

## Wellhead Closure Checklist

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

Additional attachments (optional):		Pit Closure		Tank Battery Closure		Flowline Closure	12-3-2018	Partially Buried Vault Closure	
Site Name & COGCC Facility Number: HSR-Abramson HS-23		Date: 5-5-22				Remediation Project #: 22544			
Associated Wells: 05-123-15328		Age of Site: years				Number of Photos Attached: 1			
Location: (GPS coordinates of wellhead or southeastern most wellhead for multiple)						40.299620 1-104.637450		Estimated Facility Size (acres):	
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) <p style="text-align: center;">Good condition</p>									
USCS Soil Type: CL					Estimated Depth to Groundwater: ~8-12'				
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) Petroleum hydrocarbon staining and odor observed on excavation floor and south sidewall									
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed									
<b>Wellhead(s)</b>									
Well API	05-123-15328								
Age	years								
Condition of surface around wellhead	Good- Per Crew								
PID Readings	N/A-Excavated	upon arrival							
Condition of subsurface (contains relevant PID Readings)	Petroleum hydrocarbon staining and odor observed on excavation floor and south sidewall								
	0.2	2.9	346.7	4.0	413.4				
Sample taken? Location/Sample ID#	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04	WH-FS-01				
Photo Number(s)	See photolog								
Other observations regarding wellheads: Well casing cut/capped following assessment									
<b>Summary</b>									
Was impacted soil identified? No      Yes - less than 10 cubic yards <u>Yes - more than 10 cubic yards</u>									
Total number of samples field screened: 5					Total number of samples collected: 5				
Highest PID Reading: 413.4					Total number of samples submitted to lab for analysis: 5				
If more than 10 cubic yards of impacted soil were observed:									
Vertical extent: 6'+					Estimated spill volume: TBD				
Lateral extent: ~9' x ~9'+					Volume of soil removed: N/A				
Is additional investigation required? Yes									
Was groundwater encountered during the investigation? <u>No</u> 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: N/A					Total Volume of groundwater removed:				
Total number of samples submitted to lab for analysis:									



## **FIGURES**

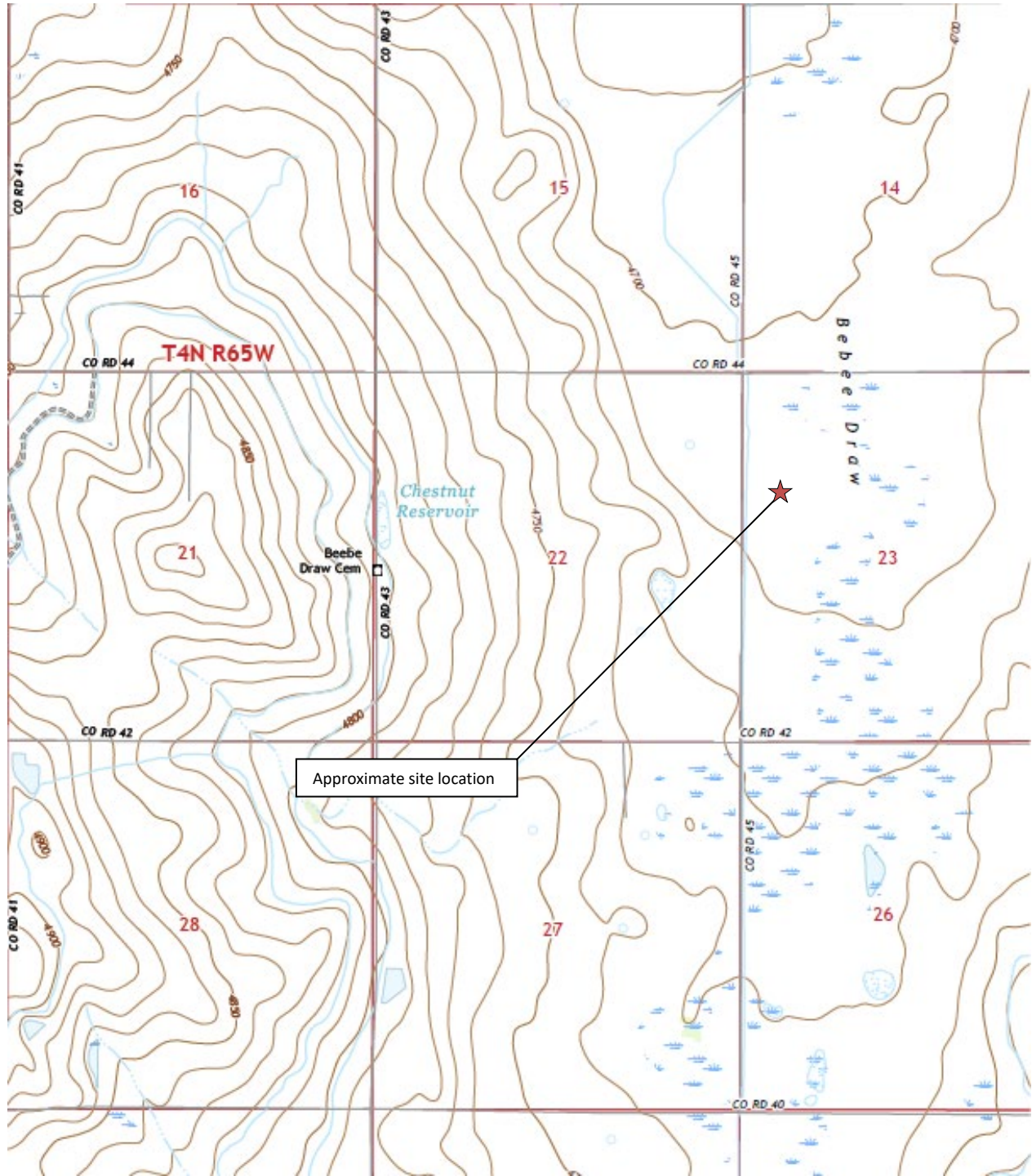
**Figure 1: Topographic Site Location Map**

**Figure 2: Aerial Site Location Map**

**Figure 3: Soil Analytical Map**

**Figure 4: Polycyclic Aromatic Hydrocarbons Map**

**Figure 5: Metals in Soil Map**



Approximate site location



**Topographic Site Location Map**  
 HSR-Abramson #5-23  
 Closure Assessment  
 40.299620 / -104.637450  
 SW¼ NW¼ SEC.23 T4N R65W 6PM  
 Weld County, Colorado  
 API # 05-123-15328  
 Remediation # 22544




**EAGLE**  
 ENVIRONMENTAL  
 CONSULTING, INC.

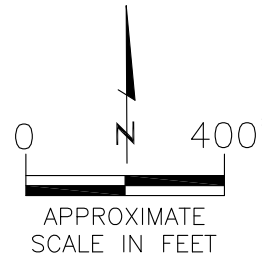
Source: USGS 7.5 Minute Topographic Map, La Salle, CO Quadrangle 2022

**Figure 1**



LEGEND

 FORMER HSR-ABRAMSON #5-23 WELLHEAD (PLUGGED AND ABANDONED)



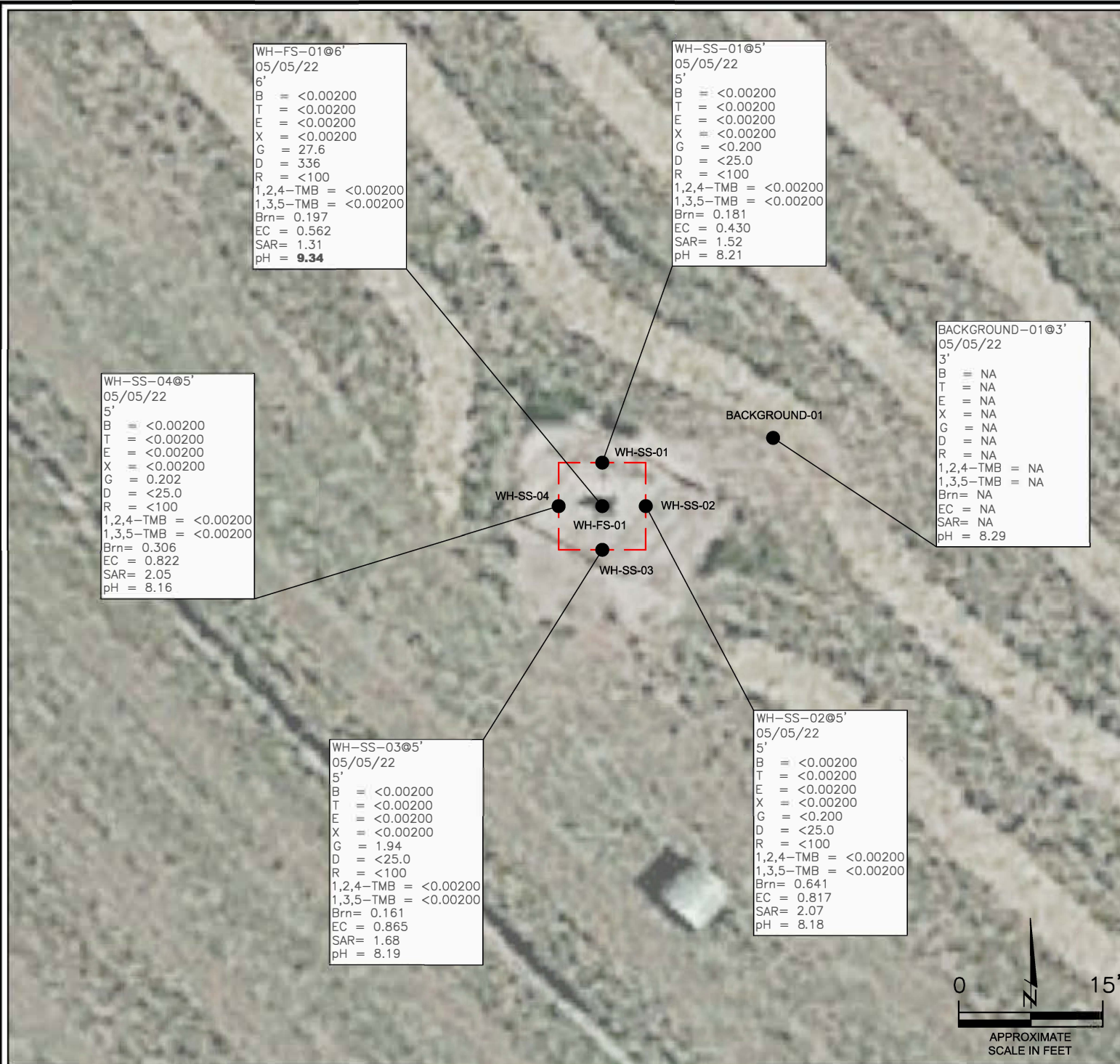
AERIAL SITE LOCATION MAP  
 HSR-ABRAMSON #5-23  
 CLOSURE ASSESSMENT  
 40.299620 / -104.637450  
 SW¼ NW¼ SEC.23 T4N R65W 6PM  
 WELD COUNTY, COLORADO  
 API # 05-123-15328  
 REMEDIATION # 22544

DATE:  
05/23/22

FIG. NO. DRAWN BY:  
2 GEC



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



WH-FS-01@6'  
05/05/22  
6'  
B = <0.00200  
T = <0.00200  
E = <0.00200  
X = <0.00200  
G = 27.6  
D = 336  
R = <100  
1,2,4-TMB = <0.00200  
1,3,5-TMB = <0.00200  
Brn= 0.197  
EC = 0.562  
SAR= 1.31  
pH = **9.34**

WH-SS-01@5'  
05/05/22  
5'  
B = <0.00200  
T = <0.00200  
E = <0.00200  
X = <0.00200  
G = <0.200  
D = <25.0  
R = <100  
1,2,4-TMB = <0.00200  
1,3,5-TMB = <0.00200  
Brn= 0.181  
EC = 0.430  
SAR= 1.52  
pH = 8.21

BACKGROUND-01@3'  
05/05/22  
3'  
B = NA  
T = NA  
E = NA  
X = NA  
G = NA  
D = NA  
R = NA  
1,2,4-TMB = NA  
1,3,5-TMB = NA  
Brn= NA  
EC = NA  
SAR= NA  
pH = 8.29

WH-SS-04@5'  
05/05/22  
5'  
B = <0.00200  
T = <0.00200  
E = <0.00200  
X = <0.00200  
G = 0.202  
D = <25.0  
R = <100  
1,2,4-TMB = <0.00200  
1,3,5-TMB = <0.00200  
Brn= 0.306  
EC = 0.822  
SAR= 2.05  
pH = 8.16

WH-SS-03@5'  
05/05/22  
5'  
B = <0.00200  
T = <0.00200  
E = <0.00200  
X = <0.00200  
G = 1.94  
D = <25.0  
R = <100  
1,2,4-TMB = <0.00200  
1,3,5-TMB = <0.00200  
Brn= 0.161  
EC = 0.865  
SAR= 1.68  
pH = 8.19

WH-SS-02@5'  
05/05/22  
5'  
B = <0.00200  
T = <0.00200  
E = <0.00200  
X = <0.00200  
G = <0.200  
D = <25.0  
R = <100  
1,2,4-TMB = <0.00200  
1,3,5-TMB = <0.00200  
Brn= 0.641  
EC = 0.817  
SAR= 2.07  
pH = 8.18

**LEGEND**

- INITIAL ASSESSMENT BOUNDARIES
- APPROXIMATE LOCATION OF SOIL SAMPLES FIELD SCREENED, ONLY, WITH PHOTOIONIZATION DETECTOR
- 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)  
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 = MILLIMHOS PER CENTIMETER

NA = NOT ANALYZED

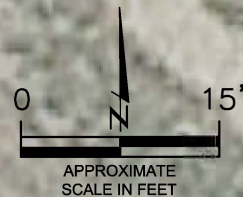
TPH-GRO = TOTAL PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS  
TPH-DRO = TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS  
TPH-RRO = TOTAL PETROLEUM HYDROCARBONS - RESIDUAL RANGE ORGANICS

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

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

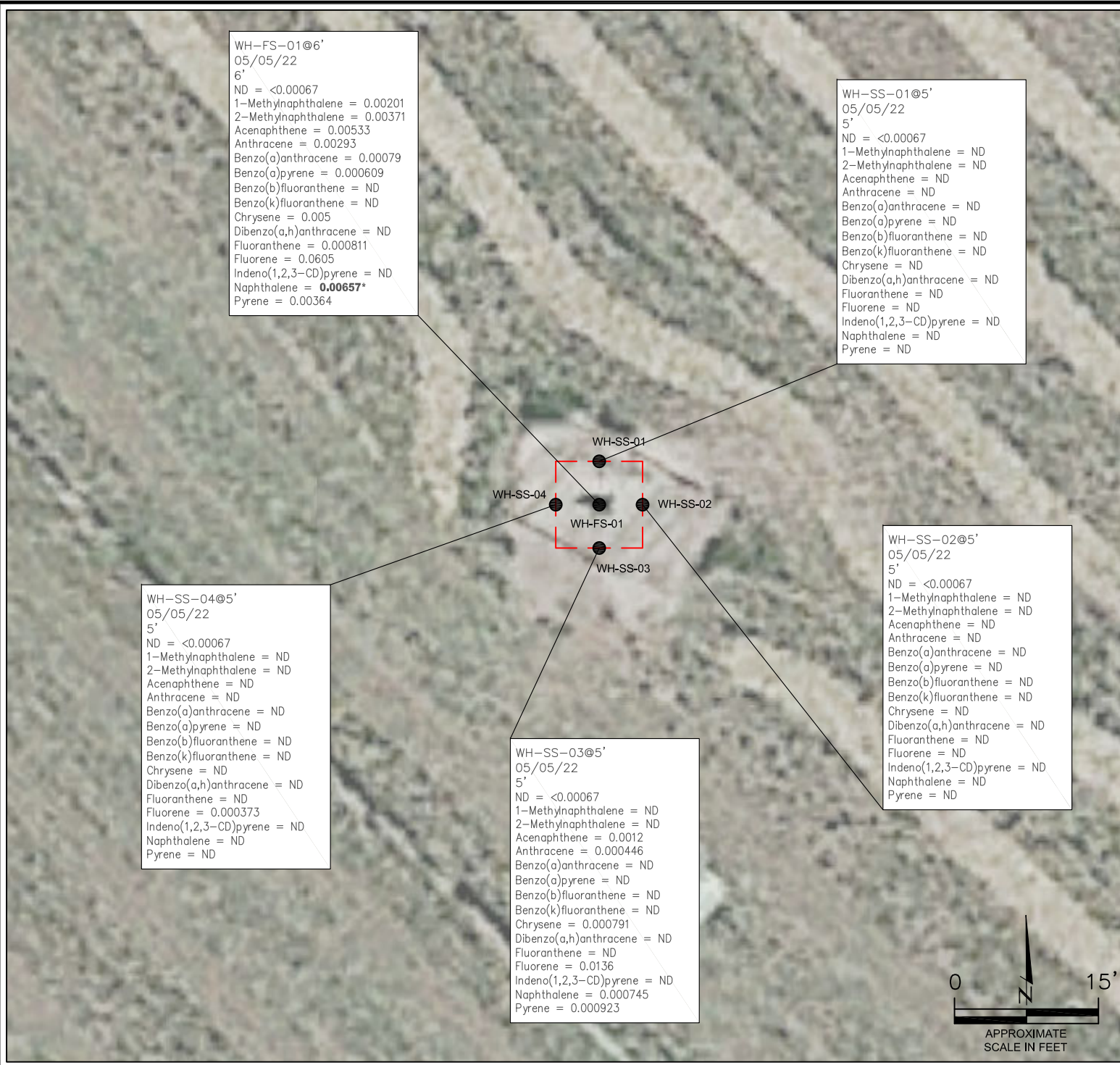
COGCC = COLORADO OIL AND GAS CONSERVATION COMMISSION

SOIL ANALYTICAL MAP  
HSR-ABRAMSON #5-23  
CLOSURE ASSESSMENT  
40.299620 / -104.637450  
SW¼ NW¼ SEC.23 T4N R65W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-15328  
REMEDIATION # 22544



DATE:  
10/25/22  
DRAWN BY:  
GEC  
FIG.  
NO. 3

**EAGLE ENVIRONMENTAL CONSULTING, INC.**  
8000 W 44th Ave, Wheat Ridge, CO 80033  
Ph: 303-433-0479 · F: 303-325-5449



WH-FS-01@6'  
05/05/22  
6'  
ND = <0.00067  
1-Methylnaphthalene = 0.00201  
2-Methylnaphthalene = 0.00371  
Acenaphthene = 0.00533  
Anthracene = 0.00293  
Benzo(a)anthracene = 0.00079  
Benzo(a)pyrene = 0.000609  
Benzo(b)fluoranthene = ND  
Benzo(k)fluoranthene = ND  
Chrysene = 0.005  
Dibenzo(a,h)anthracene = ND  
Fluoranthene = 0.000811  
Fluorene = 0.0605  
Indeno(1,2,3-CD)pyrene = ND  
Naphthalene = **0.00657\***  
Pyrene = 0.00364

WH-SS-01@5'  
05/05/22  
5'  
ND = <0.00067  
1-Methylnaphthalene = ND  
2-Methylnaphthalene = ND  
Acenaphthene = ND  
Anthracene = ND  
Benzo(a)anthracene = ND  
Benzo(a)pyrene = ND  
Benzo(b)fluoranthene = ND  
Benzo(k)fluoranthene = ND  
Chrysene = ND  
Dibenzo(a,h)anthracene = ND  
Fluoranthene = ND  
Fluorene = ND  
Indeno(1,2,3-CD)pyrene = ND  
Naphthalene = ND  
Pyrene = ND

WH-SS-02@5'  
05/05/22  
5'  
ND = <0.00067  
1-Methylnaphthalene = ND  
2-Methylnaphthalene = ND  
Acenaphthene = ND  
Anthracene = ND  
Benzo(a)anthracene = ND  
Benzo(a)pyrene = ND  
Benzo(b)fluoranthene = ND  
Benzo(k)fluoranthene = ND  
Chrysene = ND  
Dibenzo(a,h)anthracene = ND  
Fluoranthene = ND  
Fluorene = ND  
Indeno(1,2,3-CD)pyrene = ND  
Naphthalene = ND  
Pyrene = ND

WH-SS-03@5'  
05/05/22  
5'  
ND = <0.00067  
1-Methylnaphthalene = ND  
2-Methylnaphthalene = ND  
Acenaphthene = 0.0012  
Anthracene = 0.000446  
Benzo(a)anthracene = ND  
Benzo(a)pyrene = ND  
Benzo(b)fluoranthene = ND  
Benzo(k)fluoranthene = ND  
Chrysene = 0.000791  
Dibenzo(a,h)anthracene = ND  
Fluoranthene = ND  
Fluorene = 0.0136  
Indeno(1,2,3-CD)pyrene = ND  
Naphthalene = 0.000745  
Pyrene = 0.000923

WH-SS-04@5'  
05/05/22  
5'  
ND = <0.00067  
1-Methylnaphthalene = ND  
2-Methylnaphthalene = ND  
Acenaphthene = ND  
Anthracene = ND  
Benzo(a)anthracene = ND  
Benzo(a)pyrene = ND  
Benzo(b)fluoranthene = ND  
Benzo(k)fluoranthene = ND  
Chrysene = ND  
Dibenzo(a,h)anthracene = ND  
Fluoranthene = ND  
Fluorene = 0.000373  
Indeno(1,2,3-CD)pyrene = ND  
Naphthalene = ND  
Pyrene = ND

**LEGEND**

- INITIAL 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 SAMPLE COLLECTED  
APPROXIMATE DEPTH  
  
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

NOTE:  
CONCENTRATIONS PRESENTED IN mg/kg  
  
mg/kg = MILLIGRAMS PER KILOGRAM  
  
ND = NON-DETECT

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

VALUES PRESENTED IN **BOLD** CONTAIN CONCENTRATIONS EXCEEDING COGCC TABLE 915-1 REGULATORY LIMITS

VALUES PRESENTED WITH AN ASTERISK (\*) EXCEED COGCC TABLE 915-1 GROUNDWATER SOIL SCREENING LEVELS FOR THAT COMPOUND

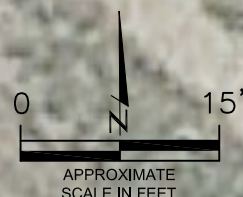
COGCC = COLORADO OIL AND GAS CONSERVATION COMMISSION

POLYCYCLIC AROMATIC HYDROCARBONS MAP

HSR-ABRAMSON #5-23  
CLOSURE ASSESSMENT  
40.299620 / -104.637450  
SW¼ NW¼ SEC.23 T4N R65W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-15328  
REMEDATION # 22544

DATE:  
10/25/22  
DRAWN BY:  
GEC  
  
FIG.  
NO. 4

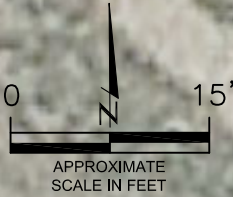
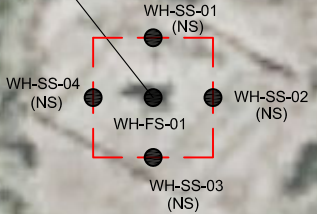
**EAGLE**  
ENVIRONMENTAL  
CONSULTING, INC.  
8000 W 44th Ave, Wheat Ridge, CO 80033  
Ph: 303-433-0479 • F: 303-325-5449





WH-FS-01@6'  
05/05/22  
6'

Arsenic = **7.09\*\*\***  
Barium = **85.9\***  
Cadmium = 0.0724  
Chromium (VI) = <0.245\*\*  
Copper = 7.19  
Lead = 9.39  
Nickel = 9.65  
Selenium = 0.211  
Silver = 0.0218  
Zinc = 25.8



**LEGEND**

- INITIAL 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 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

NA = NOT ANALYZED  
(NS) = NOT SAMPLED

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

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

\*VALUES EXCEED COGCC TABLE 915-1 PROTECTION OF GROUNDWATER SOIL SCREENING LEVELS.

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

\*\*\*ARSENIC IS NATURALLY OCCURRING IN COLORADO.

COGCC = COLORADO OIL AND GAS CONSERVATION COMMISSION

METALS IN SOIL MAP  
HSR-ABRAMSON #5-23  
CLOSURE ASSESSMENT  
40.299620 / -104.637450  
SW¼ NW¼ SEC.23 T4N R65W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-15328  
REMEDATION # 22544

DATE:  
10/25/22

DRAWN BY:  
GEC

FIG. NO. 5

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



## **TABLES**

**Table 1: Photoionization Detector Reading Summary**

**Table 2: Soil Analytical Results Summary**

**Table 3: Polycyclic Aromatic Hydrocarbons Analytical Results Summary**

**Table 4: Metals Analytical Results Summary**

**TABLE 1**  
**PHOTOIONIZATION DETECTOR READING SUMMARY**  
**HSR-ABRAMSON #5-23**  
**CLOSURE ASSESSMENT**  
**40.299620 / -104.637450**  
**SW1/4 NW1/4 SEC.23 T4N R65W 6PM**  
**WELD COUNTY, COLORADO**  
**API # 05-123-15328**  
**REMEDICATION # 22544**

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Lab Submission (Y/N)
WH-SS-01 @ 5' (40.299636 / -104.637461)	05/05/22	5	0.2	Y
WH-SS-02 @ 5' (40.299623 / -104.637442)	05/05/22	5	2.9	Y
WH-SS-03 @ 5' (40.299612 / -104.637463)	05/05/22	5	346.7	Y
WH-SS-04 @ 5' (40.299624 / -104.637479)	05/05/22	5	4.0	Y
WH-FS-01 @ 6' (40.299622 / -104.637459)	05/05/22	6	413.4	Y
Background-01 @ 3' (40.299642 / -104.637397)	05/05/22	3	7.5	Y
(Y/N) = Yes or No ppm-v = parts per million by volume PID = Photoionization Detector				

TABLE 2  
SOIL ANALYTICAL RESULTS SUMMARY  
HSR-ABRAMSON #5-23  
CLOSURE ASSESSMENT  
40.299620 / -104.637450  
SW1/4 NW1/4 SEC.23 T4N R65W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-15328  
REMEDIAION # 22544

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-RRO (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)	Boron (mg/L)	Specific Conductance (mmhos/cm)	pH (pH units)	SAR
<b>COGCC Table 915-1 Residential Screening Levels (mg/kg)</b>				1.20	490	5.8	58	500			30	27	2	<4	6-8.3	<6
<b>COGCC Table 915-1 Protection of Groundwater Soil Screening Levels</b>				0.0026	0.69	0.78	9.9	--			0.0081	0.0087	--	--	--	--
WH-SS-01 @ 5' (40.299636 / -104.637461)	05/05/22	5	0.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00200	<0.00200	0.181	0.430	8.21	1.52
WH-SS-02 @ 5' (40.299623 / -104.637442)	05/05/22	5	2.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00200	<0.00200	0.641	0.817	8.18	2.07
WH-SS-03 @ 5' (40.299612 / -104.637463)	05/05/22	5	346.7	<0.00200	<0.00200	<0.00200	<0.00200	1.94	<25.0	<100	<0.00200	<0.00200	0.161	0.865	8.19	1.68
WH-SS-04 @ 5' (40.299624 / -104.637479)	05/05/22	5	4.0	<0.00200	<0.00200	<0.00200	<0.00200	0.202	<25.0	<100	<0.00200	<0.00200	0.306	0.822	8.16	2.05
WH-FS-01 @ 6' (40.299622 / -104.637459)	05/05/22	6	413.4	<0.00200	<0.00200	<0.00200	<0.00200	27.6	336	<100	<0.00200	<0.00200	0.197	0.562	<b>9.34</b>	1.31
Background-01 @ 3' (40.299642 / -104.637397)	05/05/22	3	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.29	NA

COGCC = Colorado Oil and Gas Conservation 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

SAR = Sodium Adsorption Ratio

Note: Values presented with a less than symbol (<) did not contain concentrations at or above the laboratory MDL and/or reporting limit.

Note: Values presented in **BOLD** contained concentrations exceeding COGCC Table 915-1 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

NA = Not Analyzed

1,2,4-TMB = 1,2,4-Trimethylbenzene

1,3,5-TMB = 1,3,5-Trimethylbenzene

MDL = Minimum Detection Limits

TABLE 3  
POLYCYCLIC AROMATIC HYDROCARBONS ANALYTICAL RESULTS SUMMARY  
HSR-ABRAMSON #5-23  
CLOSURE ASSESSMENT  
40.299620 / -104.637450  
SW1/4 NW1/4 SEC.23 T4N R65W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-15328  
REMEDIATION # 22544

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	1-Methyl- naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo(a)-anthracene (mg/kg)	Benzo(a)- pyrene (mg/kg)	Benzo(b)- fluoranthene (mg/kg)	Benzo(k)- fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(a,h)- anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno(1,2,3- cd)-pyrene (mg/kg)	Naphthalene (mg/kg)	Pyrene (mg/kg)
<b>COGCC Table 915-1 Residential Screening Levels</b>				18	24	360	1,800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	2	180
<b>COGCC Table 915-1 Protection of Groundwater Soil Screening Levels</b>				0.006	0.019	0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	0.0038	1.3
WH-SS-01 @ 5' (40.299636 / -104.637461)	05/05/22	5	0.2	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067
WH-SS-02 @ 5' (40.299623 / -104.637442)	05/05/22	5	2.9	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067
WH-SS-03 @ 5' (40.299612 / -104.637463)	05/05/22	5	346.7	<0.00067	<0.00067	0.0012	0.000446	<0.00067	<0.00067	<0.00067	<0.00067	0.000791	<0.00067	<0.00067	0.0136	<0.00067	0.000745	0.000923
WH-SS-04 @ 5' (40.299624 / -104.637479)	05/05/22	5	4.0	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	0.000373	<0.00067	<0.00067	<0.00067
WH-FS-01 @ 6' (40.299622 / -104.637459)	05/05/22	6	413.4	0.00201	0.00371	0.00533	0.00293	0.00079	0.000609	<0.00067	<0.00067	0.005	<0.00067	0.000811	0.0605	<0.00067	<b>0.00657*</b>	0.00364
COGCC = Colorado Oil and Gas Conservation Commission      PID = Photoionization Detector mg/kg = milligrams per kilogram      ppm-v = parts per million by volume      MDL - Minimum Detection Limit Note: Values presented with a less than symbol (<) did not contain concentrations at or above the laboratory MDL and/or reporting limit. Note: Values presented in <b>BOLD</b> contained concentrations exceeding COGCC Table 915-1 Regulatory Limits. Values presented with asterisk (*) exceed COGCC Table 915-1 Protection of Groundwater Soil Screening Levels for that compound.																		

TABLE 4  
 METALS ANALYTICAL RESULTS SUMMARY  
 HSR-ABRAMSON #5-23  
 CLOSURE ASSESSMENT  
 40.299620 / -104.637450  
 SW1/4 NW1/4 SEC.23 T4N R65W 6PM  
 WELD COUNTY, COLORADO  
 API # 05-123-15328  
 REMEDIATION # 22544

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Hexavalent Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
<b>COGCC Table 915-1 Residential Screening Levels</b>			0.68***	15,000	71	0.3**	3,100	400	1,500	390	390	23,000
<b>COGCC Table 915-1 Protection of Groundwater Soil Screening Levels</b>			0.29***	82	0.38	0.00067**	46	14	26	0.26	0.8	370
WH-FS-01 @ 6' (40.299622 / -104.637459)	05/05/22	6	7.09***	85.9*	0.0724	<0.245**	7.19	9.39	9.65	0.211	0.0218	25.8

COGCC = Colorado Oil and Gas Conservation Commission  
 mg/kg = milligrams per kilogram  
 Notes: Values presented with a less than symbol (<) did not contain concentrations at or above the laboratory reporting limit or minimum detection levels.  
 Values presented in **BOLD** contained concentrations exceeding applicable COGCC Table 915-1 Regulatory Limits  
 Values presented in **BOLD+\*** contained concentrations exceeding COGCC Table 915-1 Protection of Groundwater Soil Screening Levels  
 \*\*Achievable practical quantitative limits for Hexavalent Chromium in soils is in the range of 0.1 to 1 mg/kg.  
 \*\*\*Arsenic is naturally occurring in Colorado.



## **ATTACHMENT A**

### **Photo Log**

HSR-Abramson #5-23  
API # 05-123-15328  
Remediation # 22544

Closure Assessment

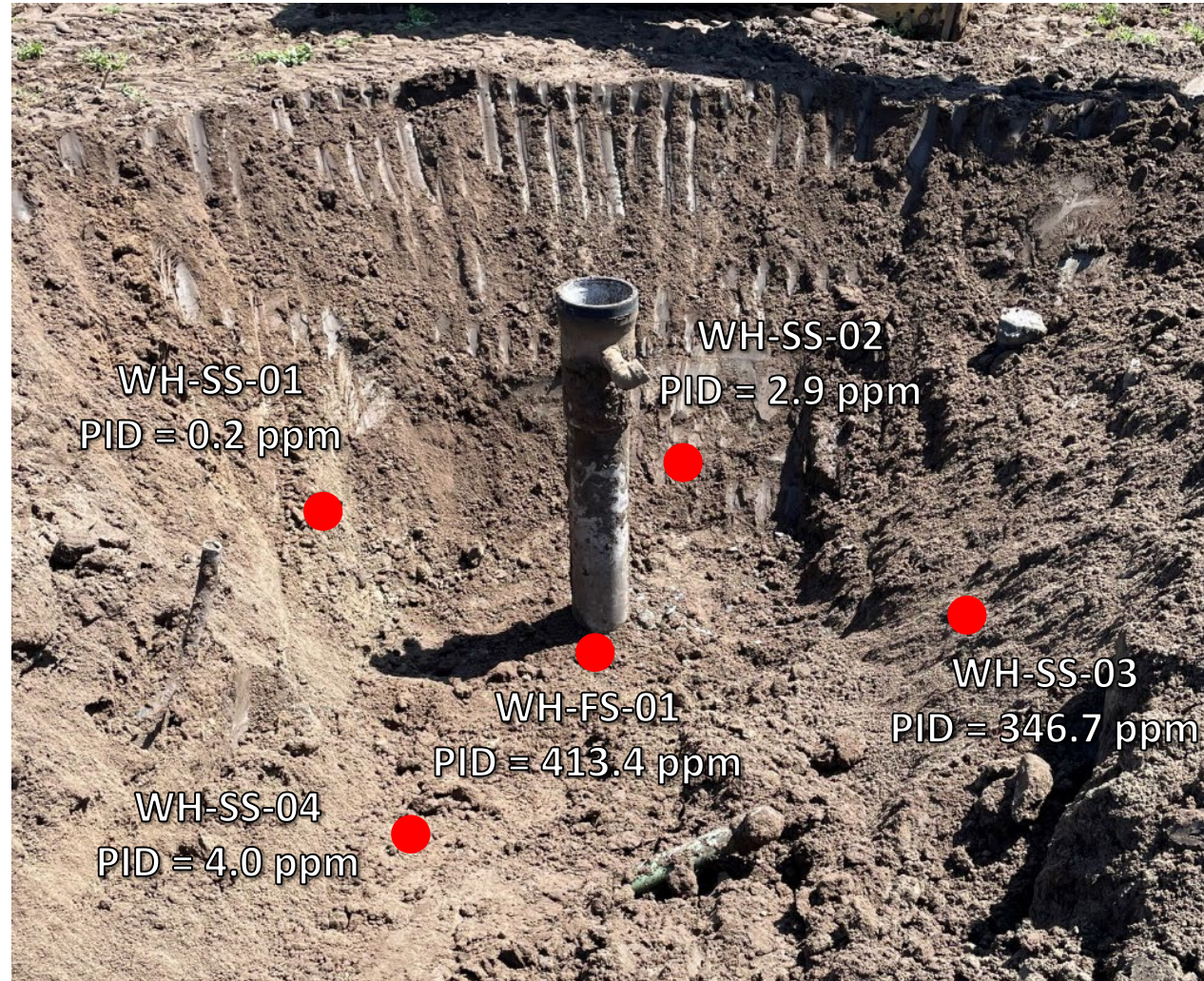
May 2022



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



# Wellhead Excavation – 05/05/22



Looking east-northeast

Petroleum hydrocarbon staining and odor observed on the floor and south sidewall



## **ATTACHMENT B**

### **Laboratory Analytical Reports**

June 07, 2022

Eagle Environmental Consulting, Inc.

Martin C Eckert III

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - HSR - Abramson #5-23

Project Number - [none]

Attached are your analytical results for Noble - HSR - Abramson #5-23 received by Origins Laboratory, Inc. May 05, 2022. This project is associated with Origins project number Y205141-01.

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



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - HSR - Abramson #5-23

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH-SS-01@5'	Y205141-01	Soil	May 5, 2022 11:22	05/05/2022 13:25
WH-SS-02@5'	Y205141-02	Soil	May 5, 2022 11:24	05/05/2022 13:25
WH-SS-03@5'	Y205141-03	Soil	May 5, 2022 11:26	05/05/2022 13:25
WH-SS-04@5'	Y205141-04	Soil	May 5, 2022 11:28	05/05/2022 13:25
WH-FS-01@6'	Y205141-05	Soil	May 5, 2022 11:30	05/05/2022 13:25

Chain of Custody Modification Request

On 5/23/2022, Grace Congdon from Eagle Environmental contacted Jordan Bynon via email regarding Y205141 requesting that Table 915 metals be added to WH-FS-01@6'.

Requested modifications to the chain of custody were made by Jordan Bynon on 5/23/2022.

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, Inc.  
 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

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

**Sample Receipt Checklist**

Origins Work Order: Y205141 Client: Eagle  
 Client Project ID: Abramson 5-23

Checklist Completed by: SG Shipped Via: HD  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Date/time completed: 5/6/22 Airbill #: N/A

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

Cooler Number/Temperature: 1 / 1.6 °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 <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
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 <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<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 <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH < 2 for samples preserved with HNO <sub>3</sub> , HCl, H <sub>2</sub> SO <sub>4</sub> ) / (pH > 10 for samples preserved with Na <sub>2</sub> SO <sub>3</sub> +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

Reviewed by JB (Project Manager) Date/Time Reviewed 5-8-22

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, Inc.  
 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-01@5'**  
**5/5/2022 11:22:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-01 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.181		0.100	mg/L	1	B2E0907	05/09/2022	05/10/2022	
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**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2E0909	05/09/2022	05/10/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	97.6 %		50-150			"	"	"	
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**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2E0626	05/06/2022	05/10/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %		70-130			"	"	"	
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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, Inc.  
 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-01@5'**  
**5/5/2022 11:22:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-01 (Soil)**

**GBTEX+TMBs by 8260D**

Surrogate: Toluene-d8	94.8 %		70-130			B2E06 26	05/06/2022	05/10/2022	
Surrogate: 4-Bromofluorobenzene	97.0 %		70-130			"	"	"	

**Metals by Saturated Paste by EPA 6010**

Calcium	1.40		0.499	meq/L	10	[CALC]	05/09/2022	05/10/2022	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	1.51		0.435	"	"	"	"	"	

**PAH by 8270D SIM**

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L615168	05/10/2022	05/11/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	

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, Inc.  
 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-01@5'**  
**5/5/2022 11:22:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Waypoint Analytical, Inc.**  
**Y205141-01 (Soil)**

**PAH by 8270D SIM**

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L615168	05/10/2022	05/11/2022	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.000484	0.00067	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	67.2 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	53.5 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	64.1 %		29-110			"	"	"	

**pH in Soil by 9045D**

pH	8.21			pH Units	1	B2E0903	05/09/2022	05/10/2022	
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**SAR by 20B Saturated Paste**

SAR	1.52			SAR	1	B2E0902	05/09/2022	05/10/2022	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.430		0.00500	mmhos/cm	1	B2E0903	05/09/2022	05/10/2022	
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Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-02@5'**  
**5/5/2022 11:24:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-02 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.641		0.100	mg/L	1	B2E0907	05/09/2022	05/10/2022	
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**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2E0909	05/09/2022	05/10/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	82.3 %		50-150			"	"	"	
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**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2E0626	05/06/2022	05/11/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	106 %		70-130			"	"	"	
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Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-02@5'**  
**5/5/2022 11:24:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-02 (Soil)**

**GBTEX+TMBs by 8260D**

Surrogate: Toluene-d8	99.0 %		70-130			B2E06 26	05/06/2022	05/11/2022	
Surrogate: 4-Bromofluorobenzene	95.4 %		70-130			"	"	"	

**Metals by Saturated Paste by EPA 6010**

Calcium	2.52		0.499	meq/L	10	[CALC]	05/09/2022	05/10/2022	
Magnesium	1.18		0.823	"	"	"	"	"	
Sodium	2.81		0.435	"	"	"	"	"	

**PAH by 8270D SIM**

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L615168	05/10/2022	05/11/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	

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, Inc.  
 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-02@5'**  
**5/5/2022 11:24:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Waypoint Analytical, Inc.**  
**Y205141-02 (Soil)**

**PAH by 8270D SIM**

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L615168	05/10/2022	05/11/2022	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.000484	0.00067	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	64.8 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	53.3 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	60.2 %		29-110			"	"	"	

**pH in Soil by 9045D**

pH	8.18			pH Units	1	B2E0903	05/09/2022	05/10/2022	
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**SAR by 20B Saturated Paste**

SAR	2.07			SAR	1	B2E0902	05/09/2022	05/10/2022	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.817		0.00500	mmhos/cm	1	B2E0903	05/09/2022	05/10/2022	
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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, Inc.  
 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-03@5'**  
**5/5/2022 11:26:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-03 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.161		0.100	mg/L	1	B2E0907	05/09/2022	05/10/2022	
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**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2E0909	05/09/2022	05/10/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: <i>o</i> -Terphenyl	81.9 %		50-150			"	"	"	
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**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2E0626	05/06/2022	05/11/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	1.94		0.200	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	107 %		70-130			"	"	"	
Surrogate: Toluene-d8	99.4 %		70-130			"	"	"	

Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-03@5'**  
**5/5/2022 11:26:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-03 (Soil)**

**GBTEX+TMBs by 8260D**

Surrogate: 4-Bromofluorobenzene	91.5 %		70-130			B2E06 26	05/06/2022	05/11/2022	
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**Metals by Saturated Paste by EPA 6010**

Calcium	2.99		0.499	meq/L	10	[CALC]	05/09/2022	05/10/2022	
Magnesium	1.70		0.823	"	"	"	"	"	
Sodium	2.58		0.435	"	"	"	"	"	

**PAH by 8270D SIM**

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L615314	05/10/2022	05/11/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	0.0012	0.000304	0.00067	"	"	"	"	"	
Anthracene	0.000446	0.000334	0.00067	"	"	"	"	"	J
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	0.000791	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	
Fluorene	0.0136	0.000286	0.00067	"	"	"	"	"	

Origins Laboratory, Inc.



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 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-03@5'**  
**5/5/2022 11:26:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Waypoint Analytical, Inc.**  
**Y205141-03 (Soil)**

**PAH by 8270D SIM**

Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	mg/Kg	1	L615314	05/10/2022	05/11/2022	
Naphthalene	<b>0.000745</b>	<b>0.000484</b>	0.00067	"	"	"	"	"	
Pyrene	<b>0.000923</b>	<b>0.000643</b>	0.00067	"	"	"	"	"	B

Surrogate: 2-Fluorobiphenyl	50.2 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	66.4 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	58.3 %		29-110			"	"	"	

**pH in Soil by 9045D**

pH	<b>8.19</b>			pH Units	1	B2E0903	05/09/2022	05/10/2022	
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**SAR by 20B Saturated Paste**

SAR	<b>1.68</b>			SAR	1	B2E0902	05/09/2022	05/10/2022	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	<b>0.865</b>		0.00500	mmhos/cm	1	B2E0903	05/09/2022	05/10/2022	
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Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-04@5'**  
**5/5/2022 11:28:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-04 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.306		0.100	mg/L	1	B2E0907	05/09/2022	05/10/2022	
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**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND		25.0	mg/kg	1	B2E0909	05/09/2022	05/10/2022	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	85.4 %		50-150			"	"	"	
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**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2E0626	05/06/2022	05/11/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	0.202		0.200	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	99.8 %		70-130			"	"	"	
Surrogate: Toluene-d8	98.5 %		70-130			"	"	"	

Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-04@5'**  
**5/5/2022 11:28:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-04 (Soil)**

**GBTEX+TMBs by 8260D**

Surrogate: 4-Bromofluorobenzene	96.2 %		70-130			B2E06 26	05/06/2022	05/11/2022	
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**Metals by Saturated Paste by EPA 6010**

Calcium	2.81		0.499	meq/L	10	[CALC]	05/09/2022	05/10/2022	
Magnesium	0.831		0.823	"	"	"	"	"	
Sodium	2.76		0.435	"	"	"	"	"	

**PAH by 8270D SIM**

1-Methylnaphthalene	ND	0.000364	0.00067	mg/Kg	1	L615314	05/10/2022	05/11/2022	
2-Methylnaphthalene	ND	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	
Fluorene	0.000373	0.000286	0.00067	"	"	"	"	"	J

Origins Laboratory, Inc.



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 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-SS-04@5'**  
**5/5/2022 11:28:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Waypoint Analytical, Inc.**  
**Y205141-04 (Soil)**

**PAH by 8270D SIM**

Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	mg/Kg	1	L615314	05/10/2022	05/11/2022	
Naphthalene	ND	0.000484	0.00067	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	57.7 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	73.9 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	60.7 %		29-110			"	"	"	

**pH in Soil by 9045D**

pH	8.16			pH Units	1	B2E0903	05/09/2022	05/10/2022	
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**SAR by 20B Saturated Paste**

SAR	2.05			SAR	1	B2E0902	05/09/2022	05/10/2022	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.822		0.00500	mmhos/cm	1	B2E0903	05/09/2022	05/10/2022	
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Origins Laboratory, Inc.



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 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-FS-01@6'**  
**5/5/2022 11:30:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-05 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.197		0.100	mg/L	1	B2E0907	05/09/2022	05/10/2022	
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**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	336		25.0	mg/kg	1	B2E0909	05/09/2022	05/10/2022	
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	87.9 %		50-150			"	"	"	
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**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B2E0626	05/06/2022	05/11/2022	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	27.6		5.00	"	25	"	"	05/11/2022	

Surrogate: 1,2-Dichloroethane-d4	105 %		70-130			"	"	05/11/2022	
Surrogate: Toluene-d8	102 %		70-130			"	"	"	

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 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-FS-01@6'**  
**5/5/2022 11:30:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205141-05 (Soil)**

**GBTEX+TMBs by 8260D**

Surrogate: 4-Bromofluorobenzene	71.8 %		70-130			B2E06 26	05/06/2022	05/11/2022	
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**Metals by Saturated Paste by EPA 6010**

Calcium	1.09		0.499	meq/L	10	[CALC]	05/09/2022	05/10/2022	
Magnesium	2.82		0.823	"	"	"	"	"	
Sodium	1.83		0.435	"	"	"	"	"	

**PAH by 8270D SIM**

1-Methylnaphthalene	0.00201	0.000364	0.00067	mg/Kg	1	L615314	05/10/2022	05/11/2022	
2-Methylnaphthalene	0.00371	0.000645	0.00067	"	"	"	"	"	
Acenaphthene	0.00533	0.000304	0.00067	"	"	"	"	"	
Anthracene	0.00293	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	0.00079	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	0.000609	0.000468	0.00067	"	"	"	"	"	J
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	0.005	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	0.000811	0.000394	0.00067	"	"	"	"	"	B
Fluorene	0.0605	0.000286	0.00067	"	"	"	"	"	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	

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 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-FS-01@6'**  
**5/5/2022 11:30:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Waypoint Analytical, Inc.**  
**Y205141-05 (Soil)**

**PAH by 8270D SIM**

Naphthalene	0.00657	0.000484	0.00067	mg/Kg	1	L615314	05/10/2022	05/11/2022	
Pyrene	0.00364	0.000643	0.00067	"	"	"	"	"	B

Surrogate: 2-Fluorobiphenyl	54.4 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	71.2 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	60.1 %		29-110			"	"	"	

**pH in Soil by 9045D**

pH	9.34			pH Units	1	B2E0903	05/09/2022	05/10/2022	
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**SAR by 20B Saturated Paste**

SAR	1.31			SAR	1	B2E0902	05/09/2022	05/10/2022	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.562		0.00500	mmhos/cm	1	B2E0903	05/09/2022	05/10/2022	
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**Total Metals by 6020B**

Arsenic	7.09	0.0855	0.25	mg/Kg	5	L619051	05/31/2022	06/02/2022	
Barium	85.9	0.042	0.25	"	"	"	"	"	
Cadmium	0.0724	0.0259	0.25	"	"	"	"	"	J

Origins Laboratory, Inc.



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 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**WH-FS-01@6'**  
**5/5/2022 11:30:00AM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Waypoint Analytical, LLC.**  
**Y205141-05 (Soil)**

**Total Metals by 6020B**

Copper	7.19	0.0806	0.25	mg/Kg	5	L619051	05/31/2022	06/02/2022	
Lead	9.39	0.031	0.25	"	"	"	"	"	
Nickel	9.65	0.0633	0.25	"	"	"	"	"	
Selenium	0.211	0.103	0.25	"	"	"	"	"	J
Silver	0.0218	0.0067	0.25	"	"	"	"	"	J
Zinc	25.8	0.534	2.5	"	"	"	"	"	

**Total Metals by 7196A**

Chromium, Hexavalent	ND	0.245	0.503	mg/Kg	1	L618810	05/05/2022	05/31/2022	
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Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 B2E0626 - EPA 5030 (soil)**

**Blank (B2E0626-BLK1)**

Prepared: 05/06/2022 Analyzed: 05/10/2022

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	0.0100	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		102	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		95.0	70-130			

Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 B2E0626 - EPA 5030 (soil)**

**LCS (B2E0626-BS1)**

Prepared: 05/06/2022 Analyzed: 05/10/2022

1,2,4-Trimethylbenzene	0.100	0.00200	mg/kg	0.100		100	70-130			
1,3,5-Trimethylbenzene	0.0998	0.00200	"	0.100		99.8	70-130			
Benzene	0.103	0.00200	"	0.100		103	70-130			
Ethylbenzene	0.0997	0.00200	"	0.100		99.7	70-130			
Naphthalene	0.102	0.0100	"	0.100		102	70-130			
Toluene	0.108	0.00200	"	0.100		108	70-130			
o-Xylene	0.0990	0.00200	"	0.100		99.0	70-130			
m,p-Xylene	0.198	0.00400	"	0.200		98.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		100	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		99.8	70-130			

Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 B2E0626 - EPA 5030 (soil)

Matrix Spike (B2E0626-MS1)	Source: Y205139-01			Prepared: 05/06/2022 Analyzed: 05/10/2022						
1,2,4-Trimethylbenzene	0.0849	0.00200	mg/kg	0.100	ND	84.9	70-130			
1,3,5-Trimethylbenzene	0.0847	0.00200	"	0.100	ND	84.7	70-130			
Benzene	0.0955	0.00200	"	0.100	ND	95.5	70-130			
Ethylbenzene	0.0877	0.00200	"	0.100	ND	87.7	70-130			
Naphthalene	0.0853	0.0100	"	0.100	ND	85.3	70-130			
Toluene	0.0972	0.00200	"	0.100	ND	97.2	70-130			
o-Xylene	0.0878	0.00200	"	0.100	ND	87.8	70-130			
m,p-Xylene	0.174	0.00400	"	0.200	ND	87.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		103	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.2	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		100	70-130			

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 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 B2E0626 - EPA 5030 (soil)

Matrix Spike Dup (B2E0626-MSD1)	Source: Y205139-01			Prepared: 05/06/2022 Analyzed: 05/10/2022						
1,2,4-Trimethylbenzene	0.0869	0.00200	mg/kg	0.100	ND	86.9	70-130	2.35	20	
1,3,5-Trimethylbenzene	0.0860	0.00200	"	0.100	ND	86.0	70-130	1.57	20	
Benzene	0.0964	0.00200	"	0.100	ND	96.4	70-130	0.855	20	
Ethylbenzene	0.0893	0.00200	"	0.100	ND	89.3	70-130	1.81	20	
Naphthalene	0.0935	0.0100	"	0.100	ND	93.5	70-130	9.24	20	
Toluene	0.0962	0.00200	"	0.100	ND	96.2	70-130	1.03	20	
o-Xylene	0.0891	0.00200	"	0.100	ND	89.1	70-130	1.40	20	
m,p-Xylene	0.178	0.00400	"	0.200	ND	88.8	70-130	2.06	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		106	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		94.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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
<b>Batch B2E0909 - EPA 3550B</b>										
<b>Blank (B2E0909-BLK1)</b>										
					Prepared: 05/09/2022 Analyzed: 05/09/2022					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	24		"	24.9		94.8	50-150			

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 B2E0909 - EPA 3550B**

**LCS (B2E0909-BS1)**

Prepared: 05/09/2022 Analyzed: 05/09/2022

Diesel (C10-C28)	882	50.0	mg/kg	1000		88.2	70-130			
Residual Range Organics (C28-C40)	994	200	"	1000		99.4	70-130			
Surrogate: o-Terphenyl	47		"	49.8		94.5	50-150			

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 B2E0909 - EPA 3550B**

<b>Matrix Spike (B2E0909-MS1)</b>	<b>Source: Y205098-01</b>			<b>Prepared: 05/09/2022 Analyzed: 05/09/2022</b>						
Diesel (C10-C28)	976	50.0	mg/kg	1000	ND	97.6	70-130			
Residual Range Organics (C28-C40)	1120	200	"	1000	ND	112	70-130			
Surrogate: o-Terphenyl	49		"	49.8		98.9	50-150			

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 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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
<b>Batch B2E0909 - EPA 3550B</b>										
<b>Matrix Spike Dup (B2E0909-MSD1)</b>					<b>Source: Y205098-01</b>					Prepared: 05/09/2022 Analyzed: 05/09/2022
Diesel (C10-C28)	1070	50.0	mg/kg	1000	ND	107	70-130	9.53	35	
Residual Range Organics (C28-C40)	1150	200	"	1000	ND	115	70-130	2.86	35	
Surrogate: o-Terphenyl	53		"	49.8		107	50-150			

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 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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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**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 B2E0903 - NO PREP**

**Blank (B2E0903-BLK1)**

Prepared: 05/09/2022 Analyzed: 05/10/2022

Specific Conductance (EC)	0.00160	0.00500	mmhos/cm
pH	0.00		pH Units

**Duplicate (B2E0903-DUP1)**

**Source: Y205136-10**

Prepared: 05/09/2022 Analyzed: 05/10/2022

Specific Conductance (EC)	0.269	0.00500	mmhos/cm	0.242	10.5	25
pH	8.45		pH Units	8.52	0.825	25

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 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 L619051 - 3050B**

<b>MSD (L 98250-MSD-L619051)</b>		<b>Source: 98250</b>			<b>Prepared: 05/31/2022 Analyzed: 06/02/2022</b>					
Selenium	5.04	0.103	mg/Kg	4.86	0.396	95	75-125	8.2	80	
Barium	12.4	0.042	"	4.86	12.6	NR	75-125	61.8	80	*
Nickel	3.16	0.0633	"	2.43	1.42	72	75-125	18.1	80	*
Silver	0.488	0.0067	"	0.486	<0.0067	100	75-125	10.7	80	
Copper	3.09	0.0806	"	2.43	1.17	79	75-125	14.6	80	
Cadmium	0.452	0.0259	"	0.486	0.0284	87	75-125	4.5	80	
Arsenic	2.79	0.0855	"	2.43	0.946	76	75-125	0.7	80	
Lead	3.28	0.031	"	2.43	1.91	56	75-125	10.4	80	*
Zinc	27.2	0.534	"	24.3	4.63	93	75-125	1.1	80	

<b>MS (L 98250-MS-L619051)</b>		<b>Source: 98250</b>			<b>Prepared: 05/31/2022 Analyzed: 06/02/2022</b>					
Lead	3.64	0.031	mg/Kg	2.3	1.91	75	75-125			
Copper	3.58	0.0806	"	2.3	1.17	105	75-125			
Cadmium	0.432	0.0259	"	0.46	0.0284	88	75-125			
Barium	23.5	0.042	"	4.6	12.6	237	75-125			*
Silver	0.438	0.0067	"	0.46	<0.0067	95	75-125			
Arsenic	2.77	0.0855	"	2.3	0.946	79	75-125			
Selenium	4.64	0.103	"	4.6	0.396	92	75-125			
Zinc	26.9	0.534	"	23	4.63	97	75-125			
Nickel	3.79	0.0633	"	2.3	1.42	103	75-125			

<b>LCS (LCS-L619051)</b>		<b>Prepared: 05/31/2022 Analyzed: 06/02/2022</b>								
Arsenic	2.1	0.0855	mg/Kg	2.5		84	80-120			
Barium	4.92	0.042	"	5		98	80-120			
Cadmium	0.428	0.0259	"	0.5		86	80-120			
Copper	2.15	0.0806	"	2.5		86	80-120			
Lead	2.29	0.031	"	2.5		92	80-120			

Origins Laboratory, Inc.



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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 L619051 - 3050B**

**LCS (LCS-L619051)**

Prepared: 05/31/2022 Analyzed: 06/02/2022

Nickel	2.21	0.0633	mg/Kg	2.5		88	80-120			
Selenium	4.58	0.103	"	5		92	80-120			
Silver	0.446	0.0067	"	0.5		89	80-120			
Zinc	21.8	0.534	"	25		87	80-120			

**LRB (LRB-L619051)**

Prepared: 05/31/2022 Analyzed: 06/02/2022

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

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 Project: Noble - HSR - Abramson #5-23

**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
<b>Batch L618810 -</b>										
<b>DUP (L 87831-DUP)</b>		<b>Source: Y205141-05</b>			Prepared: Analyzed: 05/31/2022					
Chromium, Hexavalent	ND	0.245	mg/Kg		<0.503		-	0	20	
<b>MS (L 87831-MS)</b>		<b>Source: Y205141-05</b>			Prepared: Analyzed: 05/31/2022					
Chromium, Hexavalent	4.2	0.25	mg/Kg	8.23	<0.250	51	75-125			*
<b>LCS (LCS)</b>		Prepared: Analyzed: 05/31/2022								
Chromium, Hexavalent	7.38	0.244	mg/Kg	8		92	75-125			
<b>LRB (LRB)</b>		Prepared: Analyzed: 05/31/2022								
Chromium, Hexavalent	ND	0.5	mg/Kg				-			

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 Project: Noble - HSR - Abramson #5-23

**PAH by 8270D SIM - Quality Control**  
**Waypoint Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch L615314 - 3550B**

<b>MSD (L 86749-MSD-L615314)</b>		<b>Source: 86749</b>			Prepared: 05/10/2022 Analyzed: 05/11/2022					
Fluorene	0.113	0.000286	mg/Kg	0.163	<0.000286	69.3	30-130	16.3	30	
2-Methylnaphthalene	0.104	0.000645	"	0.163	0.000702	63.3	30-130	20.8	30	
1-Methylnaphthalene	0.104	0.000364	"	0.163	0.00039	63.5	30-130	18.8	30	
Naphthalene	0.107	0.000484	"	0.163	<0.000484	65.6	30-130	20.7	30	
Dibenz(a,h)anthracene	0.127	0.000614	"	0.163	<0.000614	77.9	30-130	29.3	30	
Indeno(1,2,3-cd)pyrene	0.102	0.000627	"	0.163	<0.000627	62.5	30-130	32	30	
Fluoranthene	0.118	0.000394	"	0.163	<0.000394	72.3	30-130	17.1	30	
Chrysene	0.127	0.000624	"	0.163	<0.000624	77.9	30-130	21.8	30	
Benzo(b)fluoranthene	0.0794	0.000585	"	0.163	<0.000585	48.7	30-130	9	30	
Benzo(a)pyrene	0.127	0.000468	"	0.163	<0.000468	77.9	30-130	18	30	
Acenaphthene	0.109	0.000304	"	0.163	<0.000304	66.8	30-130	18.5	30	
Benzo(a)anthracene	0.125	0.000493	"	0.163	<0.000493	76.6	30-130	21.2	30	
Benzo(k)fluoranthene	0.114	0.000437	"	0.163	<0.000437	69.9	30-130	27	30	
Anthracene	0.12	0.000334	"	0.163	<0.000334	73.6	30-130	22.8	30	
Pyrene	0.118	0.000643	"	0.163	<0.000643	72.3	30-130	17.4	30	
Surrogate: 2-Fluorobiphenyl	60.7		"	0.326	195	60.7	33-115			
Surrogate: 4-Terphenyl-d14	76.6		"	0.326	248	76.6	33-122			
Surrogate: Nitrobenzene-d5	65.9		"	0.326	210	65.9	29-110			

<b>MS (L 86749-MS-L615314)</b>		<b>Source: 86749</b>			Prepared: 05/10/2022 Analyzed: 05/11/2022					
Benzo(b)fluoranthene	0.0725	0.000585	mg/Kg	0.166	<0.000585	43.6	30-130			
Chrysene	0.102	0.000624	"	0.166	<0.000624	61.4	30-130			
Fluoranthene	0.0994	0.000394	"	0.166	<0.000394	59.8	30-130			
Fluorene	0.0959	0.000286	"	0.166	<0.000286	57.7	30-130			
Naphthalene	0.0869	0.000484	"	0.166	<0.000484	52.3	30-130			
Benzo(a)pyrene	0.106	0.000468	"	0.166	<0.000468	63.8	30-130			
Benzo(k)fluoranthene	0.0868	0.000437	"	0.166	<0.000437	52.2	30-130			

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**PAH by 8270D SIM - Quality Control**  
**Waypoint Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch L615314 - 3550B**

<b>MS (L 86749-MS-L615314)</b>		<b>Source: 86749</b>			Prepared: 05/10/2022 Analyzed: 05/11/2022					
Pyrene	0.0991	0.000643	mg/Kg	0.166	<0.000643	59.6	30-130			
Indeno(1,2,3-cd)pyrene	0.0738	0.000627	"	0.166	<0.000627	44.4	30-130			
Dibenz(a,h)anthracene	0.0945	0.000614	"	0.166	<0.000614	56.9	30-130			
2-Methylnaphthalene	0.0844	0.000645	"	0.166	0.000702	50.4	30-130			
1-Methylnaphthalene	0.0861	0.000364	"	0.166	0.00039	51.6	30-130			
Acenaphthene	0.0905	0.000304	"	0.166	<0.000304	54.5	30-130			
Anthracene	0.0954	0.000334	"	0.166	<0.000334	57.4	30-130			
Benzo(a)anthracene	0.101	0.000493	"	0.166	<0.000493	60.8	30-130			
Surrogate: Nitrobenzene-d5	59.5		"	0.331	210	59.5	29-110			
Surrogate: 4-Terphenyl-d14	67.3		"	0.331	248	67.3	33-122			
Surrogate: 2-Fluorobiphenyl	53.1		"	0.331	195	53.1	33-115			

<b>LCS (LCS-L615314)</b>		Prepared: 05/10/2022 Analyzed: 05/11/2022								
1-Methylnaphthalene	0.0927	0.000364	mg/Kg	0.167		55.5	30-130			
2-Methylnaphthalene	0.0927	0.000645	"	0.167		55.5	30-130			
Acenaphthene	0.0952	0.000304	"	0.167		57	30-130			
Benzo(a)pyrene	0.117	0.000468	"	0.167		70	30-130			
Benzo(b)fluoranthene	0.0838	0.000585	"	0.167		50.1	30-130			
Benzo(k)fluoranthene	0.0989	0.000437	"	0.167		59.2	30-130			
Chrysene	0.114	0.000624	"	0.167		68.2	30-130			
Dibenz(a,h)anthracene	0.112	0.000614	"	0.167		67	30-130			
Fluoranthene	0.108	0.000394	"	0.167		64.6	30-130			
Fluorene	0.0995	0.000286	"	0.167		59.5	30-130			
Indeno(1,2,3-cd)pyrene	0.0879	0.000627	"	0.167		52.6	30-130			
Naphthalene	0.0945	0.000484	"	0.167		56.5	30-130			
Pyrene	0.108	0.000643	"	0.167		64.6	30-130			
Benzo(a)anthracene	0.111	0.000493	"	0.167		66.4	30-130			

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**PAH by 8270D SIM - Quality Control**  
**Waypoint Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch L615314 - 3550B**

**LCS (LCS-L615314)**

Prepared: 05/10/2022 Analyzed: 05/11/2022

Anthracene	0.103	0.000334	mg/Kg	0.167		61.6	30-130			
Surrogate: 2-Fluorobiphenyl	57.9		"	0.333		57.9	33-115			
Surrogate: 4-Terphenyl-d14	73.5		"	0.333		73.5	33-122			
Surrogate: Nitrobenzene-d5	66		"	0.333		66	29-110			

**LRB (LRB-L615314)**

Prepared: 05/10/2022 Analyzed: 05/11/2022

Benzo(k)fluoranthene	0.00049	0.00067	mg/Kg				-			J
2-Methylnaphthalene	ND	0.00067	"				-			
Acenaphthene	ND	0.00067	"				-			
Anthracene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Pyrene	0.00123	0.00067	"				-			*
Benzo(b)fluoranthene	ND	0.00067	"				-			
1-Methylnaphthalene	ND	0.00067	"				-			
Chrysene	ND	0.00067	"				-			
Dibenz(a,h)anthracene	ND	0.00067	"				-			
Fluoranthene	0.00108	0.00067	"				-			*
Fluorene	ND	0.00067	"				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
Naphthalene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Surrogate: 2-Fluorobiphenyl	61.2		"	0.333		61.2	33-115			
Surrogate: 4-Terphenyl-d14	81		"	0.333		81	33-122			
Surrogate: Nitrobenzene-d5	72.9		"	0.333		72.9	29-110			

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Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**PAH by 8270D SIM - Quality Control**  
**Waypoint Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch L615168 - 3550B**

<b>MSD (L 85975-MSD-L615168)</b>		<b>Source: 85975</b>			Prepared: 05/10/2022 Analyzed: 05/11/2022					
Anthracene	0.148	0.000334	mg/Kg	0.165	<0.000334	89.6	30-130	1.3	30	
Pyrene	0.155	0.000643	"	0.165	<0.000643	93.9	30-130	0	30	
1-Methylnaphthalene	0.105	0.000364	"	0.165	<0.000364	63.6	30-130	2.8	30	
Naphthalene	0.103	0.000484	"	0.165	<0.000484	62.4	30-130	1.9	30	
2-Methylnaphthalene	0.106	0.000645	"	0.165	<0.000645	64.2	30-130	1.8	30	
Indeno(1,2,3-cd)pyrene	0.144	0.000627	"	0.165	<0.000627	87.2	30-130	11.1	30	
Acenaphthene	0.134	0.000304	"	0.165	<0.000304	81.2	30-130	2.9	30	
Fluorene	0.127	0.000286	"	0.165	<0.000286	76.9	30-130	1.5	30	
Benzo(a)anthracene	0.136	0.000493	"	0.165	<0.000493	82.4	30-130	0.7	30	
Benzo(a)pyrene	0.133	0.000468	"	0.165	<0.000468	80.6	30-130	0.7	30	
Benzo(b)fluoranthene	0.12	0.000585	"	0.165	<0.000585	72.7	30-130	0.8	30	
Benzo(k)fluoranthene	0.102	0.000437	"	0.165	<0.000437	61.8	30-130	3.8	30	
Chrysene	0.123	0.000624	"	0.165	<0.000624	74.5	30-130	0	30	
Dibenz(a,h)anthracene	0.136	0.000614	"	0.165	<0.000614	82.4	30-130	13.6	30	
Fluoranthene	0.158	0.000394	"	0.165	<0.000394	95.7	30-130	0.6	30	
Surrogate: Nitrobenzene-d5	55.1		"	0.33	187	55.1	29-110			
Surrogate: 2-Fluorobiphenyl	60.9		"	0.33	192	60.9	33-115			
Surrogate: 4-Terphenyl-d14	53.9		"	0.33	168	53.9	33-122			

<b>MS (L 85975-MS-L615168)</b>		<b>Source: 85975</b>			Prepared: 05/10/2022 Analyzed: 05/11/2022					
Acenaphthene	0.138	0.000304	mg/Kg	0.167	<0.000304	82.6	30-130			
Fluorene	0.129	0.000286	"	0.167	<0.000286	77.2	30-130			
2-Methylnaphthalene	0.108	0.000645	"	0.167	<0.000645	64.6	30-130			
Pyrene	0.155	0.000643	"	0.167	<0.000643	92.8	30-130			
1-Methylnaphthalene	0.108	0.000364	"	0.167	<0.000364	64.6	30-130			
Indeno(1,2,3-cd)pyrene	0.161	0.000627	"	0.167	<0.000627	96.4	30-130			
Fluoranthene	0.159	0.000394	"	0.167	<0.000394	95.2	30-130			

Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**PAH by 8270D SIM - Quality Control**  
**Waypoint Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch L615168 - 3550B**

MS (L 85975-MS-L615168)	Source: 85975		Prepared: 05/10/2022 Analyzed: 05/11/2022							
Dibenz(a,h)anthracene	0.156	0.000614	mg/Kg	0.167	<0.000614	93.4	30-130			
Benzo(k)fluoranthene	0.106	0.000437	"	0.167	<0.000437	63.4	30-130			
Benzo(b)fluoranthene	0.119	0.000585	"	0.167	<0.000585	71.2	30-130			
Benzo(a)pyrene	0.132	0.000468	"	0.167	<0.000468	79	30-130			
Benzo(a)anthracene	0.135	0.000493	"	0.167	<0.000493	80.8	30-130			
Anthracene	0.15	0.000334	"	0.167	<0.000334	89.8	30-130			
Chrysene	0.123	0.000624	"	0.167	<0.000624	73.6	30-130			
Naphthalene	0.105	0.000484	"	0.167	<0.000484	62.8	30-130			
Surrogate: Nitrobenzene-d5	56.4		"	0.333	187	56.4	29-110			
Surrogate: 4-Terphenyl-d14	54.3		"	0.333	168	54.3	33-122			
Surrogate: 2-Fluorobiphenyl	62.7		"	0.333	192	62.7	33-115			

LCS (LCS-L615168)	Prepared: 05/10/2022 Analyzed: 05/11/2022									
Chrysene	0.109	0.000624	mg/Kg	0.167		65.2	30-130			
Fluoranthene	0.135	0.000394	"	0.167		80.8	30-130			
Fluorene	0.11	0.000286	"	0.167		65.8	30-130			
Indeno(1,2,3-cd)pyrene	0.136	0.000627	"	0.167		81.4	30-130			
Naphthalene	0.0915	0.000484	"	0.167		54.7	30-130			
Pyrene	0.133	0.000643	"	0.167		79.6	30-130			
Benzo(k)fluoranthene	0.0858	0.000437	"	0.167		51.3	30-130			
1-Methylnaphthalene	0.0945	0.000364	"	0.167		56.5	30-130			
Benzo(a)pyrene	0.118	0.000468	"	0.167		70.6	30-130			
Benzo(a)anthracene	0.118	0.000493	"	0.167		70.6	30-130			
Anthracene	0.126	0.000334	"	0.167		75.4	30-130			
Acenaphthene	0.119	0.000304	"	0.167		71.2	30-130			
2-Methylnaphthalene	0.0946	0.000645	"	0.167		56.6	30-130			
Dibenz(a,h)anthracene	0.128	0.000614	"	0.167		76.6	30-130			

Origins Laboratory, Inc.



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 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**PAH by 8270D SIM - Quality Control**  
**Waypoint Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch L615168 - 3550B**

**LCS (LCS-L615168)**

Prepared: 05/10/2022 Analyzed: 05/11/2022

Benzo(b)fluoranthene	0.108	0.000585	mg/Kg	0.167		64.6	30-130			
Surrogate: Nitrobenzene-d5	61.5		"	0.333		61.5	29-110			
Surrogate: 4-Terphenyl-d14	54.9		"	0.333		54.9	33-122			
Surrogate: 2-Fluorobiphenyl	69.9		"	0.333		69.9	33-115			

**LRB (LRB-L615168)**

Prepared: 05/10/2022 Analyzed: 05/11/2022

Dibenz(a,h)anthracene	ND	0.00067	mg/Kg				-			
Fluoranthene	ND	0.00067	"				-			
Fluorene	ND	0.00067	"				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
Naphthalene	ND	0.00067	"				-			
Chrysene	ND	0.00067	"				-			
Pyrene	ND	0.00067	"				-			
Acenaphthene	ND	0.00067	"				-			
Benzo(k)fluoranthene	ND	0.00067	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Anthracene	ND	0.00067	"				-			
2-Methylnaphthalene	ND	0.00067	"				-			
1-Methylnaphthalene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Surrogate: Nitrobenzene-d5	61.5		"	0.333		61.5	29-110			
Surrogate: 4-Terphenyl-d14	54.6		"	0.333		54.6	33-122			
Surrogate: 2-Fluorobiphenyl	68.7		"	0.333		68.7	33-115			

Origins Laboratory, Inc.



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

Martin C Eckert III  
Project Number: [none]  
Project: Noble - HSR - Abramson #5-23

**Notes and Definitions**

- U Sample is Non-Detect.
- J Estimated Value. Analyte below reported quantitation limit.
- B Analyte detected in associated method blank.
- \* 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.

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.*



June 06, 2022

Eagle Environmental Consulting, Inc.

Martin C Eckert III

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - HSR - Abramson #5-23

Project Number - [none]

Attached are your analytical results for Noble - HSR - Abramson #5-23 received by Origins Laboratory, Inc. May 23, 2022. This project is associated with Origins project number Y205591-01.

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, Inc.  
8000 W 44th Ave  
Wheat Ridge CO 80033

Martin C Eckert III  
Project Number: [none]  
Project: Noble - HSR - Abramson #5-23

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Background-01@3'	Y205591-01	Soil	May 5, 2022 11:33	05/23/2022 14:15

Origins Laboratory, Inc.



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

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: 1205591 Client: Eagle  
 Client Project ID: HSR Abramson 5-23

Checklist Completed by: SG Shipped Via: HD  
 Date/time completed: 5/24/22 (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, 0.4 °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 <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
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 <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<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 <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)(pH < 2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH > 10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

910  
Reviewed by (Project Manager)

5/25/22  
Date/Time Reviewed

Origins Laboratory, Inc.

*J. Bynon*

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, Inc.  
 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**Background-01@3'**  
**5/5/2022 11:33:00AM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y205591-01 (Soil)**

**pH in Soil by 9045D**

pH	8.29		pH Units	1	B2E2606	ACC	05/26/2022	05/27/2022	
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Origins Laboratory, Inc.



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 8000 W 44th Ave  
 Wheat Ridge CO 80033

Martin C Eckert III  
 Project Number: [none]  
 Project: Noble - HSR - Abramson #5-23

**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 B2E2606 - NO PREP

Duplicate (B2E2606-DUP1)

Source: Y205590-01

Prepared: 05/26/2022 Analyzed: 05/27/2022

pH	5.99		pH Units		6.02			0.500	25	
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Eagle Environmental Consulting, Inc.  
8000 W 44th Ave  
Wheat Ridge CO 80033

Martin C Eckert III  
Project Number: [none]  
Project: Noble - HSR - Abramson #5-23

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**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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