

August 11, 2022

Kathy Vertiz  
Contract EHS Specialist  
Caerus Oil and Gas  
143 Diamond Avenue  
Parachute, CO 81635

RE: PL18SW Well Pad Final Reclamation Status

Dear Kathy,

Per your request, WestWater biologists have completed vegetation monitoring for the above referenced reclaimed location. We utilized the Bureau of Land Management's (BLM) Assessment, Inventory, and Monitoring (AIM) strategy for data collection and the resulting data has been entered into the Database for Inventory, Monitoring and Assessment (DIMA). In addition to monitoring the reclaimed area we selected and inventoried a reference site for this location.

Attached you will find the results summary and photos of the reclaim and reference areas. Based on the information we collected this year and our understanding of BLM and Colorado Oil & Gas Conservation Commission (COGCC) final reclamation requirements, this site meets the 80% reference criteria for Final Abandonment Notice.

If there is any additional information we can provide or clarify please contact me.

Sincerely,



Environmental Scientist/Project Manager

## PL18SW Well Pad



Reclaim Transect 1



Reclaim Transect 2



Reclaim Transect 3



Reference Transect 1



Reference Transect 2

**Percent Cover Summary Table**

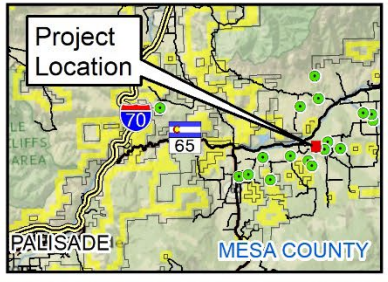
	Reference Site	Reclaim Site
<b>% Foliar Cover</b>	82.0	81.3
<b>% Basal Cover</b>	0.5	0.7
<b>% Bare ground</b>	6.7	0.0
<b>% Desirable Foliar Cover</b>	8.5	50.0
<b>% Desirable of Reference Site</b>		625
<b>80% Desirable of Reference?</b>	<b>Site meets 80% of reference criteria.</b>	

\*Percent Foliar Cover represents all points hit along transect of specific species including lower canopy layers; thus, in some cases percent foliar cover can exceed 100%.

Final Reclamation Site Percent Foliar Cover by Species			
Caerus Oil and Gas			
Location:	PL18SW		
Date:	7/14/2022		
Plot:	Final Reclamation		
Scientific Name	Common Name	Foliar Cover	Basal Cover
Graminoids			
<b>Achnatherum hymenoides</b>	<b>Indian ricegrass</b>	<b>0.7</b>	<b>0</b>
<b>Agropyron cristatum</b>	<b>crested wheatgrass</b>	<b>2.0</b>	<b>0</b>
<b>Bromus inermis</b>	<b>smooth brome</b>	<b>3.3</b>	<b>0</b>
Bromus tectorum	cheatgrass	30.0	0
<b>Elymus lanceolatus</b>	<b>thickspike wheatgrass</b>	<b>2.0</b>	<b>0</b>
<b>Poa fendleriana</b>	<b>muttongrass</b>	<b>1.3</b>	<b>0</b>
<b>Psathyrostachys juncea</b>	<b>Russian wildrye</b>	<b>4.0</b>	<b>0</b>
<b>Pseudoroegneria spicata</b>	<b>blue bunch wheatgrass</b>	<b>4.0</b>	<b>0.7</b>
<b>Thinopyrum intermedium</b>	<b>intermediate wheatgrass</b>	<b>32.7</b>	<b>0</b>
<b>Grass cover subtotal</b>		<b>80.0</b>	<b>0.7</b>
<b>Desirable grass cover subtotal</b>		<b>50.0</b>	<b>0.7</b>
Forbs/Succulents			
Convolvulus arvensis L.	field bindweed	1.3	0
<b>Forb cover subtotal</b>		<b>1.3</b>	<b>0</b>
<b>Desirable forb cover subtotal</b>		<b>0</b>	<b>0</b>
Shrubs			
<b>Shrub cover subtotal</b>		<b>0.0</b>	<b>0</b>
<b>Desirable shrub cover subtotal</b>			<b>0</b>
Trees			
<b>Desirable trees cover subtotal</b>		<b>0</b>	

**Bold = Desirable Species or Semi-desirable Species**

Final Reclamation Site Percent Foliar Cover by Species			
Caerus Oil and Gas			
Location:	PL18SW		
Date:	7/14/2022		
Plot:	Reference		
Scientific Name	Common Name	Foliar Cover	Basal Cover
Graminoids			
<b>Bromus inermis</b>	smooth brome	0.5	0
Bromus tectorum	cheatgrass	50.5	0
<b>Elymus elymoides</b>	squirreltail	1.0	0
<b>Elymus lanceolatus</b>	thickspike wheatgrass	0.5	0
Poa bulbosa	bulbous bluegrass	1.5	0
<b>Poa fendleriana</b>	muttongrass	0.5	0
<b>Thinopyrum intermedium</b>	intermediate wheatgrass	2.5	0
Grass cover subtotal		57.0	0
Desirable grass cover subtotal		5.0	0
Forbs/Succulents			
Alyssum desertorum	desert madwort	9.5	0
Ceratocephala testiculata	curvseed butterwort	2.0	0
Chorispora tenella	crossflower	2.5	0
Erodium cicutarium	redstem stork's bill	1.5	0
<b>Heterotheca villosa</b>	hairy false goldenaster	0.5	0
Sisymbrium altissimum	tall tumbledustard	0.5	0
Sisymbrium loeselii	small tumbleweed mustard	1.5	0
Forb cover subtotal		18.0	0
Desirable forb cover subtotal		0.5	0
Shrubs			
<b>Artemisia tridentata ssp. wyomingensis</b>	Wyoming big sagebrush	2.5	0.5
<b>Ericameria nauseosa</b>	rubber rabbitbrush	0.5	0
Shrub cover subtotal		3.0	0
Desirable shrub cover subtotal		3.0	0.5
Trees			
<b>Juniperus osteosperma (Torr.) Lit</b>	Utah juniper	4.0	0
Desirable trees cover subtotal			0
<b>Bold = Desirable Species or Semi-desirable Species</b>			



**Legend**

- Pad Transect
- Reference Transect

**Pad Status**

- Final Reclamation Monitoring

BLM Field Office

**PL18SW**

**Caerus Oil & Gas**

**Vegetation Monitoring 2022**

**WestWater Engineering**  
Consulting Engineers & Scientists

0                      200                      400  
Feet

Map Source: Z:\Caerus Oil & Gas\BLM Vegetation Monitoring Program\2022\GIS\GJFO Transect Maps 8-10-22\PL18SW.mxd 8/11/2022 rbb