



Eagle Environmental Consulting, LLC

Alfred Garraffa

8000 W 44th Ave

Wheat Ridge CO 80033

December 11, 2024

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 E4K0238-01.

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 | E4K0238-01 | Water | November 7, 2024 11:45 | 11/07/2024 17:12 |
| MW-02 | E4K0238-02 | Water | November 7, 2024 12:00 | 11/07/2024 17:12 |
| MW-03 | E4K0238-03 | Water | November 7, 2024 12:15 | 11/07/2024 17:12 |
| MW-04 | E4K0238-04 | Water | November 7, 2024 12:30 | 11/07/2024 17:12 |
| MW-05 | E4K0238-05 | Water | November 7, 2024 12:45 | 11/07/2024 17:12 |

Origins Laboratory



Jen Pellegrini, Project Manager

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 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: E4K0238 Client: Eagle
 Client Project ID: Sandau

Checklist Completed by: SHOIN Shipped Via: HO
 Date/time completed: 11/17/12 (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 / 15.4 °C / _____ °C / _____ °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 ⁽¹⁾ ? | /// | | | |
| Is there ice present (document if blue ice is used) | /// | | | |
| Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact) | | | /// | |
| Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact) | | | /// | |
| Were all samples received intact ⁽¹⁾ ? | /// | | | |
| Was adequate sample volume provided ⁽¹⁾ ? | /// | | | |
| Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ? | | / | | |
| Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ? | /// | | | |
| Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ? | /// | | | |
| Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ? | /// | | | |
| Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ? | /// | | | |
| For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative. | | / | | |
| Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)(pH < 2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH) | | | / | |
| Additional Comments (if any): | | | | |

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

Reviewed by (Project Manager) AG Date/Time Reviewed 11/17/12

Origins Laboratory



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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 |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Origins Laboratory
 E4K0238-01 (Water)**

Anions by IC 300.0

| | | | | | | | | | |
|----------|-----|--|------|------|-----|---------|------------|------------|--|
| Chloride | 266 | | 31.2 | mg/L | 125 | B4K1103 | 11/11/2024 | 11/12/2024 | |
| Sulfate | 570 | | 31.2 | " | " | " | " | " | |

Total Dissolved Solids by 2540C

| | | | | | | | | | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|
| Total Dissolved Solids | 1810 | | 5.00 | " | 1 | B4K1430 | 11/14/2024 | 11/14/2024 | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|

Origins Laboratory



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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 |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

Origins Laboratory
E4K0238-02 (Water)

Anions by IC 300.0

| | | | | | | | | | |
|----------|-----|--|------|------|-----|---------|------------|------------|--|
| Chloride | 327 | | 31.2 | mg/L | 125 | B4K1103 | 11/11/2024 | 11/12/2024 | |
| Sulfate | 608 | | 31.2 | " | " | " | " | " | |

Total Dissolved Solids by 2540C

| | | | | | | | | | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|
| Total Dissolved Solids | 2080 | | 5.00 | " | 1 | B4K1430 | 11/14/2024 | 11/14/2024 | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|

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Alfred Garraffa
 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 |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Origins Laboratory
 E4K0238-03 (Water)**

Anions by IC 300.0

| | | | | | | | | | |
|----------|-----|--|------|------|-----|---------|------------|------------|--|
| Chloride | 269 | | 31.2 | mg/L | 125 | B4K1103 | 11/11/2024 | 11/12/2024 | |
| Sulfate | 574 | | 31.2 | " | " | " | " | " | |

Total Dissolved Solids by 2540C

| | | | | | | | | | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|
| Total Dissolved Solids | 1850 | | 5.00 | " | 1 | B4K1430 | 11/14/2024 | 11/14/2024 | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|

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

MW-04

11/7/2024 12:30:00PM

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

Origins Laboratory
E4K0238-04 (Water)

Anions by IC 300.0

| | | | | | | | | | |
|----------|-----|--|------|------|-----|---------|------------|------------|--|
| Chloride | 269 | | 31.2 | mg/L | 125 | B4K1103 | 11/11/2024 | 11/12/2024 | |
| Sulfate | 573 | | 31.2 | " | " | " | " | " | |

Total Dissolved Solids by 2540C

| | | | | | | | | | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|
| Total Dissolved Solids | 1850 | | 5.00 | " | 1 | B4K1430 | 11/14/2024 | 11/14/2024 | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|

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

MW-05

11/7/2024 12:45:00PM

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

Origins Laboratory
E4K0238-05 (Water)

Anions by IC 300.0

| | | | | | | | | | |
|----------|-----|--|------|------|-----|---------|------------|------------|--|
| Chloride | 290 | | 31.2 | mg/L | 125 | B4K1103 | 11/11/2024 | 11/12/2024 | |
| Sulfate | 565 | | 31.2 | " | " | " | " | " | |

Total Dissolved Solids by 2540C

| | | | | | | | | | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|
| Total Dissolved Solids | 1910 | | 5.00 | " | 1 | B4K1430 | 11/14/2024 | 11/14/2024 | |
|------------------------|------|--|------|---|---|---------|------------|------------|--|

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Classical Chemistry Parameters - Quality Control
Origins Laboratory

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|--------|---------------------------|-------|-------------|---|------|-------------|--------|-----------|-------|
| Batch B4K1103 - Filter .45um non acidified | | | | | | | | | | |
| Blank (B4K1103-BLK1) | | | | | Prepared: 11/11/2024 Analyzed: 11/12/2024 | | | | | |
| Chloride | ND | 0.250 | mg/L | | | | | | | U |
| Sulfate | ND | 0.250 | " | | | | | | | U |
| LCS (B4K1103-BS1) | | | | | Prepared: 11/11/2024 Analyzed: 11/11/2024 | | | | | |
| Chloride | 3.90 | 0.250 | mg/L | 4.00 | | 97.6 | 90-110 | | | |
| Sulfate | 4.10 | 0.250 | " | 4.00 | | 103 | 90-110 | | | |
| Matrix Spike (B4K1103-MS1) | | Source: E4K0226-07 | | | Prepared: 11/11/2024 Analyzed: 11/11/2024 | | | | | |
| Chloride | 583 | | mg/L | 500 | 78.8 | 101 | 90-110 | | | |
| Sulfate | 496 | | " | 500 | 0.00 | 99.2 | 90-110 | | | |
| Matrix Spike Dup (B4K1103-MSD1) | | Source: E4K0226-07 | | | Prepared: 11/11/2024 Analyzed: 11/11/2024 | | | | | |
| Chloride | 583 | | mg/L | 500 | 78.8 | 101 | 90-110 | 0.0322 | | 5 |
| Sulfate | 494 | | " | 500 | 0.00 | 98.7 | 90-110 | 0.500 | | 5 |
| Batch B4K1430 - NO PREP | | | | | | | | | | |
| Blank (B4K1430-BLK1) | | | | | Prepared: 11/14/2024 Analyzed: 11/14/2024 | | | | | |
| Total Dissolved Solids | ND | 5.00 | mg/L | | | | | | | U |
| LCS (B4K1430-BS1) | | | | | Prepared: 11/14/2024 Analyzed: 11/14/2024 | | | | | |
| Total Dissolved Solids | 996 | 5.00 | mg/L | 1010 | | 98.6 | 90-110 | | | |
| Duplicate (B4K1430-DUP1) | | Source: E4K0238-01 | | | Prepared: 11/14/2024 Analyzed: 11/14/2024 | | | | | |
| Total Dissolved Solids | 1870 | 5.00 | mg/L | | 1810 | | | 3.27 | | 10 |

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Project: Noble - Sandau #34-12F

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.

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