



May 10, 2023

Peterson Energy Operating, Inc.

Ryan Dornbos

PO Box 2169

Loveland CO 80539

Project Name - Linnebur Farms

Project Number - [none]

Attached are your analytical results for Linnebur Farms received by Origins Laboratory, Inc. April 27, 2023. This project is associated with Origins project number Y304640-01.

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



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BACKGROUND	Y304640-01	Soil	April 27, 2023 10:00	04/27/2023 12:00
SEP	Y304640-02	Soil	April 27, 2023 10:00	04/27/2023 12:00
TANK	Y304640-03	Soil	April 27, 2023 10:00	04/27/2023 12:00
WH	Y304640-04	Soil	April 27, 2023 10:00	04/27/2023 12:00
N WALL	Y304640-05	Soil	April 27, 2023 10:00	04/27/2023 12:00
S WALL	Y304640-06	Soil	April 27, 2023 10:00	04/27/2023 12:00
E WALL	Y304640-07	Soil	April 27, 2023 10:00	04/27/2023 12:00
W WALL	Y304640-08	Soil	April 27, 2023 10:00	04/27/2023 12:00
FLOOR	Y304640-09	Soil	April 27, 2023 10:00	04/27/2023 12:00

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.*

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

# ORIGINS<sup>LABORATORY, INC</sup>

www.originslaboratory.com

Client: CATON LLC  
Address: \_\_\_\_\_

**Y304640** page of

Project Manager: Ryan Dornbos  
Project Name: KUNNEBER FARMS  
Project Number: \_\_\_\_\_

Telephone Number: 303 915 9074  
Email Address: ~~ryan.dornbos@originslab.com~~ ryan@dornbosoperating.com

ryan@dornbosoperating.com

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis					Sample Instructions		
				HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa #	Other	PH, EL, SAR	BIOLOGICAL	CHLORIDE	PARTICULATE	METALS			
BACKGROUND	4/27/25	1000	3	X				X				X						1
SER			3	X				X				X						2
TANK			3	X				X				X						3
WH			3	X				X				X						4
N WALL			3	X				X				X						5
S WALL			3	X				X				X						6
E WALL			3	X				X				X						7
W WALL			3	X				X				X						8
FLOOR			3	X				X				X						9
																		10

  

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
Ryan Dornbos	4/27/25	1200	[Signature]	4/27/25	1200	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input checked="" type="checkbox"/>
Relinquished by:	Date:	Time:	Received By:	Date:	Time:	Standard <input checked="" type="checkbox"/>

Temp Received. 15

Date Results Needed

Origins Laboratory, Inc.

Byron

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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

Origins Laboratory

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

### Sample Receipt Checklist

Origins Work Order: 4304640

Client: PE Operating

Client Project ID: Linnebur Farms

Checklist Completed by: EHS

Shipped Via: 40  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 4/27/23

Airbill #: NA

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: \_\_\_\_\_

Cooler Number/Temperature: 1/15 °C 1 °C 1 °C (Describe) \_\_\_\_\_ °C

Thermometer ID: T003

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

<sup>(1)</sup>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]

Date/Time Reviewed 5/1/23

Origins Laboratory, Inc.

[Signature]

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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## BACKGROUND

4/27/2023 10:00:00AM

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

Y304640-01 (Soil)

### Boron (DTPA Sorbitol)

Boron	ND	1.02	mg/L	10	B3E0206	05/02/2023	05/03/2023
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### Metals by Saturated Paste by EPA 6010

Calcium	0.632	0.499	meq/L	"	[CALC]	05/01/2023	05/04/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

### pH in Soil by 9045D

pH	7.15		pH Units	1	B3D2907	04/29/2023	04/30/2023
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### SAR by 20B Saturated Paste

SAR	0.164		SAR	1	B3E0108	05/01/2023	05/04/2023
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### Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.115	0.00500	mmhos/cm	1	B3D2907	04/29/2023	04/30/2023
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### Table 915 metals by EPA 6020B

Arsenic	4.57	0.0944	mg/kg	10	B3E0102	05/01/2023	05/04/2023
Barium	104	9.44	"	"	"	"	"
Cadmium	0.163	0.0944	"	"	"	"	"

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Project Number: [none]  
Project: Linnebur Farms

## BACKGROUND

4/27/2023 10:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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### Origins Laboratory, Inc. Y304640-01 (Soil)

#### Table 915 metals by EPA 6020B

Copper	ND	9.44	mg/kg	10	B3E0102	05/01/2023	05/04/2023
Lead	10.1	9.44	"	"	"	"	"
Nickel	11.2	9.44	"	"	"	"	"
Selenium	0.274	0.0944	"	"	"	"	"
Silver	ND	0.0944	"	"	"	"	"
Zinc	ND	94.4	"	"	"	"	"

#### Total Metals by 7196A

Chromium, Hexavalent	ND	1.26	2.59	mg/Kg	1	L679517	04/27/2023	05/02/2023
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Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

SEP

4/27/2023 10:00:00AM

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

Y304640-02 (Soil)

## Boron (DTPA Sorbitol)

Boron	0.570	0.102	mg/L	1	B3E0206	05/02/2023	05/03/2023	
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## DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3D2730	04/27/2023	05/03/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	92.7 %	50-150			"	"	"	
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## GBTEX+TMBs by 8260D

1,3,5-Trimethylbenzene	ND	0.00200	mg/kg	1	B3D2827	04/28/2023	04/30/2023	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: Toluene-d8	91.6 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"	

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PO Box 2169

Loveland CO 80539

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Project Number: [none]

Project: Linnebur Farms

SEP

4/27/2023 10:00:00AM

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

Y304640-02 (Soil)

## Metals by Saturated Paste by EPA 6010

Calcium	1.18	0.499	meq/L	10	[CALC]	05/01/2023	05/04/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	14.1	0.435	"	"	"	"	"

## PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L679138	04/30/2023	04/30/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
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	"	"	"	"	"
Fluorene	ND	0.000286	0.00067	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

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Project: Linnebur Farms

SEP

4/27/2023 10:00:00AM

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

Y304640-02 (Soil)

## PAH by 8270D SIM

Surrogate: 2-Fluorobiphenyl	48.2 %	33-115	L6791 38	04/30/2023	04/30/2023
Surrogate: 4-Terphenyl-d14	53.7 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	48.8 %	29-110	"	"	"

## pH in Soil by 9045D

pH	8.34	pH Units	1	B3D2907	04/29/2023	04/30/2023
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## SAR by 20B Saturated Paste

SAR	14.5	SAR	1	B3E0108	05/01/2023	05/04/2023
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## Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.96	0.00500	mmhos/cm	1	B3D2907	04/29/2023	04/30/2023
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## Table 915 metals by EPA 6020B

Arsenic	3.53	0.0870	mg/kg	10	B3E0102	05/01/2023	05/04/2023
Barium	126	8.70	"	"	"	"	"
Cadmium	0.223	0.0870	"	"	"	"	"
Copper	8.83	8.70	"	"	"	"	"
Lead	9.71	8.70	"	"	"	"	"
Nickel	11.1	8.70	"	"	"	"	"
Selenium	0.151	0.0870	"	"	"	"	"

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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

SEP

4/27/2023 10:00:00AM

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

Y304640-02 (Soil)

### Table 915 metals by EPA 6020B

Silver	ND		0.0870	mg/kg	10	B3E0102	05/01/2023	05/04/2023	
Zinc	ND		87.0	"	"	"	"	"	

### Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L679517	04/27/2023	05/02/2023	
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Peterson Energy Operating, Inc.  
PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## TANK

4/27/2023 10:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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## Origins Laboratory, Inc. Y304640-03 (Soil)

### Boron (DTPA Sorbitol)

Boron	0.718	0.0990	mg/L	1	B3E0207	05/02/2023	05/03/2023
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### DRO/ORO by EPA 8015D

Diesel (C10-C28)	490	25.0	mg/kg	1	B3D2730	04/27/2023	05/03/2023
Residual Range Organics (C28-C40)	737	100	"	"	"	"	"

Surrogate: o-Terphenyl	128 %	50-150	"	"	"
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### GBTEX+TMBs by 8260D

1,3,5-Trimethylbenzene	ND	0.00200	mg/kg	1	B3D2827	04/28/2023	04/30/2023	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: Toluene-d8	94.2 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	111 %	70-130	"	"	"

Origins Laboratory, Inc.



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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## TANK

4/27/2023 10:00:00AM

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

Y304640-03 (Soil)

## Metals by Saturated Paste by EPA 6010

Calcium	ND	0.499	meq/L	10	[CALC]	05/01/2023	05/08/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	13.0	0.435	"	"	"	"	"

## PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00549	0.0101	mg/Kg	5	L679138	04/30/2023	04/30/2023
2-Methylnaphthalene	ND	0.00972	0.0101	"	"	"	"	"
Acenaphthene	ND	0.00152	0.00335	"	"	"	"	"
Anthracene	0.00456	0.00167	0.00335	"	"	"	"	"
Benzo(a)anthracene	0.00256	0.00247	0.00335	"	"	"	"	J
Benzo(a)pyrene	0.0074	0.00234	0.00335	"	"	"	"	"
Benzo(b)fluoranthene	0.0052	0.00293	0.00335	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.00219	0.00335	"	"	"	"	"
Chrysene	0.0293	0.00312	0.00335	"	"	"	"	"
Dibenz(a,h)anthracene	0.00519	0.00307	0.00335	"	"	"	"	"
Fluoranthene	0.00234	0.00197	0.00335	"	"	"	"	J
Fluorene	0.00449	0.00143	0.00335	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	0.00851	0.00314	0.00335	"	"	"	"	"
Naphthalene	ND	0.0073	0.0101	"	"	"	"	"
Pyrene	0.00685	0.00322	0.00335	"	"	"	"	"
Surrogate: 2-Fluorobiphenyl	51.5 %		33-115			"	"	"
Surrogate: 4-Terphenyl-d14	48.2 %		33-122			"	"	"

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PO Box 2169  
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Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## TANK

4/27/2023 10:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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## Waypoint Analytical, LLC. Y304640-03 (Soil)

### PAH by 8270D SIM

Surrogate: Nitrobenzene-d5	47.5 %	29-110				L6791 38	04/30/2023	04/30/2023
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### pH in Soil by 9045D

pH	8.56		pH Units	1	B3D2907	04/29/2023	04/30/2023
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### SAR by 20B Saturated Paste

SAR	25.6		SAR	1	B3E0108	05/01/2023	05/04/2023
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### Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.27	0.00500	mmhos/cm	1	B3D2907	04/29/2023	04/30/2023
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### Table 915 metals by EPA 6020B

Arsenic	2.34	0.0946	mg/kg	10	B3E0102	05/01/2023	05/04/2023
Barium	75.7	9.46	"	"	"	"	"
Cadmium	ND	0.0946	"	"	"	"	"
Copper	ND	9.46	"	"	"	"	"
Lead	ND	9.46	"	"	"	"	"
Nickel	ND	9.46	"	"	"	"	"
Selenium	0.106	0.0946	"	"	"	"	"
Silver	ND	0.0946	"	"	"	"	"

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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## TANK

4/27/2023 10:00:00AM

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

Y304640-03 (Soil)

### Table 915 metals by EPA 6020B

Zinc	ND		94.6	mg/kg	10	B3E0102	05/01/2023	05/04/2023	
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### Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L679517	04/27/2023	05/02/2023	
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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

WH

4/27/2023 10:00:00AM

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

Y304640-04 (Soil)

## Metals by Saturated Paste by EPA 6010

Calcium	2.71	0.499	meq/L	10	[CALC]	05/01/2023	05/04/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	1.22	0.435	"	"	"	"	"

## SAR by 20B Saturated Paste

SAR	0.940		SAR	1	B3E0108	"	"
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## Table 915 metals by EPA 6020B

Arsenic	3.05	0.0908	mg/kg	10	B3E0102	05/01/2023	05/04/2023
Barium	66.9	9.08	"	"	"	"	"
Cadmium	0.124	0.0908	"	"	"	"	"
Copper	ND	9.08	"	"	"	"	"
Lead	13.9	9.08	"	"	"	"	"
Nickel	ND	9.08	"	"	"	"	"
Selenium	0.176	0.0908	"	"	"	"	"
Silver	ND	0.0908	"	"	"	"	"
Zinc	ND	90.8	"	"	"	"	"

## Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L679517	04/27/2023	05/02/2023
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Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.  
PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## N WALL

4/27/2023 10:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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## Origins Laboratory, Inc. Y304640-05 (Soil)

### Boron (DTPA Sorbitol)

Boron	13.7	0.0985	mg/L	1	B3E0207	05/02/2023	05/03/2023	
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### DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3D2730	04/27/2023	05/03/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	91.6 %	50-150	"	"	"	"	"
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### GBTEX+TMBs by 8260D

1,3,5-Trimethylbenzene	ND	0.00200	mg/kg	1	B3D2827	04/28/2023	04/30/2023	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: Toluene-d8	90.5 %	70-130	"	"	"	"
Surrogate: 4-Bromofluorobenzene	106 %	70-130	"	"	"	"

Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## N WALL

4/27/2023 10:00:00AM

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

Y304640-05 (Soil)

### Metals by Saturated Paste by EPA 6010

Calcium	ND	4.99	meq/L	100	[CALC]	05/01/2023	05/05/2023
Magnesium	ND	8.23	"	"	"	"	"
Sodium	100	4.35	"	"	"	"	"

### PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L679149	05/01/2023	05/02/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
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	"	"	"	"	"
Fluorene	ND	0.000286	0.00067	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## N WALL

4/27/2023 10:00:00AM

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

Y304640-05 (Soil)

### PAH by 8270D SIM

Surrogate: 2-Fluorobiphenyl	66 %	33-115	L6791 49	05/01/2023	05/02/2023
Surrogate: 4-Terphenyl-d14	67.5 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	67.5 %	29-110	"	"	"

### pH in Soil by 9045D

pH	8.55	pH Units	1	B3D2907	04/29/2023	04/30/2023
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### SAR by 20B Saturated Paste

SAR	246	SAR	1	B3E0108	05/01/2023	05/04/2023
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### Specific Conductance Mod. 9050A

Specific Conductance (EC)	13.8	0.00500	mmhos/cm	1	B3D2907	04/29/2023	04/30/2023
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Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## S WALL

4/27/2023 10:00:00AM

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

Y304640-06 (Soil)

### Boron (DTPA Sorbitol)

Boron	24.6	0.997	mg/L	10	B3E0207	05/02/2023	05/10/2023	
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### DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3D2730	04/27/2023	05/03/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	77.0 %	50-150			"	"	"	
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### GBTEX+TMBs by 8260D

1,3,5-Trimethylbenzene	ND	0.00200	mg/kg	1	B3D2827	04/28/2023	04/30/2023	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: Toluene-d8	91.1 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	108 %	70-130			"	"	"	

Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## S WALL

4/27/2023 10:00:00AM

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

Y304640-06 (Soil)

### Metals by Saturated Paste by EPA 6010

Calcium	ND	4.99	meq/L	100	[CALC]	05/01/2023	05/05/2023
Magnesium	ND	8.23	"	"	"	"	"
Sodium	104	4.35	"	"	"	"	"

### PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L679149	05/01/2023	05/02/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
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	"	"	"	"	"
Fluorene	ND	0.000286	0.00067	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## S WALL

4/27/2023 10:00:00AM

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

Y304640-06 (Soil)

### PAH by 8270D SIM

Surrogate: 2-Fluorobiphenyl	62.2 %	33-115	L6791 49	05/01/2023	05/02/2023
Surrogate: 4-Terphenyl-d14	65.3 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	62.8 %	29-110	"	"	"

### pH in Soil by 9045D

pH	8.78	pH Units	1	B3D2907	04/29/2023	04/30/2023
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### SAR by 20B Saturated Paste

SAR	416	SAR	1	B3E0108	05/01/2023	05/04/2023
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### Specific Conductance Mod. 9050A

Specific Conductance (EC)	11.2	0.00500	mmhos/cm	1	B3D2907	04/29/2023	04/30/2023
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Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.  
PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## E WALL

4/27/2023 10:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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## Origins Laboratory, Inc. Y304640-07 (Soil)

### Boron (DTPA Sorbitol)

Boron	28.7	1.02	mg/L	10	B3E0207	05/02/2023	05/10/2023	
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### DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3D2730	04/27/2023	05/03/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	95.5 %	50-150			"	"	"	
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### GBTEX+TMBs by 8260D

1,3,5-Trimethylbenzene	ND	0.00200	mg/kg	1	B3D2827	04/28/2023	04/30/2023	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: Toluene-d8	92.1 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"	

Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## E WALL

4/27/2023 10:00:00AM

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

Y304640-07 (Soil)

### Metals by Saturated Paste by EPA 6010

Calcium	ND	4.99	meq/L	100	[CALC]	05/01/2023	05/05/2023
Magnesium	ND	8.23	"	"	"	"	"
Sodium	151	4.35	"	"	"	"	"

### PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L679149	05/01/2023	05/02/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
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	"	"	"	"	"
Fluorene	0.000436	0.000286	0.00067	"	"	"	"	" J
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Origins Laboratory, Inc.

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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## E WALL

4/27/2023 10:00:00AM

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

Y304640-07 (Soil)

### PAH by 8270D SIM

Surrogate: 2-Fluorobiphenyl	59.6 %	33-115	L6791 49	05/01/2023	05/02/2023
Surrogate: 4-Terphenyl-d14	64.2 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	60.2 %	29-110	"	"	"

### pH in Soil by 9045D

pH	8.52	pH Units	1	B3D2907	04/29/2023	04/30/2023
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### SAR by 20B Saturated Paste

SAR	324	SAR	1	B3E0108	05/01/2023	05/04/2023
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### Specific Conductance Mod. 9050A

Specific Conductance (EC)	21.1	0.00500 mmhos/cm	1	B3D2907	04/29/2023	04/30/2023
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Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## W WALL

4/27/2023 10:00:00AM

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

Y304640-08 (Soil)

### Boron (DTPA Sorbitol)

Boron	12.5	0.999	mg/L	10	B3E0207	05/02/2023	05/10/2023	
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### DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3D2730	04/27/2023	05/03/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	79.6 %	50-150			"	"	"	
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### GBTEX+TMBs by 8260D

1,3,5-Trimethylbenzene	ND	0.00200	mg/kg	1	B3D2827	04/28/2023	04/30/2023	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: Toluene-d8	91.6 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	107 %	70-130			"	"	"	

Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## W WALL

4/27/2023 10:00:00AM

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

Y304640-08 (Soil)

### Metals by Saturated Paste by EPA 6010

Calcium	ND	4.99	meq/L	100	[CALC]	05/01/2023	05/08/2023
Magnesium	ND	8.23	"	"	"	"	"
Sodium	190	4.35	"	"	"	"	"

### PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00549	0.0101	mg/Kg	5	L679149	05/01/2023	05/02/2023
2-Methylnaphthalene	ND	0.00972	0.0101	"	"	"	"	"
Acenaphthene	ND	0.00152	0.00335	"	"	"	"	"
Anthracene	ND	0.00167	0.00335	"	"	"	"	"
Benzo(a)anthracene	0.00917	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	0.00576	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	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	0.00328	0.00314	0.00335	"	"	"	"	"
Naphthalene	ND	0.0073	0.0101	"	"	"	"	"
Pyrene	ND	0.00322	0.00335	"	"	"	"	"

Origins Laboratory, Inc.

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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## W WALL

4/27/2023 10:00:00AM

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

Y304640-08 (Soil)

### PAH by 8270D SIM

Surrogate: 2-Fluorobiphenyl	66 %	33-115	L6791 49	05/01/2023	05/02/2023
Surrogate: 4-Terphenyl-d14	68.7 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	66 %	29-110	"	"	"

### pH in Soil by 9045D

pH	8.63	pH Units	1	B3D2907	04/29/2023	04/30/2023
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### SAR by 20B Saturated Paste

SAR	416	SAR	1	B3E0108	05/01/2023	05/04/2023
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### Specific Conductance Mod. 9050A

Specific Conductance (EC)	21.8	0.00500	mmhos/cm	1	B3D2907	04/29/2023	04/30/2023
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Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.  
PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## FLOOR

4/27/2023 10:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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## Origins Laboratory, Inc. Y304640-09 (Soil)

### Boron (DTPA Sorbitol)

Boron	10.2	1.00	mg/L	10	B3E0207	05/02/2023	05/10/2023	
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### DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3D2730	04/27/2023	05/03/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	94.3 %	50-150			"	"	"	
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### GBTEX+TMBs by 8260D

1,3,5-Trimethylbenzene	ND	0.00200	mg/kg	1	B3D2827	04/28/2023	04/30/2023	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: Toluene-d8	94.5 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	113 %	70-130			"	"	"	

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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## FLOOR

4/27/2023 10:00:00AM

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

Y304640-09 (Soil)

### Metals by Saturated Paste by EPA 6010

Calcium	ND	0.499	meq/L	10	[CALC]	05/01/2023	05/04/2023	
Magnesium	ND	0.823	"	"	"	"	"	
Sodium	6.68	0.435	"	"	"	"	"	

### PAH by 8270D SIM

1-Methylnaphthalene	0.00196	0.00109	0.00201	mg/Kg	1	L679149	05/01/2023	05/02/2023	J
2-Methylnaphthalene	0.00249	0.00194	0.00201	"	"	"	"	"	
Acenaphthene	0.000321	0.000304	0.00067	"	"	"	"	"	J
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	0.00134	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	0.00133	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	
Fluorene	0.00298	0.000286	0.00067	"	"	"	"	"	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"	
Pyrene	0.000798	0.000643	0.00067	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	64.5 %		33-115			"	"	"	

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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## FLOOR

4/27/2023 10:00:00AM

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

Y304640-09 (Soil)

### PAH by 8270D SIM

Surrogate: 4-Terphenyl-d14	69.1 %	33-122	L6791 49	05/01/2023	05/02/2023
Surrogate: Nitrobenzene-d5	66.4 %	29-110	"	"	"

### pH in Soil by 9045D

pH	8.11	pH Units	1	B3D2907	04/29/2023	04/30/2023
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### SAR by 20B Saturated Paste

SAR	17.2	SAR	1	B3E0108	05/01/2023	05/04/2023
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### Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.53	0.00500	mmhos/cm	1	B3D2907	04/29/2023	04/30/2023
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### Table 915 metals by EPA 6020B

Arsenic	3.52	0.0976	mg/kg	10	B3E0102	05/01/2023	05/04/2023
Barium	284	9.76	"	"	"	"	"
Cadmium	0.282	0.0976	"	"	"	"	"
Copper	13.0	9.76	"	"	"	"	"
Lead	12.6	9.76	"	"	"	"	"
Nickel	13.2	9.76	"	"	"	"	"
Selenium	0.187	0.0976	"	"	"	"	"
Silver	ND	0.0976	"	"	"	"	"

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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## FLOOR

4/27/2023 10:00:00AM

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

Y304640-09 (Soil)

### Table 915 metals by EPA 6020B

Zinc	ND	97.6	mg/kg	10	B3E0102	05/01/2023	05/04/2023
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### Total Metals by 7196A

Chromium, Hexavalent	ND	1.22	2.5	mg/Kg	1	L679517	04/27/2023	05/02/2023
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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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
<b>Batch B3D2730 - EPA 3550B</b>										
<b>Blank (B3D2730-BLK1)</b>					Prepared: 04/27/2023 Analyzed: 05/03/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	23		"	24.9		94.1	50-150			

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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 B3D2730 - EPA 3550B

#### LCS (B3D2730-BS1)

Prepared: 04/27/2023 Analyzed: 05/03/2023

Diesel (C10-C28)	851	50.0	mg/kg	1000		85.1	70-130			
Residual Range Organics (C28-C40)	894	200	"	1000		89.4	70-130			
Surrogate: o-Terphenyl	48		"	49.8		95.8	50-150			

Origins Laboratory, Inc.



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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 B3D2730 - EPA 3550B

Matrix Spike (B3D2730-MS1)		Source: Y304623-01			Prepared: 04/27/2023 Analyzed: 05/03/2023					
Diesel (C10-C28)	853	50.0	mg/kg	1000	ND	85.3	70-130			
Residual Range Organics (C28-C40)	883	200	"	1000	ND	88.3	70-130			
Surrogate: o-Terphenyl	46		"	49.8		92.4	50-150			

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Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 B3D2730 - EPA 3550B

Matrix Spike Dup (B3D2730-MSD1)		Source: Y304623-01			Prepared: 04/27/2023 Analyzed: 05/03/2023					
Diesel (C10-C28)	703	50.0	mg/kg	1000	ND	70.3	70-130	19.3	35	
Residual Range Organics (C28-C40)	749	200	"	1000	ND	74.9	70-130	16.5	35	
Surrogate: o-Terphenyl	45		"	49.8		91.3	50-150			

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Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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
Batch B3D2827 - EPA 5030 (soil)										
Blank (B3D2827-BLK1)					Prepared: 04/28/2023 Analyzed: 04/30/2023					
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		93.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		107	70-130			

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Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 B3D2827 - EPA 5030 (soil)

#### LCS (B3D2827-BS1)

Prepared: 04/28/2023 Analyzed: 04/30/2023

1,2,4-Trimethylbenzene	0.111	0.00200	mg/kg	0.100		111	70-130			
1,3,5-Trimethylbenzene	0.112	0.00200	"	0.100		112	70-130			
Benzene	0.0997	0.00200	"	0.100		99.7	70-130			
Ethylbenzene	0.109	0.00200	"	0.100		109	70-130			
Naphthalene	0.0992	0.00380	"	0.100		99.2	70-130			
Toluene	0.0898	0.00200	"	0.100		89.8	70-130			
o-Xylene	0.107	0.00200	"	0.100		107	70-130			
m,p-Xylene	0.219	0.00400	"	0.200		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		92.4	70-130			
Surrogate: Toluene-d8	0.11		"	0.125		91.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 B3D2827 - EPA 5030 (soil)

Matrix Spike (B3D2827-MS1)		Source: Y304640-02			Prepared: 04/28/2023 Analyzed: 04/30/2023					
1,2,4-Trimethylbenzene	0.104	0.00200	mg/kg	0.100	ND	104	70-130			
1,3,5-Trimethylbenzene	0.106	0.00200	"	0.100	ND	106	70-130			
Benzene	0.0953	0.00200	"	0.100	ND	95.3	70-130			
Ethylbenzene	0.102	0.00200	"	0.100	ND	102	70-130			
Naphthalene	0.101	0.00380	"	0.100	ND	101	70-130			
Toluene	0.0851	0.00200	"	0.100	ND	85.1	70-130			
o-Xylene	0.101	0.00200	"	0.100	ND	101	70-130			
m,p-Xylene	0.205	0.00400	"	0.200	ND	103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		98.5	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		92.2	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 B3D2827 - EPA 5030 (soil)

Matrix Spike Dup (B3D2827-MSD1)		Source: Y304640-02			Prepared: 04/28/2023 Analyzed: 04/30/2023					
1,2,4-Trimethylbenzene	0.103	0.00200	mg/kg	0.100	ND	103	70-130	1.11	20	
1,3,5-Trimethylbenzene	0.105	0.00200	"	0.100	ND	105	70-130	0.492	20	
Benzene	0.0941	0.00200	"	0.100	ND	94.1	70-130	1.35	20	
Ethylbenzene	0.102	0.00200	"	0.100	ND	102	70-130	0.00	20	
Naphthalene	0.103	0.00380	"	0.100	ND	103	70-130	1.47	20	
Toluene	0.0840	0.00200	"	0.100	ND	84.0	70-130	1.30	20	
o-Xylene	0.102	0.00200	"	0.100	ND	102	70-130	0.863	20	
m,p-Xylene	0.205	0.00400	"	0.200	ND	103	70-130	0.156	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		101	70-130			
Surrogate: Toluene-d8	0.11		"	0.125		91.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		105	70-130			

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Peterson Energy Operating, Inc.  
PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## 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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## Metals by EPA 6000/7000 Series Methods - 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 B3E0102 - EPA 3050B

#### Blank (B3E0102-BLK1)

Prepared: 05/01/2023 Analyzed: 05/03/2023

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 (B3E0102-BS1)

Prepared: 05/01/2023 Analyzed: 05/03/2023

Arsenic	0.0466	0.000100	mg/kg	0.0500	93.1	80-120
Barium	4.86	0.0100	"	5.00	97.2	80-120
Cadmium	0.0468	0.000100	"	0.0500	93.6	80-120
Copper	0.477	0.0100	"	0.500	95.5	80-120
Lead	0.0481	0.0100	"	0.0500	96.2	80-120
Nickel	0.0470	0.0100	"	0.0500	94.0	80-120
Selenium	0.0499	0.000100	"	0.0500	99.8	80-120
Silver	0.0449	0.000100	"	0.0500	89.7	80-120
Zinc	0.457	0.100	"	0.500	91.3	80-120

#### Matrix Spike (B3E0102-MS1)

Source: Y304640-01

Prepared: 05/01/2023 Analyzed: 05/03/2023

Origins Laboratory, Inc.



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Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## Metals by EPA 6000/7000 Series Methods - Quality Control

### Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B3E0102 - EPA 3050B</b>										
<b>Matrix Spike (B3E0102-MS1)</b>			<b>Source: Y304640-01</b>		Prepared: 05/01/2023 Analyzed: 05/03/2023					
Arsenic	7.32	0.0974	mg/kg	4.87	4.57	56.5	75-125			QM-07
Barium	507	9.74	"	487	104	82.6	75-125			
Cadmium	4.19	0.0974	"	4.87	0.163	82.6	75-125			
Copper	47.6	9.74	"	48.7	8.40	80.4	75-125			
Lead	13.0	9.74	"	4.87	10.1	58.9	75-125			QM-07
Nickel	12.6	9.74	"	4.87	11.2	29.2	75-125			QM-07
Selenium	4.12	0.0974	"	4.87	0.274	79.0	75-125			
Silver	3.95	0.0974	"	4.87	0.0397	80.4	75-125			
Zinc	81.1	97.4	"	48.7	46.1	71.7	75-125			QM-07
<b>Matrix Spike Dup (B3E0102-MSD1)</b>			<b>Source: Y304640-01</b>		Prepared: 05/01/2023 Analyzed: 05/03/2023					
Arsenic	8.07	0.0942	mg/kg	4.71	4.57	74.3	75-125	9.69	20	QM-07
Barium	557	9.42	"	471	104	96.2	75-125	9.53	20	
Cadmium	4.54	0.0942	"	4.71	0.163	93.0	75-125	8.16	20	
Copper	51.1	9.42	"	47.1	8.40	90.7	75-125	7.18	20	
Lead	14.4	9.42	"	4.71	10.1	92.3	75-125	10.8	20	
Nickel	13.8	9.42	"	4.71	11.2	56.5	75-125	9.38	20	QM-07
Selenium	4.55	0.0942	"	4.71	0.274	90.7	75-125	9.74	20	
Silver	4.29	0.0942	"	4.71	0.0397	90.4	75-125	8.24	20	
Zinc	81.5	94.2	"	47.1	46.1	75.1	75-125	0.530	20	

Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.  
PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## 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 B3E0108 - Saturated Paste Metals

##### Blank (B3E0108-BLK1)

Prepared: 05/01/2023 Analyzed: 05/04/2023

Calcium PPM	ND	10.0	mg/L
SAR	0.00		SAR
Magnesium PPM	ND	10.0	mg/L
Sodium PPM	ND	10.0	"

##### Duplicate (B3E0108-DUP1)

Source: Y304666-01

Prepared: 05/01/2023 Analyzed: 05/04/2023

SAR	0.00		SAR	11.5	200	200
Calcium PPM	15.6	10.0	mg/L	15.9	1.97	50
Magnesium PPM	2.56	10.0	"	3.08	18.4	50
Sodium PPM	174	10.0	"	192	9.40	50

#### Batch B3E0206 - DTPA Sorbitol Preparation

##### Blank (B3E0206-BLK1)

Prepared: 05/02/2023 Analyzed: 05/03/2023

Boron	ND	0.100	mg/L
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##### Duplicate (B3E0206-DUP1)

Source: Y304640-01

Prepared: 05/02/2023 Analyzed: 05/03/2023

Boron	ND	0.998	mg/L	ND	50
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#### Batch B3E0207 - DTPA Sorbitol Preparation

##### Blank (B3E0207-BLK1)

Prepared: 05/02/2023 Analyzed: 05/03/2023

Boron	ND	0.100	mg/L
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##### Duplicate (B3E0207-DUP1)

Source: Y304640-03

Prepared: 05/02/2023 Analyzed: 05/03/2023

Boron	0.813	0.102	mg/L	0.718	12.4	50
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Origins Laboratory, Inc.



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Peterson Energy Operating, Inc.

PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 B3D2907 - Saturated Paste pH/EC

##### Blank (B3D2907-BLK1)

Prepared: 04/29/2023 Analyzed: 04/30/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

##### Duplicate (B3D2907-DUP1)

Source: Y304637-01

Prepared: 04/29/2023 Analyzed: 04/30/2023

Specific Conductance (EC)	0.892	0.00500	mmhos/cm	1.01	12.5	25
pH	8.81		pH Units	8.77	0.455	25

Origins Laboratory, Inc.



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PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

**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 L679149 - 3550B**

MSD (L 84722-MSD-L679149)		Source: Y304640-07			Prepared: 05/01/2023 Analyzed: 05/02/2023					
Fluorene	0.104	0.00067	mg/Kg	0.167	0.000436	62	30-130	5.3	30	
1-Methylnaphthalene	0.0979	0.00201	"	0.167	<0.00109	58.6	30-130	2.9	30	
2-Methylnaphthalene	0.0962	0.00201	"	0.167	<0.00194	57.6	30-130	3.4	30	
Dibenz(a,h)anthracene	0.0905	0.00067	"	0.167	<0.000614	54.1	30-130	3.5	30	
Pyrene	0.104	0.00067	"	0.167	<0.000643	62.2	30-130	3.9	30	
Naphthalene	0.0963	0.00201	"	0.167	<0.00145	57.6	30-130	5.2	30	
Indeno(1,2,3-cd)pyrene	0.0797	0.00067	"	0.167	<0.000627	47.7	30-130	7.4	30	
Fluoranthene	0.107	0.00067	"	0.167	<0.000394	64	30-130	4.7	30	
Chrysene	0.106	0.00067	"	0.167	<0.000624	63.4	30-130	2.8	30	
Benzo(b)fluoranthene	0.0882	0.00067	"	0.167	<0.000585	52.8	30-130	5.2	30	
Benzo(a)pyrene	0.108	0.00067	"	0.167	<0.000468	64.6	30-130	5.7	30	
Benzo(a)anthracene	0.114	0.00067	"	0.167	<0.000493	68.2	30-130	3.5	30	
Anthracene	0.107	0.00067	"	0.167	<0.000334	64	30-130	5.7	30	
Benzo(k)fluoranthene	0.0795	0.00067	"	0.167	<0.000437	47.6	30-130	1.6	30	
Acenaphthene	0.101	0.00067	"	0.167	<0.000304	60.4	30-130	6.8	30	
Surrogate: 2-Fluorobiphenyl	57		"	0.333	198	57	33-115			
Surrogate: Nitrobenzene-d5	61.8		"	0.333	200	61.8	29-110			
Surrogate: 4-Terphenyl-d14	62.1		"	0.333	213	62.1	33-122			

MS (L 84722-MS-L679149)		Source: Y304640-07			Prepared: 05/01/2023 Analyzed: 05/02/2023					
Indeno(1,2,3-cd)pyrene	0.0859	0.00067	mg/Kg	0.166	<0.000627	51.7	30-130			
Anthracene	0.101	0.00067	"	0.166	<0.000334	60.8	30-130			
Benzo(a)anthracene	0.11	0.00067	"	0.166	<0.000493	66.2	30-130			
Benzo(a)pyrene	0.102	0.00067	"	0.166	<0.000468	61.4	30-130			
Benzo(b)fluoranthene	0.093	0.00067	"	0.166	<0.000585	56	30-130			
Chrysene	0.103	0.00067	"	0.166	<0.000624	62	30-130			
Fluorene	0.0986	0.00067	"	0.166	0.000436	59.1	30-130			

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PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## 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 L679149 - 3550B

MS (L 84722-MS-L679149)		Source: Y304640-07			Prepared: 05/01/2023 Analyzed: 05/02/2023					
Naphthalene	0.0914	0.00201	mg/Kg	0.166	<0.00145	55	30-130			
Acenaphthene	0.0943	0.00067	"	0.166	<0.000304	56.8	30-130			
Benzo(k)fluoranthene	0.0782	0.00067	"	0.166	<0.000437	47.1	30-130			
Pyrene	0.1	0.00067	"	0.166	<0.000643	60.2	30-130			
Fluoranthene	0.102	0.00067	"	0.166	<0.000394	61.4	30-130			
Dibenz(a,h)anthracene	0.0938	0.00067	"	0.166	<0.000614	56.5	30-130			
2-Methylnaphthalene	0.0929	0.00201	"	0.166	<0.00194	55.9	30-130			
1-Methylnaphthalene	0.0951	0.00201	"	0.166	<0.00109	57.2	30-130			
Surrogate: Nitrobenzene-d5	57.2		"	0.332	200	57.2	29-110			
Surrogate: 2-Fluorobiphenyl	53.9		"	0.332	198	53.9	33-115			
Surrogate: 4-Terphenyl-d14	61.1		"	0.332	213	61.1	33-122			

LCS (LCS-L679149)		Prepared: 05/01/2023 Analyzed: 05/02/2023								
1-Methylnaphthalene	0.106	0.00201	mg/Kg	0.167		63.4	30-130			
2-Methylnaphthalene	0.102	0.00201	"	0.167		61	30-130			
Acenaphthene	0.106	0.00067	"	0.167		63.4	30-130			
Benzo(b)fluoranthene	0.0946	0.00067	"	0.167		56.6	30-130			
Anthracene	0.116	0.00067	"	0.167		69.4	30-130			
Benzo(k)fluoranthene	0.0946	0.00067	"	0.167		56.6	30-130			
Chrysene	0.113	0.00067	"	0.167		67.6	30-130			
Dibenz(a,h)anthracene	0.104	0.00067	"	0.167		62.2	30-130			
Fluoranthene	0.117	0.00067	"	0.167		70	30-130			
Fluorene	0.109	0.00067	"	0.167		65.2	30-130			
Indeno(1,2,3-cd)pyrene	0.1	0.00067	"	0.167		59.8	30-130			
Naphthalene	0.105	0.00201	"	0.167		62.8	30-130			
Pyrene	0.116	0.00067	"	0.167		69.4	30-130			
Benzo(a)anthracene	0.118	0.00067	"	0.167		70.6	30-130			

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PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## 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 L679149 - 3550B

#### LCS (LCS-L679149)

Prepared: 05/01/2023 Analyzed: 05/02/2023

Benzo(a)pyrene	0.115	0.00067	mg/Kg	0.167		68.8	30-130			
Surrogate: 2-Fluorobiphenyl	64.5		"	0.333		64.5	33-115			
Surrogate: 4-Terphenyl-d14	72.9		"	0.333		72.9	33-122			
Surrogate: Nitrobenzene-d5	66.9		"	0.333		66.9	29-110			

#### LRB (LRB-L679149)

Prepared: 05/01/2023 Analyzed: 05/02/2023

Benzo(k)fluoranthene	ND	0.00067	mg/Kg				-			
2-Methylnaphthalene	ND	0.00201	"				-			
Acenaphthene	ND	0.00067	"				-			
Anthracene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Pyrene	ND	0.00067	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
1-Methylnaphthalene	ND	0.00201	"				-			
Chrysene	ND	0.00067	"				-			
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	0.00201	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Surrogate: 2-Fluorobiphenyl	63.9		"	0.333		63.9	33-115			
Surrogate: 4-Terphenyl-d14	73.5		"	0.333		73.5	33-122			
Surrogate: Nitrobenzene-d5	67.8		"	0.333		67.8	29-110			

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Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

**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 L679138 - 3550B**

MSD (L 84553-MSD-L679138)		Source: 84553			Prepared: 04/30/2023 Analyzed: 04/30/2023					
Chrysene	0.121	0.00067	mg/Kg	0.162	<0.000624	74.6	30-130	4.2	30	
Pyrene	0.12	0.00067	"	0.162	<0.000643	74	30-130	2.5	30	
Naphthalene	0.121	0.00201	"	0.162	<0.00145	74.6	30-130	4.2	30	
Indeno(1,2,3-cd)pyrene	0.103	0.00067	"	0.162	<0.000627	63.5	30-130	9.2	30	
Fluorene	0.118	0.00067	"	0.162	<0.000286	72.8	30-130	7	30	
Benzo(k)fluoranthene	0.0919	0.00067	"	0.162	<0.000437	56.7	30-130	4.8	30	
Benzo(b)fluoranthene	0.0928	0.00067	"	0.162	<0.000585	57.2	30-130	2.6	30	
Dibenz(a,h)anthracene	0.101	0.00067	"	0.162	<0.000614	62.3	30-130	5.7	30	
Benzo(a)pyrene	0.128	0.00067	"	0.162	<0.000468	79	30-130	3.9	30	
1-Methylnaphthalene	0.105	0.00201	"	0.162	<0.00109	64.8	30-130	5.3	30	
2-Methylnaphthalene	0.105	0.00201	"	0.162	<0.00194	64.8	30-130	5.2	30	
Acenaphthene	0.108	0.00067	"	0.162	<0.000304	66.6	30-130	3.7	30	
Anthracene	0.118	0.00067	"	0.162	<0.000334	72.8	30-130	1.7	30	
Benzo(a)anthracene	0.139	0.00067	"	0.162	<0.000493	85.8	30-130	1.4	30	
Fluoranthene	0.128	0.00067	"	0.162	<0.000394	79	30-130	3.9	30	
Surrogate: Nitrobenzene-d5	50.7		"	0.325	145	50.7	29-110			
Surrogate: 2-Fluorobiphenyl	50.1		"	0.325	139	50.1	33-115			
Surrogate: 4-Terphenyl-d14	60.6		"	0.325	174	60.6	33-122			

MS (L 84553-MS-L679138)		Source: 84553			Prepared: 04/30/2023 Analyzed: 04/30/2023					
Indeno(1,2,3-cd)pyrene	0.113	0.00067	mg/Kg	0.162	<0.000627	69.7	30-130			
Pyrene	0.117	0.00067	"	0.162	<0.000643	72.2	30-130			
1-Methylnaphthalene	0.0995	0.00201	"	0.162	<0.00109	61.4	30-130			
Naphthalene	0.116	0.00201	"	0.162	<0.00145	71.6	30-130			
Fluorene	0.11	0.00067	"	0.162	<0.000286	67.9	30-130			
Fluoranthene	0.123	0.00067	"	0.162	<0.000394	75.9	30-130			
Dibenz(a,h)anthracene	0.107	0.00067	"	0.162	<0.000614	66	30-130			

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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 L679138 - 3550B

MS (L 84553-MS-L679138)		Source: 84553			Prepared: 04/30/2023 Analyzed: 04/30/2023					
Benzo(k)fluoranthene	0.0965	0.00067	mg/Kg	0.162	<0.000437	59.5	30-130			
Benzo(b)fluoranthene	0.0953	0.00067	"	0.162	<0.000585	58.8	30-130			
Benzo(a)pyrene	0.123	0.00067	"	0.162	<0.000468	75.9	30-130			
Benzo(a)anthracene	0.137	0.00067	"	0.162	<0.000493	84.5	30-130			
Anthracene	0.116	0.00067	"	0.162	<0.000334	71.6	30-130			
Acenaphthene	0.104	0.00067	"	0.162	<0.000304	64.1	30-130			
Chrysene	0.116	0.00067	"	0.162	<0.000624	71.6	30-130			
2-Methylnaphthalene	0.0996	0.00201	"	0.162	<0.00194	61.4	30-130			
Surrogate: 4-Terphenyl-d14	56.6		"	0.325	174	56.6	33-122			
Surrogate: 2-Fluorobiphenyl	45.2		"	0.325	139	45.2	33-115			
Surrogate: Nitrobenzene-d5	48		"	0.325	145	48	29-110			

#### LCS (LCS-L679138)

Prepared: 04/30/2023 Analyzed: 04/30/2023

Pyrene	0.127	0.00067	mg/Kg	0.167		76	30-130
Benzo(k)fluoranthene	0.0971	0.00067	"	0.167		58.1	30-130
Dibenz(a,h)anthracene	0.115	0.00067	"	0.167		68.8	30-130
Fluoranthene	0.135	0.00067	"	0.167		80.8	30-130
Fluorene	0.118	0.00067	"	0.167		70.6	30-130
Indeno(1,2,3-cd)pyrene	0.125	0.00067	"	0.167		74.8	30-130
Benzo(b)fluoranthene	0.104	0.00067	"	0.167		62.2	30-130
Naphthalene	0.129	0.00201	"	0.167		77.2	30-130
Benzo(a)anthracene	0.149	0.00067	"	0.167		89.2	30-130
Anthracene	0.124	0.00067	"	0.167		74.2	30-130
Acenaphthene	0.111	0.00067	"	0.167		66.4	30-130
2-Methylnaphthalene	0.11	0.00201	"	0.167		65.8	30-130
1-Methylnaphthalene	0.109	0.00201	"	0.167		65.2	30-130
Chrysene	0.119	0.00067	"	0.167		71.2	30-130

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PO Box 2169

Loveland CO 80539

Ryan Dornbos

Project Number: [none]

Project: Linnebur Farms

## 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 L679138 - 3550B

#### LCS (LCS-L679138)

Prepared: 04/30/2023 Analyzed: 04/30/2023

Benzo(a)pyrene	0.134	0.00067	mg/Kg	0.167		80.2	30-130			
Surrogate: Nitrobenzene-d5	55.2		"	0.333		55.2	29-110			
Surrogate: 4-Terphenyl-d14	63.3		"	0.333		63.3	33-122			
Surrogate: 2-Fluorobiphenyl	54.6		"	0.333		54.6	33-115			

#### LRB (LRB-L679138)

Prepared: 04/30/2023 Analyzed: 04/30/2023

Benzo(k)fluoranthene	ND	0.00067	mg/Kg				-			
Chrysene	ND	0.00067	"				-			
Dibenz(a,h)anthracene	ND	0.00067	"				-			
Fluoranthene	ND	0.00067	"				-			
Fluorene	ND	0.00067	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
Naphthalene	ND	0.00201	"				-			
2-Methylnaphthalene	ND	0.00201	"				-			
Pyrene	ND	0.00067	"				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Anthracene	ND	0.00067	"				-			
1-Methylnaphthalene	ND	0.00201	"				-			
Acenaphthene	ND	0.00067	"				-			
Surrogate: Nitrobenzene-d5	57		"	0.333		57	29-110			
Surrogate: 4-Terphenyl-d14	63		"	0.333		63	33-122			
Surrogate: 2-Fluorobiphenyl	54.9		"	0.333		54.9	33-115			

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Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## 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
<b>Batch L679517 -</b>										
<b>DUP (L 84836-DUP)</b>	<b>Source: 84836</b>				Prepared: Analyzed: 05/02/2023					
Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500	-		0	20	
<b>MS (L 84836-MS)</b>	<b>Source: 84836</b>				Prepared: Analyzed: 05/02/2023					
Chromium, Hexavalent	15.6	2.54	mg/Kg	40.6	<1.24	38	75-125			*
<b>LCS (LCS)</b>					Prepared: Analyzed: 05/02/2023					
Chromium, Hexavalent	7.19	0.5	mg/Kg	8		90	75-125			
<b>LRB (LRB)</b>					Prepared: Analyzed: 05/02/2023					
Chromium, Hexavalent	ND	0.5	mg/Kg				-			

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PO Box 2169  
Loveland CO 80539

Ryan Dornbos  
Project Number: [none]  
Project: Linnebur Farms

## Notes and Definitions

U Sample is Non-Detect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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.

Calculated results may use J-flag data (instead of reported "ND") as part of calculation to provide a more accurate result.

Origins Laboratory, Inc.



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