

# Flowline Closure Checklist

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

Additional Attachments:		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
Site Name & COGCC Facility Number: Antelope 12-19		Date: 02/09/23					Remediation Project #: 24162	
Associated Wells: 05-123-31862		Age of Site: years					Number of Photos Attached: 21	
Starting point: (GPS coordinates and descriptions) At wellhead: 40.386580 / -104.372610								
End point: (GPS coordinates and descriptions) At separator: 40.384505 / -104.368050								
USCS Soil Type: SM				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.								
<b>Flowlines</b>								
Flowline type	O,G,W							
Depth	Approx. 4'							
Age	years							
Length	1950'							
Construction Material	Steel							
Were flowlines pulled?	yes							
Visual Integrity of lines	Good							
Visual impacts if trenched	N/A							
PID Readings if trenched	1.3 to 3.4							
Sample taken? Location/Sample ID#	FL-SS-01 through FL-SS-21							
Photo Number(s)	See photolog							
Other observations regarding on location flowlines: Terminus at separator and change of directions assessed. No impacts observed. Wellhead/flowline terminus at wellhead pending assessment.								
<b>Summary</b>								
Was impacted soil identified? <input checked="" type="checkbox"/> No Yes - less than 10 cubic yards Yes - more than 10 cubic yards								
Total number of samples field screened: 21				Total number of samples collected: 21				
Highest PID Reading: 3.4				Total number of samples submitted to lab for analysis: 4				
If more than 10 cubic yards of impacted soil were observed:								
Vertical extent:				Estimated spill volume:				
Lateral extent:				Volume of soil removed:				
Is additional investigation required?								
Was groundwater encountered during the investigation? <input checked="" type="checkbox"/> 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:								



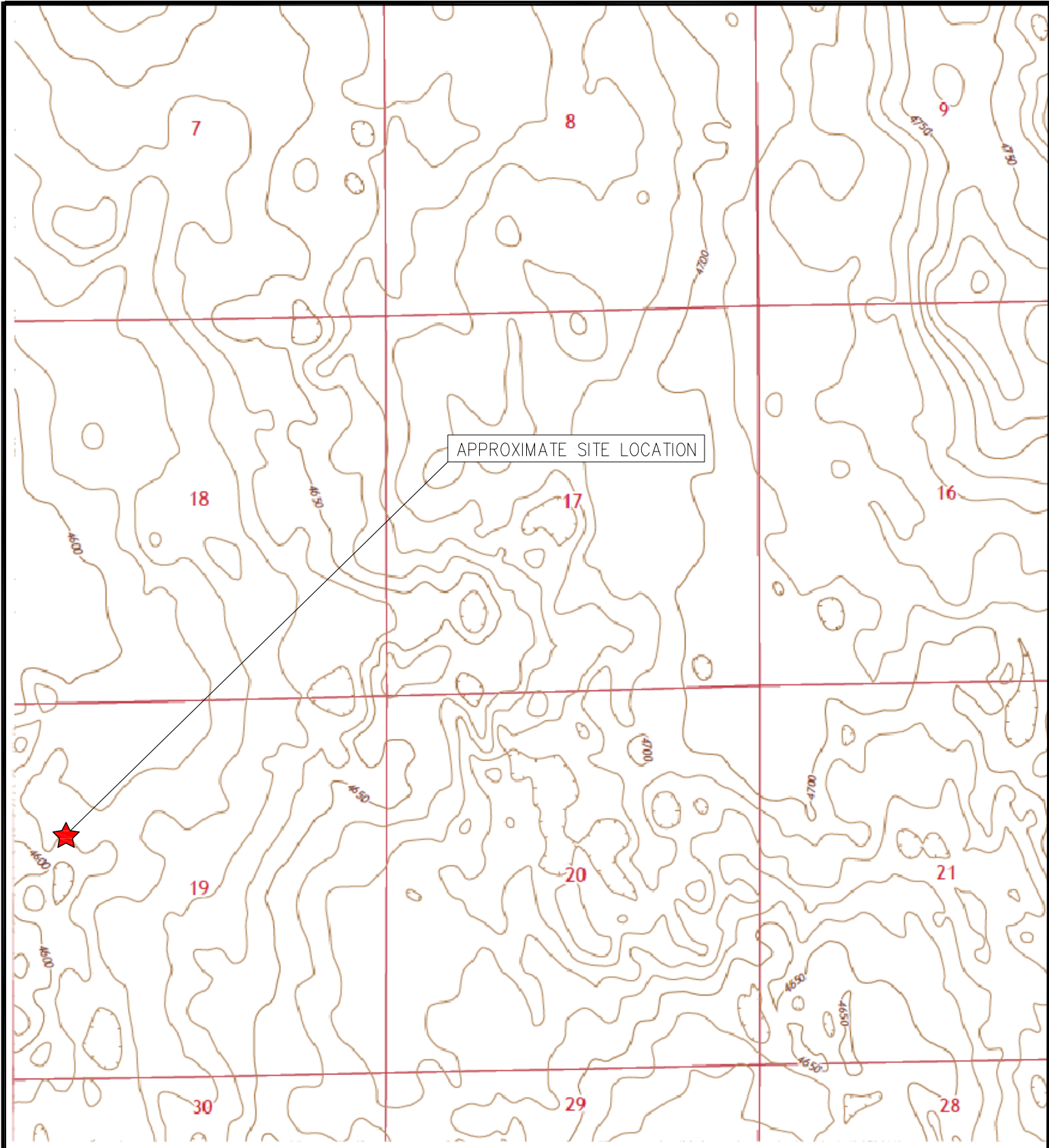
## **FIGURES**

**Figure 1: Topographic Site Location Map**

**Figure 2: Aerial Site Location Map**

**Figure 3: Soil Analytical Map**

**Figure 4: Polycyclic Aromatic Hydrocarbons Map**



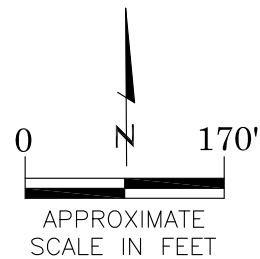
	<p> <u>TOPOGRAPHIC SITE LOCATION MAP</u>            ANTELOPE #12-19            CLOSURE ASSESSMENT            40.386580 / -104.372610            SW¼ NW¼ SEC.19 T5N R62W 6PM            WELD COUNTY, COLORADO            API # 05-123-31862            REMEDIATION # 24162         </p>	<p> <b>EAGLE</b>  <b>ENVIRONMENTAL</b>  <b>CONSULTING, LLC</b>            8000 W 44th Ave, Wheat Ridge, CO 80033            Ph: 303-433-0479 • F: 303-325-5449         </p>
<p>SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAPS POINT OF ROCKS, CO QUADRANGLE 2022</p>	<p>FIGURE 1</p>	





# LEGEND

- ANTELOPE #12-19 WELLHEAD (P&A PLANNED)
- APPROXIMATE FLOWLINE LOCATION (REMOVED)



## AERIAL SITE LOCATION MAP

ANTELOPE #12-19  
CLOSURE ASSESSMENT  
40.386580 / -104.372610  
SW¼ NW¼ SEC.19 T5N R62W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-31862  
REMEDATION # 24162

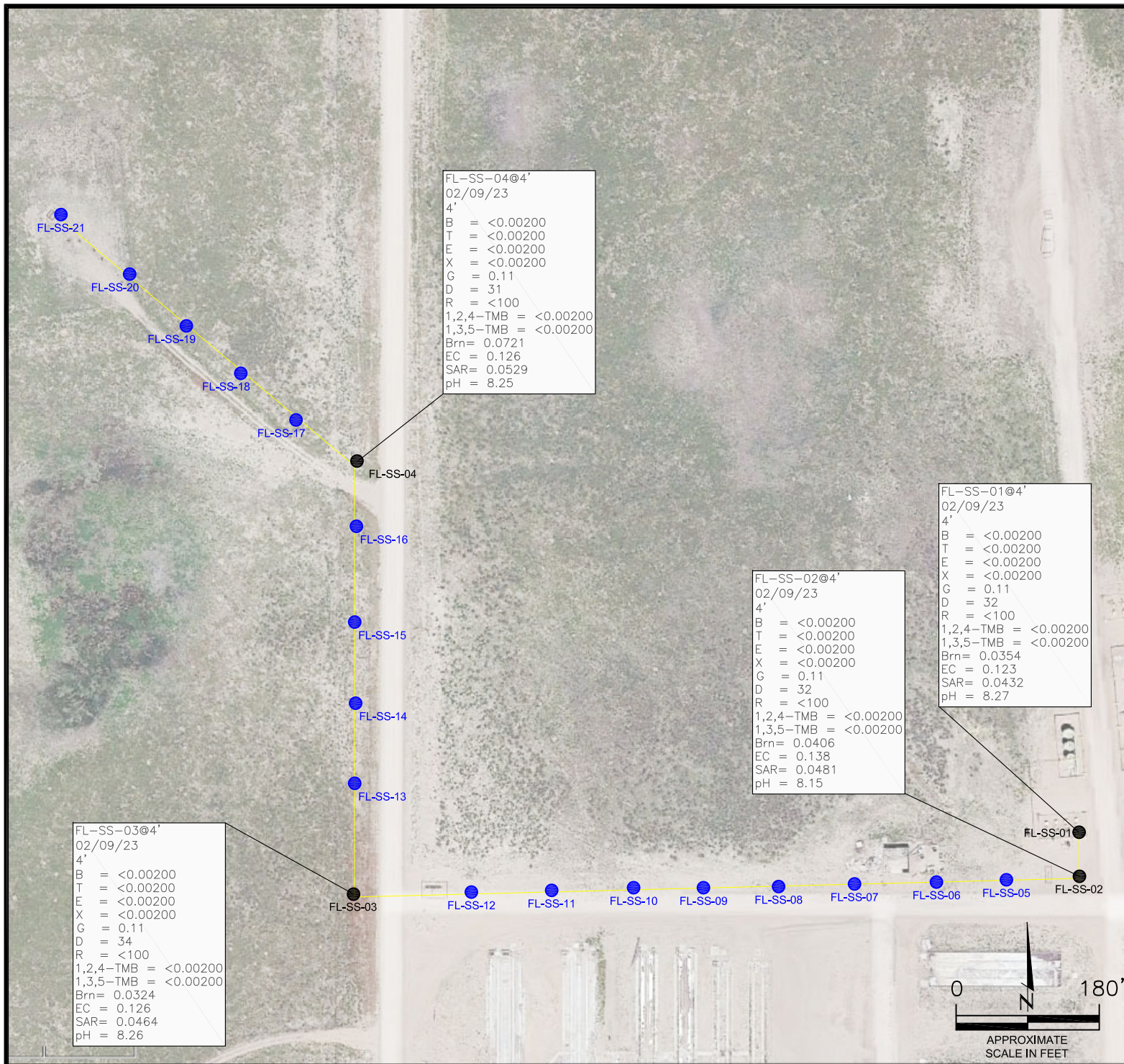
FIG. NO.  
2

DRAWN BY:  
TC



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





# LEGEND

- APPROXIMATE FLOWLINE LOCATION (REMOVED)
- 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 ECMC TABLE 915-1 REGULATORY LIMITS FOR THAT COMPOUND.

ECMC = ENERGY & CARBON MANAGEMENT COMMISSION

SOIL ANALYTICAL MAP  
ANTELOPE #12-19  
CLOSURE ASSESSMENT  
40.386580 / -104.372610  
SW¼ NW¼ SEC.19 T5N R62W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-31862  
REMEDIATION # 24162

DRAWN BY:

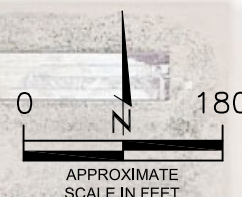
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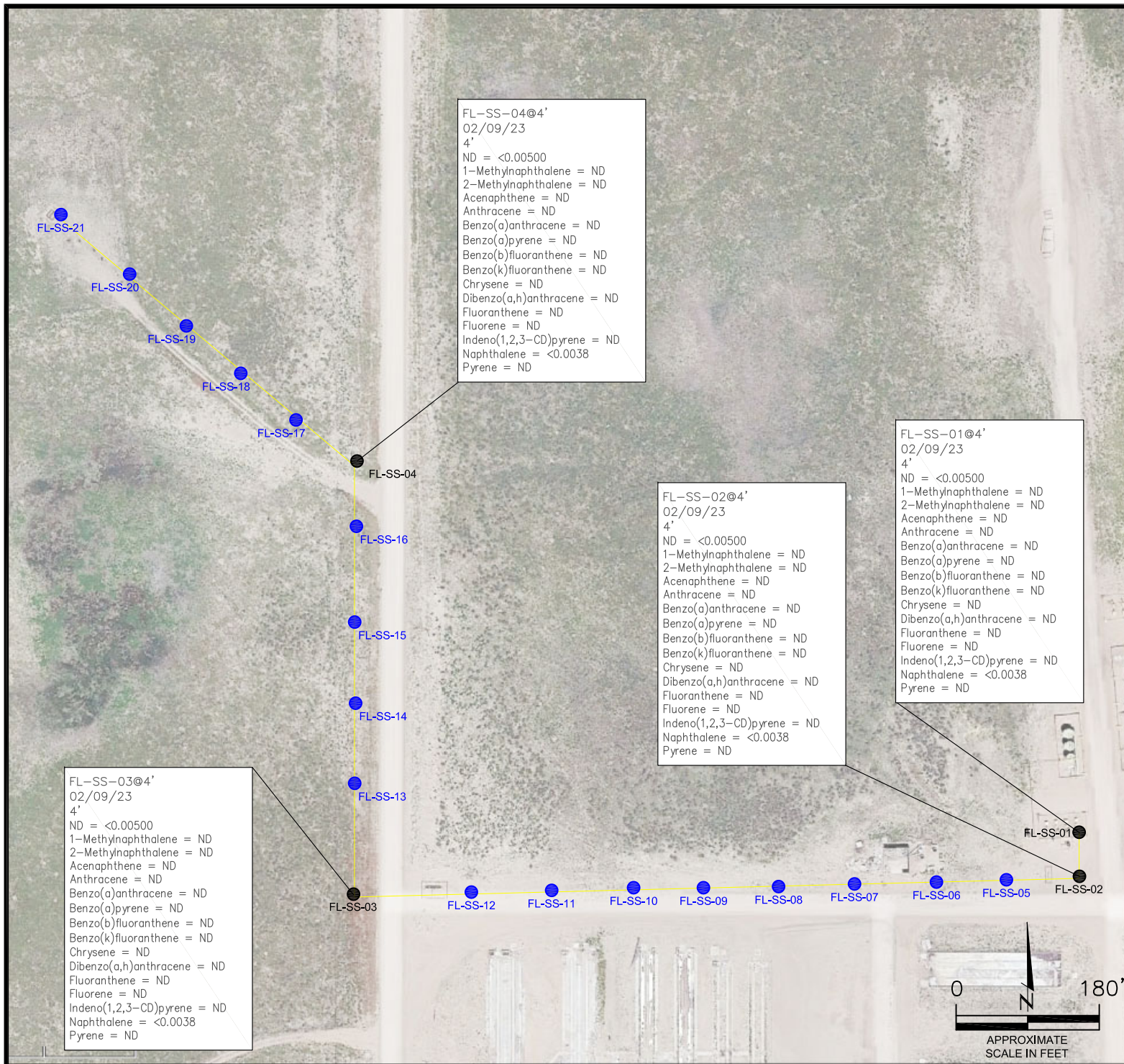
3



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







LEGEND

- APPROXIMATE FLOWLINE LOCATION (REMOVED)
- 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) (mg/kg)

mg/kg = MILLIGRAMS PER KILOGRAM

ND = NON-DETECT

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

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

VALUES PRESENTED WITH AN ASTERISK (\*) EXCEED ECMC TABLE 915-1 GROUNDWATER SOIL SCREENING LEVELS.

ECMC = ENERGY & CARBON MANAGEMENT COMMISSION

POLYCYCLIC AROMATIC HYDROCARBONS MAP  
ANTELOPE #12-19  
CLOSURE ASSESSMENT  
40.386580 / -104.372610  
SW¼ NW¼ SEC.19 T5N R62W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-31862  
REMEDATION # 24162

DRAWN BY:

TC

FIG.  
NO.

4



**EAGLE**  
ENVIRONMENTAL  
CONSULTING, LLC  
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 1**  
**PHOTOIONIZATION DETECTOR READING SUMMARY**  
**ANTELOPE #12-19**  
**CLOSURE ASSESSMENT**  
**40.386580 / -104.372610**  
**SW¼ NW¼ SEC.19 T5N R62W 6PM**  
**WELD COUNTY, COLORADO**  
**API # 05-123-31862**  
**REMEDATION # 24162**

<b>Sample Location</b> (Latitude/Longitude)	<b>Date</b>	<b>Approximate Depth</b> (feet)	<b>PID Reading</b> (ppm-v)	<b>Lab Submission</b> (Y/N)
FL-SS-01 @ 4' (40.384504 / -104.368034)	02/09/23	4	3.4	Y
FL-SS-02 @ 4' (40.384340 / -104.368023)	02/09/23	4	2.1	Y
FL-SS-03 @ 4' (40.384267 / -104.371215)	02/09/23	4	2.4	Y
FL-SS-04 @ 4' (40.385723 / -104.371251)	02/09/23	4	1.9	Y
FL-SS-05 @ 4' (40.384335 / -104.368370)	02/09/23	4	2.7	N
FL-SS-06 @ 4' (40.384346 / -104.368671)	02/09/23	4	2.1	N
FL-SS-07 @ 4' (40.384359 / -104.369050)	02/09/23	4	1.5	N
FL-SS-08 @ 4' (40.384362 / -104.369355)	02/09/23	4	2.0	N
FL-SS-09 @ 4' (40.384358 / -104.369724)	02/09/23	4	1.7	N
FL-SS-10 @ 4' (40.384349 / -104.370001)	02/09/23	4	2.3	N
FL-SS-11 @ 4' (40.384350 / -104.370395)	02/09/23	4	2.2	N
FL-SS-12 @ 4' (40.384330 / -104.370752)	02/09/23	4	3.0	N
FL-SS-13 @ 4' (40.384637 / -104.371253)	02/09/23	4	2.5	N
FL-SS-14 @ 4' (40.384910 / -104.371272)	02/09/23	4	2.6	N
FL-SS-15 @ 4' (40.385222 / -104.371266)	02/09/23	4	2.1	N
FL-SS-16 @ 4' (40.385547 / -104.371256)	02/09/23	4	1.4	N
FL-SS-17 @ 4' (40.385875 / -104.371516)	02/09/23	4	1.9	N
FL-SS-18 @ 4' (40.386030 / -104.371781)	02/09/23	4	1.3	N

**TABLE 1**  
**PHOTOIONIZATION DETECTOR READING SUMMARY**  
**ANTELOPE #12-19**  
**CLOSURE ASSESSMENT**  
**40.386580 / -104.372610**  
**SW¼ NW¼ SEC.19 T5N R62W 6PM**  
**WELD COUNTY, COLORADO**  
**API # 05-123-31862**  
**REMEDATION # 24162**

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	PID Reading (ppm-v)	Lab Submission (Y/N)
FL-SS-19 @ 4' (40.386231 / -104.372062)	02/09/23	4	1.8	N
FL-SS-20 @ 4' (40.386388 / -104.372272)	02/09/23	4	2.3	N
FL-SS-21 @ 4' (40.386595 / -104.372579)	02/09/23	4	1.7	N
(Y/N) = Yes or No ppm-v = parts per million by volume PID = Photoionization Detector				

TABLE 2  
SOIL ANALYTICAL RESULTS SUMMARY  
ANTELOPE #12-19  
CLOSURE ASSESSMENT  
40.386580 / -104.372610  
SW¼ NW¼ SEC.19 T5N R62W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-31862  
REMEDIATION # 24162

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	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- Trimethylbenzene (mg/kg)	1,3,5- Trimethylbenzene (mg/kg)	Boron (mg/L)	Specific Conductance (mmhos/cm)	pH (pH units)	SAR
<b>ECMC Table 915-1 Residential Screening Levels</b>			<b>1.2</b>	<b>490</b>	<b>5.8</b>	<b>58</b>	<b>500</b>			<b>30</b>	<b>27</b>	<b>2</b>	<b>&lt;4</b>	<b>6-8.3</b>	<b>&lt;6</b>
<b>ECMc Table 915-1 Protection of Groundwater Soil Screening Levels</b>			<b>0.0026</b>	<b>0.69</b>	<b>0.78</b>	<b>9.9</b>	<b>--</b>			<b>0.0081</b>	<b>0.0087</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
FL-SS-01 @ 4' (40.384504 / -104.368034)	02/09/23	4	<0.0020	<0.0050	<0.0050	<0.010	0.11	32	<50	<0.0050	<0.0050	0.0354	0.123	8.27	0.0432
FL-SS-02 @ 4' (40.384340 / -104.368023)	02/09/23	4	<0.0020	<0.0050	<0.0050	<0.010	0.11	32	<50	<0.0050	<0.0050	0.0406	0.138	8.15	0.0481
FL-SS-03 @ 4' (40.384267 / -104.371215)	02/09/23	4	<0.0020	<0.0050	<0.0050	<0.010	0.11	34	<50	<0.0050	<0.0050	0.0324	0.126	8.26	0.0464
FL-SS-04 @ 4' (40.385723 / -104.371251)	02/09/23	4	<0.0020	<0.0050	<0.0050	<0.010	0.11	31	<50	<0.0050	<0.0050	0.0721	0.126	8.25	0.0529
ECMC = Energy & Carbon Management Commission mg/kg = milligrams per kilogram      TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics mmhos/cm = millimhos per centimeter      TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics SAR = Sodium Adsorption Ratio      TPH-RRO = Total Petroleum Hydrocarbons - Residual Range Organics Notes: Values presented with a less than symbol (<) did not contain concentrations at or above the laboratory reporting limit. Values presented in <b>BOLD</b> contained concentrations exceeding applicable ECMC Table 915-1 Regulatory Limits Values presented with an asterisk (*) contained concentrations exceeding ECMC Table 915-1 Protection of Groundwater Soil Screening Levels															



TABLE 3  
PAH ANALYTICAL RESULTS SUMMARY  
ANTELOPE #12-19  
CLOSURE ASSESSMENT  
40.386580 / -104.372610  
SW¼ NW¼ SEC.19 T5N R62W 6PM  
WELD COUNTY, COLORADO  
API # 05-123-31862  
REMEDATION # 24162

Sample Location (Latitude/Longitude)	Date	Approximate Depth (feet)	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>ECMC Table 915-1 Residential Screening Levels</b>			<b>18</b>	<b>24</b>	<b>360</b>	<b>1,800</b>	<b>1.1</b>	<b>0.11</b>	<b>1.1</b>	<b>11</b>	<b>110</b>	<b>0.11</b>	<b>240</b>	<b>240</b>	<b>1.1</b>	<b>2</b>	<b>180</b>
<b>ECMC Table 915-1 Protection of Groundwater Soil Screening Levels</b>			<b>0.006</b>	<b>0.019</b>	<b>0.55</b>	<b>5.8</b>	<b>0.011</b>	<b>0.24</b>	<b>0.3</b>	<b>2.9</b>	<b>9</b>	<b>0.096</b>	<b>8.9</b>	<b>0.54</b>	<b>0.98</b>	<b>0.0038</b>	<b>1.3</b>
FL-SS-01 @ 4' (40.384504 / -104.368034)	2/9/23	4	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0038	<0.00500
FL-SS-02 @ 4' (40.384340 / -104.368023)	2/9/23	4	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0038	<0.00500
FL-SS-03 @ 4' (40.384267 / -104.371215)	2/9/23	4	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0038	<0.00500
FL-SS-04 @ 4' (40.385723 / -104.371251)	2/9/23	4	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0038	<0.00500
ECMC = Energy & Carbon Management 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. Values presented in <b>BOLD</b> contained concentrations exceeding applicable ECMC Table 915-1 Regulatory Limits Values presented with an asterisk (*) contained concentrations exceeding ECMC Table 915-1 Protection of Groundwater Soil Screening Levels																	



## **ATTACHMENT A**

### **Photo Log**

Antelope #12-19  
API # 05-123-31862  
Remediation # 24162

Flowline Assessment

February 2023





# Flowline Assessment – 02/09/23



Looking north



Looking west



Looking east

Cut-points/bell-holes field-screened and/or sampled per assessment plan

No petroleum hydrocarbon staining or odor observed

Samples collected:

FL-SS-01@4' (terminus at separator) – 3.4 ppm-v (lab submitted)

FL-SS-02@4' (change of direction) – 2.1 ppm-v (lab submitted)

FL-SS-03@4' (change of direction) – 2.4 ppm-v (lab submitted)



# Flowline Assessment – 02/09/23



Looking south



Looking east



Looking east

Cut-points/bell-holes field-screened and/or sampled per assessment plan

No petroleum hydrocarbon staining or odor observed

Samples collected:

FL-SS-04@4' (change of direction) – 1.9 ppm-v (lab submitted)

FL-SS-05@4' – 2.7 ppm-v

FL-SS-06@4' – 2.1 ppm-v



# Flowline Assessment – 02/09/23



Looking east



Looking east



Looking east

Cut-points/bell-holes field-screened and/or sampled per assessment plan

No petroleum hydrocarbon staining or odor observed

Samples collected:

FL-SS-07@4' – 1.5 ppm-v

FL-SS-08@4' – 2.0 ppm-v

FL-SS-09@4' – 1.7 ppm-v



# Flowline Assessment – 02/09/23



Looking east



Looking east



Looking west

Cut-points/bell-holes field-screened and/or sampled per assessment plan  
No petroleum hydrocarbon staining or odor observed

Samples collected:

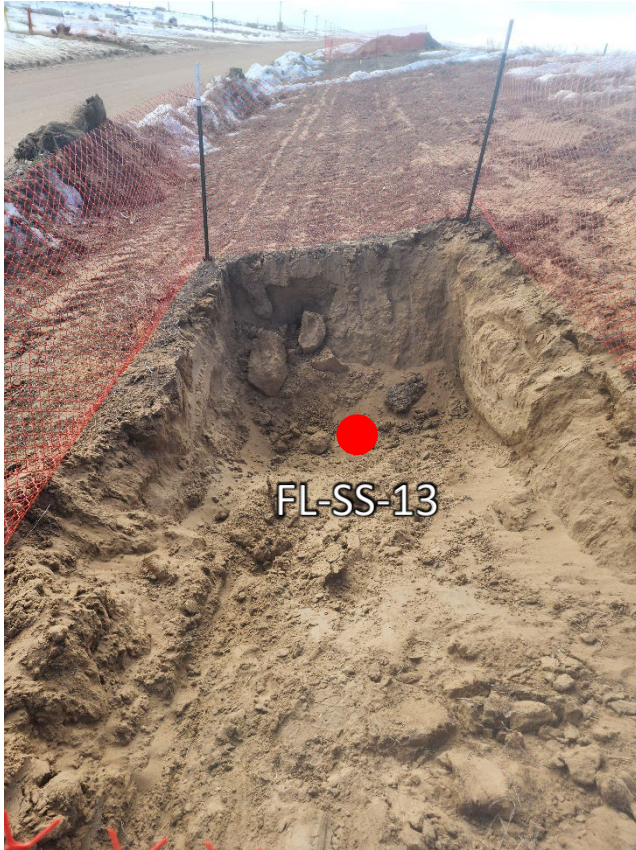
FL-SS-10@4' – 2.3 ppm-v

FL-SS-11@4' – 2.2 ppm-v

FL-SS-12@4' – 3.0 ppm-v



# Flowline Assessment – 02/09/23



Looking south



Looking south



Looking south

Cut-points/bell-holes field-screened and/or sampled per assessment plan

No petroleum hydrocarbon staining or odor observed

Samples collected:

FL-SS-13@4' – 2.5 ppm-v

FL-SS-14@4' – 2.6 ppm-v

FL-SS-15@4' – 2.1 ppm-v



# Flowline Assessment – 02/09/23



Looking south



Looking northwest



Looking southeast

Cut-points/bell-holes field-screened and/or sampled per assessment plan

No petroleum hydrocarbon staining or odor observed

Samples collected:

FL-SS-16@4' – 1.4 ppm-v

FL-SS-17@4' – 1.9 ppm-v

FL-SS-18@4' – 1.3 ppm-v



# Flowline Assessment – 02/09/23



Looking southeast



Looking southeast



Looking northwest

Cut-points/bell-holes field-screened and/or sampled per assessment plan

No petroleum hydrocarbon staining or odor observed

Samples collected:

FL-SS-19@4' – 1.8 ppm-v

FL-SS-20@4' – 2.3 ppm-v

FL-SS-21@4' – 1.7 ppm-v





## **ATTACHMENT B**

### **Laboratory Analytical Report**

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80401

303.277.9310

February 16, 2023

Martin Eckert III

Civitas Resources

650 Southgate Drive

Windsor, CO 80550

RE: Antelope 12-19

Work Order # 2302176

Enclosed are the results of analyses for samples received by Summit Scientific on 02/09/23 15:46. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Sheely". The signature is written in a cursive, flowing style.

Scott Sheely For Paul Shrewsbury

President



Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]  
Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL-SS-01@4'	2302176-01	Soil	02/09/23 09:50	02/09/23 15:46
FL-SS-02@4'	2302176-02	Soil	02/09/23 09:55	02/09/23 15:46
FL-SS-03@4'	2302176-03	Soil	02/09/23 10:00	02/09/23 15:46
FL-SS-04@4'	2302176-04	Soil	02/09/23 10:05	02/09/23 15:46

Summit Scientific

*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.*

# SUMMIT SCIENTIFIC

4653 Table Mountain Drive  
Golden, CO 80403  
303-277-9310

Lab ID	Page 1 of 1
2302176	

Client: Eagle Environmental Consulting		Send Data To:		Send Invoice To:	
Address: 8000 W 44th Ave		Project Manager: Martin Eckert III		Company: Civitas	
City/State/Zip: Wheat Ridge, CO 80033		E-Mail: mce3@eagle-enviro.com		Project Name/Location:	
Phone: 303-433-0479		Project Name: Antelope 12-19		AFE#:	
Sampler Name: TL		Project Number: —		PO/Billing Codes:	
				Contact: Jacob	

					Preservative				Matrix			Analysis Requested								Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other _____	Water	Soil	Air-Canister #	Other _____	G, BTEX, TMBs - 8260D	DDO/RRD - 8015D	PAHs - 8270D s/m	EC - 9050A	SAR - 20B	pH - 9045D	Boron - DTPA/Sorbitol		
1	FL-SS-01 @ 4'	2-9-23	0950	2			X			X			X	X	X	X	X	X	X	X	EC, SAR, pH =
2	FL-SS-02 @ 4'	↓	0955	↓			↓			↓			↓	↓	↓	↓	↓	↓	↓	↓	Saturated Paste Prep
3	FL-SS-03 @ 4'	↓	1000	↓			↓			↓			↓	↓	↓	↓	↓	↓	↓	↓	@ MDLs needed
4	FL-SS-04 @ 4'	↓	1005	↓			↓			↓			↓	↓	↓	↓	↓	↓	↓	↓	
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Relinquished by: Trevor Copple	Date/Time: 2-9-23/1545	Received by: Bob Shelly	Date/Time: 2/9/23 1546	TAT Business Days	Field DO	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard	Field Turb.	
Temperature Upon Receipt: 0.4	Corrected Temperature: —	IR gun #: 02	HNO3 lot #:			



S<sub>2</sub>

## Sample Receipt Checklist


S2 Work Order# 2302176Client: Eagle Environmental Client Project ID: Antelope 12-19Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: \_\_\_\_\_

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 0.4 Thermometer # 02

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> <b>NOTE:</b> If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>On Ice</u>
If custody seals are present, are they intact? <sup>(1)</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.
  
 Custodian Printed Name

2/9/23 1546  
 Date/Time



Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-01@4'**  
**2302176-01 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020	0.000098	mg/kg	1	BGB0301	02/10/23	02/12/23	EPA 8260B	
Toluene	ND	0.0050	0.00025	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	0.00021	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	0.00044	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	0.00024	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	0.00024	"	"	"	"	"	"	
Naphthalene	ND	0.0038	0.00036	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>0.11</b>	0.50		"	"	"	"	"	"	

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		78.9 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		91.3 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.0 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>C10-C28 (DRO)</b>	<b>32</b>	50	4.3	mg/kg	1	BGB0299	02/10/23	02/12/23	EPA 8015M	
C28-C36 (ORO)	ND	50	4.3	"	"	"	"	"	"	

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		111 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-01@4'**  
**2302176-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500	0.000620	mg/kg	1	BGB0388	02/14/23	02/14/23	EPA 8270D SIM	
Anthracene	ND	0.00500	0.000308	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	0.000363	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	0.000234	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	0.000433	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	0.000423	"	"	"	"	"	"	
Chrysene	ND	0.00500	0.000237	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	0.00167	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	0.000373	"	"	"	"	"	"	
Fluorene	ND	0.00500	0.000477	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	0.00118	"	"	"	"	"	"	
Pyrene	ND	0.00500	0.000317	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	0.00185	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	0.00189	"	"	"	"	"	"	

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		42.6 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		62.8 %		40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	<b>0.0354</b>	0.0100	0.00690	mg/L	1	BGB0348	02/13/23	02/14/23	EPA 6020B	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-01@4'**  
**2302176-01 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Calcium	35.9	0.0515	mg/L dry	1	BGB0422	02/14/23	02/16/23	EPA 6020B
Magnesium	16.2	0.0515	"	"	"	"	"	"
Sodium	1.24	0.0515	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0432	0.00100		units	1	BGB0499	02/16/23	02/16/23	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.2			%	1	BGB0425	02/14/23	02/15/23	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.123	0.0100	0.00100	mmhos/cm	1	BGB0462	02/15/23	02/15/23	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **02/09/23 09:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.27			pH Units	1	BGB0463	02/15/23	02/15/23	EPA 9045D	

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-02@4'**  
**2302176-02 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020	0.000098	mg/kg	1	BGB0301	02/10/23	02/12/23	EPA 8260B	
Toluene	ND	0.0050	0.00025	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	0.00021	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	0.00044	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	0.00024	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	0.00024	"	"	"	"	"	"	
Naphthalene	ND	0.0038	0.00036	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>0.11</b>	0.50		"	"	"	"	"	"	

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		75.0 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		87.0 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.8 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>C10-C28 (DRO)</b>	<b>32</b>	50	4.3	mg/kg	1	BGB0299	02/10/23	02/12/23	EPA 8015M	
C28-C36 (ORO)	ND	50	4.3	"	"	"	"	"	"	

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		109 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-02@4'**  
**2302176-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500	0.000620	mg/kg	1	BGB0388	02/14/23	02/14/23	EPA 8270D SIM	
Anthracene	ND	0.00500	0.000308	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	0.000363	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	0.000234	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	0.000433	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	0.000423	"	"	"	"	"	"	
Chrysene	ND	0.00500	0.000237	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	0.00167	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	0.000373	"	"	"	"	"	"	
Fluorene	ND	0.00500	0.000477	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	0.00118	"	"	"	"	"	"	
Pyrene	ND	0.00500	0.000317	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	0.00185	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	0.00189	"	"	"	"	"	"	

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		49.1 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		80.7 %		40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>Boron</b>	<b>0.0406</b>	0.0100	0.00690	mg/L	1	BGB0348	02/13/23	02/14/23	EPA 6020B	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-02@4'**  
**2302176-02 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Calcium	27.9	0.0510	mg/L dry	1	BGB0422	02/14/23	02/16/23	EPA 6020B
Magnesium	11.2	0.0510	"	"	"	"	"	"
Sodium	1.19	0.0510	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0481	0.00100		units	1	BGB0499	02/16/23	02/16/23	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	98.1			%	1	BGB0425	02/14/23	02/15/23	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.138	0.0100	0.00100	mmhos/cm	1	BGB0462	02/15/23	02/15/23	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **02/09/23 09:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.15			pH Units	1	BGB0463	02/15/23	02/15/23	EPA 9045D	

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-03@4'**  
**2302176-03 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020	0.000098	mg/kg	1	BGB0301	02/10/23	02/12/23	EPA 8260B	
Toluene	ND	0.0050	0.00025	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	0.00021	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	0.00044	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	0.00024	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	0.00024	"	"	"	"	"	"	
Naphthalene	ND	0.0038	0.00036	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>0.11</b>	0.50		"	"	"	"	"	"	

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		75.4 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		85.8 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.8 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>C10-C28 (DRO)</b>	<b>34</b>	50	4.3	mg/kg	1	BGB0299	02/10/23	02/12/23	EPA 8015M	
C28-C36 (ORO)	ND	50	4.3	"	"	"	"	"	"	

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		110 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-03@4'**  
**2302176-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500	0.000620	mg/kg	1	BGB0388	02/14/23	02/14/23	EPA 8270D SIM	
Anthracene	ND	0.00500	0.000308	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	0.000363	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	0.000234	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	0.000433	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	0.000423	"	"	"	"	"	"	
Chrysene	ND	0.00500	0.000237	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	0.00167	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	0.000373	"	"	"	"	"	"	
Fluorene	ND	0.00500	0.000477	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	0.00118	"	"	"	"	"	"	
Pyrene	ND	0.00500	0.000317	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	0.00185	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	0.00189	"	"	"	"	"	"	

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		47.5 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		77.9 %		40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0324	0.0100	0.00690	mg/L	1	BGB0348	02/13/23	02/14/23	EPA 6020B	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-03@4'**  
**2302176-03 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Calcium	26.4	0.0511	mg/L dry	1	BGB0422	02/14/23	02/16/23	EPA 6020B
Magnesium	10.3	0.0511	"	"	"	"	"	"
Sodium	1.11	0.0511	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0464	0.00100		units	1	BGB0499	02/16/23	02/16/23	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.8			%	1	BGB0425	02/14/23	02/15/23	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.126	0.0100	0.00100	mmhos/cm	1	BGB0462	02/15/23	02/15/23	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **02/09/23 10:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.26			pH Units	1	BGB0463	02/15/23	02/15/23	EPA 9045D	

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-04@4'**  
**2302176-04 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020	0.000098	mg/kg	1	BGB0301	02/10/23	02/12/23	EPA 8260B	
Toluene	ND	0.0050	0.00025	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	0.00021	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	0.00044	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	0.00024	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	0.00024	"	"	"	"	"	"	
Naphthalene	ND	0.0038	0.00036	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>0.11</b>	0.50		"	"	"	"	"	"	

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		89.5 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		102 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>C10-C28 (DRO)</b>	<b>31</b>	50	4.3	mg/kg	1	BGB0299	02/10/23	02/12/23	EPA 8015M	
C28-C36 (ORO)	ND	50	4.3	"	"	"	"	"	"	

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		111 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-04@4'**  
**2302176-04 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500	0.000620	mg/kg	1	BGB0388	02/14/23	02/14/23	EPA 8270D SIM	
Anthracene	ND	0.00500	0.000308	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	0.000363	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	0.000234	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	0.000433	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	0.000423	"	"	"	"	"	"	
Chrysene	ND	0.00500	0.000237	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	0.00167	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	0.000373	"	"	"	"	"	"	
Fluorene	ND	0.00500	0.000477	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	0.00118	"	"	"	"	"	"	
Pyrene	ND	0.00500	0.000317	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	0.00185	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	0.00189	"	"	"	"	"	"	

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		43.4 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		62.4 %		40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0721	0.0100	0.00690	mg/L	1	BGB0348	02/13/23	02/14/23	EPA 6020B	

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**FL-SS-04@4'**  
**2302176-04 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction**

Calcium	20.1	0.0513	mg/L dry	1	BGB0422	02/14/23	02/16/23	EPA 6020B
Magnesium	7.37	0.0513	"	"	"	"	"	"
Sodium	1.09	0.0513	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0529	0.00100		units	1	BGB0499	02/16/23	02/16/23	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.5			%	1	BGB0425	02/14/23	02/15/23	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.126	0.0100	0.00100	mmhos/cm	1	BGB0462	02/15/23	02/15/23	EPA 120.1	

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **02/09/23 10:05**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.25			pH Units	1	BGB0463	02/15/23	02/15/23	EPA 9045D	

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BGB0301 - EPA 5030 Soil MS

##### Blank (BGB0301-BLK1)

Prepared: 02/10/23 Analyzed: 02/11/23

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	0.120	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0400		"	0.0400		100	50-150			
Surrogate: Toluene-d8	0.0489		"	0.0400		122	50-150			
Surrogate: 4-Bromofluorobenzene	0.0469		"	0.0400		117	50-150			

##### LCS (BGB0301-BS1)

Prepared: 02/10/23 Analyzed: 02/11/23

Benzene	0.0870	0.0020	mg/kg	0.100		87.0	70-130			
Toluene	0.130	0.0050	"	0.100		130	70-130			
Ethylbenzene	0.111	0.0050	"	0.100		111	70-130			
m,p-Xylene	0.248	0.010	"	0.200		124	70-130			
o-Xylene	0.116	0.0050	"	0.100		116	70-130			
1,2,4-Trimethylbenzene	0.103	0.0050	"	0.100		103	70-130			
1,3,5-Trimethylbenzene	0.106	0.0050	"	0.100		106	70-130			
Naphthalene	0.0911	0.0038	"	0.100		91.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0406		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0504		"	0.0400		126	50-150			
Surrogate: 4-Bromofluorobenzene	0.0445		"	0.0400		111	50-150			

##### Matrix Spike (BGB0301-MS1)

Source: 2302169-01

Prepared: 02/10/23 Analyzed: 02/11/23

Benzene	0.0801	0.0020	mg/kg	0.100	ND	80.1	70-130			
Toluene	0.0820	0.0050	"	0.100	ND	82.0	70-130			
Ethylbenzene	0.0988	0.0050	"	0.100	ND	98.8	70-130			
m,p-Xylene	0.204	0.010	"	0.200	ND	102	70-130			
o-Xylene	0.0950	0.0050	"	0.100	ND	95.0	70-130			
1,2,4-Trimethylbenzene	0.0940	0.0050	"	0.100	ND	94.0	70-130			
1,3,5-Trimethylbenzene	0.0979	0.0050	"	0.100	ND	97.9	70-130			
Naphthalene	0.0904	0.0038	"	0.100	ND	90.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0280		"	0.0400		70.1	50-150			
Surrogate: Toluene-d8	0.0370		"	0.0400		92.6	50-150			
Surrogate: 4-Bromofluorobenzene	0.0381		"	0.0400		95.2	50-150			

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650 Southgate Drive  
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Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BGB0301 - EPA 5030 Soil MS

Matrix Spike Dup (BGB0301-MSD1)	Source: 2302169-01			Prepared: 02/10/23 Analyzed: 02/11/23						
Benzene	0.0821	0.0020	mg/kg	0.100	ND	82.1	70-130	2.48	30	
Toluene	0.0817	0.0050	"	0.100	ND	81.7	70-130	0.367	30	
Ethylbenzene	0.100	0.0050	"	0.100	ND	100	70-130	1.18	30	
m,p-Xylene	0.204	0.010	"	0.200	ND	102	70-130	0.0440	30	
o-Xylene	0.0963	0.0050	"	0.100	ND	96.3	70-130	1.41	30	
1,2,4-Trimethylbenzene	0.0927	0.0050	"	0.100	ND	92.7	70-130	1.35	30	
1,3,5-Trimethylbenzene	0.0960	0.0050	"	0.100	ND	96.0	70-130	1.89	30	
Naphthalene	0.0933	0.0038	"	0.100	ND	93.3	70-130	3.13	30	
Surrogate: 1,2-Dichloroethane-d4	0.0262		"	0.0400		65.6	50-150			
Surrogate: Toluene-d8	0.0340		"	0.0400		85.0	50-150			
Surrogate: 4-Bromofluorobenzene	0.0371		"	0.0400		92.8	50-150			

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BGB0299 - EPA 3550A**

**Blank (BGB0299-BLK1)**

Prepared: 02/10/23 Analyzed: 02/12/23

C10-C28 (DRO)	26.0	50	mg/kg							
C28-C36 (ORO)	5.74	50	"							
Surrogate: o-Terphenyl	13.3		"	12.5		107	30-150			

**LCS (BGB0299-BS1)**

Prepared: 02/10/23 Analyzed: 02/12/23

C10-C28 (DRO)	519	50	mg/kg	500		104	70-130			
Surrogate: o-Terphenyl	13.3		"	12.5		107	30-150			

**Matrix Spike (BGB0299-MS1)**

Source: 2302169-01

Prepared: 02/10/23 Analyzed: 02/12/23

C10-C28 (DRO)	478	50	mg/kg	500	29.9	89.6	70-130			
Surrogate: o-Terphenyl	13.2		"	12.5		106	30-150			

**Matrix Spike Dup (BGB0299-MSD1)**

Source: 2302169-01

Prepared: 02/10/23 Analyzed: 02/12/23

C10-C28 (DRO)	466	50	mg/kg	500	29.9	87.2	70-130	2.59	20	
Surrogate: o-Terphenyl	12.4		"	12.5		99.6	30-150			

Summit Scientific

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650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]  
Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BGB0388 - EPA 5030 Soil MS

##### Blank (BGB0388-BLK1)

Prepared & Analyzed: 02/14/23

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0205		"	0.0333		61.4	40-150			
Surrogate: Fluoranthene-d10	0.0334		"	0.0333		100	40-150			

##### LCS (BGB0388-BS1)

Prepared & Analyzed: 02/14/23

Acenaphthene	0.0326	0.00500	mg/kg	0.0333		97.9	31-137			
Anthracene	0.0295	0.00500	"	0.0333		88.4	30-120			
Benzo (a) anthracene	0.0269	0.00500	"	0.0333		80.7	30-120			
Benzo (a) pyrene	0.0245	0.00500	"	0.0333		73.6	30-120			
Benzo (b) fluoranthene	0.0337	0.00500	"	0.0333		101	30-120			
Benzo (k) fluoranthene	0.0321	0.00500	"	0.0333		96.2	30-120			
Chrysene	0.0331	0.00500	"	0.0333		99.4	30-120			
Dibenz (a,h) anthracene	0.0232	0.00500	"	0.0333		69.6	30-120			
Fluoranthene	0.0316	0.00500	"	0.0333		94.9	30-120			
Fluorene	0.0338	0.00500	"	0.0333		101	30-120			
Indeno (1,2,3-cd) pyrene	0.0266	0.00500	"	0.0333		79.7	30-120			
Pyrene	0.0312	0.00500	"	0.0333		93.5	35-142			
1-Methylnaphthalene	0.0270	0.00500	"	0.0333		81.1	35-142			
2-Methylnaphthalene	0.0194	0.00500	"	0.0333		58.1	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0292		"	0.0333		87.7	40-150			
Surrogate: Fluoranthene-d10	0.0311		"	0.0333		93.3	40-150			

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]  
Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BGB0388 - EPA 5030 Soil MS

##### Matrix Spike (BGB0388-MS1)

Source: 2302176-01

Prepared & Analyzed: 02/14/23

Acenaphthene	0.0211	0.00500	mg/kg	0.0333	ND	63.4	31-137		
Anthracene	0.0190	0.00500	"	0.0333	ND	57.1	30-120		
Benzo (a) anthracene	0.0200	0.00500	"	0.0333	ND	60.1	30-120		
Benzo (a) pyrene	0.0216	0.00500	"	0.0333	ND	64.8	30-120		
Benzo (b) fluoranthene	0.0222	0.00500	"	0.0333	ND	66.6	30-120		
Benzo (k) fluoranthene	0.0209	0.00500	"	0.0333	ND	62.8	30-120		
Chrysene	0.0201	0.00500	"	0.0333	ND	60.3	30-120		
Dibenz (a,h) anthracene	0.0143	0.00500	"	0.0333	ND	42.9	30-120		
Fluoranthene	0.0209	0.00500	"	0.0333	ND	62.8	30-120		
Fluorene	0.0216	0.00500	"	0.0333	ND	64.8	30-120		
Indeno (1,2,3-cd) pyrene	0.0164	0.00500	"	0.0333	ND	49.3	30-120		
Pyrene	0.0204	0.00500	"	0.0333	ND	61.3	35-142		
1-Methylnaphthalene	0.0189	0.00500	"	0.0333	ND	56.7	15-130		
2-Methylnaphthalene	0.0167	0.00500	"	0.0333	ND	50.1	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0221		"	0.0333		66.2	40-150		
Surrogate: Fluoranthene-d10	0.0220		"	0.0333		66.1	40-150		

##### Matrix Spike Dup (BGB0388-MSD1)

Source: 2302176-01

Prepared & Analyzed: 02/14/23

Acenaphthene	0.0222	0.00500	mg/kg	0.0333	ND	66.6	31-137	4.94	30
Anthracene	0.0204	0.00500	"	0.0333	ND	61.1	30-120	6.70	30
Benzo (a) anthracene	0.0213	0.00500	"	0.0333	ND	64.0	30-120	6.34	30
Benzo (a) pyrene	0.0229	0.00500	"	0.0333	ND	68.6	30-120	5.70	30
Benzo (b) fluoranthene	0.0239	0.00500	"	0.0333	ND	71.8	30-120	7.58	30
Benzo (k) fluoranthene	0.0205	0.00500	"	0.0333	ND	61.4	30-120	2.23	30
Chrysene	0.0208	0.00500	"	0.0333	ND	62.5	30-120	3.61	30
Dibenz (a,h) anthracene	0.0167	0.00500	"	0.0333	ND	50.0	30-120	15.2	30
Fluoranthene	0.0223	0.00500	"	0.0333	ND	66.9	30-120	6.26	30
Fluorene	0.0233	0.00500	"	0.0333	ND	69.9	30-120	7.55	30
Indeno (1,2,3-cd) pyrene	0.0198	0.00500	"	0.0333	ND	59.4	30-120	18.7	30
Pyrene	0.0201	0.00500	"	0.0333	ND	60.3	35-142	1.66	30
1-Methylnaphthalene	0.0191	0.00500	"	0.0333	ND	57.4	15-130	1.31	50
2-Methylnaphthalene	0.0174	0.00500	"	0.0333	ND	52.2	15-130	3.99	50
Surrogate: 2-Methylnaphthalene-d10	0.0220		"	0.0333		65.9	40-150		
Surrogate: Fluoranthene-d10	0.0230		"	0.0333		69.0	40-150		

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control**  
**Summit Scientific**

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

**Batch BGB0348 - EPA 3050B**

**Blank (BGB0348-BLK1)**

Prepared: 02/13/23 Analyzed: 02/14/23

Boron ND 0.0100 mg/L

**LCS (BGB0348-BS1)**

Prepared: 02/13/23 Analyzed: 02/14/23

Boron 5.95 0.0100 mg/L 5.00 119 80-120

**Duplicate (BGB0348-DUP1)**

**Source: 2302170-01**

Prepared: 02/13/23 Analyzed: 02/14/23

Boron 0.0437 0.0100 mg/L 0.0527 18.8 20

**Matrix Spike (BGB0348-MS1)**

**Source: 2302170-01**

Prepared: 02/13/23 Analyzed: 02/14/23

Boron 5.47 0.0100 mg/L 5.00 0.0527 108 75-125

**Matrix Spike Dup (BGB0348-MSD1)**

**Source: 2302170-01**

Prepared: 02/13/23 Analyzed: 02/14/23

Boron 5.62 0.0100 mg/L 5.00 0.0527 111 75-125 2.71 25

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control**

**Summit Scientific**

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

**Batch BGB0422 - General Preparation**

**Blank (BGB0422-BLK1)**

Prepared: 02/14/23 Analyzed: 02/16/23

Calcium	0.0433	0.0500	mg/L wet
Magnesium	0.0193	0.0500	"
Sodium	0.0482	0.0500	"

**LCS (BGB0422-BS1)**

Prepared: 02/14/23 Analyzed: 02/16/23

Calcium	5.20	0.0500	mg/L wet	5.00	104	70-130
Magnesium	5.01	0.0500	"	5.00	100	70-130
Sodium	4.76	0.0500	"	5.00	95.2	70-130

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**

02/16/23 12:59

### Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

#### Summit Scientific

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

#### Batch BGB0425 - General Preparation

**Duplicate (BGB0425-DUP1)**

**Source: 2302174-01**

Prepared: 02/14/23 Analyzed: 02/15/23

% Solids	96.7	%	96.8	0.0910	20
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Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**

02/16/23 12:59

### Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

#### Summit Scientific

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

#### Batch BGB0462 - General Preparation

##### Blank (BGB0462-BLK1)

Prepared & Analyzed: 02/15/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

##### LCS (BGB0462-BS1)

Prepared & Analyzed: 02/15/23

Specific Conductance (EC) 0.148 0.0100 mmhos/cm 0.150 98.5 95-105

##### Duplicate (BGB0462-DUP1)

Source: 2302169-01

Prepared & Analyzed: 02/15/23

Specific Conductance (EC) 0.138 0.0100 mmhos/cm 0.142 2.50 20

Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]

Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control**  
**Summit Scientific**

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

**Batch BGB0463 - General Preparation**

**LCS (BGB0463-BS1)**

Prepared & Analyzed: 02/15/23

pH	9.17	pH Units	9.18	99.9	95-105
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**Duplicate (BGB0463-DUP1)**

Source: 2302169-01

Prepared & Analyzed: 02/15/23

pH	8.22	pH Units	8.15	0.855	20
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Summit Scientific

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Civitas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Antelope 12-19

Project Number: [none]  
Project Manager: Martin Eckert III

**Reported:**  
02/16/23 12:59

### Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference