

Wellhead Closure Checklist

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

Additional attachments (optional):	Pit Closure	Tank Battery Closure	Flowline Closure 1-11-23	Partially Buried Vault Closure
Site Name & COGCC Facility Number: JOHNSON RC #29-2			Date: 1-11-23	
Associated Wells: 05-123-18187		Age of Site: YEARS		Remediation Project #: 25292
Location: (GPS coordinates of wellhead or southeastern most wellhead for multiple) 40.288960, -104.572320				Number of Photos Attached: 2
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) GOOD				Estimated Facility Size (acres):

USCS Soil Type: **SW** Estimated Depth to Groundwater: **> 20'**

Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)
NONE OBSERVED

Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)
NONE OBSERVED

Wellhead(s)					
Well API	05-123-18187				
Age	YEARS				
Condition of surface around wellhead	GOOD - PER CREW				
PID Readings	N/A - EXCAVATED UPON ARRIVAL				
Condition of subsurface	GOOD				
Estimated Present PID Readings	2.8	0.6	0.9	0.7	3.1
Sample taken? Location/Sample ID	WH-SS-01	WH-SS-02	WH-SS-03	WH-SS-04	WH-FS-01
Photo Number(s)	SEE PHOTOLG				

Other observations regarding wellheads:
WELL CASING CUT/CAPPED FOLLOWING ASSESSMENT.

Summary	
Was impacted soil identified? <input checked="" type="radio"/> No Yes - less than 10 cubic yards Yes - more than 10 cubic yards	
Total number of samples field screened: 5	Total number of samples collected: 5
Highest PID Reading: 3.1	Total number of samples submitted to lab for analysis: 1
If more than 10 cubic yards of impacted soil were observed:	
Vertical extent: N/A	Estimated spill volume:
Lateral extent:	Volume of soil removed:
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:	

Flowline Closure Checklist

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

Additional Attachments:		Tank Battery Closure		Wellhead Closure	1-11-23	Pit Closure		Partially Buried Vault Closure			
Site Name & COGCC Facility Number: JOHNSON RC # 29-2		Date: 1-11-23		Remediation Project #: 25272		Associated Wells: 05-123-13187		Age of Site: YEARS		Number of Photos Attached: 1	
Starting point: (GPS coordinates and descriptions) 40.288957, -104.572302 AT WELL											
End point: (GPS coordinates and descriptions) 40.290446, -104.573912 AT SEPARATOR											
USCS Soil Type: SW						Estimated Depth to Groundwater: > 20'					
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)											
NONE OBSERVED											
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)											
NONE OBSERVED											
Flowlines											
Flowline type	G, C, W										
Depth	~ 4'										
Age	YEARS										
Length	~ 710'										
Construction Material	STEEL										
Were flowlines pulled?	NO - ABANDONED IN PLACE										
Visual Integrity of lines	GOOD - PER INTEGRITY TEST										
Visual impacts if trenched	NA										
PID Readings if trenched	1.9										
Sample taken? Location/Sample ID#	FL-SS-01										
Photo Number(s)	SEE PHOTOLOG										
Other observations regarding on location flowlines:											
FLOWLINE ABANDONED IN PLACE. PT 13 (@ SEP) ASSESSED.											
Summary											
Was impacted soil identified?											
<input checked="" type="radio"/> No Yes - less than 10 cubic yards Yes - more than 10 cubic yards											
Total number of samples field screened: 1						Total number of samples collected: 1					
Highest PID Reading: 1.9						Total number of samples submitted to lab for analysis: 1					
If more than 10 cubic yards of impacted soil were observed:											
Vertical extent: N/A						Estimated spill volume:					
Lateral extent: N/A						Volume of soil removed:					
Is additional investigation required?											
Was groundwater encountered during the investigation?											
<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:											



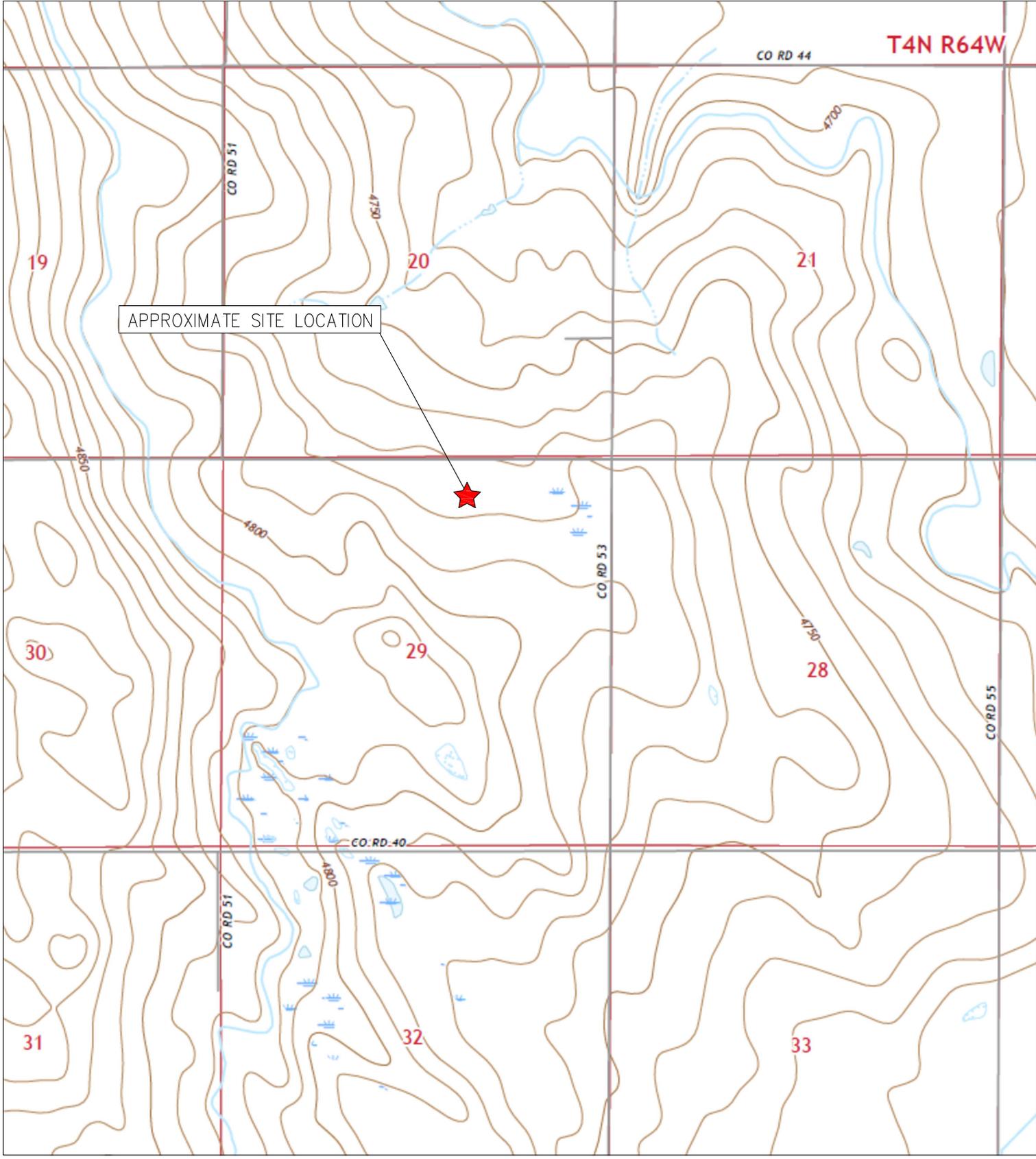
FIGURES

Figure 1: Topographic Site Location Map

Figure 2: Aerial Site Location Map

Figure 3: Soil Analytical Map

Figure 4: Polycyclic Aromatic Hydrocarbons Map



TOPOGRAPHIC SITE LOCATION MAP
 JOHNSON R C #29-2
 CLOSURE ASSESSMENT
 40.288960 / -104.572320
 NW¼ NE¼ SEC.29 T4N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-13187
 REMEDIATION # 25272



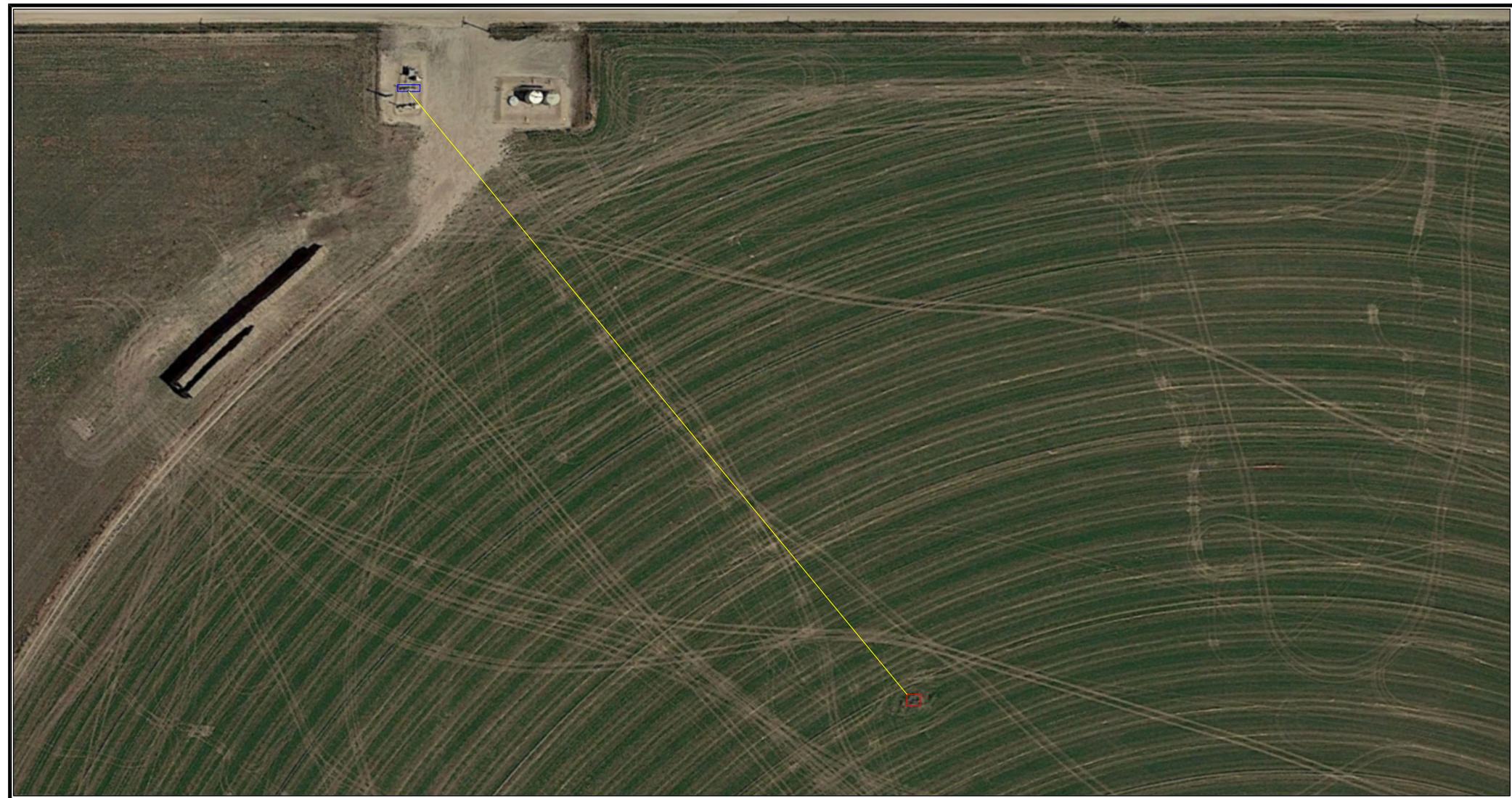
EAGLE
 ENVIRONMENTAL
 CONSULTING, LLC

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



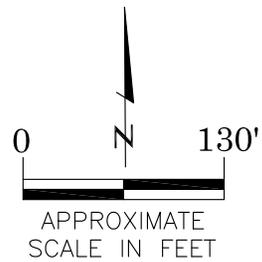
SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP,
 VALLEY VIEW SCHOOL, CO QUADRANGLE 2022

FIGURE 1



LEGEND

- FORMER JOHNSON R C #29-2 WELLHEAD (PLUGGED AND ABANDONED)
- ASSOCIATED SEPARATOR
- APPROXIMATE FLOWLINE LOCATION (ABANDONED IN PLACE)



AERIAL SITE LOCATION MAP
 JOHNSON R C #29-2
 CLOSURE ASSESSMENT
 40.288960 / -104.572320
 NW¼ NE¼ SEC.29 T4N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-13187
 REMEDIATION # 25272

FIGURE NO.

2

DRAWN BY:

EL



EAGLE
 ENVIRONMENTAL
 CONSULTING, LLC

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

LEGEND

- - - - - WELLHEAD ASSESSMENT BOUNDARIES
- APPROXIMATE FLOWLINE LOCATION (ABANDONED IN PLACE)
- 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

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
 JOHNSON R C #29-2
 CLOSURE ASSESSMENT
 40.288960 / -104.572320
 NW¼ NE¼ SEC.29 T4N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-13187
 REMEDIATION # 25272

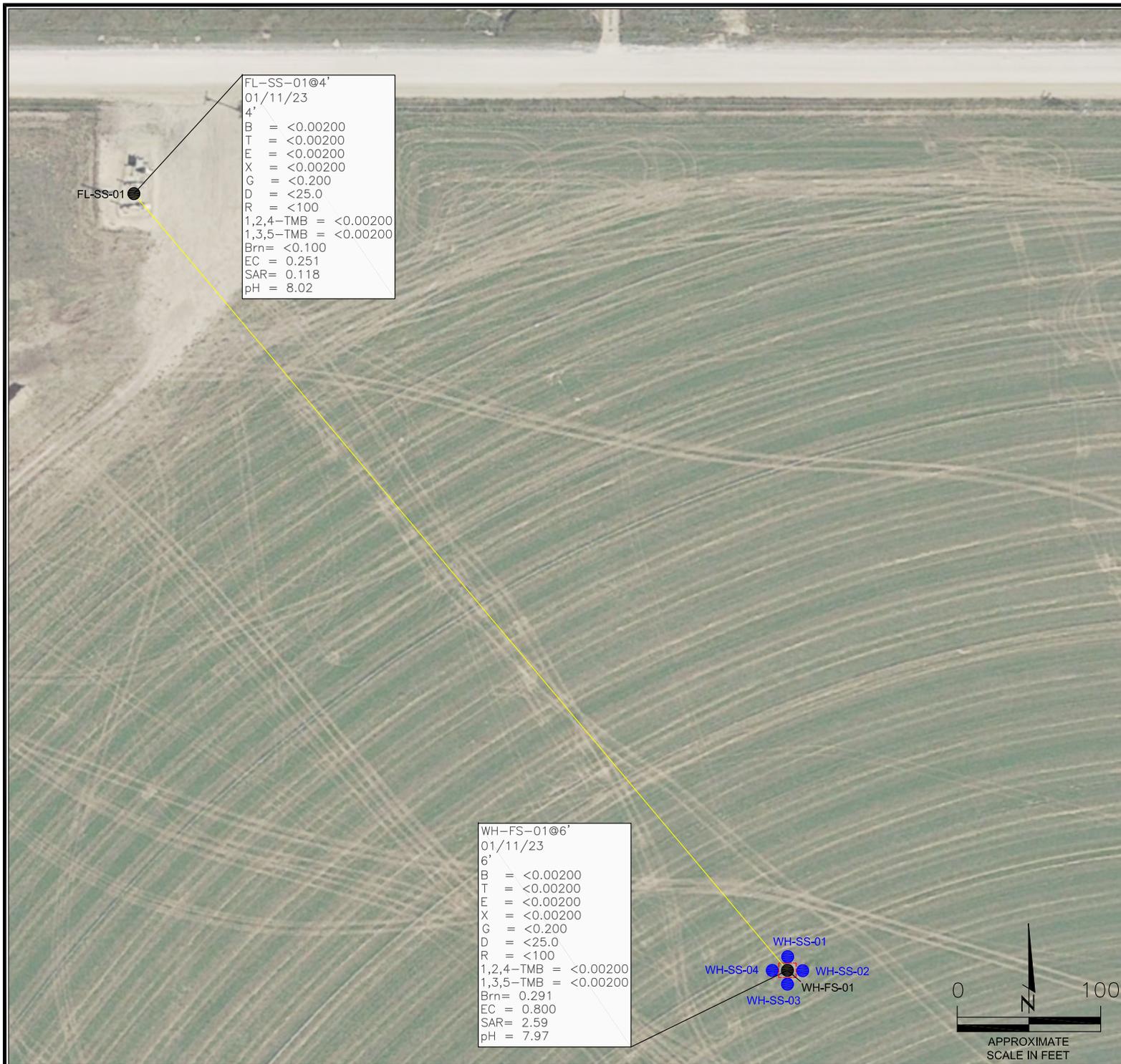
FIGURE NO.
3

DRAWN BY:
GK



EAGLE
 ENVIRONMENTAL
 CONSULTING, LLC

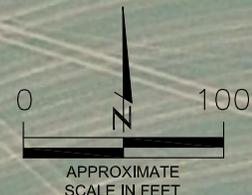
8000 W 44th Ave, Wheat Ridge, CO 80033
 Ph: 303-433-0479 • F: 303-325-5449



FL-SS-01@4'
 01/11/23
 4'
 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= <0.100
 EC = 0.251
 SAR= 0.118
 pH = 8.02

WH-FS-01@6'
 01/11/23
 6'
 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= 0.291
 EC = 0.800
 SAR= 2.59
 pH = 7.97

WH-SS-01
 WH-SS-02
 WH-FS-01
 WH-SS-03
 WH-SS-04



LEGEND

- - - - WELLHEAD ASSESSMENT BOUNDARIES
- APPROXIMATE FLOWLINE LOCATION (ABANDONED IN PLACE)
- APPROXIMATE LOCATION OF SOIL SAMPLES FIELD SCREENED, ONLY, WITH PHOTOIONIZATION DETECTOR
- 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 COGCC TABLE 915-1 REGULATORY LIMITS.

COGCC = COLORADO OIL AND GAS CONSERVATION COMMISSION

POLYCYCLIC AROMATIC HYDROCARBONS MAP

JOHNSON R C #29-2
CLOSURE ASSESSMENT
40.288960 / -104.572320
NW¼ NE¼ SEC.29 T4N R64W 6PM
WELD COUNTY, COLORADO
API # 05-123-13187
REMEDATION # 25272

FIGURE NO.

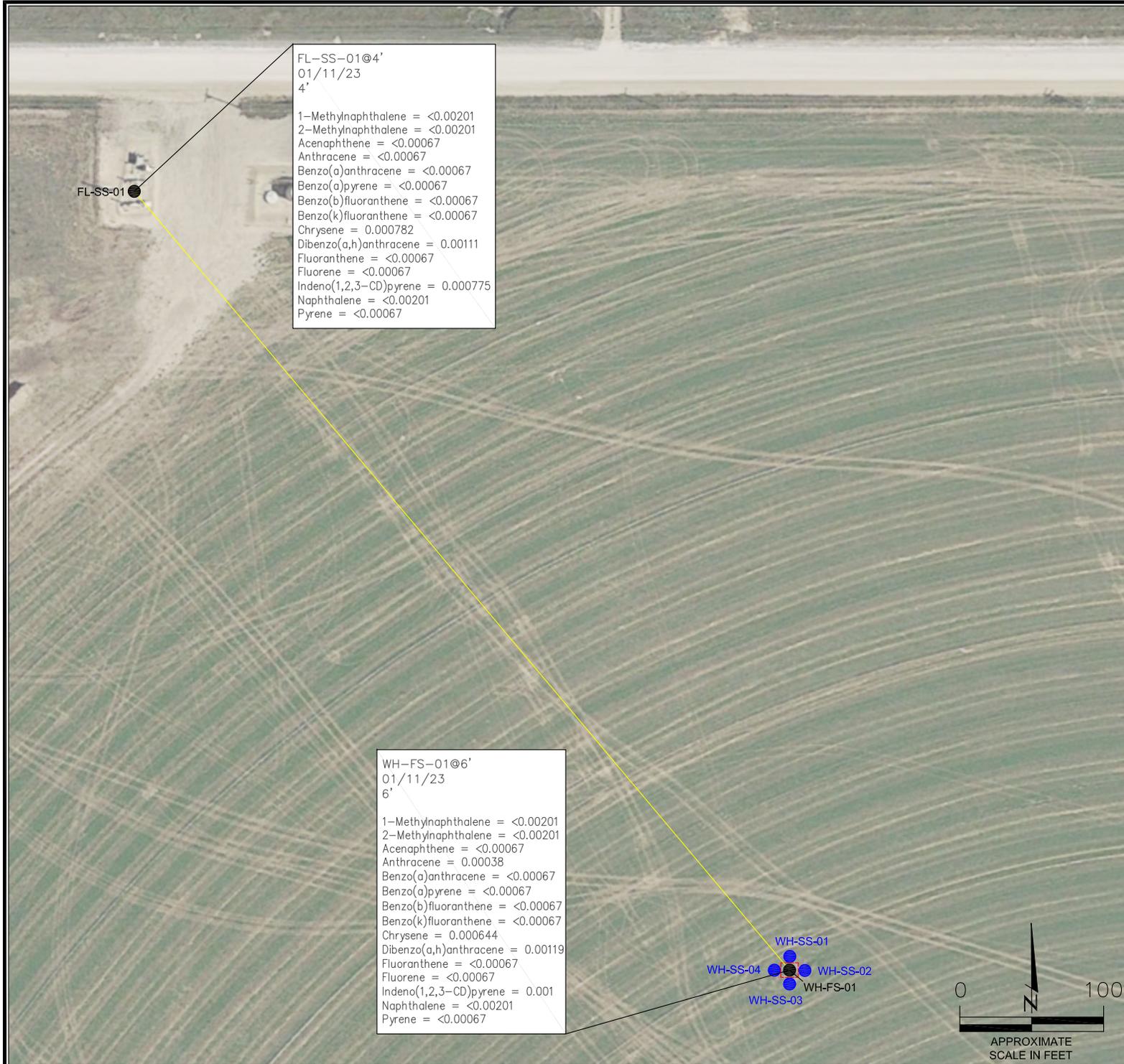
4

DRAWN BY:

JK



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



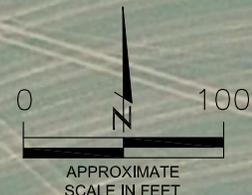
FL-SS-01@4'
01/11/23
4'

1-Methylnaphthalene = <0.00201
2-Methylnaphthalene = <0.00201
Acenaphthene = <0.00067
Anthracene = <0.00067
Benzo(a)anthracene = <0.00067
Benzo(a)pyrene = <0.00067
Benzo(b)fluoranthene = <0.00067
Benzo(k)fluoranthene = <0.00067
Chrysene = 0.000782
Dibenzo(a,h)anthracene = 0.00111
Fluoranthene = <0.00067
Fluorene = <0.00067
Indeno(1,2,3-CD)pyrene = 0.000775
Naphthalene = <0.00201
Pyrene = <0.00067

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

1-Methylnaphthalene = <0.00201
2-Methylnaphthalene = <0.00201
Acenaphthene = <0.00067
Anthracene = 0.00038
Benzo(a)anthracene = <0.00067
Benzo(a)pyrene = <0.00067
Benzo(b)fluoranthene = <0.00067
Benzo(k)fluoranthene = <0.00067
Chrysene = 0.000644
Dibenzo(a,h)anthracene = 0.00119
Fluoranthene = <0.00067
Fluorene = <0.00067
Indeno(1,2,3-CD)pyrene = 0.001
Naphthalene = <0.00201
Pyrene = <0.00067

WH-SS-01
WH-SS-02
WH-SS-03
WH-SS-04
WH-FS-01





TABLES

Table 1: Photoionization Detector Reading Summary

Table 2: Soil Analytical Results Summary

TABLE 1
PHOTOIONIZATION DETECTOR READING SUMMARY
JOHNSON R C #29-2
CLOSURE ASSESSMENT
40.288960 / -104.572320
NW¼ NE¼ SEC.29 T4N R64W 6PM
WELD COUNTY, COLORADO
API # 05-123-13187
REMEDIATION # 25272

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Lab Submission (Y/N)
WH-SS-01 @ 5' (40.288970 / -104.572321)	01/11/23	5	2.8	N
WH-SS-02 @ 5' (40.288959 / -104.572306)	01/11/23	5	0.6	N
WH-SS-03 @ 5' (40.288953 / -104.572323)	01/11/23	5	0.9	N
WH-SS-04 @ 5' (40.288961 / -104.572337)	01/11/23	5	0.7	N
WH-FS-01 @ 6' (40.288962 / -104.572319)	01/11/23	6	3.1	Y
FL-SS-01 @ 4' (40.290446 / -104.573967)	01/11/23	4	1.9	Y
(Y/N) = Yes or No ppm-v = parts per million by volume PID = Photoionization Detector				



TABLE 2
 SOIL ANALYTICAL RESULTS SUMMARY
 JOHNSON R C #29-2
 CLOSURE ASSESSMENT
 40.288960 / -104.572320
 NW¼ NE¼ SEC.29 T4N R64W 6PM
 WELD COUNTY, COLORADO
 API # 05-123-13187
 REMEDIATION # 25272

Sample Location (Latitude / Longitude)		WH-FS-01 @ 6'		FL-SS-01 @ 4'	
		(40.288962 / -104.572319)		(40.290446 / -104.573967)	
Sample Date		01/11/23		01/11/23	
Sample Depth		6'		4'	
PID Reading (ppm-v)		3.1		1.9	
Regulatory Limits					
Chemical of Concern	Units	COGCC Table 915-1 RSSLs	COGCC Table 915-1 GSSLs		
VOCs					
Benzene	mg/kg	1.2	0.0026	<0.00200	<0.00200
Toluene	mg/kg	490	0.69	<0.00200	<0.00200
Ethylbenzene	mg/kg	5.8	0.78	<0.00200	<0.00200
Total Xylenes	mg/kg	58	9.9	<0.00200	<0.00200
1,2,4-Trimethylbenzene	mg/kg	30	0.0081	<0.00200	<0.00200
1,3,5-Trimethylbenzene	mg/kg	27	0.0087	<0.00200	<0.00200
TOTAL PETROLEUM HYDROCARBONS					
TPH-GRO	mg/kg	500	--	<0.200	<0.200
TPH-DRO	mg/kg	500	--	<25.0	<25.0
TPH-RRO	mg/kg	500	--	<100	<100
POLYCYCLIC AROMATIC HYDROCARBONS					
1-Methyl-naphthalene	mg/kg	18	0.006	<0.00201	<0.00201
2-Methyl-naphthalene	mg/kg	24	0.019	<0.00201	<0.00201
Acenaphthene	mg/kg	360	0.55	<0.00067	<0.00067
Anthracene	mg/kg	1800	5.8	0.00038	<0.00067
Benzo(a)-anthracene	mg/kg	1.1	0.011	<0.00067	<0.00067
Benzo(a)-pyrene	mg/kg	0.11	0.24	<0.00067	<0.00067
Benzo(b)-fluoranthene	mg/kg	1.1	0.3	<0.00067	<0.00067
Benzo(k)-fluoranthene	mg/kg	11	2.9	<0.00067	<0.00067
Chrysene	mg/kg	110	9	0.000644	0.000782
Dibenzo(a,h)-anthracene	mg/kg	0.11	0.096	0.00119	0.00111
Fluoranthene	mg/kg	240	8.9	<0.00067	<0.00067
Fluorene	mg/kg	240	0.54	<0.00067	<0.00067
Indeno(1,2,3-cd)-pyrene	mg/kg	1.1	0.98	0.001	0.000775
Naphthalene	mg/kg	2	0.0038	<0.00201	<0.00201
Pyrene	mg/kg	180	1.3	<0.00067	<0.00067
SOIL SUITABILITY (Inorganics)					
Boron	mg/L	2	--	0.291	<0.100
pH	standard unit	6-8.3	--	7.97	8.02
Sodium Adsorption Ratio (SAR)	--	<6	--	2.59	0.118
Specific Conductance (EC)	mmhos/cm	<4	--	0.800	0.251
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 Notes: Values presented with a less than symbol (<) did not contain concentrations at or above the laboratory reporting limit and/or minimum detection limit. Values presented in BOLD exceed COGCC Table 915-1 Regulatory Limits.					





ATTACHMENT A

Photo Log

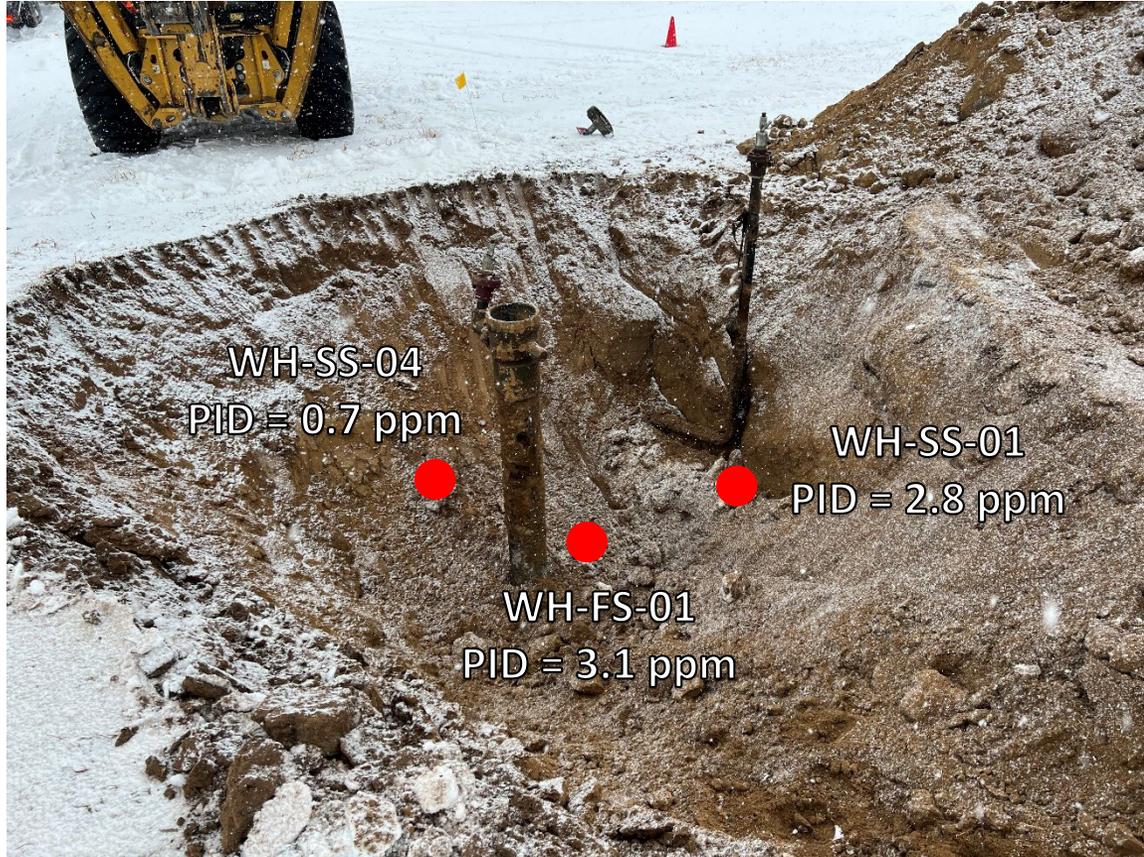
Johnson R C #29-2
API # 05-123-13187
Remediation # 25272

Closure Assessment

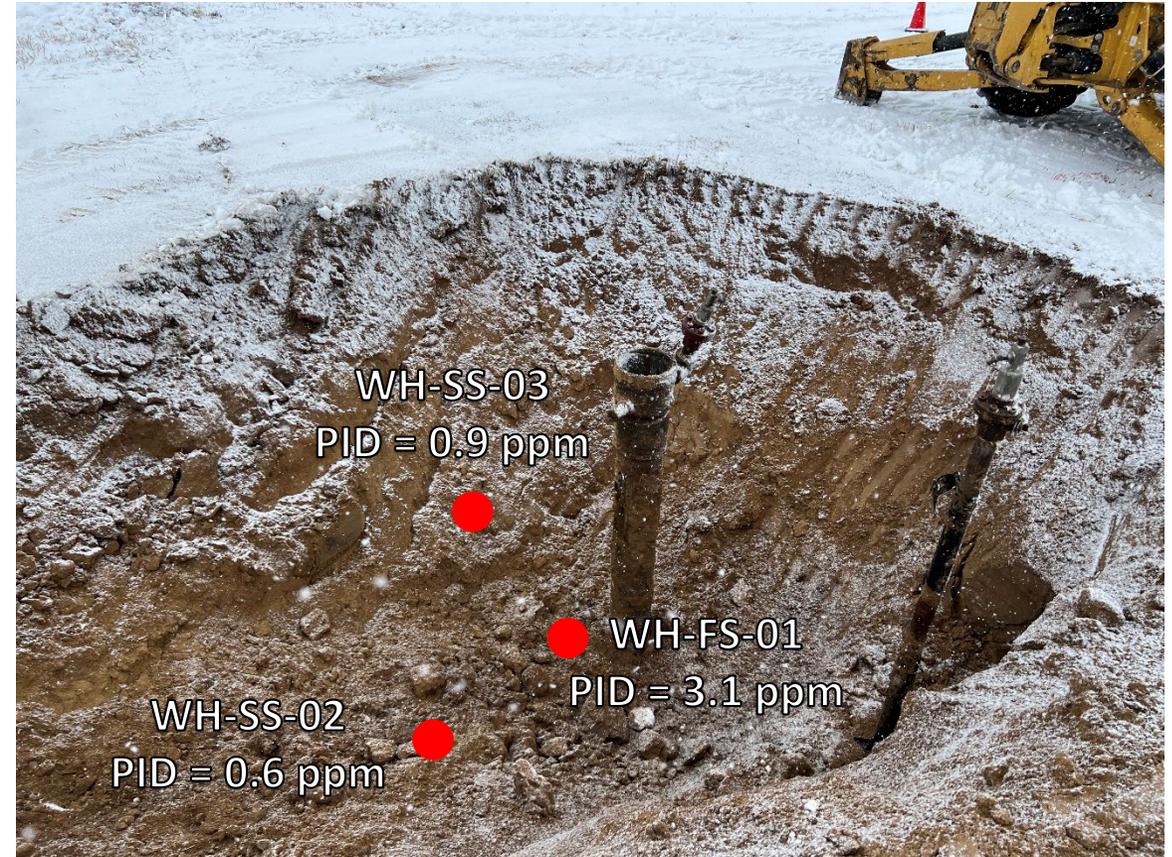
January 2023



Wellhead Excavation – 01/11/23



Looking northwest
No petroleum hydrocarbon staining or odor observed



Looking southwest
No petroleum hydrocarbon staining or odor observed

Flowline Assessment – 01/11/23



Looking north
No petroleum hydrocarbon staining or odor observed



ATTACHMENT B

Laboratory Analytical Report



January 18, 2023

Eagle Environmental Consulting, Inc.

Martin C Eckert III

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - Johnson R C #29-2

Project Number - [none]

Attached are your analytical results for Noble - Johnson R C #29-2 received by Origins Laboratory, Inc. January 11, 2023. This project is associated with Origins project number Y301163-01.

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 - Johnson R C #29-2

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH-FS-01@6'	Y301163-01	Soil	January 11, 2023 10:18	01/11/2023 12:20
FL-SS-01@4'	Y301163-02	Soil	January 11, 2023 10:32	01/11/2023 12:20

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 - Johnson R C #29-2

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 4301163

Client: Eagle

Client Project ID: Johnson R C #29-2

Checklist Completed by: EHS/DE

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

Date/time completed: 1/11/23

Airbill #: NA

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

Cooler Number/Temperature: 1 3.5 °C 1 °C 1 °C 1 °C (Describe)

Thermometer ID: T004

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			X	
Additional Comments (if any):				

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

Reviewed by (Project Manager) [Signature] Date/Time Reviewed 1/11/23

Origins Laboratory, Inc.

[Signature]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

WH-FS-01@6'

1/11/2023 10:18:00AM

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

Origins Laboratory, Inc.
Y301163-01 (Soil)

Boron (DTPA Sorbitol)

Boron	0.291		0.100	mg/L	1	B3A1207	01/12/2023	01/13/2023	
-------	-------	--	-------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B3A1201	01/12/2023	01/12/2023	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	89.3 %		50-150			"	"	"	
------------------------	--------	--	--------	--	--	---	---	---	--

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B3A1123	01/11/2023	01/12/2023	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	97.9 %		70-130			"	"	"	
----------------------------------	--------	--	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

WH-FS-01@6'

1/11/2023 10:18:00AM

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

Origins Laboratory, Inc.
Y301163-01 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	99.5 %		70-130			B3A11 23	01/11/2023	01/12/2023	
Surrogate: 4-Bromofluorobenzene	100 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	2.42		0.499	meq/L	10	[CALC]	01/12/2023	01/13/2023	
Magnesium	0.937		0.823	"	"	"	"	"	
Sodium	3.36		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L658359	01/13/2023	01/13/2023	
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	0.00038	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	0.000644	0.000624	0.00067	"	"	"	"	"	J
Dibenz(a,h)anthracene	0.00119	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	
Fluorene	ND	0.000286	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 - Johnson R C #29-2

WH-FS-01@6'

1/11/2023 10:18:00AM

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

Waypoint Analytical, LLC.
Y301163-01 (Soil)

PAH by 8270D SIM

Indeno(1,2,3-cd)pyrene	0.001	0.000627	0.00067	mg/Kg	1	L658359	01/13/2023	01/13/2023	
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	48.6 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	57.1 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	49.8 %		29-110			"	"	"	

pH in Soil by 9045D

pH	7.97			pH Units	1	B3A1209	01/12/2023	01/13/2023	
----	------	--	--	----------	---	---------	------------	------------	--

SAR by 20B Saturated Paste

SAR	2.59			SAR	1	B3A1205	01/12/2023	01/13/2023	
-----	------	--	--	-----	---	---------	------------	------------	--

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.800		0.00500	mmhos/cm	1	B3A1209	01/12/2023	01/13/2023	
---------------------------	-------	--	---------	----------	---	---------	------------	------------	--

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 - Johnson R C #29-2

FL-SS-01@4'

1/11/2023 10:32:00AM

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

Origins Laboratory, Inc.
Y301163-02 (Soil)

Boron (DTPA Sorbitol)

Boron	ND		0.100	mg/L	1	B3A1207	01/12/2023	01/13/2023	
-------	----	--	-------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND		25.0	mg/kg	1	B3A1201	01/12/2023	01/12/2023	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	84.3 %		50-150			"	"	"	
------------------------	--------	--	--------	--	--	---	---	---	--

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B3A1123	01/11/2023	01/12/2023	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	97.8 %		70-130			"	"	"	
----------------------------------	--------	--	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

FL-SS-01@4'

1/11/2023 10:32:00AM

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

Origins Laboratory, Inc.
Y301163-02 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	99.5 %		70-130			B3A11 23	01/11/2023	01/12/2023	
Surrogate: 4-Bromofluorobenzene	99.6 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	1.66		0.499	meq/L	10	[CALC]	01/12/2023	01/13/2023	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	ND		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L658359	01/13/2023	01/13/2023	
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"	
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	0.000782	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	0.00111	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 - Johnson R C #29-2

FL-SS-01@4'

1/11/2023 10:32:00AM

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

Waypoint Analytical, LLC.
Y301163-02 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L658359	01/13/2023	01/13/2023	
Indeno(1,2,3-cd)pyrene	0.000775	0.000627	0.00067	"	"	"	"	"	
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"	
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	

Surrogate: 2-Fluorobiphenyl	53 %		33-115			"	"	"	
Surrogate: 4-Terphenyl-d14	62.7 %		33-122			"	"	"	
Surrogate: Nitrobenzene-d5	54.5 %		29-110			"	"	"	

pH in Soil by 9045D

pH	8.02			pH Units	1	B3A1210	01/12/2023	01/13/2023	
----	-------------	--	--	----------	---	---------	------------	------------	--

SAR by 20B Saturated Paste

SAR	0.118			SAR	1	B3A1206	01/12/2023	01/13/2023	
-----	--------------	--	--	-----	---	---------	------------	------------	--

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.251		0.00500	mmhos/cm	1	B3A1210	01/12/2023	01/13/2023	
---------------------------	--------------	--	---------	----------	---	---------	------------	------------	--

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 - Johnson R C #29-2

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3A1123 - EPA 5030 (soil)

Blank (B3A1123-BLK1)

Prepared: 01/11/2023 Analyzed: 01/12/2023

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		95.6	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		100	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3A1123 - EPA 5030 (soil)

LCS (B3A1123-BS1)

Prepared: 01/11/2023 Analyzed: 01/12/2023

1,2,4-Trimethylbenzene	0.0898	0.00200	mg/kg	0.100		89.8	70-130			
1,3,5-Trimethylbenzene	0.0914	0.00200	"	0.100		91.4	70-130			
Benzene	0.0963	0.00200	"	0.100		96.3	70-130			
Ethylbenzene	0.0921	0.00200	"	0.100		92.1	70-130			
Naphthalene	0.0969	0.00380	"	0.100		96.9	70-130			
Toluene	0.0940	0.00200	"	0.100		94.0	70-130			
o-Xylene	0.0937	0.00200	"	0.100		93.7	70-130			
m,p-Xylene	0.181	0.00400	"	0.200		90.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		93.2	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3A1123 - EPA 5030 (soil)

Matrix Spike (B3A1123-MS1)	Source: Y301161-01			Prepared: 01/11/2023 Analyzed: 01/12/2023						
1,2,4-Trimethylbenzene	0.0796	0.00200	mg/kg	0.100	ND	79.6	70-130			
1,3,5-Trimethylbenzene	0.0803	0.00200	"	0.100	ND	80.3	70-130			
Benzene	0.0926	0.00200	"	0.100	ND	92.6	70-130			
Ethylbenzene	0.0852	0.00200	"	0.100	ND	85.2	70-130			
Naphthalene	0.0776	0.00380	"	0.100	0.000600	77.0	70-130			
Toluene	0.0895	0.00200	"	0.100	ND	89.5	70-130			
o-Xylene	0.0859	0.00200	"	0.100	ND	85.9	70-130			
m,p-Xylene	0.167	0.00400	"	0.200	ND	83.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.11		"	0.125		91.8	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3A1123 - EPA 5030 (soil)

Matrix Spike Dup (B3A1123-MSD1)	Source: Y301161-01			Prepared: 01/11/2023 Analyzed: 01/12/2023						
1,2,4-Trimethylbenzene	0.0712	0.00200	mg/kg	0.100	ND	71.2	70-130	11.1	20	
1,3,5-Trimethylbenzene	0.0722	0.00200	"	0.100	ND	72.2	70-130	10.6	20	
Benzene	0.0913	0.00200	"	0.100	ND	91.3	70-130	1.48	20	
Ethylbenzene	0.0803	0.00200	"	0.100	ND	80.3	70-130	5.85	20	
Naphthalene	0.0703	0.00380	"	0.100	0.000600	69.7	70-130	9.93	20	QM-07
Toluene	0.0862	0.00200	"	0.100	ND	86.2	70-130	3.82	20	
o-Xylene	0.0803	0.00200	"	0.100	ND	80.3	70-130	6.76	20	
m,p-Xylene	0.156	0.00400	"	0.200	ND	78.1	70-130	6.91	20	
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		93.4	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		104	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

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
Batch B3A1201 - EPA 3580										
Blank (B3A1201-BLK1)										
					Prepared: 01/12/2023 Analyzed: 01/12/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	23		"	24.9		93.6	50-150			

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 - Johnson R C #29-2

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 B3A1201 - EPA 3580

LCS (B3A1201-BS1)

Prepared: 01/12/2023 Analyzed: 01/12/2023

Diesel (C10-C28)	880	50.0	mg/kg	1000		88.0	70-130			
Residual Range Organics (C28-C40)	929	200	"	1000		92.9	70-130			
Surrogate: o-Terphenyl	44		"	49.8		88.1	50-150			

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 - Johnson R C #29-2

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 B3A1201 - EPA 3580

Matrix Spike (B3A1201-MS1)	Source: Y301161-01			Prepared: 01/12/2023 Analyzed: 01/12/2023						
Diesel (C10-C28)	951	50.0	mg/kg	1000	ND	95.1	70-130			
Residual Range Organics (C28-C40)	1020	200	"	1000	ND	102	70-130			
Surrogate: o-Terphenyl	45		"	49.8		91.4	50-150			

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 - Johnson R C #29-2

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 B3A1201 - EPA 3580

Matrix Spike Dup (B3A1201-MSD1)	Source: Y301161-01			Prepared: 01/12/2023 Analyzed: 01/12/2023						
Diesel (C10-C28)	907	50.0	mg/kg	1000	ND	90.7	70-130	4.78	35	
Residual Range Organics (C28-C40)	987	200	"	1000	ND	98.7	70-130	2.78	35	
Surrogate: o-Terphenyl	42		"	49.8		84.7	50-150			

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 - Johnson R C #29-2

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3A1205 - Saturated Paste Metals

Blank (B3A1205-BLK1)

Prepared: 01/12/2023 Analyzed: 01/13/2023

SAR	0.00		SAR							
Calcium PPM	ND	10.0	mg/L							
Magnesium PPM	ND	10.0	"							
Sodium PPM	ND	10.0	"							

Duplicate (B3A1205-DUP1)

Source: Y301143-09

Prepared: 01/12/2023 Analyzed: 01/13/2023

SAR	0.00		SAR		4.13			200	200	
Calcium PPM	460	10.0	mg/L		223			69.3	50	QR-DUP
Magnesium PPM	258	10.0	"		159			47.3	50	
Sodium PPM	338	10.0	"		331			2.36	50	

Batch B3A1206 - Saturated Paste Metals

Blank (B3A1206-BLK1)

Prepared: 01/12/2023 Analyzed: 01/13/2023

Calcium PPM	ND	10.0	mg/L							
SAR	0.00		SAR							
Magnesium PPM	ND	10.0	mg/L							
Sodium PPM	ND	10.0	"							

Duplicate (B3A1206-DUP1)

Source: Y301163-02

Prepared: 01/12/2023 Analyzed: 01/13/2023

SAR	0.00		SAR		0.118			200	200	
Calcium PPM	31.9	10.0	mg/L		33.2			4.18	50	

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 - Johnson R C #29-2

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3A1206 - Saturated Paste Metals										
Duplicate (B3A1206-DUP1)		Source: Y301163-02			Prepared: 01/12/2023 Analyzed: 01/13/2023					
Magnesium PPM	5.43	10.0	mg/L		5.75		5.83		50	
Sodium PPM	2.72	10.0	"		2.80		2.83		50	
Batch B3A1207 - DTPA Sorbitol Preparation										
Blank (B3A1207-BLK1)		Prepared: 01/12/2023 Analyzed: 01/13/2023								
Boron	ND	0.100	mg/L							
Duplicate (B3A1207-DUP1)		Source: Y301159-01			Prepared: 01/12/2023 Analyzed: 01/13/2023					
Boron	0.512	0.0991	mg/L		0.526		2.74		50	

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 - Johnson R C #29-2

Saturated Paste - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3A1209 - Saturated Paste pH/EC

Blank (B3A1209-BLK1)

Prepared: 01/12/2023 Analyzed: 01/13/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B3A1209-DUP1)

Source: Y301143-09

Prepared: 01/12/2023 Analyzed: 01/13/2023

Specific Conductance (EC)	3.24	0.00500	mmhos/cm	4.11		23.7	25
pH	7.69		pH Units	7.69		0.00	25

Batch B3A1210 - Saturated Paste pH/EC

Blank (B3A1210-BLK1)

Prepared: 01/12/2023 Analyzed: 01/13/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B3A1210-DUP1)

Source: Y301163-02

Prepared: 01/12/2023 Analyzed: 01/13/2023

pH	7.77		pH Units	8.02		3.17	25
Specific Conductance (EC)	0.266	0.00500	mmhos/cm	0.251		5.53	25

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 - Johnson R C #29-2

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L658359 - 3550B

MSD (L 92573-MSD-L658359)	Source: 92573			Prepared: 01/13/2023 Analyzed: 01/13/2023						
Chrysene	0.105	0.00067	mg/Kg	0.165	0.000741	63.1	30-130	8.5	30	
Pyrene	0.102	0.00067	"	0.165	<0.000643	61.8	30-130	8.2	30	
Naphthalene	0.0843	0.00201	"	0.165	<0.00145	51	30-130	11	30	
Indeno(1,2,3-cd)pyrene	0.0886	0.00067	"	0.165	0.000951	53.1	30-130	37.3	30	*
Fluorene	0.0944	0.00067	"	0.165	<0.000286	57.2	30-130	8.9	30	
Dibenz(a,h)anthracene	0.0949	0.00067	"	0.165	0.00127	56.7	30-130	29.5	30	
Benzo(k)fluoranthene	0.0999	0.00067	"	0.165	<0.000437	60.5	30-130	14.8	30	
2-Methylnaphthalene	0.0953	0.00201	"	0.165	<0.00194	57.7	30-130	10.9	30	
Fluoranthene	0.105	0.00067	"	0.165	<0.000394	63.6	30-130	8.6	30	
Benzo(b)fluoranthene	0.1	0.00067	"	0.165	<0.000585	60.6	30-130	9.9	30	
Acenaphthene	0.0914	0.00067	"	0.165	<0.000304	55.3	30-130	12.6	30	
Anthracene	0.0921	0.00067	"	0.165	<0.000334	55.8	30-130	11.1	30	
Benzo(a)anthracene	0.0966	0.00067	"	0.165	<0.000493	58.5	30-130	7.8	30	
Benzo(a)pyrene	0.106	0.00067	"	0.165	<0.000468	64.2	30-130	9.4	30	
1-Methylnaphthalene	0.0844	0.00201	"	0.165	<0.00109	51.1	30-130	9.8	30	
<i>Surrogate: Nitrobenzene-d5</i>	55.4		"	0.33	181	55.4	29-110			
<i>Surrogate: 2-Fluorobiphenyl</i>	52.4		"	0.33	177	52.4	33-115			
<i>Surrogate: 4-Terphenyl-d14</i>	60.9		"	0.33	208	60.9	33-122			

MS (L 92573-MS-L658359)	Source: 92573			Prepared: 01/13/2023 Analyzed: 01/13/2023						
Benzo(k)fluoranthene	0.0861	0.00067	mg/Kg	0.164	<0.000437	52.5	30-130			
Naphthalene	0.0755	0.00201	"	0.164	<0.00145	46	30-130			
Indeno(1,2,3-cd)pyrene	0.0607	0.00067	"	0.164	0.000951	36.4	30-130			
Fluorene	0.0863	0.00067	"	0.164	<0.000286	52.6	30-130			
Fluoranthene	0.0963	0.00067	"	0.164	<0.000394	58.7	30-130			
Dibenz(a,h)anthracene	0.0705	0.00067	"	0.164	0.00127	42.2	30-130			
Chrysene	0.0964	0.00067	"	0.164	0.000741	58.3	30-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L658359 - 3550B

MS (L 92573-MS-L658359)		Source: 92573			Prepared: 01/13/2023 Analyzed: 01/13/2023					
Benzo(b)fluoranthene	0.0905	0.00067	mg/Kg	0.164	<0.000585	55.1	30-130			
Pyrene	0.0939	0.00067	"	0.164	<0.000643	57.2	30-130			
1-Methylnaphthalene	0.0765	0.00201	"	0.164	<0.00109	46.6	30-130			
2-Methylnaphthalene	0.0854	0.00201	"	0.164	<0.00194	52	30-130			
Acenaphthene	0.0805	0.00067	"	0.164	<0.000304	49	30-130			
Anthracene	0.0824	0.00067	"	0.164	<0.000334	50.2	30-130			
Benzo(a)anthracene	0.0893	0.00067	"	0.164	<0.000493	54.4	30-130			
Benzo(a)pyrene	0.0964	0.00067	"	0.164	<0.000468	58.7	30-130			
Surrogate: Nitrobenzene-d5	50		"	0.328	181	50	29-110			
Surrogate: 2-Fluorobiphenyl	47.2		"	0.328	177	47.2	33-115			
Surrogate: 4-Terphenyl-d14	57		"	0.328	208	57	33-122			

LCS (LCS-L658359)		Prepared: 01/13/2023 Analyzed: 01/13/2023								
Pyrene	0.115	0.00067	mg/Kg	0.167		68.8	30-130			
Fluoranthene	0.12	0.00067	"	0.167		71.8	30-130			
Benzo(k)fluoranthene	0.117	0.00067	"	0.167		70	30-130			
Naphthalene	0.0928	0.00201	"	0.167		55.5	30-130			
Fluorene	0.106	0.00067	"	0.167		63.4	30-130			
Dibenz(a,h)anthracene	0.105	0.00067	"	0.167		62.8	30-130			
Chrysene	0.118	0.00067	"	0.167		70.6	30-130			
1-Methylnaphthalene	0.0971	0.00201	"	0.167		58.1	30-130			
Benzo(a)pyrene	0.118	0.00067	"	0.167		70.6	30-130			
Benzo(a)anthracene	0.107	0.00067	"	0.167		64	30-130			
Anthracene	0.103	0.00067	"	0.167		61.6	30-130			
Acenaphthene	0.101	0.00067	"	0.167		60.4	30-130			
2-Methylnaphthalene	0.105	0.00201	"	0.167		62.8	30-130			
Indeno(1,2,3-cd)pyrene	0.093	0.00067	"	0.167		55.6	30-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - Johnson R C #29-2

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L658359 - 3550B

LCS (LCS-L658359)

Prepared: 01/13/2023 Analyzed: 01/13/2023

Benzo(b)fluoranthene	0.117	0.00067	mg/Kg	0.167		70	30-130			
Surrogate: Nitrobenzene-d5	62.1		"	0.333		62.1	29-110			
Surrogate: 4-Terphenyl-d14	71.1		"	0.333		71.1	33-122			
Surrogate: 2-Fluorobiphenyl	58.8		"	0.333		58.8	33-115			

LRB (LRB-L658359)

Prepared: 01/13/2023 Analyzed: 01/13/2023

Chrysene	ND	0.00067	mg/Kg				-			
Dibenz(a,h)anthracene	ND	0.00067	"				-			
Fluoranthene	ND	0.00067	"				-			
Fluorene	ND	0.00067	"				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
Benzo(k)fluoranthene	ND	0.00067	"				-			
Naphthalene	ND	0.00201	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Acenaphthene	ND	0.00067	"				-			
2-Methylnaphthalene	ND	0.00201	"				-			
1-Methylnaphthalene	ND	0.00201	"				-			
Pyrene	ND	0.00067	"				-			
Anthracene	ND	0.00067	"				-			
Surrogate: Nitrobenzene-d5	58.2		"	0.333		58.2	29-110			
Surrogate: 4-Terphenyl-d14	68.1		"	0.333		68.1	33-122			
Surrogate: 2-Fluorobiphenyl	57		"	0.333		57	33-115			

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 - Johnson R C #29-2

Notes and Definitions

U Sample is Non-Detect.

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

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

J Estimated Value. Analyte below reported quantitation limit.

* 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.