

April 21, 2023

Mr. Jacob Evans
Environmental Compliance Advisor
Civitas Resources
650 Southgate Drive
Windsor, Colorado 80550

**Re: Miller 4-17J Pit Site Assessment
Soil Analytic Summary Report
SWSW Sec 17, T2S, R67W
COGCC Facility ID 103315
Remediation Project # 25332**

Dear Mr. Evans,

Site Background

On behalf Civitas Resources (Civitas), Quandary Consultants, LLC (Quandary) has prepared a soil analytic summary report for the site assessment at the Miller 14-17J location (Site). A topographic site location map is presented as Figure 1. An aerial site location map is presented as Figure 2. A soil and hydrology map are presented as Figure 3.

While collecting samples for root zone soil suitability analysis on March 8, 2023 for the Miller 14-17 pit (COGCC Location ID 103309), suspected hydrocarbon impacts were encountered by Quandary. Quandary mobilized again on March 14, 2023, and March 21, 2023 to conduct a site assessment for Colorado Oil and Gas Conservation Commission (COGCC) Table 915-1 Constituents of Concerns (COCs). Five source area boreholes (SB01-SB05) and five background boreholes (BG01-BG05) were advanced. All ten boreholes were dry to refusal at approximately 20 to 22 feet (ft.) below ground surface (bgs). After review of the soil delineation samples, it was determined that the impacts were associated with the Miller 4-17J (COGCC location ID 103315), located approximately 60 ft. northeast of Miller 4-17. All samples had been labeled as the Miller 14-17 at the time.

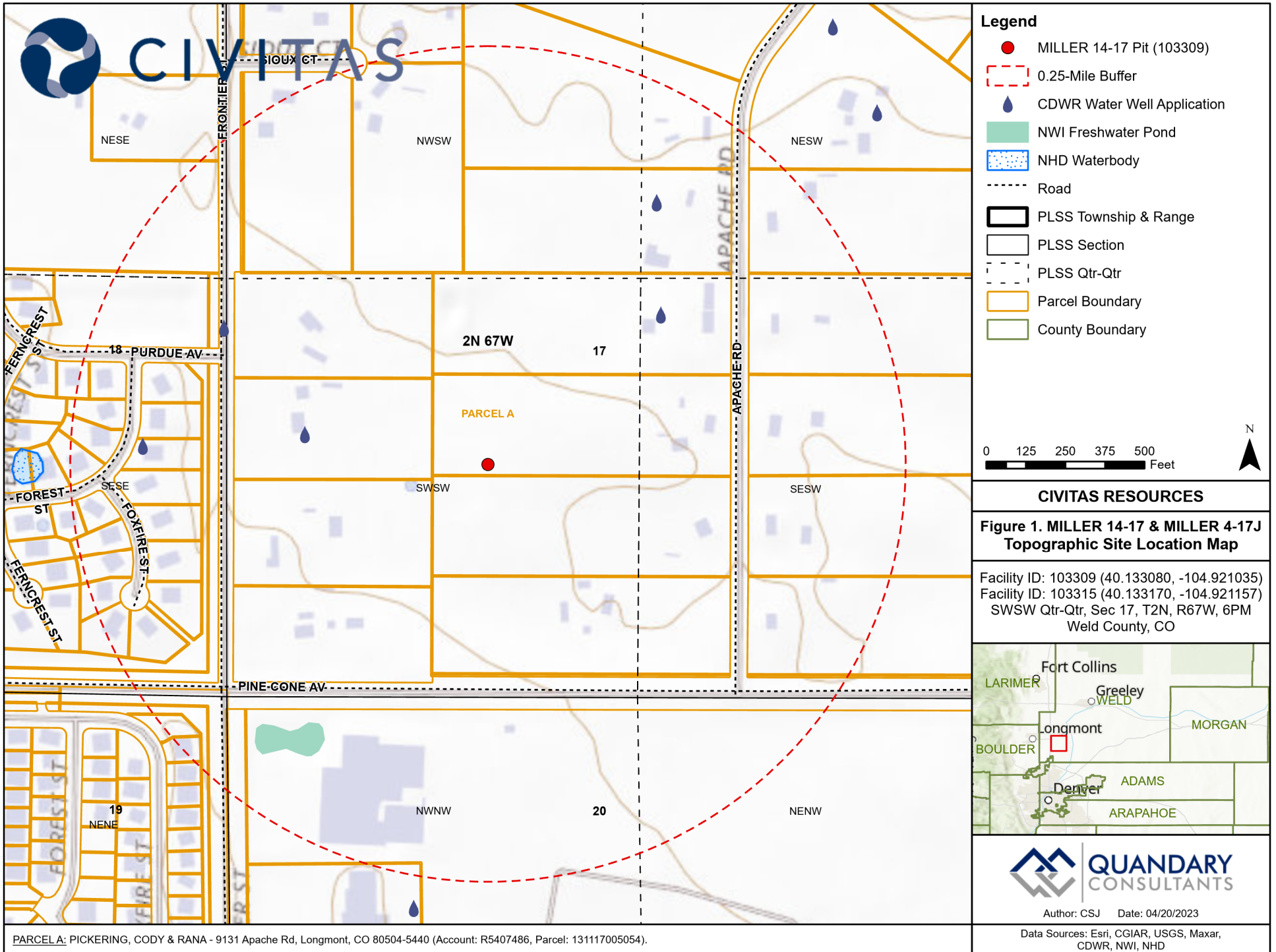
Soil Analytical Results

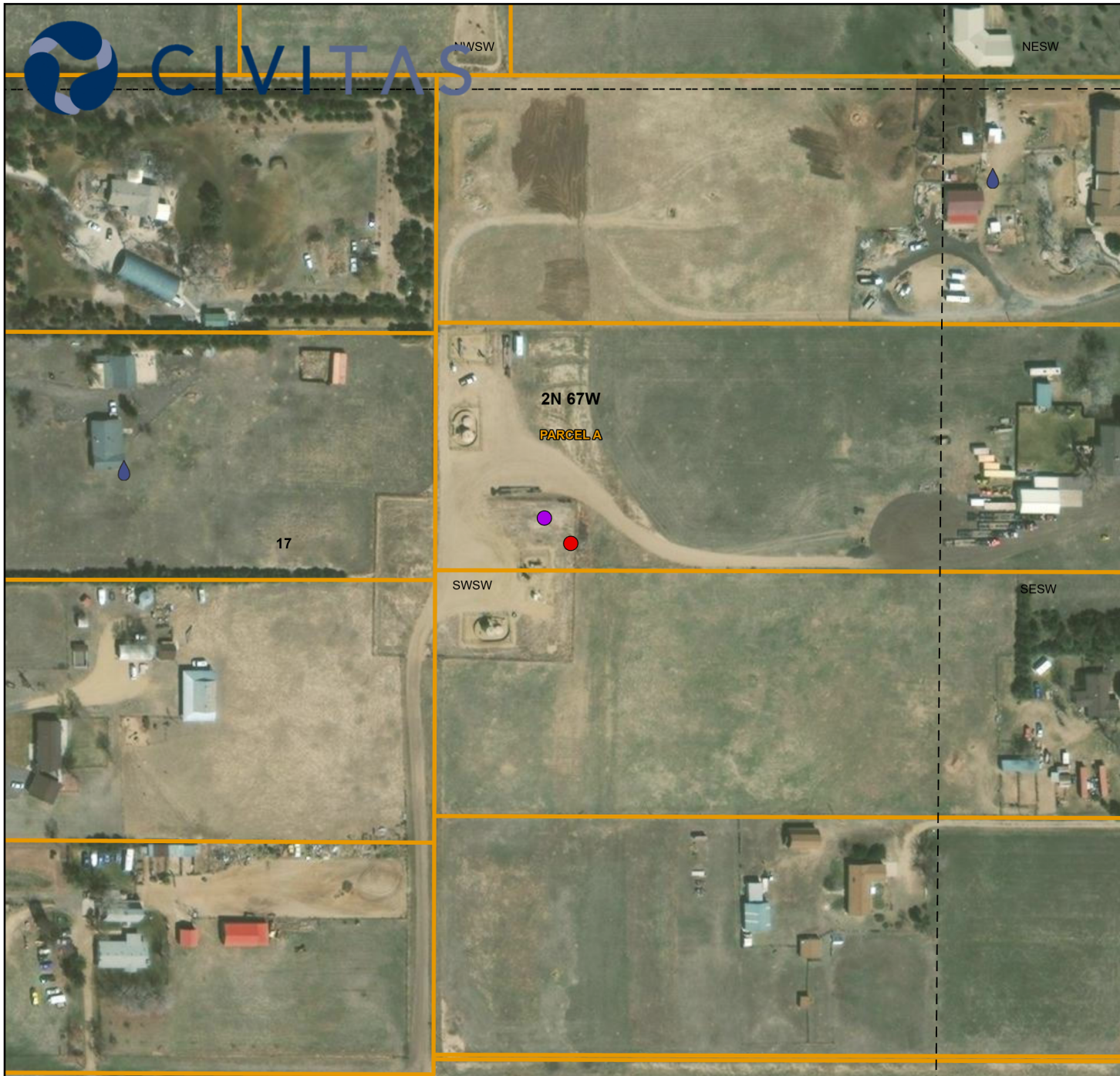
Source area soil samples were collected and analyzed for the full Table 915-1 at depths of 4-5, 9-10, 14-15, and 19-20 ft. bgs in SB01-SB05. Background soil samples were analyzed for Soil Suitability for Reclamation (Soil Suitability) and Metals in Soils (Metals) COCs at corresponding depths in BG01-BG05. The highest background value for Soil Suitability and the average background x 1.25 for Metals were utilized to compare to source area Soil Suitability and Metals at corresponding depths.

Analytical results indicate Volatile Organic Compound (VOC) and/or Polycyclic Aromatic Hydrocarbon (PAH) impacts above COGCC allowable levels in SB01, SB02, and SB03. Analytical results indicate Soil Suitability impacts above COGCC allowable levels in SB01-SB05. Finally, analytical results indicate Metals impacts above COGCC allowable levels in SB04 and SB05. Source area and background results are depicted in Figures 4-7B and presented in Tables 1-5. The borehole logs and soil laboratory analytical reports are also attached.

Conclusion

Soil analytical results indicate impacts above COGCC allowable levels in all five source area boreholes associated with Miller 14-17-J. Please contact Mike Dinkel with Quandary if you have any questions or require additional information on this Soil Analytical Summary Report. He can be reached at mdinkel@quandaryconsultants.com or 785-691-7788.





Legend

- MILLER 14-17 Pit (103309)
- MILLER 4-17J Pit (103315)
- 💧 CDWR Water Well Application
- PLSS Township & Range
- PLSS Section
- PLSS Qtr-Qtr
- Parcel Boundary
- County Boundary

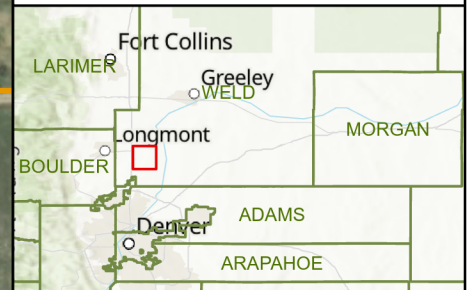
0 125 250
Feet



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Figure 2. MILLER 14-17 & MILLER 4-17J Aerial Site Location Map

Facility ID: 103309 (40.133080, -104.921035)
Facility ID: 103315 (40.133170, -104.921157)
SWSW Qtr-Qtr, Sec 17, T2N, R67W, 6PM
Weld County, CO

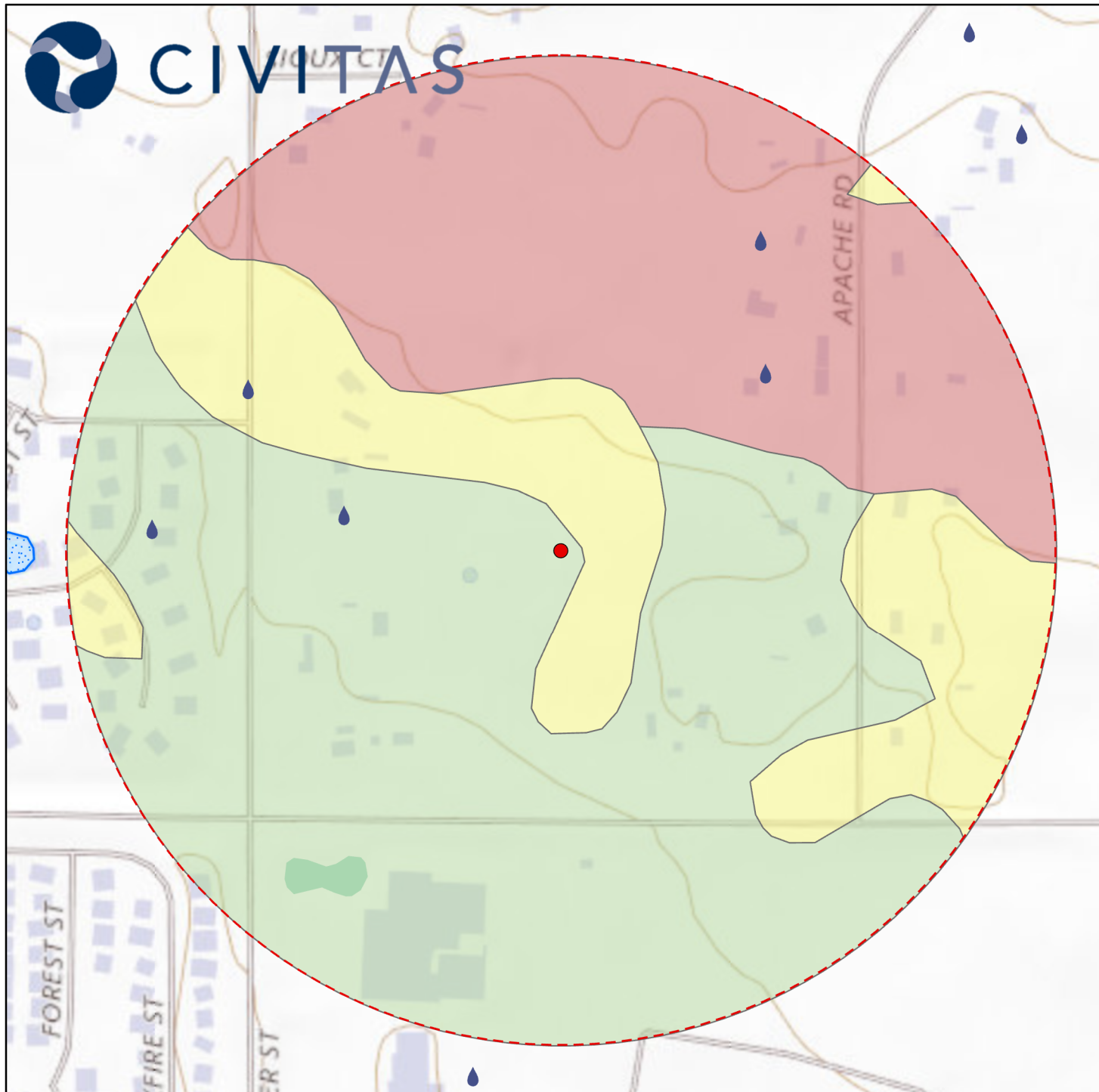


Author: CSJ Date: 04/20/2023

Data Sources: Esri, CGIAR, USGS, Maxar,
CDWR, NWI, NHD

PARCELA A: PICKERING, CODY & RANA - 9131 Apache Rd, Longmont, CO 80504-5440 (Account: R5407486, Parcel: 131117005054).

Figures



Legend

- MILLER 14-17 Pit (103309)
- 0.25-Mile Buffer
- 💧 CDWR Water Well Application
- NWI Freshwater Pond
- NRCS Soils**
(Map Unit Symbol - Map Unit Name)
- 44 - Olney loamy sand, 1-3% slopes
- 72 - Vona loamy sand, 0-3% slopes
- 73 - Vona loamy sand, 3-5% slopes

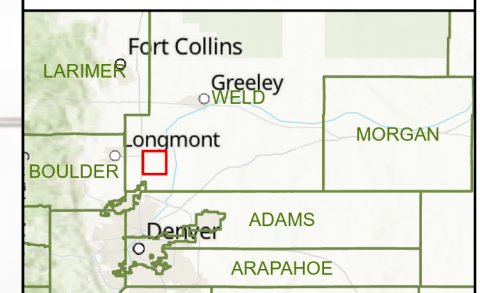
0 125 250 375 500 Feet



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Figure 3. MILLER 14-17 & MILLER 4-17J Soil & Hydrology Map

Facility ID: 103309 (40.133080, -104.921035)
Facility ID: 103315 (40.133170, -104.921157)
SWSW Qtr-Qtr, Sec 17, T2N, R67W, 6PM
Weld County, CO



Author: CSJ Date: 04/20/2023

Data Sources: Esri, CGIAR, USGS, Maxar,
CDWR, NWI, NHD, NRCS



SB01@4-5'	SB01@9-10'	SB01@14-15'	SB01@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
G = 2000	G = 280	G = 280	G = 21
D = 180	D = 2900	D = 1500	D = 210
R = <50	R = 450	R = 240	R = 74
B = 1.2	B = 0.14	B = 0.37	B = 0.017
T = 0.011	T = <0.005	T = <0.005	T = <0.005
E = 5.8	E = 0.29	E = 1.2	E = 0.09
X = 20	X = 15	X = 1.9	X = 0.57
1,2,4-Tmb = 33	1,2,4-Tmb = 7.1	1,2,4-Tmb = 6.7	1,2,4-Tmb = 0.53
1,3,5-Tmb = 27	1,3,5-Tmb = 0.56	1,3,5-Tmb = 2.5	1,3,5-Tmb = 0.2
N = 0.5	N = 0.59	N = 1.8	N = 0.14

SB02@4-5'	SB02@9-10'	SB02@14-15'	SB02@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
G = <0.50	G = <0.50	G = <0.50	G = 2.9
D = <50	D = <50	D = <50	D = <50
R = <50	R = <50	R = <50	R = <50
B = <0.002	B = <0.002	B = <0.002	B = <0.002
T = <0.005	T = <0.005	T = <0.005	T = <0.005
E = <0.005	E = <0.005	E = <0.005	E = <0.005
X = <0.01	X = <0.01	X = <0.01	X = <0.01
1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005	1,2,4-Tmb = 0.13
1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005	1,3,5-Tmb = 0.086
N = <0.0038	N = <0.0038	N = <0.0038	N = <0.0038

SB03@4-5'	SB03@9-10'	SB03@14-15'	SB03@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
G = <0.50	G = <0.50	G = <0.50	G = <0.50
D = <50	D = <50	D = <50	D = <50
R = <50	R = <50	R = <50	R = <50
B = <0.002	B = <0.002	B = <0.002	B = <0.002
T = <0.005	T = <0.005	T = <0.005	T = <0.005
E = <0.005	E = <0.005	E = <0.005	E = <0.005
X = <0.01	X = <0.01	X = <0.01	X = <0.01
1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005
1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005
N = <0.0038	N = <0.0038	N = <0.0038	N = <0.0038

SB05@4-5'	SB05@9-10'	SB05@14-15'	SB05@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
G = <0.50	G = <0.50	G = <0.50	G = <0.50
D = <50	D = <50	D = <50	D = <50
R = <50	R = <50	R = <50	R = <50
B = <0.002	B = <0.002	B = <0.002	B = <0.002
T = <0.005	T = <0.005	T = <0.005	T = <0.005
E = <0.005	E = <0.005	E = <0.005	E = <0.005
X = <0.01	X = <0.01	X = <0.01	X = <0.01
1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005
1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005
N = <0.0038	N = <0.0038	N = <0.0038	N = <0.0038

SB04@4-5'	SB04@9-10'	SB04@14-15'	SB04@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
G = <0.50	G = <0.50	G = 0.95	G = 13
D = <50	D = <50	D = <50	D = <50
R = <50	R = <50	R = <50	R = <50
B = <0.002	B = <0.002	B = <0.002	B = 0.05
T = <0.005	T = <0.005	T = <0.005	T = <0.005
E = <0.005	E = <0.005	E = 0.0078	E = 0.17
X = <0.01	X = <0.01	X = 0.087	X = 3.1
1,2,4-Tmb = <0.005	1,2,4-Tmb = <0.005	1,2,4-Tmb = 0.025	1,2,4-Tmb = 0.31
1,3,5-Tmb = <0.005	1,3,5-Tmb = <0.005	1,3,5-Tmb = 0.021	1,3,5-Tmb = 0.23
N = <0.0038	N = <0.0038	N = <0.0038	N = 0.017

Legend

- MILLER 14-17 Pit (103309)
- MILLER 4-17J Pit (103315)
- Soil Sample Location

Parameters

Sample Location @ Depth (ft.)
Sample Date
G = TPH-GRO (mg/kg)
D = TPH-DRO (mg/kg)
R = TPH-RRO (mg/kg)
B = Benzene (mg/kg)
T = Toluene (mg/kg)
E = Ethylbenzene (mg/kg)
X = Total Xylenes (mg/kg)
1,2,4-Tmb = 1,2,4-Trimethylbenzene (mg/kg)
1,3,5-Tmb = 1,3,5-Trimethylbenzene (mg/kg)
N = Naphthalene (mg/kg)

mg/kg = Milligrams per Kilogram

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics
TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics
TPH-RRO = Total Petroleum Hydrocarbons - Residual Range Organics

Note: Values presented in **bold** exceed COGCC Table 915-1 regulatory limits for that compound. Values presented in **blue** exceed Protection of Groundwater Soil Screening level concentrations. Values presented in **red** exceed Residential Soil Screening levels.



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Figure 4. MILLER 14-17 & MILLER 4-17J Soil Suitability Map - Volatile Organic Compounds

Facility ID: 103309 (40.133080, -104.921035)
Facility ID: 103315 (40.133170, -104.921157)
SWSW Qtr-Qtr, Sec 17, T2N, R67W, 6PM
Weld County, CO



Author: CSJ Date: 04/20/2023

Data Sources: Esri, CGIAR, USGS, Maxar



SB01@4-5'	SB01@9-10'	SB01@14-15'	SB01@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
Ac = <0.005	Ac = <0.05	Ac = <0.05	Ac = <0.005
An = <0.05	An = <0.05	An = <0.05	An = <0.005
Baa = <0.005	Baa = <0.05	Baa = 0.093	Baa = <0.005
Bbf = 0.0186	Bbf = <0.05	Bbf = <0.05	Bbf = <0.005
Bkf = <0.005	Bkf = <0.05	Bkf = <0.05	Bkf = <0.005
Bap = 0.0297	Bap = <0.05	Bap = <0.05	Bap = <0.005
C = 0.145	C = 0.287	C = 0.062	C = 0.00538
Di = <0.005	Di = <0.05	Di = <0.05	Di = <0.005
Fa = 0.043	Fa = 0.147	Fa = 0.0651	Fa = <0.005
F = 0.304	F = 1.85	F = 2.06	F = 0.0584
I = <0.005	I = <0.05	I = <0.05	I = <0.005
1-M = 1	1-M = 12.5	1-M = 9.96	1-M = 0.323
2-M = 1.41	2-M = 20.7	2-M = 17.1	2-M = 0.465
P = 0.036	P = 0.222	P = 0.113	P = <0.005

SB02@4-5'	SB02@9-10'	SB02@14-15'	SB02@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
Ac = <0.005	Ac = <0.005	Ac = <0.005	Ac = <0.005
An = <0.005	An = <0.005	An = <0.005	An = <0.005
Baa = <0.005	Baa = <0.005	Baa = <0.005	Baa = <0.005
Bbf = <0.005	Bbf = <0.005	Bbf = <0.005	Bbf = <0.005
Bkf = <0.005	Bkf = <0.005	Bkf = <0.005	Bkf = <0.005
Bap = <0.005	Bap = <0.005	Bap = <0.005	Bap = <0.005
C = <0.005	C = <0.005	C = <0.005	C = <0.005
Di = <0.005	Di = <0.005	Di = <0.005	Di = <0.005
Fa = <0.005	Fa = <0.005	Fa = <0.005	Fa = <0.005
F = <0.005	F = <0.005	F = <0.005	F = <0.005
I = <0.005	I = <0.005	I = <0.005	I = <0.005
1-M = <0.005	1-M = <0.005	1-M = <0.005	1-M = <0.005
2-M = <0.005	2-M = <0.005	2-M = <0.005	2-M = <0.005
P = <0.005	P = <0.005	P = <0.005	P = <0.005

SB03@4-5'	SB03@9-10'	SB03@14-15'	SB03@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
Ac = <0.005	Ac = <0.005	Ac = <0.005	Ac = <0.005
An = <0.005	An = <0.005	An = <0.005	An = <0.005
Baa = <0.005	Baa = <0.005	Baa = <0.005	Baa = <0.005
Bbf = <0.005	Bbf = <0.005	Bbf = <0.005	Bbf = <0.005
Bkf = <0.005	Bkf = <0.005	Bkf = <0.005	Bkf = <0.005
Bap = <0.005	Bap = <0.005	Bap = <0.005	Bap = <0.005
C = <0.005	C = <0.005	C = <0.005	C = <0.005
Di = <0.005	Di = <0.005	Di = <0.005	Di = <0.005
Fa = <0.005	Fa = <0.005	Fa = <0.005	Fa = <0.005
F = <0.005	F = <0.005	F = <0.005	F = <0.005
I = <0.005	I = <0.005	I = <0.005	I = <0.005
1-M = <0.005	1-M = <0.005	1-M = <0.005	1-M = <0.005
2-M = <0.005	2-M = <0.005	2-M = <0.005	2-M = <0.005
P = <0.005	P = <0.005	P = <0.005	P = <0.005

SB05@4-5'	SB05@9-10'	SB05@14-15'	SB05@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
Ac = <0.005	Ac = <0.005	Ac = <0.005	Ac = <0.005
An = <0.005	An = <0.005	An = <0.005	An = <0.005
Baa = <0.005	Baa = <0.005	Baa = <0.005	Baa = <0.005
Bbf = <0.005	Bbf = <0.005	Bbf = <0.005	Bbf = <0.005
Bkf = <0.005	Bkf = <0.005	Bkf = <0.005	Bkf = <0.005
Bap = <0.005	Bap = <0.005	Bap = <0.005	Bap = <0.005
C = <0.005	C = <0.005	C = <0.005	C = <0.005
Di = <0.005	Di = <0.005	Di = <0.005	Di = <0.005
Fa = <0.005	Fa = <0.005	Fa = <0.005	Fa = <0.005
F = <0.005	F = <0.005	F = <0.005	F = <0.005
I = <0.005	I = <0.005	I = <0.005	I = <0.005
1-M = 0.0133	1-M = <0.005	1-M = <0.005	1-M = <0.005
2-M = 0.0187	2-M = 0.0123	2-M = <0.005	2-M = <0.005
P = <0.005	P = <0.005	P = <0.005	P = <0.005

SB04@4-5'	SB04@9-10'	SB04@14-15'	SB04@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
Ac = <0.005	Ac = <0.005	Ac = <0.005	Ac = <0.005
An = <0.005	An = <0.005	An = <0.005	An = <0.005
Baa = <0.005	Baa = <0.005	Baa = <0.005	Baa = <0.005
Bbf = <0.005	Bbf = <0.005	Bbf = <0.005	Bbf = <0.005
Bkf = <0.005	Bkf = <0.005	Bkf = <0.005	Bkf = <0.005
Bap = <0.005	Bap = <0.005	Bap = <0.005	Bap = <0.005
C = <0.005	C = <0.005	C = <0.005	C = <0.005
Di = <0.005	Di = <0.005	Di = <0.005	Di = <0.005
Fa = <0.005	Fa = <0.005	Fa = <0.005	Fa = <0.005
F = <0.005	F = <0.005	F = <0.005	F = <0.005
I = <0.005	I = <0.005	I = <0.005	I = <0.005
1-M = <0.005	1-M = <0.005	1-M = 0.0162	1-M = 0.0407
2-M = <0.005	2-M = <0.005	2-M = 0.0309	2-M = 0.0793
P = <0.005	P = <0.005	P = <0.005	P = <0.005

Legend

- MILLER 14-17 Pit (103309)
- MILLER 4-17J Pit (103315)
- Soil Sample Location

Parameters

Sample Location @ Depth (ft.)
Sample Date
Ac = Acenaphthene (mg/kg)
An = Anthracene (mg/kg)
Baa = Benz[a]anthracene (mg/kg)
Bbf = Benzo[b]fluoranthene (mg/kg)
Bkf = Benzo[k]fluoranthene (mg/kg)
Bap = Benzo[a]pyrene (mg/kg)
C = Chrysene (mg/kg)
Di = Dibenzo[a,h]anthracene (mg/kg)
Fa = Fluoranthene (mg/kg)
F = Fluorene (mg/kg)
I = Indeno[1,2,3-cd]pyrene (mg/kg)
1-M = 1-Methylnaphthalene (mg/kg)
2-M = 2-Methylnaphthalene (mg/kg)
P = Pyrene (mg/kg)

mg/kg = Milligrams per Kilogram

Note: Values presented in **bold** exceed COGCC Table 915-1 regulatory limits for that compound. Values presented in **blue** exceed Protection of Groundwater Soil Screening level concentrations. Values presented in **red** exceed Residential Soil Screening levels.



CIVITAS RESOURCES

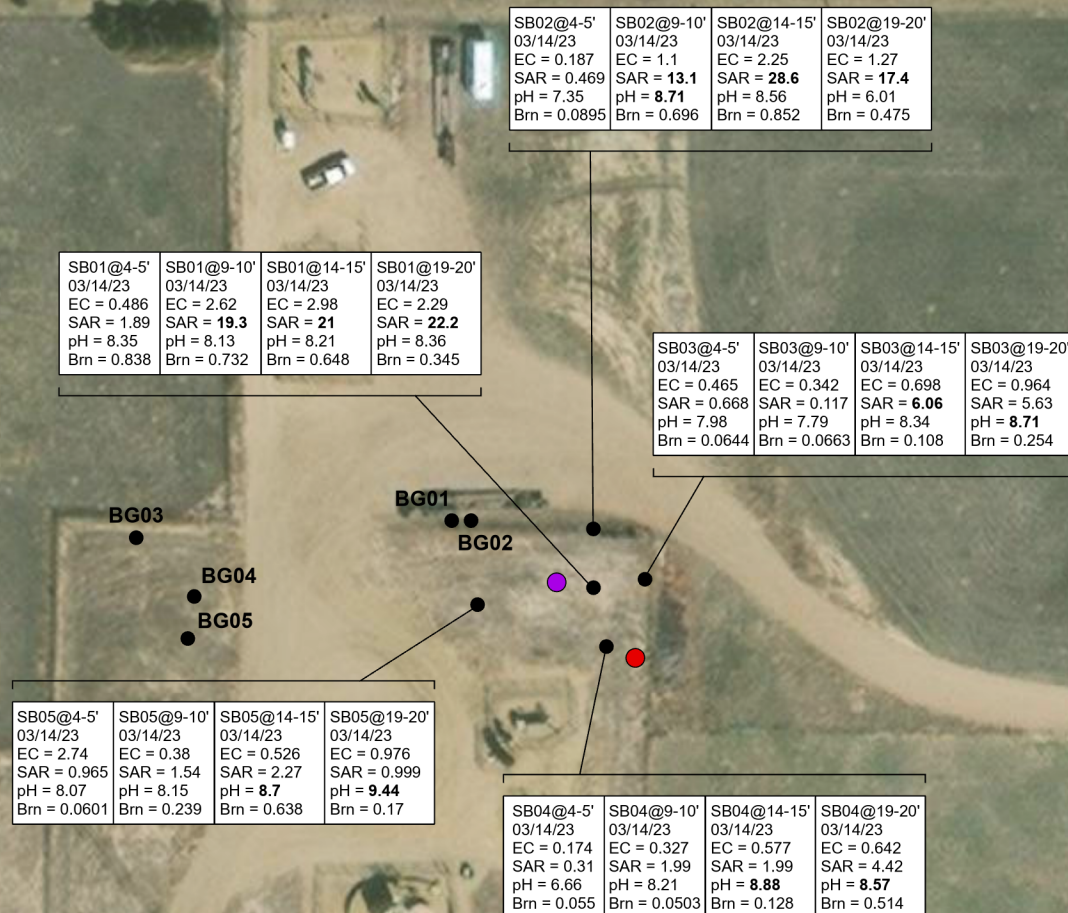
Figure 5. MILLER 14-17 & MILLER 4-17J Soil Suitability Map - PAH

Facility ID: 103309 (40.133080, -104.921035)
Facility ID: 103315 (40.133170, -104.921157)
SWSW Qtr-Qtr, Sec 17, T2N, R67W, 6PM
Weld County, CO



Author: CSJ Date: 04/20/2023

Data Sources: Esri, CGIAR, USGS, Maxar



Legend

- MILLER 14-17 Pit (103309)
- MILLER 4-17J Pit (103315)
- Soil Sample Location

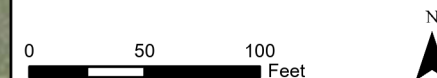
Parameters

Sample Location @ Depth (ft.)
Sample Date
EC = Electrical Conductivity (mmhos/cm)
SAR = Sodium Absorption Ratio
pH = pH (pH Units)
Brn = Boron (mg/L)

mmhos/cm = Millimhos per Centimeter
mg/L = Milligrams per Liter

ND = Non-Detect

Note: Values presented in **bold** exceed
COGCC Table 915-1 regulatory limits
for that compound.



CIVITAS RESOURCES

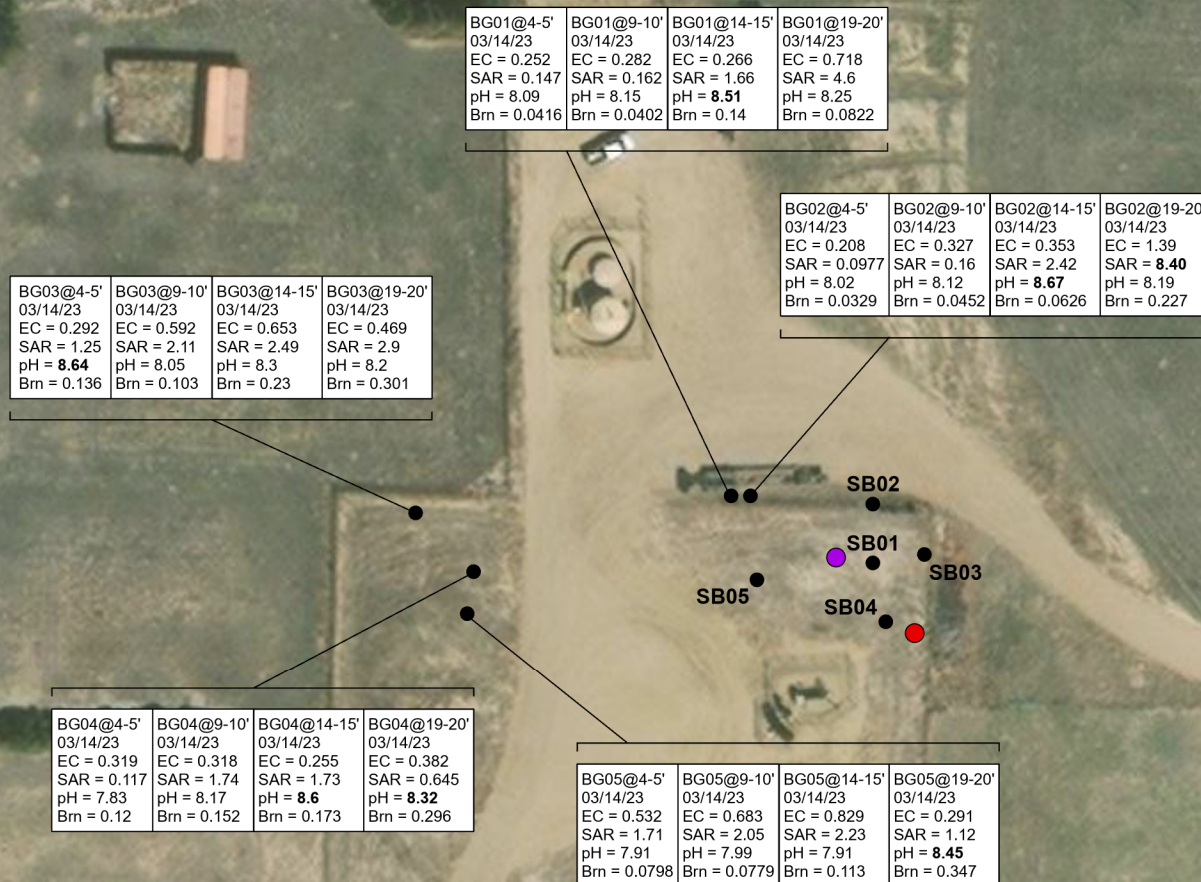
Figure 6A. MILLER 14-17 & MILLER 4-17J Soil Suitability Map - Soil Reclamation

Facility ID: 103309 (40.133080, -104.921035)
Facility ID: 103315 (40.133170, -104.921157)
SWSW Qtr-Qtr, Sec 17, T2N, R67W, 6PM
Weld County, CO



Author: CSJ Date: 04/20/2023

Data Sources: Esri, CGIAR, USGS, Maxar



Legend

- MILLER 14-17 Pit (103309)
- MILLER 4-17J Pit (103315)
- Soil Sample Location

Parameters

Sample Location @ Depth (ft.)
Sample Date
EC = Electrical Conductivity (mmhos/cm)
SAR = Sodium Absorption Ratio
pH = pH (pH Units)
Brn = Boron (mg/L)

mmhos/cm = Millimhos per Centimeter
mg/L = Milligrams per Liter

ND = Non-Detect

Note: Values presented in **bold** exceed
COGCC Table 915-1 regulatory limits
for that compound.



CIVITAS RESOURCES

Figure 6B. MILLER 14-17 & MILLER 4-17J Soil Suitability Map - Soil Reclamation

Facility ID: 103309 (40.133080, -104.921035)
Facility ID: 103315 (40.133170, -104.921157)
SWSW Qtr-Qtr, Sec 17, T2N, R67W, 6PM
Weld County, CO



Author: CSJ Date: 04/20/2023

Data Sources: Esri, CGIAR, USGS, Maxar



SB01@4-5'	SB01@9-10'	SB01@14-15'	SB01@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 0.948	As = 4.74	As = 2.91	As = 6.38
Ba = 50	Ba = 154	Ba = 130	Ba = 43.1
Cd = 0.101	Cd = 0.0922	Cd = 0.13	Cd = 0.0792
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 6.33	Cu = 11.5	Cu = 6.87	Cu = 14.4
Pb = 6.04	Pb = 8.34	Pb = 5.82	Pb = 9.68
Ni = 5.08	Ni = 14.2	Ni = 7.93	Ni = 4.62
Se = 0.381	Se = 0.542	Se = 0.385	Se = 0.636
Ag = 0.0246	Ag = 0.0272	Ag = 0.0251	Ag = 0.0329
Zn = 32.7	Zn = 39.6	Zn = 26.8	Zn = 27.4

SB02@4-5'	SB02@9-10'	SB02@14-15'	SB02@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 1.16	As = 5.25	As = 4.35	As = 4.88
Ba = 55.9	Ba = 143	Ba = 137	Ba = 41.4
Cd = 0.75	Cd = 0.209	Cd = 0.189	Cd = 0.107
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 5.97	Cu = 7	Cu = 4.4	Cu = 6.43
Pb = 4.67	Pb = 9.49	Pb = 7	Pb = 6.68
Ni = 6.59	Ni = 8.5	Ni = 5.84	Ni = 2.06
Se = 0.264	Se = <0.175	Se = <0.175	Se = <0.175
Ag = 0.0332	Ag = 0.0284	Ag = 0.0123	Ag = 0.0274
Zn = 23.5	Zn = 22.8	Zn = 17.9	Zn = 19.6

SB03@4-5'	SB03@9-10'	SB03@14-15'	SB03@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 1.95	As = 3.46	As = 4.63	As = 4.62
Ba = 70.7	Ba = 95.1	Ba = 76.8	Ba = 166
Cd = 0.157	Cd = 0.208	Cd = 0.165	Cd = 0.558
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 4.17	Cu = 6.18	Cu = 5.62	Cu = 8.41
Pb = 6.12	Pb = 8.32	Pb = 8.79	Pb = 10
Ni = 4.57	Ni = 7.63	Ni = 6.79	Ni = 9.79
Se = <0.175	Se = <0.175	Se = <0.175	Se = <0.175
Ag = 0.0267	Ag = 0.0302	Ag = 0.0135	Ag = 0.0343
Zn = 17.7	Zn = 21.6	Zn = 21.9	Zn = 23.2

SB05@4-5'	SB05@9-10'	SB05@14-15'	SB05@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 1.94	As = 4.69	As = 5.23	As = 4.95
Ba = 73.4	Ba = 383	Ba = 259	Ba = 78.4
Cd = 0.0759	Cd = 0.149	Cd = 0.129	Cd = 0.119
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 6.68	Cu = 9.16	Cu = 11.7	Cu = 7.23
Pb = 4.92	Pb = 7.57	Pb = 9.49	Pb = 10.6
Ni = 8	Ni = 10.2	Ni = 10.7	Ni = 3.39
Se = 0.299	Se = 0.423	Se = 0.579	Se = <0.175
Ag = 0.0235	Ag = 0.0201	Ag = 0.0356	Ag = 0.0331
Zn = 25.6	Zn = 36.2	Zn = 33.4	Zn = 18.5

SB04@4-5'	SB04@9-10'	SB04@14-15'	SB04@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 2.07	As = 4.83	As = 3.51	As = 4.03
Ba = 59.8	Ba = 412	Ba = 157	Ba = 264
Cd = 0.116	Cd = 0.205	Cd = 0.101	Cd = 0.306
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 3.94	Cu = 5.91	Cu = 6.33	Cu = 12.3
Pb = 5.65	Pb = 8.27	Pb = 7.48	Pb = 10.2
Ni = 4.27	Ni = 6.88	Ni = 8.14	Ni = 19.5
Se = <0.175	Se = <0.175	Se = <0.175	Se = 0.591
Ag = 0.0264	Ag = 0.0169	Ag = 0.0106	Ag = 0.0892
Zn = 15.4	Zn = 20.8	Zn = 19	Zn = 46

Legend

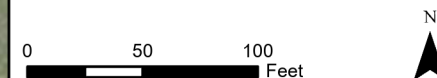
- MILLER 14-17 Pit (103309)
- MILLER 4-17J Pit (103315)
- Soil Sample Location

Parameters

Sample Location @ Depth (ft.)
Sample Date
As = Arsenic (mg/kg)
Ba = Barium (mg/kg)
Cd = Cadmium (mg/kg)
Cr = Chromium (VI) (mg/kg)
Cu = Copper (mg/kg)
Pb = Lead (mg/kg)
Ni = Nickel (mg/kg)
Se = Selenium (mg/kg)
Ag = Silver (mg/kg)
Zn = Zinc (mg/kg)

mg/kg = Milligrams per Kilogram

Note: Values presented in **bold** exceed COGCC Table 915-1 regulatory limits for that compound. Values presented in **blue** exceed Protection of Groundwater Soil Screening level concentrations. Values presented in **red** exceed Residential Soil Screening levels.



CIVITAS RESOURCES

Figure 7A. MILLER 14-17 & MILLER 4-17J Soil Suitability Map - Metals

Facility ID: 103309 (40.133080, -104.921035)
Facility ID: 103315 (40.133170, -104.921157)
SWSW Qtr-Qtr, Sec 17, T2N, R67W, 6PM
Weld County, CO



Author: CSJ Date: 04/20/2023

Data Sources: Esri, CGIAR, USGS, Maxar



BG01@4-5'	BG01@9-10'	BG01@14-15'	BG01@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 4.5	As = 3.91	As = 5.11	As = 7.69
Ba = 83.6	Ba = 96.6	Ba = 46.5	Ba = 31.8
Cd = 0.182	Cd = 0.199	Cd = 0.113	Cd = 0.169
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 5.21	Cu = 5.46	Cu = 5.71	Cu = 7.32
Pb = 6.85	Pb = 7.63	Pb = 6.4	Pb = 21.3
Ni = 5.6	Ni = 5.72	Ni = 5.27	Ni = 2.74
Se = <0.175	Se = <0.175	Se = <0.175	Se = <0.175
Ag = 0.0191	Ag = 0.0144	Ag = 0.00888	Ag = 0.0374
Zn = 18.3	Zn = 19.8	Zn = 16.8	Zn = 18.1

BG03@4-5'	BG03@9-10'	BG03@14-15'	BG03@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 1.61	As = 5.01	As = 3.29	As = 3.64
Ba = 65.1	Ba = 124	Ba = 70.7	Ba = 49.5
Cd = 0.0812	Cd = 0.257	Cd = 0.145	Cd = 0.147
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 3.65	Cu = 6.28	Cu = 5.38	Cu = 7.99
Pb = 4.23	Pb = 8.61	Pb = 6.17	Pb = 13.6
Ni = 4.31	Ni = 7.36	Ni = 5.36	Ni = 3.01
Se = <0.175	Se = <0.175	Se = <0.175	Se = <0.175
Ag = 0.0239	Ag = 0.0203	Ag = 0.0108	Ag = 0.03
Zn = 13.3	Zn = 22.6	Zn = 18.2	Zn = 20.1

BG02@4-5'	BG02@9-10'	BG02@14-15'	BG02@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 2.06	As = 5.26	As = 3.25	As = 7.18
Ba = 80.3	Ba = 116	Ba = 65	Ba = 38.6
Cd = 0.119	Cd = 0.313	Cd = 0.237	Cd = 0.117
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 4.58	Cu = 6.06	Cu = 4.1	Cu = 8.12
Pb = 4.96	Pb = 8.56	Pb = 5.98	Pb = 9.92
Ni = 5.02	Ni = 7.54	Ni = 5.4	Ni = 2.22
Se = <0.175	Se = <0.175	Se = <0.175	Se = <0.175
Ag = 0.0248	Ag = 0.0184	Ag = 0.0131	Ag = 0.0305
Zn = 16	Zn = 21.9	Zn = 16.1	Zn = 21.4

BG04@4-5'	BG04@9-10'	BG04@14-15'	BG04@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 2.56	As = 3.11	As = 2.72	As = 29.5
Ba = 71.5	Ba = 33	Ba = 37.8	Ba = 44
Cd = 0.135	Cd = 0.116	Cd = 0.0748	Cd = 0.352
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 4.63	Cu = 4.32	Cu = 4.99	Cu = 18.2
Pb = 11.9	Pb = <0.215	Pb = 6.91	Pb = <0.235
Ni = 5.17	Ni = 4.42	Ni = 7.53	Ni = 4.15
Se = <0.175	Se = <0.175	Se = <0.175	Se = <0.175
Ag = 0.0256	Ag = 0.00816	Ag = 0.0131	Ag = 0.0612
Zn = 28.4	Zn = 16.6	Zn = 18.7	Zn = 23.7

BG05@4-5'	BG05@9-10'	BG05@14-15'	BG05@19-20'
03/14/23	03/14/23	03/14/23	03/14/23
As = 2.7	As = 4.16	As = 4.85	As = 0.727
Ba = 79.2	Ba = 429	Ba = 348	Ba = 33.6
Cd = 0.178	Cd = 0.207	Cd = 0.245	Cd = 0.175
Cr = <0.3	Cr = <0.3	Cr = <0.3	Cr = <0.3
Cu = 5.3	Cu = 5.27	Cu = 5.65	Cu = 8.03
Pb = 8.25	Pb = 7.52	Pb = 8.41	Pb = 19
Ni = 5.56	Ni = 6.22	Ni = 6.59	Ni = 1.4
Se = <0.175	Se = <0.175	Se = <0.175	Se = <0.175
Ag = 0.0325	Ag = 0.0137	Ag = 0.015	Ag = 0.0662
Zn = 19.8	Zn = 20.9	Zn = 22.4	Zn = 2.48

SB02
SB01
SB03
SB04
SB05

Legend

- MILLER 14-17 Pit (103309)
- MILLER 4-17J Pit (103315)
- Soil Sample Location

Parameters

Sample Location @ Depth (ft.)
Sample Date
As = Arsenic (mg/kg)
Ba = Barium (mg/kg)
Cd = Cadmium (mg/kg)
Cr = Chromium (VI) (mg/kg)
Cu = Copper (mg/kg)
Pb = Lead (mg/kg)
Ni = Nickel (mg/kg)
Se = Selenium (mg/kg)
Ag = Silver (mg/kg)
Zn = Zinc (mg/kg)

mg/kg = Milligrams per Kilogram

Note: Values presented in **bold** exceed COGCC Table 915-1 regulatory limits for that compound. Values presented in **blue** exceed Protection of Groundwater Soil Screening level concentrations. Values presented in **red** exceed Residential Soil Screening levels.

0 50 100
Feet

CIVITAS RESOURCES

Figure 7B. MILLER 14-17 & MILLER 4-17J Soil Suitability Map - Metals

Facility ID: 103309 (40.133080, -104.921035)
Facility ID: 103315 (40.133170, -104.921157)
SWSW Qtr-Qtr, Sec 17, T2N, R67W, 6PM
Weld County, CO



Author: CSJ Date: 04/20/2023

Data Sources: Esri, CGIAR, USGS, Maxar

Tables

Table 1 - Miller 4-17J, 14-17 VOC Results

Sample ID	Date Sampled	Depth	TPH-GRO	TPH-DRO	TPH-ORO	benzene	Toluene	ethyl-benzene	xylenes (total)	1,2,4-trimethyl-benzene	1,3,5-trimethyl-benzene	Naphthalene
Table 915-1 - Residential Soil Screening Levels		ft. (bgs)	500 mg/kg			1.2 mg/kg	490 mg/kg	5.8 mg/kg	58 mg/kg	30 mg/kg	27 mg/kg	2.4 mg/kg
Table 915-1 - Protection of Groundwater Soil Screening Levels						0.0026 mg/kg	0.69 mg/kg	0.78 mg/kg	9.9 mg/kg	0.0081 mg/kg	0.0087 mg/kg	0.0038 mg/kg
SB01@9-10'	3/14/23	4-5	2000	180	<50	1.2	0.011	5.8	20	33	27	0.5
SB01@9-10'	3/14/23	9-10	280	2900	450	0.14	<0.0050	0.29	15	7.1	0.56	0.59
SB01@14-15'	3/14/23	14-15	280	1500	240	0.37	<0.0050	1.2	1.9	6.7	2.5	1.8
SB01@19-20'	3/14/23	19-20	21	210	74	0.017	<0.0050	0.09	0.57	0.53	0.2	0.14
SB02@4-5'	3/14/23	4-5	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB02@9-10'	3/14/23	9-10	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB02@14-15'	3/14/23	14-15	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB02@19-20'	3/14/23	19-20	2.9	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	0.13	0.086	<0.0038
SB03@4-5'	3/14/23	4-5	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB03@9-10'	3/14/23	9-10	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB03@14-15'	3/14/23	14-15	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB03@19-20'	3/14/23	19-20	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB04@4-5'	3/14/23	4-5	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB04@9-10'	3/14/23	9-10	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB04@14-15'	3/14/23	14-15	0.95	<50	<50	<0.0020	<0.0050	0.0078	0.087	0.025	0.021	<0.0038
SB04@19-20'	3/14/23	19-20	13	<50	<50	0.05	<0.0050	0.17	3.1	0.31	0.23	0.017
SB05@4-5'	3/14/23	4-5	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB05@9-10'	3/14/23	9-10	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB05@14-15'	3/14/23	14-15	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
SB05@19-20'	3/14/23	19-20	<0.50	<50	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038

Notes:

mg/kg-milligrams per kilogram

TPH-GRO = total petroleum hydrocarbons-gasoline range organics

TPH-DRO = total petroleum hydrocarbons-diesel range organics

TPH-RRO = total petroleum hydrocarbons-residual range organics

Bold indicates a Table 915-1 exceedance

Table 2 - Miller 4-17J, 14-17 PAH results																
Sample ID	Date Sampled	Depth	ace-naphthene	anthracene	benz (a)-anthracene	benzo (b)-fluoranthene	benzo (k)-fluoranthene	benzo-(a)pyrene	chrysene	dibenzo-(a,h)-anthracene	fluoranthene	fluorene	indeno-(1,2,3-cd)-pyrene	1-methyl-naphthalene	2-methyl-naphthalene	pyrene
Table 915-1 - Residential Soil Screening Levels		ft. (bgs)	360 mg/kg	360 mg/kg	1800 mg/kg	1.1 mg/kg	11 mg/kg	0.11 mg/kg	110 mg/kg	110 mg/kg	240 mg/kg	240 mg/kg	240 mg/kg	18 mg/kg	24 mg/kg	180 mg/kg
Table 915-1 - Protection of Groundwater Soil Screening Levels			0.55 mg/kg	5.8 mg/kg	0.011 mg/kg	0.3 mg/kg	1.1 mg/kg	0.24 mg/kg	9 mg/kg	9 mg/kg	8.9 mg/kg	0.54 mg/kg	0.98 mg/kg	0.006 mg/kg	0.019 mg/kg	1.3 mg/kg
SB01@9-10'	3/14/23	4-5	<0.005	<0.05	<0.005	0.0186	<0.005	0.0297	0.145	<0.005	0.043	0.304	<0.005	1.0	1.41	0.036
SB01@9-10'	3/14/23	9-10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.287	<0.05	0.147	1.85	<0.05	12.5	20.7	0.222
SB01@14-15'	3/14/23	14-15	<0.05	<0.05	0.093	<0.05	<0.05	<0.05	0.062	<0.05	0.0651	2.06	<0.05	9.96	17.1	0.113
SB01@19-20'	3/14/23	19-20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00538	<0.005	<0.005	0.0584	<0.005	0.323	0.465	<0.005
SB02@4-5'	3/14/23	4-5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB02@9-10'	3/14/23	9-10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB02@14-15'	3/14/23	14-15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB02@19-20'	3/14/23	19-20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB03@4-5'	3/14/23	4-5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB03@9-10'	3/14/23	9-10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB03@14-15'	3/14/23	14-15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB03@19-20'	3/14/23	19-20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB04@4-5'	3/14/23	4-5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB04@9-10'	3/14/23	9-10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB04@14-15'	3/14/23	14-15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0162	0.0309	<0.005
SB04@19-20'	3/14/23	19-20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0407	0.0793	<0.005
SB05@4-5'	3/14/23	4-5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0133	0.0187	<0.005
SB05@9-10'	3/14/23	9-10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0123	<0.005
SB05@14-15'	3/14/23	14-15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB05@19-20'	3/14/23	19-20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Notes:

mg/kg-milligrams per kilogram

Bold indicates a Table 915-1 exceedance

Blue shading indicates above Protection of Groundwater Soil Screening levels

Yellow shading indicates above Residential Soil Screening levels

Table 3 - Miller 4-17J, 14-17 Soil Suitability Results						
Sample ID	Date Sampled	Depth	EC	SAR	pH	boron
Table 915-1 Standards		ft. (bgs)	<4 mmhos/cm	6	6–8.3	2.0 mg/L
SB01@4-5'	3/14/23	4-5	0.486	1.89	8.35	0.838
SB01@9-10'	3/14/23	9-10	2.62	19.3	8.13	0.732
SB01@14-15'	3/14/23	14-15	2.98	21.0	8.21	0.648
SB01@19-20'	3/14/23	19-20	2.29	22.2	8.36	0.345
SB02@4-5'	3/14/23	4-5	0.187	0.469	7.35	0.0895
SB02@9-10'	3/14/23	9-10	1.1	13.1	8.71	0.696
SB02@14-15'	3/14/23	14-15	2.25	28.6	8.56	0.852
SB02@19-20'	3/14/23	19-20	1.27	17.4	6.01	0.475
SB03@4-5'	3/21/23	4-5	0.465	0.668	7.98	0.0644
SB03@9-10'	3/21/23	9-10	0.342	0.117	7.79	0.0663
SB03@14-15'	3/21/23	14-15	0.698	6.06	8.34	0.108
SB03@19-20'	3/21/23	19-20	0.964	5.63	8.71	0.254
SB04@4-5'	3/21/23	4-5	0.174	0.31	6.66	0.055
SB04@9-10'	3/21/23	9-10	0.327	1.99	8.21	0.0503
SB04@14-15'	3/21/23	14-15	0.577	1.99	8.88	0.128
SB04@19-20'	3/21/23	19-20	0.642	4.42	8.57	0.514
SB05@4-5'	3/21/23	4-5	2.74	0.965	8.07	0.0601
SB05@9-10'	3/21/23	9-10	0.38	1.54	8.15	0.239
SB05@14-15'	3/21/23	14-15	0.526	2.27	8.70	0.638
SB05@19-20'	3/21/23	19-20	0.976	0.999	9.44	0.17

Notes:

mg/L = milligrams per liter

mg/kg = milligrams per kilogram

mmhos/cm-millimhos per centimeter

EC = Electrical Conductivity

SAR = Sodium absorption ratio

Bold indicates a Table 915-1 exceedance and above background

Table 3 - Miller 4-17J, 14-17 Soil Suitability Results continued						
Sample ID	Date Sampled	Depth	EC	SAR	pH	boron
Table 915-1 Standards		ft. (bgs)	<4 mmhos/cm	6	6–8.3	2.0 mg/L
BG01@4-5'	3/14/23	4-5	0.252	0.147	8.09	0.0416
BG01@9-10'	3/14/23	9-10	0.282	0.162	8.15	0.0402
BG01@14-15	3/14/23	14-15	0.266	1.66	8.51	0.14
BG01@19-20'	3/14/23	19-20	0.718	4.6	8.25	0.0822
BG02@4-5'	3/14/23	4-5	0.208	0.0977	8.02	0.0329
BG02@9-10'	3/14/23	9-10	0.327	0.16	8.12	0.0452
BG02@14-15'	3/14/23	14-15	0.353	2.42	8.67	0.0626
BG02@19-20'	3/14/23	19-20	1.39	8.40	8.19	0.227
BG03@4.5'	3/21/23	4.5	0.292	1.25	8.64	0.136
BG03@9-10'	3/21/23	9-10	0.592	2.11	8.05	0.103
BG03@14-15'	3/21/23	14-15	0.653	2.49	8.3	0.23
BG03@19-20'	3/21/23	19-20	0.469	2.9	8.2	0.301
BG04@4.5'	3/21/23	4.5	0.319	0.117	7.83	0.12
BG04@9-10'	3/21/23	9-10	0.318	1.74	8.17	0.152
BG04@14-15'	3/21/23	14-15	0.255	1.73	8.6	0.173
BG04@19-20'	3/21/23	19-20	0.382	0.645	8.32	0.296
BG05@4.5'	3/21/23	4.5	0.532	1.71	7.91	0.0798
BG05@9-10'	3/21/23	9-10	0.683	2.05	7.99	0.0779
BG05@14-15'	3/21/23	14-15	0.829	2.23	7.91	0.113
BG05@19-20'	3/21/23	19-20	0.291	1.12	8.45	0.347

Notes:

mg/L = milligrams per liter

mg/kg = milligrams per kilogram

mmhos/cm-millimhos per centimeter

EC = Electrical Conductivity

SAR = Sodium absorption ratio

Bold indicates background above Table 915-1

Table 4 -Miller 4-17J, 14-17 Metals Results												
Sample ID	Date Sampled	Date Sampled	arsenic	barium	cadmium	chromium (VI)	copper	lead	nickel	selenium	silver	zinc
Table 915-1 Standards Residential Soil Screening Levels			0.68 mg/kg	15000 mg/kg	71 mg/kg	0.3 mg/kg	3100 mg/kg	400 mg/kg	1500 mg/kg	390 mg/kg	390 mg/kg	23000 mg/kg
Table 915-1 Protection of Groundwater Soil Screening Levels			0.29 mg/kg	82 mg/kg	0.38 mg/kg	0.00067 mg/kg	46 mg/kg	14 mg/kg	26 mg/kg	0.26 mg/kg	0.8 mg/kg	23000 mg/kg
SB01@4-5'	3/14/23	4-5	0.948	50	0.101	<0.3	6.33	6.04	5.08	0.381	0.0246	32.7
SB01@9-10'	3/14/23	9-10	4.74	154	0.0922	<0.3	11.5	8.34	14.2	0.542	0.0272	39.6
SB01@14-15'	3/14/23	14-15	2.91	130	0.13	<0.3	6.87	5.82	7.93	0.385	0.0251	26.8
SB01@19-20'	3/14/23	19-20	6.38	43.1	0.0792	<0.3	14.4	9.68	4.62	0.636	0.0329	27.4
SB02@4-5'	3/14/23	4-5	1.16	55.9	0.075	<0.3	5.97	4.67	6.59	0.264	0.0332	23.5
SB02@9-10'	3/14/23	9-10	5.25	143	0.209	<0.3	7.0	9.49	8.5	<0.175	0.0284	22.8
SB02@14-15'	3/14/23	14-15	4.35	137	0.189	<0.3	4.4	7.0	5.84	<0.175	0.0123	17.9
SB02@19-20'	3/14/23	19-20	4.88	41.4	0.107	<0.3	6.43	6.68	2.06	<0.175	0.0274	19.6
SB03@4-5'	3/14/23	4-5	1.95	70.7	0.157	<0.3	4.17	6.12	4.57	<0.175	0.0267	17.1
SB03@9-10'	3/14/23	9-10	3.46	95.1	0.208	<0.3	6.18	8.32	7.63	<0.175	0.0302	21.6
SB03@14-15'	3/14/23	14-15	4.63	76.8	0.165	<0.3	5.62	8.79	6.79	<0.175	0.0135	21.9
SB03@19-20'	3/14/23	19-20	4.62	166	0.558	<0.3	8.41	10	9.79	<0.175	0.0343	23.2
SB04@4-5'	3/14/23	4-5	2.07	59.8	0.116	<0.3	3.94	5.65	4.27	<0.175	0.0264	15.4
SB04@9-10'	3/14/23	9-10	4.83	412	0.205	<0.3	5.91	8.27	6.88	<0.175	0.0169	20.8
SB04@14-15'	3/14/23	14-15	3.51	157	0.101	<0.3	6.33	7.48	8.14	<0.175	0.0106	19.0
SB04@19-20'	3/14/23	19-20	4.03	264	0.306	<0.3	12.3	10.2	19.5	0.591	0.0892	46.0
SB05@4-5'	3/14/23	4-5	1.94	73.4	0.0759	<0.3	6.68	4.92	8	0.299	0.0235	25.6
SB05@9-10'	3/14/23	9-10	4.69	383	0.149	<0.3	9.16	7.57	10.2	0.423	0.0201	36.2
SB05@14-15'	3/14/23	14-15	5.23	259	0.129	<0.3	11.7	9.49	10.7	0.579	0.0356	33.4
SB05@19-20'	3/14/23	19-20	4.95	78.4	0.119	<0.3	7.23	10.6	3.39	<0.175	0.0331	18.5

Notes:

mg/kg-milligrams per kilogram

Bold indicates a Table 915-1 exceedance

Blue shading indicates above Protection of Groundwater Soil Screening level and above background

Yellow shading indicates above Residential Soil Screening levels and above background

Table 4 -Miller 4-17J, 14-17 Metals Results continued

Sample ID	Date Sampled	Date Sampled	arsenic	barium	cadmium	chromium (VI)	copper	lead	nickel	selenium	silver	zinc
Table 915-1 Standards Residential Soil Screening Levels			0.68 mg/kg	15000 mg/kg	71 mg/kg	0.3 mg/kg	3100 mg/kg	400 mg/kg	1500 mg/kg	390 mg/kg	390 mg/kg	23000 mg/kg
Table 915-1 Protection of Groundwater Soil Screening Levels			0.29 mg/kg	82 mg/kg	0.38 mg/kg	0.00067 mg/kg	46 mg/kg	14 mg/kg	26 mg/kg	0.26 mg/kg	0.8 mg/kg	370 mg/kg
		ft. (bgs)										
BG01@4-5'	3/14/23	4-5	4.5	83.6	0.182	<0.3	5.21	6.85	5.60	<0.175	0.0191	18.3
BG01@9-10'	3/14/23	9-10	3.91	96.6	0.199	<0.3	5.46	7.63	5.72	<0.175	0.0144	19.8
BG01@14-15	3/14/23	14-15	5.11	46.5	0.113	<0.3	5.71	6.4	5.27	<0.175	0.00888	16.8
BG01@19-20'	3/14/23	19-20	7.69	31.8	0.169	<0.3	7.32	21.3	2.74	<0.175	0.0374	18.1
BG02@4-5'	3/14/23	4-5	2.06	80.3	0.119	<0.3	4.58	4.96	5.02	<0.175	0.0248	16.0
BG02@9-10'	3/14/23	9-10	5.26	116	0.313	<0.3	6.06	8.56	7.54	<0.175	0.0184	21.9
BG02@14-15'	3/14/23	14-15	3.25	65	0.237	<0.3	4.1	5.98	5.40	<0.175	0.0131	16.1
BG02@19-20'	3/14/23	19-20	7.18	38.6	0.117	<0.3	8.12	9.92	2.22	<0.175	0.0305	21.4
BG03@4.5'	3/21/23	4-5	1.61	65.1	0.0812	<0.3	3.65	4.23	4.31	<0.175	0.0239	13.3
BG03@9-10'	3/21/23	9-10	5.01	124	0.257	<0.3	6.28	8.61	7.36	<0.175	0.0203	22.6
BG03@14-15'	3/21/23	14-15	3.29	70.7	0.145	<0.3	5.38	6.17	5.36	<0.175	0.0108	18.2
BG03@19-20'	3/21/23	19-20	3.64	49.5	0.147	<0.3	7.99	13.6	3.01	<0.175	0.03	20.1
BG04@4.5'	3/21/23	4-5	2.56	71.5	0.135	<0.3	4.63	11.9	5.17	<0.175	0.0256	28.4
BG04@9-10'	3/21/23	9-10	3.11	33	0.116	<0.3	4.32	<0.215	4.42	<0.175	0.00816	16.6
BG04@14-15'	3/21/23	14-15	2.72	37.8	0.0748	<0.3	4.99	6.91	7.53	<0.175	0.0131	18.7
BG04@19-20'	3/21/23	19-20	29.5	44	0.352	<0.3	18.2	<0.235	4.15	<0.175	0.0612	23.7
BG05@4.5'	3/21/23	4.5	2.7	79.2	0.178	<0.3	5.3	8.25	5.56	<0.175	0.0325	19.8
BG05@9-10'	3/21/23	9-10	4.16	429	0.207	<0.3	5.27	7.52	6.22	<0.175	0.0137	20.9
BG05@14-15'	3/21/23	14-15	4.85	348	0.245	<0.3	5.65	8.41	6.59	<0.175	0.015	22.4
BG05@19-20'	3/21/23	19-20	0.727	33.6	0.175	<0.3	8.03	19.0	1.4	<0.175	0.0662	2.48

Notes:

mg/kg-milligrams per kilogram

Bold indicates background above Table 915-1 Protection of Groundwater Soil Screening Levels

Table 5 - Miller 4-17J, 14-17 Background Comparison Values						
Depth ft. (bgs)	EC	SAR	pH	boron	arsenic	barium
4-5	0.53	1.71	8.64	0.136	3.58	94.93
9-10	0.683	2.11	8.17	0.152	5.36	199.65
14-15	0.829	2.42	8.67	0.23	4.80	142.0
19-20	1.39	8.4	8.41	0.347	12.18	49.38

Notes:

Soil suitability background comparison values are the highest value at that depth.



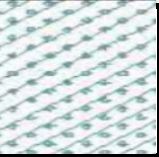
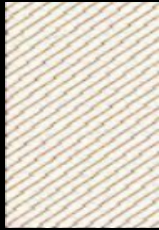
Arsenic and barium background comparison values are the average concentration at that depth x 1.25.





mg/kg-milligrams per kilogram



EC = Electrical Conductivity





SAR = Sodium absorption ratio





Borelogs



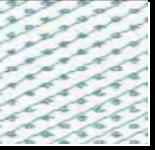
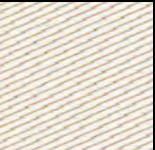
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		Boring/Well Number: SB01				Project: Miller 14-17						
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro						
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID						
Gravel Pack: NA		Seal: 0-22' BGS				Grout: NA						
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry		
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 22		
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks			Well Completion	
0			Dry				0-4'	SP - Sand, medium, brown				
5			Dry	477	Yes	SB01@4-5'	4-8'					
10			Dry	778	Yes	SB01@9-10'	8-12'					
15			Dry	1467	Yes	SB01@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray				
20				Dry	630	Yes	SB01@19-20'	16-20'				CL - Clay, gray and orange, compacted, refusal at 20'
							20-22'					
NOTES:												



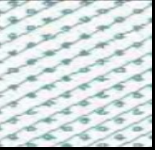
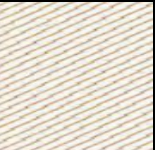
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		Boring/Well Number: SB02				Project: Miller 14-17							
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro							
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID							
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA							
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry			
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20			
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks			Well Completion		
0			Dry		No		0-4'	SP - Sand, medium, brown					
5			Dry	1.1	No	SB02@4-5'	4-8'						
10			Dry	13.8	No	SB02@9-10'	8-12'						
15				Dry	5.6	No	SB02@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray				
20				Dry	29.6	No	SB02@19-20'	16-20'	CL - Clay, gray and orange, compacted, refusal at 20'				
NOTES:													



		BORING LOG/MONITORING WELL COMPLETION LOG										
		Boring/Well Number: SB03				Project: Miller 14-17						
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro						
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID						
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA						
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry		
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20		
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks			Well Completion	
0			Dry		No		0-4'	SP - Sand, medium, brown				
5			Dry	0.4	No	SB03@4-5'	4-8'					
10			Dry	0.6	No	SB03@9-10'	8-12'					
15			Dry	1.4	No	SB03@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray				
20			Dry	1.8	No	SB03@19-20'	16-20'	CL - Clay, gray and orange, compacted, refusal at 20'				
NOTES:												



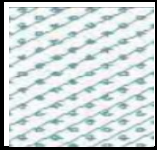
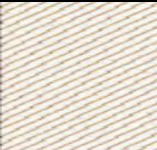
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		Boring/Well Number: SB04				Project: Miller 14-17						
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro						
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID						
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA						
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry		
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20		
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks		Well Completion		
0			Dry		No		0-4'	SP - Sand, medium, brown				
5			Dry	6.8	Yes	SB04@4-5'	4-8'					
10			Dry	4.7	Yes	SB04@9-10'	8-12'					
15			Dry	877	Yes	SB04@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray				
20			Dry	345	Yes	SB04@19-20'	16-20'	CL - Clay, gray and orange, compacted, refusal at 20'				
NOTES:												



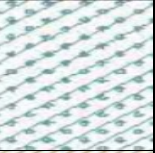
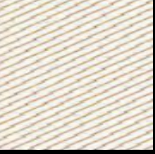
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		Boring/Well Number: SB05				Project: Miller 14-17							
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro							
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID							
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA							
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry			
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20			
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks			Well Completion		
0			Dry		No		0-4'	SP - Sand, medium, brown					
5			Dry	2.5	No	SB05@4-5'	4-8'						
10			Dry	1.5	No	SB05@9-10'	8-12'						
15				Dry	1.7	No	SB05@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray				
20				Dry	0.2	No	SB05@19-20'	16-20'	CL - Clay, gray and orange, compacted, refusal at 20'				
NOTES: Stepped out approximately 50' to the west after higher PID detections in the original borehole.													

		BORING LOG/MONITORING WELL COMPLETION LOG											
		Boring/Well Number: BG01				Project: Miller 14-17							
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro							
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID							
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA							
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry			
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20			
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks			Well Completion		
0			Dry				0-4'	SP - Sand, medium, brown					
5			Dry	0	No	BG01@4-5'	4-8'						
10			Dry	0	No	BG01@9-10	8-12'						
15			Dry	0	No	BG01@14-15'	12-16'	SC- Clayey-sand, brown, orange, and gray					
20			Dry	0	No	BG01@19-20'	16-20'	CL - Clay, gray and orange, compacted, refusal at 20'					
NOTES:													

		BORING LOG/MONITORING WELL COMPLETION LOG											
		Boring/Well Number: BG02				Project: Miller 14-17							
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro							
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID							
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA							
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry			
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20			
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks			Well Completion		
0			Dry				0-4'	SP - Sand, medium, brown					
5			Dry	0	No	BG02@4-5'	4-8'						
10			Dry	0	No	BG02@9-10	8-12'						
15			Dry	0	No	BG02@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray					
20			Dry	0	No	BG02@19-20'	16-20'	CL - Clay, gray and orange, compacted, refusal at 20'					
NOTES:													

		BORING LOG/MONITORING WELL COMPLETION LOG										
		Boring/Well Number: BG03				Project: Miller 14-17						
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro						
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID						
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA						
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry		
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20		
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks			Well Completion	
0			Dry				0-4'	SP - Sand, medium, brown				
5			Dry	0	No	BG03@4-5'	4-8'					
10			Dry	0	No	BG03@9-10	8-12'					
15			Dry	0	No	BG03@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray				
20			Dry	0	No	BG03@19-20'	16-20'	CL - Clay, gray and orange, compacted, refusal at 20'				
NOTES:												

		BORING LOG/MONITORING WELL COMPLETION LOG											
		Boring/Well Number: BG04				Project: Miller 14-17							
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro							
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID							
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA							
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry			
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20			
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks			Well Completion		
5			Dry				0-4'	SP - Sand, medium, brown					
			Dry	0	No	BG04@4-5'	4-8'						
10			Dry	0	No	BG04@9-10'	8-12'						
15			Dry	0	No	BG04@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray					
20			Dry	0	No	BG04@19-20'	16-20'	CL - Clay, gray and orange, compacted, refusal at 20'					
NOTES:													

		BORING LOG/MONITORING WELL COMPLETION LOG										
		Boring/Well Number: BG05				Project: Miller 14-17						
Date: 3/14/23		Logged By: Mike Dinkel				Driller: DrillPro						
Drilling Method: Direct Push		Sampling Method: Single Rod				Field Screening Equipment: Mini Rae 2000 PID						
Gravel Pack: NA		Seal: 0-20' BGS				Grout: NA						
Casing Type: NA		Diameter: NA				Length: NA				Depth to Water (ft. bgs): Dry		
Screen Type: NA		Slot: NA		Diameter: NA		Length: NA				Total Depth (ft.): 20		
Depth (ft. bgs)	Lithology	Water Level	Moisture Content	Vapor (ppm)	Staining (Y/N)	Sample	Sample Run	Lithology/Remarks		Well Completion		
5			Dry				0-4'	SP - Sand, medium, brown				
			Dry	0	No	BG05@4-5'	4-8'					
10			Dry	0	No	BG05@9-10'	8-12'					
15			Dry	0	No	BG05@14-15'	12-16'	SC - Clayey-sand, brown, orange, and gray				
20				Dry	0	No	BG05@19-20'	16-20'				CL - Clay, gray and orange, compacted, refusal at 20'
NOTES:												

Laboratory Analytical

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80401

303.277.9310

March 21, 2023

Mike Dinkel

Civitas Resources

650 Southgate Drive

Windsor, CO 80550

RE: Miller 14-17

Work Order # 2303333

Enclosed are the results of analyses for samples received by Summit Scientific on 03/14/23 15:37. 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: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB01@4-5'	2303333-01	Soil	03/14/23 08:45	03/14/23 15:37
SB01@9-10'	2303333-02	Soil	03/14/23 08:50	03/14/23 15:37
SB01@14-15'	2303333-03	Soil	03/14/23 08:55	03/14/23 15:37
SB01@19-20'	2303333-04	Soil	03/14/23 09:00	03/14/23 15:37
SB02@4-5'	2303333-05	Soil	03/14/23 09:30	03/14/23 15:37
SB02@9-10'	2303333-06	Soil	03/14/23 09:40	03/14/23 15:37
SB02@14-15'	2303333-07	Soil	03/14/23 09:45	03/14/23 15:37
SB02@19-20'	2303333-08	Soil	03/14/23 09:50	03/14/23 15:37
SB03@4-5'	2303333-09	Soil	03/14/23 10:00	03/14/23 15:37
SB03@9-10'	2303333-10	Soil	03/14/23 10:05	03/14/23 15:37
SB03@14-15'	2303333-11	Soil	03/14/23 10:10	03/14/23 15:37
SB03@19-20'	2303333-12	Soil	03/14/23 10:20	03/14/23 15:37
SB04@4-5'	2303333-13	Soil	03/14/23 11:15	03/14/23 15:37
SB04@9-10'	2303333-14	Soil	03/14/23 11:20	03/14/23 15:37
SB04@14-15'	2303333-15	Soil	03/14/23 11:25	03/14/23 15:37
SB04@19-20'	2303333-16	Soil	03/14/23 11:30	03/14/23 15:37
SB05@4-5'	2303333-17	Soil	03/14/23 11:45	03/14/23 15:37
SB05@9-10'	2303333-18	Soil	03/14/23 11:50	03/14/23 15:37
SB05@14-15'	2303333-19	Soil	03/14/23 11:55	03/14/23 15:37
BG01@4-5'	2303333-20	Soil	03/14/23 13:00	03/14/23 15:37
BG01@9-10'	2303333-21	Soil	03/14/23 13:10	03/14/23 15:37
BG01@14-15'	2303333-22	Soil	03/14/23 13:30	03/14/23 15:37
BG01@19-20'	2303333-23	Soil	03/14/23 13:35	03/14/23 15:37
BG02@4-5'	2303333-24	Soil	03/14/23 13:40	03/14/23 15:37
BG02@9-10'	2303333-25	Soil	03/14/23 13:45	03/14/23 15:37
BG02@14-15'	2303333-26	Soil	03/14/23 13:50	03/14/23 15:37
BG02@19-20'	2303333-27	Soil	03/14/23 13:55	03/14/23 15:37

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB05@19'-20'	2303333-28	Soil	03/14/23 00:00	03/14/23 15:37

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

2303333.1

Lab ID

Page 1 of 2

				Send Data To:								Send Invoice To:							
Client: Civitas				Project Manager: mdinkel@quandaryconsultants.com								Company: Civitas							
Address: 650 Southgate				E-Mail: rshaw@quandaryconsultants.com								Project Name/Location: Miller 14-17							
City/State/Zip: Windsor CO												AFE#:							
Phone: 785-696-7788				Project Name: Miller 14-17								PO/Billing Codes:							
Sampler Name: Mike Dinkel				Project Number:								Contact: Jacob Evans							
				Preservative				Matrix				Analysis Requested				Special Instructions			
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other							
1	SB01 @ 4-5'		0845	2			X			X			X						
2	SB01 @ 9-10'		0850																
3	SB01 @ 14-15'		0855																
4	SB01 @ 17-20'		0900																
5	SB02 @ 4-5'		0930																
6	SB02 @ 9-10'		0940																
7	SB02 @ 14-15'		0945																
8	SB02 @ 17-20'		0950																
9	SB03 @ 4-5'		1000																
10	SB03 @ 9-10'		1005																
11	SB03 @ 14-15'		1010																
12	SB03 @ 17-20'		1020																
13	SB04 @ 4-5'		1115																
14	SB04 @ 9-10'		1120																
15	SB04 @ 14-15'		1125																
Relinquished by: <i>[Signature]</i> Date/Time: 3-14/1530				Received by: <i>[Signature]</i> Date/Time: 3/14/23 1537				TAT Business Days				Field DO				Notes: same day for organics - analysis for all else			
Relinquished by: Date/Time:				Received by: Date/Time:				Same Day <input checked="" type="checkbox"/>				Field EC							
								1 Day <input type="checkbox"/>				Field ORP							
								2 Days <input type="checkbox"/>				Field pH							
								3 Days <input type="checkbox"/>				Field Temp.							
Relinquished by: Date/Time:				Received by: Date/Time:				Standard <input type="checkbox"/>				Field Turb.							
Temperature Upon Receipt: 10.3				Corrected Temperature: —				IR gun #: 02				HNO3 lot #:							

SUMMIT SCIENTIFIC

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

2303333-2

Lab ID

Page 2 of 2

Client: CIVITAS				Send Data To:				Send Invoice To:			
Address: 650 Southgate				Project Manager: Mike Drake				Company: CIVITAS			
City/State/Zip: Windsor CO				E-Mail: mdrake@ghandaryconsultants.com				Project Name/Location: Miller 14-17			
Phone: 785-691-7388				rslac@ghandaryconsultants.com				AFE#:			
Sampler Name: Mike Drake				Project Name: Miller 14-17				PO/Billing Codes:			
				Project Number:				Contact: Jacob Evans			

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix		Air-Canister #	Analysis Requested				Special Instructions
					HCl	HNO3	None	Other	Water	Soil		Other	Table 915-1	Table 915-2	Table 915-3	
1	SB04 @ 19-20'		1130	2			X			X						
2	SB05 @ 4-5'		1145	2												
3	SB05 @ 9-10'		1150	2												
4	SB05 @ 14-15'		1155	2												
5	B601 @ 4-5'		1300	1												
6	B601 @ 9-10'		1300 ¹³¹⁰	1												
7	B601 @ 14-15'		1320 ¹³³⁰	1												
8	B601 @ 19-20'		1335	1												
9	B602 @ 4-5'		1340	1												
10	B602 @ 9-10'		1345	1												
11	B602 @ 14-15'		1350	1												
12	B602 @ 19-20'		1355	1												
13																
14																
15																

Relinquished by: <i>[Signature]</i>	Date/Time: 3-14/15	Received by: <i>[Signature]</i>	Date/Time: 3/14/15 1537	TAT Business Days	Field DO	Notes: same day for organics quickest for all else
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input checked="" type="checkbox"/>	Field EC	
				1 Day <input type="checkbox"/>	Field ORP	
				2 Days <input type="checkbox"/>	Field pH	
				3 Days <input type="checkbox"/>	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard <input type="checkbox"/>	Field Turb.	
Temperature Upon Receipt: 10.3	Corrected Temperature: —	IR gun #: 02	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2303833Client: Civitas Client Project ID: Miller 14-17Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐
☒ ☐ ☐ ☐ ☐
Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 10.3Thermometer # 02

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: 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"/>	On Ice
If custody seals are present, are they intact? ⁽¹⁾	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Same day
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , 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? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	extra sample
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ 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):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				


 Custodian Printed Name

3/14/23 1537
 Date/Time



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@4-5'
2303333-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	1.2	0.20		mg/kg	100	BGC0415	03/14/23	03/14/23	EPA 8260B	
Toluene	0.011	0.0050		"	1	"	"	"	"	
Ethylbenzene	5.8	0.50		"	100	"	"	"	"	
Xylenes (total)	20	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	33	0.50		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	27	0.50		"	"	"	"	"	"	
Naphthalene	0.50	0.0038		"	1	"	"	"	"	
Gasoline Range Hydrocarbons	2000	50		"	100	"	"	"	"	

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		145 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		137 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		134 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	180	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		69.2 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@4-5'
2303333-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/18/23	EPA 8270D SIM	
Anthracene	ND	0.0500		"	10	"	"	03/19/23	"	
Benzo (a) anthracene	ND	0.00500		"	1	"	"	03/18/23	"	
Benzo (a) pyrene	0.0297	0.00500		"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0186	0.00500		"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500		"	"	"	"	"	"	
Chrysene	0.145	0.00500		"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500		"	"	"	"	"	"	
Fluoranthene	0.0430	0.00500		"	"	"	"	"	"	
Fluorene	0.304	0.0500		"	10	"	"	03/19/23	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500		"	1	"	"	03/18/23	"	
Pyrene	0.0360	0.00500		"	"	"	"	"	"	
1-Methylnaphthalene	1.00	0.0500		"	10	"	"	03/19/23	"	
2-Methylnaphthalene	1.41	0.0500		"	"	"	"	"	"	

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		64.9 %		40-150		"	"	03/18/23	"	
Surrogate: Fluoranthene-d10		110 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.838	0.0100		mg/L	1	BGC0418	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 08:45**

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



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@4-5'
2303333-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.948	0.237	0.199	mg/kg dry	1	BGC0417	03/14/23	03/16/23	EPA 6020B	
Barium	50.0	0.473	0.374	"	"	"	"	"	"	
Cadmium	0.101	0.237	0.00852	"	"	"	"	"	"	
Copper	6.33	0.473	0.0247	"	"	"	"	"	"	
Lead	6.04	0.237	0.0650	"	"	"	"	"	"	
Nickel	5.08	0.473	0.0722	"	"	"	"	"	"	
Selenium	0.381	0.260	0.175	"	"	"	"	"	"	
Silver	0.0246	0.0237	0.00316	"	"	"	"	"	"	
Zinc	32.7	0.473	0.315	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 08:45

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 08:45

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	44.3	0.0591		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	9.11	0.0591		"	"	"	"	"	"	
Sodium	52.9	0.0591		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 08:45

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.89	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@4-5'
2303333-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	84.5			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.486	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 08:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.35			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@9-10'
2303333-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.14	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	0.29	0.0050		"	"	"	"	"	"	
Xylenes (total)	15	0.10		"	10	"	"	"	"	E
1,2,4-Trimethylbenzene	7.1	0.050		"	"	"	"	"	"	E
1,3,5-Trimethylbenzene	0.56	0.0050		"	1	"	"	"	"	
Naphthalene	0.59	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	280	5.0		"	10	"	"	"	"	

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		137 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		134 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		135 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	2900	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	450	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		77.7 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@9-10'
2303333-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500		mg/kg	10	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
Anthracene	ND	0.0500		"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500		"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500		"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500		"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500		"	"	"	"	"	"	
Chrysene	0.287	0.0500		"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500		"	"	"	"	"	"	
Fluoranthene	0.147	0.0500		"	"	"	"	"	"	
Fluorene	1.85	0.0500		"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500		"	"	"	"	"	"	
Pyrene	0.222	0.0500		"	"	"	"	"	"	
1-Methylnaphthalene	12.5	0.500		"	100	"	"	03/19/23	"	
2-Methylnaphthalene	20.7	0.500		"	"	"	"	"	"	E

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		84.0 %		40-150		"	"	03/19/23	"	
Surrogate: Fluoranthene-d10		107 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.732	0.0100		mg/L	1	BGC0418	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@9-10'
2303333-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	4.74	0.228	0.192	mg/kg dry	1	BGC0417	03/14/23	03/16/23	EPA 6020B
Barium	154	0.456	0.360	"	"	"	"	"	"
Cadmium	0.0922	0.228	0.00821	"	"	"	"	"	"
Copper	11.5	0.456	0.0238	"	"	"	"	"	"
Lead	8.34	0.228	0.0627	"	"	"	"	"	"
Nickel	14.2	0.456	0.0696	"	"	"	"	"	"
Selenium	0.542	0.260	0.175	"	"	"	"	"	"
Silver	0.0272	0.0228	0.00304	"	"	"	"	"	"
Zinc	39.6	0.456	0.303	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	36.4	0.0570		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	2.73	0.0570		"	"	"	"	"	"	
Sodium	449	0.0570		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	19.3	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@9-10'
2303333-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	87.7			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	2.62	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 08:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.13			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@14-15'
2303333-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.37	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	1.2	0.050		"	10	"	"	"	"	
Xylenes (total)	1.9	0.10		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	6.7	0.050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	2.5	0.050		"	"	"	"	"	"	
Naphthalene	1.8	0.038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	280	5.0		"	"	"	"	"	"	

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		130 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		149 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		141 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	1500	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	240	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		70.0 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@14-15'
2303333-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500		mg/kg	10	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
Anthracene	ND	0.0500		"	"	"	"	"	"	
Benzo (a) anthracene	0.0973	0.0500		"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500		"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500		"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500		"	"	"	"	"	"	
Chrysene	0.0620	0.0500		"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500		"	"	"	"	"	"	
Fluoranthene	0.0651	0.0500		"	"	"	"	"	"	
Fluorene	2.06	0.0500		"	"	"	"	"	"	E
Indeno (1,2,3-cd) pyrene	ND	0.0500		"	"	"	"	"	"	
Pyrene	0.113	0.0500		"	"	"	"	"	"	
1-Methylnaphthalene	9.96	0.500		"	100	"	"	03/19/23	"	
2-Methylnaphthalene	17.1	0.500		"	"	"	"	"	"	

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		119 %		40-150		"	"	03/19/23	"	
Surrogate: Fluoranthene-d10		58.9 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.648	0.0100		mg/L	1	BGC0418	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@14-15'
2303333-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.91	0.225	0.190	mg/kg dry	1	BGC0417	03/14/23	03/16/23	EPA 6020B
Barium	130	0.451	0.356	"	"	"	"	"	"
Cadmium	0.130	0.225	0.00812	"	"	"	"	"	"
Copper	6.87	0.451	0.0236	"	"	"	"	"	"
Lead	5.82	0.225	0.0620	"	"	"	"	"	"
Nickel	7.93	0.451	0.0688	"	"	"	"	"	"
Selenium	0.385	0.260	0.175	"	"	"	"	"	"
Silver	0.0251	0.0225	0.00301	"	"	"	"	"	"
Zinc	26.8	0.451	0.300	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	35.4	0.0564		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	4.27	0.0564		"	"	"	"	"	"	
Sodium	496	0.0564		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	21.0	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@14-15'
2303333-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	88.7			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	2.98	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 08:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.21			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@19-20'
2303333-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.017	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	0.090	0.0050		"	"	"	"	"	"	
Xylenes (total)	0.57	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.53	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	0.20	0.0050		"	"	"	"	"	"	
Naphthalene	0.14	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	21	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		126 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		147 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		137 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	210	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	74	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		69.8 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@19-20'
2303333-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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	0.00538	0.00500		"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500		"	"	"	"	"	"	
Fluoranthene	ND	0.00500		"	"	"	"	"	"	
Fluorene	0.0584	0.00500		"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500		"	"	"	"	"	"	
Pyrene	ND	0.00500		"	"	"	"	"	"	
1-Methylnaphthalene	0.323	0.00500		"	"	"	"	"	"	E
2-Methylnaphthalene	0.465	0.00500		"	"	"	"	"	"	E

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		81.4 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		69.4 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.345	0.0100		mg/L	1	BGC0418	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 09:00**

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

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@19-20'
2303333-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	6.38	0.229	0.193	mg/kg dry	1	BGC0417	03/14/23	03/16/23	EPA 6020B
Barium	43.1	0.457	0.361	"	"	"	"	"	"
Cadmium	0.0792	0.229	0.00823	"	"	"	"	"	"
Copper	14.4	0.457	0.0239	"	"	"	"	"	"
Lead	9.68	0.229	0.0628	"	"	"	"	"	"
Nickel	4.62	0.457	0.0697	"	"	"	"	"	"
Selenium	0.636	0.260	0.175	"	"	"	"	"	"
Silver	0.0329	0.0229	0.00305	"	"	"	"	"	"
Zinc	27.4	0.457	0.304	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	12.3	0.0571		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	5.50	0.0571		"	"	"	"	"	"	
Sodium	373	0.0571		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	22.2	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB01@19-20'
2303333-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	87.5			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	2.29	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 09:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.36			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@4-5'
2303333-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		139 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		96.1 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		79.1 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@4-5'
2303333-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		81.9 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		65.3 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0895	0.0100		mg/L	1	BGC0418	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 09:30**

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: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@4-5'
2303333-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.16	0.212	0.179	mg/kg dry	1	BGC0417	03/14/23	03/16/23	EPA 6020B
Barium	55.9	0.424	0.335	"	"	"	"	"	"
Cadmium	0.0750	0.212	0.00763	"	"	"	"	"	"
Copper	5.97	0.424	0.0221	"	"	"	"	"	"
Lead	4.67	0.212	0.0582	"	"	"	"	"	"
Nickel	6.59	0.424	0.0646	"	"	"	"	"	"
Selenium	0.264	0.260	0.175	"	"	"	"	"	"
Silver	0.0332	0.0212	0.00283	"	"	"	"	"	"
Zinc	23.5	0.424	0.282	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	42.4	0.0530		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	13.0	0.0530		"	"	"	"	"	"	
Sodium	13.6	0.0530		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.469	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@4-5'
2303333-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	94.4			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.187	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	7.35			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@9-10'
2303333-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		144 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		102 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		58.8 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@9-10'
2303333-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		70.4 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		54.4 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.696	0.0100		mg/L	1	BGC0418	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 09:40**

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: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@9-10'
2303333-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.25	0.229	0.193	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	143	0.458	0.362	"	"	"	"	"	"	
Cadmium	0.209	0.229	0.00825	"	"	"	"	"	"	
Copper	7.00	0.458	0.0239	"	"	"	"	"	"	
Lead	9.49	0.229	0.0630	"	"	"	"	"	"	
Nickel	8.50	0.458	0.0699	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0284	0.0229	0.00306	"	"	"	"	"	"	
Zinc	22.8	0.458	0.305	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 09:40

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 09:40

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	12.9	0.0573		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	4.63	0.0573		"	"	"	"	"	"	
Sodium	216	0.0573		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 09:40

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	13.1	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@9-10'
2303333-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	87.3			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	1.10	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 09:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.71			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@14-15'
2303333-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		135 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		101 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		111 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		48.5 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@14-15'
2303333-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit									
Acenaphthene	ND	0.00500			mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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			"	"	"	"	"	"	

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit									
Surrogate: 2-Methylnaphthalene-d10		64.0 %			40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		46.0 %			40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit									
Boron	0.852	0.0100			mg/L	1	BGC0418	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 09:45**

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

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@14-15'
2303333-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.35	0.227	0.191	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	137	0.454	0.359	"	"	"	"	"	"	
Cadmium	0.189	0.227	0.00818	"	"	"	"	"	"	
Copper	4.40	0.454	0.0237	"	"	"	"	"	"	
Lead	7.00	0.227	0.0624	"	"	"	"	"	"	
Nickel	5.84	0.454	0.0693	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0123	0.0227	0.00303	"	"	"	"	"	"	
Zinc	17.9	0.454	0.302	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 09:45

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 09:45

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	11.4	0.0568		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	1.60	0.0568		"	"	"	"	"	"	
Sodium	389	0.0568		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 09:45

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	28.6	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@14-15'
2303333-07 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	88.1			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	2.25	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.56			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@19-20'
2303333-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.13	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	0.086	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	2.9	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		150 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		98.3 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		125 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		46.3 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@19-20'
2303333-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		70.6 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		56.5 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.475	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 09:50**

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

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@19-20'
2303333-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.88	0.225	0.189	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	41.4	0.450	0.355	"	"	"	"	"	"	
Cadmium	0.107	0.225	0.00809	"	"	"	"	"	"	
Copper	6.43	0.450	0.0235	"	"	"	"	"	"	
Lead	6.68	0.225	0.0618	"	"	"	"	"	"	
Nickel	2.06	0.450	0.0686	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0274	0.0225	0.00300	"	"	"	"	"	"	
Zinc	19.6	0.450	0.299	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 09:50

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 09:50

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	6.11	0.0562		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	2.37	0.0562		"	"	"	"	"	"	
Sodium	200	0.0562		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 09:50

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	17.4	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB02@19-20'
2303333-08 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	89.0			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	1.27	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	6.01			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@4-5'
2303333-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		140 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		95.0 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		52.6 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@4-5'
2303333-09 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/18/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		47.3 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		56.3 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0644	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@4-5'
2303333-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	1.95	0.226	0.190	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	70.7	0.452	0.357	"	"	"	"	"	"	
Cadmium	0.157	0.226	0.00813	"	"	"	"	"	"	
Copper	4.17	0.452	0.0236	"	"	"	"	"	"	
Lead	6.12	0.226	0.0621	"	"	"	"	"	"	
Nickel	4.57	0.452	0.0689	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0267	0.0226	0.00302	"	"	"	"	"	"	
Zinc	17.1	0.452	0.300	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 10:00

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 10:00

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	37.6	0.0565		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	10.2	0.0565		"	"	"	"	"	"	
Sodium	17.9	0.0565		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 10:00

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.668	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@4-5'
2303333-09 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	88.5			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.465	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	7.98			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@9-10'
2303333-10 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		135 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		96.6 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		111 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/15/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		56.5 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@9-10'
2303333-10 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/18/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		65.5 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		82.5 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0663	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 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: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@9-10'
2303333-10 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.46	0.243	0.205	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	95.1	0.486	0.384	"	"	"	"	"	"	
Cadmium	0.208	0.243	0.00876	"	"	"	"	"	"	
Copper	6.18	0.486	0.0254	"	"	"	"	"	"	
Lead	8.32	0.243	0.0668	"	"	"	"	"	"	
Nickel	7.63	0.486	0.0742	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0302	0.0243	0.00325	"	"	"	"	"	"	
Zinc	21.6	0.486	0.323	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 10:05

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 10:05

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	31.4	0.0608		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	9.03	0.0608		"	"	"	"	"	"	
Sodium	2.88	0.0608		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 10:05

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.117	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@9-10'
2303333-10 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	82.2			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.342	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 10:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	7.79			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@14-15'
2303333-11 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		107 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		73.4 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@14-15'
2303333-11 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/18/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		54.7 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		79.4 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.108	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@14-15'
2303333-11 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.63	0.232	0.195	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	76.8	0.464	0.367	"	"	"	"	"	"	
Cadmium	0.165	0.232	0.00835	"	"	"	"	"	"	
Copper	5.62	0.464	0.0242	"	"	"	"	"	"	
Lead	8.79	0.232	0.0638	"	"	"	"	"	"	
Nickel	6.79	0.464	0.0708	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0135	0.0232	0.00310	"	"	"	"	"	"	
Zinc	21.9	0.464	0.309	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 10:10

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 10:10

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	17.4	0.0580		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	4.59	0.0580		"	"	"	"	"	"	
Sodium	110	0.0580		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 10:10

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	6.06	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@14-15'
2303333-11 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	86.2			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.698	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.34			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@19-20'
2303333-12 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		100 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		78.5 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@19-20'
2303333-12 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/18/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		54.5 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		72.8 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.254	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@19-20'
2303333-12 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.62	0.238	0.201	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	166	0.477	0.377	"	"	"	"	"	"	
Cadmium	0.558	0.238	0.00858	"	"	"	"	"	"	
Copper	8.41	0.477	0.0249	"	"	"	"	"	"	
Lead	10.0	0.238	0.0655	"	"	"	"	"	"	
Nickel	9.79	0.477	0.0727	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0343	0.0238	0.00318	"	"	"	"	"	"	
Zinc	23.2	0.477	0.317	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 10:20

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 10:20

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	72.5	0.0596		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	4.69	0.0596		"	"	"	"	"	"	
Sodium	183	0.0596		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 10:20

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	5.63	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB03@19-20'
2303333-12 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	83.9			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.964	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.71			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@4-5'
2303333-13 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		102 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		80.5 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@4-5'
2303333-13 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit									
Acenaphthene	ND	0.00500			mg/kg	1	BGC0427	03/15/23	03/18/23	EPA 8270D SIM	
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			"	"	"	"	"	"	

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit									
Surrogate: 2-Methylnaphthalene-d10		53.2 %			40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		66.9 %			40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit									
Boron	0.0550	0.0100			mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 11:15**

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

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@4-5'
2303333-13 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.07	0.213	0.179	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B
Barium	59.8	0.426	0.337	"	"	"	"	"	"
Cadmium	0.116	0.213	0.00767	"	"	"	"	"	"
Copper	3.94	0.426	0.0223	"	"	"	"	"	"
Lead	5.65	0.213	0.0585	"	"	"	"	"	"
Nickel	4.27	0.426	0.0650	"	"	"	"	"	"
Selenium	ND	0.260	0.175	"	"	"	"	"	"
Silver	0.0264	0.0213	0.00284	"	"	"	"	"	"
Zinc	15.4	0.426	0.283	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	108	0.0533		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	52.8	0.0533		"	"	"	"	"	"	
Sodium	15.7	0.0533		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.310	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@4-5'
2303333-13 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	93.9			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.174	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	6.66			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@9-10'
2303333-14 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		101 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		98.4 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		63.3 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@9-10'
2303333-14 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/18/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		64.7 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		72.7 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0503	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 11:20**

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: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@9-10'
2303333-14 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.83	0.228	0.192	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	412	0.457	0.361	"	"	"	"	"	"	
Cadmium	0.205	0.228	0.00822	"	"	"	"	"	"	
Copper	5.91	0.457	0.0239	"	"	"	"	"	"	
Lead	8.27	0.228	0.0627	"	"	"	"	"	"	
Nickel	6.88	0.457	0.0696	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0169	0.0228	0.00305	"	"	"	"	"	"	
Zinc	20.8	0.457	0.304	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 11:20

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 11:20

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	20.8	0.0571		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	5.41	0.0571		"	"	"	"	"	"	
Sodium	39.4	0.0571		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 11:20

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.99	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@9-10'
2303333-14 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	87.6			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.327	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.21			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@14-15'
2303333-15 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/15/23	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	0.0078	0.0050		"	"	"	"	"	"	
Xylenes (total)	0.087	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.025	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	0.021	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.95	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		104 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		101 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		80.7 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@14-15'
2303333-15 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/18/23	EPA 8270D SIM	
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	0.0162	0.00500		"	"	"	"	"	"	
2-Methylnaphthalene	0.0309	0.00500		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		97.6 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		81.5 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.128	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@14-15'
2303333-15 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.51	0.231	0.194	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	157	0.462	0.365	"	"	"	"	"	"	
Cadmium	0.101	0.231	0.00831	"	"	"	"	"	"	
Copper	6.33	0.462	0.0241	"	"	"	"	"	"	
Lead	7.48	0.231	0.0634	"	"	"	"	"	"	
Nickel	8.14	0.462	0.0704	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0106	0.0231	0.00308	"	"	"	"	"	"	
Zinc	19.0	0.462	0.307	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 11:25

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 11:25

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	200	0.0577		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	72.7	0.0577		"	"	"	"	"	"	
Sodium	129	0.0577		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 11:25

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.99	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@14-15'
2303333-15 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	86.7			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.577	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 11:25**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.88			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@19-20'
2303333-16 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.050	0.0020		mg/kg	1	BGC0415	03/14/23	03/15/23	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	0.17	0.0050		"	"	"	"	"	"	
Xylenes (total)	3.1	0.10		"	10	"	"	"	"	
1,2,4-Trimethylbenzene	0.31	0.0050		"	1	"	"	"	"	
1,3,5-Trimethylbenzene	0.23	0.0050		"	"	"	"	"	"	
Naphthalene	0.017	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	13	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		93.9 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		124 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		118 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@19-20'
2303333-16 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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	0.0407	0.00500		"	"	"	"	"	"	
2-Methylnaphthalene	0.0793	0.00500		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		111 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		81.6 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.514	0.0100		mg/L	1	BGC0480	03/16/23	03/18/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@19-20'
2303333-16 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.03	0.243	0.204	mg/kg dry	1	BGC0453	03/15/23	03/17/23	EPA 6020B	
Barium	264	0.485	0.383	"	"	"	"	"	"	
Cadmium	0.306	0.243	0.00873	"	"	"	"	"	"	
Copper	12.3	0.485	0.0254	"	"	"	"	"	"	
Lead	10.2	0.243	0.0667	"	"	"	"	"	"	
Nickel	19.5	0.485	0.0740	"	"	"	"	"	"	
Selenium	0.591	0.260	0.175	"	"	"	"	"	"	
Silver	0.0892	0.0243	0.00324	"	"	"	"	"	"	
Zinc	46.0	0.485	0.323	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 11:30

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 11:30

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	46.8	0.0607		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	6.67	0.0607		"	"	"	"	"	"	
Sodium	122	0.0607		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 11:30

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.42	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB04@19-20'
2303333-16 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	82.4			%	1	BGC0456	03/15/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.642	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.57			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@4-5'
2303333-17 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		106 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		99.8 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		76.4 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@4-5'
2303333-17 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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	0.0133	0.00500		"	"	"	"	"	"	
2-Methylnaphthalene	0.0187	0.00500		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		74.1 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		84.8 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0601	0.0100		mg/L	1	BGC0480	03/16/23	03/18/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@4-5'
2303333-17 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.94	0.210	0.177	mg/kg dry	1	BGC0453	03/15/23	03/17/23	EPA 6020B
Barium	73.4	0.421	0.332	"	"	"	"	"	"
Cadmium	0.0759	0.210	0.00757	"	"	"	"	"	"
Copper	6.68	0.421	0.0220	"	"	"	"	"	"
Lead	4.92	0.210	0.0578	"	"	"	"	"	"
Nickel	8.00	0.421	0.0642	"	"	"	"	"	"
Selenium	0.299	0.260	0.175	"	"	"	"	"	"
Silver	0.0235	0.0210	0.00281	"	"	"	"	"	"
Zinc	25.6	0.421	0.280	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	15.5	0.0526		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	8.42	0.0526		"	"	"	"	"	"	
Sodium	19.0	0.0526		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.965	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@4-5'
2303333-17 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	95.1			%	1	BGC0456	03/15/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	2.74	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.07			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@9-10'
2303333-18 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		101 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		99.4 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		76.2 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@9-10'
2303333-18 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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	0.0123	0.00500		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		55.9 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		69.6 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.239	0.0100		mg/L	1	BGC0480	03/16/23	03/18/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 11:50**

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



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@9-10'
2303333-18 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	4.69	0.226	0.191	mg/kg dry	1	BGC0453	03/15/23	03/17/23	EPA 6020B
Barium	383	0.453	0.358	"	"	"	"	"	"
Cadmium	0.149	0.226	0.00815	"	"	"	"	"	"
Copper	9.16	0.453	0.0237	"	"	"	"	"	"
Lead	7.57	0.226	0.0622	"	"	"	"	"	"
Nickel	10.2	0.453	0.0691	"	"	"	"	"	"
Selenium	0.423	0.260	0.175	"	"	"	"	"	"
Silver	0.0201	0.0226	0.00302	"	"	"	"	"	"
Zinc	36.2	0.453	0.301	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	14.3	0.0566		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	16.2	0.0566		"	"	"	"	"	"	
Sodium	35.9	0.0566		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.54	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@9-10'
2303333-18 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	88.3			%	1	BGC0456	03/15/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.380	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 11:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.15			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@14-15'
2303333-19 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGC0415	03/14/23	03/14/23	EPA 8260B	
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	ND	0.50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		102 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		99.2 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0416	03/14/23	03/14/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		49.7 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@14-15'
2303333-19 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		53.4 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		66.3 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.638	0.0100		mg/L	1	BGC0480	03/16/23	03/18/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 11:55**

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: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@14-15'
2303333-19 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	5.23	0.237	0.200	mg/kg dry	1	BGC0453	03/15/23	03/17/23	EPA 6020B
Barium	259	0.474	0.375	"	"	"	"	"	"
Cadmium	0.129	0.237	0.00853	"	"	"	"	"	"
Copper	11.7	0.474	0.0248	"	"	"	"	"	"
Lead	9.49	0.237	0.0651	"	"	"	"	"	"
Nickel	10.7	0.474	0.0723	"	"	"	"	"	"
Selenium	0.579	0.260	0.175	"	"	"	"	"	"
Silver	0.0356	0.0237	0.00316	"	"	"	"	"	"
Zinc	33.4	0.474	0.315	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 11:55

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 11:55

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	103	0.0593		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	19.4	0.0593		"	"	"	"	"	"	
Sodium	95.8	0.0593		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 11:55

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.27	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@14-15'
2303333-19 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	84.4			%	1	BGC0456	03/15/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.526	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.70			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG01@4-5'
2303333-20 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0416	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	4.50	0.222	0.187	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	83.6	0.444	0.351	"	"	"	"	"	"	
Cadmium	0.182	0.222	0.00799	"	"	"	"	"	"	
Copper	5.21	0.444	0.0232	"	"	"	"	"	"	
Lead	6.85	0.222	0.0610	"	"	"	"	"	"	
Nickel	5.60	0.444	0.0677	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0191	0.0222	0.00296	"	"	"	"	"	"	
Zinc	18.3	0.444	0.295	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	16.9	0.0555		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	12.4	0.0555		"	"	"	"	"	"	
Sodium	3.26	0.0555		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG01@4-5'
2303333-20 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Sodium Adsorption Ratio	0.147	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	90.1			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.252	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 13:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.09			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG01@9-10'
2303333-21 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 13:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0402	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 13:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	3.91	0.225	0.189	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	96.6	0.449	0.355	"	"	"	"	"	"	
Cadmium	0.199	0.225	0.00809	"	"	"	"	"	"	
Copper	5.46	0.449	0.0235	"	"	"	"	"	"	
Lead	7.63	0.225	0.0617	"	"	"	"	"	"	
Nickel	5.72	0.449	0.0685	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0144	0.0225	0.00300	"	"	"	"	"	"	
Zinc	19.8	0.449	0.299	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 13:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 13:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	16.0	0.0562		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	17.3	0.0562		"	"	"	"	"	"	
Sodium	3.92	0.0562		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG01@9-10'
2303333-21 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/14/23 13:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.162	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 13:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.0			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 13:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.282	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 13:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.15			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG01@14-15'
2303333-22 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 13:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.140	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 13:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	5.11	0.222	0.187	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	46.5	0.444	0.351	"	"	"	"	"	"	
Cadmium	0.113	0.222	0.00799	"	"	"	"	"	"	
Copper	5.71	0.444	0.0232	"	"	"	"	"	"	
Lead	6.40	0.222	0.0610	"	"	"	"	"	"	
Nickel	5.27	0.444	0.0677	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.00888	0.0222	0.00296	"	"	"	"	"	"	
Zinc	16.8	0.444	0.295	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 13:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 13:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	9.51	0.0555		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	6.67	0.0555		"	"	"	"	"	"	
Sodium	27.3	0.0555		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG01@14-15'
2303333-22 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/14/23 13:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.66	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 13:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.1			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 13:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.266	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 13:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.51			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG01@19-20'
2303333-23 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 13:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0822	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 13:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	7.69	0.228	0.192	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	31.8	0.456	0.360	"	"	"	"	"	"	
Cadmium	0.169	0.228	0.00821	"	"	"	"	"	"	
Copper	7.32	0.456	0.0238	"	"	"	"	"	"	
Lead	21.3	0.228	0.0627	"	"	"	"	"	"	
Nickel	2.74	0.456	0.0695	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0374	0.0228	0.00304	"	"	"	"	"	"	
Zinc	18.1	0.456	0.303	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 13:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 13:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	12.4	0.0570		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	11.2	0.0570		"	"	"	"	"	"	
Sodium	92.8	0.0570		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG01@19-20'
2303333-23 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/14/23 13:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Sodium Adsorption Ratio	4.60	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 13:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	87.7			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 13:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.718	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 13:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.25			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG02@4-5'
2303333-24 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0329	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	2.06	0.213	0.180	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	80.3	0.427	0.337	"	"	"	"	"	"	
Cadmium	0.119	0.213	0.00768	"	"	"	"	"	"	
Copper	4.58	0.427	0.0223	"	"	"	"	"	"	
Lead	4.96	0.213	0.0586	"	"	"	"	"	"	
Nickel	5.02	0.427	0.0651	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0248	0.0213	0.00285	"	"	"	"	"	"	
Zinc	16.0	0.427	0.284	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	36.8	0.0533		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	3.17	0.0533		"	"	"	"	"	"	
Sodium	2.30	0.0533		"	"	"	"	"	"	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG02@4-5'
2303333-24 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/14/23 13:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0977	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 13:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.7			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 13:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.208	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 13:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.02			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG02@9-10'
2303333-25 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 13:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0452	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 13:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	5.26	0.229	0.193	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	116	0.459	0.363	"	"	"	"	"	"	
Cadmium	0.313	0.229	0.00826	"	"	"	"	"	"	
Copper	6.06	0.459	0.0240	"	"	"	"	"	"	
Lead	8.56	0.229	0.0631	"	"	"	"	"	"	
Nickel	7.54	0.459	0.0700	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0184	0.0229	0.00306	"	"	"	"	"	"	
Zinc	21.9	0.459	0.305	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 13:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 13:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	15.5	0.0574		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	22.2	0.0574		"	"	"	"	"	"	
Sodium	4.26	0.0574		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG02@9-10'
2303333-25 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/14/23 13:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Sodium Adsorption Ratio	0.163	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 13:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	87.2			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 13:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.327	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 13:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.12			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG02@14-15'
2303333-26 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0626	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	3.25	0.225	0.190	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	65.0	0.451	0.356	"	"	"	"	"	"	
Cadmium	0.237	0.225	0.00811	"	"	"	"	"	"	
Copper	4.10	0.451	0.0235	"	"	"	"	"	"	
Lead	5.98	0.225	0.0619	"	"	"	"	"	"	
Nickel	5.40	0.451	0.0687	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0131	0.0225	0.00301	"	"	"	"	"	"	
Zinc	16.1	0.451	0.300	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	13.1	0.0563		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	8.42	0.0563		"	"	"	"	"	"	
Sodium	45.6	0.0563		"	"	"	"	"	"	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG02@14-15'
2303333-26 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/14/23 13:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.42	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 13:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.8			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 13:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.353	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 13:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.67			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG02@19-20'
2303333-27 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.227	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	7.18	0.228	0.192	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	38.6	0.455	0.360	"	"	"	"	"	"	
Cadmium	0.117	0.228	0.00819	"	"	"	"	"	"	
Copper	8.12	0.455	0.0238	"	"	"	"	"	"	
Lead	9.92	0.228	0.0625	"	"	"	"	"	"	
Nickel	2.22	0.455	0.0694	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0305	0.0228	0.00304	"	"	"	"	"	"	
Zinc	21.4	0.455	0.303	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/14/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: **03/14/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	17.5	0.0569		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	17.6	0.0569		"	"	"	"	"	"	
Sodium	208	0.0569		"	"	"	"	"	"	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

BG02@19-20'
2303333-27 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/14/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Sodium Adsorption Ratio	8.40	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	87.9			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	1.39	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.19			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@19'-20'
2303333-28 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/14/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGC0427	03/15/23	03/19/23	EPA 8270D SIM	
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		"	"	"	"	"	"	

Date Sampled: **03/14/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		60.9 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		75.0 %		40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/14/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.170	0.0100		mg/L	1	BGC0422	03/14/23	03/17/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/14/23 00:00**

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: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@19'-20'
2303333-28 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.95	0.227	0.191	mg/kg dry	1	BGC0423	03/14/23	03/17/23	EPA 6020B	
Barium	78.4	0.453	0.358	"	"	"	"	"	"	
Cadmium	0.119	0.227	0.00816	"	"	"	"	"	"	
Copper	7.23	0.453	0.0237	"	"	"	"	"	"	
Lead	10.6	0.227	0.0623	"	"	"	"	"	"	
Nickel	3.39	0.453	0.0691	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0331	0.0227	0.00302	"	"	"	"	"	"	
Zinc	18.5	0.453	0.301	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 03/14/23 00:00

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0640	03/20/23	03/20/23	EPA 7196A	

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

Date Sampled: 03/14/23 00:00

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	103	0.0566		mg/L dry	1	BGC0429	03/15/23	03/17/23	EPA 6020B	
Magnesium	30.8	0.0566		"	"	"	"	"	"	
Sodium	45.0	0.0566		"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 03/14/23 00:00

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.999	0.00100		units	1	BGC0533	03/17/23	03/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

SB05@19'-20'
2303333-28 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	88.3			%	1	BGC0486	03/16/23	03/16/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/14/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.976	0.0100		mmhos/cm	1	BGC0489	03/16/23	03/16/23	EPA 120.1	

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

Date Sampled: **03/14/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	9.44			pH Units	1	BGC0488	03/16/23	03/16/23	EPA 9045D	

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0415 - EPA 5030 Soil MS

Blank (BGC0415-BLK1)

Prepared: 03/14/23 Analyzed: 03/15/23

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	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0393		"	0.0400		98.3	50-150			
Surrogate: Toluene-d8	0.0398		"	0.0400		99.5	50-150			
Surrogate: 4-Bromofluorobenzene	0.0434		"	0.0400		109	50-150			

Blank (BGC0415-BLK2)

Prepared: 03/14/23 Analyzed: 03/15/23

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	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0390		"	0.0400		97.6	50-150			
Surrogate: Toluene-d8	0.0387		"	0.0400		96.7	50-150			
Surrogate: 4-Bromofluorobenzene	0.0443		"	0.0400		111	50-150			

LCS (BGC0415-BS1)

Prepared: 03/14/23 Analyzed: 03/15/23

Benzene	0.0924	0.0020	mg/kg	0.125		73.9	70-130			
Toluene	0.111	0.0050	"	0.125		88.6	70-130			
Ethylbenzene	0.138	0.0050	"	0.125		110	70-130			
m,p-Xylene	0.274	0.010	"	0.250		110	70-130			
o-Xylene	0.128	0.0050	"	0.125		102	70-130			
1,2,4-Trimethylbenzene	0.148	0.0050	"	0.125		119	70-130			
1,3,5-Trimethylbenzene	0.151	0.0050	"	0.125		121	70-130			
Naphthalene	0.0971	0.0038	"	0.125		77.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0402		"	0.0400		100	50-150			
Surrogate: Toluene-d8	0.0413		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	50-150			

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0415 - EPA 5030 Soil MS

LCS (BGC0415-BS2)

Prepared: 03/14/23 Analyzed: 03/15/23

Benzene	0.117	0.0020	mg/kg	0.125		93.3	70-130			
Toluene	0.106	0.0050	"	0.125		84.8	70-130			
Ethylbenzene	0.137	0.0050	"	0.125		109	70-130			
m,p-Xylene	0.272	0.010	"	0.250		109	70-130			
o-Xylene	0.127	0.0050	"	0.125		102	70-130			
1,2,4-Trimethylbenzene	0.149	0.0050	"	0.125		119	70-130			
1,3,5-Trimethylbenzene	0.152	0.0050	"	0.125		121	70-130			
Naphthalene	0.103	0.0038	"	0.125		82.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0405		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0405		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	50-150			

Matrix Spike (BGC0415-MS1)

Source: 2303333-04

Prepared: 03/14/23 Analyzed: 03/15/23

Benzene	0.131	0.0020	mg/kg	0.125	0.0172	90.6	70-130			
Toluene	0.0980	0.0050	"	0.125	ND	78.4	70-130			
Ethylbenzene	0.196	0.0050	"	0.125	0.0902	84.5	70-130			
m,p-Xylene	0.617	0.010	"	0.250	0.525	36.9	70-130			QM-02
o-Xylene	0.163	0.0050	"	0.125	0.0502	89.9	70-130			
1,2,4-Trimethylbenzene	0.507	0.0050	"	0.125	0.526	NR	70-130			QM-02
1,3,5-Trimethylbenzene	0.243	0.0050	"	0.125	0.204	31.3	70-130			QM-02
Naphthalene	0.216	0.0038	"	0.125	0.142	59.4	70-130			QM-02
Surrogate: 1,2-Dichloroethane-d4	0.0428		"	0.0400		107	50-150			
Surrogate: Toluene-d8	0.0355		"	0.0400		88.7	50-150			
Surrogate: 4-Bromofluorobenzene	0.0516		"	0.0400		129	50-150			

Matrix Spike (BGC0415-MS2)

Source: 2303333-05

Prepared: 03/14/23 Analyzed: 03/15/23

Benzene	0.143	0.0020	mg/kg	0.125	ND	115	70-130			
Toluene	0.103	0.0050	"	0.125	ND	82.2	70-130			
Ethylbenzene	0.133	0.0050	"	0.125	ND	106	70-130			
m,p-Xylene	0.265	0.010	"	0.250	ND	106	70-130			
o-Xylene	0.125	0.0050	"	0.125	ND	99.6	70-130			
1,2,4-Trimethylbenzene	0.148	0.0050	"	0.125	ND	119	70-130			
1,3,5-Trimethylbenzene	0.148	0.0050	"	0.125	ND	118	70-130			
Naphthalene	0.122	0.0038	"	0.125	0.00363	94.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0412		"	0.0400		103	50-150			
Surrogate: Toluene-d8	0.0406		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0414		"	0.0400		104	50-150			

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0415 - EPA 5030 Soil MS

Matrix Spike Dup (BGC0415-MSD1)		Source: 2303333-04			Prepared: 03/14/23 Analyzed: 03/15/23					
Benzene	0.137	0.0020	mg/kg	0.125	0.0172	95.8	70-130	4.80	30	
Toluene	0.0982	0.0050	"	0.125	ND	78.5	70-130	0.184	30	
Ethylbenzene	0.201	0.0050	"	0.125	0.0902	89.0	70-130	2.84	30	
m,p-Xylene	0.652	0.010	"	0.250	0.525	51.1	70-130	5.58	30	QM-02
o-Xylene	0.164	0.0050	"	0.125	0.0502	91.0	70-130	0.864	30	
1,2,4-Trimethylbenzene	0.563	0.0050	"	0.125	0.526	29.0	70-130	10.5	30	QM-02
1,3,5-Trimethylbenzene	0.238	0.0050	"	0.125	0.204	27.5	70-130	1.97	30	QM-02
Naphthalene	0.227	0.0038	"	0.125	0.142	67.6	70-130	4.58	30	QM-02
Surrogate: 1,2-Dichloroethane-d4		0.0436	"	0.0400		109	50-150			
Surrogate: Toluene-d8		0.0359	"	0.0400		89.8	50-150			
Surrogate: 4-Bromofluorobenzene		0.0533	"	0.0400		133	50-150			

Matrix Spike Dup (BGC0415-MSD2)		Source: 2303333-05			Prepared: 03/14/23 Analyzed: 03/15/23					
Benzene	0.141	0.0020	mg/kg	0.125	ND	112	70-130	1.94	30	
Toluene	0.0982	0.0050	"	0.125	ND	78.6	70-130	4.45	30	
Ethylbenzene	0.132	0.0050	"	0.125	ND	105	70-130	0.885	30	
m,p-Xylene	0.262	0.010	"	0.250	ND	105	70-130	1.12	30	
o-Xylene	0.125	0.0050	"	0.125	ND	99.7	70-130	0.0482	30	
1,2,4-Trimethylbenzene	0.148	0.0050	"	0.125	ND	119	70-130	0.0607	30	
1,3,5-Trimethylbenzene	0.147	0.0050	"	0.125	ND	118	70-130	0.406	30	
Naphthalene	0.118	0.0038	"	0.125	0.00363	91.8	70-130	3.05	30	
Surrogate: 1,2-Dichloroethane-d4		0.0412	"	0.0400		103	50-150			
Surrogate: Toluene-d8		0.0406	"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene		0.0406	"	0.0400		102	50-150			

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0416 - EPA 3550A

Blank (BGC0416-BLK1)

Prepared: 03/14/23 Analyzed: 03/15/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	10.8		"	12.5		86.0	30-150			

Blank (BGC0416-BLK2)

Prepared: 03/14/23 Analyzed: 03/15/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	10.0		"	12.5		80.0	30-150			

LCS (BGC0416-BS1)

Prepared: 03/14/23 Analyzed: 03/15/23

C10-C28 (DRO)	481	50	mg/kg	500		96.3	70-130			
Surrogate: o-Terphenyl	9.13		"	12.5		73.1	30-150			

LCS (BGC0416-BS2)

Prepared: 03/14/23 Analyzed: 03/15/23

C10-C28 (DRO)	513	50	mg/kg	500		103	70-130			
Surrogate: o-Terphenyl	11.4		"	12.5		91.2	30-150			

Matrix Spike (BGC0416-MS1)

Source: 2303333-05

Prepared: 03/14/23 Analyzed: 03/15/23

C10-C28 (DRO)	408	50	mg/kg	500	38.4	74.0	70-130			
Surrogate: o-Terphenyl	9.34		"	12.5		74.7	30-150			

Matrix Spike (BGC0416-MS2)

Source: 2303333-02

Prepared: 03/14/23 Analyzed: 03/15/23

C10-C28 (DRO)	3460	50	mg/kg	500	2900	111	70-130			
Surrogate: o-Terphenyl	10.8		"	12.5		86.6	30-150			

Matrix Spike Dup (BGC0416-MSD1)

Source: 2303333-05

Prepared: 03/14/23 Analyzed: 03/15/23

C10-C28 (DRO)	415	50	mg/kg	500	38.4	75.3	70-130	1.62	20	
Surrogate: o-Terphenyl	9.45		"	12.5		75.6	30-150			

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650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGC0416 - EPA 3550A

Matrix Spike Dup (BGC0416-MSD2)

Source: 2303333-02

Prepared: 03/14/23 Analyzed: 03/15/23

C10-C28 (DRO)	3340	50	mg/kg	500	2900	86.9	70-130	3.55	20	
Surrogate: o-Terphenyl	10.8		"	12.5		86.4	30-150			

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Civitas Resources
650 Southgate Drive
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Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGC0427 - EPA 5030 Soil MS

Blank (BGC0427-BLK1)

Prepared: 03/15/23 Analyzed: 03/18/23

Acenaphthene	ND	0.00500	mg/kg							
Acenaphthene	ND	0.00500	"							
Anthracene	ND	0.00500	"							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0391		"	0.0333	117	40-150				
Surrogate: 2-Methylnaphthalene-d10	0.0391		"	0.0333	117	40-150				
Surrogate: Fluoranthene-d10	0.0300		"	0.0333	90.1	40-150				
Surrogate: Fluoranthene-d10	0.0300		"	0.0333	90.1	40-150				

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0427 - EPA 5030 Soil MS

LCS (BGC0427-BS1)

Prepared: 03/15/23 Analyzed: 03/18/23

Acenaphthene	0.0330	0.00500	mg/kg	0.0333	99.1	31-137
Acenaphthene	0.0330	0.00500	"	0.0333	99.1	31-137
Anthracene	0.0369	0.00500	"	0.0333	111	30-120
Anthracene	0.0369	0.00500	"	0.0333	111	30-120
Benzo (a) anthracene	0.0265	0.00500	"	0.0333	79.5	30-120
Benzo (a) anthracene	0.0265	0.00500	"	0.0333	79.5	30-120
Benzo (a) pyrene	0.0289	0.00500	"	0.0333	86.6	30-120
Benzo (a) pyrene	0.0289	0.00500	"	0.0333	86.6	30-120
Benzo (b) fluoranthene	0.0293	0.00500	"	0.0333	87.9	30-120
Benzo (b) fluoranthene	0.0293	0.00500	"	0.0333	87.9	30-120
Benzo (k) fluoranthene	0.0336	0.00500	"	0.0333	101	30-120
Benzo (k) fluoranthene	0.0336	0.00500	"	0.0333	101	30-120
Chrysene	0.0260	0.00500	"	0.0333	77.9	30-120
Chrysene	0.0260	0.00500	"	0.0333	77.9	30-120
Dibenz (a,h) anthracene	0.0286	0.00500	"	0.0333	85.8	30-120
Dibenz (a,h) anthracene	0.0286	0.00500	"	0.0333	85.8	30-120
Fluoranthene	0.0396	0.00500	"	0.0333	119	30-120
Fluoranthene	0.0396	0.00500	"	0.0333	119	30-120
Fluorene	0.0375	0.00500	"	0.0333	112	30-120
Fluorene	0.0375	0.00500	"	0.0333	112	30-120
Indeno (1,2,3-cd) pyrene	0.0271	0.00500	"	0.0333	81.2	30-120
Indeno (1,2,3-cd) pyrene	0.0271	0.00500	"	0.0333	81.2	30-120
Pyrene	0.0291	0.00500	"	0.0333	87.2	35-142
Pyrene	0.0291	0.00500	"	0.0333	87.2	35-142
1-Methylnaphthalene	0.0361	0.00500	"	0.0333	108	35-142
1-Methylnaphthalene	0.0361	0.00500	"	0.0333	108	35-142
2-Methylnaphthalene	0.0328	0.00500	"	0.0333	98.4	35-142
2-Methylnaphthalene	0.0328	0.00500	"	0.0333	98.4	35-142
Surrogate: 2-Methylnaphthalene-d10	0.0377		"	0.0333	113	40-150
Surrogate: 2-Methylnaphthalene-d10	0.0377		"	0.0333	113	40-150
Surrogate: Fluoranthene-d10	0.0343		"	0.0333	103	40-150
Surrogate: Fluoranthene-d10	0.0343		"	0.0333	103	40-150

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0427 - EPA 5030 Soil MS

LCS Dup (BGC0427-BSD1)

Prepared: 03/15/23 Analyzed: 03/18/23

Acenaphthene	0.0330	0.00500	mg/kg	0.0333	99.0	31-137	0.142	30	
Acenaphthene	0.0330	0.00500	"	0.0333	99.0	31-137	0.142	30	
Anthracene	0.0364	0.00500	"	0.0333	109	30-120	1.38	30	
Anthracene	0.0364	0.00500	"	0.0333	109	30-120	1.38	30	
Benzo (a) anthracene	0.0264	0.00500	"	0.0333	79.1	30-120	0.491	30	
Benzo (a) anthracene	0.0264	0.00500	"	0.0333	79.1	30-120	0.491	30	
Benzo (a) pyrene	0.0294	0.00500	"	0.0333	88.2	30-120	1.82	30	
Benzo (a) pyrene	0.0294	0.00500	"	0.0333	88.2	30-120	1.82	30	
Benzo (b) fluoranthene	0.0289	0.00500	"	0.0333	86.7	30-120	1.37	30	
Benzo (b) fluoranthene	0.0289	0.00500	"	0.0333	86.7	30-120	1.37	30	
Benzo (k) fluoranthene	0.0331	0.00500	"	0.0333	99.4	30-120	1.41	30	
Benzo (k) fluoranthene	0.0331	0.00500	"	0.0333	99.4	30-120	1.41	30	
Chrysene	0.0258	0.00500	"	0.0333	77.3	30-120	0.764	30	
Chrysene	0.0258	0.00500	"	0.0333	77.3	30-120	0.764	30	
Dibenz (a,h) anthracene	0.0270	0.00500	"	0.0333	81.1	30-120	5.69	30	
Dibenz (a,h) anthracene	0.0270	0.00500	"	0.0333	81.1	30-120	5.69	30	
Fluoranthene	0.0333	0.00500	"	0.0333	99.9	30-120	17.4	30	
Fluoranthene	0.0333	0.00500	"	0.0333	99.9	30-120	17.4	30	
Fluorene	0.0373	0.00500	"	0.0333	112	30-120	0.414	30	
Fluorene	0.0373	0.00500	"	0.0333	112	30-120	0.414	30	
Indeno (1,2,3-cd) pyrene	0.0235	0.00500	"	0.0333	70.5	30-120	14.2	30	
Indeno (1,2,3-cd) pyrene	0.0235	0.00500	"	0.0333	70.5	30-120	14.2	30	
Pyrene	0.0295	0.00500	"	0.0333	88.4	35-142	1.36	30	
Pyrene	0.0295	0.00500	"	0.0333	88.4	35-142	1.36	30	
1-Methylnaphthalene	0.0348	0.00500	"	0.0333	104	35-142	3.68	30	
1-Methylnaphthalene	0.0348	0.00500	"	0.0333	104	35-142	3.68	30	
2-Methylnaphthalene	0.0373	0.00500	"	0.0333	112	35-142	12.8	30	
2-Methylnaphthalene	0.0373	0.00500	"	0.0333	112	35-142	12.8	30	
Surrogate: 2-Methylnaphthalene-d10	0.0391		"	0.0333	117	40-150			
Surrogate: 2-Methylnaphthalene-d10	0.0391		"	0.0333	117	40-150			
Surrogate: Fluoranthene-d10	0.0377		"	0.0333	113	40-150			
Surrogate: Fluoranthene-d10	0.0377		"	0.0333	113	40-150			

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0418 - EPA 3050B

Blank (BGC0418-BLK1)

Prepared: 03/14/23 Analyzed: 03/17/23

Boron ND 0.0100 mg/L

LCS (BGC0418-BS1)

Prepared: 03/14/23 Analyzed: 03/17/23

Boron 5.96 0.0100 mg/L 5.00 119 80-120

Duplicate (BGC0418-DUP1)

Source: 2303331-01

Prepared: 03/14/23 Analyzed: 03/17/23

Boron 0.320 0.0100 mg/L 0.286 11.2 20

Matrix Spike (BGC0418-MS1)

Source: 2303331-01

Prepared: 03/14/23 Analyzed: 03/17/23

Boron 6.01 0.0100 mg/L 5.00 0.286 115 75-125

Matrix Spike Dup (BGC0418-MSD1)

Source: 2303331-01

Prepared: 03/14/23 Analyzed: 03/17/23

Boron 6.00 0.0100 mg/L 5.00 0.286 114 75-125 0.287 25

Batch BGC0422 - EPA 3050B

Blank (BGC0422-BLK1)

Prepared: 03/14/23 Analyzed: 03/17/23

Boron ND 0.0100 mg/L

LCS (BGC0422-BS1)

Prepared: 03/14/23 Analyzed: 03/17/23

Boron 5.44 0.0100 mg/L 5.00 109 80-120

Duplicate (BGC0422-DUP1)

Source: 2303333-08

Prepared: 03/14/23 Analyzed: 03/17/23

Boron 0.447 0.0100 mg/L 0.475 6.04 20

Matrix Spike (BGC0422-MS1)

Source: 2303333-08

Prepared: 03/14/23 Analyzed: 03/17/23

Boron 5.85 0.0100 mg/L 5.00 0.475 107 75-125

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0422 - EPA 3050B

Matrix Spike Dup (BGC0422-MSD1)

Source: 2303333-08

Prepared: 03/14/23 Analyzed: 03/17/23

Boron	6.08	0.0100	mg/L	5.00	0.475	112	75-125	3.89	25
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Batch BGC0480 - EPA 3050B

Blank (BGC0480-BLK1)

Prepared: 03/16/23 Analyzed: 03/18/23

Boron	ND	0.0100	mg/L
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LCS (BGC0480-BS1)

Prepared: 03/16/23 Analyzed: 03/18/23

Boron	5.04	0.0100	mg/L	5.00	101	80-120
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Duplicate (BGC0480-DUP1)

Source: 2303289-01

Prepared: 03/16/23 Analyzed: 03/18/23

Boron	0.478	0.0100	mg/L	0.486	1.71	20
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Matrix Spike (BGC0480-MS1)

Source: 2303289-01

Prepared: 03/16/23 Analyzed: 03/18/23

Boron	5.25	0.0100	mg/L	5.00	0.486	95.2	75-125
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Matrix Spike Dup (BGC0480-MSD1)

Source: 2303289-01

Prepared: 03/16/23 Analyzed: 03/18/23

Boron	5.26	0.0100	mg/L	5.00	0.486	95.5	75-125	0.249	25
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

Total Metals by EPA 6020B - Quality Control

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

Batch BGC0417 - EPA 3050B

Blank (BGC0417-BLK1)

Prepared: 03/14/23 Analyzed: 03/16/23

Arsenic	ND	0.200	mg/kg wet
Barium	ND	0.400	"
Cadmium	ND	0.200	"
Copper	ND	0.400	"
Lead	ND	0.200	"
Nickel	ND	0.400	"
Selenium	ND	0.260	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"

LCS (BGC0417-BS1)

Prepared: 03/14/23 Analyzed: 03/16/23

Arsenic	39.7	0.200	mg/kg wet	40.0	99.3	80-120
Barium	36.0	0.400	"	40.0	90.1	80-120
Cadmium	1.88	0.200	"	2.00	93.8	80-120
Copper	38.3	0.400	"	40.0	95.7	80-120
Lead	17.5	0.200	"	20.0	87.7	80-120
Nickel	38.2	0.400	"	40.0	95.4	80-120
Selenium	3.73	0.260	"	4.00	93.4	80-120
Silver	1.68	0.0200	"	2.00	83.9	80-120
Zinc	40.6	0.400	"	40.0	101	80-120

Duplicate (BGC0417-DUP1)

Source: 2303306-01

Prepared: 03/14/23 Analyzed: 03/16/23

Arsenic	2.35	0.251	mg/kg dry	5.30	77.1	20	QR-03
Barium	520	0.503	"	464	11.4	20	
Cadmium	0.211	0.251	"	0.197	6.77	20	
Copper	34.8	0.503	"	18.7	60.0	20	QR-03
Lead	43.6	0.251	"	36.6	17.5	20	
Nickel	6.28	0.503	"	6.11	2.82	20	
Selenium	1.48	0.260	"	1.22	19.2	20	
Silver	0.113	0.0251	"	0.0864	26.8	20	QR-03
Zinc	78.4	0.503	"	84.5	7.52	20	

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BGC0417 - EPA 3050B

Matrix Spike (BGC0417-MS1)			Source: 2303306-01		Prepared: 03/14/23 Analyzed: 03/16/23					
Arsenic	50.0	0.251	mg/kg dry	50.3	5.30	88.9	75-125			
Barium	1070	0.503	"	50.3	464	NR	75-125			QM-02
Cadmium	2.47	0.251	"	2.51	0.197	90.6	75-125			
Copper	62.7	0.503	"	50.3	18.7	87.6	75-125			
Lead	52.3	0.251	"	25.1	36.6	62.8	75-125			QM-05
Nickel	51.3	0.503	"	50.3	6.11	89.9	75-125			
Selenium	5.13	0.260	"	5.03	1.22	77.9	75-125			
Silver	0.844	0.0251	"	2.51	0.0864	30.2	75-125			QM-05
Zinc	136	0.503	"	50.3	84.5	103	75-125			

Matrix Spike Dup (BGC0417-MSD1)			Source: 2303306-01		Prepared: 03/14/23 Analyzed: 03/16/23					
Arsenic	53.0	0.251	mg/kg dry	50.3	5.30	94.9	75-125	5.88	25	
Barium	1150	0.503	"	50.3	464	NR	75-125	7.64	25	QM-02
Cadmium	2.69	0.251	"	2.51	0.197	99.2	75-125	8.43	25	
Copper	66.4	0.503	"	50.3	18.7	94.9	75-125	5.72	25	
Lead	56.0	0.251	"	25.1	36.6	77.2	75-125	6.69	25	
Nickel	54.6	0.503	"	50.3	6.11	96.5	75-125	6.30	25	
Selenium	5.47	0.260	"	5.03	1.22	84.5	75-125	6.27	25	
Silver	0.917	0.0251	"	2.51	0.0864	33.1	75-125	8.26	25	QM-05
Zinc	145	0.503	"	50.3	84.5	120	75-125	5.84	25	

Batch BGC0423 - EPA 3050B

Blank (BGC0423-BLK1)			Prepared: 03/14/23 Analyzed: 03/17/23							
Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Selenium	ND	0.260	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGC0423 - EPA 3050B

LCS (BGC0423-BS1)

Prepared: 03/14/23 Analyzed: 03/17/23

Arsenic	38.9	0.200	mg/kg wet	40.0		97.3	80-120			
Barium	38.5	0.400	"	40.0		96.2	80-120			
Cadmium	1.85	0.200	"	2.00		92.4	80-120			
Copper	37.3	0.400	"	40.0		93.4	80-120			
Lead	18.5	0.200	"	20.0		92.7	80-120			
Nickel	36.3	0.400	"	40.0		90.8	80-120			
Selenium	4.16	0.260	"	4.00		104	80-120			
Silver	1.71	0.0200	"	2.00		85.6	80-120			
Zinc	36.2	0.400	"	40.0		90.5	80-120			

Duplicate (BGC0423-DUP1)

Source: 2303333-06

Prepared: 03/14/23 Analyzed: 03/17/23

Arsenic	5.23	0.229	mg/kg dry		5.25			0.455	20	
Barium	142	0.458	"		143			0.372	20	
Cadmium	0.212	0.229	"		0.209			1.31	20	
Copper	6.95	0.458	"		7.00			0.618	20	
Lead	9.34	0.229	"		9.49			1.51	20	
Nickel	8.46	0.458	"		8.50			0.486	20	
Selenium	ND	0.260	"		ND				20	
Silver	0.0261	0.0229	"		0.0284			8.40	20	
Zinc	22.7	0.458	"		22.8			0.433	20	

Matrix Spike (BGC0423-MS1)

Source: 2303333-06

Prepared: 03/14/23 Analyzed: 03/17/23

Arsenic	48.4	0.229	mg/kg dry	45.8	5.25	94.1	75-125			
Barium	171	0.458	"	45.8	143	60.3	75-125			QM-02
Cadmium	2.32	0.229	"	2.29	0.209	92.1	75-125			
Copper	31.9	0.458	"	45.8	7.00	54.3	75-125			QM-07
Lead	29.8	0.229	"	22.9	9.49	88.5	75-125			
Nickel	33.1	0.458	"	45.8	8.50	53.7	75-125			QM-07
Selenium	4.25	0.260	"	4.58	ND	92.6	75-125			
Silver	1.77	0.0229	"	2.29	0.0284	75.9	75-125			
Zinc	46.8	0.458	"	45.8	22.8	52.2	75-125			QM-07

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGC0423 - EPA 3050B

Matrix Spike Dup (BGC0423-MSD1)			Source: 2303333-06		Prepared: 03/14/23 Analyzed: 03/17/23					
Arsenic	47.4	0.229	mg/kg dry	45.8	5.25	92.1	75-125	1.96	25	
Barium	168	0.458	"	45.8	143	55.5	75-125	1.29	25	QM-02
Cadmium	2.29	0.229	"	2.29	0.209	90.9	75-125	1.13	25	
Copper	32.1	0.458	"	45.8	7.00	54.7	75-125	0.541	25	QM-07
Lead	29.4	0.229	"	22.9	9.49	86.9	75-125	1.23	25	
Nickel	33.2	0.458	"	45.8	8.50	54.0	75-125	0.345	25	QM-07
Selenium	4.44	0.260	"	4.58	ND	96.9	75-125	4.53	25	
Silver	1.76	0.0229	"	2.29	0.0284	75.7	75-125	0.260	25	
Zinc	46.9	0.458	"	45.8	22.8	52.6	75-125	0.362	25	QM-07

Batch BGC0453 - EPA 3050B

Blank (BGC0453-BLK1)			Prepared: 03/15/23 Analyzed: 03/17/23							
Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Selenium	ND	0.260	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							

LCS (BGC0453-BS1)			Prepared: 03/15/23 Analyzed: 03/17/23							
Arsenic	39.7	0.200	mg/kg wet	40.0		99.2	80-120			
Barium	39.1	0.400	"	40.0		97.7	80-120			
Cadmium	1.97	0.200	"	2.00		98.3	80-120			
Copper	38.5	0.400	"	40.0		96.2	80-120			
Lead	19.3	0.200	"	20.0		96.4	80-120			
Nickel	37.8	0.400	"	40.0		94.4	80-120			
Selenium	3.79	0.260	"	4.00		94.9	80-120			
Silver	1.78	0.0200	"	2.00		89.0	80-120			
Zinc	40.1	0.400	"	40.0		100	80-120			

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BGC0453 - EPA 3050B

Duplicate (BGC0453-DUP1)		Source: 2303333-16			Prepared: 03/15/23 Analyzed: 03/17/23					
Arsenic	4.02	0.243	mg/kg dry		4.03			0.355	20	
Barium	266	0.485	"		264			0.786	20	
Cadmium	0.303	0.243	"		0.306			0.999	20	
Copper	12.3	0.485	"		12.3			0.119	20	
Lead	10.3	0.243	"		10.2			0.790	20	
Nickel	19.4	0.485	"		19.5			0.442	20	
Selenium	0.556	0.260	"		0.591			6.05	20	
Silver	0.0996	0.0243	"		0.0892			11.0	20	
Zinc	46.2	0.485	"		46.0			0.573	20	

Matrix Spike (BGC0453-MS1)		Source: 2303333-16			Prepared: 03/15/23 Analyzed: 03/17/23					
Arsenic	51.1	0.243	mg/kg dry	48.5	4.03	96.9	75-125			
Barium	362	0.485	"	48.5	264	200	75-125			QM-02
Cadmium	2.69	0.243	"	2.43	0.306	98.3	75-125			
Copper	59.1	0.485	"	48.5	12.3	96.5	75-125			
Lead	31.2	0.243	"	24.3	10.2	86.4	75-125			
Nickel	63.2	0.485	"	48.5	19.5	90.0	75-125			
Selenium	4.59	0.260	"	4.85	0.591	82.4	75-125			
Silver	2.15	0.0243	"	2.43	0.0892	85.1	75-125			
Zinc	93.0	0.485	"	48.5	46.0	97.0	75-125			

Matrix Spike Dup (BGC0453-MSD1)		Source: 2303333-16			Prepared: 03/15/23 Analyzed: 03/17/23					
Arsenic	51.7	0.243	mg/kg dry	48.5	4.03	98.2	75-125	1.22	25	
Barium	354	0.485	"	48.5	264	184	75-125	2.20	25	QM-02
Cadmium	2.67	0.243	"	2.43	0.306	97.6	75-125	0.600	25	
Copper	59.4	0.485	"	48.5	12.3	97.1	75-125	0.471	25	
Lead	30.9	0.243	"	24.3	10.2	85.1	75-125	0.978	25	
Nickel	63.2	0.485	"	48.5	19.5	90.1	75-125	0.0885	25	
Selenium	4.87	0.260	"	4.85	0.591	88.2	75-125	5.89	25	
Silver	2.19	0.0243	"	2.43	0.0892	86.5	75-125	1.57	25	
Zinc	94.0	0.485	"	48.5	46.0	99.0	75-125	1.04	25	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BGC0640 - 3060A Mod

Blank (BGC0640-BLK1)

Prepared & Analyzed: 03/20/23

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BGC0640-BS1)

Prepared & Analyzed: 03/20/23

Chromium, Hexavalent 21.4 0.30 mg/kg wet 25.0 85.4 80-120

Duplicate (BGC0640-DUP1)

Source: 2303333-05

Prepared & Analyzed: 03/20/23

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BGC0640-MS1)

Source: 2303333-05

Prepared & Analyzed: 03/20/23

Chromium, Hexavalent 23.6 0.30 mg/kg dry 26.5 ND 89.0 75-125

Matrix Spike Dup (BGC0640-MSD1)

Source: 2303333-05

Prepared & Analyzed: 03/20/23

Chromium, Hexavalent 24.2 0.30 mg/kg dry 26.5 ND 91.4 75-125 2.66 20

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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 BGC0429 - General Preparation

Blank (BGC0429-BLK1)

Prepared: 03/15/23 Analyzed: 03/17/23

Calcium	ND	0.0500	mg/L wet
Magnesium	ND	0.0500	"
Sodium	ND	0.0500	"

LCS (BGC0429-BS1)

Prepared: 03/15/23 Analyzed: 03/17/23

Calcium	5.58	0.0500	mg/L wet	5.00	112	70-130
Magnesium	5.25	0.0500	"	5.00	105	70-130
Sodium	4.83	0.0500	"	5.00	96.6	70-130

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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

Summit Scientific

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

Batch BGC0456 - General Preparation

Duplicate (BGC0456-DUP1)		Source: 2303312-01			Prepared: 03/15/23 Analyzed: 03/16/23						
% Solids	83.8		%		82.9			1.10		20	

Batch BGC0486 - General Preparation

Duplicate (BGC0486-DUP1)		Source: 2303333-01			Prepared & Analyzed: 03/16/23						
% Solids	85.1		%		84.5			0.711		20	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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

Summit Scientific

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

Batch BGC0489 - General Preparation

Blank (BGC0489-BLK1)

Prepared & Analyzed: 03/16/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGC0489-BS1)

Prepared & Analyzed: 03/16/23

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 102 95-105

Duplicate (BGC0489-DUP1)

Source: 2303333-01

Prepared & Analyzed: 03/16/23

Specific Conductance (EC) 0.482 0.0100 mmhos/cm 0.486 0.764 20

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

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

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

Batch BGC0488 - General Preparation

LCS (BGC0488-BS1)

Prepared & Analyzed: 03/16/23

pH	9.09	pH Units	9.18	99.0	95-105
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Duplicate (BGC0488-DUP1)

Source: 2303333-01

Prepared & Analyzed: 03/16/23

pH	8.20	pH Units	8.35	1.81	20
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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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
03/21/23 17:04

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
QM-02	The RPD and/or percent recovery for this QC sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
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

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80401

303.277.9310

April 03, 2023

Mike Dinkel

Civitas Resources

650 Southgate Drive

Windsor, CO 80550

RE: Miller 14-17

Work Order # 2303556

Enclosed are the results of analyses for samples received by Summit Scientific on 03/22/23 17:02. 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: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BG03@4.5'	2303556-01	Soil	03/21/23 13:40	03/22/23 17:02
BG03@9-10'	2303556-02	Soil	03/21/23 13:50	03/22/23 17:02
BG03@14-15'	2303556-03	Soil	03/21/23 13:55	03/22/23 17:02
BG03@19-20'	2303556-04	Soil	03/21/23 14:00	03/22/23 17:02
BG04@4.5'	2303556-05	Soil	03/21/23 14:10	03/22/23 17:02
BG04@9-10'	2303556-06	Soil	03/21/23 14:20	03/22/23 17:02
BG04@14-15'	2303556-07	Soil	03/21/23 14:30	03/22/23 17:02
BG04@19-20'	2303556-08	Soil	03/21/23 14:40	03/22/23 17:02
BG05@4.5'	2303556-09	Soil	03/21/23 14:50	03/22/23 17:02
BG05@9-10'	2303556-10	Soil	03/21/23 15:00	03/22/23 17:02
BG05@14-15'	2303556-11	Soil	03/21/23 15:10	03/22/23 17:02
BG05@19-20'	2303556-12	Soil	03/21/23 15:20	03/22/23 17:02

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
2303556	

Client: Civitas		Send Data To: Project Manager: Mike Dinkel		Send Invoice To: Company: Civitas	
Address: 650 Southgate		E-Mail: mdinkel@guardianconsultants		Project Name/Location:	
City/State/Zip: Windsor CO		Show Boundary Consultants, etc		AFE#:	
Phone: 785-691-77		Project Name: Miller 14-17		PO/Billing Codes:	
Sampler Name: Mike Dinkel		Project Number:		Contact: Jacob Evans	

					Preservative				Matrix				Analysis Requested						Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other								
1	B603 @ 4-5'	3-21-23	1340	1			X			X			X							
2	B603 @ 7-10'		1350	1																
3	B603 @ 14-15'		1355	1																
4	B603 @ 19-20'		1400	1																
5	B604 @ 4-5'		1410	1																
6	B604 @ 7-10'		1420	1																
7	B604 @ 14-15'		1430	1																
8	B604 @ 19-20'		1440	1																
9	B605 @ 4-5'		1450	1																
10	B605 @ 7-10'		1500	1																
11	B605 @ 14-15'		1510	1																
12	B605 @ 19-20'		1520	1						X										
13																				
14																				
15																				

Relinquished by: [Signature]	Date/Time: 3-22-23/1300	Received by: [Signature]	Date/Time: 3/22/23 1654	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: [Signature]	Date/Time: 3/22/23 1654	Received by: [Signature]	Date/Time: 3/22/23 1702	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	X Field Turb.	
Temperature Upon Receipt: 9.9	Corrected Temperature	IR gun #: 02	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2303556Client: Civitas Client Project ID: Miller 14-17Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐
☒ ☐ ☐ ☐ ☐
Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 9.9 Thermometer # 02

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: 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? ⁽¹⁾	<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 ²⁺), Hexavalent Chromium (Cr ⁶⁺ , 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? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ 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):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				


 Custodian Printed Name

3/22/23 1702
 Date/Time



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG03@4.5'
2303556-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.136	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	1.61	0.209	0.176	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	65.1	0.419	0.331	"	"	"	"	"	"	
Cadmium	0.0812	0.209	0.00754	"	"	"	"	"	"	
Copper	3.65	0.419	0.0219	"	"	"	"	"	"	
Lead	4.23	0.209	0.0575	"	"	"	"	"	"	
Nickel	4.31	0.419	0.0639	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0239	0.0209	0.00279	"	"	"	"	"	"	
Zinc	13.3	0.419	0.278	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	26.3	0.0523		mg/L dry	1	BGC0912	03/27/23	03/28/23	EPA 6020B	
Magnesium	4.46	0.0523		"	"	"	"	"	"	
Sodium	26.3	0.0523		"	"	"	"	"	"	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG03@4.5'
2303556-01 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 13:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.25	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 13:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.5			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 13:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.292	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 13:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.64			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG03@9-10'
2303556-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.103	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	5.01	0.225	0.190	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	124	0.450	0.356	"	"	"	"	"	"	
Cadmium	0.257	0.225	0.00811	"	"	"	"	"	"	
Copper	6.28	0.450	0.0235	"	"	"	"	"	"	
Lead	8.61	0.225	0.0619	"	"	"	"	"	"	
Nickel	7.36	0.450	0.0687	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0203	0.0225	0.00301	"	"	"	"	"	"	
Zinc	22.6	0.450	0.300	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	29.0	0.0563		mg/L dry	1	BGC0912	03/27/23	03/28/23	EPA 6020B	
Magnesium	16.9	0.0563		"	"	"	"	"	"	
Sodium	57.9	0.0563		"	"	"	"	"	"	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG03@9-10'
2303556-02 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 13:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.11	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 13:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.8			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 13:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.592	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 13:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.05			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG03@14-15'
2303556-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.230	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	3.29	0.226	0.190	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	70.7	0.451	0.356	"	"	"	"	"	"	
Cadmium	0.145	0.226	0.00812	"	"	"	"	"	"	
Copper	5.38	0.451	0.0236	"	"	"	"	"	"	
Lead	6.17	0.226	0.0620	"	"	"	"	"	"	
Nickel	5.36	0.451	0.0688	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0108	0.0226	0.00301	"	"	"	"	"	"	
Zinc	18.2	0.451	0.300	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	28.5	0.0564		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	15.0	0.0564		"	"	"	"	"	"	
Sodium	66.1	0.0564		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG03@14-15'
2303556-03 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Sodium Adsorption Ratio	2.49	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	88.7			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.653	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 13:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	8.30			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG03@19-20'
2303556-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 14:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.301	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 14:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	3.64	0.231	0.194	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	49.5	0.461	0.365	"	"	"	"	"	"	
Cadmium	0.147	0.231	0.00831	"	"	"	"	"	"	
Copper	7.99	0.461	0.0241	"	"	"	"	"	"	
Lead	13.6	0.231	0.0634	"	"	"	"	"	"	
Nickel	3.01	0.461	0.0704	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0300	0.0231	0.00308	"	"	"	"	"	"	
Zinc	20.1	0.461	0.307	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 14:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 14:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	16.8	0.0577		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	8.73	0.0577		"	"	"	"	"	"	
Sodium	58.8	0.0577		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG03@19-20'
2303556-04 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 14:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.90	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 14:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.7			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 14:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.469	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 14:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.20			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG04@4.5'
2303556-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 14:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.120	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 14:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	2.56	0.210	0.177	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	71.5	0.420	0.332	"	"	"	"	"	"	
Cadmium	0.135	0.210	0.00756	"	"	"	"	"	"	
Copper	4.63	0.420	0.0219	"	"	"	"	"	"	
Lead	11.9	0.210	0.0577	"	"	"	"	"	"	
Nickel	5.17	0.420	0.0640	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0256	0.0210	0.00280	"	"	"	"	"	"	
Zinc	28.4	0.420	0.279	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 14:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 14:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	33.9	0.0525		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	9.05	0.0525		"	"	"	"	"	"	
Sodium	2.97	0.0525		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG04@4.5'
2303556-05 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 14:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.117	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 14:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.2			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 14:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.319	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 14:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.83			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG04@9-10'
2303556-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 14:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.152	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 14:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	3.11	0.215	0.181	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	33.0	0.429	0.339	"	"	"	"	"	"	
Cadmium	0.116	0.215	0.00773	"	"	"	"	"	"	
Copper	4.32	0.429	0.0224	"	"	"	"	"	"	
Lead	ND	0.215	0.0590	"	"	"	"	"	"	
Nickel	4.42	0.429	0.0655	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.00816	0.0215	0.00287	"	"	"	"	"	"	
Zinc	16.6	0.429	0.286	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 14:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 14:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	15.5	0.0537		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	7.19	0.0537		"	"	"	"	"	"	
Sodium	32.9	0.0537		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG04@9-10'
2303556-06 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 14:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.74	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 14:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.2			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 14:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.318	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 14:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.17			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG04@14-15'
2303556-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 14:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.173	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 14:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	2.72	0.219	0.184	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	37.8	0.437	0.345	"	"	"	"	"	"	
Cadmium	0.0748	0.219	0.00787	"	"	"	"	"	"	
Copper	4.99	0.437	0.0228	"	"	"	"	"	"	
Lead	6.91	0.219	0.0601	"	"	"	"	"	"	
Nickel	7.53	0.437	0.0667	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0131	0.0219	0.00292	"	"	"	"	"	"	
Zinc	18.7	0.437	0.291	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 14:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 14:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	20.8	0.0547		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	6.78	0.0547		"	"	"	"	"	"	
Sodium	35.6	0.0547		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG04@14-15'
2303556-07 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 14:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.73	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 14:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.5			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 14:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.255	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 14:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.60			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG04@19-20'
2303556-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 14:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.296	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 14:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	29.5	0.235	0.198	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	44.0	0.470	0.372	"	"	"	"	"	"	
Cadmium	0.352	0.235	0.00847	"	"	"	"	"	"	
Copper	18.2	0.470	0.0246	"	"	"	"	"	"	
Lead	ND	0.235	0.0646	"	"	"	"	"	"	
Nickel	4.15	0.470	0.0717	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0612	0.0235	0.00314	"	"	"	"	"	"	
Zinc	23.7	0.470	0.313	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 14:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 14:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	95.3	0.0588		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	23.5	0.0588		"	"	"	"	"	"	
Sodium	27.1	0.0588		"	"	"	"	"	"	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG04@19-20'
2303556-08 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 14:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.645	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 14:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.0			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 14:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.382	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 14:40**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.32			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG05@4.5'
2303556-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 14:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0798	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 14:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	2.70	0.211	0.178	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	79.2	0.422	0.333	"	"	"	"	"	"	
Cadmium	0.178	0.211	0.00759	"	"	"	"	"	"	
Copper	5.30	0.422	0.0220	"	"	"	"	"	"	
Lead	8.25	0.211	0.0579	"	"	"	"	"	"	
Nickel	5.56	0.422	0.0643	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0325	0.0211	0.00282	"	"	"	"	"	"	
Zinc	19.8	0.422	0.280	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 14:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 14:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	34.2	0.0527		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	8.54	0.0527		"	"	"	"	"	"	
Sodium	43.0	0.0527		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG05@4.5'
2303556-09 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 14:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.71	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 14:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.8			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 14:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.532	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 14:50**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.91			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG05@9-10'
2303556-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 15:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.0779	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 15:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	4.16	0.220	0.186	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	429	0.441	0.348	"	"	"	"	"	"	
Cadmium	0.207	0.220	0.00793	"	"	"	"	"	"	
Copper	5.27	0.441	0.0230	"	"	"	"	"	"	
Lead	7.52	0.220	0.0606	"	"	"	"	"	"	
Nickel	6.22	0.441	0.0672	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0137	0.0220	0.00294	"	"	"	"	"	"	
Zinc	20.9	0.441	0.293	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 15:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 15:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	33.0	0.0551		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	17.8	0.0551		"	"	"	"	"	"	
Sodium	58.8	0.0551		"	"	"	"	"	"	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG05@9-10'
2303556-10 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 15:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.05	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 15:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.8			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 15:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.683	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 15:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.99			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG05@14-15'
2303556-11 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 15:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.113	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 15:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	4.85	0.227	0.192	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	348	0.455	0.359	"	"	"	"	"	"	
Cadmium	0.245	0.227	0.00819	"	"	"	"	"	"	
Copper	5.65	0.455	0.0238	"	"	"	"	"	"	
Lead	8.41	0.227	0.0625	"	"	"	"	"	"	
Nickel	6.59	0.455	0.0694	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0150	0.0227	0.00304	"	"	"	"	"	"	
Zinc	22.4	0.455	0.302	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 15:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 15:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	41.3	0.0568		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	21.5	0.0568		"	"	"	"	"	"	
Sodium	70.8	0.0568		"	"	"	"	"	"	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG05@14-15'
2303556-11 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 15:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.23	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 15:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.0			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 15:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.829	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 15:10**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.91			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG05@19-20'
2303556-12 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/21/23 15:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Boron	0.347	0.0100		mg/L	1	BGC0937	03/27/23	03/29/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **03/21/23 15:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Arsenic	0.727	0.235	0.198	mg/kg dry	1	BGC0929	03/27/23	03/31/23	EPA 6020B	
Barium	33.6	0.470	0.371	"	"	"	"	"	"	
Cadmium	0.175	0.235	0.00845	"	"	"	"	"	"	
Copper	8.03	0.470	0.0245	"	"	"	"	"	"	
Lead	19.0	0.235	0.0645	"	"	"	"	"	"	
Nickel	1.40	0.470	0.0716	"	"	"	"	"	"	
Selenium	ND	0.260	0.175	"	"	"	"	"	"	
Silver	0.0662	0.0235	0.00313	"	"	"	"	"	"	
Zinc	2.48	0.470	0.312	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **03/21/23 15:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGC0901	03/27/23	03/27/23	EPA 7196A	

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

Date Sampled: **03/21/23 15:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Calcium	35.1	0.0587		mg/L dry	1	BGC0912	03/27/23	03/29/23	EPA 6020B	
Magnesium	16.3	0.0587		"	"	"	"	"	"	
Sodium	32.0	0.0587		"	"	"	"	"	"	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

BG05@19-20'
2303556-12 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **03/21/23 15:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.12	0.00100		units	1	BGC0976	03/29/23	03/29/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/21/23 15:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.2			%	1	BGC0903	03/27/23	03/28/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/21/23 15:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.291	0.0100		mmhos/cm	1	BGC0958	03/28/23	03/28/23	EPA 120.1	

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

Date Sampled: **03/21/23 15:20**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.45			pH Units	1	BGC0957	03/28/23	03/28/23	EPA 9045D	

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

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 BGC0937 - EPA 3050B

Blank (BGC0937-BLK1)

Prepared: 03/27/23 Analyzed: 03/29/23

Boron	ND	0.0100	mg/L
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LCS (BGC0937-BS1)

Prepared: 03/27/23 Analyzed: 03/29/23

Boron	5.98	0.0100	mg/L	5.00	120	80-120
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Duplicate (BGC0937-DUP1)

Source: 2303540-01

Prepared: 03/27/23 Analyzed: 03/29/23

Boron	0.249	0.0100	mg/L	0.237	5.12	20
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Matrix Spike (BGC0937-MS1)

Source: 2303540-01

Prepared: 03/27/23 Analyzed: 03/29/23

Boron	6.09	0.0100	mg/L	5.00	0.237	117	75-125
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Matrix Spike Dup (BGC0937-MSD1)

Source: 2303540-01

Prepared: 03/27/23 Analyzed: 03/29/23

Boron	6.14	0.0100	mg/L	5.00	0.237	118	75-125	0.785	25
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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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGC0929 - EPA 3050B

Blank (BGC0929-BLK1)

Prepared: 03/27/23 Analyzed: 03/31/23

Arsenic	ND	0.200	mg/kg wet
Barium	ND	0.400	"
Cadmium	ND	0.200	"
Copper	ND	0.400	"
Lead	ND	0.200	"
Nickel	ND	0.400	"
Selenium	ND	0.260	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"

LCS (BGC0929-BS1)

Prepared: 03/27/23 Analyzed: 03/31/23

Arsenic	41.0	0.200	mg/kg wet	40.0	103	80-120
Barium	40.0	0.400	"	40.0	100	80-120
Cadmium	1.94	0.200	"	2.00	97.1	80-120
Copper	39.0	0.400	"	40.0	97.4	80-120
Lead	19.3	0.200	"	20.0	96.4	80-120
Nickel	37.3	0.400	"	40.0	93.3	80-120
Selenium	4.10	0.260	"	4.00	103	80-120
Silver	1.95	0.0200	"	2.00	97.5	80-120
Zinc	37.1	0.400	"	40.0	92.7	80-120

Duplicate (BGC0929-DUP1)

Source: 2303556-01

Prepared: 03/27/23 Analyzed: 03/31/23

Arsenic	1.62	0.209	mg/kg dry	1.61	0.569	20
Barium	66.1	0.419	"	65.1	1.41	20
Cadmium	0.0854	0.209	"	0.0812	5.03	20
Copper	3.70	0.419	"	3.65	1.24	20
Lead	4.29	0.209	"	4.23	1.33	20
Nickel	4.37	0.419	"	4.31	1.52	20
Selenium	ND	0.260	"	ND		20
Silver	0.0239	0.0209	"	0.0239	0.00	20
Zinc	13.4	0.419	"	13.3	0.710	20

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BGC0929 - EPA 3050B

Matrix Spike (BGC0929-MS1)		Source: 2303556-01			Prepared: 03/27/23		Analyzed: 03/31/23			
Arsenic	45.1	0.209	mg/kg dry	41.9	1.61	104	75-125			
Barium	115	0.419	"	41.9	65.1	120	75-125			
Cadmium	2.19	0.209	"	2.09	0.0812	101	75-125			
Copper	32.7	0.419	"	41.9	3.65	69.3	75-125			QM-07
Lead	25.5	0.209	"	20.9	4.23	101	75-125			
Nickel	32.6	0.419	"	41.9	4.31	67.5	75-125			QM-07
Selenium	4.75	0.260	"	4.19	ND	114	75-125			
Silver	2.04	0.0209	"	2.09	0.0239	96.3	75-125			
Zinc	43.4	0.419	"	41.9	13.3	72.0	75-125			QM-07

Matrix Spike Dup (BGC0929-MSD1)		Source: 2303556-01			Prepared: 03/27/23		Analyzed: 03/31/23			
Arsenic	44.6	0.209	mg/kg dry	41.9	1.61	103	75-125	1.06	25	
Barium	114	0.419	"	41.9	65.1	116	75-125	1.20	25	
Cadmium	2.20	0.209	"	2.09	0.0812	101	75-125	0.476	25	
Copper	32.8	0.419	"	41.9	3.65	69.6	75-125	0.462	25	QM-07
Lead	ND	0.209	"	20.9	4.23	NR	75-125	200	25	QM-07
Nickel	32.6	0.419	"	41.9	4.31	67.6	75-125	0.215	25	QM-07
Selenium	4.89	0.260	"	4.19	ND	117	75-125	2.90	25	
Silver	2.04	0.0209	"	2.09	0.0239	96.4	75-125	0.103	25	
Zinc	43.8	0.419	"	41.9	13.3	73.0	75-125	0.924	25	QM-07

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.



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BGC0901 - 3060A Mod

Blank (BGC0901-BLK1)

Prepared & Analyzed: 03/27/23

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BGC0901-BS1)

Prepared & Analyzed: 03/27/23

Chromium, Hexavalent 25.3 0.30 mg/kg wet 25.0 101 80-120

Duplicate (BGC0901-DUP1)

Source: 2303552-01

Prepared & Analyzed: 03/27/23

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BGC0901-MS1)

Source: 2303552-01

Prepared & Analyzed: 03/27/23

Chromium, Hexavalent 33.1 0.30 mg/kg dry 33.9 ND 97.8 75-125

Matrix Spike Dup (BGC0901-MSD1)

Source: 2303552-01

Prepared & Analyzed: 03/27/23

Chromium, Hexavalent 33.3 0.30 mg/kg dry 33.9 ND 98.4 75-125 0.612 20

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

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 BGC0912 - General Preparation

Blank (BGC0912-BLK1)

Prepared: 03/27/23 Analyzed: 03/28/23

Calcium	ND	0.0500	mg/L wet
Magnesium	ND	0.0500	"
Sodium	ND	0.0500	"

LCS (BGC0912-BS1)

Prepared: 03/27/23 Analyzed: 03/28/23

Calcium	4.88	0.0500	mg/L wet	5.00	97.7	70-130
Magnesium	4.70	0.0500	"	5.00	93.9	70-130
Sodium	4.87	0.0500	"	5.00	97.3	70-130

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

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 BGC0903 - General Preparation

Duplicate (BGC0903-DUP1)

Source: 2303539-01

Prepared: 03/27/23 Analyzed: 03/28/23

% Solids	71.9	%	73.1	1.70	20
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Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

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

Summit Scientific

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

Batch BGC0958 - General Preparation

Blank (BGC0958-BLK1)

Prepared & Analyzed: 03/28/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGC0958-BS1)

Prepared & Analyzed: 03/28/23

Specific Conductance (EC) 0.151 0.0100 mmhos/cm 0.150 101 95-105

Duplicate (BGC0958-DUP1)

Source: 2303556-01

Prepared & Analyzed: 03/28/23

Specific Conductance (EC) 0.287 0.0100 mmhos/cm 0.292 1.90 20

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]

Project Manager: Mike Dinkel

Reported:

04/03/23 13:31

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 BGC0957 - General Preparation

LCS (BGC0957-BS1)

Prepared & Analyzed: 03/28/23

pH	9.14	pH Units	9.18	99.6	95-105
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Duplicate (BGC0957-DUP1)

Source: 2303556-01

Prepared & Analyzed: 03/28/23

pH	8.65	pH Units	8.64	0.116	20
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Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Miller 14-17

Project Number: [none]
Project Manager: Mike Dinkel

Reported:
04/03/23 13:31

Notes and Definitions

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