



June 03, 2024

Eagle Environmental Consulting, LLC

Andrew Newberry

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - Pioneer USX #Y07-08D

Project Number - [none]

Attached are your analytical results for Noble - Pioneer USX #Y07-08D received by Origins Laboratory, Inc. May 10, 2024.
This project is associated with Origins project number Y405360-01.

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.

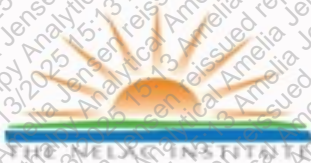
The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

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 - Pioneer USX #Y07-08D

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01R-S@3'	Y405360-01	Soil	May 10, 2024 13:05	05/10/2024 15:25
FL02R-W@4'	Y405360-02	Soil	May 10, 2024 13:35	05/10/2024 15:25
FL03@4'	Y405360-03	Soil	May 10, 2024 14:00	05/10/2024 15:25
Background-01@2'	Y405360-04	Soil	May 10, 2024 14:10	05/10/2024 15:25
Background-02@2'	Y405360-05	Soil	May 10, 2024 14:15	05/10/2024 15:25

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 - Pioneer USX #Y07-08D

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order:

Y405360

Client:

Eagle

Client Project ID:

Pioneer USX # Y07-08

Checklist Completed by:

SA/CHD

Shipped Via:

HD

Date/time completed:

5/10/24

Airbill #: N/A

Matrix(s) Received: (Check all that apply):

✓

Soil/Solid

Water

Other:

(Describe)

Cooler Number/Temperature:

1 / 3.3 °C

°C

°C

°C

Thermometer ID:

TC005

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 be taken in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

5/13/24

Date/Time Reviewed

Origins Laboratory, Inc.

J. Bynon

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Jordan A. Bynon, Project Manager



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8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL01R-S@3'

5/10/2024 1:05:00PM

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

Y405360-01 (Soil)

Boron (DTPA Sorbitol)

Boron	ND	0.100	mg/L	1	B4E1410	05/14/2024	05/15/2024	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B4E1401	05/14/2024	05/17/2024	Ua
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Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	Ua
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Surrogate: o-Terphenyl	94.2 %	50-150	"	"	"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B4E1203	05/12/2024	05/14/2024	Ua
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1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	Ua
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Benzene	ND	0.00200	"	"	"	"	"	Ua
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Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
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Naphthalene	ND	0.00380	"	"	"	"	"	Ua
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Toluene	ND	0.00200	"	"	"	"	"	Ua
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Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
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Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	Ua
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FL01R-S@3'

5/10/2024 1:05:00PM

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

Y405360-01 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	114 %	70-130	B4E12 03	05/12/2024	05/14/2024
Surrogate: Toluene-d8	98.0 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	96.0 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	0.813	0.499	meq/L	10	[CALC]	05/14/2024	05/15/2024
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B4E1425	05/14/2024	05/16/2024	Ua
2-Methylnaphthalene	ND	0.002	"	"	"	"	"	Ua
Acenaphthene	ND	0.020	"	"	"	"	"	Ua
Anthracene	ND	0.020	"	"	"	"	"	Ua
Benzo (a) anthracene	ND	0.005	"	"	"	"	"	Ua
Benzo (a) pyrene	ND	0.020	"	"	"	"	"	Ua
Benzo (b) fluoranthene	ND	0.020	"	"	"	"	"	Ua
Benzo (k) fluoranthene	ND	0.020	"	"	"	"	"	Ua
Chrysene	ND	0.020	"	"	"	"	"	Ua
Dibenz (a,h) anthracene	ND	0.020	"	"	"	"	"	Ua

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FL01R-S@3'

5/10/2024 1:05:00PM

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

Y405360-01 (Soil)

PAH by EPA 8270E

Fluoranthene	ND	0.020	mg/kg	1	B4E1425	05/14/2024	05/16/2024	Ua
Fluorene	ND	0.020	"	"	"	"	"	Ua
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	"	"	Ua
Pyrene	ND	0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	101 %	60-130	"	"	"	"	"
Surrogate: Anthracene-d10	99.8 %	60-130	"	"	"	"	"
Surrogate: Pyrene-d10	85.3 %	60-130	"	"	"	"	"
Surrogate: Benzo (a) pyrene-d12	95.1 %	60-130	"	"	"	"	"

pH in Soil by 9045D

pH	7.90	pH Units	1	B4E1420	05/14/2024	05/15/2024
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SAR by 20B Saturated Paste

SAR	0.116	0.0100	SAR	1	B4E1415	05/14/2024	05/15/2024
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.138	0.00500	mmhos/cm	1	B4E1420	05/14/2024	05/15/2024
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Table 915 metals by EPA 6020B

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Jordan A. Bynon, Project Manager



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Andrew Newberry

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FL01R-S@3'

5/10/2024 1:05:00PM

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

Y405360-01 (Soil)

Table 915 metals by EPA 6020B

Arsenic	1.21	0.270	mg/kg	10	B4E1049	05/13/2024	05/14/2024
Barium	48.2	9.31	"	"	"	"	"
Cadmium	0.149	0.0931	"	"	"	"	"
Copper	ND	9.31	"	"	"	"	"
Lead	5.38	0.931	"	"	"	"	"
Nickel	3.57	0.931	"	"	"	"	"
Selenium	ND	0.242	"	"	"	"	"
Silver	ND	0.0931	"	"	"	"	"
Zinc	ND	34.4	"	"	"	"	"

Total Metals by 7196A

Hexavalent Chromium	ND	0.110	0.275	mg/kg dry	1	2612252	05/15/2024	05/17/2024	U
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Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL02R-W@4'

5/10/2024 1:35:00PM

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

Y405360-02 (Soil)

Boron (DTPA Sorbitol)

Boron	0.845	0.101	mg/L	1	B4E1410	05/14/2024	05/15/2024
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B4E1401	05/14/2024	05/17/2024	Ua
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	98.5 %	50-150	"	"	"	"	"
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B4E1203	05/12/2024	05/14/2024	Ua
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Benzene	ND	0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Naphthalene	ND	0.00380	"	"	"	"	"	Ua
Toluene	ND	0.00200	"	"	"	"	"	Ua
Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	Ua

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Jordan A. Bynon, Project Manager



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Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL02R-W@4'

5/10/2024 1:35:00PM

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

Y405360-02 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	116 %	70-130	B4E12 03	05/12/2024	05/14/2024
Surrogate: Toluene-d8	98.8 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	23.4	0.499	meq/L	10	[CALC]	05/14/2024	05/15/2024
Magnesium	14.3	0.823	"	"	"	"	"
Sodium	43.5	0.435	"	"	"	"	"

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B4E1425	05/14/2024	05/16/2024	Ua
2-Methylnaphthalene	ND	0.002	"	"	"	"	"	Ua
Acenaphthene	ND	0.020	"	"	"	"	"	Ua
Anthracene	ND	0.020	"	"	"	"	"	Ua
Benzo (a) anthracene	ND	0.005	"	"	"	"	"	Ua
Benzo (a) pyrene	ND	0.020	"	"	"	"	"	Ua
Benzo (b) fluoranthene	ND	0.020	"	"	"	"	"	Ua
Benzo (k) fluoranthene	ND	0.020	"	"	"	"	"	Ua
Chrysene	ND	0.020	"	"	"	"	"	Ua
Dibenz (a,h) anthracene	ND	0.020	"	"	"	"	"	Ua

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Jordan A. Bynon, Project Manager



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8000 W 44th Ave

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Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL02R-W@4'

5/10/2024 1:35:00PM

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

Y405360-02 (Soil)

PAH by EPA 8270E

Fluoranthene	ND	0.020	mg/kg	1	B4E1425	05/14/2024	05/16/2024	Ua
Fluorene	ND	0.020	"	"	"	"	"	Ua
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	"	"	Ua
Pyrene	ND	0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	101 %	60-130	"	"	"	"	"	"
Surrogate: Anthracene-d10	100 %	60-130	"	"	"	"	"	"
Surrogate: Pyrene-d10	85.2 %	60-130	"	"	"	"	"	"
Surrogate: Benzo (a) pyrene-d12	99.3 %	60-130	"	"	"	"	"	"

pH in Soil by 9045D

pH	8.14	pH Units	1	B4E1420	05/14/2024	05/15/2024
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SAR by 20B Saturated Paste

SAR	10.0	0.0100	SAR	1	B4E1415	05/14/2024	05/15/2024
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	4.66	0.00500	mmhos/cm	1	B4E1420	05/14/2024	05/15/2024
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Table 915 metals by EPA 6020B

Origins Laboratory, Inc.

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Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL02R-W@4'

5/10/2024 1:35:00PM

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

Y405360-02 (Soil)

Table 915 metals by EPA 6020B

Arsenic	2.26	0.266	mg/kg	10	B4E1049	05/13/2024	05/14/2024
Barium	156	9.16	"	"	"	"	"
Cadmium	ND	0.0916	"	"	"	"	"
Copper	ND	9.16	"	"	"	"	"
Lead	7.18	0.916	"	"	"	"	"
Nickel	7.55	0.916	"	"	"	"	"
Selenium	ND	0.238	"	"	"	"	"
Silver	ND	0.0916	"	"	"	"	"
Zinc	ND	33.9	"	"	"	"	"

Total Metals by 7196A

Hexavalent Chromium	ND	0.182	0.454	mg/kg dry	1	2612252	05/15/2024	05/17/2024	U
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Jordan A. Bynon, Project Manager



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8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL03@4'

5/10/2024 2:00:00PM

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

Y405360-03 (Soil)

Boron (DTPA Sorbitol)

Boron	0.893	0.0998	mg/L	1	B4E1410	05/14/2024	05/15/2024
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B4E1401	05/14/2024	05/17/2024	Ua
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	97.4 %	50-150	"	"	"	"	"
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B4E1203	05/12/2024	05/14/2024	Ua
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Benzene	ND	0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Naphthalene	ND	0.00380	"	"	"	"	"	Ua
Toluene	ND	0.00200	"	"	"	"	"	Ua
Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	Ua

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Jordan A. Bynon, Project Manager



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8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL03@4'

5/10/2024 2:00:00PM

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

Y405360-03 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	116 %	70-130	B4E12 03	05/12/2024	05/14/2024
Surrogate: Toluene-d8	95.1 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	105 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	15.8	0.499	meq/L	10	[CALC]	05/14/2024	05/15/2024
Magnesium	9.96	0.823	"	"	"	"	"
Sodium	28.3	0.435	"	"	"	"	"

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B4E1425	05/14/2024	05/16/2024	Ua
2-Methylnaphthalene	ND	0.002	"	"	"	"	"	Ua
Acenaphthene	ND	0.020	"	"	"	"	"	Ua
Anthracene	ND	0.020	"	"	"	"	"	Ua
Benzo (a) anthracene	ND	0.005	"	"	"	"	"	Ua
Benzo (a) pyrene	ND	0.020	"	"	"	"	"	Ua
Benzo (b) fluoranthene	ND	0.020	"	"	"	"	"	Ua
Benzo (k) fluoranthene	ND	0.020	"	"	"	"	"	Ua
Chrysene	ND	0.020	"	"	"	"	"	Ua
Dibenz (a,h) anthracene	ND	0.020	"	"	"	"	"	Ua

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL03@4'

5/10/2024 2:00:00PM

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

Y405360-03 (Soil)

PAH by EPA 8270E

Fluoranthene	ND	0.020	mg/kg	1	B4E1425	05/14/2024	05/16/2024	Ua
Fluorene	ND	0.020	"	"	"	"	"	Ua
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	"	"	Ua
Pyrene	ND	0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	103 %	60-130	"	"	"	"	"	"
Surrogate: Anthracene-d10	99.5 %	60-130	"	"	"	"	"	"
Surrogate: Pyrene-d10	85.6 %	60-130	"	"	"	"	"	"
Surrogate: Benzo (a) pyrene-d12	92.9 %	60-130	"	"	"	"	"	"

pH in Soil by 9045D

pH	8.10	pH Units	1	B4E1420	05/14/2024	05/15/2024
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SAR by 20B Saturated Paste

SAR	7.90	0.0100	SAR	1	B4E1415	05/14/2024	05/15/2024
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	3.92	0.00500	mmhos/cm	1	B4E1420	05/14/2024	05/15/2024
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Table 915 metals by EPA 6020B

Origins Laboratory, Inc.

J. Bynon

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

FL03@4'

5/10/2024 2:00:00PM

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

Y405360-03 (Soil)

Table 915 metals by EPA 6020B

Arsenic	3.71	0.257	mg/kg	10	B4E1049	05/13/2024	05/14/2024
Barium	121	8.87	"	"	"	"	"
Cadmium	0.192	0.0887	"	"	"	"	"
Copper	ND	8.87	"	"	"	"	"
Lead	9.38	0.887	"	"	"	"	"
Nickel	11.2	0.887	"	"	"	"	"
Selenium	0.379	0.230	"	"	"	"	"
Silver	ND	0.0887	"	"	"	"	"
Zinc	40.4	32.8	"	"	"	"	"

Total Metals by 7196A

Hexavalent Chromium	ND	0.147	0.368	mg/kg dry	1	2612252	05/15/2024	05/17/2024	U
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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

Background-01@2'

5/10/2024 2:10:00PM

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

Y405360-04 (Soil)

Boron (DTPA Sorbitol)

Boron	0.324	0.101	mg/L	1	B4E1410	05/14/2024	05/15/2024
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Metals by Saturated Paste by EPA 6010

Calcium	2.49	0.499	meq/L	10	[CALC]	05/14/2024	05/15/2024
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.46		pH Units	1	B4E1420	05/14/2024	05/15/2024
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SAR by 20B Saturated Paste

SAR	0.181	0.0100	SAR	1	B4E1415	05/14/2024	05/15/2024
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.281	0.00500	mmhos/cm	1	B4E1420	05/14/2024	05/15/2024
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Table 915 metals by EPA 6020B

Arsenic	3.58	0.252	mg/kg	10	B4E1049	05/13/2024	05/14/2024
Barium	94.9	8.70	"	"	"	"	"
Cadmium	0.184	0.0870	"	"	"	"	"
Copper	ND	8.70	"	"	"	"	"

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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

Background-01@2'
5/10/2024 2:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y405360-04 (Soil)

Table 915 metals by EPA 6020B

Lead	7.72	0.870	mg/kg	10	B4E1049	05/13/2024	05/14/2024
Nickel	8.87	0.870	"	"	"	"	"
Selenium	0.428	0.226	"	"	"	"	"
Silver	ND	0.0870	"	"	"	"	"
Zinc	32.4	32.2	"	"	"	"	"

Total Metals by 7196A

Hexavalent Chromium	ND	0.0979	0.245	mg/kg dry	1	2612252	05/15/2024	05/17/2024	U
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Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

Background-02@2'
5/10/2024 2:15:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y405360-05 (Soil)

Boron (DTPA Sorbitol)

Boron	0.334	0.101	mg/L	1	B4E1410	05/14/2024	05/15/2024
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Metals by Saturated Paste by EPA 6010

Calcium	2.06	0.499	meq/L	10	[CALC]	05/14/2024	05/15/2024
Magnesium	0.869	0.823	"	"	"	"	"
Sodium	2.83	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.39		pH Units	1	B4E1420	05/14/2024	05/15/2024
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SAR by 20B Saturated Paste

SAR	2.34	0.0100	SAR	1	B4E1415	05/14/2024	05/15/2024
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.597	0.00500	mmhos/cm	1	B4E1420	05/14/2024	05/15/2024
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Table 915 metals by EPA 6020B

Arsenic	2.48	0.273	mg/kg	10	B4E1049	05/13/2024	05/14/2024
Barium	83.0	9.43	"	"	"	"	"
Cadmium	0.197	0.0943	"	"	"	"	"
Copper	ND	9.43	"	"	"	"	"

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

Background-02@2'

5/10/2024 2:15:00PM

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

Y405360-05 (Soil)

Table 915 metals by EPA 6020B

Lead	5.39	0.943	mg/kg	10	B4E1049	05/13/2024	05/14/2024
Nickel	6.43	0.943	"	"	"	"	"
Selenium	1.00	0.245	"	"	"	"	"
Silver	ND	0.0943	"	"	"	"	"
Zinc	ND	34.9	"	"	"	"	"

Total Metals by 7196A

Hexavalent Chromium	ND	0.0999	0.250	mg/kg dry	1	2612252	05/15/2024	05/17/2024	U
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Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

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 B4E1203 - EPA 5030 (soil)

Blank (B4E1203-BLK1)

Prepared: 05/12/2024 Analyzed: 05/13/2024

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							Ua
1,3,5-Trimethylbenzene	ND	0.00200	"							Ua
Benzene	ND	0.00200	"							Ua
Ethylbenzene	ND	0.00200	"							Ua
Naphthalene	ND	0.00380	"							Ua
Toluene	ND	0.00200	"							Ua
Xylenes, total	ND	0.00200	"							Ua
Gasoline Range Hydrocarbons	ND	0.200	"							Ua
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		98.7	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.2	70-130			
Surrogate: 4-Bromofluorobenzene	0.14		"	0.125		112	70-130			

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

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 B4E1203 - EPA 5030 (soil)

LCS (B4E1203-BS1)

Prepared: 05/12/2024 Analyzed: 05/13/2024

1,2,4-Trimethylbenzene	0.104	0.00200	mg/kg	0.100		104	70-130			
1,3,5-Trimethylbenzene	0.107	0.00200	"	0.100		107	70-130			
Benzene	0.101	0.00200	"	0.100		101	70-130			
Ethylbenzene	0.103	0.00200	"	0.100		103	70-130			
Naphthalene	0.110	0.00380	"	0.100		110	70-130			
Toluene	0.102	0.00200	"	0.100		102	70-130			
o-Xylene	0.101	0.00200	"	0.100		101	70-130			
m,p-Xylene	0.207	0.00400	"	0.200		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		96.7	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		97.7	70-130			

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

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 B4E1203 - EPA 5030 (soil)

Matrix Spike (B4E1203-MS1)

Source: Y405285-01

Prepared: 05/12/2024 Analyzed: 05/13/2024

1,2,4-Trimethylbenzene	0.101	0.00200	mg/kg	0.100	ND	101	70-130
1,3,5-Trimethylbenzene	0.103	0.00200	"	0.100	ND	103	70-130
Benzene	0.103	0.00200	"	0.100	ND	103	70-130
Ethylbenzene	0.0997	0.00200	"	0.100	ND	99.7	70-130
Naphthalene	0.124	0.00380	"	0.100	ND	124	70-130
Toluene	0.102	0.00200	"	0.100	ND	102	70-130
o-Xylene	0.0982	0.00200	"	0.100	ND	98.2	70-130
m,p-Xylene	0.200	0.00400	"	0.200	ND	99.8	70-130
Surrogate: 1,2-Dichloroethane-d4	0.13	"	"	0.125		102	70-130
Surrogate: Toluene-d8	0.12	"	"	0.125		95.4	70-130
Surrogate: 4-Bromofluorobenzene	0.12	"	"	0.125		95.6	70-130

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

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 B4E1203 - EPA 5030 (soil)

Matrix Spike Dup (B4E1203-MSD1)

Source: Y405285-01

Prepared: 05/12/2024 Analyzed: 05/13/2024

1,2,4-Trimethylbenzene	0.0971	0.00200	mg/kg	0.100	ND	97.1	70-130	4.33	20	
1,3,5-Trimethylbenzene	0.0971	0.00200	"	0.100	ND	97.1	70-130	5.76	20	
Benzene	0.0987	0.00200	"	0.100	ND	98.7	70-130	4.11	20	
Ethylbenzene	0.0957	0.00200	"	0.100	ND	95.7	70-130	4.09	20	
Naphthalene	0.116	0.00380	"	0.100	ND	116	70-130	7.18	20	
Toluene	0.0963	0.00200	"	0.100	ND	96.3	70-130	5.57	20	
o-Xylene	0.0946	0.00200	"	0.100	ND	94.6	70-130	3.80	20	
m,p-Xylene	0.194	0.00400	"	0.200	ND	96.9	70-130	2.97	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		104	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		95.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		99.4	70-130			

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

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 B4E1401 - EPA 3550B

Blank (B4E1401-BLK1)

Prepared: 05/14/2024 Analyzed: 05/17/2024

Diesel (C10-C28)	ND	25.0	mg/kg							Ua
Residual Range Organics (C28-C40)	ND	100	"							Ua
Surrogate: o-Terphenyl	24		"	24.9		97.0	50-150			

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

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 B4E1401 - EPA 3550B										
LCS (B4E1401-BS1)					Prepared: 05/14/2024 Analyzed: 05/17/2024					
Diesel (C10-C28)	901	50.0	mg/kg	1000		90.1	70-130			
Residual Range Organics (C28-C40)	948	200	"	1000		94.8	70-130			
Surrogate: o-Terphenyl	58		"	49.8		116	50-150			

Origins Laboratory, Inc.

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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

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 B4E1401 - EPA 3550B										
Matrix Spike (B4E1401-MS1)			Source: Y405341-01			Prepared: 05/14/2024 Analyzed: 05/17/2024				
Diesel (C10-C28)	871	50.0	mg/kg	1000	ND	87.1	70-130			
Residual Range Organics (C28-C40)	921	200	"	1000	ND	92.1	70-130			
Surrogate: o-Terphenyl	52		"	49.8		104	50-150			

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

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 B4E1401 - EPA 3550B

Matrix Spike Dup (B4E1401-MSD1)

Source: Y405341-01

Prepared: 05/14/2024 Analyzed: 05/17/2024

Diesel (C10-C28)	901	50.0	mg/kg	1000	ND	90.1	70-130	3.40	35	
Residual Range Organics (C28-C40)	958	200	"	1000	ND	95.8	70-130	3.98	35	
Surrogate: o-Terphenyl	52		"	49.8		105	50-150			

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Jordan A. Bynon, Project Manager



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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

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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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 B4E1049 - EPA 3050B

Blank (B4E1049-BLK1)

Prepared: 05/13/2024 Analyzed: 05/14/2024

Arsenic	ND	0.290	mg/kg
Barium	ND	10.0	"
Cadmium	ND	0.100	"
Copper	ND	10.0	"
Lead	ND	1.00	"
Nickel	ND	1.00	"
Selenium	ND	0.260	"
Silver	ND	0.100	"
Zinc	ND	37.0	"

LCS (B4E1049-BS1)

Prepared: 05/13/2024 Analyzed: 05/14/2024

Arsenic	5.57	0.290	mg/kg	5.00	111	80-120
Barium	574	10.0	"	500	115	80-120
Cadmium	5.86	0.100	"	5.00	117	80-120
Copper	57.6	10.0	"	50.0	115	80-120
Lead	5.73	1.00	"	5.00	115	80-120
Nickel	5.84	1.00	"	5.00	117	80-120
Selenium	11.0	0.260	"	9.50	116	80-120
Silver	5.98	0.100	"	5.00	120	80-120
Zinc	57.0	37.0	"	50.0	114	80-120

Matrix Spike (B4E1049-MS1)

Source: Y405357-01

Prepared: 05/13/2024 Analyzed: 05/14/2024

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

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 B4E1049 - EPA 3050B

Matrix Spike (B4E1049-MS1)

Source: Y405357-01

Prepared: 05/13/2024 Analyzed: 05/14/2024

Arsenic	5.92	0.247	mg/kg	4.25	1.15	112	75-125			
Barium	532	8.50	"	425	39.6	116	75-125			
Cadmium	5.10	0.0850	"	4.25	0.0696	118	75-125			
Copper	52.9	8.50	"	42.5	0.684	123	75-125			
Lead	9.74	0.850	"	4.25	4.52	123	75-125			
Nickel	8.48	0.850	"	4.25	3.27	122	75-125			
Selenium	9.70	0.221	"	8.08	0.0400	120	75-125			
Silver	5.06	0.0850	"	4.25	0.0217	118	75-125			
Zinc	69.3	31.5	"	42.5	21.4	113	75-125			

Matrix Spike Dup (B4E1049-MSD1)

Source: Y405357-01

Prepared: 05/13/2024 Analyzed: 05/14/2024

Arsenic	6.43	0.277	mg/kg	4.77	1.15	111	75-125	8.33	20	
Barium	582	9.53	"	477	39.6	114	75-125	8.88	20	
Cadmium	5.59	0.0953	"	4.77	0.0696	116	75-125	9.28	20	
Copper	57.1	9.53	"	47.7	0.684	118	75-125	7.78	20	
Lead	10.4	0.953	"	4.77	4.52	124	75-125	6.69	20	
Nickel	8.69	0.953	"	4.77	3.27	114	75-125	2.52	20	
Selenium	10.8	0.248	"	9.06	0.0400	118	75-125	10.5	20	
Silver	5.58	0.0953	"	4.77	0.0217	117	75-125	9.76	20	
Zinc	74.3	35.3	"	47.7	21.4	111	75-125	6.98	20	

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

EPA 8270E (SW846) - Semivolatile Organic Compounds - 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 B4E1425 - EPA 3580

Blank (B4E1425-BLK1)

Prepared: 05/14/2024 Analyzed: 05/16/2024

1-Methylnaphthalene	ND	0.002	mg/kg							Ua
2-Methylnaphthalene	ND	0.002	"							Ua
Acenaphthene	ND	0.020	"							Ua
Anthracene	ND	0.020	"							Ua
Benzo (a) anthracene	ND	0.005	"							Ua
Benzo (a) pyrene	ND	0.020	"							Ua
Benzo (b) fluoranthene	ND	0.020	"							Ua
Benzo (g,h,i) perylene	ND	0.020	"							Ua
Benzo (k) fluoranthene	ND	0.020	"							Ua
Chrysene	ND	0.020	"							Ua
Dibenz (a,h) anthracene	ND	0.020	"							Ua
Fluoranthene	ND	0.020	"							Ua
Fluorene	ND	0.020	"							Ua
Indeno (1,2,3-cd) pyrene	ND	0.020	"							Ua
Naphthalene	ND	0.002	"							Ua
Phenanthrene	ND	0.020	"							Ua
Pyrene	ND	0.020	"							Ua
Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130			
Surrogate: Anthracene-d10	200		"	200		100	60-130			
Surrogate: Pyrene-d10	170		"	200		87.1	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		97.5	60-130			

LCS (B4E1425-BS1)

Prepared: 05/14/2024 Analyzed: 05/16/2024

1-Methylnaphthalene	0.180	0.002	mg/kg	0.200		90.1	70-130			
2-Methylnaphthalene	0.181	0.002	"	0.200		90.7	70-130			
Acenaphthene	0.178	0.020	"	0.200		88.9	70-130			
Anthracene	0.180	0.020	"	0.200		90.0	70-130			

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



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Wheat Ridge CO 80033

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

EPA 8270E (SW846) - Semivolatile Organic Compounds - 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 B4E1425 - EPA 3580

LCS (B4E1425-BS1)

Prepared: 05/14/2024 Analyzed: 05/16/2024

Benzo (a) anthracene	0.180	0.005	mg/kg	0.200		90.1	70-130
Benzo (a) pyrene	0.180	0.020	"	0.200		90.0	70-130
Benzo (b) fluoranthene	0.186	0.020	"	0.200		92.9	70-130
Benzo (g,h,i) perylene	0.174	0.020	"	0.200		87.0	70-130
Benzo (k) fluoranthene	0.184	0.020	"	0.200		91.9	70-130
Chrysene	0.191	0.020	"	0.200		95.6	70-130
Dibenz (a,h) anthracene	0.194	0.020	"	0.200		96.9	70-130
Fluoranthene	0.187	0.020	"	0.200		93.7	70-130
Fluorene	0.180	0.020	"	0.200		90.2	70-130
Indeno (1,2,3-cd) pyrene	0.174	0.020	"	0.200		87.1	70-130
Naphthalene	0.179	0.002	"	0.200		89.6	70-130
Phenanthrene	0.180	0.020	"	0.200		90.0	70-130
Pyrene	0.161	0.020	"	0.200		80.4	70-130
Surrogate: Fluorene-d10	200		ug/kg	200		102	60-130
Surrogate: Anthracene-d10	200		"	200		101	60-130
Surrogate: Pyrene-d10	180		"	200		90.3	60-130
Surrogate: Benzo (a) pyrene-d12	200		"	200		99.2	60-130

Matrix Spike (B4E1425-MS1)

Source: Y405336-01

Prepared: 05/14/2024 Analyzed: 05/17/2024

1-Methylnaphthalene	0.193	0.002	mg/kg	0.200	ND	96.6	70-130
2-Methylnaphthalene	0.193	0.002	"	0.200	ND	96.5	70-130
Acenaphthene	0.194	0.020	"	0.200	ND	96.9	70-130
Anthracene	0.193	0.020	"	0.200	ND	96.6	70-130
Benzo (a) anthracene	0.201	0.005	"	0.200	ND	100	70-130
Benzo (a) pyrene	0.188	0.020	"	0.200	ND	94.1	70-130
Benzo (b) fluoranthene	0.199	0.020	"	0.200	0.0003	99.4	70-130
Benzo (g,h,i) perylene	0.190	0.020	"	0.200	ND	95.2	70-130

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

EPA 8270E (SW846) - Semivolatile Organic Compounds - 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 B4E1425 - EPA 3580

Matrix Spike (B4E1425-MS1)

Source: Y405336-01

Prepared: 05/14/2024 Analyzed: 05/17/2024

Benzo (k) fluoranthene	0.183	0.020	mg/kg	0.200	0.0005	91.2	70-130			
Chrysene	0.204	0.020	"	0.200	ND	102	70-130			
Dibenz (a,h) anthracene	0.216	0.020	"	0.200	ND	108	70-130			
Fluoranthene	0.203	0.020	"	0.200	ND	101	70-130			
Fluorene	0.200	0.020	"	0.200	ND	100	70-130			
Indeno (1,2,3-cd) pyrene	0.187	0.020	"	0.200	ND	93.5	70-130			
Naphthalene	0.191	0.002	"	0.200	ND	95.7	70-130			
Phenanthrene	0.192	0.020	"	0.200	ND	96.0	70-130			
Pyrene	0.172	0.020	"	0.200	ND	85.9	70-130			

Surrogate: Fluorene-d10	200		ug/kg	200		102	60-130			
Surrogate: Anthracene-d10	200		"	200		99.5	60-130			
Surrogate: Pyrene-d10	180		"	200		87.6	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		94.8	60-130			

Matrix Spike Dup (B4E1425-MSD1)

Source: Y405336-01

Prepared: 05/14/2024 Analyzed: 05/16/2024

1-Methylnaphthalene	0.193	0.002	mg/kg	0.200	ND	96.5	70-130	0.136	20	
2-Methylnaphthalene	0.192	0.002	"	0.200	ND	96.2	70-130	0.355	20	
Acenaphthene	0.193	0.020	"	0.200	ND	96.6	70-130	0.317	20	
Anthracene	0.194	0.020	"	0.200	ND	96.9	70-130	0.389	20	
Benzo (a) anthracene	0.192	0.005	"	0.200	ND	95.8	70-130	4.70	20	
Benzo (a) pyrene	0.190	0.020	"	0.200	ND	95.1	70-130	1.07	20	
Benzo (b) fluoranthene	0.200	0.020	"	0.200	0.0003	100	70-130	0.708	20	
Benzo (g,h,i) perylene	0.189	0.020	"	0.200	ND	94.6	70-130	0.693	20	
Benzo (k) fluoranthene	0.186	0.020	"	0.200	0.0005	92.8	70-130	1.74	20	
Chrysene	0.202	0.020	"	0.200	ND	101	70-130	0.831	20	
Dibenz (a,h) anthracene	0.215	0.020	"	0.200	ND	108	70-130	0.269	20	
Fluoranthene	0.206	0.020	"	0.200	ND	103	70-130	1.39	20	

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

EPA 8270E (SW846) - Semivolatile Organic Compounds - 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 B4E1425 - EPA 3580

Matrix Spike Dup (B4E1425-MSD1)

Source: Y405336-01

Prepared: 05/14/2024 Analyzed: 05/16/2024

Fluorene	0.195	0.020	mg/kg	0.200	ND	97.5	70-130	2.59	20	
Indeno (1,2,3-cd) pyrene	0.196	0.020	"	0.200	ND	97.8	70-130	4.46	20	
Naphthalene	0.191	0.002	"	0.200	ND	95.4	70-130	0.365	20	
Phenanthrene	0.195	0.020	"	0.200	ND	97.4	70-130	1.51	20	
Pyrene	0.171	0.020	"	0.200	ND	85.6	70-130	0.344	20	
Surrogate: Fluorene-d10	200		ug/kg	200		100	60-130			
Surrogate: Anthracene-d10	200		"	200		100	60-130			
Surrogate: Pyrene-d10	180		"	200		87.6	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		95.6	60-130			

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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

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 B4E1410 - DTPA Sorbitol Preparation

Blank (B4E1410-BLK1)

Prepared: 05/14/2024 Analyzed: 05/15/2024

Boron ND 0.100 mg/L

Duplicate (B4E1410-DUP1)

Source: Y405360-01

Prepared: 05/14/2024 Analyzed: 05/15/2024

Boron 0.0575 0.0992 mg/L 0.0553 3.95 50

Batch B4E1415 - Saturated Paste Metals

Blank (B4E1415-BLK1)

Prepared: 05/14/2024 Analyzed: 05/15/2024

Calcium PPM ND 10.0 mg/L

SAR ND 0.0100 SAR

Magnesium PPM ND 10.0 mg/L

Sodium PPM ND 10.0 "

Duplicate (B4E1415-DUP1)

Source: Y405360-01

Prepared: 05/14/2024 Analyzed: 05/15/2024

SAR ND 0.0100 SAR 0.116 200

Calcium PPM 18.0 10.0 mg/L 16.3 9.97 50

Magnesium PPM 2.53 10.0 " 2.31 9.09 50

Sodium PPM 2.25 10.0 " 1.89 17.4 50

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

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 B4E1420 - Saturated Paste pH/EC

Blank (B4E1420-BLK1)

Prepared: 05/14/2024 Analyzed: 05/15/2024

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B4E1420-DUP1)

Source: Y405360-01

Prepared: 05/14/2024 Analyzed: 05/15/2024

pH	7.93		pH Units	7.90		0.379	25
Specific Conductance (EC)	0.149	0.00500	mmhos/cm	0.138		7.82	25

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager



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

Andrew Newberry
Project Number: [none]
Project: Noble - Pioneer USX #Y07-08D

Total Metals by 7196A - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2612252 - SW846 3060A										
BLANK (1205733991-BLK)					Prepared: 05/15/2024 Analyzed: 05/17/2024					
Hexavalent Chromium	ND	0.392	mg/kg			-				U
LCS (1205733992-BKS)					Prepared: 05/15/2024 Analyzed: 05/17/2024					
Hexavalent Chromium	3.74	0.375	mg/kg	3.75		99.7	80-120			
DUP (1205733993 D)					Source: 667382001 Prepared: 05/15/2024 Analyzed: 05/17/2024					
Hexavalent Chromium	ND	0.392	mg/kg dry		<0.157		0-50	N/A	50	U
MS (1205733994 S)					Source: 667382001 Prepared: 05/15/2024 Analyzed: 05/17/2024					
Hexavalent Chromium	3.74	0.392	mg/kg dry	3.92	<0.157	93.7	75-125			
DUP (1205733995 D)					Source: Y405360-04 Prepared: 05/15/2024 Analyzed: 05/17/2024					
Hexavalent Chromium	ND	0.245	mg/kg dry		<0.0980		0-50	N/A	50	U
MS (1205733996 S)					Source: Y405360-04 Prepared: 05/15/2024 Analyzed: 05/17/2024					
Hexavalent Chromium	2380	0.245	mg/kg dry	2.45	<0.0980	NR	75-125			
ILCS (1205733997-ILCS)					Prepared: 05/15/2024 Analyzed: 05/17/2024					
Hexavalent Chromium	8.43	0.391	mg/kg	7.97		106	80-120			

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Jordan A. Bynon, Project Manager



Eagle Environmental Consulting, LLC

8000 W 44th Ave

Wheat Ridge CO 80033

Andrew Newberry

Project Number: [none]

Project: Noble - Pioneer USX #Y07-08D

Notes and Definitions

Ua Sample is Non-Detect.

U Result not detected above the detection limit

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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