

Wellhead Closure Checklist

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

Additional attachments (optional):		Pit Closure --		Tank Battery Closure --		Flowline Closure 9-25-18		Partially Buried Vault Closure --	
Site Name & COGCC Facility Number: Shable USX AB #11-16P		Date: 11-30-23					Remediation Project #: 30818		
Associated Wells: 05-123-31051		Age of Site: years					Number of Photos Attached: 5		
Location: (GPS coordinates of wellhead or southeastern most wellhead for multiple)						40.582380 / -104.510025		Estimated Facility Size (acres):	
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Good condition									
USCS Soil Type: SC				Estimated Depth to Groundwater: ~30-50'					
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) Slight petroleum hydrocarbon odor observed within excavation; no staining 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	05-123-31051								
Age	years								
Condition of surface around wellhead	Good - No odor/no staining								
PID Readings	WH-N: 0.6	WH-E: 0.7	WH-S: 1.2	WH-W: 0.4					
Condition of subsurface (staining present)	Slight petroleum hydrocarbon odor observed throughout excavation; no staining observed								
PID Readings	57.0	2.6	7.7	11.8	104.4				
Sample taken? Location/Sample ID#	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04	WH-FS-01				
Photo Number(s)	See photo log								
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: 104.4				Total number of samples submitted to lab for analysis: 5					
If more than 10 cubic yards of impacted soil were observed:									
Vertical extent:				Estimated spill volume:					
Lateral extent:				Volume of soil removed:					
N/A									
Is additional investigation required?									
Was groundwater encountered during the investigation? <input checked="" type="radio"/> 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				Volume of groundwater removed prior to sampling:					
Free product observed? Yes No				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

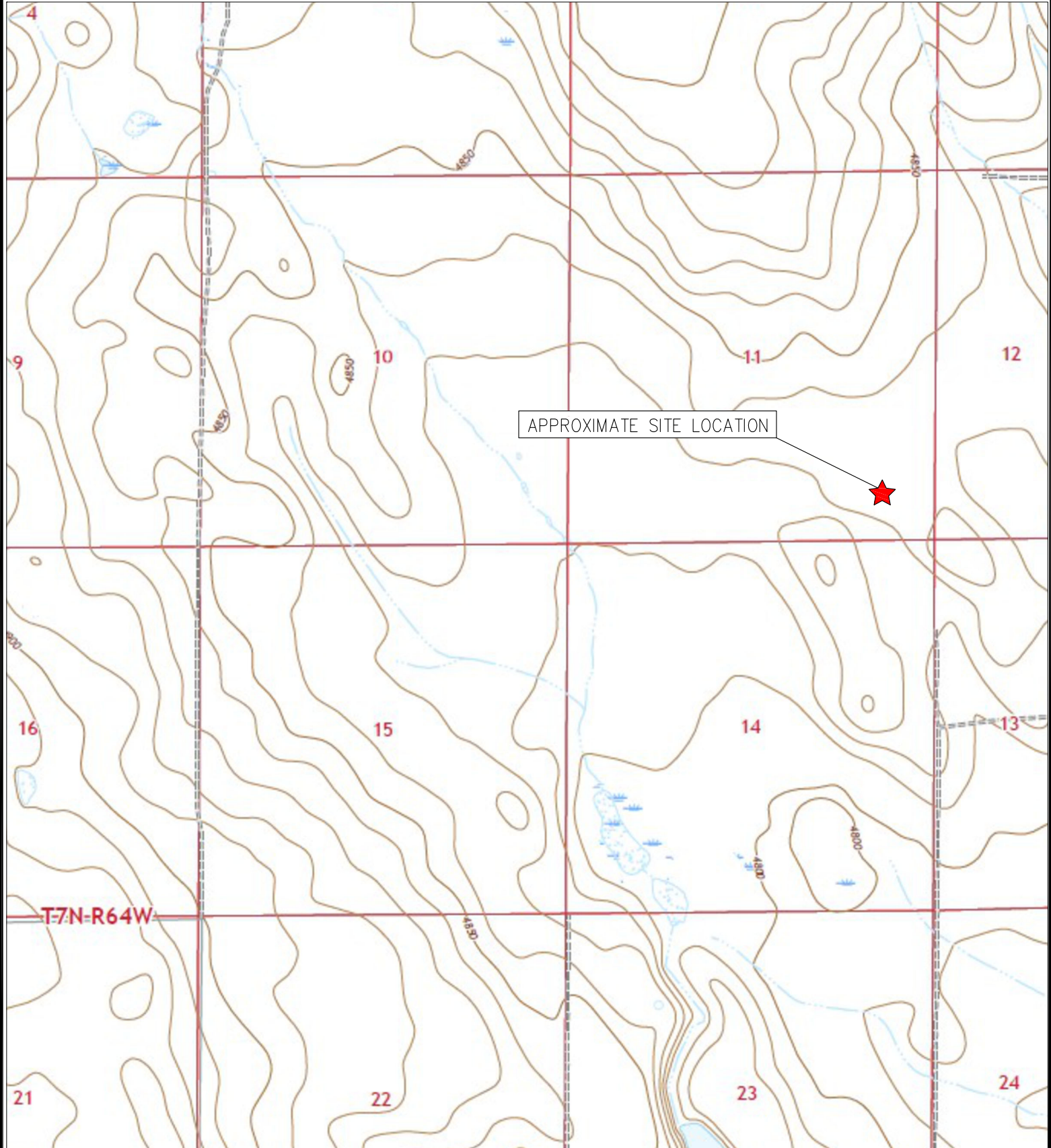
Figure 2: Aerial Site Location Map

Figure 3: Sample Location Map

Figure 4: Soil Analytical Map

Figure 5: Polycyclic Aromatic Hydrocarbons Map

Figure 6: Metals in Soil Map



TOPOGRAPHIC SITE LOCATION MAP
 SHABLE USX AB #11-16P
 CLOSURE ASSESSMENT
 40.582380 / -104.510025
 SE¼ SE¼ SEC.11 T7N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-31051
 REMEDIATION # 30818



EAGLE
 ENVIRONMENTAL
 CONSULTING, LLC


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

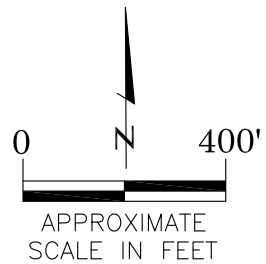
SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP,
 GALETON, CO QUADRANGLE 2022

FIGURE NO. 1



LEGEND

 FORMER SHABLE USX AB #11-16P WELLHEAD (PLUGGED AND ABANDONED)



AERIAL SITE LOCATION MAP
SHABLE USX AB #11-16P
CLOSURE ASSESSMENT
40.582380 / -104.510025
SE $\frac{1}{4}$ SE $\frac{1}{4}$ SEC.11 T7N R64W 6PM
WELD COUNTY, COLORADO
API # 05-123-31051
REMEDATION # 30818

FIGURE NO.
2

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ENVIRONMENTAL
CONSULTING, LLC

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

LEGEND

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



SAMPLE LOCATION MAP
SHABLE USX AB #11-16P
CLOSURE ASSESSMENT
40.582380 / -104.510025
SE¼ SE¼ SEC.11 T7N R64W 6PM
WELD COUNTY, COLORADO
API # 05-123-31051
REMEDIAION # 30818

FIGURE NO.
3

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LEGEND

- WELLHEAD ASSESSMENT BOUNDARIES
- 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)

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

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 LABORATORY DETECTION LIMITS

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

ECMC = ENERGY & CARBON MANAGEMENT COMMISSION

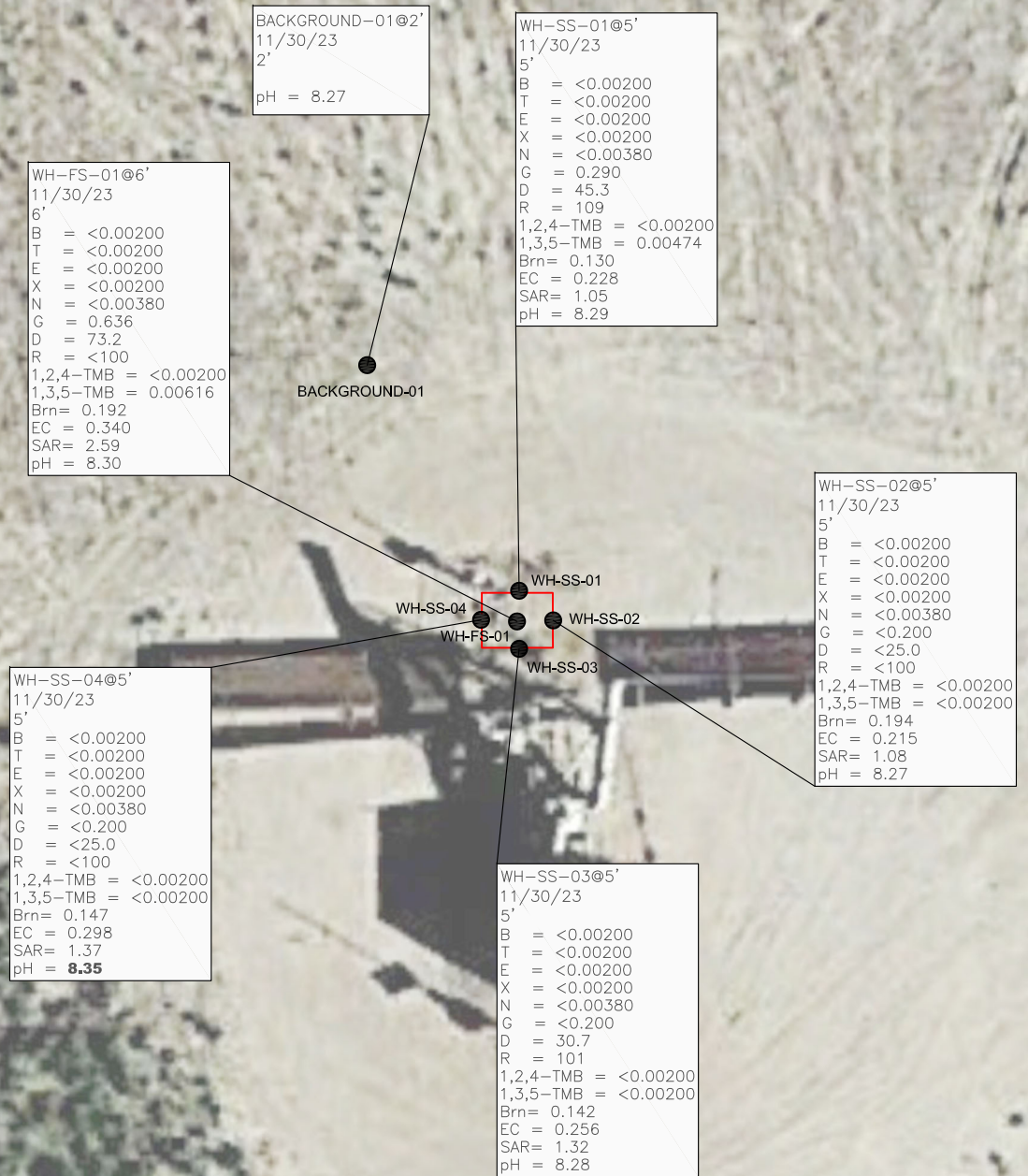
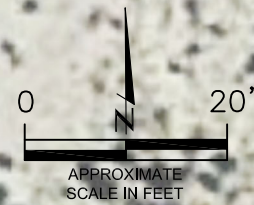
SOIL ANALYTICAL MAP
SHABLE USX AB #11-16P
CLOSURE ASSESSMENT
40.582380 / -104.510025
SE¼ SE¼ SEC.11 T7N R64W 6PM
WELD COUNTY, COLORADO
API # 05-123-31051
REMEDIAION # 30818

FIGURE NO.
4

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



LEGEND

- WELLHEAD ASSESSMENT BOUNDARIES
- APPROXIMATE LOCATION OF SOIL SAMPLES SUBMITTED FOR LABORATORY ANALYSIS

PARAMETERS

SAMPLE LOCATION
 DATE SAMPLE COLLECTED
 APPROXIMATE DEPTH
 POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) (mg/kg)

mg/kg = MILLIGRAMS PER KILOGRAM

NOTES:
 VALUES PRESENTED WITH A LESS THAN SYMBOL (<) DID NOT CONTAIN CONCENTRATIONS AT OR ABOVE LABORATORY DETECTION LIMITS

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

VALUES PRESENTED WITH AN ASTERISK (*) ARE EQUAL TO OR EXCEED ECMC TABLE 915-1 GROUNDWATER SOIL SCREENING LEVELS, ONLY.

ECMC = ENERGY & CARBON MANAGEMENT COMMISSION

POLYCYCLIC AROMATIC HYDROCARBONS MAP

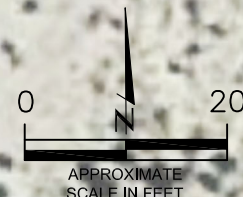
SHABLE USX AB #11-16P
 CLOSURE ASSESSMENT
 40.582380 / -104.510025
 SE¼ SE¼ SEC.11 T7N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-31051
 REMEDIATION # 30818

FIGURE NO.
5

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WH-FS-01@6'
 11/30/23
 6'

1-Methylnaphthalene = **0.041***
 2-Methylnaphthalene = 0.003
 Acenaphthene = <0.020
 Anthracene = <0.020
 Benzo(a)anthracene = <0.005
 Benzo(a)pyrene = <0.020
 Benzo(b)fluoranthene = <0.020
 Benzo(k)fluoranthene = <0.020
 Chrysene = <0.020
 Dibenzo(a,h)anthracene = <0.020
 Fluoranthene = <0.020
 Fluorene = <0.020
 Indeno(1,2,3-CD)pyrene = <0.020
 Pyrene = <0.020

WH-SS-01@5'
 11/30/23
 5'

1-Methylnaphthalene = 0.005
 2-Methylnaphthalene = <0.002
 Acenaphthene = <0.020
 Anthracene = <0.020
 Benzo(a)anthracene = <0.005
 Benzo(a)pyrene = <0.020
 Benzo(b)fluoranthene = <0.020
 Benzo(k)fluoranthene = <0.020
 Chrysene = <0.020
 Dibenzo(a,h)anthracene = <0.020
 Fluoranthene = <0.020
 Fluorene = <0.020
 Indeno(1,2,3-CD)pyrene = <0.020
 Pyrene = <0.020

WH-SS-02@5'
 11/30/23
 5'

1-Methylnaphthalene = <0.002
 2-Methylnaphthalene = <0.002
 Acenaphthene = <0.020
 Anthracene = <0.020
 Benzo(a)anthracene = <0.005
 Benzo(a)pyrene = <0.020
 Benzo(b)fluoranthene = <0.020
 Benzo(k)fluoranthene = <0.020
 Chrysene = <0.020
 Dibenzo(a,h)anthracene = <0.020
 Fluoranthene = <0.020
 Fluorene = <0.020
 Indeno(1,2,3-CD)pyrene = <0.020
 Pyrene = <0.020

WH-SS-04@5'
 11/30/23
 5'

1-Methylnaphthalene = **0.006***
 2-Methylnaphthalene = <0.002
 Acenaphthene = <0.020
 Anthracene = <0.020
 Benzo(a)anthracene = <0.005
 Benzo(a)pyrene = <0.020
 Benzo(b)fluoranthene = <0.020
 Benzo(k)fluoranthene = <0.020
 Chrysene = <0.020
 Dibenzo(a,h)anthracene = <0.020
 Fluoranthene = <0.020
 Fluorene = <0.020
 Indeno(1,2,3-CD)pyrene = <0.020
 Pyrene = <0.020

WH-SS-03@5'
 11/30/23
 5'

1-Methylnaphthalene = 0.002
 2-Methylnaphthalene = <0.002
 Acenaphthene = <0.020
 Anthracene = <0.020
 Benzo(a)anthracene = <0.005
 Benzo(a)pyrene = <0.020
 Benzo(b)fluoranthene = <0.020
 Benzo(k)fluoranthene = <0.020
 Chrysene = <0.020
 Dibenzo(a,h)anthracene = <0.020
 Fluoranthene = <0.020
 Fluorene = <0.020
 Indeno(1,2,3-CD)pyrene = <0.020
 Pyrene = <0.020



LEGEND

- WELLHEAD ASSESSMENT BOUNDARIES
- APPROXIMATE LOCATION OF SOIL SAMPLES SUBMITTED FOR LABORATORY ANALYSIS

PARAMETERS

SAMPLE LOCATION
 DATE SAMPLE COLLECTED
 APPROXIMATE DEPTH
 Arsenic = (mg/kg)
 Barium = (mg/kg)
 Cadmium = (mg/kg)
 Chromium (VI) = (mg/kg)
 Copper = (mg/kg)
 Lead = (mg/kg)
 Nickel = (mg/kg)
 Selenium = (mg/kg)
 Silver = (mg/kg)
 Zinc = (mg/kg)

mg/kg = MILLIGRAMS PER KILOGRAM

NOTES:
 VALUES PRESENTED WITH A LESS THAN SYMBOL (<) DID NOT CONTAIN CONCENTRATIONS AT/OR ABOVE LABORATORY REPORTING LIMITS AND/OR MINIMUM DETECTION LIMITS.

ELEVATED METALS ARE NATURALLY OCCURRING IN COLORADO. LOCAL CLEAN-UP LEVELS ARE 1.25*BACKGROUND CONCENTRATIONS WHERE APPLICABLE.

VALUES PRESENTED IN **BOLD** EXCEED ECMC TABLE 915-1 REGULATORY LIMITS AND LOCAL CLEAN-UP LEVELS.

*VALUES EXCEED ECMC TABLE 915-1 PROTECTION OF GROUNDWATER SOIL SCREENING LEVELS, ONLY.

**ACHIEVABLE PRACTICAL QUANTITATIVE LIMITS FOR HEXAVALENT CHROMIUM (Cr VI) IN SOILS IS IN THE RANGE OF 0.1 TO 1 mg/kg.

ECMC = ENERGY & CARBON MANAGEMENT COMMISSION

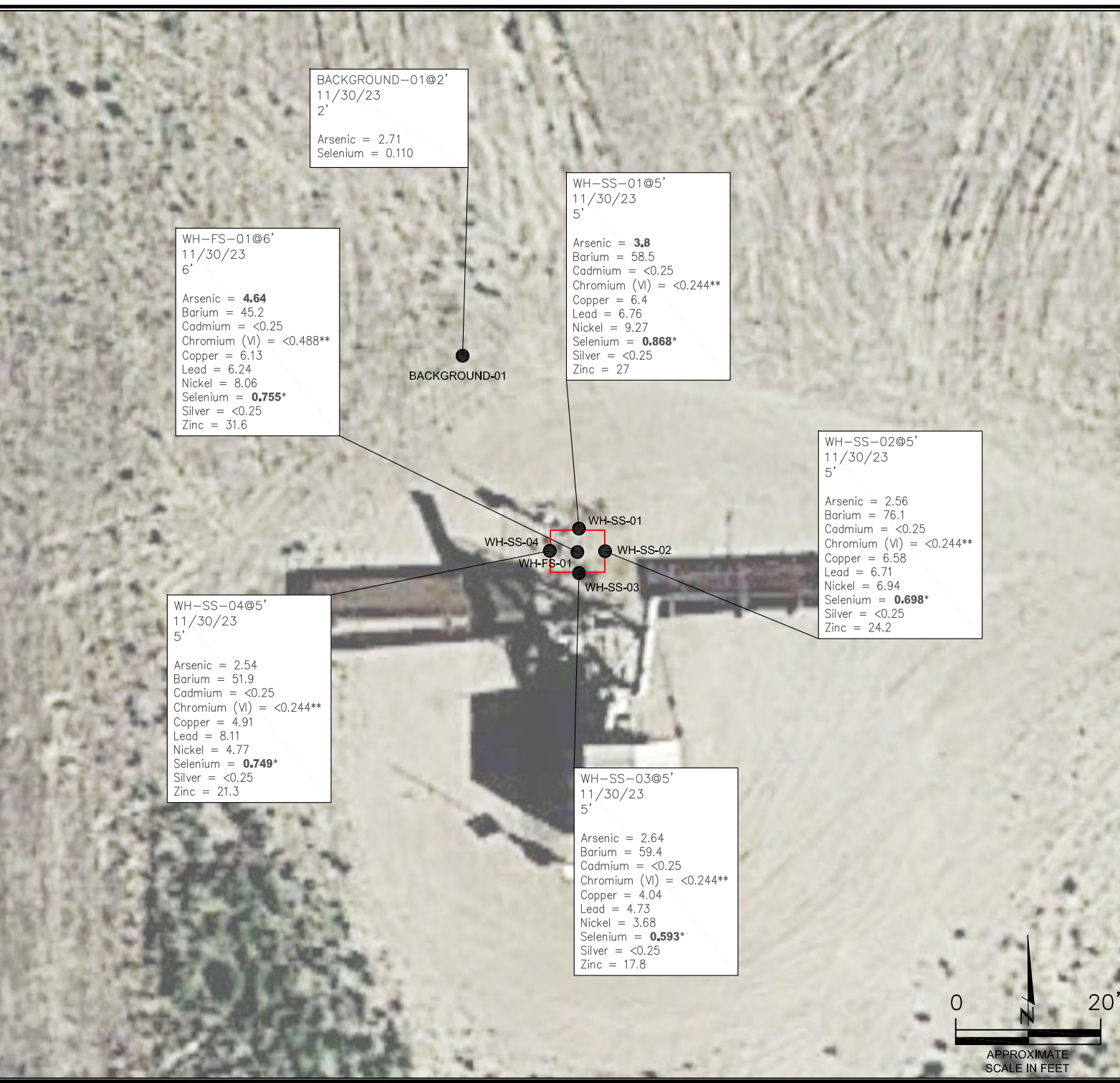
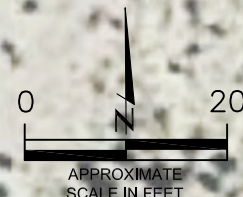
METALS IN SOIL MAP
 SHABLE USX AB #11-16P
 CLOSURE ASSESSMENT
 40.582380 / -104.510025
 SE¼ SE¼ SEC.11 T7N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-31051
 REMEDIATION # 30818

FIGURE NO.
6

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TABLES

Table 1: Photoionization Detector Reading Summary

Table 2: Soil Analytical Results Summary

TABLE 1
PHOTOIONIZATION DETECTOR READING SUMMARY
SHABLE USX AB #11-16P
CLOSURE ASSESSMENT
40.582380 / -104.510025
SE¼ SE¼ SEC.11 T7N R64W 6PM
WELD COUNTY, COLORADO
API # 05-123-31051
REMEDIAION # 30818

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Lab Submission (Y/N)
WH-SS-01 @ 5' (40.582399 / -104.510034)	11/30/23	5	57.0	N
WH-SS-02 @ 5' (40.582393 / -104.510023)	11/30/23	5	2.6	N
WH-SS-03 @ 5' (40.582384 / -104.510035)	11/30/23	5	7.7	N
WH-SS-04 @ 5' (40.582391 / -104.510045)	11/30/23	5	11.8	N
WH-FS-01 @ 6' (40.582392 / -104.510033)	11/30/23	6	104.4	Y
WH-N @ 0.5' (40.582408 / -104.510033)	11/30/23	0.5	0.6	N
WH-E @ 0.5' (40.582386 / -104.510009)	11/30/23	0.5	0.7	N
WH-S @ 0.5' (40.582374 / -104.510035)	11/30/23	0.5	1.2	N
WH-W @ 0.5' (40.582387 / -104.510070)	11/30/23	0.5	0.4	N
Background-01 @ 2' (40.582466 / -104.510091)	11/30/23	2	0.7	Y
(Y/N) = Yes or No ppm-v = parts per million by volume PID = Photoionization Detector				



TABLE 2
SOIL ANALYTICAL RESULTS SUMMARY
SHABLE USX AB #11-16P
CLOSURE ASSESSMENT
40.582380 / -104.510025
SE 1/4, SEC. 11, T7N R64W 6PM
WELD COUNTY, COLORADO
API # 05-123-31051
REMEDIATION # 30818

Sample Location (Latitude / Longitude)		WH-SS-01 @ 5'	WH-SS-02 @ 5'	WH-SS-03 @ 5'	WH-SS-04 @ 5'	WH-FS-01 @ 6'	Background-01 @ 2'
Sample Date		11/30/2023	11/30/2023	11/30/2023	11/30/2023	11/30/2023	11/30/2023
Sample Depth		5	5	5	5	6	2
PID Reading (ppm-v)		57.0	2.6	7.7	11.8	104.4	0.7
Regulatory Limits							
Chemical of Concern	Units	ECMC Table 915-1 RSSLs	ECMC Table 915-1 GSSLs	Local Clean-Up Level			
VOCs							
Benzene	mg/kg	1.2	0.0026	--	<0.00200	<0.00200	<0.00200
Toluene	mg/kg	490	0.69	--	<0.00200	<0.00200	<0.00200
Ethylbenzene	mg/kg	5.8	0.78	--	<0.00200	<0.00200	<0.00200
Total Xylenes	mg/kg	58	9.9	--	<0.00200	<0.00200	<0.00200
Naphthalene	mg/kg	2	0.0038	--	<0.00380	<0.00380	<0.00380
1,2,4-Trimethylbenzene	mg/kg	30	0.0081	--	0.00474	<0.00200	<0.00200
1,3,5-Trimethylbenzene	mg/kg	27	0.0087	--	<0.00200	<0.00200	0.00616
TOTAL PETROLEUM HYDROCARBONS							
TPH-GRO	mg/kg	500	--	--	0.290	<0.200	0.636
TPH-DRO	mg/kg	500	--	--	45.3	<25.0	73.2
TPH-RRO	mg/kg	500	--	--	109	<100	<100
POLYCYCLIC AROMATIC HYDROCARBONS							
1-Methyl-naphthalene	mg/kg	18	0.006	--	0.005	<0.002	0.006*
2-Methyl-naphthalene	mg/kg	24	0.019	--	<0.002	<0.002	0.003
Acenaphthene	mg/kg	360	0.55	--	<0.020	<0.020	<0.020
Anthracene	mg/kg	1800	5.8	--	<0.020	<0.020	<0.020
Benzo(a)-anthracene	mg/kg	1.1	0.011	--	<0.005	<0.005	<0.005
Benzo(a)-pyrene	mg/kg	0.11	0.24	--	<0.020	<0.020	<0.020
Benzo(b)-fluoranthene	mg/kg	1.1	0.3	--	<0.020	<0.020	<0.020
Benzo(k)-fluoranthene	mg/kg	11	2.9	--	<0.020	<0.020	<0.020
Chrysene	mg/kg	110	9	--	<0.020	<0.020	<0.020
Dibenzo(a,h)-anthracene	mg/kg	0.11	0.006	--	<0.020	<0.020	<0.020
Fluoranthene	mg/kg	240	8.9	--	<0.020	<0.020	<0.020
Fluorene	mg/kg	240	0.54	--	<0.020	<0.020	<0.020
Indeno(1,2,3-cd)-pyrene	mg/kg	1.1	0.98	--	<0.020	<0.020	<0.020
Pyrene	mg/kg	180	1.3	--	<0.020	<0.020	<0.020
SOIL SUITABILITY (Inorganics)							
Boron	mg/L	2	--	--	0.130	0.194	0.147
pH	standard unit	6-8.3	--	--	8.29	8.27	8.35
Sodium Adsorption Ratio (SAR)	--	<6	--	--	1.05	1.32	1.37
Specific Conductance (EC)	mmhos/cm	<4	--	--	0.228	0.215	0.298
METALS							
Arsenic	mg/kg	0.68***	0.29***	3.39	3.8	2.56	2.64
Barium	mg/kg	15000	82	--	58.5	76.1	59.4
Cadmium	mg/kg	71	0.38	--	<0.25	<0.25	<0.25
Copper	mg/kg	3100	46	--	6.4	6.58	4.04
Lead	mg/kg	400	14	--	6.76	6.71	4.73
Nickel	mg/kg	1500	26	--	9.27	6.94	3.68
Selenium	mg/kg	390	0.26	--	0.868*	0.698*	0.593*
Silver	mg/kg	390	0.8	--	<0.25	<0.25	<0.25
Zinc	mg/kg	23000	370	--	27	24.2	17.8
Hexavalent Chromium	mg/kg	0.3**	0.00067**	0.1 to 1.0**	<0.244**	<0.244**	<0.244**
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							
Elevated metals are naturally occurring in Colorado. Local Clean-up Levels are 1.25*Background concentrations where applicable.							
Values presented in BOLD exceed ECMC Table 915-1 Regulatory Limits and applicable Local Clean-up Levels. Values presented with asterisk (*) exceed ECMC Table 915-1 GSSLs, only.							
**Achievable practical quantitative limits for Hexavalent Chromium in soils is in the range of 0.1 to 1 mg/kg.							



ATTACHMENT A

Photo Log

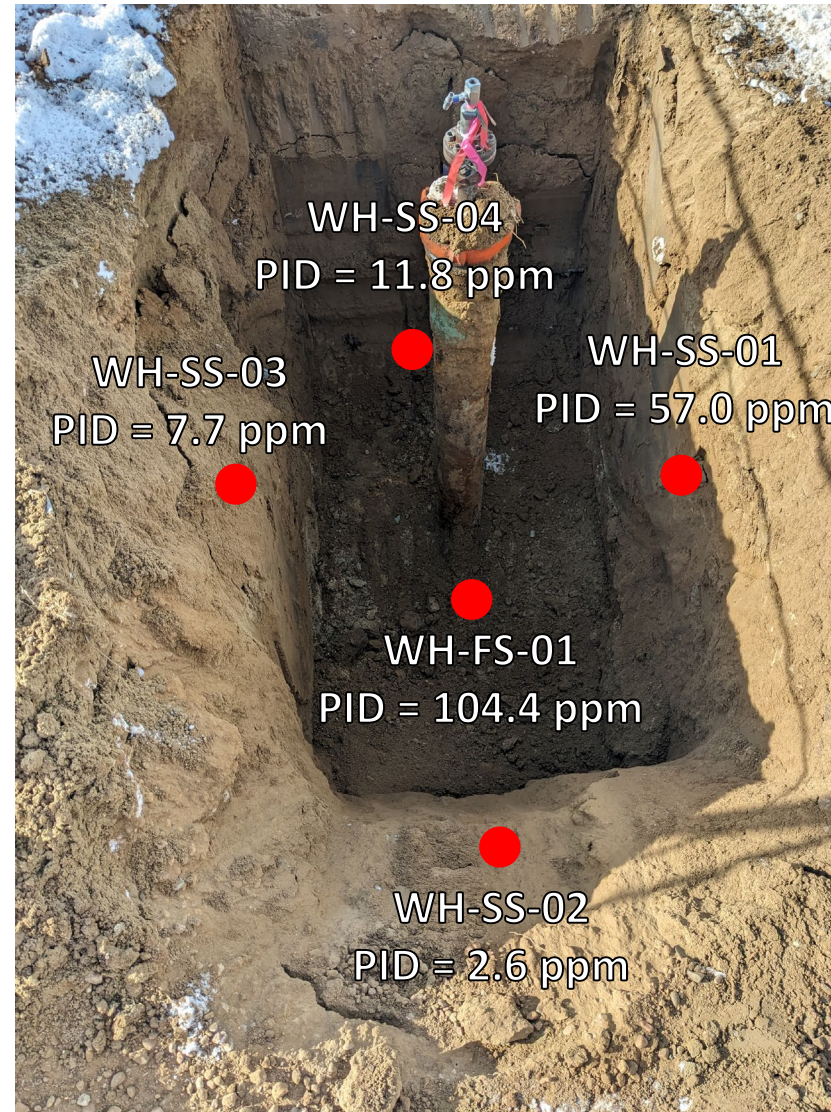
Shable USX AB #11-16P
API # 05-123-31051
Remediation # 30818

Closure Assessment

November 2023



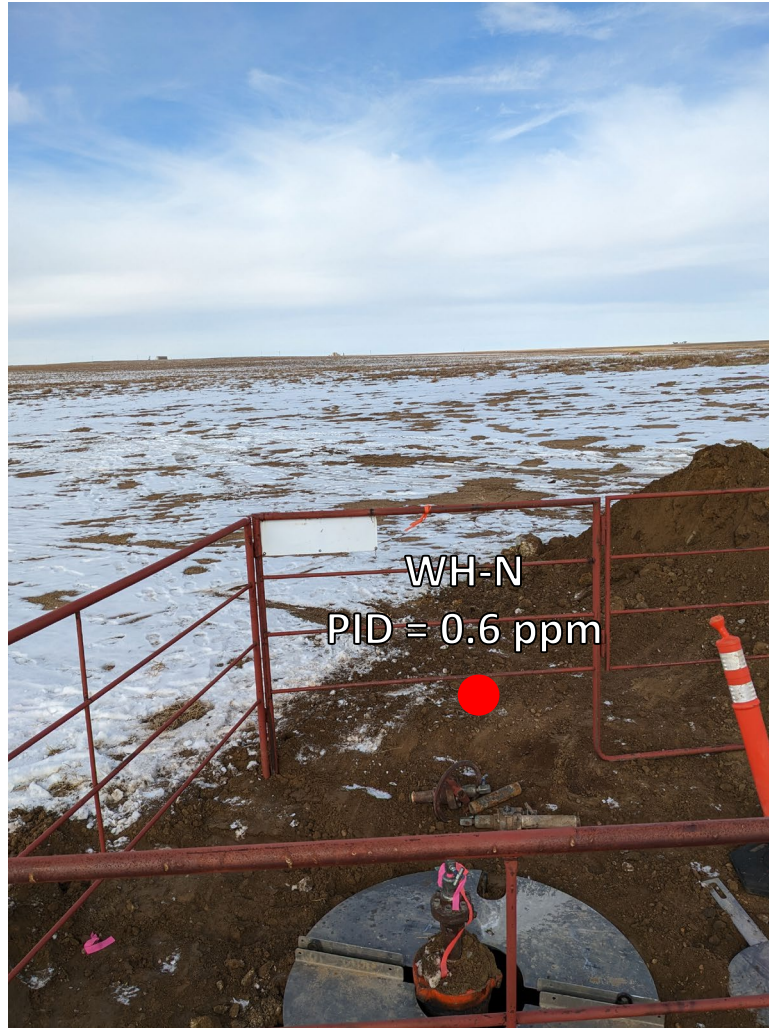
Wellhead Excavation – 11/30/23



Looking west

Slight petroleum hydrocarbon odor observed throughout excavation;
no staining observed

Wellhead Surface – 11/30/23



Looking north

Site in good condition – no petroleum hydrocarbon staining or odor observed on surface around wellhead



Looking east

Site in good condition – no petroleum hydrocarbon staining or odor observed on surface around wellhead

Wellhead Surface – 11/30/23



WH-S
PID = 1.2 ppm

Looking south

Site in good condition – no petroleum hydrocarbon staining or odor observed on surface around wellhead



WH-W
PID = 0.4 ppm

Looking west

Site in good condition – no petroleum hydrocarbon staining or odor observed on surface around wellhead



ATTACHMENT B

Laboratory Analytical Reports



December 26, 2023

Eagle Environmental Consulting, LLC

Andrew Newberry

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - Shable USX AB#11-16P

Project Number - [none]

Attached are your analytical results for Noble - Shable USX AB#11-16P received by Origins Laboratory, Inc. November 30, 2023. This project is associated with Origins project number Y312007-01.

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 - Shable USX AB#11-16P

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH-SS-01@5'	Y312007-01	Soil	November 30, 2023 11:30	11/30/2023 17:19
WH-SS-02@5'	Y312007-02	Soil	November 30, 2023 11:32	11/30/2023 17:19
WH-SS-03@5'	Y312007-03	Soil	November 30, 2023 11:34	11/30/2023 17:19
WH-SS-04@5'	Y312007-04	Soil	November 30, 2023 11:36	11/30/2023 17:19
WH-FS-01@6'	Y312007-05	Soil	November 30, 2023 11:38	11/30/2023 17:19

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 - Shable USX AB#11-16P

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 432007

Client: Eagle

Client Project ID: SHABLE USX AB #11-16P

Checklist Completed by: TJH/EHS

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

Date/time completed: 12/01/12

Airbill #: N/A

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

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

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

Reviewed by (Project Manager): JH

Date/Time Reviewed: 12-4-12

Origins Laboratory, Inc.



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 Wheat Ridge CO 80033

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-01@5'
11/30/2023 11:30:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-01 (Soil)

Boron (DTPA Sorbitol)

Boron	0.130		0.101	mg/L	1	B3L0409	12/04/2023	12/05/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	45.3		25.0	mg/kg	1	B3L0401	12/04/2023	12/05/2023	
Residual Range Organics (C28-C40)	109		100	"	"	"	"	"	

Surrogate: o-Terphenyl	76.9 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B3L0526	12/05/2023	12/06/2023	U
1,3,5-Trimethylbenzene	0.00474		0.00200	"	"	"	"	"	
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	0.290		0.200	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	99.7 %		70-130			"	"	"	
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WH-SS-01@5'
11/30/2023 11:30:00AM

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

Origins Laboratory, Inc.
Y312007-01 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	100 %		70-130			B3L05 26	12/05/2023	12/06/2023	
Surrogate: 4-Bromofluorobenzene	117 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	0.904		0.499	meq/L	10	[CALC]	12/02/2023	12/04/2023	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	0.869		0.435	"	"	"	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	0.005		0.002	mg/kg	1	B3L0621	12/06/2023	12/09/2023	
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 (k) fluoranthene	ND		0.020	"	"	"	"	"	U
Chrysene	ND		0.020	"	"	"	"	"	U
Dibenz (a,h) anthracene	ND		0.020	"	"	"	"	"	U
Fluoranthene	ND		0.020	"	"	"	"	"	U

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Andrew Newberry
 Project Number: [none]
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WH-SS-01@5'
11/30/2023 11:30:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-01 (Soil)

PAH by EPA 8270E

Fluorene	ND		0.020	mg/kg	1	B3L0621	12/06/2023	12/09/2023	U
Indeno (1,2,3-cd) pyrene	ND		0.020	"	"	"	"	"	U
Naphthalene	ND		0.002	"	"	"	"	"	U
Pyrene	ND		0.020	"	"	"	"	"	U

Surrogate: Fluorene-d10	106 %		60-130			"	"	"	
Surrogate: Anthracene-d10	96.1 %		60-130			"	"	"	
Surrogate: Pyrene-d10	95.6 %		60-130			"	"	"	
Surrogate: Benzo (a) pyrene-d12	102 %		60-130			"	"	"	

pH in Soil by 9045D

pH	8.29			pH Units	1	B3L0209	12/02/2023	12/04/2023	
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SAR by 20B Saturated Paste

SAR	1.05		0.0100	SAR	1	B3L0205	12/02/2023	12/04/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.228		0.00500	mmhos/cm	1	B3L0209	12/02/2023	12/04/2023	
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Total Metals by 6020B

Origins Laboratory, Inc.



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 Wheat Ridge CO 80033

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-01@5'
11/30/2023 11:30:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y312007-01 (Soil)

Total Metals by 6020B

Arsenic	3.8	0.25	0.25	mg/Kg	5	L721047	12/07/2023	12/21/2023	
Barium	58.5	0.25	0.25	"	"	"	"	"	
Cadmium	ND	0.25	0.25	"	"	"	"	"	
Copper	6.4	0.25	0.25	"	"	"	"	"	
Lead	6.76	0.25	0.25	"	"	"	"	"	
Nickel	9.27	0.25	0.25	"	"	"	"	"	
Selenium	0.868	0.25	0.25	"	"	"	"	"	
Silver	ND	0.25	0.25	"	"	"	"	"	
Zinc	27	2.5	2.5	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L721116	11/30/2023	12/07/2023	
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 Wheat Ridge CO 80033

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-02@5'
11/30/2023 11:32:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-02 (Soil)

Boron (DTPA Sorbitol)

Boron	0.194		0.0987	mg/L	1	B3L0409	12/04/2023	12/05/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B3L0401	12/04/2023	12/05/2023	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	97.3 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B3L0526	12/05/2023	12/06/2023	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

Origins Laboratory, Inc.



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Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-02@5'
11/30/2023 11:32:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-02 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	101 %		70-130			B3L05 26	12/05/2023	12/06/2023	
Surrogate: Toluene-d8	99.5 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	117 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	0.888		0.499	meq/L	10	[CALC]	12/02/2023	12/04/2023	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	0.812		0.435	"	"	"	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	ND		0.002	mg/kg	1	B3L0621	12/06/2023	12/09/2023	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 (k) fluoranthene	ND		0.020	"	"	"	"	"	U
Chrysene	ND		0.020	"	"	"	"	"	U
Dibenz (a,h) anthracene	ND		0.020	"	"	"	"	"	U

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 Wheat Ridge CO 80033

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-02@5'

11/30/2023 11:32:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-02 (Soil)

PAH by EPA 8270E

Fluoranthene	ND		0.020	mg/kg	1	B3L0621	12/06/2023	12/09/2023	U
Fluorene	ND		0.020	"	"	"	"	"	U
Indeno (1,2,3-cd) pyrene	ND		0.020	"	"	"	"	"	U
Naphthalene	ND		0.002	"	"	"	"	"	U
Pyrene	ND		0.020	"	"	"	"	"	U

Surrogate: Fluorene-d10	105 %		60-130			"	"	"	
Surrogate: Anthracene-d10	96.9 %		60-130			"	"	"	
Surrogate: Pyrene-d10	94.7 %		60-130			"	"	"	
Surrogate: Benzo (a) pyrene-d12	100 %		60-130			"	"	"	

pH in Soil by 9045D

pH	8.27			pH Units	1	B3L0209	12/02/2023	12/04/2023	
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SAR by 20B Saturated Paste

SAR	1.08		0.0100	SAR	1	B3L0205	12/02/2023	12/04/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.215		0.00500	mmhos/cm	1	B3L0209	12/02/2023	12/04/2023	
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 Wheat Ridge CO 80033

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-02@5'

11/30/2023 11:32:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y312007-02 (Soil)

Total Metals by 6020B

Arsenic	2.56	0.25	0.25	mg/Kg	5	L721047	12/07/2023	12/21/2023	
Barium	76.1	0.25	0.25	"	"	"	"	"	
Cadmium	ND	0.25	0.25	"	"	"	"	"	
Copper	6.58	0.25	0.25	"	"	"	"	"	
Lead	6.71	0.25	0.25	"	"	"	"	"	
Nickel	6.94	0.25	0.25	"	"	"	"	"	
Selenium	0.698	0.25	0.25	"	"	"	"	"	
Silver	ND	0.25	0.25	"	"	"	"	"	
Zinc	24.2	2.5	2.5	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L721116	11/30/2023	12/07/2023	
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Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-03@5'
11/30/2023 11:34:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-03 (Soil)

Boron (DTPA Sorbitol)

Boron	0.142		0.0982	mg/L	1	B3L0409	12/04/2023	12/05/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	30.7		25.0	mg/kg	1	B3L0401	12/04/2023	12/05/2023	
Residual Range Organics (C28-C40)	101		100	"	"	"	"	"	

Surrogate: o-Terphenyl	94.0 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B3L0526	12/05/2023	12/06/2023	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

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 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-03@5'
11/30/2023 11:34:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-03 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	103 %		70-130			B3L05 26	12/05/2023	12/06/2023	
Surrogate: Toluene-d8	99.0 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	118 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	0.834		0.499	meq/L	10	[CALC]	12/02/2023	12/04/2023	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	1.07		0.435	"	"	"	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	0.002		0.002	mg/kg	1	B3L0621	12/06/2023	12/09/2023	
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 (k) fluoranthene	ND		0.020	"	"	"	"	"	U
Chrysene	ND		0.020	"	"	"	"	"	U
Dibenz (a,h) anthracene	ND		0.020	"	"	"	"	"	U

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 8000 W 44th Ave
 Wheat Ridge CO 80033

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-03@5'

11/30/2023 11:34:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-03 (Soil)

PAH by EPA 8270E

Fluoranthene	ND		0.020	mg/kg	1	B3L0621	12/06/2023	12/09/2023	U
Fluorene	ND		0.020	"	"	"	"	"	U
Indeno (1,2,3-cd) pyrene	ND		0.020	"	"	"	"	"	U
Naphthalene	ND		0.002	"	"	"	"	"	U
Pyrene	ND		0.020	"	"	"	"	"	U

Surrogate: Fluorene-d10	105 %		60-130			"	"	"	
Surrogate: Anthracene-d10	96.3 %		60-130			"	"	"	
Surrogate: Pyrene-d10	94.9 %		60-130			"	"	"	
Surrogate: Benzo (a) pyrene-d12	100 %		60-130			"	"	"	

pH in Soil by 9045D

pH	8.28			pH Units	1	B3L0209	12/02/2023	12/04/2023	
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SAR by 20B Saturated Paste

SAR	1.32		0.0100	SAR	1	B3L0205	12/02/2023	12/04/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.256		0.00500	mmhos/cm	1	B3L0209	12/02/2023	12/04/2023	
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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

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

WH-SS-03@5'

11/30/2023 11:34:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y312007-03 (Soil)

Total Metals by 6020B

Arsenic	2.64	0.25	0.25	mg/Kg	5	L721047	12/07/2023	12/21/2023	
Barium	59.4	0.25	0.25	"	"	"	"	"	
Cadmium	ND	0.25	0.25	"	"	"	"	"	
Copper	4.04	0.25	0.25	"	"	"	"	"	
Lead	4.73	0.25	0.25	"	"	"	"	"	
Nickel	3.68	0.25	0.25	"	"	"	"	"	
Selenium	0.593	0.25	0.25	"	"	"	"	"	
Silver	ND	0.25	0.25	"	"	"	"	"	
Zinc	17.8	2.5	2.5	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L721116	11/30/2023	12/07/2023	
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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 - Shable USX AB#11-16P

WH-SS-04@5'
11/30/2023 11:36:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-04 (Soil)

Boron (DTPA Sorbitol)

Boron	0.147		0.0992	mg/L	1	B3L0409	12/04/2023	12/05/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B3L0401	12/04/2023	12/05/2023	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	76.2 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B3L0526	12/05/2023	12/06/2023	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

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 - Shable USX AB#11-16P

WH-SS-04@5'
11/30/2023 11:36:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-04 (Soil)

GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	107 %		70-130			B3L05 26	12/05/2023	12/06/2023	
Surrogate: Toluene-d8	98.0 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	114 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	0.890		0.499	meq/L	10	[CALC]	12/02/2023	12/04/2023	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	1.23		0.435	"	"	"	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	0.006		0.002	mg/kg	1	B3L0621	12/06/2023	12/09/2023	
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 (k) fluoranthene	ND		0.020	"	"	"	"	"	U
Chrysene	ND		0.020	"	"	"	"	"	U
Dibenz (a,h) anthracene	ND		0.020	"	"	"	"	"	U

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 - Shable USX AB#11-16P

WH-SS-04@5'

11/30/2023 11:36:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-04 (Soil)

PAH by EPA 8270E

Fluoranthene	ND		0.020	mg/kg	1	B3L0621	12/06/2023	12/09/2023	U
Fluorene	ND		0.020	"	"	"	"	"	U
Indeno (1,2,3-cd) pyrene	ND		0.020	"	"	"	"	"	U
Naphthalene	ND		0.002	"	"	"	"	"	U
Pyrene	ND		0.020	"	"	"	"	"	U

Surrogate: Fluorene-d10	103 %		60-130			"	"	"	
Surrogate: Anthracene-d10	95.5 %		60-130			"	"	"	
Surrogate: Pyrene-d10	98.4 %		60-130			"	"	"	
Surrogate: Benzo (a) pyrene-d12	102 %		60-130			"	"	"	

pH in Soil by 9045D

pH	8.35			pH Units	1	B3L0209	12/02/2023	12/04/2023	
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SAR by 20B Saturated Paste

SAR	1.37		0.0100	SAR	1	B3L0205	12/02/2023	12/04/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.298		0.00500	mmhos/cm	1	B3L0209	12/02/2023	12/04/2023	
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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 - Shable USX AB#11-16P

WH-SS-04@5'
11/30/2023 11:36:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y312007-04 (Soil)

Total Metals by 6020B

Arsenic	2.54	0.25	0.25	mg/Kg	5	L721047	12/07/2023	12/21/2023	
Barium	51.9	0.25	0.25	"	"	"	"	"	
Cadmium	ND	0.25	0.25	"	"	"	"	"	
Copper	4.91	0.25	0.25	"	"	"	"	"	
Lead	8.11	0.25	0.25	"	"	"	"	"	
Nickel	4.77	0.25	0.25	"	"	"	"	"	
Selenium	0.749	0.25	0.25	"	"	"	"	"	
Silver	ND	0.25	0.25	"	"	"	"	"	
Zinc	21.3	2.5	2.5	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L721116	11/30/2023	12/07/2023	
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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 - Shable USX AB#11-16P

WH-FS-01@6'
11/30/2023 11:38:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-05 (Soil)

Boron (DTPA Sorbitol)

Boron	0.192		0.100	mg/L	1	B3L0409	12/04/2023	12/05/2023	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	73.2		25.0	mg/kg	1	B3L0401	12/04/2023	12/05/2023	
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	84.9 %		50-150			"	"	"	
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B3L0526	12/05/2023	12/06/2023	U
1,3,5-Trimethylbenzene	0.00616		0.00200	"	"	"	"	"	
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	0.636		0.200	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	107 %		70-130			"	"	"	
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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 - Shable USX AB#11-16P

WH-FS-01@6'
11/30/2023 11:38:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-05 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	98.3 %		70-130			B3L05 26	12/05/2023	12/06/2023	
Surrogate: 4-Bromofluorobenzene	116 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	0.714	0.499	meq/L	10	[CALC]		12/02/2023	12/04/2023	
Magnesium	ND	0.823	"	"	"		"	"	
Sodium	1.98	0.435	"	"	"		"	"	

PAH by EPA 8270E

1-Methylnaphthalene	0.041	0.002	mg/kg	1	B3L0621		12/06/2023	12/09/2023	
2-Methylnaphthalene	0.003	0.002	"	"	"		"	"	
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 (k) fluoranthene	ND	0.020	"	"	"		"	"	U
Chrysene	ND	0.020	"	"	"		"	"	U
Dibenz (a,h) anthracene	ND	0.020	"	"	"		"	"	U
Fluoranthene	ND	0.020	"	"	"		"	"	U

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 - Shable USX AB#11-16P

WH-FS-01@6'

11/30/2023 11:38:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y312007-05 (Soil)

PAH by EPA 8270E

Fluorene	ND		0.020	mg/kg	1	B3L0621	12/06/2023	12/09/2023	U
Indeno (1,2,3-cd) pyrene	ND		0.020	"	"	"	"	"	U
Naphthalene	ND		0.002	"	"	"	"	"	U
Pyrene	ND		0.020	"	"	"	"	"	U

Surrogate: Fluorene-d10	106 %		60-130			"	"	"	
Surrogate: Anthracene-d10	97.6 %		60-130			"	"	"	
Surrogate: Pyrene-d10	89.9 %		60-130			"	"	"	
Surrogate: Benzo (a) pyrene-d12	97.4 %		60-130			"	"	"	

pH in Soil by 9045D

pH	8.30			pH Units	1	B3L0209	12/02/2023	12/04/2023	
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SAR by 20B Saturated Paste

SAR	2.59		0.0100	SAR	1	B3L0205	12/02/2023	12/04/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.340		0.00500	mmhos/cm	1	B3L0209	12/02/2023	12/04/2023	
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Total Metals by 6020B

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 - Shable USX AB#11-16P

WH-FS-01@6'

11/30/2023 11:38:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y312007-05 (Soil)

Total Metals by 6020B

Arsenic	4.64	0.25	0.25	mg/Kg	5	L721047	12/07/2023	12/21/2023	
Barium	45.2	0.25	0.25	"	"	"	"	"	
Cadmium	ND	0.25	0.25	"	"	"	"	"	
Copper	6.13	0.25	0.25	"	"	"	"	"	
Lead	6.24	0.25	0.25	"	"	"	"	"	
Nickel	8.06	0.25	0.25	"	"	"	"	"	
Selenium	0.755	0.25	0.25	"	"	"	"	"	
Silver	ND	0.25	0.25	"	"	"	"	"	
Zinc	31.6	2.5	2.5	"	"	"	"	"	

Total Metals by 7196A

Chromium, Hexavalent	ND	0.488	1	mg/Kg	2	L721116	11/30/2023	12/07/2023	
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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 - Shable USX AB#11-16P

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 B3L0401 - EPA 3550B										
Blank (B3L0401-BLK1)										
					Prepared: 12/04/2023 Analyzed: 12/05/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	20		"	24.9		78.6	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 - Shable USX AB#11-16P

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 B3L0401 - EPA 3550B										
LCS (B3L0401-BS1)										
					Prepared: 12/04/2023 Analyzed: 12/05/2023					
Diesel (C10-C28)	852	50.0	mg/kg	1000		85.2	70-130			
Residual Range Organics (C28-C40)	813	200	"	1000		81.3	70-130			
Surrogate: o-Terphenyl	39		"	49.8		78.4	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 - Shable USX AB#11-16P

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 B3L0401 - EPA 3550B

Matrix Spike (B3L0401-MS1)	Source: Y312005-01			Prepared: 12/04/2023 Analyzed: 12/05/2023						
Diesel (C10-C28)	963	50.0	mg/kg	1000	ND	96.3	70-130			
Residual Range Organics (C28-C40)	954	200	"	1000	ND	95.4	70-130			
Surrogate: o-Terphenyl	56		"	49.8		113	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 - Shable USX AB#11-16P

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 B3L0401 - EPA 3550B										
Matrix Spike Dup (B3L0401-MSD1)					Source: Y312005-01					Prepared: 12/04/2023 Analyzed: 12/05/2023
Diesel (C10-C28)	894	50.0	mg/kg	1000	ND	89.4	70-130	7.47	35	
Residual Range Organics (C28-C40)	880	200	"	1000	ND	88.0	70-130	8.14	35	
Surrogate: o-Terphenyl	48		"	49.8		96.4	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 - Shable USX AB#11-16P

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 B3L0526 - EPA 5030 (soil)

Blank (B3L0526-BLK1)

Prepared: 12/05/2023 Analyzed: 12/05/2023

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	0.15		"	0.125	118		70-130			
Surrogate: Toluene-d8	0.13		"	0.125	101		70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125	101		70-130			

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 - Shable USX AB#11-16P

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 B3L0526 - EPA 5030 (soil)

LCS (B3L0526-BS1)

Prepared: 12/05/2023 Analyzed: 12/05/2023

1,2,4-Trimethylbenzene	0.0940	0.00200	mg/kg	0.100		94.0	70-130			
1,3,5-Trimethylbenzene	0.0958	0.00200	"	0.100		95.8	70-130			
Benzene	0.108	0.00200	"	0.100		108	70-130			
Ethylbenzene	0.0947	0.00200	"	0.100		94.7	70-130			
Naphthalene	0.103	0.00380	"	0.100		103	70-130			
Toluene	0.107	0.00200	"	0.100		107	70-130			
o-Xylene	0.0902	0.00200	"	0.100		90.2	70-130			
m,p-Xylene	0.186	0.00400	"	0.200		92.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.15		"	0.125		116	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		92.6	70-130			

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 - Shable USX AB#11-16P

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 B3L0526 - EPA 5030 (soil)

Matrix Spike (B3L0526-MS1)	Source: Y312110-01			Prepared: 12/05/2023 Analyzed: 12/05/2023						
1,2,4-Trimethylbenzene	0.0829	0.00200	mg/kg	0.100	ND	82.9	70-130			
1,3,5-Trimethylbenzene	0.0832	0.00200	"	0.100	ND	83.2	70-130			
Benzene	0.102	0.00200	"	0.100	ND	102	70-130			
Ethylbenzene	0.0848	0.00200	"	0.100	ND	84.8	70-130			
Naphthalene	0.0778	0.00380	"	0.100	ND	77.8	70-130			
Toluene	0.0984	0.00200	"	0.100	ND	98.4	70-130			
o-Xylene	0.0813	0.00200	"	0.100	ND	81.3	70-130			
m,p-Xylene	0.169	0.00400	"	0.200	ND	84.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.15		"	0.125		117	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		94.3	70-130			

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 - Shable USX AB#11-16P

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 B3L0526 - EPA 5030 (soil)

Matrix Spike Dup (B3L0526-MSD1)	Source: Y312110-01			Prepared: 12/05/2023 Analyzed: 12/05/2023						
1,2,4-Trimethylbenzene	0.170	0.00200	mg/kg	0.100	ND	170	70-130	69.0	20	QM-07
1,3,5-Trimethylbenzene	0.174	0.00200	"	0.100	ND	174	70-130	70.8	20	QM-07
Benzene	0.208	0.00200	"	0.100	ND	208	70-130	68.9	20	QM-07
Ethylbenzene	0.187	0.00200	"	0.100	ND	187	70-130	75.3	20	QM-07
Naphthalene	0.161	0.00380	"	0.100	ND	161	70-130	69.6	20	QM-07
Toluene	0.212	0.00200	"	0.100	ND	212	70-130	73.2	20	QM-07
o-Xylene	0.168	0.00200	"	0.100	ND	168	70-130	69.4	20	QM-07
m,p-Xylene	0.331	0.00400	"	0.200	ND	165	70-130	64.9	20	QM-07
Surrogate: 1,2-Dichloroethane-d4	0.15		"	0.125		117	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		93.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		93.8	70-130			

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 - Shable USX AB#11-16P

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 B3L0621 - EPA 3580

Blank (B3L0621-BLK1)

Prepared: 12/06/2023 Analyzed: 12/09/2023

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		102	60-130			
Surrogate: Anthracene-d10	190		"	200		97.4	60-130			
Surrogate: Pyrene-d10	190		"	200		97.0	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		98.9	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 - Shable USX AB#11-16P

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 B3L0621 - EPA 3580

LCS (B3L0621-BS1)

Prepared: 12/06/2023 Analyzed: 12/09/2023

1-Methylnaphthalene	0.198	0.002	mg/kg	0.200		98.8	70-130			
2-Methylnaphthalene	0.198	0.002	"	0.200		98.9	70-130			
Acenaphthene	0.194	0.020	"	0.200		97.1	70-130			
Anthracene	0.208	0.020	"	0.200		104	70-130			
Benzo (a) anthracene	0.206	0.005	"	0.200		103	70-130			
Benzo (a) pyrene	0.201	0.020	"	0.200		101	70-130			
Benzo (b) fluoranthene	0.191	0.020	"	0.200		95.3	70-130			
Benzo (g,h,i) perylene	0.206	0.020	"	0.200		103	70-130			
Benzo (k) fluoranthene	0.164	0.020	"	0.200		82.1	70-130			
Chrysene	0.173	0.020	"	0.200		86.7	70-130			
Dibenz (a,h) anthracene	0.201	0.020	"	0.200		101	70-130			
Fluoranthene	0.191	0.020	"	0.200		95.7	70-130			
Fluorene	0.200	0.020	"	0.200		99.9	70-130			
Indeno (1,2,3-cd) pyrene	0.210	0.020	"	0.200		105	70-130			
Naphthalene	0.197	0.002	"	0.200		98.3	70-130			
Phenanthrene	0.196	0.020	"	0.200		97.9	70-130			
Pyrene	0.182	0.020	"	0.200		91.1	70-130			
Surrogate: Fluorene-d10	210		ug/kg	200		104	60-130			
Surrogate: Anthracene-d10	200		"	200		97.9	60-130			
Surrogate: Pyrene-d10	200		"	200		97.9	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		101	60-130			

Matrix Spike (B3L0621-MS1)

Source: Y312005-01

Prepared: 12/06/2023 Analyzed: 12/09/2023

1-Methylnaphthalene	0.207	0.002	mg/kg	0.200	ND	104	70-130			
2-Methylnaphthalene	0.206	0.002	"	0.200	ND	103	70-130			
Acenaphthene	0.203	0.020	"	0.200	ND	101	70-130			
Anthracene	0.212	0.020	"	0.200	ND	106	70-130			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, LLC
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 Wheat Ridge CO 80033

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

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 B3L0621 - EPA 3580

Matrix Spike (B3L0621-MS1)		Source: Y312005-01			Prepared: 12/06/2023 Analyzed: 12/09/2023					
Benzo (a) anthracene	0.185	0.005	mg/kg	0.200	ND	92.4	70-130			
Benzo (a) pyrene	0.203	0.020	"	0.200	ND	101	70-130			
Benzo (b) fluoranthene	0.199	0.020	"	0.200	ND	99.6	70-130			
Benzo (g,h,i) perylene	0.213	0.020	"	0.200	ND	107	70-130			
Benzo (k) fluoranthene	0.191	0.020	"	0.200	ND	95.4	70-130			
Chrysene	0.189	0.020	"	0.200	ND	94.3	70-130			
Dibenz (a,h) anthracene	0.217	0.020	"	0.200	ND	108	70-130			
Fluoranthene	0.209	0.020	"	0.200	ND	105	70-130			
Fluorene	0.208	0.020	"	0.200	ND	104	70-130			
Indeno (1,2,3-cd) pyrene	0.223	0.020	"	0.200	ND	112	70-130			
Naphthalene	0.204	0.002	"	0.200	ND	102	70-130			
Phenanthrene	0.201	0.020	"	0.200	ND	101	70-130			
Pyrene	0.190	0.020	"	0.200	ND	95.1	70-130			
Surrogate: Fluorene-d10	210		ug/kg	200		104	60-130			
Surrogate: Anthracene-d10	190		"	200		97.1	60-130			
Surrogate: Pyrene-d10	190		"	200		93.2	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		99.2	60-130			

Matrix Spike Dup (B3L0621-MSD1)		Source: Y312005-01			Prepared: 12/06/2023 Analyzed: 12/09/2023					
1-Methylnaphthalene	0.213	0.002	mg/kg	0.200	ND	106	70-130	2.71	20	
2-Methylnaphthalene	0.211	0.002	"	0.200	ND	105	70-130	2.48	20	
Acenaphthene	0.207	0.020	"	0.200	ND	104	70-130	2.20	20	
Anthracene	0.205	0.020	"	0.200	ND	102	70-130	3.19	20	
Benzo (a) anthracene	0.218	0.005	"	0.200	ND	109	70-130	16.3	20	
Benzo (a) pyrene	0.210	0.020	"	0.200	ND	105	70-130	3.62	20	
Benzo (b) fluoranthene	0.206	0.020	"	0.200	ND	103	70-130	3.30	20	
Benzo (g,h,i) perylene	0.218	0.020	"	0.200	ND	109	70-130	2.26	20	

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

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

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 B3L0621 - EPA 3580

Matrix Spike Dup (B3L0621-MSD1)	Source: Y312005-01			Prepared: 12/06/2023 Analyzed: 12/09/2023						
Benzo (k) fluoranthene	0.172	0.020	mg/kg	0.200	ND	85.9	70-130	10.5	20	
Chrysene	0.190	0.020	"	0.200	ND	94.9	70-130	0.666	20	
Dibenz (a,h) anthracene	0.220	0.020	"	0.200	ND	110	70-130	1.48	20	
Fluoranthene	0.216	0.020	"	0.200	ND	108	70-130	2.83	20	
Fluorene	0.218	0.020	"	0.200	ND	109	70-130	4.36	20	
Indeno (1,2,3-cd) pyrene	0.223	0.020	"	0.200	ND	112	70-130	0.181	20	
Naphthalene	0.210	0.002	"	0.200	ND	105	70-130	2.92	20	
Phenanthrene	0.208	0.020	"	0.200	ND	104	70-130	3.11	20	
Pyrene	0.198	0.020	"	0.200	ND	98.8	70-130	3.83	20	
Surrogate: Fluorene-d10	210		ug/kg	200		105	60-130			
Surrogate: Anthracene-d10	190		"	200		95.1	60-130			
Surrogate: Pyrene-d10	190		"	200		94.3	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		98.3	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 - Shable USX AB#11-16P

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 B3L0205 - Saturated Paste Metals

Blank (B3L0205-BLK1)

Prepared: 12/02/2023 Analyzed: 12/04/2023

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 (B3L0205-DUP1)

Source: Y312007-01

Prepared: 12/02/2023 Analyzed: 12/04/2023

SAR	ND	0.0100	SAR		1.05				200	
Calcium PPM	19.6	10.0	mg/L		18.1			7.85	50	
Magnesium PPM	5.96	10.0	"		5.58			6.59	50	
Sodium PPM	19.8	10.0	"		20.0			0.905	50	

Batch B3L0409 - DTPA Sorbitol Preparation

Blank (B3L0409-BLK1)

Prepared: 12/04/2023 Analyzed: 12/05/2023

Boron	ND	0.100	mg/L							
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Duplicate (B3L0409-DUP1)

Source: Y311672-04

Prepared: 12/04/2023 Analyzed: 12/05/2023

Boron	0.210	0.0991	mg/L		0.227			7.72	50	
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 8000 W 44th Ave
 Wheat Ridge CO 80033

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

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 B3L0209 - Saturated Paste pH/EC

Blank (B3L0209-BLK1)

Prepared: 12/02/2023 Analyzed: 12/04/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B3L0209-DUP1)

Source: Y312007-01

Prepared: 12/02/2023 Analyzed: 12/04/2023

Specific Conductance (EC)	0.232	0.00500	mmhos/cm	0.228	1.74	25
pH	8.29		pH Units	8.29	0.00	25

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 - Shable USX AB#11-16P

Total Metals by 6020B - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch L721047 - 3050B

MSD (L 82227-MSD-L721047)	Source: 82227			Prepared: 12/07/2023 Analyzed: 12/21/2023						
Cadmium	0.58	0.25	mg/Kg	0.477	0.149	90	75-125	5.6	80	
Zinc	55.3	2.5	"	23.8	36.8	78	75-125	0.7	80	
Silver	0.493	0.25	"	0.477	0.0368	96	75-125	4.9	80	
Selenium	4.58	0.25	"	4.77	0.922	77	75-125	3.5	80	
Nickel	13	0.25	"	2.38	11.7	55	75-125	3.1	80	*
Copper	11.1	0.25	"	2.38	10.2	38	75-125	1.8	80	*
Barium	108	0.25	"	4.77	89.7	384	75-125	11.3	80	I, *
Arsenic	4.7	0.25	"	2.38	4.27	18	75-125	3.3	80	*
Lead	8.43	0.25	"	2.38	7.35	45	75-125	3.6	80	I, *

MS (L 82227-MS-L721047)	Source: 82227			Prepared: 12/07/2023 Analyzed: 12/21/2023						
Selenium	4.42	0.25	mg/Kg	4.63	0.922	76	75-125			
Nickel	12.6	0.25	"	2.31	11.7	39	75-125			*
Copper	10.9	0.25	"	2.31	10.2	30	75-125			*
Cadmium	0.548	0.25	"	0.463	0.149	86	75-125			
Barium	121	0.25	"	4.63	89.7	676	75-125			I, *
Zinc	54.9	2.5	"	23.1	36.8	78	75-125			
Arsenic	4.86	0.25	"	2.31	4.27	25	75-125			*
Silver	0.469	0.25	"	0.463	0.0368	93	75-125			
Lead	8.74	0.25	"	2.31	7.35	60	75-125			I, *

LCS (LCS-L721047)				Prepared: 12/07/2023 Analyzed: 12/21/2023						
Barium	4.82	0.25	mg/Kg	5		96	80-120			
Silver	0.528	0.25	"	0.5		106	80-120			
Selenium	4.63	0.25	"	5		93	80-120			
Arsenic	2.52	0.25	"	2.5		101	80-120			
Nickel	2.6	0.25	"	2.5		104	80-120			

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 - Shable USX AB#11-16P

Total Metals by 6020B - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch L721047 - 3050B

LCS (LCS-L721047)

Prepared: 12/07/2023 Analyzed: 12/21/2023

Lead	2.33	0.25	mg/Kg	2.5		93	80-120			
Copper	2.66	0.25	"	2.5		106	80-120			
Cadmium	0.495	0.25	"	0.5		99	80-120			
Zinc	24.5	2.5	"	25		98	80-120			

LRB (LRB-L721047)

Prepared: 12/07/2023 Analyzed: 12/21/2023

Barium	ND	0.25	mg/Kg				-			
Zinc	ND	2.5	"				-			
Silver	ND	0.25	"				-			
Selenium	ND	0.25	"				-			
Nickel	ND	0.25	"				-			
Lead	ND	0.25	"				-			
Cadmium	ND	0.25	"				-			
Arsenic	ND	0.25	"				-			
Copper	ND	0.25	"				-			

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 - Shable USX AB#11-16P

Total Metals by 7196A - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch L721116 -										
DUP (L 82121-DUP)		Source: 82121			Prepared: Analyzed: 12/07/2023					
Chromium, Hexavalent	ND	0.5	mg/Kg		82121		-	0	20	
MS (L 82121-MS)		Source: 82121			Prepared: Analyzed: 12/07/2023					
Chromium, Hexavalent	34.2	2.5	mg/Kg	39.8	82121	86	75-125			
LCS (LCS)		Prepared: Analyzed: 12/07/2023								
Chromium, Hexavalent	7.13	0.5	mg/Kg	8		89	75-125			
LRB (LRB)		Prepared: Analyzed: 12/07/2023								
Chromium, Hexavalent	ND	0.5	mg/Kg				-			

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 - Shable USX AB#11-16P

Notes and Definitions

U Sample is Non-Detect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

I Recoveries affected by interferences or high background

* QC Failure

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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Jordan A. Bynon, Project Manager



January 24, 2024

Eagle Environmental Consulting, LLC

Andrew Newberry

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - Shable USX AB#11-16P

Project Number - [none]

Attached are your analytical results for Noble - Shable USX AB#11-16P received by Origins Laboratory, Inc. January 12, 2024. This project is associated with Origins project number Y401326-01.

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 - Shable USX AB#11-16P

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Background-01@2'	Y401326-01	Soil	November 30, 2023 11:15	01/12/2024 14:34

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 - Shable USX AB#11-16P

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 440320

Client: Eagle

Checklist Completed by: JST/VHS

Client Project ID: Shable USX AB #11-16P

Date/time completed: 1/12/24

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

Airbill #: N/A

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

Cooler Number/Temperature: 115 °C / _____ °C / _____ °C (Describe)

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

Reviewed by (Project Manager) [Signature]

Date/Time Reviewed 1/15/24

Origins Laboratory, Inc.

[Signature]

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

Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

Background-01@2'
11/30/2023 11:15:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y401326-01 (Soil)

pH in Soil by 9045D

pH	8.27		pH Units	1	B4A1614	EAL	01/16/2024	01/17/2024	
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Table 915 metals by EPA 6020B

Arsenic	2.71	0.0836	mg/kg	10	B4A1241	JAH	01/12/2024	01/16/2024	
Selenium	0.110	0.0836	"	"	"	JAH	"	01/17/2024	

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Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

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 B4A1241 - EPA 3050B

Blank (B4A1241-BLK1)

Prepared: 01/12/2024 Analyzed: 01/16/2024

Arsenic	ND	0.0100	mg/kg							
Barium	ND	1.00	"							
Cadmium	ND	0.0100	"							
Copper	ND	1.00	"							
Lead	ND	0.100	"							
Nickel	ND	0.100	"							
Selenium	ND	0.0100	"							
Silver	ND	0.0100	"							
Zinc	ND	1.00	"							

LCS (B4A1241-BS1)

Prepared: 01/12/2024 Analyzed: 01/16/2024

Arsenic	5.00	0.0100	mg/kg	5.00		100	80-120			
Barium	488	1.00	"	500		97.6	80-120			
Cadmium	5.17	0.0100	"	5.00		103	80-120			
Copper	45.5	1.00	"	50.0		91.1	80-120			
Lead	5.09	0.100	"	5.00		102	80-120			
Nickel	4.62	0.100	"	5.00		92.4	80-120			
Selenium	5.29	0.0100	"	5.00		106	80-120			
Silver	5.14	0.0100	"	5.00		103	80-120			
Zinc	51.1	1.00	"	50.0		102	80-120			

Matrix Spike (B4A1241-MS1)

Source: Y401323-01

Prepared: 01/12/2024 Analyzed: 01/16/2024

Arsenic	6.75	0.0980	mg/kg	4.90	1.47	108	75-125			
Barium	584	9.80	"	490	50.0	109	75-125			
Cadmium	5.59	0.0980	"	4.90	0.0485	113	75-125			
Copper	58.5	9.80	"	49.0	4.38	111	75-125			
Lead	9.11	0.980	"	4.90	3.59	113	75-125			

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Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

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 B4A1241 - EPA 3050B

Matrix Spike (B4A1241-MS1)

Source: Y401323-01

Prepared: 01/12/2024 Analyzed: 01/16/2024

Nickel	9.17	0.980	mg/kg	4.90	3.53	115	75-125			
Selenium	5.24	0.0980	"	4.90	ND	107	75-125			
Silver	5.52	0.0980	"	4.90	0.0190	112	75-125			
Zinc	69.1	9.80	"	49.0	16.1	108	75-125			

Matrix Spike Dup (B4A1241-MSD1)

Source: Y401323-01

Prepared: 01/12/2024 Analyzed: 01/16/2024

Arsenic	5.69	0.0925	mg/kg	4.62	1.47	91.4	75-125	16.9	20	
Barium	491	9.25	"	462	50.0	95.5	75-125	17.2	20	
Cadmium	4.76	0.0925	"	4.62	0.0485	102	75-125	16.0	20	
Copper	49.7	9.25	"	46.2	4.38	98.1	75-125	16.2	20	
Lead	7.75	0.925	"	4.62	3.59	90.0	75-125	16.1	20	
Nickel	7.91	0.925	"	4.62	3.53	94.7	75-125	14.8	20	
Selenium	4.89	0.0925	"	4.62	ND	106	75-125	6.89	20	
Silver	4.63	0.0925	"	4.62	0.0190	99.6	75-125	17.7	20	
Zinc	59.1	9.25	"	46.2	16.1	93.0	75-125	15.6	20	

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Andrew Newberry
 Project Number: [none]
 Project: Noble - Shable USX AB#11-16P

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 B4A1614 - Saturated Paste pH/EC

Duplicate (B4A1614-DUP1)

Source: Y401302-01

Prepared: 01/16/2024 Analyzed: 01/17/2024

pH	8.04		pH Units		8.00			0.499	25	
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Eagle Environmental Consulting, LLC
8000 W 44th Ave
Wheat Ridge CO 80033

Andrew Newberry
Project Number: [none]
Project: Noble - Shable USX AB#11-16P

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.



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Jordan A. Bynon, Project Manager