

Wellhead Closure Checklist

COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form

Additional attachments (optional):		Pit Closure <u> </u>		Tank Battery Closure		Flowline Closure		Partially Buried Vault Closure
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Site Name & COGCC Facility Number: Derr #21-4	Date: 09/06/23	Remediation Project #: 29994
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Associated Wells: 05-123-30775	Age of Site: Years	Number of Photos Attached: 6
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Location: (GPS coordinates of wellhead or southeastern most wellhead for multiple) 40.431342 -104.663468	Estimated Facility Size (acres):
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General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.)

Good condition.

USCS Soil Type: SC	Estimated Depth to Groundwater: Approx. 30-50'
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Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)

None observed.

Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)

None observed.

Wellhead(s)

Well API	05-123-30775				
Age	Years				
Condition of surface around wellhead	Good - Per Crew				
PID Readings	WH-N: 4.2	WH-E: 5.0	WH-S: 3.6	WH-W: 2.8	
Condition of subsurface (staining present)	Good - No odor/no staining				
PID Readings	29.1	127.4	150.6	36.7	51.5
Sample taken? Location/Sample ID#	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04	WH-FS-01
Photo Number(s)	See photolog				

Other observations regarding wellheads:

Well casing cut/capped following assessment.

Summary

Was impacted soil identified? **No** Yes - less than 10 cubic yards Yes - more than 10 cubic yards

Total number of samples field screened: **9** Total number of samples collected: **9**

Highest PID Reading: **150.6** Total number of samples submitted to lab for analysis: **1**

If more than 10 cubic yards of impacted soil were observed:

Vertical extent: **N/A** Estimated spill volume:

Lateral extent: **N/A** Volume of soil removed:

Is additional investigation required?

Was groundwater encountered during the investigation? **No** Yes - not impacted or in contact with impacted soils Yes - groundwater impacted and/or in contact with impacted soils

Measured depth to groundwater: Was remedial groundwater removal conducted? Yes No

Date Groundwater was encountered: Commencement date of removal:

Sheen on groundwater? Yes No **N/A** Volume of groundwater removed prior to sampling:

Free product observed? Yes No **N/A** Volume of groundwater removed post sampling:

Total number of samples collected: Total Volume of groundwater removed:

Total number of samples submitted to lab for analysis:



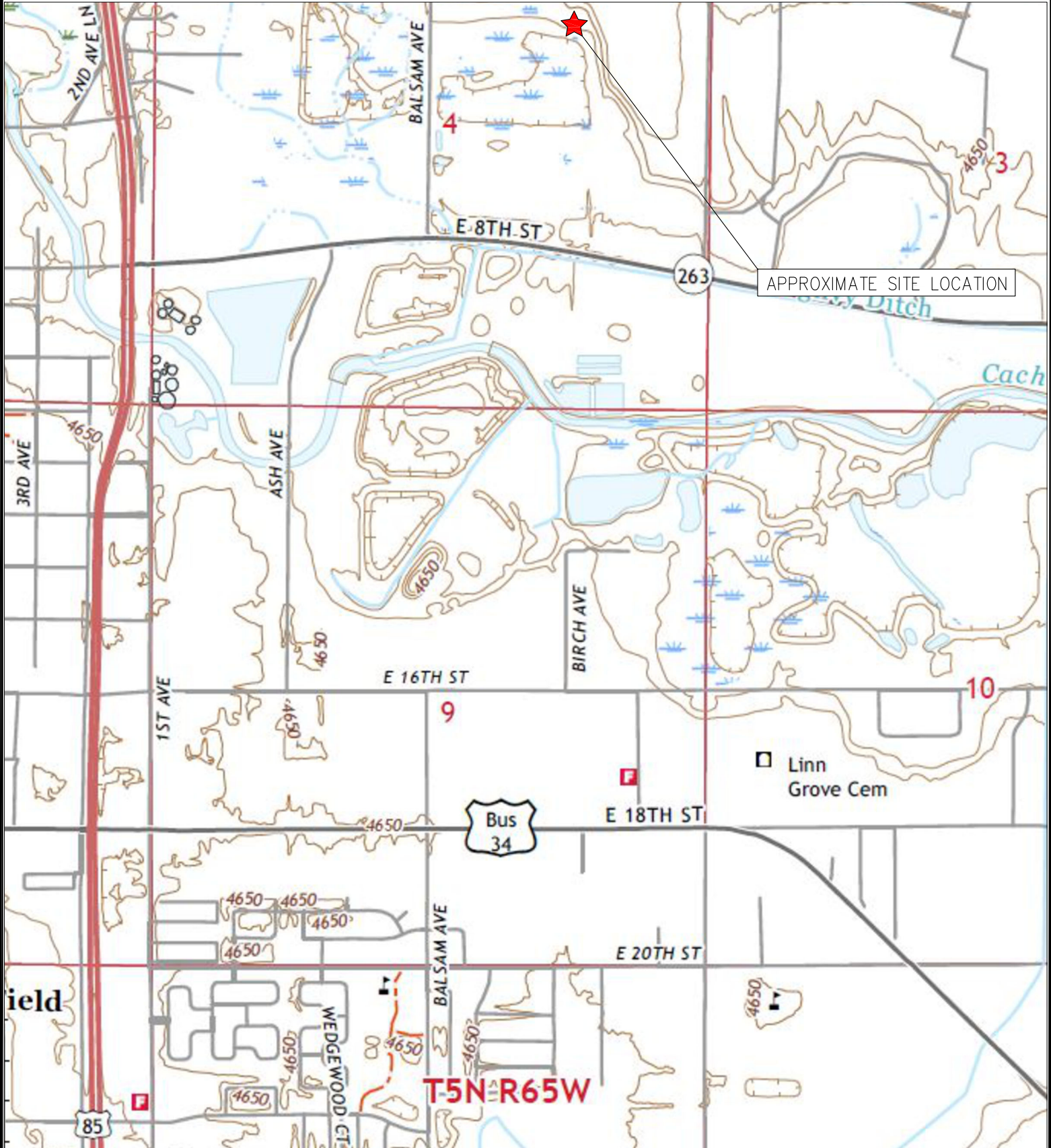
FIGURES

Figure 1: Topographic Site Location Map

Figure 2: Aerial Site Location Map

Figure 3: Soil Sampling Location Map

Figure 4: Soil Analytical Map



TOPOGRAPHIC SITE LOCATION MAP
 DERR #21-4
 CLOSURE ASSESSMENT
 40.431342 / -104.663468
 SE¼ NE¼ SEC.4 T5N R65W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-30775
 REMEDIATION # 29994



EAGLE
 ENVIRONMENTAL
 CONSULTING, LLC

8000 W 44th Ave, Wheat Ridge, CO 80033
 Ph: 303-433-0479 • F: 303-325-5449

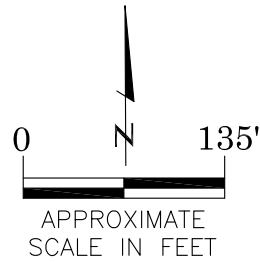
SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP,
 GREELEY, CO QUADRANGLE 2022

FIGURE NO. 1



LEGEND

- FORMER DERR #21-4 WELLHEAD (PLUGGED AND ABANDONED)
- ASSOCIATED SEPARATOR
- APPROXIMATE FLOWLINE LOCATION



AERIAL SITE LOCATION MAP
 DERR #21-4
 CLOSURE ASSESSMENT
 40.431342 / -104.663468
 SE¼ NE¼ SEC.4 T5N R65W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-30775
 REMEDIATION # 29994

FIGURE NO.
2

DRAWN BY:
BU



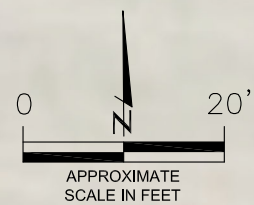
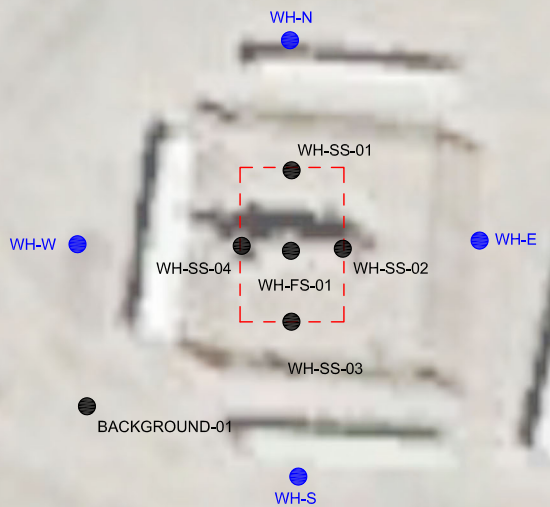
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LEGEND

- - - WELLHEAD ASSESSMENT BOUNDARIES
- SS-02 APPROXIMATE LOCATION OF SOIL SAMPLES FIELD SCREENED, ONLY, WITH PHOTOIONIZATION DETECTOR
- SS-02 APPROXIMATE LOCATION OF SOIL SAMPLES SUBMITTED FOR LABORATORY ANALYSIS



SOIL SAMPLING LOCATION MAP
DERR #21-4
CLOSURE ASSESSMENT
40.431342 / -104.663468
SE¼ NE¼ SEC.4 T5N R65W 6PM
WELD COUNTY, COLORADO
API # 05-123-30775
REMEDATION # 29994

FIGURE NO.
3
DRAWN BY:
BU



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LEGEND

- - - WELLHEAD ASSESSMENT BOUNDARIES
- SS-02 APPROXIMATE LOCATION OF SOIL SAMPLES FIELD SCREENED, ONLY, WITH PHOTOIONIZATION DETECTOR
- SS-02 APPROXIMATE LOCATION OF SOIL SAMPLES SUBMITTED FOR LABORATORY ANALYSIS

PARAMETERS

SAMPLE LOCATION
DATE
DEPTH (FEET)
B = BENZENE (mg/kg)
T = TOLUENE (mg/kg)
E = ETHYLBENZENE (mg/kg)
X = TOTAL XYLENES (mg/kg)
N = NAPHTHALENE (mg/kg)
G = TPH-GRO (mg/kg)
D = TPH-DRO (mg/kg)
R = TPH-RRO (mg/kg)
1,2,4-TMB = 1,2,4 TRIMETHYLBENZENE (mg/kg)
1,3,5-TMB = 1,3,5 TRIMETHYLBENZENE (mg/kg)
Brn = BORON (mg/L)
EC = SPECIFIC CONDUCTANCE (mmhos/cm)
SAR = SODIUM ADSORPTION RATIO
pH = pH (pH UNITS)
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) (mg/kg)

mg/kg = MILLIGRAMS PER KILOGRAM
mg/L = MILLIGRAMS PER LITER
mmhos/cm = MILLIHOS PER CENTIMETER

BRL = BELOW REGULATORY LIMITS

TPH-GRO = TOTAL PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS
TPH-DRO = TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS
TPH-RRO = TOTAL PETROLEUM HYDROCARBONS - RESIDUAL RANGE ORGANICS

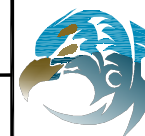
NOTES:
VALUES PRESENTED IN **BOLD** EXCEED ECMC TABLE 915-1 REGULATORY LIMITS.

ECMC = ENERGY & CARBON MANAGEMENT COMMISSION

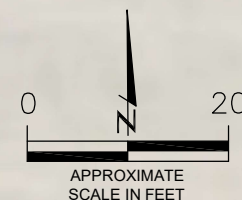
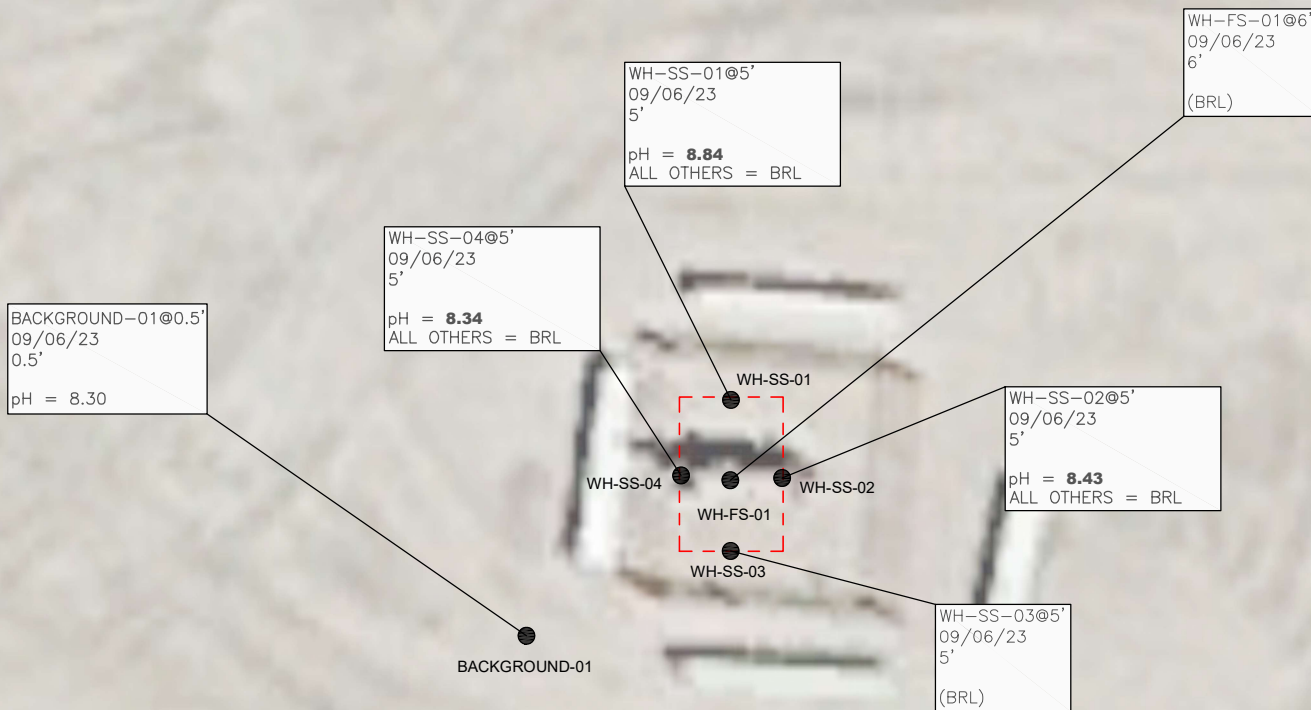
SOIL ANALYTICAL MAP
DERR #21-4
CLOSURE ASSESSMENT
40.431342 / -104.663468
SE¼ NE¼ SEC.4 T5N R65W 6PM
WELD COUNTY, COLORADO
API # 05-123-30775
REMEDATION # 29994

FIGURE NO.
4

DRAWN BY:
BU



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TABLES

Table 1: Photoionization Detector Reading Summary

Table 2: Soil Analytical Results Summary

TABLE 1
PHOTOIONIZATION DETECTOR READING SUMMARY
DERR #21-4
CLOSURE ASSESSMENT
40.431342 / -104.663468
SE¼ NE¼ SEC.4 T5N R65W 6PM
WELD COUNTY, COLORADO
API # 05-123-30775
REMEDIAION # 29994

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Lab Submission (Y/N)
WH-SS-01 @ 5' (40.431350 / -104.663479)	09/06/23	5	29.1	Y
WH-SS-02 @ 5' (40.431338 / -104.663469)	09/06/23	5	127.4	Y
WH-SS-03 @ 5' (40.431328 / -104.663479)	09/06/23	5	150.6	Y
WH-SS-04 @ 5' (40.431338 / -104.663488)	09/06/23	5	36.7	Y
WH-FS-01 @ 6' (40.431338 / -104.663479)	09/06/23	6	51.5	Y
WH-N @ 0.5' (40.431368 / -104.663478)	09/06/23	0.5	4.2	N
WH-E @ 0.5' (40.431338 / -104.663442)	09/06/23	0.5	5.0	N
WH-S @ 0.5' (40.431306 / -104.663477)	09/06/23	0.5	3.6	N
WH-W @ 0.5' (40.431338 / -104.663515)	09/06/23	0.5	2.8	N
Background-01 @ 0.5' (40.431303 / -104.663516)	09/06/23	0.5	5.1	Y
(Y/N) = Yes or No ppm-v = parts per million by volume PID = Photoionization Detector				



TABLE 2
SOIL ANALYTICAL RESULTS SUMMARY
DERR #21-4
CLOSURE ASSESSMENT
40.431342 / -104.663468
SE¼ NE¼ SEC.4 T5N R65W 6PM
WELD COUNTY, COLORADO
API # 05-123-30775
REMEDIAION # 29994

Sample Location		WH-SS-01 @ 5'	WH-SS-02 @ 5'	WH-SS-03 @ 5'	WH-SS-04 @ 5'	WH-FS-01 @ 6'	Background-01 @ 0.5'
(Latitude / Longitude)		(40.431350 / -104.663479)	(40.431338 / -104.663469)	(40.431328 / -104.663479)	(40.431338 / -104.663488)	(40.431338 / -104.663479)	(40.431303 / -104.663516)
Sample Date		9/6/2023	9/6/2023	9/6/2023	9/6/2023	9/6/2023	9/6/2023
Sample Depth		5	5	5	5	6	0.5
PID Reading (ppm-v)		29.1	127.4	150.6	36.7	51.5	5.1
Regulatory Limits							
Chemical of Concern	Units	ECMC Table 915-1 RSSLs	ECMC Table 915-1 GSSLs				
VOLATILE ORGANIC COMPOUNDS							
Benzene	mg/kg	1.2	0.0026	<0.00200	<0.00200	<0.00200	NA
Toluene	mg/kg	490	0.69	<0.00200	<0.00200	<0.00200	NA
Ethylbenzene	mg/kg	5.8	0.78	<0.00200	<0.00200	<0.00200	NA
Total Xylenes	mg/kg	58	9.9	<0.00200	<0.00200	<0.00200	NA
Naphthalene	mg/kg	2	0.0038	<0.00380	<0.00380	<0.00380	NA
1,2,4-Trimethylbenzene	mg/kg	30	0.0081	<0.00200	<0.00200	<0.00200	NA
1,3,5-Trimethylbenzene	mg/kg	27	0.0087	<0.00200	<0.00200	<0.00200	NA
TOTAL PETROLEUM HYDROCARBONS							
TPH-GRO	mg/kg	500	--	<0.200	<0.200	<0.200	NA
TPH-DRO	mg/kg	500	--	<25.0	<25.0	<25.0	NA
TPH-RRO	mg/kg	500	--	<100	<100	<100	NA
POLYCYCLIC AROMATIC HYDROCARBONS							
1-Methyl-naphthalene	mg/kg	18	0.006	<0.002	<0.002	<0.002	NA
2-Methyl-naphthalene	mg/kg	24	0.019	<0.002	<0.002	<0.002	NA
Acenaphthene	mg/kg	360	0.55	<0.020	<0.020	<0.020	NA
Anthracene	mg/kg	1800	5.8	<0.020	<0.020	<0.020	NA
Benzo(a)-anthracene	mg/kg	1.1	0.011	<0.005	<0.005	<0.005	NA
Benzo(a)-pyrene	mg/kg	0.11	0.24	<0.020	<0.020	<0.020	NA
Benzo(b)-fluoranthene	mg/kg	1.1	0.3	<0.020	<0.020	<0.020	NA
Benzo(k)-fluoranthene	mg/kg	11	2.9	<0.020	<0.020	<0.020	NA
Chrysene	mg/kg	110	9	<0.020	<0.020	<0.020	NA
Dibenzo(a,h)-anthracene	mg/kg	0.11	0.096	<0.020	<0.020	<0.020	NA
Fluoranthene	mg/kg	240	8.9	<0.020	<0.020	<0.020	NA
Fluorene	mg/kg	240	0.54	<0.020	<0.020	<0.020	NA
Indeno(1,2,3-cd)-pyrene	mg/kg	1.1	0.98	<0.020	<0.020	<0.020	NA
Pyrene	mg/kg	180	1.3	<0.020	<0.020	<0.020	NA
SOIL SUITABILITY (Inorganics)							
Boron	mg/L	2	--	0.338	<0.0994	0.188	0.425
pH	standard unit	6-8.3	--	8.84	8.43	8.22	8.34
Sodium Adsorption Ratio (SAR)	--	<6	--	1.19	1.06	0.792	0.842
Specific Conductance (EC)	mmhos/cm	<4	--	0.705	0.319	0.385	0.275
ECMC = Energy & Carbon Management Commission mg/kg = milligrams per kilogram mmhos/cm = millimhos per centimeter PID = Photoionization Detector ppm-v = parts per million by volume mg/L = milligrams per liter NA = Not Analyzed RSSLs = Residential Soil Screening Levels GSSLs = Protection of Groundwater Soil Screening Levels TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics TPH-RRO = Total Petroleum Hydrocarbons - Residual Range Organics Notes: Values presented with a less than symbol (<) did not contain concentrations at or above the laboratory reporting limit and/or minimum detection limit Values presented in BOLD exceed ECMC Table 915-1 Regulatory Limits.							



ATTACHMENT A

Photo Log

Derr #21-4
API # 05-123-30775
Remediation # 29994

Closure Assessment

September 2023



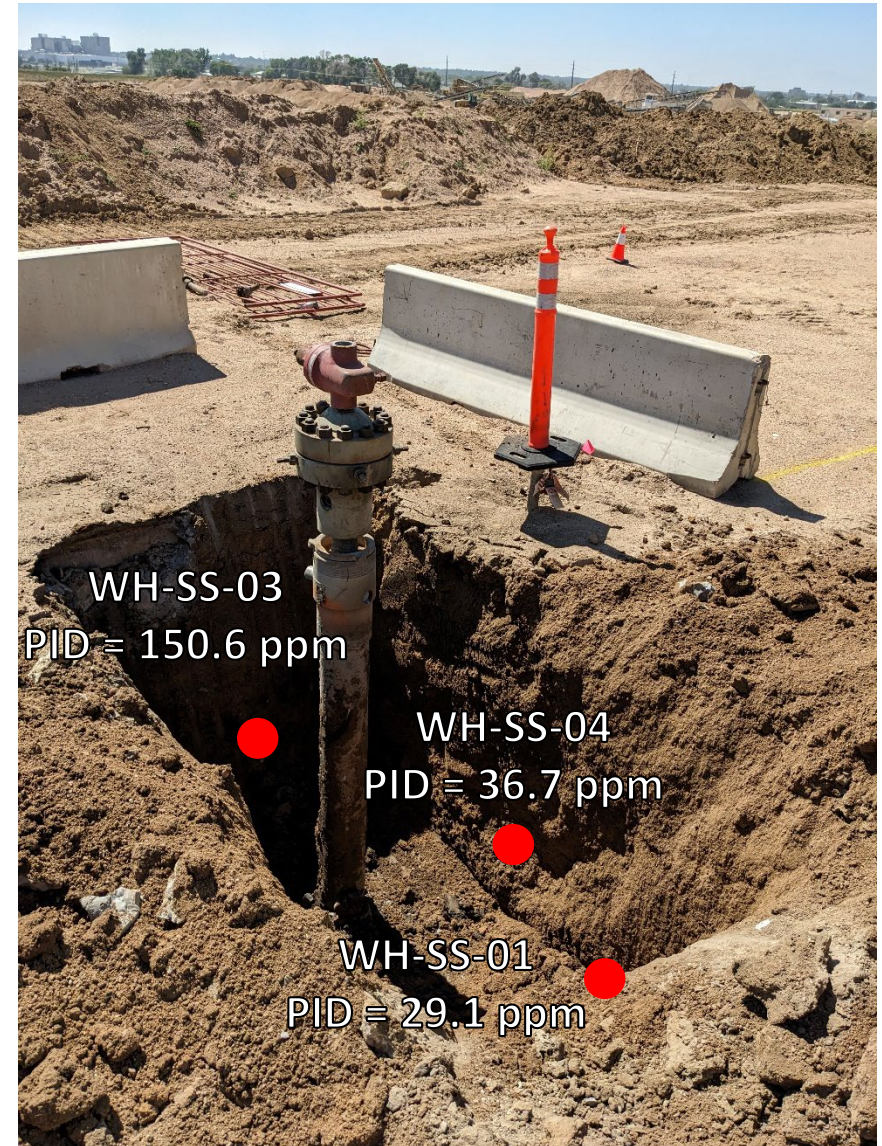
Wellhead Excavation – 09/06/23



WH-SS-02
PID = 127.4 ppm

WH-FS-01
PID = 51.5 ppm

Looking southeast
No petroleum hydrocarbon staining or odor observed



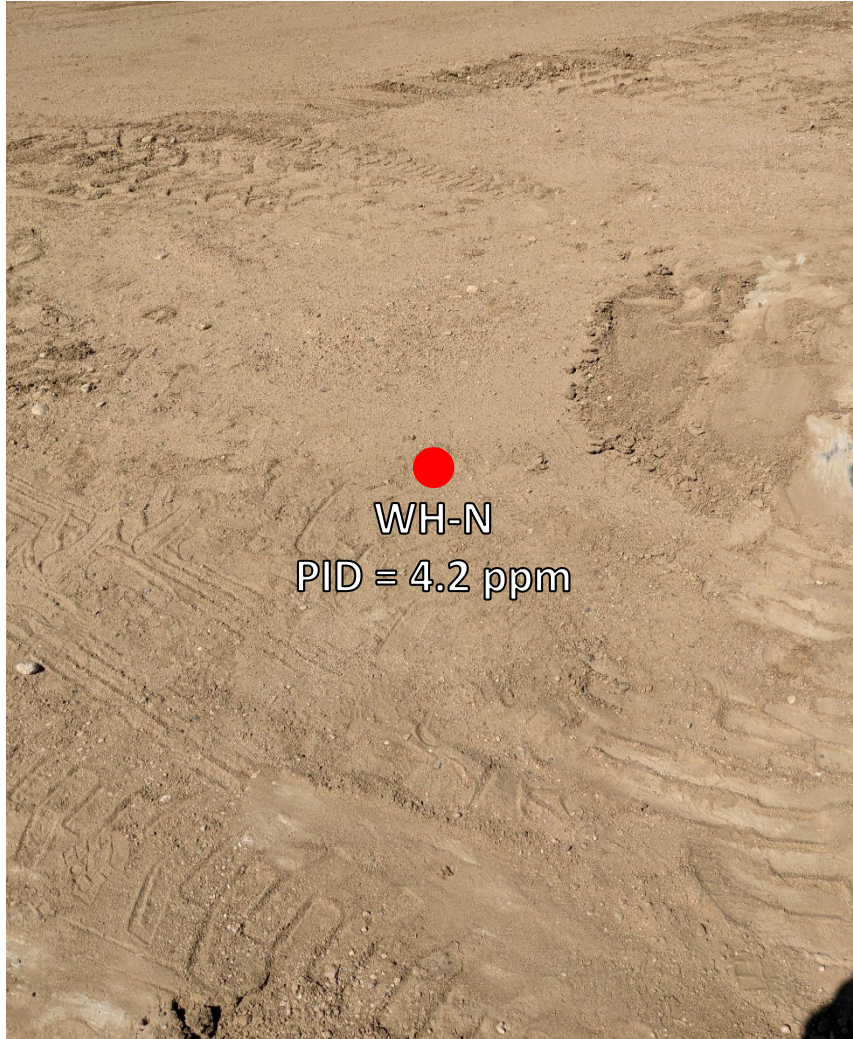
WH-SS-03
PID = 150.6 ppm

WH-SS-04
PID = 36.7 ppm

WH-SS-01
PID = 29.1 ppm

Looking southwest
No petroleum hydrocarbon staining or odor observed

Wellhead Excavation – 09/06/23



Looking north at surface screen
No petroleum hydrocarbon staining or odor observed



Looking east at surface screen
No petroleum hydrocarbon staining or odor observed

Wellhead Excavation – 09/06/23



Looking south at surface screen
No petroleum hydrocarbon staining or odor observed



Looking west at surface screen
No petroleum hydrocarbon staining or odor observed



ATTACHMENT B

Laboratory Analytical Reports



September 20, 2023

Eagle Environmental Consulting, LLC

Martin C Eckert III

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - Derr 21-04

Project Number - [none]

Attached are your analytical results for Noble - Derr 21-04 received by Origins Laboratory, Inc. September 06, 2023. This project is associated with Origins project number Y309097-01.

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

Martin C Eckert III
Project Number: [none]
Project: Noble - Derr 21-04

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH-FS-01@6'	Y309097-01	Soil	September 6, 2023 13:30	09/06/2023 17:37
WH-SS-01@5'	Y309097-02	Soil	September 6, 2023 13:32	09/06/2023 17:37
WH-SS-02@5'	Y309097-03	Soil	September 6, 2023 13:34	09/06/2023 17:37
WH-SS-03@5'	Y309097-04	Soil	September 6, 2023 13:36	09/06/2023 17:37
WH-SS-04@5'	Y309097-05	Soil	September 6, 2023 13:38	09/06/2023 17:37

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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

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

Sample Receipt Checklist

Origins Work Order: Y309097 Client: Eagle
 Client Project ID: Derr 21-04

Checklist Completed by: ISN/ENS Shipped Via: HP
 Date/time completed: 9/7/23 (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, 8 °C / _____ °C / _____ °C (Describe) _____ °C
 Thermometer ID: 1004

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		<input checked="" type="checkbox"/>		<u>SD</u>
Is there ice present (document if blue ice is used)	<input checked="" 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"/>		
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"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
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)			<input checked="" type="checkbox"/>	
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) [Signature]

Date/Time Reviewed 9/8/23

Origins Laboratory, Inc.

[Signature]

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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-FS-01@6'

9/6/2023 1:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-01 (Soil)

Boron (DTPA Sorbitol)

Boron	0.425	0.0997	mg/L	1	B311110	KAP	09/11/2023	09/12/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B310703	ZZZ	09/07/2023	09/10/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: o-Terphenyl	105 %	50-150			"	"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B310804	HKS	09/08/2023	09/08/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Benzene	ND	0.00200	"	"	"	HKS	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Naphthalene	ND	0.00380	"	"	"	HKS	"	"	U
Toluene	ND	0.00200	"	"	"	HKS	"	"	U
Xylenes, total	ND	0.00200	"	"	"	HKS	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	HKS	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	104 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.1 %	70-130			"	"	"	"	

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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-FS-01@6'

9/6/2023 1:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	----------	-------

Origins Laboratory, Inc.
Y309097-01 (Soil)

Metals by Saturated Paste by EPA 6010

Calcium	1.97	0.499	meq/L	10	[CALC]	KAP	09/09/2023	09/11/2023	
Magnesium	0.963	0.823	"	"	"	KAP	"	"	
Sodium	0.943	0.435	"	"	"	KAP	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B310745	Windo	09/07/2023	09/12/2023	U
2-Methylnaphthalene	ND	0.002	"	"	"	Windo	"	"	U
Acenaphthene	ND	0.020	"	"	"	Windo	"	"	U
Anthracene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (a) anthracene	ND	0.005	"	"	"	Windo	"	"	U
Benzo (a) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (b) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (k) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Chrysene	ND	0.020	"	"	"	Windo	"	"	U
Dibenz (a,h) anthracene	ND	0.020	"	"	"	Windo	"	"	U
Fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Fluorene	ND	0.020	"	"	"	Windo	"	"	U
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Pyrene	ND	0.020	"	"	"	Windo	"	"	U

Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-FS-01@6'

9/6/2023 1:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.
 Y309097-01 (Soil)**

PAH by EPA 8270E

Surrogate: Fluorene-d10	101 %	60-130			B3I074 5		09/07/2023	09/12/2023	
Surrogate: Anthracene-d10	94.7 %	60-130			"		"	"	
Surrogate: Benzo (a) pyrene-d12	98.2 %	60-130			"		"	"	
Surrogate: Pyrene-d10	129 %	60-130			"		"	"	

pH in Soil by 9045D

pH	8.05		pH Units	1	B3I1924	HJD	09/19/2023	09/19/2023	
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SAR by 20B Saturated Paste

SAR	0.779	0.0100	SAR	1	B3I0903	KAP	09/09/2023	09/11/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.486	0.00500	mmhos/cm	1	B3I0906	ACN	09/09/2023	09/10/2023	
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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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-01@5'

9/6/2023 1:32:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-02 (Soil)

Boron (DTPA Sorbitol)

Boron	0.338	0.0998	mg/L	1	B311110	KAP	09/11/2023	09/12/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B310703	ZZZ	09/07/2023	09/10/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: o-Terphenyl	106 %	50-150			"	"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B310804	HKS	09/08/2023	09/08/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Benzene	ND	0.00200	"	"	"	HKS	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Naphthalene	ND	0.00380	"	"	"	HKS	"	"	U
Toluene	ND	0.00200	"	"	"	HKS	"	"	U
Xylenes, total	ND	0.00200	"	"	"	HKS	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	HKS	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	106 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.2 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-01@5'

9/6/2023 1:32:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-02 (Soil)

Metals by Saturated Paste by EPA 6010

Calcium	2.69	0.499	meq/L	10	[CALC]	KAP	09/09/2023	09/11/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	
Sodium	1.57	0.435	"	"	"	KAP	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B310745	Windo	09/07/2023	09/12/2023	U
2-Methylnaphthalene	ND	0.002	"	"	"	Windo	"	"	U
Acenaphthene	ND	0.020	"	"	"	Windo	"	"	U
Anthracene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (a) anthracene	ND	0.005	"	"	"	Windo	"	"	U
Benzo (a) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (b) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (k) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Chrysene	ND	0.020	"	"	"	Windo	"	"	U
Dibenz (a,h) anthracene	ND	0.020	"	"	"	Windo	"	"	U
Fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Fluorene	ND	0.020	"	"	"	Windo	"	"	U
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Pyrene	ND	0.020	"	"	"	Windo	"	"	U

Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-01@5'

9/6/2023 1:32:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-02 (Soil)

PAH by EPA 8270E

Surrogate: Fluorene-d10	97.8 %	60-130			B3I074 5		09/07/2023	09/12/2023	
Surrogate: Anthracene-d10	95.4 %	60-130			"		"	"	
Surrogate: Benzo (a) pyrene-d12	99.9 %	60-130			"		"	"	
Surrogate: Pyrene-d10	86.3 %	60-130			"		"	"	

pH in Soil by 9045D

pH	8.84		pH Units	1	B3I1924	HJD	09/19/2023	09/19/2023	
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SAR by 20B Saturated Paste

SAR	1.19	0.0100	SAR	1	B3I0903	KAP	09/09/2023	09/11/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.705	0.00500	mmhos/cm	1	B3I0906	ACN	09/09/2023	09/10/2023	
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Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-02@5'

9/6/2023 1:34:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-03 (Soil)

Boron (DTPA Sorbitol)

Boron	ND	0.0994	mg/L	1	B311110	KAP	09/11/2023	09/12/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B310703	ZZZ	09/07/2023	09/10/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: *o*-Terphenyl 110 % 50-150 " "

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B310804	HKS	09/08/2023	09/08/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Benzene	ND	0.00200	"	"	"	HKS	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Naphthalene	ND	0.00380	"	"	"	HKS	"	"	U
Toluene	ND	0.00200	"	"	"	HKS	"	"	U
Xylenes, total	ND	0.00200	"	"	"	HKS	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	HKS	"	"	U

Surrogate: 1,2-Dichloroethane-d4 103 % 70-130 " "
 Surrogate: Toluene-d8 106 % 70-130 " "
 Surrogate: 4-Bromofluorobenzene 95.9 % 70-130 " "

Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-02@5'

9/6/2023 1:34:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-03 (Soil)

Metals by Saturated Paste by EPA 6010

Calcium	1.22	0.499	meq/L	10	[CALC]	KAP	09/09/2023	09/11/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	
Sodium	0.954	0.435	"	"	"	KAP	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B310745	Windo	09/07/2023	09/12/2023	U
2-Methylnaphthalene	ND	0.002	"	"	"	Windo	"	"	U
Acenaphthene	ND	0.020	"	"	"	Windo	"	"	U
Anthracene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (a) anthracene	ND	0.005	"	"	"	Windo	"	"	U
Benzo (a) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (b) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (k) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Chrysene	ND	0.020	"	"	"	Windo	"	"	U
Dibenz (a,h) anthracene	ND	0.020	"	"	"	Windo	"	"	U
Fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Fluorene	ND	0.020	"	"	"	Windo	"	"	U
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Pyrene	ND	0.020	"	"	"	Windo	"	"	U

Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-02@5'

9/6/2023 1:34:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-03 (Soil)

PAH by EPA 8270E

Surrogate: Fluorene-d10	103 %	60-130			B3I074 5		09/07/2023	09/12/2023	
Surrogate: Anthracene-d10	96.6 %	60-130			"	"	"	"	
Surrogate: Benzo (a) pyrene-d12	98.8 %	60-130			"	"	"	"	
Surrogate: Pyrene-d10	94.0 %	60-130			"	"	"	"	

pH in Soil by 9045D

pH	8.43		pH Units	1	B3I1924	HJD	09/19/2023	09/19/2023	
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SAR by 20B Saturated Paste

SAR	1.06	0.0100	SAR	1	B3I0903	KAP	09/09/2023	09/11/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.319	0.00500	mmhos/cm	1	B3I0906	ACN	09/09/2023	09/10/2023	
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Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-03@5'

9/6/2023 1:36:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-04 (Soil)

Boron (DTPA Sorbitol)

Boron	0.188	0.0987	mg/L	1	B311111	KAP	09/11/2023	09/12/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B310703	ZZZ	09/07/2023	09/10/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: o-Terphenyl	97.1 %	50-150			"	"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B310804	HKS	09/08/2023	09/08/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Benzene	ND	0.00200	"	"	"	HKS	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Naphthalene	ND	0.00380	"	"	"	HKS	"	"	U
Toluene	ND	0.00200	"	"	"	HKS	"	"	U
Xylenes, total	ND	0.00200	"	"	"	HKS	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	HKS	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	105 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.5 %	70-130			"	"	"	"	

Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-03@5'

9/6/2023 1:36:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-04 (Soil)

Metals by Saturated Paste by EPA 6010

Calcium	1.59	0.499	meq/L	10	[CALC]	KAP	09/09/2023	09/11/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	
Sodium	0.848	0.435	"	"	"	KAP	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B310745	Windo	09/07/2023	09/12/2023	U
2-Methylnaphthalene	ND	0.002	"	"	"	Windo	"	"	U
Acenaphthene	ND	0.020	"	"	"	Windo	"	"	U
Anthracene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (a) anthracene	ND	0.005	"	"	"	Windo	"	"	U
Benzo (a) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (b) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (k) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Chrysene	ND	0.020	"	"	"	Windo	"	"	U
Dibenz (a,h) anthracene	ND	0.020	"	"	"	Windo	"	"	U
Fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Fluorene	ND	0.020	"	"	"	Windo	"	"	U
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Pyrene	ND	0.020	"	"	"	Windo	"	"	U

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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-03@5'

9/6/2023 1:36:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-04 (Soil)

PAH by EPA 8270E

Surrogate: Fluorene-d10	102 %	60-130			B3I074 5		09/07/2023	09/12/2023	
Surrogate: Anthracene-d10	97.0 %	60-130			"		"	"	
Surrogate: Benzo (a) pyrene-d12	98.4 %	60-130			"		"	"	
Surrogate: Pyrene-d10	114 %	60-130			"		"	"	

pH in Soil by 9045D

pH	8.22		pH Units	1	B3I1924	HJD	09/19/2023	09/19/2023	
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SAR by 20B Saturated Paste

SAR	0.792	0.0100	SAR	1	B3I0903	KAP	09/09/2023	09/11/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.385	0.00500	mmhos/cm	1	B3I0906	ACN	09/09/2023	09/10/2023	
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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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-04@5'

9/6/2023 1:38:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-05 (Soil)

Boron (DTPA Sorbitol)

Boron	0.104	0.0982	mg/L	1	B3I1111	KAP	09/11/2023	09/12/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3I0703	ZZZ	09/07/2023	09/10/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: <i>o</i> -Terphenyl	107 %	50-150			"	"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3I0804	HKS	09/08/2023	09/08/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Benzene	ND	0.00200	"	"	"	HKS	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	HKS	"	"	U
Naphthalene	ND	0.00380	"	"	"	HKS	"	"	U
Toluene	ND	0.00200	"	"	"	HKS	"	"	U
Xylenes, total	ND	0.00200	"	"	"	HKS	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	HKS	"	"	U

Surrogate: 1,2-Dichloroethane-d4	108 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	96.7 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	98.8 %	70-130			"	"	"	"	

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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-04@5'

9/6/2023 1:38:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-05 (Soil)

Metals by Saturated Paste by EPA 6010

Calcium	1.25	0.499	meq/L	10	[CALC]	KAP	09/09/2023	09/11/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	
Sodium	0.775	0.435	"	"	"	KAP	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B310745	Windo	09/07/2023	09/12/2023	U
2-Methylnaphthalene	ND	0.002	"	"	"	Windo	"	"	U
Acenaphthene	ND	0.020	"	"	"	Windo	"	"	U
Anthracene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (a) anthracene	ND	0.005	"	"	"	Windo	"	"	U
Benzo (a) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (b) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Benzo (k) fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Chrysene	ND	0.020	"	"	"	Windo	"	"	U
Dibenz (a,h) anthracene	ND	0.020	"	"	"	Windo	"	"	U
Fluoranthene	ND	0.020	"	"	"	Windo	"	"	U
Fluorene	ND	0.020	"	"	"	Windo	"	"	U
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	Windo	"	"	U
Pyrene	ND	0.020	"	"	"	Windo	"	"	U

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 Wheat Ridge CO 80033

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

WH-SS-04@5'

9/6/2023 1:38:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y309097-05 (Soil)

PAH by EPA 8270E

Surrogate: Fluorene-d10	101 %	60-130			B3I074 5		09/07/2023	09/12/2023	
Surrogate: Anthracene-d10	96.1 %	60-130			"		"	"	
Surrogate: Benzo (a) pyrene-d12	101 %	60-130			"		"	"	
Surrogate: Pyrene-d10	115 %	60-130			"		"	"	

pH in Soil by 9045D

pH	8.34		pH Units	1	B3I1924	HJD	09/19/2023	09/19/2023	
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SAR by 20B Saturated Paste

SAR	0.842	0.0100	SAR	1	B3I0903	KAP	09/09/2023	09/11/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.275	0.00500	mmhos/cm	1	B3I0906	ACN	09/09/2023	09/10/2023	
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Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

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 B310703 - EPA 3550B										
Blank (B310703-BLK1)										
					Prepared: 09/07/2023 Analyzed: 09/10/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	26		"	24.9		106	50-150			

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Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

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 B310703 - EPA 3550B

LCS (B310703-BS1)

Prepared: 09/07/2023 Analyzed: 09/10/2023

Diesel (C10-C28)	933	50.0	mg/kg	1000		93.3	70-130			
Residual Range Organics (C28-C40)	970	200	"	1000		97.0	70-130			
Surrogate: o-Terphenyl	53		"	49.8		107	50-150			

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 Project Number: [none]
 Project: Noble - Derr 21-04

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 B310703 - EPA 3550B

Matrix Spike (B310703-MS1)	Source: Y309095-01			Prepared: 09/07/2023 Analyzed: 09/10/2023						
Diesel (C10-C28)	1150	50.0	mg/kg	1000	140	101	70-130			
Residual Range Organics (C28-C40)	1170	200	"	1000	121	105	70-130			
Surrogate: o-Terphenyl	60		"	49.8		120	50-150			

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 Project Number: [none]
 Project: Noble - Derr 21-04

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 B310703 - EPA 3550B										
Matrix Spike Dup (B310703-MSD1)					Source: Y309095-01					Prepared: 09/07/2023 Analyzed: 09/10/2023
Diesel (C10-C28)	1200	50.0	mg/kg	1000	140	106	70-130	3.75	35	
Residual Range Organics (C28-C40)	1220	200	"	1000	121	110	70-130	4.10	35	
Surrogate: o-Terphenyl	55		"	49.8		110	50-150			

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 Project: Noble - Derr 21-04

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 B310804 - EPA 5030 (soil)										
Blank (B310804-BLK1)										
					Prepared: 09/08/2023 Analyzed: 09/08/2023					
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	0.12		"	0.125		95.4	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		107	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		94.0	70-130			

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 Project: Noble - Derr 21-04

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 B310804 - EPA 5030 (soil)

LCS (B310804-BS1)

Prepared: 09/08/2023 Analyzed: 09/08/2023

1,2,4-Trimethylbenzene	0.106	0.00200	mg/kg	0.100		106	70-130			
1,3,5-Trimethylbenzene	0.0993	0.00200	"	0.100		99.3	70-130			
Benzene	0.0950	0.00200	"	0.100		95.0	70-130			
Ethylbenzene	0.0932	0.00200	"	0.100		93.2	70-130			
Naphthalene	0.0893	0.00380	"	0.100		89.3	70-130			
Toluene	0.103	0.00200	"	0.100		103	70-130			
o-Xylene	0.0950	0.00200	"	0.100		95.0	70-130			
m,p-Xylene	0.194	0.00400	"	0.200		97.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		96.3	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		105	70-130			
Surrogate: 4-Bromofluorobenzene	0.10		"	0.125		83.5	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 B3I0804 - EPA 5030 (soil)

Matrix Spike (B3I0804-MS1)	Source: Y309070-01			Prepared: 09/08/2023 Analyzed: 09/08/2023						
1,2,4-Trimethylbenzene	0.0772	0.00200	mg/kg	0.100	ND	77.2	70-130			
1,3,5-Trimethylbenzene	0.0705	0.00200	"	0.100	ND	70.5	70-130			
Benzene	0.0751	0.00200	"	0.100	ND	75.1	70-130			
Ethylbenzene	0.0740	0.00200	"	0.100	ND	74.0	70-130			
Naphthalene	0.0772	0.00380	"	0.100	ND	77.2	70-130			
Toluene	0.0798	0.00200	"	0.100	ND	79.8	70-130			
o-Xylene	0.0761	0.00200	"	0.100	ND	76.1	70-130			
m,p-Xylene	0.151	0.00400	"	0.200	ND	75.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		107	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		105	70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125		90.5	70-130			

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 Project: Noble - Derr 21-04

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 B310804 - EPA 5030 (soil)

Matrix Spike Dup (B310804-MSD1)	Source: Y309070-01			Prepared: 09/08/2023 Analyzed: 09/08/2023						
1,2,4-Trimethylbenzene	0.0808	0.00200	mg/kg	0.100	ND	80.8	70-130	4.53	20	
1,3,5-Trimethylbenzene	0.0735	0.00200	"	0.100	ND	73.5	70-130	4.22	20	
Benzene	0.0802	0.00200	"	0.100	ND	80.2	70-130	6.62	20	
Ethylbenzene	0.0794	0.00200	"	0.100	ND	79.4	70-130	7.01	20	
Naphthalene	0.0872	0.00380	"	0.100	ND	87.2	70-130	12.2	20	
Toluene	0.0846	0.00200	"	0.100	ND	84.6	70-130	5.89	20	
o-Xylene	0.0826	0.00200	"	0.100	ND	82.6	70-130	8.14	20	
m,p-Xylene	0.163	0.00400	"	0.200	ND	81.6	70-130	7.64	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		108	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		104	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		93.3	70-130			

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 Project Number: [none]
 Project: Noble - Derr 21-04

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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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 B3I0745 - EPA 3580

Blank (B3I0745-BLK1)

Prepared: 09/07/2023 Analyzed: 09/12/2023

1-Methylnaphthalene	ND	0.002	mg/kg							U
2-Methylnaphthalene	ND	0.002	"							U
Acenaphthene	ND	0.020	"							U
Anthracene	ND	0.020	"							U
Benzo (a) anthracene	ND	0.005	"							U
Benzo (a) pyrene	ND	0.020	"							U
Benzo (b) fluoranthene	ND	0.020	"							U
Benzo (g,h,i) perylene	ND	0.020	"							U
Benzo (k) fluoranthene	ND	0.020	"							U
Chrysene	ND	0.020	"							U
Dibenz (a,h) anthracene	ND	0.020	"							U
Fluoranthene	ND	0.020	"							U
Fluorene	ND	0.020	"							U
Indeno (1,2,3-cd) pyrene	ND	0.020	"							U
Naphthalene	ND	0.002	"							U
Phenanthrene	ND	0.020	"							U
Pyrene	ND	0.020	"							U
Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130			
Surrogate: Anthracene-d10	200		"	200		98.8	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		101	60-130			
Surrogate: Pyrene-d10	240		"	200		120	60-130			

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Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

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 B310745 - EPA 3580

LCS (B310745-BS1)

Prepared: 09/07/2023 Analyzed: 09/12/2023

1-Methylnaphthalene	0.195	0.002	mg/kg	0.200		97.4	70-130			
2-Methylnaphthalene	0.192	0.002	"	0.200		96.2	70-130			
Acenaphthene	0.188	0.020	"	0.200		93.8	70-130			
Anthracene	0.178	0.020	"	0.200		89.1	70-130			
Benzo (a) anthracene	0.172	0.005	"	0.200		86.1	70-130			
Benzo (a) pyrene	0.206	0.020	"	0.200		103	70-130			
Benzo (b) fluoranthene	0.196	0.020	"	0.200		98.2	70-130			
Benzo (g,h,i) perylene	0.215	0.020	"	0.200		107	70-130			
Benzo (k) fluoranthene	0.173	0.020	"	0.200		86.5	70-130			
Chrysene	0.181	0.020	"	0.200		90.3	70-130			
Dibenz (a,h) anthracene	0.169	0.020	"	0.200		84.4	70-130			
Fluoranthene	0.163	0.020	"	0.200		81.7	70-130			
Fluorene	0.189	0.020	"	0.200		94.4	70-130			
Indeno (1,2,3-cd) pyrene	0.221	0.020	"	0.200		110	70-130			
Naphthalene	0.194	0.002	"	0.200		97.0	70-130			
Phenanthrene	0.182	0.020	"	0.200		91.2	70-130			
Pyrene	0.231	0.020	"	0.200		115	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130			
Surrogate: Anthracene-d10	200		"	200		99.1	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		101	60-130			
Surrogate: Pyrene-d10	240		"	200		120	60-130			

Matrix Spike (B310745-MS1)

Source: Y309067-01

Prepared: 09/07/2023 Analyzed: 09/12/2023

1-Methylnaphthalene	0.205	0.010	mg/kg	0.200	0.012	96.8	70-130			
2-Methylnaphthalene	0.203	0.010	"	0.200	0.011	95.7	70-130			
Acenaphthene	0.234	0.100	"	0.200	0.031	101	70-130			
Anthracene	0.435	0.100	"	0.200	0.107	164	70-130			QM-02

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Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

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 B3I0745 - EPA 3580

Matrix Spike (B3I0745-MS1)		Source: Y309067-01			Prepared: 09/07/2023 Analyzed: 09/12/2023					
Benzo (a) anthracene	1.54	0.025	mg/kg	0.200	0.658	443	70-130			QM-02
Benzo (a) pyrene	1.30	0.100	"	0.200	0.659	321	70-130			QM-02
Benzo (b) fluoranthene	1.42	0.100	"	0.200	0.626	398	70-130			QM-02
Benzo (g,h,i) perylene	1.41	0.100	"	0.200	0.622	393	70-130			QM-02
Benzo (k) fluoranthene	0.687	0.100	"	0.200	0.278	205	70-130			QM-02
Chrysene	1.33	0.100	"	0.200	0.637	348	70-130			QM-02
Dibenz (a,h) anthracene	0.465	0.100	"	0.200	0.133	166	70-130			QM-02
Fluoranthene	2.45	0.100	"	0.200	1.02	714	70-130			QM-02
Fluorene	0.234	0.100	"	0.200	0.032	101	70-130			
Indeno (1,2,3-cd) pyrene	1.25	0.100	"	0.200	0.561	345	70-130			QM-02
Naphthalene	0.236	0.010	"	0.200	0.021	108	70-130			
Phenanthrene	0.920	0.100	"	0.200	0.441	239	70-130			QM-02
Pyrene	1.84	0.100	"	0.200	1.46	188	70-130			QM-02
Surrogate: Fluorene-d10	190		ug/kg	200		97.0	60-130			
Surrogate: Anthracene-d10	190		"	200		97.5	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		103	60-130			
Surrogate: Pyrene-d10	140		"	200		69.2	60-130			

Matrix Spike Dup (B3I0745-MSD1)		Source: Y309067-01			Prepared: 09/07/2023 Analyzed: 09/12/2023					
1-Methylnaphthalene	0.198	0.010	mg/kg	0.200	0.012	93.4	70-130	3.38	20	
2-Methylnaphthalene	0.194	0.010	"	0.200	0.011	91.5	70-130	4.28	20	
Acenaphthene	0.214	0.100	"	0.200	0.031	91.6	70-130	8.69	20	
Anthracene	0.377	0.100	"	0.200	0.107	135	70-130	14.2	20	QM-02
Benzo (a) anthracene	0.906	0.025	"	0.200	0.658	124	70-130	52.1	20	QR-DUP
Benzo (a) pyrene	0.948	0.100	"	0.200	0.659	144	70-130	31.4	20	QM-02, QR-DUP
Benzo (b) fluoranthene	0.830	0.100	"	0.200	0.626	102	70-130	52.5	20	QR-DUP

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Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

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 B310745 - EPA 3580

Matrix Spike Dup (B310745-MSD1)	Source: Y309067-01			Prepared: 09/07/2023 Analyzed: 09/12/2023						
Benzo (g,h,i) perylene	1.03	0.100	mg/kg	0.200	0.622	203	70-130	31.3	20	QM-02, QR-DUP
Benzo (k) fluoranthene	0.490	0.100	"	0.200	0.278	106	70-130	33.6	20	QR-DUP
Chrysene	0.896	0.100	"	0.200	0.637	130	70-130	39.1	20	QR-DUP
Dibenz (a,h) anthracene	0.377	0.100	"	0.200	0.133	122	70-130	20.9	20	QR-DUP
Fluoranthene	1.28	0.100	"	0.200	1.02	132	70-130	62.4	20	QM-02, QR-DUP
Fluorene	0.214	0.100	"	0.200	0.032	91.0	70-130	9.10	20	
Indeno (1,2,3-cd) pyrene	0.892	0.100	"	0.200	0.561	165	70-130	33.5	20	QM-02, QR-DUP
Naphthalene	0.222	0.010	"	0.200	0.021	101	70-130	6.43	20	
Phenanthrene	0.563	0.100	"	0.200	0.441	60.9	70-130	48.2	20	QM-02, QR-DUP
Pyrene	1.15	0.100	"	0.200	1.46	NR	70-130	45.8	20	QM-02, QR-DUP
Surrogate: Fluorene-d10	200		ug/kg	200		97.7	60-130			
Surrogate: Anthracene-d10	200		"	200		98.5	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		98.5	60-130			
Surrogate: Pyrene-d10	160		"	200		82.5	60-130			

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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

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 B3I0903 - Saturated Paste Metals

Blank (B3I0903-BLK1)

Prepared: 09/09/2023 Analyzed: 09/11/2023

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 (B3I0903-DUP1)

Source: Y309095-01

Prepared: 09/09/2023 Analyzed: 09/11/2023

Calcium PPM	86.0	10.0	mg/L		84.3			2.00	50	
SAR	ND	0.0100	SAR		1.83				200	
Magnesium PPM	23.6	10.0	mg/L		23.4			1.11	50	
Sodium PPM	77.4	10.0	"		73.8			4.76	50	

Batch B3I1110 - DTPA Sorbitol Preparation

Blank (B3I1110-BLK1)

Prepared: 09/11/2023 Analyzed: 09/12/2023

Boron	ND	0.100	mg/L							
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Duplicate (B3I1110-DUP1)

Source: Y309070-01

Prepared: 09/11/2023 Analyzed: 09/12/2023

Boron	0.235	0.0993	mg/L		0.238			1.23	50	
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Batch B3I1111 - DTPA Sorbitol Preparation

Blank (B3I1111-BLK1)

Prepared: 09/11/2023 Analyzed: 09/12/2023

Boron	ND	0.100	mg/L							
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Duplicate (B3I1111-DUP1)

Source: Y309097-04

Prepared: 09/11/2023 Analyzed: 09/12/2023

Boron	0.177	0.0997	mg/L		0.188			6.40	50	
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Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

Saturated Paste - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3I0906 - Saturated Paste pH/EC										
Blank (B3I0906-BLK1)					Prepared: 09/09/2023 Analyzed: 09/10/2023					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							
Duplicate (B3I0906-DUP1)		Source: Y309095-01			Prepared: 09/09/2023 Analyzed: 09/10/2023					
Specific Conductance (EC)	1.08	0.00500	mmhos/cm		1.11			3.19	25	
Batch B3I1924 - Saturated Paste pH/EC										
Duplicate (B3I1924-DUP1)		Source: Y309097-01			Prepared: 09/19/2023 Analyzed: 09/19/2023					
pH	7.92		pH Units		8.05			1.63	25	

Origins Laboratory, Inc.



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

Martin C Eckert III
Project Number: [none]
Project: Noble - Derr 21-04

Notes and Definitions

U Sample is Non-Detect.

QR-DUP RPD exceeds QC acceptance criteria, this indicates source sample is not homogenous.

QM-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

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.



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.



October 10, 2023

Eagle Environmental Consulting, LLC

Martin C Eckert III

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - Derr 21-04

Project Number - [none]

Attached are your analytical results for Noble - Derr 21-04 received by Origins Laboratory, Inc. September 29, 2023. This project is associated with Origins project number Y310007-01.

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

Martin C Eckert III
Project Number: [none]
Project: Noble - Derr 21-04

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Background-01@0.5'	Y310007-01	Soil	September 6, 2023 13:50	09/29/2023 12:15

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.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: V310007

Client: Eagle

Client Project ID: Derr 21-04

Checklist Completed by: JG/KAS

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

Date/time completed: 10/12/23

Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid

Water Other: _____

Cooler Number/Temperature: 1, 25 °C / _____ °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 ⁽¹⁾ ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	
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)			X	
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) [Signature]

Date/Time Reviewed 10/13/23

Origins Laboratory, Inc.

[Signature]

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.

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

Martin C Eckert III
Project Number: [none]
Project: Noble - Derr 21-04

Background-01@0.5'

9/6/2023 1:50:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y310007-01 (Soil)

pH in Soil by 9045D

pH	8.30		pH Units	1	B3J0215	HJD	10/02/2023	10/03/2023	
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Origins Laboratory, Inc.



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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Derr 21-04

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 B3J0215 - Saturated Paste pH/EC

Duplicate (B3J0215-DUP1)		Source: Y309720-06			Prepared: 10/02/2023 Analyzed: 10/03/2023					
pH	7.64		pH Units		7.55			1.18	25	

Origins Laboratory, Inc.



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

Martin C Eckert III
Project Number: [none]
Project: Noble - Derr 21-04

Notes and Definitions

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.



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.