

November 01, 2022

Environmental Works

Adam Kubat

AP@environmentalworks.com

Briggsdale CO 80204

Project Name - Taproot - Pintail Release

Project Number - 223274

Attached are your analytical results for Taproot - Pintail Release received by Origins Laboratory, Inc. October 19, 2022. This project is associated with Origins project number Y210424-01.

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, Inc.
303.433.1322
o-squad@oelabinc.com



Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS1-0.5	Y210424-01	Soil	October 18, 2022 16:45	10/19/2022 09:20
SS1-3	Y210424-02	Soil	October 18, 2022 16:50	10/19/2022 09:20
SS2-0.5	Y210424-03	Soil	October 18, 2022 17:00	10/19/2022 09:20
SS2-3	Y210424-04	Soil	October 18, 2022 17:05	10/19/2022 09:20
SS3-0.5	Y210424-05	Soil	October 18, 2022 17:10	10/19/2022 09:20
SS3-3	Y210424-06	Soil	October 18, 2022 17:20	10/19/2022 09:20
BS1-0.5	Y210424-07	Soil	October 18, 2022 17:25	10/19/2022 09:20
BS1-3	Y210424-08	Soil	October 18, 2022 17:30	10/19/2022 09:20

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Briggsdale CO 80204

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Project Number: 223274

Project: Taproot - Pintail Release



www.originslaboratory.com

4210424

page of

Client: Environmental Works, Inc
 Address: 301 Century Rd.
 Telephone Number: 507-475-7825
 Email Address: AKubat@environmentalworks.com

Project Manager: Adam Kubat
 Project Name: Taproot - Pintail Release
 Project Number: 223274
 Samples Collected By: Adam Kubat

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	As Summa #			Other
551-0.5	10/18	1645	2	X				X					
551-3	10/18	1650	2	X				X					
552-0.5	10/18	1700	2	X				X					
552-3	10/18	1705	2	X				X					
553-0.5	10/18	1710	2	X				X					
553-3	10/18	1720	2	X				X					
551-0.5	10/18	1725	2	X				X					
551-3	10/18	1730	2	X				X					
Relinquished By: <i>Adam Kubat</i>	Date: 10/19/22	Time: 0920						Received By: <i>AK</i>	Date: 10/19/22	Time: 0920			Turnaround Time: Some Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>
Relinquished By:	Date:	Time:						Received By:	Date:	Time:			

Temp Received: 2.9 Date Results Needed

Origins Laboratory, Inc.

J. Bynon

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Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 4210424

Client: Environmental Works

Client Project ID: Taproot - Pintail release

Checklist Completed by: ETHS/DE

Shipped Via: HD
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 10/19/12

Airbill #: NA

Matrix(s) Received: (Check all that apply): Soil/Solid

Water

Other:

Cooler Number/Temperature: 1 / 12.9 °C / _____ °C / _____ °C (Describe)

Thermometer ID: T004

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	
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 HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			X	
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: JB (Project Manager)

10-20-12
Date/Time Reviewed

Origins Laboratory, Inc.



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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS1-0.5

10/18/2022 4:45:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-01 (Soil)

Boron (DTPA Sorbitol)

Boron	6.93		0.100	mg/L	1	B2J2009	10/20/2022	10/24/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2J2529	10/25/2022	10/26/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	78.8 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2J2033	10/20/2022	10/25/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	0.00218		0.00200	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	113 %		70-130			"	"	"	
Surrogate: Toluene-d8	100 %		70-130			"	"	"	

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Briggsdale CO 80204

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Project Number: 223274

Project: Taproot - Pintail Release

SS1-0.5

10/18/2022 4:45:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-01 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 4-Bromofluorobenzene	95.6 %		70-130			B2J20 33	10/20/2022	10/25/2022	
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Metals by Saturated Paste by EPA 6010

Calcium	14.8		0.499	meq/L	10	[CALC]	10/21/2022	10/25/2022	
Magnesium	5.08		0.823	"	"	"	"	"	
Sodium	91.8		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	0.00586	0.00182	0.00335	mg/Kg	5	L644816	10/24/2022	10/24/2022	
2-Methylnaphthalene	ND	0.00323	0.00335	"	"	"	"	"	
Acenaphthene	ND	0.00152	0.00335	"	"	"	"	"	
Anthracene	ND	0.00167	0.00335	"	"	"	"	"	
Benzo(a)anthracene	ND	0.00247	0.00335	"	"	"	"	"	
Benzo(a)pyrene	0.00278	0.00234	0.00335	"	"	"	"	"	J
Benzo(b)fluoranthene	ND	0.00293	0.00335	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.00219	0.00335	"	"	"	"	"	
Chrysene	ND	0.00312	0.00335	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.00307	0.00335	"	"	"	"	"	
Fluoranthene	ND	0.00197	0.00335	"	"	"	"	"	
Fluorene	ND	0.00143	0.00335	"	"	"	"	"	

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SS1-0.5

10/18/2022 4:45:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y210424-01 (Soil)

PAH by 8270D SIM

Indeno(1,2,3-cd)pyrene	ND	0.00314	0.00335	mg/Kg	5	L644816	10/24/2022	10/24/2022	
Naphthalene	ND	0.00242	0.00335	"	"	"	"	"	
Pyrene	ND	0.00322	0.00335	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	64.4 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	75.2 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	68.1 %		29-110			"	"	"	

pH in Soil by 9045D

pH	7.65			pH Units	1	B2J2121	10/21/2022	10/25/2022	
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SAR by 20B Saturated Paste

SAR	29.1			SAR	1	B2J2113	10/21/2022	10/25/2022	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	11.8		0.00500	mmhos/cm	1	B2J2121	10/21/2022	10/25/2022	
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Table 915 metals by EPA 6020B

Arsenic	3.43		0.0995	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Barium	191		9.95	"	"	"	"	"	

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Project: Taproot - Pintail Release

SS1-0.5

10/18/2022 4:45:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.

Y210424-01 (Soil)

Table 915 metals by EPA 6020B

Cadmium	0.173		0.0995	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Copper	10.7		9.95	"	"	"	"	"	
Lead	14.3		9.95	"	"	"	"	"	
Nickel	ND		9.95	"	"	"	"	"	
Selenium	0.115		0.0995	"	"	"	"	"	
Silver	ND		0.0995	"	"	"	"	"	
Zinc	ND		99.5	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	1.22	2.5	mg/Kg	5	L645065	10/18/2022	10/25/2022	
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Project: Taproot - Pintail Release

SS1-3

10/18/2022 4:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-02 (Soil)

Boron (DTPA Sorbitol)

Boron	0.685		0.0992	mg/L	1	B2J2009	10/20/2022	10/24/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2J2529	10/25/2022	10/26/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	86.7 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2J2033	10/20/2022	10/25/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	106 %		70-130			"	"	"	
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Project Number: 223274

Project: Taproot - Pintail Release

SS1-3

10/18/2022 4:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-02 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	93.8 %		70-130			B2J20 33	10/20/2022	10/25/2022	
Surrogate: 4-Bromofluorobenzene	96.4 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	58.8		0.499	meq/L	10	[CALC]	10/21/2022	10/25/2022	
Magnesium	21.3		0.823	"	"	"	"	"	
Sodium	10.7		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	

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Project Number: 223274

Project: Taproot - Pintail Release

SS1-3

10/18/2022 4:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y210424-02 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.000484	0.00067	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	65 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	75.5 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	60.1 %		29-110			"	"	"	

pH in Soil by 9045D

pH	7.53			pH Units	1	B2J2121	10/21/2022	10/25/2022	
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SAR by 20B Saturated Paste

SAR	1.70			SAR	1	B2J2113	10/21/2022	10/25/2022	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	9.29		0.00500	mmhos/cm	1	B2J2121	10/21/2022	10/25/2022	
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Table 915 metals by EPA 6020B

Arsenic	3.75		0.0879	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
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Project Number: 223274

Project: Taproot - Pintail Release

SS1-3

10/18/2022 4:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.

Y210424-02 (Soil)

Table 915 metals by EPA 6020B

Barium	200		8.79	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Cadmium	0.127		0.0879	"	"	"	"	"	
Copper	10.3		8.79	"	"	"	"	"	
Lead	20.5		8.79	"	"	"	"	"	
Nickel	ND		8.79	"	"	"	"	"	
Selenium	0.112		0.0879	"	"	"	"	"	
Silver	ND		0.0879	"	"	"	"	"	
Zinc	ND		87.9	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.488	1	mg/Kg	2	L645065	10/18/2022	10/25/2022	
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Project Number: 223274

Project: Taproot - Pintail Release

SS2-0.5

10/18/2022 5:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-03 (Soil)

Boron (DTPA Sorbitol)

Boron	4.33		0.0999	mg/L	1	B2J2009	10/20/2022	10/24/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2J2529	10/25/2022	10/26/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	84.6 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2J2033	10/20/2022	10/25/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	0.00374		0.00200	"	"	"	"	"	
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	0.00536		0.00200	"	"	"	"	"	
Xylenes, total	0.00316		0.00200	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %		70-130			"	"	"	
Surrogate: Toluene-d8	88.0 %		70-130			"	"	"	

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Project Number: 223274

Project: Taproot - Pintail Release

SS2-0.5

10/18/2022 5:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-03 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 4-Bromofluorobenzene	109 %		70-130			B2J20 33	10/20/2022	10/25/2022	
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Metals by Saturated Paste by EPA 6010

Calcium	25.6		0.499	meq/L	10	[CALC]	10/21/2022	10/25/2022	
Magnesium	9.34		0.823	"	"	"	"	"	
Sodium	85.9		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00182	0.00335	mg/Kg	5	L644816	10/24/2022	10/24/2022	
2-Methylnaphthalene	ND	0.00323	0.00335	"	"	"	"	"	
Acenaphthene	ND	0.00152	0.00335	"	"	"	"	"	
Anthracene	ND	0.00167	0.00335	"	"	"	"	"	
Benzo(a)anthracene	ND	0.00247	0.00335	"	"	"	"	"	
Benzo(a)pyrene	0.00332	0.00234	0.00335	"	"	"	"	"	J
Benzo(b)fluoranthene	ND	0.00293	0.00335	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.00219	0.00335	"	"	"	"	"	
Chrysene	ND	0.00312	0.00335	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.00307	0.00335	"	"	"	"	"	
Fluoranthene	ND	0.00197	0.00335	"	"	"	"	"	
Fluorene	ND	0.00143	0.00335	"	"	"	"	"	

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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS2-0.5

10/18/2022 5:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y210424-03 (Soil)

PAH by 8270D SIM

Indeno(1,2,3-cd)pyrene	ND	0.00314	0.00335	mg/Kg	5	L644816	10/24/2022	10/24/2022	
Naphthalene	ND	0.00242	0.00335	"	"	"	"	"	
Pyrene	ND	0.00322	0.00335	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	69.9 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	64.8 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	71.7 %		29-110			"	"	"	

pH in Soil by 9045D

pH	7.70			pH Units	1	B2J2121	10/21/2022	10/25/2022	
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SAR by 20B Saturated Paste

SAR	20.6			SAR	1	B2J2113	10/21/2022	10/25/2022	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	12.6		0.00500	mmhos/cm	1	B2J2121	10/21/2022	10/25/2022	
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Table 915 metals by EPA 6020B

Arsenic	3.61		0.0915	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Barium	145		9.15	"	"	"	"	"	

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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS2-0.5

10/18/2022 5:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-03 (Soil)

Table 915 metals by EPA 6020B

Cadmium	0.147		0.0915	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Copper	10.6		9.15	"	"	"	"	"	
Lead	11.6		9.15	"	"	"	"	"	
Nickel	ND		9.15	"	"	"	"	"	
Selenium	0.137		0.0915	"	"	"	"	"	
Silver	ND		0.0915	"	"	"	"	"	
Zinc	ND		91.5	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.488	1	mg/Kg	2	L645065	10/18/2022	10/25/2022	
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Project Number: 223274

Project: Taproot - Pintail Release

SS2-3

10/18/2022 5:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-04 (Soil)

Boron (DTPA Sorbitol)

Boron	1.49		0.100	mg/L	1	B2J2009	10/20/2022	10/24/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2J2529	10/25/2022	10/26/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	81.1 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2J2033	10/20/2022	10/25/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	96.4 %		70-130			"	"	"	
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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS2-3

10/18/2022 5:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-04 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	103 %		70-130			B2J20 33	10/20/2022	10/25/2022	
Surrogate: 4-Bromofluorobenzene	101 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	35.4		0.499	meq/L	10	[CALC]	10/21/2022	10/25/2022	
Magnesium	13.2		0.823	"	"	"	"	"	
Sodium	22.1		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS2-3

10/18/2022 5:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y210424-04 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.000484	0.00067	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	61.3 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	76.1 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	63.8 %		29-110			"	"	"	

pH in Soil by 9045D

pH	7.80			pH Units	1	B2J2121	10/21/2022	10/25/2022	
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SAR by 20B Saturated Paste

SAR	4.48			SAR	1	B2J2113	10/21/2022	10/25/2022	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	7.46		0.00500	mmhos/cm	1	B2J2121	10/21/2022	10/25/2022	
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Table 915 metals by EPA 6020B

Arsenic	3.80		0.0970	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS2-3

10/18/2022 5:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-04 (Soil)

Table 915 metals by EPA 6020B

Barium	400		9.70	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Cadmium	0.127		0.0970	"	"	"	"	"	
Copper	10.6		9.70	"	"	"	"	"	
Lead	11.4		9.70	"	"	"	"	"	
Nickel	ND		9.70	"	"	"	"	"	
Selenium	ND		0.0970	"	"	"	"	"	
Silver	ND		0.0970	"	"	"	"	"	
Zinc	ND		97.0	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.251	0.516	mg/Kg	1	L645065	10/18/2022	10/25/2022	
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Briggsdale CO 80204

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Project Number: 223274

Project: Taproot - Pintail Release

SS3-0.5

10/18/2022 5:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-05 (Soil)

Boron (DTPA Sorbitol)

Boron	3.27		0.101	mg/L	1	B2J2009	10/20/2022	10/24/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2J2529	10/25/2022	10/26/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	83.6 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2J2033	10/20/2022	10/25/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	112 %		70-130			"	"	"	
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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS3-0.5

10/18/2022 5:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-05 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	100 %		70-130			B2J20 33	10/20/2022	10/25/2022	
Surrogate: 4-Bromofluorobenzene	97.2 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	35.0		0.499	meq/L	10	[CALC]	10/21/2022	10/25/2022	
Magnesium	13.0		0.823	"	"	"	"	"	
Sodium	66.4		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS3-0.5

10/18/2022 5:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y210424-05 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.000484	0.00067	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	58 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	62.8 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	56.8 %		29-110			"	"	"	

pH in Soil by 9045D

pH	7.83			pH Units	1	B2J2121	10/21/2022	10/25/2022	
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SAR by 20B Saturated Paste

SAR	13.5			SAR	1	B2J2113	10/21/2022	10/25/2022	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	12.1		0.00500	mmhos/cm	1	B2J2121	10/21/2022	10/25/2022	
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Table 915 metals by EPA 6020B

Arsenic	3.53		0.0979	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
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Environmental Works
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Adam Kubat
 Project Number: 223274
 Project: Taproot - Pintail Release

SS3-0.5

10/18/2022 5:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-05 (Soil)

Table 915 metals by EPA 6020B

Barium	141		9.79	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Cadmium	0.139		0.0979	"	"	"	"	"	
Copper	11.6		9.79	"	"	"	"	"	
Lead	12.0		9.79	"	"	"	"	"	
Nickel	ND		9.79	"	"	"	"	"	
Selenium	0.128		0.0979	"	"	"	"	"	
Silver	ND		0.0979	"	"	"	"	"	
Zinc	ND		97.9	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	1.26	2.59	mg/Kg	5	L645066	10/18/2022	10/25/2022	
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Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS3-3

10/18/2022 5:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-06 (Soil)

Boron (DTPA Sorbitol)

Boron	0.669		0.0992	mg/L	1	B2J2009	10/20/2022	10/24/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2J2529	10/25/2022	10/26/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	85.0 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2J2033	10/20/2022	10/25/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	0.00522		0.00200	"	"	"	"	"	
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	0.00282		0.00200	"	"	"	"	"	
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	99.3 %		70-130			"	"	"	
Surrogate: Toluene-d8	117 %		70-130			"	"	"	

Origins Laboratory, Inc.



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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS3-3

10/18/2022 5:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-06 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 4-Bromofluorobenzene	94.6 %		70-130			B2J20 33	10/20/2022	10/25/2022	
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Metals by Saturated Paste by EPA 6010

Calcium	60.8		0.499	meq/L	10	[CALC]	10/21/2022	10/25/2022	
Magnesium	25.9		0.823	"	"	"	"	"	
Sodium	29.0		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00182	0.00335	mg/Kg	5	L644816	10/24/2022	10/24/2022	
2-Methylnaphthalene	ND	0.00323	0.00335	"	"	"	"	"	
Acenaphthene	ND	0.00152	0.00335	"	"	"	"	"	
Anthracene	ND	0.00167	0.00335	"	"	"	"	"	
Benzo(a)anthracene	ND	0.00247	0.00335	"	"	"	"	"	
Benzo(a)pyrene	ND	0.00234	0.00335	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.00293	0.00335	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.00219	0.00335	"	"	"	"	"	
Chrysene	ND	0.00312	0.00335	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.00307	0.00335	"	"	"	"	"	
Fluoranthene	ND	0.00197	0.00335	"	"	"	"	"	
Fluorene	ND	0.00143	0.00335	"	"	"	"	"	

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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS3-3

10/18/2022 5:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y210424-06 (Soil)

PAH by 8270D SIM

Indeno(1,2,3-cd)pyrene	ND	0.00314	0.00335	mg/Kg	5	L644816	10/24/2022	10/24/2022	
Naphthalene	ND	0.00242	0.00335	"	"	"	"	"	
Pyrene	ND	0.00322	0.00335	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	52.7 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	69.1 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	62.4 %		29-110			"	"	"	

pH in Soil by 9045D

pH	7.76			pH Units	1	B2J2121	10/21/2022	10/25/2022	
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SAR by 20B Saturated Paste

SAR	4.41			SAR	1	B2J2113	10/21/2022	10/25/2022	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	11.8		0.00500	mmhos/cm	1	B2J2121	10/21/2022	10/25/2022	
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Table 915 metals by EPA 6020B

Arsenic	4.78		0.0972	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Barium	211		9.72	"	"	"	"	"	

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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

SS3-3

10/18/2022 5:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-06 (Soil)

Table 915 metals by EPA 6020B

Cadmium	0.116		0.0972	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Copper	10.0		9.72	"	"	"	"	"	
Lead	16.7		9.72	"	"	"	"	"	
Nickel	ND		9.72	"	"	"	"	"	
Selenium	ND		0.0972	"	"	"	"	"	
Silver	ND		0.0972	"	"	"	"	"	
Zinc	ND		97.2	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L645066	10/18/2022	10/25/2022	
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Project Number: 223274

Project: Taproot - Pintail Release

BS1-0.5

10/18/2022 5:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-07 (Soil)

Boron (DTPA Sorbitol)

Boron	0.889		0.100	mg/L	1	B2J2009	10/20/2022	10/24/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2J2529	10/25/2022	10/26/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	107 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2J2033	10/20/2022	10/25/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	106 %		70-130			"	"	"	
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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

BS1-0.5

10/18/2022 5:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-07 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	109 %		70-130			B2J20 33	10/20/2022	10/25/2022	
Surrogate: 4-Bromofluorobenzene	92.0 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	2.62		0.499	meq/L	10	[CALC]	10/21/2022	10/25/2022	
Magnesium	1.02		0.823	"	"	"	"	"	
Sodium	0.812		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	

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Project Number: 223274

Project: Taproot - Pintail Release

BS1-0.5

10/18/2022 5:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.

Y210424-07 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.000484	0.00067	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	60.4 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	69.4 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	60.1 %		29-110			"	"	"	

pH in Soil by 9045D

pH	8.03			pH Units	1	B2J2121	10/21/2022	10/25/2022	
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SAR by 20B Saturated Paste

SAR	0.602			SAR	1	B2J2113	10/21/2022	10/25/2022	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.536		0.00500	mmhos/cm	1	B2J2121	10/21/2022	10/25/2022	
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Table 915 metals by EPA 6020B

Arsenic	3.59		0.0953	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

BS1-0.5

10/18/2022 5:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-07 (Soil)

Table 915 metals by EPA 6020B

Barium	186		9.53	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Cadmium	0.157		0.0953	"	"	"	"	"	
Copper	13.1		9.53	"	"	"	"	"	
Lead	14.2		9.53	"	"	"	"	"	
Nickel	ND		9.53	"	"	"	"	"	
Selenium	0.158		0.0953	"	"	"	"	"	
Silver	ND		0.0953	"	"	"	"	"	
Zinc	ND		95.3	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	1.22	2.5	mg/Kg	5	L645066	10/18/2022	10/25/2022	
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Project Number: 223274

Project: Taproot - Pintail Release

BS1-3

10/18/2022 5:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-08 (Soil)

Boron (DTPA Sorbitol)

Boron	0.915		0.0999	mg/L	1	B2J2009	10/20/2022	10/24/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2J2529	10/25/2022	10/26/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	82.2 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2J2033	10/20/2022	10/25/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	111 %		70-130			"	"	"	
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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

BS1-3

10/18/2022 5:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-08 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	96.5 %		70-130			B2J20 33	10/20/2022	10/25/2022	
Surrogate: 4-Bromofluorobenzene	95.8 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	1.79		0.499	meq/L	10	[CALC]	10/21/2022	10/25/2022	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	2.76		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

BS1-3

10/18/2022 5:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y210424-08 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L644816	10/24/2022	10/24/2022	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.000484	0.00067	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	63.3 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	50.6 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	58.2 %		29-110			"	"	"	

pH in Soil by 9045D

pH	8.32			pH Units	1	B2J2121	10/21/2022	10/25/2022	
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SAR by 20B Saturated Paste

SAR	2.59			SAR	1	B2J2113	10/21/2022	10/25/2022	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.458		0.00500	mmhos/cm	1	B2J2121	10/21/2022	10/25/2022	
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Table 915 metals by EPA 6020B

Arsenic	3.49		0.0913	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
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Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

BS1-3

10/18/2022 5:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y210424-08 (Soil)

Table 915 metals by EPA 6020B

Barium	215		9.13	mg/kg	10	B2J2402	10/24/2022	10/27/2022	
Cadmium	0.134		0.0913	"	"	"	"	"	
Copper	11.1		9.13	"	"	"	"	"	
Lead	15.9		9.13	"	"	"	"	"	
Nickel	ND		9.13	"	"	"	"	"	
Selenium	ND		0.0913	"	"	"	"	"	
Silver	ND		0.0913	"	"	"	"	"	
Zinc	ND		91.3	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L645066	10/18/2022	10/25/2022	
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Project Number: 223274

Project: Taproot - Pintail Release

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2033 - EPA 5030 (soil)

Blank (B2J2033-BLK1)

Prepared: 10/20/2022 Analyzed: 10/21/2022

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125	98.0		70-130			
Surrogate: Toluene-d8	0.13		"	0.125	101		70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125	105		70-130			

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Project Number: 223274

Project: Taproot - Pintail Release

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2033 - EPA 5030 (soil)

LCS (B2J2033-BS1)

Prepared: 10/20/2022 Analyzed: 10/21/2022

1,2,4-Trimethylbenzene	0.117	0.00200	mg/kg	0.100		117	70-130			
1,3,5-Trimethylbenzene	0.117	0.00200	"	0.100		117	70-130			
Benzene	0.105	0.00200	"	0.100		105	70-130			
Ethylbenzene	0.109	0.00200	"	0.100		109	70-130			
Naphthalene	0.104	0.00380	"	0.100		104	70-130			
Toluene	0.108	0.00200	"	0.100		108	70-130			
o-Xylene	0.110	0.00200	"	0.100		110	70-130			
m,p-Xylene	0.224	0.00400	"	0.200		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		101	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		101	70-130			

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Project Number: 223274

Project: Taproot - Pintail Release

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2033 - EPA 5030 (soil)

Matrix Spike (B2J2033-MS1)	Source: Y210372-01			Prepared: 10/20/2022 Analyzed: 10/21/2022						
1,2,4-Trimethylbenzene	0.0976	0.00200	mg/kg	0.100	ND	97.6	70-130			
1,3,5-Trimethylbenzene	0.0970	0.00200	"	0.100	ND	97.0	70-130			
Benzene	0.0971	0.00200	"	0.100	ND	97.1	70-130			
Ethylbenzene	0.0945	0.00200	"	0.100	ND	94.5	70-130			
Naphthalene	0.0896	0.00380	"	0.100	ND	89.6	70-130			
Toluene	0.0958	0.00200	"	0.100	ND	95.8	70-130			
o-Xylene	0.0970	0.00200	"	0.100	ND	97.0	70-130			
m,p-Xylene	0.195	0.00400	"	0.200	ND	97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		109	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

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Project Number: 223274

Project: Taproot - Pintail Release

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2033 - EPA 5030 (soil)

Matrix Spike Dup (B2J2033-MSD1)	Source: Y210372-01			Prepared: 10/20/2022 Analyzed: 10/21/2022						
1,2,4-Trimethylbenzene	0.0921	0.00200	mg/kg	0.100	ND	92.1	70-130	5.80	20	
1,3,5-Trimethylbenzene	0.0919	0.00200	"	0.100	ND	91.9	70-130	5.44	20	
Benzene	0.0953	0.00200	"	0.100	ND	95.3	70-130	1.89	20	
Ethylbenzene	0.0921	0.00200	"	0.100	ND	92.1	70-130	2.61	20	
Naphthalene	0.0876	0.00380	"	0.100	ND	87.6	70-130	2.24	20	
Toluene	0.0933	0.00200	"	0.100	ND	93.3	70-130	2.64	20	
o-Xylene	0.0954	0.00200	"	0.100	ND	95.4	70-130	1.62	20	
m,p-Xylene	0.188	0.00400	"	0.200	ND	94.2	70-130	3.59	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		106	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		98.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		101	70-130			

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B2J2529 - EPA 3550B										
Blank (B2J2529-BLK1)										
					Prepared: 10/25/2022 Analyzed: 10/25/2022					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	27		"	24.9		109	50-150			

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Project Number: 223274

Project: Taproot - Pintail Release

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2529 - EPA 3550B

LCS (B2J2529-BS1)

Prepared: 10/25/2022 Analyzed: 10/25/2022

Diesel (C10-C28)	1000	50.0	mg/kg	1000		100	70-130			
Residual Range Organics (C28-C40)	940	200	"	1000		94.0	70-130			
Surrogate: o-Terphenyl	46		"	49.8		93.4	50-150			

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Project: Taproot - Pintail Release

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2529 - EPA 3550B

Matrix Spike (B2J2529-MS1)	Source: Y210424-01			Prepared: 10/25/2022 Analyzed: 10/25/2022						
Diesel (C10-C28)	1080	50.0	mg/kg	1000	ND	108	70-130			
Residual Range Organics (C28-C40)	1010	200	"	1000	ND	101	70-130			
Surrogate: o-Terphenyl	46		"	49.8		92.6	50-150			

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Project: Taproot - Pintail Release

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2529 - EPA 3550B

Matrix Spike Dup (B2J2529-MSD1)	Source: Y210424-01		Prepared: 10/25/2022 Analyzed: 10/25/2022							
Diesel (C10-C28)	947	50.0	mg/kg	1000	ND	94.7	70-130	13.0	35	
Residual Range Organics (C28-C40)	857	200	"	1000	ND	85.7	70-130	16.4	35	
Surrogate: o-Terphenyl	41		"	49.8		82.0	50-150			

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Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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***** DEFAULT GENERAL METHOD *** - Quality Control**
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2402 - Default Prep Metals

Blank (B2J2402-BLK1)

Prepared: 10/24/2022 Analyzed: 10/27/2022

Arsenic	ND	0.000100	mg/kg							
Barium	ND	0.0100	"							
Cadmium	ND	0.000100	"							
Copper	ND	0.0100	"							
Lead	ND	0.0100	"							
Nickel	ND	0.0100	"							
Selenium	ND	0.000100	"							
Silver	ND	0.000100	"							
Zinc	ND	0.100	"							

LCS (B2J2402-BS1)

Prepared: 10/24/2022 Analyzed: 10/27/2022

Arsenic	0.0511	0.000100	mg/kg	0.0500		102	80-120			
Barium	4.84	0.0100	"	5.00		96.7	80-120			
Cadmium	0.0535	0.000100	"	0.0500		107	80-120			
Copper	0.558	0.0100	"	0.500		112	80-120			
Lead	0.0525	0.0100	"	0.0500		105	80-120			
Nickel	0.0531	0.0100	"	0.0500		106	80-120			
Selenium	0.0495	0.000100	"	0.0500		98.9	80-120			
Silver	0.0524	0.000100	"	0.0500		105	80-120			
Zinc	0.543	0.100	"	0.500		109	80-120			

Matrix Spike (B2J2402-MS1)

Source: Y210424-01

Prepared: 10/24/2022 Analyzed: 10/27/2022

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Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

***** DEFAULT GENERAL METHOD *** - Quality Control**
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2402 - Default Prep Metals

Matrix Spike (B2J2402-MS1)		Source: Y210424-01			Prepared: 10/24/2022 Analyzed: 10/27/2022					
Arsenic	7.48	0.0995	mg/kg	4.98	3.43	81.5	75-125			
Barium	629	9.95	"	498	191	88.2	75-125			
Cadmium	5.28	0.0995	"	4.98	0.173	103	75-125			
Copper	55.6	9.95	"	49.8	10.7	90.3	75-125			
Lead	18.5	9.95	"	4.98	14.3	83.1	75-125			
Nickel	11.9	9.95	"	4.98	7.86	82.2	75-125			
Selenium	4.73	0.0995	"	4.98	0.115	92.7	75-125			
Silver	4.72	0.0995	"	4.98	0.0279	94.4	75-125			
Zinc	90.1	99.5	"	49.8	49.6	81.5	75-125			
Matrix Spike Dup (B2J2402-MSD1)		Source: Y210424-01			Prepared: 10/24/2022 Analyzed: 10/27/2022					
Arsenic	7.53	0.0893	mg/kg	4.47	3.43	92.0	75-125	0.710	20	
Barium	670	8.93	"	447	191	107	75-125	6.30	20	
Cadmium	5.26	0.0893	"	4.47	0.173	114	75-125	0.428	20	
Copper	58.4	8.93	"	44.7	10.7	107	75-125	4.96	20	
Lead	19.4	8.93	"	4.47	14.3	113	75-125	4.90	20	
Nickel	12.8	8.93	"	4.47	7.86	111	75-125	6.98	20	
Selenium	4.61	0.0893	"	4.47	0.115	101	75-125	2.45	20	
Silver	4.75	0.0893	"	4.47	0.0279	106	75-125	0.520	20	
Zinc	95.8	89.3	"	44.7	49.6	104	75-125	6.14	20	

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Project Number: 223274

Project: Taproot - Pintail Release

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2009 - Default Prep Metals

Blank (B2J2009-BLK1)

Prepared: 10/20/2022 Analyzed: 10/24/2022

Boron ND 0.100 mg/L

Duplicate (B2J2009-DUP1)

Source: Y210423-03

Prepared: 10/20/2022 Analyzed: 10/24/2022

Boron 3.78 0.0991 mg/L 3.83 1.36 50

Batch B2J2113 - Default Prep Metals

Blank (B2J2113-BLK1)

Prepared: 10/21/2022 Analyzed: 10/25/2022

Calcium PPM ND 10.0 mg/L

SAR 0.00 SAR

Magnesium PPM ND 10.0 mg/L

Sodium PPM ND 10.0 "

Duplicate (B2J2113-DUP1)

Source: Y210439-02

Prepared: 10/21/2022 Analyzed: 10/25/2022

SAR 0.00 SAR 1.98 200 200

Calcium PPM 65.4 10.0 mg/L 65.1 0.478 50

Magnesium PPM 20.9 10.0 " 20.9 0.0907 50

Sodium PPM 73.2 10.0 " 71.8 1.86 50

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 Project: Taproot - Pintail Release

Saturated Paste - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2J2121 - NO PREP

Blank (B2J2121-BLK1)

Prepared: 10/21/2022 Analyzed: 10/25/2022

pH	0.00		pH Units							
Specific Conductance (EC)	ND	0.00500	mmhos/cm							

Duplicate (B2J2121-DUP1)

Source: Y210439-02

Prepared: 10/21/2022 Analyzed: 10/25/2022

pH	7.89		pH Units		8.05			2.01	25	
Specific Conductance (EC)	0.902	0.00500	mmhos/cm		0.863			4.45	25	

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Project Number: 223274

Project: Taproot - Pintail Release

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch L644816 - 3550B

MSD (L 81850-MSD-L644816)		Source: Y210424-08			Prepared: 10/24/2022 Analyzed: 10/24/2022					
Naphthalene	0.102	0.00067	mg/Kg	0.167	<0.000484	61	30-130	4	30	
Benzo(b)fluoranthene	0.101	0.00067	"	0.167	<0.000585	60.4	30-130	1.7	30	
1-Methylnaphthalene	0.0708	0.00067	"	0.167	<0.000364	42.3	30-130	33.5	30	*
2-Methylnaphthalene	0.071	0.00067	"	0.167	<0.000645	42.5	30-130	28.5	30	
Acenaphthene	0.112	0.00067	"	0.167	<0.000304	67	30-130	6.4	30	
Anthracene	0.121	0.00067	"	0.167	<0.000334	72.4	30-130	5.9	30	
Pyrene	0.131	0.00067	"	0.167	<0.000643	78.4	30-130	3.1	30	
Benzo(a)pyrene	0.135	0.00067	"	0.167	<0.000468	80.8	30-130	4.5	30	
Benzo(k)fluoranthene	0.101	0.00067	"	0.167	<0.000437	60.4	30-130	3.1	30	
Chrysene	0.106	0.00067	"	0.167	<0.000624	63.4	30-130	3.7	30	
Dibenz(a,h)anthracene	0.163	0.00067	"	0.167	<0.000614	97.6	30-130	18	30	
Fluoranthene	0.131	0.00067	"	0.167	<0.000394	78.4	30-130	2.3	30	
Fluorene	0.155	0.00067	"	0.167	<0.000286	92.8	30-130	39.3	30	*
Indeno(1,2,3-cd)pyrene	0.135	0.00067	"	0.167	<0.000627	80.8	30-130	12.5	30	
Benzo(a)anthracene	0.121	0.00067	"	0.167	<0.000493	72.4	30-130	4.2	30	
Surrogate: Nitrobenzene-d5	68.4		"	0.333	192	68.4	29-110			
Surrogate: 2-Fluorobiphenyl	45.6		"	0.333	209	45.6	33-115			
Surrogate: 4-Terphenyl-d14	83.7		"	0.333	167	83.7	33-122			

MS (L 81850-MS-L644816)		Source: Y210424-08			Prepared: 10/24/2022 Analyzed: 10/24/2022					
Naphthalene	0.098	0.00067	mg/Kg	0.164	<0.000484	59.7	30-130			
Indeno(1,2,3-cd)pyrene	0.119	0.00067	"	0.164	<0.000627	72.5	30-130			
Pyrene	0.127	0.00067	"	0.164	<0.000643	77.4	30-130			
1-Methylnaphthalene	0.0993	0.00067	"	0.164	<0.000364	60.5	30-130			
2-Methylnaphthalene	0.0946	0.00067	"	0.164	<0.000645	57.6	30-130			
Acenaphthene	0.105	0.00067	"	0.164	<0.000304	64	30-130			
Anthracene	0.114	0.00067	"	0.164	<0.000334	69.5	30-130			

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Project Number: 223274

Project: Taproot - Pintail Release

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch L644816 - 3550B

MS (L 81850-MS-L644816)	Source: Y210424-08			Prepared: 10/24/2022 Analyzed: 10/24/2022						
Benzo(a)anthracene	0.116	0.00067	mg/Kg	0.164	<0.000493	70.7	30-130			
Fluoranthene	0.128	0.00067	"	0.164	<0.000394	78	30-130			
Benzo(b)fluoranthene	0.0992	0.00067	"	0.164	<0.000585	60.4	30-130			
Benzo(k)fluoranthene	0.0979	0.00067	"	0.164	<0.000437	59.6	30-130			
Chrysene	0.11	0.00067	"	0.164	<0.000624	67	30-130			
Dibenz(a,h)anthracene	0.136	0.00067	"	0.164	<0.000614	82.9	30-130			
Benzo(a)pyrene	0.129	0.00067	"	0.164	<0.000468	78.6	30-130			
Fluorene	0.104	0.00067	"	0.164	<0.000286	63.4	30-130			
Surrogate: Nitrobenzene-d5	68.9		"	0.329	192	68.9	29-110			
Surrogate: 4-Terphenyl-d14	77.5		"	0.329	167	77.5	33-122			
Surrogate: 2-Fluorobiphenyl	65		"	0.329	209	65	33-115			

LCS (LCS-L644816)	Prepared: 10/24/2022 Analyzed: 10/24/2022									
Chrysene	0.117	0.00067	mg/Kg	0.167		70	30-130			
Dibenz(a,h)anthracene	0.177	0.00067	"	0.167		106	30-130			
Fluoranthene	0.128	0.00067	"	0.167		76.6	30-130			
Fluorene	0.116	0.00067	"	0.167		69.4	30-130			
Pyrene	0.127	0.00067	"	0.167		76	30-130			
Benzo(k)fluoranthene	0.0721	0.00067	"	0.167		43.1	30-130			
Indeno(1,2,3-cd)pyrene	0.143	0.00067	"	0.167		85.6	30-130			
Naphthalene	0.105	0.00067	"	0.167		62.8	30-130			
1-Methylnaphthalene	0.114	0.00067	"	0.167		68.2	30-130			
Benzo(a)pyrene	0.139	0.00067	"	0.167		83.2	30-130			
Benzo(a)anthracene	0.123	0.00067	"	0.167		73.6	30-130			
Anthracene	0.123	0.00067	"	0.167		73.6	30-130			
Acenaphthene	0.113	0.00067	"	0.167		67.6	30-130			
2-Methylnaphthalene	0.123	0.00067	"	0.167		73.6	30-130			

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Project Number: 223274

Project: Taproot - Pintail Release

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch L644816 - 3550B

LCS (LCS-L644816)

Prepared: 10/24/2022 Analyzed: 10/24/2022

Benzo(b)fluoranthene	0.0807	0.00067	mg/Kg	0.167		48.3	30-130			
Surrogate: 4-Terphenyl-d14	90		"	0.333		90	33-122			
Surrogate: 2-Fluorobiphenyl	84.9		"	0.333		84.9	33-115			
Surrogate: Nitrobenzene-d5	82.2		"	0.333		82.2	29-110			

LRB (LRB-L644816)

Prepared: 10/24/2022 Analyzed: 10/24/2022

Chrysene	ND	0.00067	mg/Kg				-			
Dibenz(a,h)anthracene	ND	0.00067	"				-			
Fluoranthene	ND	0.00067	"				-			
Fluorene	ND	0.00067	"				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
Naphthalene	ND	0.00067	"				-			
Pyrene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
1-Methylnaphthalene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Anthracene	ND	0.00067	"				-			
Acenaphthene	ND	0.00067	"				-			
2-Methylnaphthalene	ND	0.00067	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
Benzo(k)fluoranthene	ND	0.00067	"				-			
Surrogate: Nitrobenzene-d5	80.4		"	0.333		80.4	29-110			
Surrogate: 4-Terphenyl-d14	102		"	0.333		102	33-122			
Surrogate: 2-Fluorobiphenyl	73.8		"	0.333		73.8	33-115			

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Project Number: 223274

Project: Taproot - Pintail Release

**Total Metals by 7196A - Quality Control
Waypoint Analytical, LLC.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch L645066 -										
DUP (L 81850-DUP)		Source: Y210424-08			Prepared: Analyzed: 10/25/2022					
Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500		-	0	20	
MS (L 81850-MS)		Source: Y210424-08			Prepared: Analyzed: 10/25/2022					
Chromium, Hexavalent	38.2	2.57	mg/Kg	41.2	< 0.244	93	75-125			
MSD (L 81850-MSD)		Source: Y210424-08			Prepared: Analyzed: 10/25/2022					
Chromium, Hexavalent	362	50	mg/Kg	712	<24.4	51	75-125			*
LCS (LCS)					Prepared: Analyzed: 10/25/2022					
Chromium, Hexavalent	6.8	0.5	mg/Kg	8		85	75-125			
LRB (LRB)					Prepared: Analyzed: 10/25/2022					
Chromium, Hexavalent	ND	0.5	mg/Kg				-			

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 Project Number: 223274
 Project: Taproot - Pintail Release

Total Metals by 7196A - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch L645065 -										
DUP (L 81795-DUP)		Source: 81795			Prepared: Analyzed: 10/25/2022					
Chromium, Hexavalent	ND	0.501	mg/Kg		<0.501		-	0	20	
MS (L 81795-MS)		Source: 81795			Prepared: Analyzed: 10/25/2022					
Chromium, Hexavalent	38	2.53	mg/Kg	40.5	< 0.244	94	75-125			
MSD (L 81795-MSD)		Source: 81795			Prepared: Analyzed: 10/25/2022					
Chromium, Hexavalent	637	51.5	mg/Kg	703	<25.1	91	75-125			

Origins Laboratory, Inc.



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.

Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274

Project: Taproot - Pintail Release

Notes and Definitions

U Sample is Non-Detect.

J Estimated Value. Analyte below reported quantitation limit.

* QC Failure

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, Inc.



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.

February 17, 2023

Environmental Works

Adam Kubat

AP@environmentalworks.com

Briggsdale CO 80204

Project Name - Taproot - Pintail

Project Number - 223274-C1

Attached are your analytical results for Taproot - Pintail received by Origins Laboratory, Inc. February 10, 2023. This project is associated with Origins project number Y302217-01.

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, Inc.
303.433.1322
o-squad@oelabinc.com



Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB1-5	Y302217-01	Soil	February 9, 2023 9:35	02/10/2023 15:07
SB1-8	Y302217-02	Soil	February 9, 2023 10:00	02/10/2023 15:07
SB1-13	Y302217-03	Soil	February 9, 2023 10:10	02/10/2023 15:07
SB2-4	Y302217-04	Soil	February 9, 2023 10:30	02/10/2023 15:07
SB2-8	Y302217-05	Soil	February 9, 2023 10:40	02/10/2023 15:07
SB4-8	Y302217-06	Soil	February 9, 2023 11:10	02/10/2023 15:07
SB5-7	Y302217-07	Soil	February 9, 2023 11:40	02/10/2023 15:07
SB5-11	Y302217-08	Soil	February 9, 2023 11:50	02/10/2023 15:07
SB6-6	Y302217-09	Soil	February 9, 2023 12:00	02/10/2023 15:07
SB6-10	Y302217-10	Soil	February 9, 2023 12:10	02/10/2023 15:07
SB7-5	Y302217-11	Soil	February 9, 2023 12:40	02/10/2023 15:07
SB7-9	Y302217-12	Soil	February 9, 2023 12:50	02/10/2023 15:07
SB8-5	Y302217-13	Soil	February 9, 2023 13:00	02/10/2023 15:07
SB8-8	Y302217-14	Soil	February 9, 2023 13:05	02/10/2023 15:07

Origins Laboratory, Inc.



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.

Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB9-5	Y302217-15	Soil	February 9, 2023 13:10	02/10/2023 15:07
SB9-11	Y302217-16	Soil	February 9, 2023 13:15	02/10/2023 15:07
SB10-4	Y302217-17	Soil	February 9, 2023 13:30	02/10/2023 15:07
SB3-5	Y302217-18	Soil	February 9, 2023 10:45	02/10/2023 15:07
SB3-9	Y302217-19	Soil	February 9, 2023 10:55	02/10/2023 15:07

Origins Laboratory, Inc.



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.

Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail



www.originslaboratory.com

4302217 page 1 of 2

Client: Environmental Works
 Address: 2770 Industrial Ln
 Telephone Number: 507-475-2825
 Email Address: Akubat@environmentalworks.com

Project Manager: Adam Kubat
 Project Name: Taproot - Pintail
 Project Number: 223274-C1
 Samples Collected By: A. Kubat

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis		Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #	Other	Table 915	
SB1-5	2/9	9:35	2	X				X				X	Table 915 Spun, 1
SB1-8		10:00	2					X				X	PH, SR, and Cond. 2
SB1-13		10:10	2					X				X	for all samples 3
SB2-4		10:30	2					X				X	not full list 4
SB2-8		10:40	2					X				X	table 915 5
SB4-8		11:10	2					X				X	
SB5-7		11:40	2					X				X	
SB5-11		11:50	2					X				X	
SB6-6		12:00	2					X				X	
SB6-10		12:10	2					X				X	
Relinquished By: <i>WJG</i>	Date: 2/10/23	Time: 15:07	Received By: EHS	Date: 2/10/23	Time: 15:07	Received By:	Date: 2/10/23	Time: 15:07	Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input checked="" type="checkbox"/> Standard				

Temp Received - 12.1 Date Results Needed

Origins Laboratory, Inc.

J. Bynon

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.

Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 4302217

Client: Environmental Works

Client Project ID: Taproot-Pintail

Checklist Completed by: EHS/DC

Shipped Via: HD
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 2/10/23

Airbill #: NA

Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: _____

Cooler Number/Temperature: 1 12.1 °C _____ °C _____ °C (Describe) _____ °C

Thermometer ID: 7004

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is there ice present (document if blue ice is used)		<input checked="" type="checkbox"/>		
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		sample #6 ^B no volume in can
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
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 HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):	<u>Sample #6B no volume provided</u>			

⁽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) [Signature]

2/13/23
Date/Time Reviewed

Origins Laboratory, Inc.

[Signature]

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.

Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB1-5

2/9/2023 9:35:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-01 (Soil)**

Boron (DTPA Sorbitol)

Boron	0.709	0.0998	mg/L	1	B3B1308	KAP	02/13/2023	02/14/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	98.4 %	70-130				"	"	"	
Surrogate: Toluene-d8	96.5 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	92.2 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	2.77	0.499	meq/L	10	[CALC]	KAP	02/14/2023	02/15/2023	
Magnesium	0.886	0.823	"	"	"	KAP	"	"	
Sodium	4.47	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	8.30		pH Units	1	B3B1414	HJD	02/14/2023	02/15/2023	
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SAR by 20B Saturated Paste

SAR	3.31		SAR	1	B3B1411	KAP	02/14/2023	02/15/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.507	0.00500	mmhos/cm	1	B3B1414	HJD	02/14/2023	02/15/2023	
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Origins Laboratory, Inc.



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.

Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB1-8

2/9/2023 10:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-02 (Soil)**

Boron (DTPA Sorbitol)

Boron	0.848	0.0993	mg/L	1	B3B1308	KAP	02/13/2023	02/14/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	96.6 %	70-130				"	"	"	
Surrogate: Toluene-d8	97.7 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	91.6 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	54.5	0.499	meq/L	10	[CALC]	KAP	02/14/2023	02/15/2023	
Magnesium	12.6	0.823	"	"	"	KAP	"	"	
Sodium	16.4	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	7.71		pH Units	1	B3B1414	HJD	02/14/2023	02/15/2023	
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SAR by 20B Saturated Paste

SAR	2.83		SAR	1	B3B1411	KAP	02/14/2023	02/15/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	4.34	0.00500	mmhos/cm	1	B3B1414	HJD	02/14/2023	02/15/2023	
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Origins Laboratory, Inc.



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Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB1-13

2/9/2023 10:10:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-03 (Soil)**

Boron (DTPA Sorbitol)

Boron	ND	0.0992	mg/L	1	B3B1308	KAP	02/13/2023	02/14/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	102 %	70-130				"	"	"	
Surrogate: Toluene-d8	96.9 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	90.6 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	5.14	0.499	meq/L	10	[CALC]	KAP	02/14/2023	02/15/2023	
Magnesium	1.41	0.823	"	"	"	KAP	"	"	
Sodium	5.52	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	8.05		pH Units	1	B3B1414	HJD	02/14/2023	02/15/2023	
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SAR by 20B Saturated Paste

SAR	3.05		SAR	1	B3B1411	KAP	02/14/2023	02/15/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.834	0.00500	mmhos/cm	1	B3B1414	HJD	02/14/2023	02/15/2023	
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Origins Laboratory, Inc.



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Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB2-4

2/9/2023 10:30:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-04 (Soil)**

Boron (DTPA Sorbitol)

Boron	0.864	0.101	mg/L	1	B3B1308	KAP	02/13/2023	02/14/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130				"	"	"	
Surrogate: Toluene-d8	95.7 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	90.3 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	6.39	0.499	meq/L	10	[CALC]	KAP	02/14/2023	02/15/2023	
Magnesium	2.12	0.823	"	"	"	KAP	"	"	
Sodium	6.11	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	7.74		pH Units	1	B3B1414	HJD	02/14/2023	02/15/2023	
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SAR by 20B Saturated Paste

SAR	2.96		SAR	1	B3B1411	KAP	02/14/2023	02/15/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.958	0.00500	mmhos/cm	1	B3B1414	HJD	02/14/2023	02/15/2023	
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Origins Laboratory, Inc.



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Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB2-8

2/9/2023 10:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-05 (Soil)**

Boron (DTPA Sorbitol)

Boron	2.03	0.101	mg/L	1	B3B1308	KAP	02/13/2023	02/14/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	100 %	70-130				"	"	"	
Surrogate: Toluene-d8	96.0 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	90.4 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	28.3	0.499	meq/L	10	[CALC]	KAP	02/14/2023	02/15/2023	
Magnesium	7.06	0.823	"	"	"	KAP	"	"	
Sodium	10.8	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	7.88		pH Units	1	B3B1414	HJD	02/14/2023	02/15/2023	
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SAR by 20B Saturated Paste

SAR	2.57		SAR	1	B3B1411	KAP	02/14/2023	02/15/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	2.11	0.00500	mmhos/cm	1	B3B1414	HJD	02/14/2023	02/15/2023	
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Origins Laboratory, Inc.



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.

Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB4-8

2/9/2023 11:10:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-06 (Soil)**

Boron (DTPA Sorbitol)

Boron	2.03	0.101	mg/L	1	B3B1407	KAP	02/14/2023	02/15/2023
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Metals by Saturated Paste by EPA 6010

Calcium	8.43	0.499	meq/L	10	[CALC]	KAP	02/14/2023	02/15/2023
Magnesium	2.29	0.823	"	"	"	KAP	"	"
Sodium	7.13	0.435	"	"	"	KAP	"	"

pH in Soil by 9045D

pH	8.07		pH Units	1	B3B1414	HJD	02/14/2023	02/15/2023
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SAR by 20B Saturated Paste

SAR	3.08		SAR	1	B3B1411	KAP	02/14/2023	02/15/2023
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.04	0.00500	mmhos/cm	1	B3B1414	HJD	02/14/2023	02/15/2023
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Origins Laboratory, Inc.



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.

Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB5-7

2/9/2023 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-07 (Soil)**

Boron (DTPA Sorbitol)

Boron	2.44	0.0991	mg/L	1	B3B1407	KAP	02/14/2023	02/15/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	95.7 %	70-130				"	"	"	
Surrogate: Toluene-d8	96.0 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	90.1 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	57.1	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023	
Magnesium	16.4	0.823	"	"	"	KAP	"	"	
Sodium	19.3	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	7.67		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023	
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SAR by 20B Saturated Paste

SAR	3.18		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	9.37	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023	
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Origins Laboratory, Inc.



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Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB5-11

2/9/2023 11:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-08 (Soil)**

Boron (DTPA Sorbitol)

Boron	0.762	0.101	mg/L	1	B3B1407	KAP	02/14/2023	02/15/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	96.7 %	70-130				"	"	"	
Surrogate: Toluene-d8	95.6 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	90.3 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	37.7	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023	
Magnesium	9.94	0.823	"	"	"	KAP	"	"	
Sodium	13.5	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	7.67		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023	
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SAR by 20B Saturated Paste

SAR	2.77		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	5.62	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023	
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Origins Laboratory, Inc.



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Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB6-6

2/9/2023 12:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-09 (Soil)**

Boron (DTPA Sorbitol)

Boron	1.64	0.0997	mg/L	1	B3B1407	KAP	02/14/2023	02/15/2023
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Metals by Saturated Paste by EPA 6010

Calcium	11.1	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023
Magnesium	3.50	0.823	"	"	"	KAP	"	"
Sodium	9.00	0.435	"	"	"	KAP	"	"

pH in Soil by 9045D

pH	7.94		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023
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SAR by 20B Saturated Paste

SAR	3.33		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	2.66	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023
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Origins Laboratory, Inc.



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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB6-10

2/9/2023 12:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-10 (Soil)**

Boron (DTPA Sorbitol)

Boron	1.58	0.101	mg/L	1	B3B1407	KAP	02/14/2023	02/15/2023
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Metals by Saturated Paste by EPA 6010

Calcium	2.07	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023
Magnesium	ND	0.823	"	"	"	KAP	"	"
Sodium	4.37	0.435	"	"	"	KAP	"	"

pH in Soil by 9045D

pH	8.17		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023
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SAR by 20B Saturated Paste

SAR	3.79		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.780	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023
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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB7-5

2/9/2023 12:40:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-11 (Soil)**

Boron (DTPA Sorbitol)

Boron	0.315	0.101	mg/L	1	B3B1407	KAP	02/14/2023	02/15/2023	
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Metals by Saturated Paste by EPA 6010

Calcium	4.12	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023	
Magnesium	1.20	0.823	"	"	"	KAP	"	"	
Sodium	6.43	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	7.73		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023	
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SAR by 20B Saturated Paste

SAR	3.94		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.32	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023	
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Origins Laboratory, Inc.



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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB7-9

2/9/2023 12:50:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-12 (Soil)**

Boron (DTPA Sorbitol)

Boron	0.926	0.101	mg/L	1	B3B1407	KAP	02/14/2023	02/15/2023
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Metals by Saturated Paste by EPA 6010

Calcium	6.21	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023
Magnesium	1.74	0.823	"	"	"	KAP	"	"
Sodium	7.64	0.435	"	"	"	KAP	"	"

pH in Soil by 9045D

pH	8.04		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023
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SAR by 20B Saturated Paste

SAR	3.83		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.63	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023
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Origins Laboratory, Inc.



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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB8-5

2/9/2023 1:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-13 (Soil)**

Boron (DTPA Sorbitol)

Boron	1.51	0.100	mg/L	1	B3B1407	KAP	02/14/2023	02/15/2023	
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Metals by Saturated Paste by EPA 6010

Calcium	18.4	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023	
Magnesium	5.24	0.823	"	"	"	KAP	"	"	
Sodium	12.0	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	7.97		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023	
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SAR by 20B Saturated Paste

SAR	3.49		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	2.95	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023	
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Origins Laboratory, Inc.



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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB8-8

2/9/2023 1:05:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-14 (Soil)**

Boron (DTPA Sorbitol)

Boron	0.332	0.0999	mg/L	1	B3B1506	KAP	02/15/2023	02/16/2023
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Metals by Saturated Paste by EPA 6010

Calcium	7.12	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023
Magnesium	2.03	0.823	"	"	"	KAP	"	"
Sodium	7.51	0.435	"	"	"	KAP	"	"

pH in Soil by 9045D

pH	7.75		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023
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SAR by 20B Saturated Paste

SAR	3.51		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.69	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023
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Origins Laboratory, Inc.



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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB9-5

2/9/2023 1:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y302217-15 (Soil)

Boron (DTPA Sorbitol)

Boron	1.73	0.0999	mg/L	1	B3B1506	KAP	02/15/2023	02/16/2023
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Metals by Saturated Paste by EPA 6010

Calcium	3.87	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023
Magnesium	1.34	0.823	"	"	"	KAP	"	"
Sodium	5.41	0.435	"	"	"	KAP	"	"

pH in Soil by 9045D

pH	8.16		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023
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SAR by 20B Saturated Paste

SAR	3.35		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.11	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023
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AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB9-11

2/9/2023 1:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y302217-16 (Soil)

Boron (DTPA Sorbitol)

Boron	0.133	0.0996	mg/L	1	B3B1506	KAP	02/15/2023	02/16/2023
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Metals by Saturated Paste by EPA 6010

Calcium	2.67	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023
Magnesium	ND	0.823	"	"	"	KAP	"	"
Sodium	4.22	0.435	"	"	"	KAP	"	"

pH in Soil by 9045D

pH	7.95		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023
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SAR by 20B Saturated Paste

SAR	3.22		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.876	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023
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Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB10-4

2/9/2023 1:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-17 (Soil)**

Boron (DTPA Sorbitol)

Boron	1.53	0.100	mg/L	1	B3B1506	KAP	02/15/2023	02/16/2023
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Metals by Saturated Paste by EPA 6010

Calcium	2.07	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023
Magnesium	ND	0.823	"	"	"	KAP	"	"
Sodium	2.43	0.435	"	"	"	KAP	"	"

pH in Soil by 9045D

pH	8.38		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023
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SAR by 20B Saturated Paste

SAR	2.03		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.573	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023
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Origins Laboratory, Inc.



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Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB3-5

2/9/2023 10:45:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-18 (Soil)**

Boron (DTPA Sorbitol)

Boron	1.76	0.0983	mg/L	1	B3B1506	KAP	02/15/2023	02/16/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	99.1 %	70-130				"	"	"	
Surrogate: Toluene-d8	96.0 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	89.7 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	2.32	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	
Sodium	2.91	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	8.25		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023	
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SAR by 20B Saturated Paste

SAR	2.38		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.628	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023	
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Origins Laboratory, Inc.



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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

SB3-9

2/9/2023 10:55:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
Y302217-19 (Soil)**

Boron (DTPA Sorbitol)

Boron	0.548	0.0986	mg/L	1	B3B1506	KAP	02/15/2023	02/16/2023	
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GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B1417	ZZZ	02/14/2023	02/15/2023	U
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Surrogate: 1,2-Dichloroethane-d4	96.3 %	70-130				"	"	"	
Surrogate: Toluene-d8	96.5 %	70-130				"	"	"	
Surrogate: 4-Bromofluorobenzene	91.0 %	70-130				"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	3.17	0.499	meq/L	10	[CALC]	KAP	02/15/2023	02/16/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	
Sodium	3.98	0.435	"	"	"	KAP	"	"	

pH in Soil by 9045D

pH	7.96		pH Units	1	B3B1508	HJD	02/15/2023	02/16/2023	
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SAR by 20B Saturated Paste

SAR	2.82		SAR	1	B3B1504	KAP	02/15/2023	02/16/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.847	0.00500	mmhos/cm	1	B3B1508	HJD	02/15/2023	02/16/2023	
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Origins Laboratory, Inc.



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Environmental Works

AP@environmentalworks.com

Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B3B1417 - EPA 5030 (soil)

Blank (B3B1417-BLK1)

Prepared: 02/14/2023 Analyzed: 02/15/2023

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.11		"	0.125	90.8		70-130			
Surrogate: Toluene-d8	0.12		"	0.125	97.4		70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125	89.2		70-130			

Origins Laboratory, Inc.



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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B3B1417 - EPA 5030 (soil)

LCS (B3B1417-BS1)

Prepared: 02/14/2023 Analyzed: 02/15/2023

1,2,4-Trimethylbenzene	0.0947	0.00200	mg/kg	0.100		94.7	70-130			
1,3,5-Trimethylbenzene	0.0999	0.00200	"	0.100		99.9	70-130			
Benzene	0.0950	0.00200	"	0.100		95.0	70-130			
Ethylbenzene	0.0941	0.00200	"	0.100		94.1	70-130			
Naphthalene	0.0803	0.00380	"	0.100		80.3	70-130			
Toluene	0.0917	0.00200	"	0.100		91.7	70-130			
o-Xylene	0.0911	0.00200	"	0.100		91.1	70-130			
m,p-Xylene	0.194	0.00400	"	0.200		97.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.11		"	0.125		86.2	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125		85.5	70-130			

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Environmental Works

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Briggsdale CO 80204

Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B3B1417 - EPA 5030 (soil)

Matrix Spike (B3B1417-MS1)	Source: Y302217-01			Prepared: 02/14/2023 Analyzed: 02/15/2023						
1,2,4-Trimethylbenzene	0.0935	0.00200	mg/kg	0.100	ND	93.5	70-130			
1,3,5-Trimethylbenzene	0.0962	0.00200	"	0.100	ND	96.2	70-130			
Benzene	0.0944	0.00200	"	0.100	ND	94.4	70-130			
Ethylbenzene	0.0894	0.00200	"	0.100	ND	89.4	70-130			
Naphthalene	0.0958	0.00380	"	0.100	ND	95.8	70-130			
Toluene	0.0888	0.00200	"	0.100	ND	88.8	70-130			
o-Xylene	0.0901	0.00200	"	0.100	ND	90.1	70-130			
m,p-Xylene	0.185	0.00400	"	0.200	ND	92.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.11		"	0.125		90.6	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		94.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125		88.7	70-130			

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Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B3B1417 - EPA 5030 (soil)

Matrix Spike Dup (B3B1417-MSD1)	Source: Y302217-01			Prepared: 02/14/2023 Analyzed: 02/15/2023						
1,2,4-Trimethylbenzene	0.0920	0.00200	mg/kg	0.100	ND	92.0	70-130	1.64	20	
1,3,5-Trimethylbenzene	0.0953	0.00200	"	0.100	ND	95.3	70-130	0.940	20	
Benzene	0.0931	0.00200	"	0.100	ND	93.1	70-130	1.37	20	
Ethylbenzene	0.0897	0.00200	"	0.100	ND	89.7	70-130	0.335	20	
Naphthalene	0.0916	0.00380	"	0.100	ND	91.6	70-130	4.46	20	
Toluene	0.0868	0.00200	"	0.100	ND	86.8	70-130	2.23	20	
o-Xylene	0.0898	0.00200	"	0.100	ND	89.8	70-130	0.333	20	
m,p-Xylene	0.185	0.00400	"	0.200	ND	92.3	70-130	0.0867	20	
Surrogate: 1,2-Dichloroethane-d4	0.11		"	0.125		91.7	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		93.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125		89.2	70-130			

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Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B3B1308 - DTPA Sorbitol Preparation

Blank (B3B1308-BLK1)

Prepared: 02/13/2023 Analyzed: 02/14/2023

Boron ND 0.100 mg/L

Duplicate (B3B1308-DUP1)

Source: Y302177-01

Prepared: 02/13/2023 Analyzed: 02/14/2023

Boron 0.105 0.0996 mg/L 0.118 12.0 50

Batch B3B1407 - DTPA Sorbitol Preparation

Blank (B3B1407-BLK1)

Prepared: 02/14/2023 Analyzed: 02/15/2023

Boron ND 0.100 mg/L

Duplicate (B3B1407-DUP1)

Source: Y302217-06

Prepared: 02/14/2023 Analyzed: 02/15/2023

Boron 2.14 0.101 mg/L 2.03 5.33 50

Batch B3B1411 - Saturated Paste Metals

Blank (B3B1411-BLK1)

Prepared: 02/14/2023 Analyzed: 02/15/2023

Calcium PPM ND 10.0 mg/L

SAR 0.00 SAR

Magnesium PPM ND 10.0 mg/L

Sodium PPM ND 10.0 "

Duplicate (B3B1411-DUP1)

Source: Y302216-01

Prepared: 02/14/2023 Analyzed: 02/15/2023

Calcium PPM 43.6 10.0 mg/L 50.7 15.1 50

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Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B3B1411 - Saturated Paste Metals

Duplicate (B3B1411-DUP1)		Source: Y302216-01			Prepared: 02/14/2023 Analyzed: 02/15/2023					
SAR	0.00		SAR		0.268			200	200	
Magnesium PPM	8.67	10.0	mg/L		9.91			13.4	50	
Sodium PPM	7.29	10.0	"		7.96			8.80	50	

Batch B3B1504 - Saturated Paste Metals

Blank (B3B1504-BLK1)		Prepared: 02/15/2023 Analyzed: 02/16/2023								
Calcium PPM	ND	10.0	mg/L							
SAR	0.00		SAR							
Magnesium PPM	ND	10.0	mg/L							
Sodium PPM	ND	10.0	"							
Duplicate (B3B1504-DUP1)		Source: Y302217-07			Prepared: 02/15/2023 Analyzed: 02/16/2023					
SAR	0.00		SAR		3.18			200	200	
Calcium PPM	1190	10.0	mg/L		1140			3.62	50	
Magnesium PPM	210	10.0	"		199			5.08	50	
Sodium PPM	442	10.0	"		444			0.475	50	

Batch B3B1506 - DTPA Sorbitol Preparation

Blank (B3B1506-BLK1)		Prepared: 02/15/2023 Analyzed: 02/16/2023								
Boron	ND	0.100	mg/L							
Duplicate (B3B1506-DUP1)		Source: Y302217-14			Prepared: 02/15/2023 Analyzed: 02/16/2023					
Boron	0.237	0.0995	mg/L		0.332			33.5	50	

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Project Number: 223274-C1

Project: Taproot - Pintail

Saturated Paste - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B3B1414 - Saturated Paste pH/EC

Blank (B3B1414-BLK1)

Prepared: 02/14/2023 Analyzed: 02/15/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B3B1414-DUP1)

Source: Y302216-01

Prepared: 02/14/2023 Analyzed: 02/15/2023

pH 8.23 pH Units 8.13 1.22 25

Specific Conductance (EC) 0.221 0.00500 mmhos/cm 0.251 12.7 25

Batch B3B1508 - Saturated Paste pH/EC

Blank (B3B1508-BLK1)

Prepared: 02/15/2023 Analyzed: 02/16/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B3B1508-DUP1)

Source: Y302217-07

Prepared: 02/15/2023 Analyzed: 02/16/2023

pH 7.68 pH Units 7.67 0.130 25

Specific Conductance (EC) 9.61 0.00500 mmhos/cm 9.37 2.45 25

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Adam Kubat

Project Number: 223274-C1

Project: Taproot - Pintail

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 at a wet weight basis.

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