



Eagle Environmental Consulting, LLC  
Alfred Garraffa  
8000 W 44th Ave

December 11, 2024

Wheat Ridge CO 80033

Project Name - Noble - Sandau #34-12F

Project Number - [none]

Attached are your analytical results for Noble - Sandau #34-12F received by Origins Laboratory November 07, 2024. This project is associated with Origins project number E4K0240-01.

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

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

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

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

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

Origins Laboratory  
303.433.1322  
projectmanager@originslab.com



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

Alfred Garraffa  
Project Number: [none]  
Project: Noble - Sandau #34-12F

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-01	E4K0240-01	Water	November 7, 2024 11:45	11/07/2024 17:12
MW-02	E4K0240-02	Water	November 7, 2024 12:00	11/07/2024 17:12
MW-03	E4K0240-03	Water	November 7, 2024 12:15	11/07/2024 17:12
MW-04	E4K0240-04	Water	November 7, 2024 12:30	11/07/2024 17:12
MW-05	E4K0240-05	Water	November 7, 2024 12:45	11/07/2024 17:12

Origins Laboratory



Jen Pellegrini, Project Manager

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 8000 W 44th Ave  
 Wheat Ridge CO 80033

Alfred Garraffa  
 Project Number: [none]  
 Project: Noble - Sandau #34-12F

**ORIGINS**  
 LABORATORY INC

ORIGINS WORK ORDER #

**EKO240**

Page 1 of 1

Client: Eagle Environmental Consulting  
 Address: 8000 W 44th Ave  
 Project Manager: Alfred Garraffa  
 Key: W=Water

Telephone Number: 303-433-0479  
 Project Name: Sandau #34-12F  
 Key: GW=Groundwater

Email Address: garraffa@eagle-environment.com  
 Project Number: None  
 Key: SW=Surface Water

Collected By: FM  
 Invoice/Billing Info: Mobile / Bill to Day  
 Key: WW=Waste Water

S=Soil | SO=Solid | O=Oil | A=Air | G=Gas | U=Impress | HCl=Hydrochloric | HNO3=Nitric | H2SO4=Sulfuric | NaOH=Sodium Hydroxide  
 I=Liquid

#	Sample ID	Date Sampled	Time Sampled	# of Containers	Matrix Preservative	Analysis				Comments
						BIEX	ANION	TRAS	TR600	
1	MW-01	11/1/24	11:45	3 (GW)	MLL	X	X	X	X	
2	MW-02		12:00	1						
3	MW-03		12:15	1						
4	MW-04		12:30	1						
5	MW-05	X	12:45	V	V	V	V	V	V	
6										
7										
8										
9										
10										

Requisitioned By: Alfred Garraffa Date: 11/1/24 Time: 17:12  
 Received By: FM Date: 11/1/24 Time: 17:12  
 Requisitioned By: Alfred Garraffa Date: 11/1/24 Time: 17:12  
 Received By: FM Date: 11/1/24 Time: 17:12

1725 Elk Place Denver, Co, 80211 | # 303.433.1322 | originslab.com | Temp Received - 5.1 Received On Ice?  Yes  No  
 For Lab Sample Receiving Only:  Standard  48 Hr  72 Hr  
 Turnaround Time:  SAME DAY  24 Hr

Origins Laboratory

*Jefe Pellegrini*

Jen Pellegrini, Project Manager

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8000 W 44th Ave  
Wheat Ridge CO 80033

Alfred Garraffa  
Project Number: [none]  
Project: Noble - Sandau #34-12F

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

**Sample Receipt Checklist**

Origins Work Order: E4K0240 Client: Eagle  
Client Project ID: Sandau

Checklist Completed by: JHP/DKN Shipped Via: HO  
Date/time completed: 11/7/12 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
Airbill #: N/A

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

Cooler Number/Temperature: 1 5-4 °C 1 °C 1 °C (Describe) °C

Thermometer ID: 7007

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> ?	/			
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)	/			NC
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) JHP

11/11/12  
Date/Time Reviewed

Origins Laboratory

*Jen Pellegrini*

Jen Pellegrini, Project Manager

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 Wheat Ridge CO 80033

Alfred Garraffa  
 Project Number: [none]  
 Project: Noble - Sandau #34-12F

**MW-01**

**11/7/2024 11:45:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory**  
**E4K0240-01 (Water)**

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

1,2,4-Trimethylbenzene	ND		2.00	ug/L	1	B4K1006	11/10/2024	11/10/2024	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	103 %		70-130			"	"	"	
Surrogate: Toluene-d8	101 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.8 %		70-130			"	"	"	

Origins Laboratory



Jen Pellegrini, Project Manager

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Alfred Garraffa  
 Project Number: [none]  
 Project: Noble - Sandau #34-12F

**MW-02**

**11/7/2024 12:00:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory**  
**E4K0240-02 (Water)**

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

1,2,4-Trimethylbenzene	ND		2.00	ug/L	1	B4K1006	11/10/2024	11/10/2024	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	106 %		70-130			"	"	"	
Surrogate: Toluene-d8	100 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.2 %		70-130			"	"	"	

Origins Laboratory



Jen Pellegrini, Project Manager

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 Project Number: [none]  
 Project: Noble - Sandau #34-12F

**MW-03**

**11/7/2024 12:15:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory**  
**E4K0240-03 (Water)**

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

1,2,4-Trimethylbenzene	ND		2.00	ug/L	1	B4K1006	11/10/2024	11/10/2024	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	105 %		70-130			"	"	"	
Surrogate: Toluene-d8	101 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.1 %		70-130			"	"	"	

Origins Laboratory



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**MW-04**

**11/7/2024 12:30:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory**  
**E4K0240-04 (Water)**

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

1,2,4-Trimethylbenzene	ND		2.00	ug/L	1	B4K1006	11/10/2024	11/10/2024	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	104 %		70-130			"	"	"	
Surrogate: Toluene-d8	101 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.2 %		70-130			"	"	"	

Origins Laboratory



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**MW-05**

**11/7/2024 12:45:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory**  
**E4K0240-05 (Water)**

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

1,2,4-Trimethylbenzene	ND		2.00	ug/L	1	B4K1006	11/10/2024	11/10/2024	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	105 %		70-130			"	"	"	
Surrogate: Toluene-d8	101 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.0 %		70-130			"	"	"	

Origins Laboratory



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**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B4K1006 - EPA 5030B (Water)</b>										
<b>Blank (B4K1006-BLK1)</b>										
					Prepared: 11/10/2024 Analyzed: 11/10/2024					
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	65		"	62.5		104	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.4	70-130			

Origins Laboratory



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**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4K1006 - EPA 5030B (Water)**

**LCS (B4K1006-BS1)**

Prepared: 11/10/2024 Analyzed: 11/10/2024

1,2,4-Trimethylbenzene	46.2	2.00	ug/L	50.0		92.3	70-130			
1,3,5-Trimethylbenzene	56.0	2.00	"	50.0		112	70-130			
Benzene	45.0	1.00	"	50.0		89.9	70-130			
Ethylbenzene	50.4	1.00	"	50.0		101	70-130			
m,p-Xylene	90.4	2.00	"	100		90.4	70-130			
Naphthalene	52.3	2.00	"	50.0		105	70-130			
o-Xylene	45.2	1.00	"	50.0		90.3	70-130			
Toluene	44.4	1.00	"	50.0		88.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	68		"	62.5		109	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory



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 Wheat Ridge CO 80033

Alfred Garraffa  
 Project Number: [none]  
 Project: Noble - Sandau #34-12F

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4K1006 - EPA 5030B (Water)

Matrix Spike (B4K1006-MS1)	Source: E4K0226-01			Prepared: 11/10/2024 Analyzed: 11/10/2024						
1,2,4-Trimethylbenzene	47.3	2.00	ug/L	50.0	ND	94.6	70-130			
1,3,5-Trimethylbenzene	57.6	2.00	"	50.0	ND	115	70-130			
Benzene	46.5	1.00	"	50.0	0.250	92.5	70-130			
Ethylbenzene	53.5	1.00	"	50.0	ND	107	70-130			
m,p-Xylene	96.6	2.00	"	100	ND	96.6	70-130			
Naphthalene	46.5	2.00	"	50.0	0.200	92.5	70-130			
o-Xylene	47.8	1.00	"	50.0	ND	95.7	70-130			
Toluene	46.7	1.00	"	50.0	ND	93.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.8	70-130			

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**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4K1006 - EPA 5030B (Water)**

Matrix Spike Dup (B4K1006-MSD1)	Source: E4K0226-01				Prepared: 11/10/2024 Analyzed: 11/10/2024					
1,2,4-Trimethylbenzene	48.4	2.00	ug/L	50.0	ND	96.8	70-130	2.32	20	
1,3,5-Trimethylbenzene	58.8	2.00	"	50.0	ND	118	70-130	2.03	20	
Benzene	47.8	1.00	"	50.0	0.250	95.2	70-130	2.86	20	
Ethylbenzene	54.0	1.00	"	50.0	ND	108	70-130	0.967	20	
m,p-Xylene	97.4	2.00	"	100	ND	97.4	70-130	0.824	20	
Naphthalene	53.4	2.00	"	50.0	0.200	106	70-130	13.8	20	
o-Xylene	48.8	1.00	"	50.0	ND	97.5	70-130	1.88	20	
Toluene	47.0	1.00	"	50.0	ND	93.9	70-130	0.662	20	
Surrogate: 1,2-Dichloroethane-d4	68		"	62.5		108	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.5	70-130			

Origins Laboratory



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8000 W 44th Ave  
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Alfred Garraffa  
Project Number: [none]  
Project: Noble - Sandau #34-12F

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**Notes and Definitions**

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

Origins Laboratory



Jen Pellegrini, Project Manager

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