method Blank  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230519-MB

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

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.54	0.070	ND	0.063	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
127-18-4	Tetrachloroethene	ND	0.53	0.069	ND	0.078	0.010	V
108-90-7	Chlorobenzene	ND	0.53	0.071	ND	0.12	0.015	
100-41-4	Ethylbenzene	ND	0.53	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.54	0.11	ND	0.052	0.011	
100-42-5	Styrene	ND	0.53	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.53	0.077	ND	0.12	0.018	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	0.074	ND	0.077	0.011	
98-82-8	Cumene	ND	0.54	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.55	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	2.1	0.12	ND	0.41	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.53	0.080	ND	0.088	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.53	0.082	ND	0.088	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.54	0.079	ND	0.090	0.013	V
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.55	0.13	ND	0.10	0.025	
87-68-3	Hexachlorobutadiene	ND	0.53	0.11	ND	0.050	0.010	

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

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

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.



# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** Stantec  
**Client Sample ID:** Method Blank  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230522-MB

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Wida Ang  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.53	0.13	ND	0.31	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.52	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.52	0.084	ND	0.074	0.012	
75-01-4	Vinyl Chloride	ND	0.51	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.53	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.52	0.066	ND	0.20	0.025	
67-64-1	Acetone	ND	5.3	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.42	0.090	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.53	0.15	ND	0.15	0.043	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.34	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-34-3	1,1-Dichloroethane	ND	0.54	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.35	0.037	
156-59-2	cis-1,2-Dichloroethene	ND	0.53	0.075	ND	0.13	0.019	

ND = Compound was analyzed for, but not detected above the laboratory detection 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 3

**Client:** Stantec  
**Client Sample ID:** Method Blank  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230522-MB

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Wida Ang  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.53	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.54	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.53	0.066	ND	0.097	0.012	
71-43-2	Benzene	ND	0.54	0.077	ND	0.17	0.024	
56-23-5	Carbon Tetrachloride	ND	0.52	0.074	ND	0.083	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.31	0.044	
78-87-5	1,2-Dichloropropane	ND	0.53	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.54	0.077	ND	0.081	0.011	
79-01-6	Trichloroethene	ND	0.53	0.072	ND	0.099	0.013	
123-91-1	1,4-Dioxane	ND	0.53	0.063	ND	0.15	0.017	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.54	0.083	ND	0.12	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.53	0.054	ND	0.097	0.0099	
108-88-3	Toluene	ND	0.53	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	

ND = Compound was analyzed for, but not detected above the laboratory detection 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 3

**Client:** Stantec  
**Client Sample ID:** Method Blank  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230522-MB

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Wida Ang  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	MDL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.54	0.070	ND	0.063	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
127-18-4	Tetrachloroethene	ND	0.53	0.069	ND	0.078	0.010	
108-90-7	Chlorobenzene	ND	0.53	0.071	ND	0.12	0.015	
100-41-4	Ethylbenzene	ND	0.53	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.54	0.11	ND	0.052	0.011	
100-42-5	Styrene	ND	0.53	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.53	0.077	ND	0.12	0.018	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	0.074	ND	0.077	0.011	
98-82-8	Cumene	ND	0.54	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.55	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	2.1	0.12	ND	0.41	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.53	0.080	ND	0.088	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.53	0.082	ND	0.088	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.54	0.079	ND	0.090	0.013	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.55	0.13	ND	0.10	0.025	
87-68-3	Hexachlorobutadiene	ND	0.53	0.11	ND	0.050	0.010	

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

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

**ALS ENVIRONMENTAL**

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

**Client:** Stantec  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140

Test Code: EPA TO-15 / EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Simon Cao/Wida Ang  
 Sample Type: 6.0 L Silonite Canister(s)  
 Test Notes:

Date(s) Collected: 5/10 - 5/11/23  
 Date(s) Received: 5/12/23  
 Date(s) Analyzed: 5/19 - 5/22/23

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	P230519-MB	107	92	91	70-130	
Method Blank	P230522-MB	108	92	92	70-130	
Lab Control Sample	P230519-LCS	108	91	95	70-130	
Lab Control Sample	P230522-LCS	110	92	94	70-130	
Duplicate Lab Control Sample	P230519-DLCS	108	89	94	70-130	
Duplicate Lab Control Sample	P230522-DLCS	109	91	95	70-130	
MP-1	P2302140-001	107	90	92	70-130	
MP-2	P2302140-002	106	90	92	70-130	
MP-3	P2302140-003	108	90	92	70-130	
MP-4	P2302140-004	108	89	91	70-130	
MP-5	P2302140-005	108	89	92	70-130	
MP-6	P2302140-006	107	89	91	70-130	
MP-7	P2302140-007	108	90	91	70-130	
SW-2U	P2302140-008	108	81	86	70-130	
SW-2L	P2302140-009	109	81	85	70-130	
SW-1U	P2302140-010	109	85	90	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 / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

**Client:** Stantec  
**Client Sample ID:** Duplicate Lab Control Sample  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230519-DLCS

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

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount		Result		% Recovery		ALS	RPD	RPD Limit	Data Qualifier
		LCS / DLCS µg/m <sup>3</sup>	LCS µg/m <sup>3</sup>	DLCS µg/m <sup>3</sup>	LCS	DLCS	Acceptance Limits				
115-07-1	Propene	212	191	187	<b>90</b>	<b>88</b>	56-128	2	25		
75-71-8	Dichlorodifluoromethane (CFC 12)	212	172	168	<b>81</b>	<b>79</b>	71-112	3	25		
74-87-3	Chloromethane	210	173	168	<b>82</b>	<b>80</b>	53-126	2	25		
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	214	167	163	<b>78</b>	<b>76</b>	62-121	3	25		
75-01-4	Vinyl Chloride	210	181	181	<b>86</b>	<b>86</b>	63-123	0	25		
106-99-0	1,3-Butadiene	210	193	191	<b>92</b>	<b>91</b>	63-135	1	25		
74-83-9	Bromomethane	210	176	170	<b>84</b>	<b>81</b>	71-112	4	25		
75-00-3	Chloroethane	212	185	177	<b>87</b>	<b>83</b>	66-117	5	25		
67-64-1	Acetone	1,060	854	802	<b>81</b>	<b>76</b>	60-117	6	25		
75-69-4	Trichlorofluoromethane (CFC 11)	210	170	164	<b>81</b>	<b>78</b>	71-114	4	25		
67-63-0	2-Propanol (Isopropyl Alcohol)	414	396	374	<b>96</b>	<b>90</b>	61-124	6	25		
75-35-4	1,1-Dichloroethene	204	176	168	<b>86</b>	<b>82</b>	74-114	5	25		
75-09-2	Methylene Chloride	204	162	153	<b>79</b>	<b>75</b>	75-112	5	25		
76-13-1	Trichlorotrifluoroethane (CFC 113)	210	168	162	<b>80</b>	<b>77</b>	73-114	4	25		
75-15-0	Carbon Disulfide	430	361	341	<b>84</b>	<b>79</b>	70-113	6	25		
156-60-5	trans-1,2-Dichloroethene	216	195	186	<b>90</b>	<b>86</b>	76-119	5	25		
75-34-3	1,1-Dichloroethane	216	181	172	<b>84</b>	<b>80</b>	70-114	5	25		
1634-04-4	Methyl tert-Butyl Ether	216	184	178	<b>85</b>	<b>82</b>	72-118	4	25		
108-05-4	Vinyl Acetate	1,100	1220	1190	<b>111</b>	<b>108</b>	56-137	3	25		
78-93-3	2-Butanone (MEK)	414	345	339	<b>83</b>	<b>82</b>	74-121	1	25		
156-59-2	cis-1,2-Dichloroethene	214	178	177	<b>83</b>	<b>83</b>	73-117	0	25		

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 / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

**Client:** Stantec  
**Client Sample ID:** Duplicate Lab Control Sample  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230519-DLCS

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

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount		Result		% Recovery		ALS		Data Qualifier
		LCS / DLCS µg/m <sup>3</sup>	LCS µg/m <sup>3</sup>	DLCS µg/m <sup>3</sup>	LCS	DLCS	Acceptance Limits	RPD	RPD Limit	
141-78-6	Ethyl Acetate	398	319	316	80	79	59-161	1	25	
110-54-3	n-Hexane	212	175	173	83	82	55-130	1	25	
67-66-3	Chloroform	216	170	167	79	77	71-114	3	25	
109-99-9	Tetrahydrofuran (THF)	402	329	323	82	80	73-114	2	25	
107-06-2	1,2-Dichloroethane	204	183	181	90	89	71-119	1	25	
71-55-6	1,1,1-Trichloroethane	210	171	172	81	82	73-119	1	25	
71-43-2	Benzene	204	169	169	83	83	72-113	0	25	
56-23-5	Carbon Tetrachloride	210	183	182	87	87	67-123	0	25	
110-82-7	Cyclohexane	426	326	324	77	76	70-119	1	25	
78-87-5	1,2-Dichloropropane	214	171	171	80	80	70-118	0	25	
75-27-4	Bromodichloromethane	216	181	180	84	83	74-119	1	25	
79-01-6	Trichloroethene	212	160	160	75	75	74-115	0	25	
123-91-1	1,4-Dioxane	212	190	190	90	90	77-124	0	25	
142-82-5	n-Heptane	214	173	173	81	81	70-119	0	25	
10061-01-5	cis-1,3-Dichloropropene	212	208	208	98	98	81-126	0	25	
108-10-1	4-Methyl-2-pentanone	426	406	407	95	96	73-129	1	25	
10061-02-6	trans-1,3-Dichloropropene	196	185	185	94	94	80-127	0	25	
79-00-5	1,1,2-Trichloroethane	216	176	176	81	81	78-117	0	25	
108-88-3	Toluene	214	153	150	71	70	70-118	1	25	
591-78-6	2-Hexanone	426	400	394	94	92	74-132	2	25	

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 / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

**Client:** Stantec  
**Client Sample ID:** Duplicate Lab Control Sample  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230519-DLCS

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

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/19/23  
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount		Result		% Recovery		ALS		Data Qualifier
		LCS / DLCS µg/m <sup>3</sup>	LCS µg/m <sup>3</sup>	DLCS µg/m <sup>3</sup>	LCS	DLCS	Acceptance Limits	RPD	RPD Limit	
124-48-1	Dibromochloromethane	214	163	160	76	75	69-137	1	25	
106-93-4	1,2-Dibromoethane	204	157	155	77	76	76-128	1	25	
127-18-4	Tetrachloroethene	214	151	147	71	69	63-130	3	25	
108-90-7	Chlorobenzene	216	149	146	69	68	70-118	1	25	L
100-41-4	Ethylbenzene	218	157	154	72	71	71-123	1	25	
179601-23-1	m,p-Xylenes	430	316	311	73	72	67-127	1	25	
75-25-2	Bromoform	218	176	173	81	79	65-149	3	25	
100-42-5	Styrene	214	165	163	77	76	76-132	1	25	
95-47-6	o-Xylene	216	156	154	72	71	69-124	1	25	
79-34-5	1,1,2,2-Tetrachloroethane	216	159	156	74	72	69-128	3	25	
98-82-8	Cumene	212	152	149	72	70	69-125	3	25	
622-96-8	4-Ethyltoluene	218	162	156	74	72	69-127	3	25	
108-67-8	1,3,5-Trimethylbenzene	216	156	153	72	71	66-129	1	25	
95-63-6	1,2,4-Trimethylbenzene	212	157	154	74	73	63-142	1	25	
100-44-7	Benzyl Chloride	428	399	395	93	92	73-145	1	25	
541-73-1	1,3-Dichlorobenzene	214	150	147	70	69	67-136	1	25	
106-46-7	1,4-Dichlorobenzene	214	148	145	69	68	63-134	1	25	
95-50-1	1,2-Dichlorobenzene	212	148	145	70	68	64-139	3	25	
120-82-1	1,2,4-Trichlorobenzene	440	315	312	72	71	62-154	1	25	
91-20-3	Naphthalene	220	177	176	80	80	62-156	0	25	
87-68-3	Hexachlorobutadiene	218	147	146	67	67	55-142	0	25	

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.  
 L = Laboratory control sample recovery outside the specified limits, results may be biased high.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

**Client:** Stantec  
**Client Sample ID:** Duplicate Lab Control Sample  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230522-DLCS

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Wida Ang  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount		Result		% Recovery		ALS		Data Qualifier
		LCS / DLCS µg/m <sup>3</sup>	LCS µg/m <sup>3</sup>	DLCS µg/m <sup>3</sup>	LCS	DLCS	Acceptance Limits	RPD	RPD Limit	
115-07-1	Propene	212	192	188	91	89	56-128	2	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	212	175	170	83	80	71-112	4	25	
74-87-3	Chloromethane	210	167	166	80	79	53-126	1	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	214	171	166	80	78	62-121	3	25	
75-01-4	Vinyl Chloride	210	184	183	88	87	63-123	1	25	
106-99-0	1,3-Butadiene	210	196	193	93	92	63-135	1	25	
74-83-9	Bromomethane	210	179	172	85	82	71-112	4	25	
75-00-3	Chloroethane	212	184	178	87	84	66-117	4	25	
67-64-1	Acetone	1,060	849	802	80	76	60-117	5	25	
75-69-4	Trichlorofluoromethane (CFC 11)	210	174	166	83	79	71-114	5	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	414	391	370	94	89	61-124	5	25	
75-35-4	1,1-Dichloroethene	204	172	167	84	82	74-114	2	25	
75-09-2	Methylene Chloride	204	156	153	76	75	75-112	1	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	210	167	163	80	78	73-114	3	25	
75-15-0	Carbon Disulfide	430	354	342	82	80	70-113	2	25	
156-60-5	trans-1,2-Dichloroethene	216	189	186	88	86	76-119	2	25	
75-34-3	1,1-Dichloroethane	216	175	172	81	80	70-114	1	25	
1634-04-4	Methyl tert-Butyl Ether	216	180	178	83	82	72-118	1	25	
108-05-4	Vinyl Acetate	1,100	1210	1190	110	108	56-137	2	25	
78-93-3	2-Butanone (MEK)	414	341	340	82	82	74-121	0	25	
156-59-2	cis-1,2-Dichloroethene	214	179	175	84	82	73-117	2	25	

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 / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

**Client:** Stantec  
**Client Sample ID:** Duplicate Lab Control Sample  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230522-DLCS

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Wida Ang  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount		Result		% Recovery		ALS		Data Qualifier
		LCS / DLCS µg/m <sup>3</sup>	LCS µg/m <sup>3</sup>	DLCS µg/m <sup>3</sup>	LCS	DLCS	Acceptance Limits	RPD	RPD Limit	
141-78-6	Ethyl Acetate	398	317	314	80	79	59-161	1	25	
110-54-3	n-Hexane	212	176	172	83	81	55-130	2	25	
67-66-3	Chloroform	216	170	168	79	78	71-114	1	25	
109-99-9	Tetrahydrofuran (THF)	402	325	322	81	80	73-114	1	25	
107-06-2	1,2-Dichloroethane	204	187	183	92	90	71-119	2	25	
71-55-6	1,1,1-Trichloroethane	210	173	173	82	82	73-119	0	25	
71-43-2	Benzene	204	168	169	82	83	72-113	1	25	
56-23-5	Carbon Tetrachloride	210	185	186	88	89	67-123	1	25	
110-82-7	Cyclohexane	426	322	322	76	76	70-119	0	25	
78-87-5	1,2-Dichloropropane	214	168	169	79	79	70-118	0	25	
75-27-4	Bromodichloromethane	216	182	182	84	84	74-119	0	25	
79-01-6	Trichloroethene	212	162	162	76	76	74-115	0	25	
123-91-1	1,4-Dioxane	212	188	190	89	90	77-124	1	25	
142-82-5	n-Heptane	214	172	173	80	81	70-119	1	25	
10061-01-5	cis-1,3-Dichloropropene	212	209	209	99	99	81-126	0	25	
108-10-1	4-Methyl-2-pentanone	426	403	404	95	95	73-129	0	25	
10061-02-6	trans-1,3-Dichloropropene	196	185	186	94	95	80-127	1	25	
79-00-5	1,1,2-Trichloroethane	216	175	176	81	81	78-117	0	25	
108-88-3	Toluene	214	156	154	73	72	70-118	1	25	
591-78-6	2-Hexanone	426	406	400	95	94	74-132	1	25	

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 / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

**Client:** Stantec  
**Client Sample ID:** Duplicate Lab Control Sample  
**Client Project ID:** Bristol, VA / 182603807

ALS Project ID: P2302140  
 ALS Sample ID: P230522-DLCS

Test Code: EPA TO-15 Modified  
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
 Analyst: Wida Ang  
 Sample Type: 6.0 L Silonite Canister  
 Test Notes:

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 5/22/23  
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount		Result		% Recovery		ALS		Data Qualifier
		LCS / DLCS µg/m <sup>3</sup>	LCS µg/m <sup>3</sup>	DLCS µg/m <sup>3</sup>	LCS	DLCS	Acceptance Limits	RPD	RPD Limit	
124-48-1	Dibromochloromethane	214	167	166	78	78	69-137	0	25	
106-93-4	1,2-Dibromoethane	204	159	159	78	78	76-128	0	25	
127-18-4	Tetrachloroethene	214	155	154	72	72	63-130	0	25	
108-90-7	Chlorobenzene	216	152	150	70	69	70-118	1	25	L
100-41-4	Ethylbenzene	218	161	159	74	73	71-123	1	25	
179601-23-1	m,p-Xylenes	430	324	319	75	74	67-127	1	25	
75-25-2	Bromoform	218	183	180	84	83	65-149	1	25	
100-42-5	Styrene	214	168	166	79	78	76-132	1	25	
95-47-6	o-Xylene	216	160	158	74	73	69-124	1	25	
79-34-5	1,1,2,2-Tetrachloroethane	216	161	159	75	74	69-128	1	25	
98-82-8	Cumene	212	157	155	74	73	69-125	1	25	
622-96-8	4-Ethyltoluene	218	163	164	75	75	69-127	0	25	
108-67-8	1,3,5-Trimethylbenzene	216	159	158	74	73	66-129	1	25	
95-63-6	1,2,4-Trimethylbenzene	212	161	159	76	75	63-142	1	25	
100-44-7	Benzyl Chloride	428	411	412	96	96	73-145	0	25	
541-73-1	1,3-Dichlorobenzene	214	154	152	72	71	67-136	1	25	
106-46-7	1,4-Dichlorobenzene	214	151	149	71	70	63-134	1	25	
95-50-1	1,2-Dichlorobenzene	212	151	150	71	71	64-139	0	25	
120-82-1	1,2,4-Trichlorobenzene	440	311	317	71	72	62-154	1	25	
91-20-3	Naphthalene	220	172	176	78	80	62-156	3	25	
87-68-3	Hexachlorobutadiene	218	150	151	69	69	55-142	0	25	

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. L = Laboratory control sample recovery outside the specified limits, results may be biased low.