

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

December 02, 2024

Tanna Lyon

Ensolum, LLC

11049 W. 44th Ave, Ste 100

Wheat Ridge, CO 80033

RE: Civitas - Blue 3-65 33-32-31

Work Order #2411358

Enclosed are the results of analyses for samples received by Summit Scientific on 11/20/24 13:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Natalie Tessier". The signature is fluid and cursive, with the first name being more prominent.

Natalie Tessier For Paul Shrewsbury  
President



Ensolum, LLC  
11049 W. 44th Ave, Ste 100  
Wheat Ridge CO, 80033

Project: Civitas - Blue 3-65 33-32-31

Project Number: 09C2407007  
Project Manager: Tanna Lyon

**Reported:**  
12/02/24 08:50

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W02@4'	2411358-01	Soil	11/20/24 11:20	11/20/24 13:00

# SUMMIT SCIENTIFIC

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

Lab ID	Page 1 of 1
2411358	

Client: <u>Ensolum</u>		Send Data To: Project Manager: <u>Tanna Lyon</u>		Send Invoice To: Company: <u>Civitas</u>	
Address: <u>11049 W 44th Ave Ste 100</u>		E-Mail: <u>tlion@ensolum.com/bsulzberger@ensolum.com</u>		Project Name/Location: <u>Blue 3-GS 33-32-31</u>	
City/State/Zip: <u>Wheat Ridge CO, 80033</u>		com/cmcqueen@civitasresources.com		AFE#: <u>P1671 PD</u>	
Phone: <u>720 363 6416</u>		Project Name: <u>Blue 3-GS 33-32-31</u>		PO/Billing Codes: <u>M/M: 8520.162</u>	
Sampler Name: <u>Max Buffy</u>		Project Number: <u>0902407007</u>		Contact: <u>Coshin McQueen</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	TPHs	SAR						
1	W02@4'	11/20/24	1120	2			X			X			X	X						W04@2' on Hold
2	W04@2'	↓	1122	2			X			X			X	X						on Hold
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Relinquished by: <u>M. Buffy</u>	Date/Time: <u>11/20/24 1300</u>	Received by: <u>J. W. L.</u>	Date/Time: <u>11/20/24 13:00</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>11</u>	Corrected Temperature	IR gun #: <u>2</u>	HNO3 lot #:			

S<sub>2</sub>

## Sample Receipt Checklist

S2 Work Order# 2411358Client: Civilis-En Solu Client Project ID: B/c 3-65 33-32-31Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐
☒ ☐ ☐ ☐ ☐
Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 1.1Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> <b>NOTE:</b> 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"/>	
If custody seals are present, are they intact? <sup>(1)</sup>	<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 <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , 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? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<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)? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> 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): <u>Client requested 24hr TAT - AS</u>				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

Control Form #: SRC-001

J.V.d.  
Custodian Printed Name

11/20/24 13:00  
Date/Time



Ensolum, LLC  
11049 W. 44th Ave, Ste 100  
Wheat Ridge CO, 80033

Project: Civitas - Blue 3-65 33-32-31  
Project Number: 09C2407007  
Project Manager: Tanna Lyon

**Reported:**  
12/02/24 08:50

**W02@4'**  
**2411358-01 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **11/20/24 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Gasoline Range Hydrocarbons	ND	0.50	mg/kg	1	BHK1065	11/20/24	11/21/24	EPA 8260B	

Date Sampled: **11/20/24 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0348	87.0 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	0.0407	102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0407	102 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **11/20/24 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHK1068	11/20/24	11/21/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **11/20/24 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	9.40	75.2 %	30-150		"	"	"	"	

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

Date Sampled: **11/20/24 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	2.29	0.0500	mg/L dry	1	BHK1213	11/22/24	11/25/24	EPA 6020B	
Magnesium	4.59	0.0500	"	"	"	"	"	"	
Sodium	95.8	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

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Project: Civitas - Blue 3-65 33-32-31  
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Project Manager: Tanna Lyon

**Reported:**  
12/02/24 08:50

**W02@4'**  
**2411358-01 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **11/20/24 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	8.40	0.00100	units	1	BHK1368	11/27/24	11/27/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **11/20/24 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.2		%	1	BHK1121	11/21/24	11/21/24	Calculation	

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Project: Civitas - Blue 3-65 33-32-31

Project Number: 09C2407007  
Project Manager: Tanna Lyon

**Reported:**  
12/02/24 08:50

## 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 BHK1065 - EPA 5030 Soil MS

##### Blank (BHK1065-BLK1)

Prepared: 11/20/24 Analyzed: 11/21/24

Gasoline Range Hydrocarbons	ND	0.50	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	0.0506		"	0.0400	127	23-173				
Surrogate: Toluene-d8	0.0410		"	0.0400	102	20-170				
Surrogate: 4-Bromofluorobenzene	0.0430		"	0.0400	108	21-167				

##### LCS (BHK1065-BS1)

Prepared: 11/20/24 Analyzed: 11/21/24

Surrogate: 1,2-Dichloroethane-d4	0.0338		mg/kg	0.0400	84.4	23-173				
Surrogate: Toluene-d8	0.0411		"	0.0400	103	20-170				
Surrogate: 4-Bromofluorobenzene	0.0401		"	0.0400	100	21-167				

##### Matrix Spike (BHK1065-MS1)

Source: 2411373-01

Prepared: 11/20/24 Analyzed: 11/21/24

Surrogate: 1,2-Dichloroethane-d4	0.0509		mg/kg	0.0400	127	23-173				
Surrogate: Toluene-d8	0.0410		"	0.0400	103	20-170				
Surrogate: 4-Bromofluorobenzene	0.0433		"	0.0400	108	21-167				

##### Matrix Spike Dup (BHK1065-MSD1)

Source: 2411373-01

Prepared: 11/20/24 Analyzed: 11/21/24

Surrogate: 1,2-Dichloroethane-d4	0.0529		mg/kg	0.0400	132	23-173				
Surrogate: Toluene-d8	0.0418		"	0.0400	105	20-170				
Surrogate: 4-Bromofluorobenzene	0.0432		"	0.0400	108	21-167				

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**Reported:**  
12/02/24 08:50

**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 BHK1068 - EPA 3550A**

**Blank (BHK1068-BLK1)**

Prepared: 11/20/24 Analyzed: 11/21/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	11.5		"	12.5		92.2	30-150			

**LCS (BHK1068-BS1)**

Prepared: 11/20/24 Analyzed: 11/21/24

C10-C28 (DRO)	488	50	mg/kg	500		97.6	70-130			
Surrogate: o-Terphenyl	11.0		"	12.5		87.9	30-150			

**Matrix Spike (BHK1068-MS1)**

Source: 2411373-01

Prepared: 11/20/24 Analyzed: 11/21/24

C10-C28 (DRO)	456	50	mg/kg	500	26.3	86.0	70-130			
Surrogate: o-Terphenyl	11.4		"	12.5		91.6	30-150			

**Matrix Spike Dup (BHK1068-MSD1)**

Source: 2411373-01

Prepared: 11/20/24 Analyzed: 11/21/24

C10-C28 (DRO)	505	50	mg/kg	500	26.3	95.7	70-130	10.1	20	
Surrogate: o-Terphenyl	10.7		"	12.5		85.5	30-150			

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**Reported:**  
12/02/24 08:50

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

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

**Batch BHK1213 - General Preparation**

**Blank (BHK1213-BLK1)**

Prepared: 11/22/24 Analyzed: 11/25/24

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

**LCS (BHK1213-BS1)**

Prepared: 11/22/24 Analyzed: 11/25/24

Calcium	4.88	0.0500	mg/L wet	5.00	97.7	70-130
Magnesium	5.54	0.0500	"	5.00	111	70-130
Sodium	5.84	0.0500	"	5.00	117	70-130

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**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 BHK1121 - General Preparation**

Duplicate (BHK1121-DUP1)			Source: 2411272-01			Prepared & Analyzed: 11/21/24				
% Solids	77.6		%			79.9		2.90	20	

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Project Number: 09C2407007  
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**Reported:**  
12/02/24 08:50

### Notes and Definitions

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