

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 03, 2023


Brian Humphrey
Industrial Gas Services
5862 McIntyre Ct.
Golden, CO 80403

RE: Behring 1

Work Order #2309468

Enclosed are the results of analyses for samples received by Summit Scientific on 09/26/23 14:56. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jacob Wood". The signature is written in a cursive, flowing style.

Jacob Wood For Paul Shrewsbury
President



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N Tank01@1'	2309468-01	Soil	09/26/23 09:40	09/26/23 14:56
S Tank01@1'	2309468-02	Soil	09/26/23 09:41	09/26/23 14:56
WH01@1'	2309468-03	Soil	09/26/23 10:45	09/26/23 14:56
HT South@3'	2309468-04	Soil	09/26/23 12:29	09/26/23 14:56

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SUMMIT SCIENTIFIC

4653 Table Mountain Drive
Golden, CO 80403
303-277-9310

Lab ID	Page 1 of 1
2309468	

Client: <u>IGS, Inc.</u>		Send Data To:		Send Invoice To:	
Address:		Project Manager: <u>Dennis Horner/Brian Humphrey</u>		Company: <u>IGS, Inc</u>	
City/State/Zip:		E-Mail: <u>IGSINC@att.net</u> <u>bhumphrey@cgrs.com</u>		Project Name/Location: <u>Behring 1</u>	
Phone:		Project Name: <u>Behring 1</u>		AFE#:	
Sampler Name: <u>Mitchell Bond/Brian Humphrey</u>		Project Number:		PO/Billing Codes:	
				Contact: <u>Dennis Horner/Brian Humphrey</u>	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other					
1	NTank01 @ 1'	9/26/23	0940	2			X			X			X				
2	STank01 @ 1'	9/26/23	0941	2			X			X			X				
3	WH01 @ 1'	9/26/23	1045	2			X			X			X				
4	HiSouth @ 3'	9/26/23	1229	2			X			X			X				
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Relinquished by: <u>Dennis Horner/Brian Humphrey</u>	Date/Time: <u>9/26/23 14:54</u>	Received by: <u>John Wind</u>	Date/Time: <u>9/26/23 14:56</u>	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	Field Turb.	
Temperature Upon Receipt: <u>4.1</u>	Corrected Temperature	IR gun #: <u>2</u>	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2309468Client: IGS Client Project ID: Behring 1Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: _____

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 4.1 Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ice
If custody seals are present, are they intact? ⁽¹⁾	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				


 Custodian Printed Name

9/26/23 14:56
 Date/Time



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

N Tank01@1'
2309468-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGI0867	09/27/23	09/28/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0292	72.9 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0365	91.2 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGI0870	09/27/23	09/27/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.0	88.3 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

N Tank01@1'
2309468-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BGI0832	09/27/23	09/27/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0322	96.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0276	82.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	0.264	0.0100	mg/L	1	BGI0842	09/27/23	09/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

N Tank01@1'
2309468-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.66	0.200	mg/kg dry	1	BGI0958	09/29/23	10/01/23	EPA 6020B
Barium	45.3	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.24	0.400	"	"	"	"	"	"
Lead	4.17	0.200	"	"	"	"	"	"
Nickel	2.66	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	10.7	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGI0851	09/27/23	09/27/23	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	284	0.0542	mg/L dry	1	BGI0956	09/29/23	10/02/23	EPA 6020B	
Magnesium	53.6	0.0542	"	"	"	"	"	"	
Sodium	6.95	0.0542	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0992	0.00100	units	1	BGI0069	10/03/23	10/03/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

N Tank01@1'
2309468-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.3		%	1	BGI0938	09/29/23	09/29/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.211	0.0100	mmhos/cm	1	BGJ0015	10/02/23	10/02/23	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/26/23 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.12		pH Units	1	BGJ0017	10/02/23	10/02/23	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

S Tank01@1'
2309468-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGI0867	09/27/23	09/28/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0338	84.5 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0398	99.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0373	93.3 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGI0870	09/27/23	09/27/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	10.6	84.6 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

S Tank01@1'
2309468-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BGI0832	09/27/23	09/27/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0285	85.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0276	82.8 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	0.316	0.0100	mg/L	1	BGI0842	09/27/23	09/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

S Tank01@1'
2309468-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.75	0.200	mg/kg dry	1	BGI0958	09/29/23	10/01/23	EPA 6020B
Barium	44.3	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.21	0.400	"	"	"	"	"	"
Lead	4.20	0.200	"	"	"	"	"	"
Nickel	2.81	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	10.8	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGI0851	09/27/23	09/27/23	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	23.1	0.0534	mg/L dry	1	BGI0956	09/29/23	10/02/23	EPA 6020B	
Magnesium	7.38	0.0534	"	"	"	"	"	"	
Sodium	1.26	0.0534	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0584	0.00100	units	1	BGI0069	10/03/23	10/03/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

S Tank01@1'
2309468-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	93.7			%	1	BGI0938	09/29/23	09/29/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.136	0.0100		mmhos/cm	1	BGJ0015	10/02/23	10/02/23	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/26/23 09:41**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.39			pH Units	1	BGJ0017	10/02/23	10/02/23	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

WH01@1'
2309468-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGI0867	09/27/23	09/28/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0305	76.4 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0366	91.6 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	980	50	mg/kg	1	BGI0870	09/27/23	09/27/23	EPA 8015M	
C28-C36 (ORO)	740	50	"	"	"	"	"	"	

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.6	92.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

WH01@1'
2309468-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGI0832	09/27/23	09/27/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0257	77.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0206	61.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.327	0.0100	mg/L	1	BGI0842	09/27/23	09/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

WH01@1'
2309468-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.55	0.200	mg/kg dry	1	BGI0958	09/29/23	10/01/23	EPA 6020B
Barium	42.9	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.56	0.400	"	"	"	"	"	"
Lead	4.06	0.200	"	"	"	"	"	"
Nickel	2.74	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	12.4	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGI0851	09/27/23	09/27/23	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	65.9	0.0556	mg/L dry	1	BGI0956	09/29/23	10/02/23	EPA 6020B	
Magnesium	16.1	0.0556	"	"	"	"	"	"	
Sodium	13.4	0.0556	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.384	0.00100	units	1	BGI0069	10/03/23	10/03/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

WH01@1'
2309468-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.9		%	1	BGI0938	09/29/23	09/29/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.554	0.0100	mmhos/cm	1	BGJ0015	10/02/23	10/02/23	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/26/23 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.73		pH Units	1	BGJ0017	10/02/23	10/02/23	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

HT South@3'
2309468-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGI0867	09/27/23	09/28/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0371	92.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0402	101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0370	92.4 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGI0870	09/27/23	09/27/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.0	88.2 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

HT South@3'
2309468-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGI0832	09/27/23	09/27/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0333	99.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0268	80.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/26/23 12:29**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.223	0.0100	mg/L	1	BGI0842	09/27/23	09/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Summit Scientific



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

HT South@3'
2309468-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	3.00	0.200	mg/kg dry	1	BGI0958	09/29/23	10/01/23	EPA 6020B
Barium	49.0	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.49	0.400	"	"	"	"	"	"
Lead	4.93	0.200	"	"	"	"	"	"
Nickel	3.38	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	11.6	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGI0851	09/27/23	09/27/23	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	130	0.0524	mg/L dry	1	BGI0956	09/29/23	10/02/23	EPA 6020B	
Magnesium	24.6	0.0524	"	"	"	"	"	"	
Sodium	17.5	0.0524	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.369	0.00100	units	1	BGI0069	10/03/23	10/03/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

HT South@3'
2309468-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.5		%	1	BGI0938	09/29/23	09/29/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0600	0.0100	mmhos/cm	1	BGJ0015	10/02/23	10/02/23	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **09/26/23 12:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.48		pH Units	1	BGJ0017	10/02/23	10/02/23	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0867 - EPA 5030 Soil MS

Blank (BGI0867-BLK1)

Prepared & Analyzed: 09/27/23

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0387		"	0.0400		96.8	50-150			
Surrogate: Toluene-d8	0.0400		"	0.0400		99.9	50-150			
Surrogate: 4-Bromofluorobenzene	0.0368		"	0.0400		92.0	50-150			

LCS (BGI0867-BS1)

Prepared & Analyzed: 09/27/23

Benzene	0.0990	0.0020	mg/kg	0.100		99.0	70-130			
Toluene	0.0982	0.0050	"	0.100		98.2	70-130			
Ethylbenzene	0.0968	0.0050	"	0.100		96.8	70-130			
m,p-Xylene	0.190	0.010	"	0.200		94.8	70-130			
o-Xylene	0.0917	0.0050	"	0.100		91.7	70-130			
1,2,4-Trimethylbenzene	0.0877	0.0050	"	0.100		87.7	70-130			
1,3,5-Trimethylbenzene	0.0908	0.0050	"	0.100		90.8	70-130			
Naphthalene	0.0784	0.0038	"	0.100		78.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0348		"	0.0400		87.1	50-150			
Surrogate: Toluene-d8	0.0401		"	0.0400		100	50-150			
Surrogate: 4-Bromofluorobenzene	0.0383		"	0.0400		95.7	50-150			

Matrix Spike (BGI0867-MS1)

Source: 2309461-01

Prepared & Analyzed: 09/27/23

Benzene	0.0851	0.0020	mg/kg	0.100	ND	85.1	70-130			
Toluene	0.0845	0.0050	"	0.100	ND	84.5	70-130			
Ethylbenzene	0.0802	0.0050	"	0.100	ND	80.2	70-130			
m,p-Xylene	0.156	0.010	"	0.200	ND	78.2	70-130			
o-Xylene	0.0769	0.0050	"	0.100	ND	76.9	70-130			
1,2,4-Trimethylbenzene	0.0716	0.0050	"	0.100	ND	71.6	70-130			
1,3,5-Trimethylbenzene	0.0734	0.0050	"	0.100	ND	73.4	70-130			
Naphthalene	0.0651	0.0038	"	0.100	ND	65.1	70-130			QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0379		"	0.0400		94.8	50-150			
Surrogate: Toluene-d8	0.0410		"	0.0400		102	50-150			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		99.9	50-150			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0867 - EPA 5030 Soil MS

Matrix Spike Dup (BGI0867-MSD1)		Source: 2309461-01			Prepared: 09/27/23 Analyzed: 09/28/23					
Benzene	0.0807	0.0020	mg/kg	0.100	ND	80.7	70-130	5.28	30	
Toluene	0.0788	0.0050	"	0.100	ND	78.8	70-130	6.94	30	
Ethylbenzene	0.0706	0.0050	"	0.100	ND	70.6	70-130	12.8	30	
m,p-Xylene	0.136	0.010	"	0.200	ND	68.1	70-130	13.8	30	QM-07
o-Xylene	0.0695	0.0050	"	0.100	ND	69.5	70-130	10.1	30	QM-07
1,2,4-Trimethylbenzene	0.0640	0.0050	"	0.100	ND	64.0	70-130	11.1	30	QM-07
1,3,5-Trimethylbenzene	0.0631	0.0050	"	0.100	ND	63.1	70-130	15.1	30	QM-07
Naphthalene	0.0687	0.0038	"	0.100	ND	68.7	70-130	5.43	30	QM-07
Surrogate: 1,2-Dichloroethane-d4		0.0374	"	0.0400		93.4	50-150			
Surrogate: Toluene-d8		0.0425	"	0.0400		106	50-150			
Surrogate: 4-Bromofluorobenzene		0.0405	"	0.0400		101	50-150			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0870 - EPA 3550A

Blank (BGI0870-BLK1)

Prepared & Analyzed: 09/27/23

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

Surrogate: o-Terphenyl	12.9	"	12.5	103	30-150
------------------------	------	---	------	-----	--------

LCS (BGI0870-BS1)

Prepared & Analyzed: 09/27/23

C10-C28 (DRO)	435	50	mg/kg	500	87.0	70-130
---------------	-----	----	-------	-----	------	--------

Surrogate: o-Terphenyl	13.5	"	12.5	108	30-150
------------------------	------	---	------	-----	--------

Matrix Spike (BGI0870-MS1)

Source: 2309461-01

Prepared & Analyzed: 09/27/23

C10-C28 (DRO)	455	50	mg/kg	500	28.6	85.4	70-130
---------------	-----	----	-------	-----	------	------	--------

Surrogate: o-Terphenyl	12.5	"	12.5	100	30-150
------------------------	------	---	------	-----	--------

Matrix Spike Dup (BGI0870-MSD1)

Source: 2309461-01

Prepared & Analyzed: 09/27/23

C10-C28 (DRO)	370	50	mg/kg	500	28.6	68.3	70-130	20.7	20	QM-07
---------------	-----	----	-------	-----	------	------	--------	------	----	-------

Surrogate: o-Terphenyl	11.6	"	12.5	92.8	30-150
------------------------	------	---	------	------	--------

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0832 - EPA 5030 Soil MS

Blank (BGI0832-BLK1)

Prepared & Analyzed: 09/27/23

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0173		"	0.0333		51.8	40-150			
Surrogate: Fluoranthene-d10	0.0262		"	0.0333		78.5	40-150			

LCS (BGI0832-BS1)

Prepared & Analyzed: 09/27/23

Acenaphthene	0.0349	0.00500	mg/kg	0.0333	105	31-137
Anthracene	0.0342	0.00500	"	0.0333	103	30-120
Benzo (a) anthracene	0.0272	0.00500	"	0.0333	81.6	30-120
Benzo (a) pyrene	0.0344	0.00500	"	0.0333	103	30-120
Benzo (b) fluoranthene	0.0316	0.00500	"	0.0333	94.7	30-120
Benzo (k) fluoranthene	0.0343	0.00500	"	0.0333	103	30-120
Chrysene	0.0346	0.00500	"	0.0333	104	30-120
Dibenz (a,h) anthracene	0.0372	0.00500	"	0.0333	112	30-120
Fluoranthene	0.0344	0.00500	"	0.0333	103	30-120
Fluorene	0.0338	0.00500	"	0.0333	101	30-120
Indeno (1,2,3-cd) pyrene	0.0369	0.00500	"	0.0333	111	30-120
Pyrene	0.0375	0.00500	"	0.0333	113	35-142
1-Methylnaphthalene	0.0340	0.00500	"	0.0333	102	35-142
2-Methylnaphthalene	0.0395	0.00500	"	0.0333	118	35-142
Surrogate: 2-Methylnaphthalene-d10	0.0233		"	0.0333	69.8	40-150
Surrogate: Fluoranthene-d10	0.0349		"	0.0333	105	40-150

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0832 - EPA 5030 Soil MS

Matrix Spike (BGI0832-MS1)			Source: 2309468-01		Prepared & Analyzed: 09/27/23					
Acenaphthene	0.0169	0.00500	mg/kg	0.0333	ND	50.8	31-137			
Anthracene	0.0179	0.00500	"	0.0333	ND	53.8	30-120			
Benzo (a) anthracene	0.0178	0.00500	"	0.0333	ND	53.3	30-120			
Benzo (a) pyrene	0.0198	0.00500	"	0.0333	ND	59.5	30-120			
Benzo (b) fluoranthene	0.0166	0.00500	"	0.0333	ND	49.9	30-120			
Benzo (k) fluoranthene	0.0160	0.00500	"	0.0333	ND	48.0	30-120			
Chrysene	0.0170	0.00500	"	0.0333	ND	51.1	30-120			
Dibenz (a,h) anthracene	0.0229	0.00500	"	0.0333	ND	68.7	30-120			
Fluoranthene	0.0167	0.00500	"	0.0333	ND	50.1	30-120			
Fluorene	0.0188	0.00500	"	0.0333	ND	56.4	30-120			
Indeno (1,2,3-cd) pyrene	0.0269	0.00500	"	0.0333	ND	80.6	30-120			
Pyrene	0.0238	0.00500	"	0.0333	ND	71.4	35-142			
1-Methylnaphthalene	0.0171	0.00500	"	0.0333	ND	51.3	15-130			
2-Methylnaphthalene	0.0154	0.00500	"	0.0333	ND	46.2	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0162		"	0.0333		48.7	40-150			
Surrogate: Fluoranthene-d10	0.0171		"	0.0333		51.4	40-150			

Matrix Spike Dup (BGI0832-MSD1)			Source: 2309468-01		Prepared & Analyzed: 09/27/23					
Acenaphthene	0.0202	0.00500	mg/kg	0.0333	ND	60.7	31-137	17.8	30	
Anthracene	0.0215	0.00500	"	0.0333	ND	64.4	30-120	18.0	30	
Benzo (a) anthracene	0.0210	0.00500	"	0.0333	ND	62.9	30-120	16.5	30	
Benzo (a) pyrene	0.0250	0.00500	"	0.0333	ND	74.9	30-120	22.8	30	
Benzo (b) fluoranthene	0.0153	0.00500	"	0.0333	ND	46.0	30-120	8.15	30	
Benzo (k) fluoranthene	0.0184	0.00500	"	0.0333	ND	55.3	30-120	14.1	30	
Chrysene	0.0229	0.00500	"	0.0333	ND	68.8	30-120	29.5	30	
Dibenz (a,h) anthracene	0.0299	0.00500	"	0.0333	ND	89.6	30-120	26.4	30	
Fluoranthene	0.0201	0.00500	"	0.0333	ND	60.4	30-120	18.6	30	
Fluorene	0.0222	0.00500	"	0.0333	ND	66.7	30-120	16.7	30	
Indeno (1,2,3-cd) pyrene	0.0301	0.00500	"	0.0333	ND	90.2	30-120	11.2	30	
Pyrene	0.0297	0.00500	"	0.0333	ND	89.1	35-142	22.0	30	
1-Methylnaphthalene	0.0235	0.00500	"	0.0333	ND	70.5	15-130	31.4	50	
2-Methylnaphthalene	0.0207	0.00500	"	0.0333	ND	62.2	15-130	29.6	50	
Surrogate: 2-Methylnaphthalene-d10	0.0222		"	0.0333		66.6	40-150			
Surrogate: Fluoranthene-d10	0.0205		"	0.0333		61.6	40-150			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0842 - EPA 3050B

Blank (BGI0842-BLK1)

Prepared: 09/27/23 Analyzed: 09/29/23

Boron ND 0.0100 mg/L

LCS (BGI0842-BS1)

Prepared: 09/27/23 Analyzed: 09/29/23

Boron 5.83 0.0100 mg/L 5.00 117 80-120

Duplicate (BGI0842-DUP1)

Source: 2309468-01

Prepared: 09/27/23 Analyzed: 09/29/23

Boron 0.179 0.0100 mg/L 0.264 38.5 20 QR-04

Matrix Spike (BGI0842-MS1)

Source: 2309468-01

Prepared: 09/27/23 Analyzed: 09/29/23

Boron 5.60 0.0100 mg/L 5.00 0.264 107 75-125

Matrix Spike Dup (BGI0842-MSD1)

Source: 2309468-01

Prepared: 09/27/23 Analyzed: 09/29/23

Boron 5.32 0.0100 mg/L 5.00 0.264 101 75-125 5.12 25

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0958 - EPA 3050B

Blank (BGI0958-BLK1)

Prepared: 09/29/23 Analyzed: 10/01/23

Arsenic	ND	0.200	mg/kg wet
Barium	ND	0.400	"
Cadmium	ND	0.200	"
Copper	ND	0.400	"
Lead	ND	0.200	"
Nickel	ND	0.400	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"
Selenium	ND	0.260	"

LCS (BGI0958-BS1)

Prepared: 09/29/23 Analyzed: 10/01/23

Arsenic	38.2	0.200	mg/kg wet	40.0	95.6	80-120
Barium	40.5	0.400	"	40.0	101	80-120
Cadmium	1.99	0.200	"	2.00	99.3	80-120
Copper	39.2	0.400	"	40.0	98.1	80-120
Lead	19.9	0.200	"	20.0	99.4	80-120
Nickel	39.1	0.400	"	40.0	97.7	80-120
Silver	1.97	0.0200	"	2.00	98.4	80-120
Zinc	39.8	0.400	"	40.0	99.5	80-120

Duplicate (BGI0958-DUP1)

Source: 2309017-06

Prepared: 09/29/23 Analyzed: 10/01/23

Arsenic	0.534	0.200	mg/kg dry	0.711	28.5	20	QR-01
Barium	10.2	0.400	"	11.7	13.4	20	
Cadmium	0.0390	0.200	"	0.0452	14.7	20	
Copper	2.15	0.400	"	1.67	25.1	20	QR-01
Lead	2.01	0.200	"	1.81	10.7	20	
Nickel	2.39	0.400	"	1.88	24.0	20	QR-01
Silver	0.00620	0.0200	"	0.00576	7.41	20	
Zinc	8.58	0.400	"	7.13	18.5	20	
Selenium	0.184	0.260	"	ND	200	200	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0958 - EPA 3050B

Matrix Spike (BGI0958-MS1)

Source: 2309017-06

Prepared: 09/29/23 Analyzed: 10/01/23

Arsenic	50.8	0.200	mg/kg dry	44.3	0.711	113	75-125
Barium	63.7	0.400	"	44.3	11.7	117	75-125
Cadmium	2.71	0.200	"	2.21	0.0452	120	75-125
Copper	43.9	0.400	"	44.3	1.67	95.3	75-125
Lead	28.0	0.200	"	22.1	1.81	118	75-125
Nickel	43.9	0.400	"	44.3	1.88	94.9	75-125
Silver	2.46	0.0200	"	2.21	0.00576	111	75-125
Zinc	51.7	0.400	"	44.3	7.13	101	75-125

Matrix Spike Dup (BGI0958-MSD1)

Source: 2309017-06

Prepared: 09/29/23 Analyzed: 10/01/23

Arsenic	46.5	0.200	mg/kg dry	44.3	0.711	103	75-125	8.73	25
Barium	56.8	0.400	"	44.3	11.7	102	75-125	11.3	25
Cadmium	2.48	0.200	"	2.21	0.0452	110	75-125	8.79	25
Copper	42.8	0.400	"	44.3	1.67	92.9	75-125	2.49	25
Lead	26.4	0.200	"	22.1	1.81	111	75-125	5.79	25
Nickel	43.0	0.400	"	44.3	1.88	92.8	75-125	2.12	25
Silver	2.28	0.0200	"	2.21	0.00576	103	75-125	7.54	25
Zinc	50.1	0.400	"	44.3	7.13	97.1	75-125	3.01	25

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0851 - 3060A Mod

Blank (BGI0851-BLK1)

Prepared & Analyzed: 09/27/23

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BGI0851-BS1)

Prepared & Analyzed: 09/27/23

Chromium, Hexavalent 26.0 0.30 mg/kg wet 25.0 104 80-120

Duplicate (BGI0851-DUP1)

Source: 2309468-01

Prepared & Analyzed: 09/27/23

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BGI0851-MS1)

Source: 2309468-01

Prepared & Analyzed: 09/27/23

Chromium, Hexavalent 25.3 0.30 mg/kg dry 27.1 ND 93.4 75-125

Matrix Spike Dup (BGI0851-MSD1)

Source: 2309468-01

Prepared & Analyzed: 09/27/23

Chromium, Hexavalent 25.4 0.30 mg/kg dry 27.1 ND 93.6 75-125 0.214 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1

Project Number: [none]

Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BGI0956 - General Preparation

Blank (BGI0956-BLK1)

Prepared: 09/29/23 Analyzed: 10/02/23

Calcium	ND	0.0500	mg/L wet
Magnesium	ND	0.0500	"
Sodium	ND	0.0500	"

LCS (BGI0956-BS1)

Prepared: 09/29/23 Analyzed: 10/02/23

Calcium	5.56	0.0500	mg/L wet	5.00	111	70-130
Magnesium	5.41	0.0500	"	5.00	108	70-130
Sodium	5.47	0.0500	"	5.00	109	70-130

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1

Project Number: [none]

Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BGI0938 - General Preparation

Duplicate (BGI0938-DUP1)

Source: 2309468-01

Prepared & Analyzed: 09/29/23

% Solids	91.9	%		92.3		0.370	20
----------	------	---	--	------	--	-------	----

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BGJ0015 - General Preparation

Blank (BGJ0015-BLK1)

Prepared & Analyzed: 10/02/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGJ0015-BS1)

Prepared & Analyzed: 10/02/23

Specific Conductance (EC) 0.149 0.0100 mmhos/cm 0.150 99.1 95-105

Duplicate (BGJ0015-DUP1)

Source: 2309456-01

Prepared & Analyzed: 10/02/23

Specific Conductance (EC) 2.24 0.0100 mmhos/cm 2.22 0.718 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1

Project Number: [none]

Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BGJ0017 - General Preparation

LCS (BGJ0017-BS1)

Prepared & Analyzed: 10/02/23

pH	9.10	pH Units	9.18	99.1	95-105
----	------	----------	------	------	--------

Duplicate (BGJ0017-DUP1)

Source: 2309458-04

Prepared & Analyzed: 10/02/23

pH	8.64	pH Units	8.57	0.813	20
----	------	----------	------	-------	----

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Industrial Gas Services
5862 McIntyre Ct.
Golden CO, 80403

Project: Behring 1

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
10/03/23 15:52

Notes and Definitions

QR-04	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-01	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference