



October 25, 2023

Eagle Environmental Consulting, LLC

Andrew Newberry

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - Huntsman G #13-10

Project Number - [none]

Attached are your analytical results for Noble - Huntsman G #13-10 received by Origins Laboratory, Inc. October 17, 2023. This project is associated with Origins project number Y310479-01.

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



Eagle Environmental Consulting, LLC  
8000 W 44th Ave  
Wheat Ridge CO 80033

Andrew Newberry  
Project Number: [none]  
Project: Noble - Huntsman G #13-10

### CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-01	Y310479-01	Water	October 17, 2023 11:00	10/17/2023 18:04
MW-02	Y310479-02	Water	October 17, 2023 11:20	10/17/2023 18:04
MW-03	Y310479-03	Water	October 17, 2023 11:40	10/17/2023 18:04
MW-04	Y310479-04	Water	October 17, 2023 12:00	10/17/2023 18:04
MW-05	Y310479-05	Water	October 17, 2023 12:20	10/17/2023 18:04

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



# ORIGINS LABORATORY, INC

Eagle Environmental Consulting, LLC  
8000 W 44th Ave  
Wheat Ridge CO 80033

Andrew Newberry  
Project Number: [none]  
Project: Noble - Huntsman G #13-10

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

**Sample Receipt Checklist**

Origins Work Order: B10479 Client: Eagle  
Client Project ID: Huntsman G #13-10

Checklist Completed by: JTB/EHS Shipped Via: TID  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)  
Date/time completed: 10/18/23 Airbill #: N/A

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

Cooler Number/Temperature: L 114 °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 <sup>(1)?</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact <sup>(1)?</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)?</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTS due within 48 hours present <sup>(1)?</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely <sup>(1)?</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)?</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)?</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded <sup>(1)?</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water — Is there headspace (> 1/4 inch bubble) present? If yes, contact client and note in narrative.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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 HNO3, HCL, H2SO4) / (pH > 10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>no</u>
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 10/19/23

Origins Laboratory, Inc.  
[Signature]

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Eagle Environmental Consulting, LLC  
 8000 W 44th Ave  
 Wheat Ridge CO 80033

Andrew Newberry  
 Project Number: [none]  
 Project: Noble - Huntsman G #13-10

MW-01

10/17/2023 11:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y310479-01 (Water)**

**BTEX+N+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND	2.00	ug/L	1	B3J1817	JSM	10/18/2023	10/18/2023	U
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	<b>2.88</b>	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130	"	"	"	"	"	"	"
Surrogate: Toluene-d8	101 %	70-130	"	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	94.8 %	70-130	"	"	"	"	"	"	"

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager

Eagle Environmental Consulting, LLC  
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 Wheat Ridge CO 80033

Andrew Newberry  
 Project Number: [none]  
 Project: Noble - Huntsman G #13-10

**MW-02**

**10/17/2023 11:20:00AM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y310479-02 (Water)**

**BTEX+N+TMBs by 8260D**

1,2,4-Trimethylbenzene	2.00	2.00	ug/L	1	B3J1817	JSM	10/18/2023	10/18/2023	
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	2.84	1.00	"	"	"	JSM	"	"	
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U
Surrogate: 1,2-Dichloroethane-d4	99.2 %		70-130		"	"	"	"	
Surrogate: Toluene-d8	101 %		70-130		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	98.6 %		70-130		"	"	"	"	

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Andrew Newberry  
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 Project: Noble - Huntsman G #13-10

MW-03

10/17/2023 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y310479-03 (Water)

**BTEX+N+TMBs by 8260D**

1,2,4-Trimethylbenzene	2.00	2.00	ug/L	1	B3J1817	JSM	10/18/2023	10/18/2023	
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	ND	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	99.6 %	70-130	"	"	"	"	"	"	"
Surrogate: Toluene-d8	105 %	70-130	"	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	94.8 %	70-130	"	"	"	"	"	"	"

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Andrew Newberry  
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 Project: Noble - Huntsman G #13-10

**MW-04**

**10/17/2023 12:00:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y310479-04 (Water)**

**BTEX+N+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND	2.00	ug/L	1	B3J1817	JSM	10/18/2023	10/18/2023	U
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	ND	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130	"	"	"	"	"	"	"
Surrogate: Toluene-d8	100 %	70-130	"	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	96.8 %	70-130	"	"	"	"	"	"	"

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Andrew Newberry  
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 Project: Noble - Huntsman G #13-10

MW-05

10/17/2023 12:20:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y310479-05 (Water)

**BTEX+N+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND	2.00	ug/L	1	B3J1817	JSM	10/18/2023	10/18/2023	U
1,3,5-Trimethylbenzene	ND	2.00	"	"	"	JSM	"	"	U
Benzene	ND	1.00	"	"	"	JSM	"	"	U
Ethylbenzene	<b>2.82</b>	1.00	"	"	"	JSM	"	"	U
Naphthalene	ND	2.00	"	"	"	JSM	"	"	U
Toluene	ND	1.00	"	"	"	JSM	"	"	U
Xylenes, total	ND	1.00	"	"	"	JSM	"	"	U

Surrogate: 1,2-Dichloroethane-d4	100 %	70-130	"	"	"	"	"	"	"
Surrogate: Toluene-d8	101 %	70-130	"	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	96.7 %	70-130	"	"	"	"	"	"	"

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Jordan A. Bynon, Project Manager



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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 B3J1817 - EPA 5030B (Water)**

**Blank (B3J1817-BLK1)**

Prepared: 10/18/2023 Analyzed: 10/18/2023

1,2,4-Trimethylbenzene	ND	2.00	ug/L							U
1,3,5-Trimethylbenzene	ND	2.00	"							U
Benzene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Naphthalene	ND	2.00	"							U
Toluene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		95.1	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 B3J1817 - EPA 5030B (Water)

LCS (B3J1817-BS1)

Prepared: 10/18/2023 Analyzed: 10/18/2023

1,2,4-Trimethylbenzene	59.2	2.00	ug/L	50.0	118	70-130				
1,3,5-Trimethylbenzene	57.5	2.00	"	50.0	115	70-130				
Benzene	54.9	1.00	"	50.0	110	70-130				
Ethylbenzene	58.6	1.00	"	50.0	117	70-130				
m,p-Xylene	114	2.00	"	100	114	70-130				
Naphthalene	53.5	2.00	"	50.0	107	70-130				
o-Xylene	56.4	1.00	"	50.0	113	70-130				
Toluene	59.4	1.00	"	50.0	119	70-130				
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5	104	70-130				
Surrogate: Toluene-d8	65		"	62.5	104	70-130				
Surrogate: 4-Bromofluorobenzene	67		"	62.5	107	70-130				

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Project Number: [none]  
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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 B3J1817 - EPA 5030B (Water)

Matrix Spike (B3J1817-MS1)

Source: Y310447-01

Prepared: 10/18/2023 Analyzed: 10/18/2023

1,2,4-Trimethylbenzene	64.7	2.00	ug/L	50.0	2.59	124	70-130			
1,3,5-Trimethylbenzene	63.2	2.00	"	50.0	ND	126	70-130			
Benzene	59.0	1.00	"	50.0	0.640	117	70-130			
Ethylbenzene	63.8	1.00	"	50.0	2.89	122	70-130			
m,p-Xylene	124	2.00	"	100	1.14	123	70-130			
Naphthalene	51.0	2.00	"	50.0	0.190	102	70-130			
o-Xylene	62.4	1.00	"	50.0	ND	125	70-130			
Toluene	64.5	1.00	"	50.0	0.290	128	70-130			
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		100	70-130			
Surrogate: Toluene-d8	67		"	62.5		107	70-130			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		105	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 B3J1817 - EPA 5030B (Water)

Matrix Spike Dup (B3J1817-MSD1)

Source: Y310447-01

Prepared: 10/18/2023 Analyzed: 10/18/2023

1,2,4-Trimethylbenzene	74.7	2.00	ug/L	50.0	2.59	144	70-130	14.3	20	QM-07
1,3,5-Trimethylbenzene	74.2	2.00	"	50.0	ND	148	70-130	15.9	20	QM-07
Benzene	72.2	1.00	"	50.0	0.640	143	70-130	20.2	20	QM-07
Ethylbenzene	77.4	1.00	"	50.0	2.89	149	70-130	19.2	20	QM-07
m,p-Xylene	150	2.00	"	100	1.14	149	70-130	19.3	20	QM-07
Naphthalene	61.5	2.00	"	50.0	0.190	123	70-130	18.7	20	
o-Xylene	73.3	1.00	"	50.0	ND	147	70-130	16.2	20	QM-07
Toluene	76.6	1.00	"	50.0	0.290	153	70-130	17.1	20	QM-07
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		101	70-130			
Surrogate: Toluene-d8	66		"	62.5		105	70-130			
Surrogate: 4-Bromofluorobenzene	67		"	62.5		107	70-130			

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Andrew Newberry  
Project Number: [none]  
Project: Noble - Huntsman G #13-10

## 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.
  - ND Analyte NOT DETECTED at or above the reporting limit
  - RPD Relative Percent Difference
- All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



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