ORIGINS LABORATORY

Environmental Works
Adam Kubat
AP@environmentalworks.com
Briggsdale CO 80204

April 28, 2025

Project Name - Taproot-BMV **Project Number - 241536-A4**

Attached are your analytical results for Taproot-BMV received by Origins Laboratory April 10, 2025. This project is associated with Origins project number E5D0304-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory
303.433.1322
projectmanager@originslab.com

THE NELAC INSTITUTE

Environmental Works
AP@environmentalworks.com
Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB9-7	E5D0304-01	Soil	April 10, 2025 10:30	04/10/2025 15:51
SB10-7	E5D0304-02	Soil	April 10, 2025 11:15	04/10/2025 15:51
SB11-7	E5D0304-03	Soil	April 10, 2025 11:20	04/10/2025 15:51
BS4-2	E5D0304-04	Soil	April 10, 2025 11:25	04/10/2025 15:51
BS4-6	E5D0304-05	Soil	April 10, 2025 11:30	04/10/2025 15:51
BS4-10	E5D0304-06	Soil	April 10, 2025 11:35	04/10/2025 15:51
BS5-2	E5D0304-07	Soil	April 10, 2025 11:00	04/10/2025 15:51
BS5-6	E5D0304-08	Soil	April 10, 2025 11:05	04/10/2025 15:51
BS5-10	E5D0304-09	Soil	April 10, 2025 11:10	04/10/2025 15:51

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

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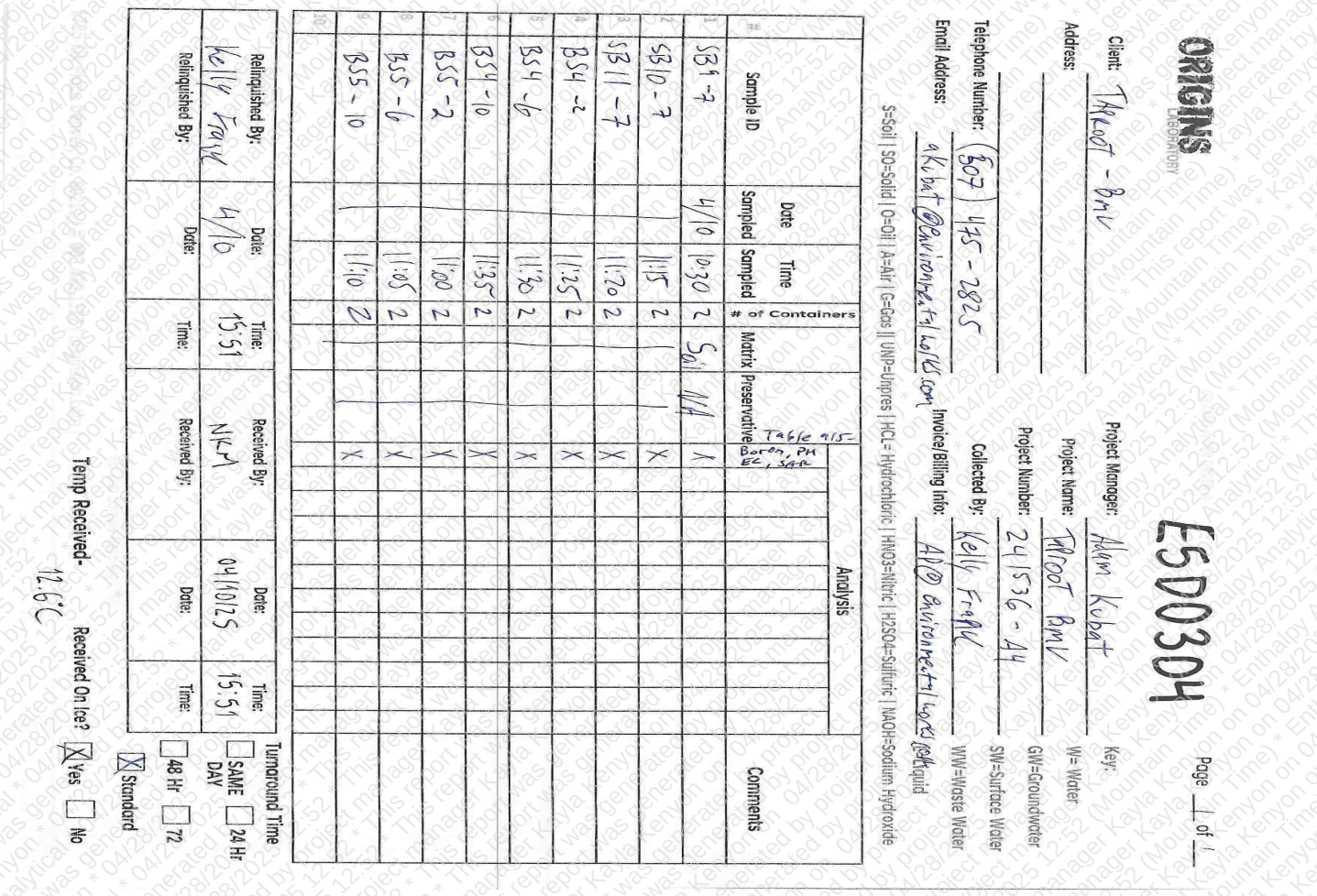
Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV



ORIGINS LABORATORY

E5D0304

Page 1 of 1

Client: Taproot - Bmv
Address:
Telephone Number: (607) 425-2825
Email Address: akubat@environmentalworks.com

Project Manager: Adam Kubat
Project Name: Taproot BMV
Project Number: 241536-A4
Collected By: Kelly Frank
Invoice/Billing Info: AP@environmentalworks.com

Key:
W= Water
GW=Groundwater
SW=Surface Water
WW=Waste Water
S=Soil | SD=Solid | O=Oil | A=Air | G=Gas || UNP=Unpres | HCL= Hydrochloric | HNO3=Nitric | H2SO4=Sulfuric | NAOH=Sodium Hydroxide

#	Sample ID	Date Sampled	Time Sampled	# of Containers	Matrix	Preservative	Analysis: Table 915-1 Boron, pH EC, SAR	Comments
1	SB1-7	4/10	10:30	2	Soil	N/A	X	
2	SB10-7		11:15	2			X	
3	SB11-7		11:20	2			X	
4	BS4-2		11:35	2			X	
5	BS4-6		11:30	2			X	
6	BS4-10		11:35	2			X	
7	BS5-2		11:00	2			X	
8	BS5-6		11:05	2			X	
9	BS5-10		11:10	2			X	
10								

Relinquished By: Kelly Frank Date: 4/10 Time: 15:51
Received By: NKM Date: 04/10/25 Time: 15:51

Temp Received- 12.6°C
Received On Ice? ☒ Yes ☐ No

Turnaround Time
☐ SAME DAY ☐ 24 Hr ☐ 48 Hr ☐ 72 ☒ Standard

Origins Laboratory

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Kayla Kenyon For Jen Pellegrini, Project Manager

Environmental Works
AP@environmentalworks.com
Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: ESD0304

Client: Environmental Works
Client Project ID: Taproot-BMV

Checklist Completed by: NKM / SKM
Date/time completed: 04 / 10 / 25

Shipped Via: HD
(UPS, FedEx, Hand Delivered, Pick-up, etc.)
Airbill #: N/A

Matrix(s) Received: (Check all that apply): X Soil/Solid ____Water ____Other: ____
(Describe)

Cooler Number/Temperature: 1 / 12.6 °c

Thermometer ID: T-007

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C[1]?		/		SD.
Is there ice present (document if blue ice is used)	/			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		/		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		/		
Were all samples received intact[1]?	/			
Was adequate sample volume provided[1]?	/			
Are short holding time analytes or samples with HTs due within 48 hours present[1]?			/	
Is a chain-of-custody (COC) present and filled out completely[1]?	/			
Does the COC agree with the number and type of sample bottles received[1]?	/			
Do the sample IDs on the bottle labels match the COC[1]?	/			
Is the COC properly relinquished by the client with date and time recorded[1]?	/			
For volatiles in water – is there headspace (> ¼ inch bubble) present? **If yes, contact client and note in narrative.**			/	
Are samples preserved that require preservation and was it checked[1]? *(note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)*			/	

Additional Comments (if any):

[1]*If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.*

Reviewed by (Project Manager)

4/11/25
Date/Time Reviewed

Origins Laboratory

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Kayla Kenyon For Jen Pellegrini, Project Manager

Environmental Works
AP@environmentalworks.com
Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

SB9-7
4/10/2025 10:30:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-01 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	0.443		0.100	mg/L	1	B5D1108	04/11/2025	04/14/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	12.3		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	3.36		0.823	"	"	"	"	"	
Sodium	17.1		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	7.96			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	6.09		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	3.66		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

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Environmental Works
AP@environmentalworks.com
Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

SB10-7
4/10/2025 11:15:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-02 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	0.421		0.100	mg/L	1	B5D1108	04/11/2025	04/14/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	5.71		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	1.43		0.823	"	"	"	"	"	
Sodium	10.5		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	8.14			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	5.57		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	1.98		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

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Environmental Works
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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

SB11-7
4/10/2025 11:20:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-03 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	0.607		0.0995	mg/L	1	B5D1108	04/11/2025	04/14/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	8.22		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	1.97		0.823	"	"	"	"	"	
Sodium	12.9		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	8.00			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	5.71		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	2.94		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

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Environmental Works
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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

BS4-2
4/10/2025 11:25:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-04 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	0.736		0.100	mg/L	1	B5D1108	04/11/2025	04/14/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	1.64		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	2.71		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	8.31			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	2.81		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	0.535		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

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Environmental Works
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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

BS4-6
4/10/2025 11:30:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-05 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	1.23		0.0996	mg/L	1	B5D1108	04/11/2025	04/14/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	4.19		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	5.24		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	8.21			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	3.33		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	1.12		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

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Environmental Works
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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

BS4-10
4/10/2025 11:35:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-06 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	1.16		0.0995	mg/L	1	B5D1108	04/11/2025	04/14/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	4.22		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	0.853		0.823	"	"	"	"	"	
Sodium	5.64		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	8.16			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	3.54		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	1.18		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

BS5-2
4/10/2025 11:00:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-07 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	0.642		0.0996	mg/L	1	B5D1108	04/11/2025	04/14/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	1.34		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	1.85		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	8.37			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	2.15		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	0.367		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

BS5-6
4/10/2025 11:05:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-08 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	0.932		0.0998	mg/L	1	B5D1109	04/11/2025	04/16/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	5.13		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	0.928		0.823	"	"	"	"	"	
Sodium	6.40		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	8.17			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	3.68		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	1.37		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

BS5-10
4/10/2025 11:10:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5D0304-09 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	1.12		0.0999	mg/L	1	B5D1109	04/11/2025	04/16/2025	
Metals by Saturated Paste by EPA 6010									
Calcium	7.06		0.499	meq/L	10	[CALC]	04/15/2025	04/17/2025	
Magnesium	1.43		0.823	"	"	"	"	"	
Sodium	8.30		0.435	"	"	"	"	"	
pH in Soil by 9045D									
pH	8.09			pH Units	1	B5D1521	04/15/2025	04/17/2025	
SAR by 20B Saturated Paste									
SAR	4.03		0.0100	SAR	1	B5D1516	04/15/2025	04/17/2025	
Specific Conductance Mod. 9050A									
Specific Conductance (EC)	1.81		0.00500	mmhos/cm	1	B5D1521	04/15/2025	04/17/2025	

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Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

Classical Chemistry Parameters - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5D1108 - DTPA Sorbitol Preparation										
Blank (B5D1108-BLK1)					Prepared: 04/11/2025 Analyzed: 04/14/2025					
Boron	ND	0.100	mg/L							U
Duplicate (B5D1108-DUP1)			Source: E5D0298-02		Prepared: 04/11/2025 Analyzed: 04/14/2025					
Boron	0.129	0.0999	mg/L		0.119			8.29	50	
Batch B5D1109 - DTPA Sorbitol Preparation										
Blank (B5D1109-BLK1)					Prepared: 04/11/2025 Analyzed: 04/16/2025					
Boron	ND	0.100	mg/L							U
Duplicate (B5D1109-DUP1)			Source: E5D0304-08		Prepared: 04/11/2025 Analyzed: 04/16/2025					
Boron	0.993	0.0996	mg/L		0.932			6.35	50	
Batch B5D1516 - Saturated Paste Metals										
Blank (B5D1516-BLK1)					Prepared: 04/15/2025 Analyzed: 04/17/2025					
SAR	ND	0.0100	SAR							U
Calcium PPM	ND	10.0	mg/L							U
Magnesium PPM	ND	10.0	"							U
Sodium PPM	ND	10.0	"							U
Duplicate (B5D1516-DUP1)			Source: E5D0302-09		Prepared: 04/15/2025 Analyzed: 04/17/2025					
SAR	ND	0.0100	SAR		7.42				200	U
Calcium PPM	498	10.0	mg/L		508			2.07	50	
Magnesium PPM	425	10.0	"		388			9.13	50	
Sodium PPM	996	10.0	"		913			8.64	50	

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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

Saturated Paste - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5D1521 - Saturated Paste pH/EC										
Blank (B5D1521-BLK1)					Prepared: 04/15/2025 Analyzed: 04/17/2025					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							U
Duplicate (B5D1521-DUP1)			**Source: E5D0302-09**		Prepared: 04/15/2025 Analyzed: 04/17/2025					
Specific Conductance (EC)	7.86	0.00500	mmhos/cm		7.55			3.96	25	
pH	7.95		pH Units		7.97			0.251	25	

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Briggsdale CO 80204

Adam Kubat
Project Number: 241536-A4
Project: Taproot-BMV

Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

Origins Laboratory

Kayla Kenyon For Jen Pellegrini, Project Manager

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