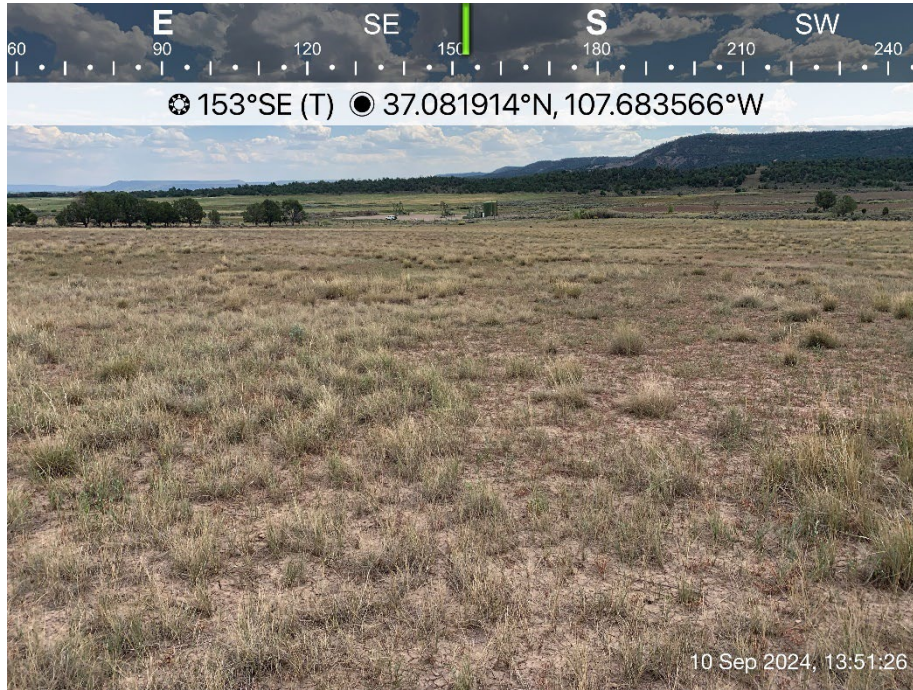


TOPSOIL PROTECTION PLAN CATAMOUNT OUTPOST 33-8 PAD

La Plata County, Colorado



Prepared For:



Catamount Energy Partners, LLC
600 17th St Suite 1400S
Denver, CO 80202

Prepared By:



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PO Box 1653
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Completion Date: May 22, 2025

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1.0 INTRODUCTION

Cottonwood Consulting, LLC (Cottonwood) has prepared this topsoil protection plan for Catamount Energy Partner's (Catamount's) proposed natural gas development project in La Plata County, Colorado. Catamount proposes to expand one well pad, construct one temporary tank pad, and drill ten new gas wells. The project is referred to in this plan as the "Outpost 33-8 Pad".

This plan was created to comply with the requirements of Section 304.c.(14) of the Colorado Energy and Carbon Management Commission (ECMC) and is consistent with ECMC Rule 1002.c (ECMC, 2024b).

2.0 PROJECT DESCRIPTION

Catamount proposes to expand one well pad, construct one temporary tank pad, and drill ten new gas wells in Section 26 Township (T) 33 North (N) Range (R) 8 West (W), New Mexico Principal Meridian (NMPM) in La Plata County, Colorado. Catamount intends to construct the pads and begin drilling the wells in 2025.

The well pad would be an expansion and partial pad share of an active well pad operated by Red Willow Production Company (Red Willow; ECMC, 2024a). The tank pad would be located northwest of the well pad. The well pad oil and gas location (OGL) measures 7.28 acres, with a working pad surface of 5.30 acres. The tank pad OGL measures 5.18 acres, with a working pad surface of 3.20 acres.

The well pad would be located on private land approximately 3.5 miles southwest of Ignacio, Colorado. The elevation of the proposed project is approximately 6,580 feet above mean sea level. Access to the well pad is from existing roads. Catamount would construct a new access road to access the tank pad.

The proposed well pad and tank pad OGLs would be constructed prior to the drilling rig and tanks being mobilized onto location. Site preparation would include clearing the location and grading the well site to create the working pad surface. The well pad would consist of a graveled surface. Access roads to the well pad would be upgraded and maintained as needed prior to drilling operations.

At the well pad, approximately 3,751 cubic yards of topsoil would be stored along the northeastern and south sides of the well pad. At the tank pad, approximately 3,196 cubic yards of topsoil would be stored along the northeastern and eastern sides of the tank pad.

The proposed horizontal wellbores would target minerals from the Mancos Shale. Catamount would use directional drilling and hydraulic fracturing techniques to access the Mancos Shale. Drilling would begin after the drilling rig has been assembled on the well pad. Once drilling begins, the operation would continue 24 hours per day until the bottom hole location is reached. Equipment associated with the drilling rig includes, but is not limited to tanks, blow-out preventer, cuttings bin, pipe storage, trailers for rig workers, portable toilets, garbage bin and pumps.

Hydraulic fracturing is a process used to enhance production by creating or enlarging fractures in

the reservoir rocks through the injection of fluids under high pressure. Creating or enlarging fractures within the reservoir rock allows for increased communication within the reservoir and enhances the flow of gas towards the wellbore. Hydraulic fracturing also bypasses any near-wellbore damage within the geologic formation. The fluids used in hydraulic fracturing are primarily composed of water, with chemicals added for a variety of purposes, including limiting the growth of bacteria and preventing corrosion of the well casing. A proppant, such as sand, is injected with the fluids in order to keep the fractures open after the stimulation process is complete. The vast majority of the hydraulic fracturing fluids would “flowback” to the wellbore for subsequent disposal at an approved facility.

Catamount would use freshwater for construction and dust abatement. Water used during drilling and completions for each well would be sourced from either the Southern Ute Indian Tribe (SUIT) water station in Ignacio, Colorado or the Los Pinos River. Freshwater from the Los Pinos River would be delivered via layflat pipeline and stored in tanks located on the tank pad. Layflat pipelines would be temporary for the duration of active drilling and completion operations. Water sourced from the SUIT water station would be delivered by water trucks.

Reclamation following the drilling and completion activities would occur as soon as the facility is no longer in use for drilling. The entire tank pad would be reclaimed following drilling and completion.

If economically viable, the proposed wells would enter the production/operational phase following completion activities. The wells would produce gas for subsequent transportation, treatment, and sales. The wells would most likely also produce water in conjunction with gas.

When the economics no longer justify continued production of the well, the wells would be plugged and abandoned. The plugging and abandonment would be conducted in compliance with ECMC regulations to ensure that formations, particularly freshwater aquifers, are isolated and to prevent the migration of hydrocarbons and other fluids through or along the wellbore. Typically, a series of cement plugs are set in the wellbore to achieve this isolation and prevent migration of fluids. Following downhole plugging operations, the production equipment on the well pad would be removed, the site would be contoured to match pre-disturbance conditions, the remaining topsoil would be spread on the ground surface, and the site would be seeded. The area would be monitored until revegetation success has reached at least 80 percent (%) of the surrounding area.

3.0 PROJECT LOCATION

The proposed project is located in Section 26, T33N R8W, NMPM in La Plata County, Colorado. The surface location was selected based on landowner preference, proximity to existing roads and pipeline infrastructure, and to avoid impacts to wetlands, ponds, and irrigation ditches. The proposed well pad is located on LPC parcel 595325200071 and the proposed tank pad is located on LPC parcel 595327100812. The parcels are part of the unincorporated portion of La Plata County, which is not zoned. Instead, lands within La Plata County are divided by the La Plata County Comprehensive Plan into planning districts which provide recommendations for the

development of the districts and guidance regarding land development decisions, including supplying land use classifications for the included lands (LPC, 2017). The parcels are in the Southeast Planning District. The Southeast District Plan states that one of the goals is to “Value and esteem natural resource extraction as a viable part of the District’s economy” (LPC, 2019).

Land use in the project area is dominated by oil and gas development and agricultural activities with some residential development. Some grazing occurs in the project area. Vegetation at the well pad is primarily native grasses and forbs, including western wheatgrass (*Pascopyrum smithii*), crested wheatgrass (*Agropyron cristatum*), Indian ricegrass (*Oryzopsis hymenoides*), prairie sagewort (*Artemisia frigida*), white heath aster (*Symphotrichum ericoides*), and curly cup gumweed (*Grindelia squarrosa*), with some big sagebrush (*Artemesia tridentata*). Vegetation at the tank pad is dominated by grasses and forbs. Some Colorado Department of Agriculture noxious weeds were observed on the tank pad and well pad, including field bindweed (*Convolvulus arvensis*; List C) and musk thistle (*Carduus nutans*; List B; CDA, 2024).

Irrigation ditches, ponds, and wetlands are located adjacent to and near the project area. The Pine River Southwest Ditch is located adjacent to and upgradient of the well pad and downgradient of the tank pad. A pond is located approximately 42 feet south of the well pad and other ponds and wetlands are located near the project area. No wetlands or ponds are located within the project area.

4.0 DESKTOP SOIL CLASSIFICATION

Based on the Natural Resources Conservation Service (NRCS) Web Soil Survey, the Arboles clay (3 to 12 percent [%] slopes) comprises 84.4% of the project area, the Zyme-Rock outcrop complex (12 to 65% slopes) comprises 1.0%, and water comprises 14.5% of the project area. However, based on field observations, there is no surface water within the footprint of the Outpost 33-8 Pad. Therefore, if the NRCS-mapped water unit is excluded, the Arboles clay (3 to 12%) comprises 99% of the project area.

The parent material of the Arboles clay is fine-textured alluvium derived from shale. These soils are commonly found on slopes of 3 to 12%. The soil is well drained with a high runoff class with a moderately low to moderately high capacity of the most limiting layer to transmit water. This soil is not prone to flooding or ponding. The Arboles clay is not considered prime farmland.

The parent material of the Zyme-Rock outcrop complex is residuum weathered from shale. These soils are commonly found on slopes of 12 to 65%. The soil is well drained with a very high runoff class with a moderately low to moderately high capacity of the most limiting layer to transmit water. This soil is not prone to flooding or ponding. The Zyme-Rock outcrop complex is not considered prime farmland (NRCS, 2024).

5.0 FIELD SOIL CLASSIFICATION

Cottonwood staff were onsite on September 10, 2024 to dig topsoil pits in the well pad and tank pad areas. Three topsoil pits were dug at the well pad OGL and two topsoil pits were dug at the tank pad OGL. At each pit, Cottonwood evaluated the soil horizons, soil type, moisture content,

root depth, surrounding vegetation, and hue, value, and chroma based on the Munsell color system. Test pits are shown on Figure 1 and photos of each test pit are included in Attachment 1.

5.1 Test Pit 1

Test pit 1 was hand-dug in the well pad working pad surface in the area defined as water by NRCS. There was no standing water or signs of standing water at the location. No hydric vegetation or soils were observed in the test pit.

Test pit 1 was excavated to a depth of 12 inches below ground surface (bgs). The A-horizon (topsoil) was less than one inch thick. The B-horizon (subsoil) extended from approximately 1 inch bgs to 12 inches bgs. Soil was a dry, brown, silty clay. Hue, value, and chroma was 7.5YR 6/2 (Munsell Color, 2009). Some roots were observed from 0 to 8 inches bgs. Soil at the surface was cracked.

Vegetation within a ten-foot radius of the test pit is shown on Table 1, below.

Table 1: Vegetation Coverage Within a Ten-Foot Radius of Test Pit 1.

Plant Species	Coverage (%)
Big sagebrush	10
Curlycup gumweed	35
Other	5
None (bare ground)	50

Notes: % - percent

5.2 Test Pit 2

Test pit 2 was hand-dug in the well pad working pad surface in soils defined by the NRCS as Arboles clay. Test pit 2 was excavated to a depth of 12 inches bgs. The A-horizon was less than one inch thick. The B-horizon extended from approximately 1 inch bgs to 12 inches bgs. Soil was a dry, brown, silty clay. Hue, value, and chroma was 7.5YR 6/2 (Munsell Color, 2009). Some roots were observed from 0 to 8 inches bgs, although roots were most abundant from 0 to 4 inches bgs. Soil at the surface was cracked.

Vegetation within a ten-foot radius of the test pit is shown on Table 2, below.

Table 2: Vegetation Coverage Within a Ten-Foot Radius of Test Pit 2.

Plant Species	Coverage (%)
Big sagebrush	10
Curlycup gumweed	20
Grasses	10
Other	5
None (bare ground)	55

Notes: % - percent

5.3 Test Pit 3

Test pit 3 was hand-dug in the well pad working pad surface in soils defined by the NRCS as Arboles clay. Test pit 3 was excavated to a depth of 12 inches bgs. The A-horizon was less than one inch thick. The B-horizon extended from approximately 1 inch bgs to 12 inches bgs. Soil was a dry, brown, silty clay. Hue, value, and chroma was 7.5YR 6/2 (Munsell Color, 2009). Some roots were observed from 0 to 8 inches bgs, although roots were most abundant from 0 to 4 inches bgs. Soil at the surface was cracked.

Vegetation within a ten-foot radius of the test pit is shown on Table 3, below.

Table 3: Vegetation Coverage Within a Ten-Foot Radius of Test Pit 3.

Plant Species	Coverage (%)
Big sagebrush	30
Curlycup gumweed	15
Grasses and forbs	15
None (bare ground)	40

Notes: % - percent

5.4 Test Pit 4

Test pit 4 was hand-dug in the tank pad working pad surface in soils defined by the NRCS as Arboles clay. Test pit 4 was excavated to a depth of 12 inches bgs. The A-horizon was less than one inch thick. The B-horizon extended from approximately 1 inch bgs to 12 inches bgs. Soil was a dry, brown, silty clay. Hue, value, and chroma was 7.5YR 6/2 (Munsell Color, 2009). Some roots were observed from 0 to 12 inches bgs, although roots were most abundant from 0 to 4 inches bgs. Soil at the surface was cracked.

Vegetation within a ten-foot radius of the test pit is shown on Table 4, below.

Table 4: Vegetation Coverage Within a Ten-Foot Radius of Test Pit 4.

Plant Species	Coverage (%)
Crested wheatgrass	30
Western wheatgrass	5
Common purslane	20
Other	15
None (bare ground)	30

Notes: % - percent

5.5 Test Pit 5

Test pit 5 was hand-dug in the tank pad working pad surface in soils defined by the NRCS as Arboles clay. Test pit 5 was excavated to a depth of 12 inches bgs. The A-horizon was minimal to non-existent. The B-horizon extended from approximately 1 inch bgs to 12 inches bgs. Soil was a dry, brown, silty clay. Hue, value, and chroma was 7.5YR 6/2 (Munsell Color, 2009). Some roots

were observed from 0 to 8 inches bgs, although roots were most abundant from 0 to 4 inches bgs. Soil at the surface was cracked.

Vegetation within a ten-foot radius of the test pit is shown on Table 5, below.

Table 5: Vegetation Coverage Within a Ten-Foot Radius of Test Pit 5.

Plant Species	Coverage (%)
Crested wheatgrass	20
Western wheatgrass	20
Other	20
None (bare ground)	40

Notes: % - percent

5.6 Soil Sampling

On April 25, 2025, Cottonwood was onsite to collect soil samples from the topsoil at each pad. Two soil samples were collected from the well pad and two soil samples were collected from the tank pad. Soil samples were analyzed for agronomic properties and analytes. Soil sampling results from the samples collected at the well pad are included in Table 6.

Table 6: Well Pad Soil Sampling Results.

Parameter	Well Pad Topsoil 1 4/25/2025	Well Pad Topsoil 2 4/25/2025	Units
Depth	0-8	0-8	inches bgs
Organic Matter	4.10	4.19	%
Dry Solids	92.2	92.4	%
Chloride	<10.8	94.2	mg/kg
Ammonia as N	<1.00	1.33	mg/kg
Calcium	33.2	30.3	mg/L
Conductivity	234	212	umho/cm
Magnesium	6.57	6.59	mg/L
pH	7.20	6.96	pH units
SAR	0.25	0.20	no units
Sodium	6.13	4.68	mg/L
Copper	3.17	6.92	mg/kg
Manganese	1.31	1.83	mg/kg
Cation Exchange Capacity	52.8	51.5	meq/100g
Iron	10.8	9.57	mg/kg
Nitrate/Nitrite as N	<1.00	<1.00	mg/kg
Total Phosphorus	1.24	1.37	mg/kg
Potassium	235	230	mg/kg
Zinc	12.7	1.36	mg/kg
Exchangeable Sodium Percentage	0.36	0.29	%
Boron	<1.20	<1.20	mg/L

Parameter	Well Pad Topsoil 1 4/25/2025	Well Pad Topsoil 2 4/25/2025	Units
Acid Neutralization Potential	10.0	10.0	TCaCO3/kT
Sand (%)	28.80	30.00	%
Clay (%)	36.30	28.80	%
Silt (%)	35.00	41.30	%

Notes: bgs – below ground surface; % - percent; mg/kg - milligrams per kilogram; mg/L - milligrams per liter; umho/cm - micromhos per centimeter; meq/100g - milliequivalents per 100 grams; TCaCO3/kT - tons of calcium carbonate per kiloton

Soil sampling results from the samples collected at the tank pad are included in Table 7.

Table 7: Tank Pad Soil Sampling Results.

Parameter	Tank Pad Topsoil 1 4/25/2025	Tank Pad Topsoil 2 4/25/2025	Units
Depth	0-8	0-8	inches bgs
Organic Matter	6.95	3.92	%
Dry Solids	89.9	91.4	%
Chloride	124	<10.9	mg/kg
Ammonia as N	1.44	1.28	mg/kg
Calcium	23.2	29.5	mg/L
Conductivity	182	219	umho/cm
Magnesium	5.61	6.15	mg/L
pH	7.10	7.63	pH units
SAR	0.45	0.33	no units
Sodium	9.25	7.55	mg/L
Copper	1.74	1.72	mg/kg
Manganese	0.576	0.913	mg/kg
Cation Exchange Capacity	54.4	50.9	meq/100g
Iron	6.74	5.27	mg/kg
Nitrate/Nitrite as N	<1.00	<1.00	mg/kg
Total Phosphorus	0.722	0.584	mg/kg
Potassium	172	195	mg/kg
Zinc	0.797	0.593	mg/kg
Exchangeable Sodium Percentage	0.62	0.46	%
Boron	<1.20	<1.20	mg/L
Acid Neutralization Potential	10.0	11.0	TCaCO3/kT
Sand (%)	27.50	25.00	%
Clay (%)	38.80	37.50	%
Silt (%)	33.80	37.50	%

Notes: bgs – below ground surface; % - percent; mg/kg - milligrams per kilogram; mg/L - milligrams per liter; umho/cm - micromhos per centimeter; meq/100g - milliequivalents per 100 grams; TCaCO3/kT - tons of calcium carbonate per kiloton

Results from the samples collected at the well pad were relatively consistent with each other, and results from the samples collected at the tank pad were relatively consistent with each other. Laboratory results are included in Attachment 2.

6.0 TOTAL TOPSOIL SALVAGE

Approximately 3,751 cubic yards of topsoil would be stripped from the well pad and approximately 3,196 cubic yards of topsoil would be stripped from the tank pad.

7.0 BEST MANAGEMENT PRACTICES FOR SHORT- AND LONG-TERM STABILIZATION

Site specific best management practices (BMPs) would be utilized on site to control erosion and protect topsoil in the project area.

7.1 Short-Term Stabilization

Proper stockpiling and management of the topsoil will help to preserve the chemical and biological integrity of the topsoil. Catamount plans to implement the following BMPs to stabilize topsoil stockpiles in the initial phase of construction.

- The upper six inches of topsoil would be stripped following vegetation and site clearing during construction of the OGLs. This topsoil would not be mixed with the underlying subsoil horizons and would be stockpiled and separated from other excavated material.
- Sediment control logs would be installed around topsoil storage areas to prevent erosion.
- The stockpile surface would be reseeded and stabilized with mulch and, or erosion control blankets as necessary to control any erosion and sedimentation.
- Topsoil would be placed in areas away from vehicle and equipment traffic, and stockpiling and compaction will be minimized by limiting the number of equipment passes, limiting stockpile height, and reseeding.
- Surface roughening, reseeding, and mulch would be utilized to protect against wind and water erosion.
- Catamount would use mechanical, biological, and chemical control, as needed, to prevent the establishment of weeds as outlined in Catamount's Weed Management Plan (Attachment 3) .

7.2 Long-Term Stabilization

- During interim reclamation, the stockpiled topsoil would be replaced prior to final seedbed preparation. Once the working pad surface and slopes have been established, a portion of the stored topsoil would be redistributed across all reseeded areas.
- Any remaining topsoil would be stored and marked with a permanent sign for final reclamation of the well pad.
- Spreading of topsoil shall not be done when the ground or topsoil is wet.
- Vehicle/equipment traffic would not be allowed to cross topsoil stockpiles.
- Topsoil areas would be planted with the approved seed mix and covered with certified

weed free mulch.

- Catamount would use mechanical, biological, and chemical control to prevent the establishment of weeds as outlined in Catamount's Weed Management Plan.

Additional control measures may be installed as needed to protect topsoil and adjacent water quality.

8.0 AUTHOR CERTIFICATION STATEMENT

This Topsoil Protection Plan was prepared by Kyle Siesser, PG. Mr. Siesser is a registered professional geoscientist in the State of Louisiana. Mr. Siesser has over 22 years of professional experience in expertise in field soil identification and reclamation techniques and standards. Mr. Siesser's contact information is listed as follows:

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970-764-7356
ksiesser@cottonwoodconsulting.com

Signature:

Kyle D. Siesser

9.0 REFERENCES

Colorado Department of Agriculture (CDA). 2024. Noxious Weed Species ID.

<https://ag.colorado.gov/conservation/noxious-weeds/species-id>

Colorado Energy and Carbon Management Commission (ECMC). 2024a. Facility Inquiry.

https://ecmc.state.co.us/data5_ext.html#/cogis

Colorado Energy and Carbon Management Commission (ECMC). 2024b. Reclamation Regulations 1000 Series

<https://ecmc.state.co.us/documents/reg/Rules/LATEST/1000%20Series%20-%20Reclamation%20Regulations.pdf>

La Plata County (LPC). 2019. Southeast District Plan.

<https://www.lpcgov.org/planning/PDF%20document%20attachments/District%20&%20Comp%20Plans/Southeast%20Final%20to%20Publish.pdf>

La Plata County (LPC). 2017. Comprehensive Plan.

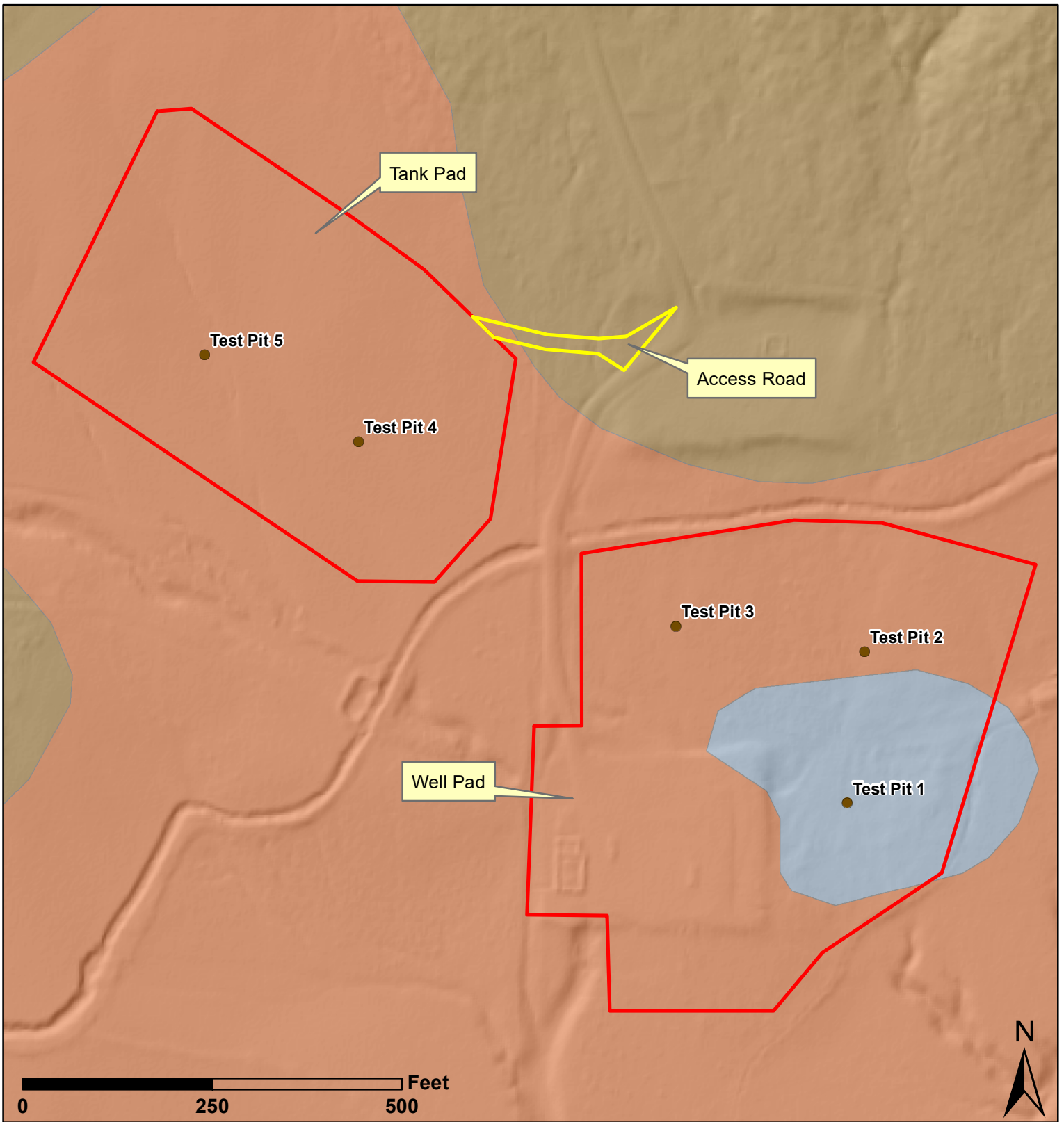
<https://www.lpcgov.org/planning/PDF%20document%20attachments/District%20&%20Comp%20Plans/2017%20Comprehensive%20Plan.pdf>

Munsell Color. 2010. Munsell soil color charts. Grand Rapids, MI

Natural Resources Conservation Service (NRCS). 2024. Web Soil Survey Data.







<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

FIGURE



Notes: Soil data from the NRCS. Only soil in the project area included in the legend.

Legend

-  Project Area
-  Access Road
-  Test Pit
-  5; Arboles clay, 3-12% slopes
-  82; Zyme-Rock outcrop complex, 12-65% slopes
-  84; Water



Mapping by: E. Millar, 10/11/2024
 Coordinate System:
 NAD 1983 UTM Zone 13 N

Location: Section 26 T33N R8W NMPM

Figure 1
Topsoil Protection Map
Outpost 33-8 Pad
Topsoil Protection Plan
Catamount Energy Partners LLC

Attachment 1

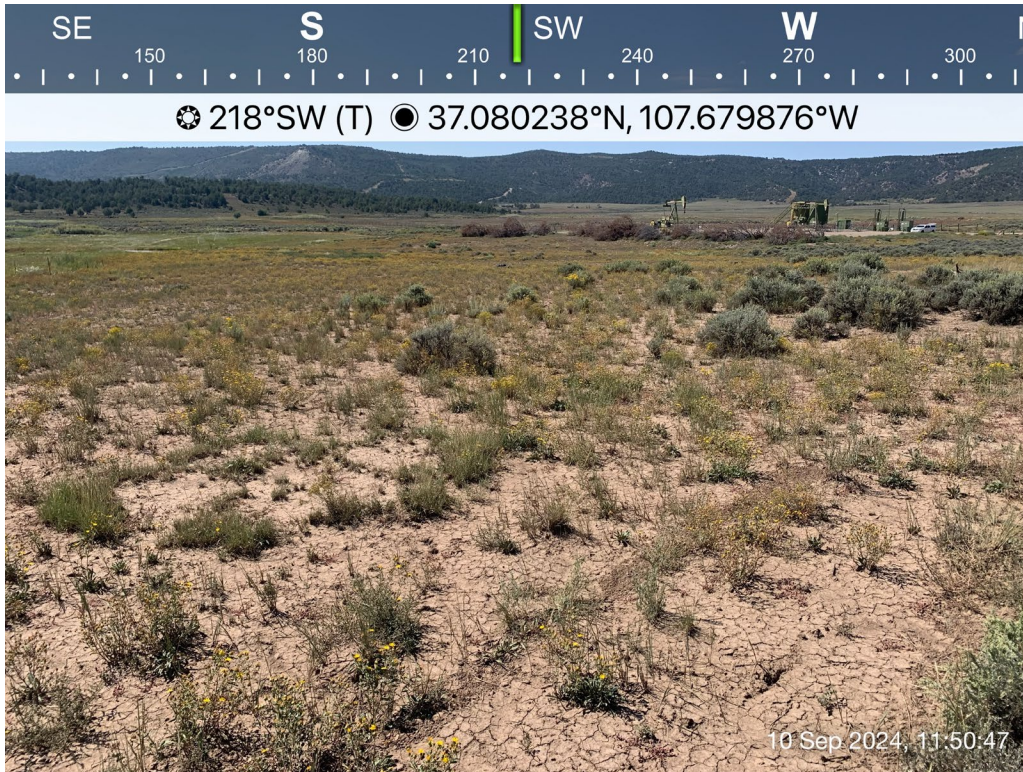


Photo 1: Well pad overview.



Photo 2: Tank pad overview.

Outpost 33-8 Pad Project
Topsoil Protection Plan
Photographic Log
Catamount Energy Partners



Photo 3: Test pit 1.



Photo 4: Test pit 1.

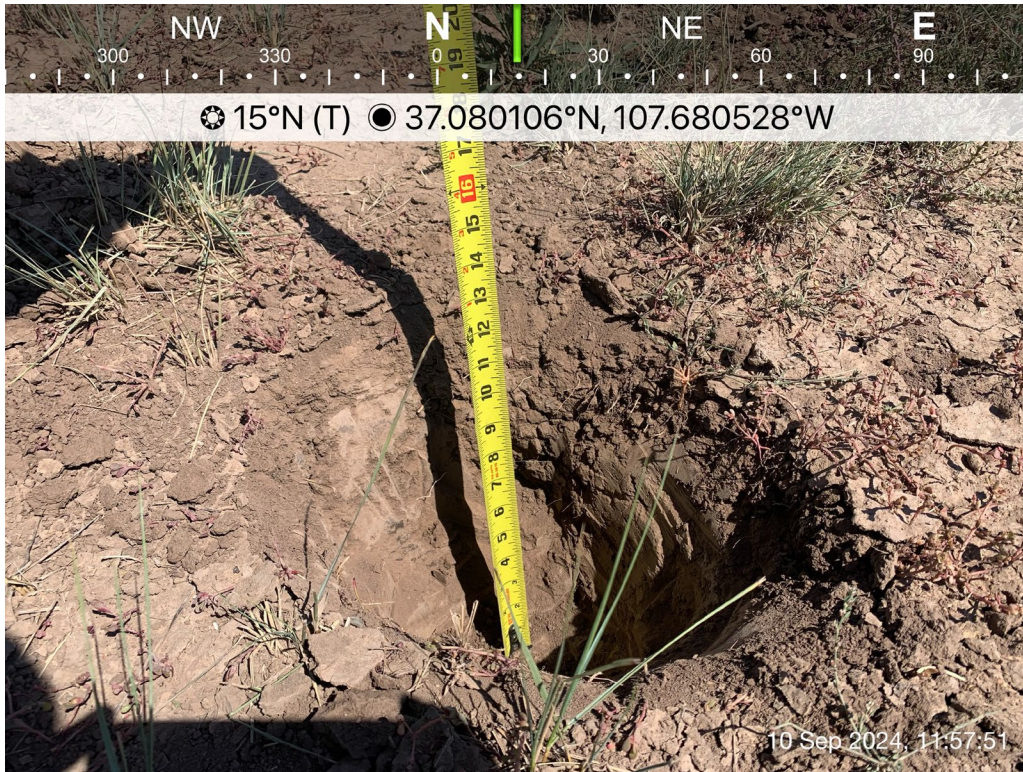


Photo 5: Test pit 2.

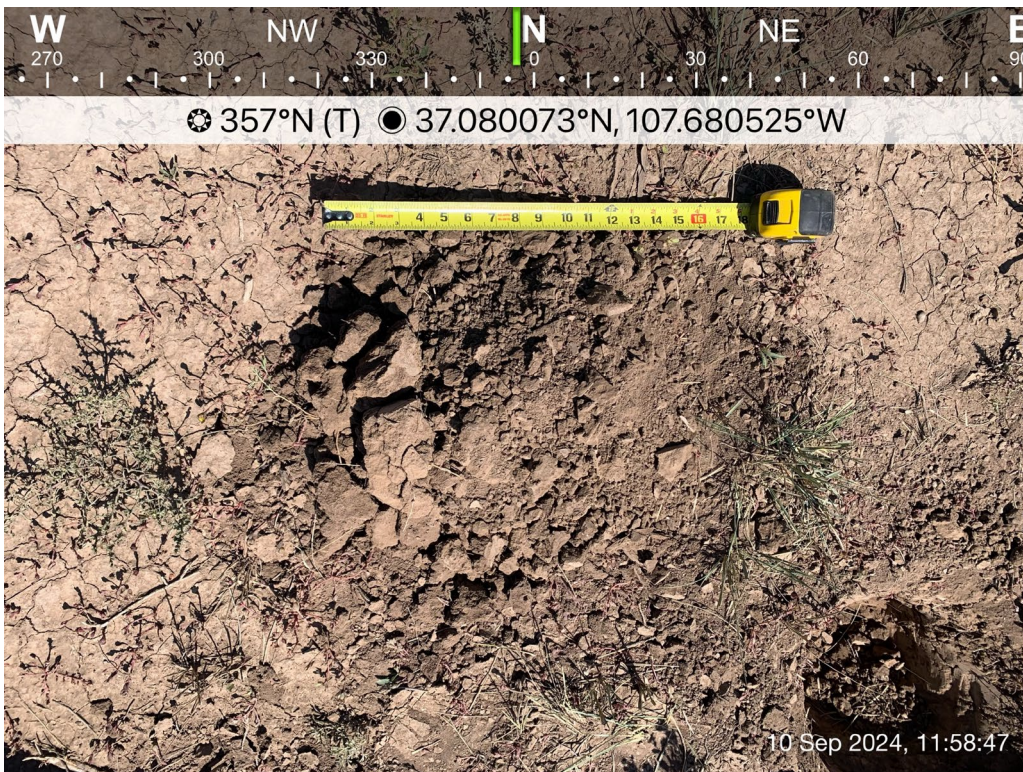


Photo 6: Test pit 2.



Photo 7: Test pit 3.



Photo 8: Test pit 3.



Photo 9: Test pit 4.

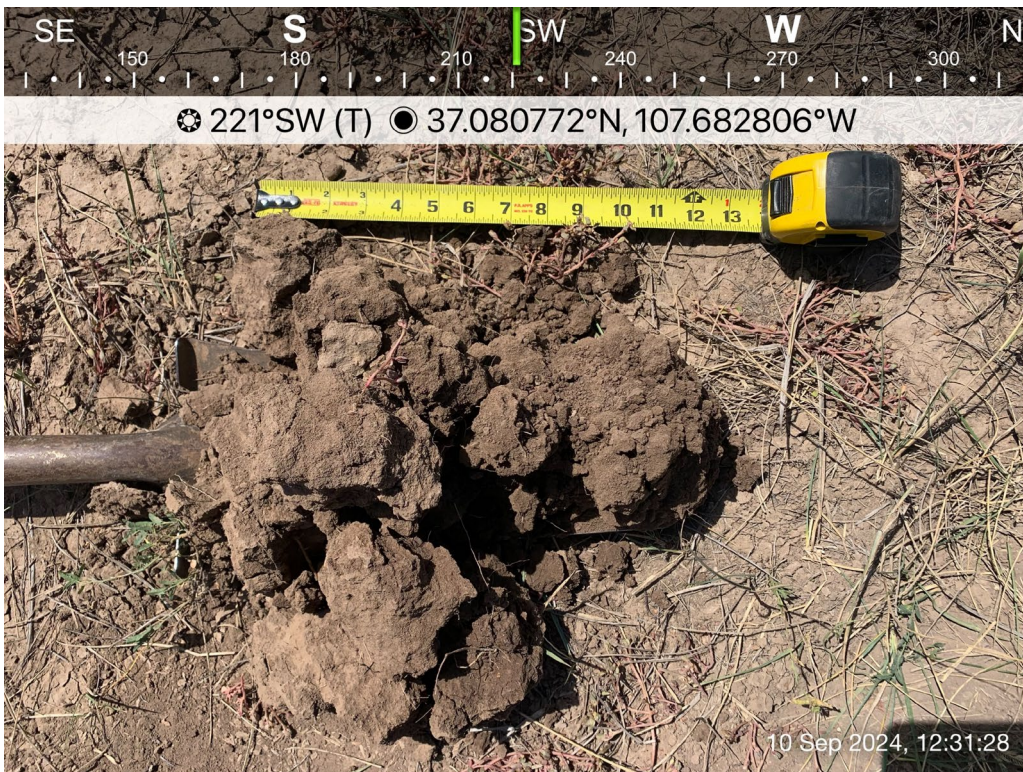


Photo 10: Test pit 4.



Photo 11: Test pit 5.

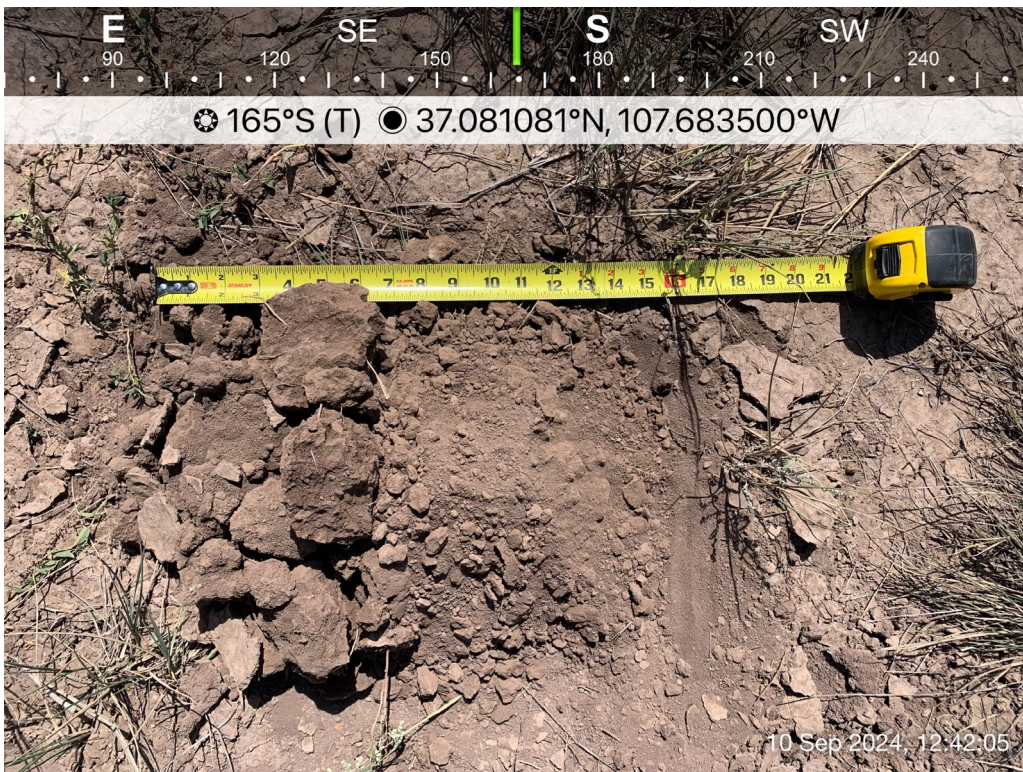


Photo 12: Test pit 5.

Attachment 2



75 Suttle Street
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970.247.4220 Phone
jeremy.allen@greenanalytical.com

02 May 2025

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: Outpost Pad

Enclosed are the results of analyses for samples received by the laboratory on 04/25/25 11:18. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen
Laboratory Director

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C25-00079

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C25-00101

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Cottonwood Consulting
 PO Box 1653
 Durango CO, 81302

Project: ECMC Soil Revegetation
 Project Name / Number: Outpost Pad
 Project Manager: Kyle Siesser

Reported:
 05/02/25 17:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
Well Pad Topsoil 1	2504298-01	Solid	04/25/25 09:45	04/25/25 11:18	
Well Pad Topsoil 2	2504298-02	Solid	04/25/25 09:50	04/25/25 11:18	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:30

Well Pad Topsoil 1

2504298-01 (Soil)

Sampled Date: 04/25/25 09:45

Sampled By: Emma Millar

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Organic Matter	4.10	1.00		%	1	05/02/25 17:17	LOI SSSA#5 P1004		HIC
% Dry Solids	92.2			%	1	04/29/25 16:44	EPA 160.3/1684		HIC
Soluble (DI Water Extraction)									
Chloride	<10.8	10.8	2.61	mg/kg dry	10	05/01/25 17:23	4500-Cl- C		AWG
KCl Exchangeable									
Ammonia as N	<1.00	1.00	0.140	mg/kg dry	10	04/30/25 16:40	EPA 350.1	M5	HIC
Saturated Paste Extraction									
Calcium	33.2	0.100	0.072	mg/L	1	04/30/25 13:59	EPA 200.7		AWG
Conductivity	234			umho/cm@25 C	1	04/29/25 12:00	ASA#9 10-3.3		JDA
Magnesium	6.57	0.100	0.079	mg/L	1	04/30/25 13:59	EPA 200.7		AWG
pH	7.20			pH Units	1	04/29/25 12:00	ASA#9 10-3.2		JDA
SAR	0.25			No Unit	1	04/30/25 13:59	Calculation		AWG
Sodium	6.13	1.00	0.756	mg/L	1	04/30/25 13:59	EPA 200.7		AWG
Total Metals by ICP									
Copper	3.17	0.400	0.184	mg/kg dry	4	05/01/25 17:33	6010B	SD2	AWG
Manganese	1.31	0.200	0.035	mg/kg dry	4	05/01/25 17:33	6010B	SD2	AWG
Sodium Saturation									
Cation Exchange Capacity	52.8	0.04		meq/100 g	1	05/02/25 09:21	USDA-60 19		AWG
ab-DTPA Extracted (Available)									
Iron	10.8	0.200	0.138	mg/kg dry	4	05/02/25 11:43	6010B		AWG
Nitrate/Nitrite as N	<1.00	1.00	0.070	mg/kg dry	10	05/02/25 16:13	EPA 353.2		HIC
Phosphorus, Total	1.24	0.100	0.0431	mg/kg dry	2	05/02/25 12:11	EPA 365.1		AWG
Potassium	235	4.00	0.725	mg/kg dry	4	05/01/25 17:33	6010B	SD2	AWG
Zinc	12.7	0.400	0.027	mg/kg dry	4	05/01/25 17:33	6010B	SD2	AWG

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:30

Well Pad Topsoil 1

2504298-01 (Soil)

Sampled Date: 04/25/25 09:45

Sampled By: Emma Millar

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Exchangable Metals by ICP (Ammonium Acetate Extractable - Soluble)									
Exchangable Sodium Percentage	0.36	0.001		%	1	05/01/25 09:34	USDA-60		AWG
Hot Water Extractable									
Boron	<1.20	1.20	0.214	mg/L	4	04/30/25 14:46	EPA 200.7		AWG
Acid Base Accounting									
Acid Neutralization Potential	10.0	-100	-100	TCaCO3/kT	1	05/01/25 12:49	EPA 600/2-78-054, 3.2.3		JDA
Texture Classification 4Hr									
Textural Class	CLAY LOAM			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Sand, Percent	28.80			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Clay, Percent	36.30			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Silt, Percent	35.00			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:30

Well Pad Topsoil 2

2504298-02 (Soil)

Sampled Date: 04/25/25 09:50

Sampled By: Emma Millar

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Organic Matter	4.19	1.00		%	1	05/02/25 17:17	LOI SSSA#5 P1004		HIC
% Dry Solids	92.4			%	1	04/29/25 16:44	EPA 160.3/1684		HIC
Soluble (DI Water Extraction)									
Chloride	94.2	10.8	2.61	mg/kg dry	10	05/01/25 18:36	4500-Cl- C		AWG
KCl Exchangeable									
Ammonia as N	1.33	1.00	0.140	mg/kg dry	10	04/30/25 16:42	EPA 350.1		HIC
Saturated Paste Extraction									
Calcium	30.3	0.100	0.072	mg/L	1	04/30/25 14:07	EPA 200.7		AWG
Conductivity	212			umho/cm@25 C	1	04/29/25 12:00	ASA#9 10-3.3		JDA
Magnesium	6.59	0.100	0.079	mg/L	1	04/30/25 14:07	EPA 200.7		AWG
pH	6.96			pH Units	1	04/29/25 12:00	ASA#9 10-3.2		JDA
SAR	0.20			No Unit	1	04/30/25 14:07	Calculation		AWG
Sodium	4.68	1.00	0.756	mg/L	1	04/30/25 14:07	EPA 200.7		AWG
Total Metals by ICP									
Copper	6.92	0.400	0.184	mg/kg dry	4	05/01/25 17:40	6010B		AWG
Manganese	1.83	0.200	0.035	mg/kg dry	4	05/01/25 17:40	6010B		AWG
Sodium Saturation									
Cation Exchange Capacity	51.5	0.04		meq/100 g	1	05/02/25 09:21	USDA-60 19		AWG
ab-DTPA Extracted (Available)									
Iron	9.57	0.200	0.138	mg/kg dry	4	05/02/25 11:47	6010B		AWG
Nitrate/Nitrite as N	<1.00	1.00	0.070	mg/kg dry	10	05/02/25 16:15	EPA 353.2		HIC
Phosphorus, Total	1.37	0.100	0.0431	mg/kg dry	2	05/02/25 12:12	EPA 365.1		AWG
Potassium	230	4.00	0.725	mg/kg dry	4	05/01/25 17:40	6010B		AWG
Zinc	1.36	0.400	0.027	mg/kg dry	4	05/01/25 17:40	6010B		AWG

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:30

Well Pad Topsoil 2

2504298-02 (Soil)

Sampled Date: 04/25/25 09:50

Sampled By: Emma Millar

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Exchangable Metals by ICP (Ammonium Acetate Extractable - Soluble)									
Exchangable Sodium Percentage	0.29	0.001		%	1	05/01/25 09:34	USDA-60		AWG
Hot Water Extractable									
Boron	<1.20	1.20	0.214	mg/L	4	04/30/25 14:53	EPA 200.7		AWG
Acid Base Accounting									
Acid Neutralization Potential	10.0	-100	-100	TCaCO ₃ /kT	1	05/01/25 12:49	EPA 600/2-78-054, 3.2.3		JDA
Texture Classification 4Hr									
Textural Class	CLAY LOAM			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Sand, Percent	30.00			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Clay, Percent	28.80			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Silt, Percent	41.30			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:30

Soluble (DI Water Extraction) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251120 - IC- Ion Chromatograph										
Blank (B251120-BLK1)										
Prepared & Analyzed: 05/01/25										
Chloride	ND	10.0	mg/kg wet							
LCS (B251120-BS1)										
Prepared & Analyzed: 05/01/25										
Chloride	239	10.0	mg/kg wet	250		95.5	85-115			
LCS Dup (B251120-BSD1)										
Prepared & Analyzed: 05/01/25										
Chloride	236	10.0	mg/kg wet	250		94.3	85-115	1.21	20	

KCl Exchangeable - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251090 - Lachat										
Blank (B251090-BLK1)										
Prepared: 04/29/25 Analyzed: 04/30/25										
Ammonia as N	ND	1.00	mg/kg wet							
LCS (B251090-BS1)										
Prepared: 04/29/25 Analyzed: 04/30/25										
Ammonia as N	10.7	1.00	mg/kg wet	10.0		107	90-110			
LCS Dup (B251090-BSD1)										
Prepared: 04/29/25 Analyzed: 04/30/25										
Ammonia as N	10.4	1.00	mg/kg wet	10.0		104	90-110	2.47	20	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:30

Saturated Paste Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B251082 - Paste Extract

Blank (B251082-BLK1)

Prepared: 04/29/25 Analyzed: 04/30/25

Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
SAR	0.00		No Unit							
Sodium	ND	1.00	mg/L							

Reference (B251082-SRM1)

Prepared: 04/29/25 Analyzed: 04/30/25

SAR	15.3		No Unit	1.49		NR	90-110			BS3
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Batch B251083 - Paste Extract

Reference (B251083-SRM1)

Prepared & Analyzed: 04/29/25

Conductivity	7540		umho/cm@2 5C	7390		102	90-110			
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Batch B251084 - Paste Extract

Reference (B251084-SRM1)

Prepared & Analyzed: 04/29/25

pH	7.62		pH Units	7.66		99.5	92-108			
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Total Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B251104 - EPA 3050

Blank (B251104-BLK1)

Prepared: 04/30/25 Analyzed: 05/01/25

Copper	ND	0.400	mg/kg dry							
Manganese	ND	0.200	mg/kg dry							

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:30

ab-DTPA Extracted (Available) - Quality Control

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

Batch B251093 - Lachat

Blank (B251093-BLK1)

Prepared: 04/29/25 Analyzed: 05/02/25

Nitrate/Nitrite as N ND 0.200 mg/kg wet

LCS (B251093-BS1)

Prepared: 04/29/25 Analyzed: 05/02/25

Nitrate/Nitrite as N 2.01 0.200 mg/kg wet 2.03 98.8 80-120

LCS Dup (B251093-BSD1)

Prepared: 04/29/25 Analyzed: 05/02/25

Nitrate/Nitrite as N 2.01 0.200 mg/kg wet 2.03 99.0 80-120 0.298 20

Batch B251097 - Lachat

Blank (B251097-BLK1)

Prepared: 04/29/25 Analyzed: 05/02/25

Phosphorus, Total ND 0.100 mg/kg dry

LCS (B251097-BS1)

Prepared: 04/29/25 Analyzed: 05/02/25

Phosphorus, Total 5.42 0.100 mg/kg dry 5.00 108 90-110

LCS Dup (B251097-BSD1)

Prepared: 04/29/25 Analyzed: 05/02/25

Phosphorus, Total 5.43 0.100 mg/kg dry 5.00 109 90-110 0.258 20

Batch B251105 - ab-DTPA Extraction

Blank (B251105-BLK1)

Prepared: 04/30/25 Analyzed: 05/02/25

Iron ND 0.200 mg/kg dry

Potassium ND 4.00 mg/kg dry

Zinc ND 0.400 mg/kg dry

Hot Water Extractable - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B251085 - Paste Extract

Blank (B251085-BLK1)

Prepared: 04/29/25 Analyzed: 04/30/25

Boron ND 1.20 mg/L

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
 PO Box 1653
 Durango CO, 81302

Project: ECMC Soil Revegetation
 Project Name / Number: Outpost Pad
 Project Manager: Kyle Siesser

Reported:
 05/02/25 17:30

Notes and Definitions

SD2 Serial Dilution RPD exceeded the laboratory control limit. All other QC for analyte acceptable.

M5 Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.

BS3 Laboratory control sample did not meet laboratory acceptance criteria.

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
 *Results reported on as received basis unless designated as dry.

RPD Relative Percent Difference

LCS Laboratory Control Sample (Blank Spike)

RL Report Limit

MDL Method Detection Limit

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
 PO Box 1653
 Durango CO, 81302

Project: ECMC Soil Revegetation
 Project Name / Number: Outpost Pad
 Project Manager: Kyle Siesser

Reported:
 05/02/25 17:30

Qualifier Summary

<u>LabNumber</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>TextBody</u>
2504298-01	Ammonia - KCl Exchangeable [LACHAT]	Ammonia as N	M5	Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.
2504298-01	Copper [DTPA Available]	Copper	SD2	Serial Dilution RPD exceeded the laboratory control limit. All other QC for analyte acceptable.
2504298-01	Manganese [DTPA Available]	Manganese	SD2	Serial Dilution RPD exceeded the laboratory control limit. All other QC for analyte acceptable.
2504298-01	Potassium [DTPA Available]	Potassium	SD2	Serial Dilution RPD exceeded the laboratory control limit. All other QC for analyte acceptable.
2504298-01	Zinc [DTPA Available]	Zinc	SD2	Serial Dilution RPD exceeded the laboratory control limit. All other QC for analyte acceptable.
B251082-SRM1	SAR-Calc	SAR	BS3	Laboratory control sample did not meet laboratory acceptance criteria.

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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75 Suttle Street
Durango, CO 81303
(970) 247-4220

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

FORM-006, R 8.0

Note: Write-Out™ or similar products cannot be used on the Chain of Custody

Company or Client: Cottonwood Consulting LLC

Address: PO Box 1653

City: Durango State: CO Zip: 81302

Phone #: 970-764-7356

Contact Person: Kyle Stesser

Email Report to: kstesser@cottonwoodconsulting.com

Project Name(optional):

Outpost Pad

Sampler Name (Print): Emma Millar

Bill to (if different):

ANALYSIS REQUEST

P.O. #:

Rush?

TAT Needed?

5 days

Matrix (check one)

of containers

Sample Name or Location

Lab I.D. 2504-228
Lab Use Only

Well ID	Sample Name or Location	Collected		Matrix (check one)							# of containers	Preservation	Temperature at receipt: °C	Checked by:	On Ice? <input type="checkbox"/>	Therm. used:
		Date	Time	GROUNDWATER	SURFACE WATER	WASTEWATER	PRODUCED WATER	DRINKING WATER	SOIL	OTHER:						
01	Well Pad Topsoil 1	4/25/2025	0945	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No preservation	✓				
02	Well Pad Topsoil 2	4/25/2025	0950	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No preservation	✓	16.3/16.5	KW	<input checked="" type="checkbox"/>	16202
3)																
4)																
5)																
6)																
7)																
8)																
9)																
10)																

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion of the applicable service. In no event shall GAL be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: [Signature] Date: 4/25/25 Time: 1115

Relinquished By: [Signature] Date: 4/25/25 Time: 1114

Relinquished By: [Signature] Date: 4/25/25 Time: 1114

Relinquished By: [Signature] Date: 4/25/25 Time: 1114

† GAL cannot accept verbal changes. Please email changes to receiving@greenanalytical.com
* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.

- SAR – from saturated paste extract
- EC – Saturated Paste
- ESP %
- CEC
- pH- saturated paste method
- % Organic matter – Walkely-Black method
- NO₃ – Nitrate – "&" nitrogen - AB-DTPA
- NH₄ - Ammonium – nitrogen - AB-DTPA
- P – Phosphorous AB-DTPA
- K- Potassium AB-DTPA
- Zn- AB-DTPA
- Fe- AB-DTPA
- Mn - AB-DTPA
- Cu - AB-DTPA
- Cl – Chloride
- % calcium carbonate equivalent - gravimetric
- Texture – by hydrometer with textures reported as USDA
- Boron, hot water soluble method



SAMPLE CONDITION RECEIPT FORM

Date/Initials of person examining contents: mm 4.25.23
 Labeled by initials: _____
 (If different than above)

Client Name: Cottonwood Consulting

Work Order # 2504-298

Courier: Fed Ex UPS USPS Client Kangaroo Third Party Other

Custody Seals on Box/Cooler Present: Yes No Seals Intact: Yes No GAL Cooler #: _____

Thermometer Used: #2 Samples on ice, cooling process has begun: Yes No

Type of Ice: Wet Blue None Cooler Temp: Observed Temp: 16.3 °C Correction Factor: +0.2 °C Final Temp: 16.5 °C

*Temp should be above freezing 6°C

Compliance: Yes No

Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
COC Signed when Relinquished and Received:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Sampler Name and Signature on COC: *Required for compliance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Samples arrived within hold time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Correct Containers Used & Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. <u>5 day</u>
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. <u>Aliquot taken</u>
pH's acceptable upon receipt, where applicable: *Not including metals bottles	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.
Dissolved Testing Needed: Field Filtered: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10.
Sample Labels match COC: -Includes Date/Time/ID Matrix: WT (SL) OT	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11.
Trip Blank Present: Trip Blank Custody Seals Present: VOA's meet headspace requirement (<6mm bubbles)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Non-Conformance(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	13.

Client Notification/Resolution:

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____



75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
jeremy.allen@greenanalytical.com

02 May 2025

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: Outpost Pad

Enclosed are the results of analyses for samples received by the laboratory on 04/25/25 11:18. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen
Laboratory Director

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C25-00079

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C25-00101

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Cottonwood Consulting
 PO Box 1653
 Durango CO, 81302

Project: ECMC Soil Revegetation
 Project Name / Number: Outpost Pad
 Project Manager: Kyle Siesser

Reported:
 05/02/25 17:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
Tank Pad Topsoil 1	2504299-01	Solid	04/25/25 10:10	04/25/25 11:18	
Tank Pad Topsoil 2	2504299-02	Solid	04/25/25 10:15	04/25/25 11:18	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:34

Tank Pad Topsoil 1

2504299-01 (Soil)

Sampled Date: 04/25/25 10:10

Sampled By: Emma Millar

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Organic Matter	6.95	1.00		%	1	05/02/25 17:17	LOI SSSA#5 P1004		HIC
% Dry Solids	89.9			%	1	04/29/25 16:44	EPA 160.3/1684		HIC
Soluble (DI Water Extraction)									
Chloride	124	11.1	2.68	mg/kg dry	10	05/01/25 19:01	4500-Cl- C		AWG
KCl Exchangeable									
Ammonia as N	1.44	1.00	0.140	mg/kg dry	10	04/30/25 16:43	EPA 350.1		HIC
Saturated Paste Extraction									
Calcium	23.2	0.100	0.072	mg/L	1	04/30/25 14:09	EPA 200.7		AWG
Conductivity	182			umho/cm@25 C	1	04/29/25 12:00	ASA#9 10-3.3		JDA
Magnesium	5.61	0.100	0.079	mg/L	1	04/30/25 14:09	EPA 200.7		AWG
pH	7.10			pH Units	1	04/29/25 12:00	ASA#9 10-3.2		JDA
SAR	0.45			No Unit	1	04/30/25 14:09	Calculation		AWG
Sodium	9.25	1.00	0.756	mg/L	1	04/30/25 14:09	EPA 200.7		AWG
Total Metals by ICP									
Copper	1.74	0.400	0.184	mg/kg dry	4	05/01/25 17:42	6010B		AWG
Manganese	0.576	0.200	0.035	mg/kg dry	4	05/01/25 17:42	6010B		AWG
Sodium Saturation									
Cation Exchange Capacity	54.4	0.04		meq/100 g	1	05/02/25 09:21	USDA-60 19		AWG
ab-DTPA Extracted (Available)									
Iron	6.74	0.200	0.138	mg/kg dry	4	05/02/25 11:48	6010B		AWG
Nitrate/Nitrite as N	<1.00	1.00	0.070	mg/kg dry	10	05/02/25 16:17	EPA 353.2		HIC
Phosphorus, Total	0.722	0.100	0.0431	mg/kg dry	2	05/02/25 12:13	EPA 365.1		AWG
Potassium	172	4.00	0.725	mg/kg dry	4	05/01/25 17:42	6010B		AWG
Zinc	0.797	0.400	0.027	mg/kg dry	4	05/01/25 17:42	6010B		AWG

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Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:34

Tank Pad Topsoil 1

2504299-01 (Soil)

Sampled Date: 04/25/25 10:10

Sampled By: Emma Millar

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Exchangable Metals by ICP (Ammonium Acetate Extractable - Soluble)									
Exchangable Sodium Percentage	0.62	0.001		%	1	05/01/25 09:34	USDA-60		AWG
Hot Water Extractable									
Boron	<1.20	1.20	0.214	mg/L	4	04/30/25 14:55	EPA 200.7		AWG
Acid Base Accounting									
Acid Neutralization Potential	10.0	-100	-100	TCaCO3/kT	1	05/01/25 12:49	EPA 600/2-78-054, 3.2.3		JDA
Texture Classification 4Hr									
Textural Class	CLAY LOAM			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Sand, Percent	27.50			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Clay, Percent	38.80			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Silt, Percent	33.80			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:34

Tank Pad Topsoil 2

2504299-02 (Soil)

Sampled Date: 04/25/25 10:15

Sampled By: Emma Millar

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Organic Matter	3.92	1.00		%	1	05/02/25 17:17	LOI SSSA#5 P1004		HIC
% Dry Solids	91.4			%	1	04/29/25 16:44	EPA 160.3/1684		HIC
Soluble (DI Water Extraction)									
Chloride	<10.9	10.9	2.64	mg/kg dry	10	05/01/25 20:14	4500-Cl- C		AWG
KCl Exchangeable									
Ammonia as N	1.28	1.00	0.140	mg/kg dry	10	04/30/25 16:44	EPA 350.1		HIC
Saturated Paste Extraction									
Calcium	29.5	0.100	0.072	mg/L	1	04/30/25 14:10	EPA 200.7		AWG
Conductivity	219			umho/cm@25 C	1	04/29/25 12:00	ASA#9 10-3.3		JDA
Magnesium	6.15	0.100	0.079	mg/L	1	04/30/25 14:10	EPA 200.7		AWG
pH	7.63			pH Units	1	04/29/25 12:00	ASA#9 10-3.2		JDA
SAR	0.33			No Unit	1	04/30/25 14:10	Calculation		AWG
Sodium	7.55	1.00	0.756	mg/L	1	04/30/25 14:10	EPA 200.7		AWG
Total Metals by ICP									
Copper	1.72	0.400	0.184	mg/kg dry	4	05/01/25 17:44	6010B		AWG
Manganese	0.913	0.200	0.035	mg/kg dry	4	05/01/25 17:44	6010B		AWG
Sodium Saturation									
Cation Exchange Capacity	50.9	0.04		meq/100 g	1	05/02/25 09:21	USDA-60 19		AWG
ab-DTPA Extracted (Available)									
Iron	5.27	0.200	0.138	mg/kg dry	4	05/02/25 11:50	6010B		AWG
Nitrate/Nitrite as N	<1.00	1.00	0.070	mg/kg dry	10	05/02/25 16:18	EPA 353.2		HIC
Phosphorus, Total	0.584	0.100	0.0431	mg/kg dry	2	05/02/25 12:14	EPA 365.1		AWG
Potassium	195	4.00	0.725	mg/kg dry	4	05/01/25 17:44	6010B		AWG
Zinc	0.593	0.400	0.027	mg/kg dry	4	05/01/25 17:44	6010B		AWG

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Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:34

Tank Pad Topsoil 2

2504299-02 (Soil)

Sampled Date: 04/25/25 10:15

Sampled By: Emma Millar

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Exchangable Metals by ICP (Ammonium Acetate Extractable - Soluble)									
Exchangable Sodium Percentage	0.46	0.001		%	1	05/01/25 09:34	USDA-60		AWG
Hot Water Extractable									
Boron	<1.20	1.20	0.214	mg/L	4	04/30/25 14:57	EPA 200.7		AWG
Acid Base Accounting									
Acid Neutralization Potential	11.0	-100	-100	TCaCO3/kT	1	05/01/25 12:49	EPA 600/2-78-054, 3.2.3		JDA
Texture Classification 4Hr									
Textural Class	CLAY LOAM			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Sand, Percent	25.00			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Clay, Percent	37.50			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA
Silt, Percent	37.50			%	1	05/01/25 09:45	EPA 600/2-78-054, 3.4.3.5		JDA

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:34

Soluble (DI Water Extraction) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251120 - IC- Ion Chromatograph										
Blank (B251120-BLK1)										
Prepared & Analyzed: 05/01/25										
Chloride	ND	10.0	mg/kg wet							
LCS (B251120-BS1)										
Prepared & Analyzed: 05/01/25										
Chloride	239	10.0	mg/kg wet	250		95.5	85-115			
LCS Dup (B251120-BSD1)										
Prepared & Analyzed: 05/01/25										
Chloride	236	10.0	mg/kg wet	250		94.3	85-115	1.21	20	

KCl Exchangeable - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B251090 - Lachat										
Blank (B251090-BLK1)										
Prepared: 04/29/25 Analyzed: 04/30/25										
Ammonia as N	ND	1.00	mg/kg wet							
LCS (B251090-BS1)										
Prepared: 04/29/25 Analyzed: 04/30/25										
Ammonia as N	10.7	1.00	mg/kg wet	10.0		107	90-110			
LCS Dup (B251090-BSD1)										
Prepared: 04/29/25 Analyzed: 04/30/25										
Ammonia as N	10.4	1.00	mg/kg wet	10.0		104	90-110	2.47	20	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:34

Saturated Paste Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B251082 - Paste Extract

Blank (B251082-BLK1)

Prepared: 04/29/25 Analyzed: 04/30/25

Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
SAR	0.00		No Unit							
Sodium	ND	1.00	mg/L							

Reference (B251082-SRM1)

Prepared: 04/29/25 Analyzed: 04/30/25

SAR	15.3		No Unit	1.49		NR	90-110			BS3
-----	------	--	---------	------	--	----	--------	--	--	-----

Batch B251083 - Paste Extract

Reference (B251083-SRM1)

Prepared & Analyzed: 04/29/25

Conductivity	7540		umho/cm@2 5C	7390		102	90-110			
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Batch B251084 - Paste Extract

Reference (B251084-SRM1)

Prepared & Analyzed: 04/29/25

pH	7.62		pH Units	7.66		99.5	92-108			
----	------	--	----------	------	--	------	--------	--	--	--

Total Metals by ICP - Quality Control

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

Batch B251104 - EPA 3050

Blank (B251104-BLK1)

Prepared: 04/30/25 Analyzed: 05/01/25

Copper	ND	0.400	mg/kg dry							
Manganese	ND	0.200	mg/kg dry							

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Jeremy D Allen, Laboratory Director

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PO Box 1653
Durango CO, 81302

Project: ECMC Soil Revegetation
Project Name / Number: Outpost Pad
Project Manager: Kyle Siesser

Reported:
05/02/25 17:34

ab-DTPA Extracted (Available) - Quality Control

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

Batch B251093 - Lachat

Blank (B251093-BLK1)

Prepared: 04/29/25 Analyzed: 05/02/25

Nitrate/Nitrite as N ND 0.200 mg/kg wet

LCS (B251093-BS1)

Prepared: 04/29/25 Analyzed: 05/02/25

Nitrate/Nitrite as N 2.01 0.200 mg/kg wet 2.03 98.8 80-120

LCS Dup (B251093-BSD1)

Prepared: 04/29/25 Analyzed: 05/02/25

Nitrate/Nitrite as N 2.01 0.200 mg/kg wet 2.03 99.0 80-120 0.298 20

Batch B251097 - Lachat

Blank (B251097-BLK1)

Prepared: 04/29/25 Analyzed: 05/02/25

Phosphorus, Total ND 0.100 mg/kg dry

LCS (B251097-BS1)

Prepared: 04/29/25 Analyzed: 05/02/25

Phosphorus, Total 5.42 0.100 mg/kg dry 5.00 108 90-110

LCS Dup (B251097-BSD1)

Prepared: 04/29/25 Analyzed: 05/02/25

Phosphorus, Total 5.43 0.100 mg/kg dry 5.00 109 90-110 0.258 20

Batch B251105 - ab-DTPA Extraction

Blank (B251105-BLK1)

Prepared: 04/30/25 Analyzed: 05/02/25

Iron ND 0.200 mg/kg dry

Potassium ND 4.00 mg/kg dry

Zinc ND 0.400 mg/kg dry

Hot Water Extractable - Quality Control

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

Batch B251085 - Paste Extract

Blank (B251085-BLK1)

Prepared: 04/29/25 Analyzed: 04/30/25

Boron ND 1.20 mg/L

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
 PO Box 1653
 Durango CO, 81302

Project: ECMC Soil Revegetation
 Project Name / Number: Outpost Pad
 Project Manager: Kyle Siesser

Reported:
 05/02/25 17:34

Notes and Definitions

BS3 Laboratory control sample did not meet laboratory acceptance criteria.

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
 *Results reported on as received basis unless designated as dry.

RPD Relative Percent Difference

LCS Laboratory Control Sample (Blank Spike)

RL Report Limit

MDL Method Detection Limit

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
 PO Box 1653
 Durango CO, 81302

Project: ECMC Soil Revegetation
 Project Name / Number: Outpost Pad
 Project Manager: Kyle Siesser

Reported:
 05/02/25 17:34

Qualifier Summary

<u>LabNumber</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>TextBody</u>
B251082-SRM1	SAR-Calc	SAR	BS3	Laboratory control sample did not meet laboratory acceptance criteria.

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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- SAR – from saturated paste extract
- EC – Saturated Paste
- ESP %
- CEC
- pH- saturated paste method
- % Organic matter – Walkely-Black method
- NO₃ – Nitrate – "&" nitrogen - AB-DTPA
- NH₄ - Ammonium – nitrogen - AB-DTPA
- P – Phosphorous AB-DTPA
- K- Potassium AB-DTPA
- Zn- AB-DTPA
- Fe- AB-DTPA
- Mn - AB-DTPA
- Cu - AB-DTPA
- Cl – Chloride
- % calcium carbonate equivalent - gravimetric
- Texture – by hydrometer with textures reported as USDA
- Boron, hot water soluble method



Date/Initials of person examining contents: NDA 4-25-25

Labeled by initials: _____
(If different than above)

SAMPLE CONDITION RECEIPT FORM

Client Name: Cottonwood Consulting

Work Order # 2504-299

Courier: Fed Ex UPS USPS Client Kangaroo Third Party Other

Custody Seals on Box/Cooler Present: Yes No Seals Intact: Yes No GAL Cooler #: _____

Thermometer Used: #2 Samples on ice, cooling process has begun: Yes No

Type of Ice: Wet Blue None Cooler Temp: Observed Temp: 16.3 °C Correction Factor: +0.2 °C Final Temp: 16.5 °C

*Temp should be above freezing 6°C

Compliance: Yes No

Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
COC Signed when Relinquished and Received:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Sampler Name and Signature on COC: *Required for compliance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Samples arrived within hold time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Correct Containers Used & Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. <u>5 day</u>
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. <u>Aliquot taken</u>
pH's acceptable upon receipt, where applicable: *Not including metals bottles	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.
Dissolved Testing Needed:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10.
Field Filtered: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Labels match COC: -Includes Date/Time/ID	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11.
Matrix:	<u>NDA 4-25-25</u> <input checked="" type="checkbox"/> WT <input checked="" type="checkbox"/> SL <input type="checkbox"/> OT	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
VOA's meet headspace requirement (<6mm bubbles)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Non-Conformance(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	13.

Client Notification/Resolution:

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Attachment 3



Weed Management Plan

March 7, 2024

**Catamount Energy Partners LLC
600 17th Street Ste 1400S
Denver CO 80202**

Introduction

In accordance with the Colorado Noxious Weed Act (Title 35; Article 5.5) and under directives of the “Rules Pertaining to the Administration and Enforcement of the Colorado Noxious Weed Act” (8 CCR 1203-19) (“Weed Rules”) prepared by the Colorado Department of Agriculture; Plant Industry Division, Catamount Energy Partners LLC (Catamount) proposes the following plan for eradication, control and suppression of noxious weeds within their pipeline right of ways, roadways, well sites, transfer stations, and other Catamount owned facilities.

Species Identified for Management

The “Weed Rules” provide three designations for weed species within the State of Colorado; “A” species designated by the Commissioner for eradication within the State, “B” species of which the Commissioner requires implementation of a weed management plan to control and suppress their spread, and “C” species which the Commissioner requires implementation of a noxious weed plan to support statewide control through integrated management.

Control Management Plan

General Methods:

Noxious weeds can be managed by using a combination of control methods including prevention, mechanical, cultural, biological, and chemical.

Prevention involves planting weed free seed, mulching with weed free material, cleaning machinery before moving between sites and controlling weeds prior to their setting seed. Most important, it involves the use of land management practices that minimizes soil disturbance and compaction. It involves short duration, intensive grazing practices that takes half and leaves half of the plant un-grazed. It allows for enough time for plant recovery (re-growth) before more grazing is scheduled. It evaluates the health of a grass plant community and provides for sufficient nutrients and water to optimize plant health and growth.

Mechanical control involves mechanical methods, i.e.: shoveling, mowing, and cultivation.

Cultural controls include over seeding with native plants or desirable grasses and a structured grazing plan.

Biological control incorporates releasing beneficial insects which feed only on certain noxious weeds and well managed grazing practices that target specific weeds.

Chemical control involves the judicious use of herbicides to compliment all control methods and provide an effective noxious weed management program.

Strategy

New Facilities-Revegetation:

Bare-ground application of chemical controls will occur following clean-up, but prior to re-seeding, on project sites with identified significant weedy species establishment before construction operations, as determined by a qualified third party contractor or authorized Catamount personnel.

All disturbed areas of facilities not used as working surfaces or otherwise surfaced with weed free materials shall be top-soiled and seeded with a native grass seed-mix as specified by the land-owner, Catamount or interested government agency. Seed application will be followed by the application of mulch, or weed-free straw crimped to promote seed establishment through moisture retention, and resistance to wind and water erosions.

Newly vegetated areas will be allowed at least one full growing season following successful germination and growth in order to achieve hardiness before chemical herbicides are used in the vegetated areas.

Existing Facilities-Chemical Control:

Control of noxious weeds at existing facilities will be achieved primarily by use of herbicides. Weed control operations will only be performed by Colorado approved Weed Control Contractors. The contractor will treat each facility (excluding 'no spray' areas and leases from the San Juan National Forest) during the growing season.

Bare Ground (Sterilant) Control:

- 1) Areas such as well heads, well pad and pipeline surface equipment, building foundations and other areas where unrestricted access and fire suppression are desired will be controlled by annual use of a chemical sterilant. Chemical application will generally be limited to the confines of barricades, cattle panels or other such work area delineators that are not part of the driving surface. For undefined work areas such as unrestricted wellheads, spraying should be limited to a ten (10') foot radius around the equipment.

- 2) The graveled traffic and work areas will not be bare ground sprayed. When present, these weeds will be treated during the spot spraying phase.

Spot Spraying (Selective) Control:

- 1) Spot spraying should include any areas within the perimeter of the well pad, including the interim reclamation, any transition between work areas and interim areas, and access roads. Native shrubs, such as rabbit brush and sage, shall not be sprayed.
- 2) Spraying along access roads should be limited to weeds immediately adjacent to the road. There should be no overspray into private land. Trees and native shrubs, such as sage and rabbit brush, should not be sprayed.
- 3) During spot spraying operations, any weeds found growing in bare ground treatment areas should also be treated.

Chemical control products can also vary depending on contractor preference and as chemicals and chemical mixes improve for the weed species in this area.

Audit of Weed Control Program Effectiveness

Catamount facilities are frequently inspected by Catamount's Well Technicians who have been trained to report weed infestation. If necessary, additional actions will be taken to reach management objectives.