



## ANALYTICAL REPORT

Report Date: August 31, 2023

Stantec Consulting Services Inc.  
27280 Haggerty Road Suite C-11  
Farmington, MI 48331

Workorder: **34-2323506**

Client Project ID: Bristol, VA  
Purchase Order: 182603807  
Project Manager: Lisa Reid

### Analytical Results

Sample ID: <b>MP-4B</b>		Collected: 08/22/2023		
Lab ID: 2323506001		Sampling Location: Bristol, VA		Received: 08/23/2023
Method: NIOSH 6015 Mod.		Media: SKC 226-10-06, Silica gel tube (Sulfuric acid) (100/200mg)		Instrument: WET01
Dilution: 1		Sampling Parameter: Air Volume 55 L		Analyzed: 08/30/2023 (310160)
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Ammonia	1.2	0.023	0.033	1.2

Sample ID: <b>MP-4R</b>		Collected: 08/22/2023		
Lab ID: 2323506002		Sampling Location: Bristol, VA		Received: 08/23/2023
Method: NIOSH 6015 Mod.		Media: SKC 226-10-06, Silica gel tube (Sulfuric acid) (100/200mg)		Instrument: WET01
Dilution: 1		Sampling Parameter: Air Volume 56 L		Analyzed: 08/30/2023 (310160)
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Ammonia	<1.2	<0.021	<0.031	1.2

Sample ID: <b>MP-6B</b>		Collected: 08/22/2023		
Lab ID: 2323506003		Sampling Location: Bristol, VA		Received: 08/23/2023
Method: NIOSH 6015 Mod.		Media: SKC 226-10-06, Silica gel tube (Sulfuric acid) (100/200mg)		Instrument: WET01
Dilution: 1		Sampling Parameter: Air Volume 58 L		Analyzed: 08/30/2023 (310160)
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Ammonia	<1.2	<0.021	<0.030	1.2



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Workorder: **34-2323506**

Client Project ID: Bristol, VA  
Purchase Order: 182603807  
Project Manager: Lisa Reid

### Analytical Results

Sample ID: <b>MP-6R</b> Lab ID: 2323506004		Sampling Location: Bristol, VA		Collected: 08/22/2023 Received: 08/23/2023
Method: NIOSH 6015 Mod.		Media: SKC 226-10-06, Silica gel tube (Sulfuric acid) (100/200mg)		Instrument: WET01
Dilution: 1		Sampling Parameter: Air Volume 61 L		Analyzed: 08/30/2023 (310160)
Analyte	Result (ug/sample)	Result (mg/m <sup>3</sup> )	Result (ppm)	RL (ug/sample)
Ammonia	<1.2	<0.020	<0.028	1.2

Sample ID: <b>MP-8B</b> Lab ID: 2323506005		Sampling Location: Bristol, VA		Collected: 08/22/2023 Received: 08/23/2023
Method: NIOSH 6015 Mod.		Media: SKC 226-10-06, Silica gel tube (Sulfuric acid) (100/200mg)		Instrument: WET01
Dilution: 1		Sampling Parameter: Air Volume 52 L		Analyzed: 08/30/2023 (310160)
Analyte	Result (ug/sample)	Result (mg/m <sup>3</sup> )	Result (ppm)	RL (ug/sample)
Ammonia	<1.2	<0.023	<0.033	1.2

Sample ID: <b>MP-9B</b> Lab ID: 2323506006		Sampling Location: Bristol, VA		Collected: 08/22/2023 Received: 08/23/2023
Method: NIOSH 6015 Mod.		Media: SKC 226-10-06, Silica gel tube (Sulfuric acid) (100/200mg)		Instrument: WET01
Dilution: 1		Sampling Parameter: Air Volume 53 L		Analyzed: 08/30/2023 (310160)
Analyte	Result (ug/sample)	Result (mg/m <sup>3</sup> )	Result (ppm)	RL (ug/sample)
Ammonia	<1.2	<0.023	<0.033	1.2

Sample ID: <b>MP-9R</b> Lab ID: 2323506007		Sampling Location: Bristol, VA		Collected: 08/22/2023 Received: 08/23/2023
Method: NIOSH 6015 Mod.		Media: SKC 226-10-06, Silica gel tube (Sulfuric acid) (100/200mg)		Instrument: WET01
Dilution: 1		Sampling Parameter: Air Volume 55 L		Analyzed: 08/30/2023 (310160)
Analyte	Result (ug/sample)	Result (mg/m <sup>3</sup> )	Result (ppm)	RL (ug/sample)
Ammonia	<1.2	<0.022	<0.031	1.2

### Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method (Analysis Batch)	Analyst	Peer Review
NIOSH 6015 Mod. (310160)	/S/ Brian S. Stites 08/30/2023 23:26	/S/ Kristie F. Bitner 08/31/2023 08:14

### Laboratory Contact Information

ALS Environmental  
960 W Levoy Drive  
Salt Lake City, Utah 84123

Phone: (801) 266-7700  
Email: [alslt.lab@ALSGlobal.com](mailto:alslt.lab@ALSGlobal.com)  
Web: [www.alsglobal.com/slt](http://www.alsglobal.com/slt)



## ANALYTICAL REPORT

Workorder: **34-2323506**

Client Project ID: Bristol, VA  
Purchase Order: 182603807  
Project Manager: Lisa Reid

### General Lab Comments

The results provided in this report relate only to the items tested.

Samples were received in acceptable condition unless otherwise noted.

The following was provided by the client: Sample ID, Collection Date, Sampling Location, Media Type, Sampling Parameter. Collection Date, Media Type, and Sampling Parameter can potentially affect the validity of the results.

Samples have not been blank corrected unless otherwise noted.

This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP)	101574	<a href="http://www.aihaaccreditedlabs.org">http://www.aihaaccreditedlabs.org</a>
	DOECAP-AP	L22-62	<a href="http://www.pjlabs.com">http://www.pjlabs.com</a>
	Washington	C596	<a href="https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation">https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Laboratory-Accreditation</a>
Dietary Supplements	PJLA (ISO 17025)	L22-61	<a href="http://www.pjlabs.com">http://www.pjlabs.com</a>

### Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

NA = Not Applicable.

\*\* No result could be reported, see sample comments for details.

< Means this testing result is less than the numerical value.

( ) This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.



## Quality Control Sample Batch Report

### Analysis Information

Workorder: 2323506

Limits: Historical/Performance  
Basis: ALS Laboratory Group

Preparation: NA  
Batch: NA  
Prepared By: NA

Analysis: NIOSH 6015 Mod.  
Batch: IWC/4105 (HBN: 310160)  
Analyzed By: Brian S. Stites

### Blank

LMB: 832601  
Analyzed: 08/30/2023 18:00  
Units: ug/sample

Analyte	Result	MDL	RL
Ammonia	ND	NA	1.20

### Laboratory Control Sample - Laboratory Control Sample Duplicate

LCS: 832602  
Analyzed: 08/30/2023 18:00  
Dilution: 1  
Units: ug/sample

LCSD: 832603  
Analyzed: 08/30/2023 18:02  
Dilution: 1  
Units: ug/sample

Analyte	Result	Target	% Rec	QC Limits	Result	% Rec	RPD	QC Limits
Ammonia	22.4	24.3	92.2	70.0 130.0	22.2	91.4	0.905	0.0 20.0

### QC Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Workorder	Analyst	Peer Review
2323506	/S/ Brian S. Stites 08/30/2023 23:26	/S/ Kristie F. Bitner 08/31/2023 08:14

### Symbols and Definitions

- \* - Analyte above reporting limit or outside of control limits
- ▲ - Sample result is greater than 4 times the spike added
- - Sample and Matrix Duplicate less than 5 times the reporting limit
- - Result is above the calibration range
- # - The Matrix Spike, Matrix Spike duplicate or Matrix Duplicate is reported for your information only. The sample matrix may be inappropriate for the method selected.

RPD - Relative % Difference (Spike / Spike Duplicate)  
ND - Not Detected (U - Qualifier also flags analyte as not detected)  
NA - Not Applicable  
QC results are not adjusted for moisture correction, where applicable



2323506



## ANALYTICAL REQUEST FORM

1. ☒ REGULAR Status☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY \_\_\_\_\_

DATE \_\_\_\_\_

CONTACT ALS SALT LAKE PRIOR TO SENDING SAMPLES

2. Date: 8/22/23 Purchase Order No. 182603807

3. Company Name: Stantec Consulting Services Inc.

Address: 27280 Haggerty Road Suite C-11

Farmington Hills, MI 48331

Person to Contact: [REDACTED]

Telephone [REDACTED]

Fax Telephone ( ) \_\_\_\_\_

E-mail Address: [REDACTED]

Billing Address (if different from above) \_\_\_\_\_

4. Quote No. \_\_\_\_\_

ALS Project Manager: Lisa Reid

5. Sample Collection

Sampling Site: Bristol, VA

Industrial Process: \_\_\_\_\_

Date of Collection: 8/22/23

Time Collected \_\_\_\_\_

Date of Shipment: 8/22/23

Chain of Custody No.: \_\_\_\_\_

6. How did you first learn about ALS? \_\_\_\_\_

## 7. REQUEST FOR ANALYSES

Client Sample Number	Matrix*	Date	Start Time	End Time	mL/minute	Total minutes	Sample/Area Volume	ANALYSES REQUESTED - Use method number if known	Units**	Lab Comments
MP-4B	Silica Gel Tube Sulfuric Acid	8/22/2023	1058	1601	180	303	55(L)	Ammonia by NIOSH 6015		report in ppm
MP-4R	Silica Gel Tube Sulfuric Acid	8/22/2023	1142	1648	185	305	56(L)	Ammonia by NIOSH 6015		report in ppm
MP-6B	Silica Gel Tube Sulfuric Acid	8/22/2023	1118	1624	190	306	58(L)	Ammonia by NIOSH 6015		report in ppm
MP-6R	Silica Gel Tube Sulfuric Acid	8/22/2023	1124	1630	200	306	61(L)	Ammonia by NIOSH 6015		report in ppm
MP-8B	Silica Gel Tube Sulfuric Acid	8/22/2023	1104	1608	170	304	52(L)	Ammonia by NIOSH 6015		report in ppm
MP-9B	Silica Gel Tube Sulfuric Acid	8/22/2023	1110	1614	175	304	53(L)	Ammonia by NIOSH 6015		report in ppm
MP-9R	Silica Gel Tube Sulfuric Acid	8/22/2023	1132	1637	180	305	55(L)	Ammonia by NIOSH 6015		report in ppm

\* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other

\*\* 1. µg/sample 2. mg/m³ 3. ppm 4. % 5. µg/m³ 6. \_\_\_\_\_ (other) Please indicate one or more units in the column entitled Units\*\*

Comments \_\_\_\_\_

Possible Contamination and/or Chemical Hazards \_\_\_\_\_

## 7. Chain of Custody (Optional)

Relinquished by	[REDACTED]	Date/Time	8/22/23 1720
Received by	FedEx	Date/Time	8/22/23
Relinquished by	[Signature]	Date/Time	08-23-23 9:15
Received by	[Signature]	Date/Time	

960 West LeVoy Drive / Salt Lake City, UT 84123

ALS Environmental

800-356-9135 or 801-266-7700 / FAX: 801-268-9992