

August 20, 2019

Lindsey Rider
EHS Lead
Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

RE: O18 1095 Well Pad Final Reclamation Status

Dear Lindsey,

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

Percent Cover Summary Table		
	Reference Site	Reclaim Site
% Foliar Cover	70.0	82.7
% Basal Cover	2.0	0.7
% Bare ground	20.0	13.3
% Desirable Foliar Cover	36.0	42.0
% Desirable of Reference Site		116
80% Desirable of Reference?	Site meets 80% of Reference Criteria	

*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%.



Reclaim Transect 1



Reclaim Transect 2



Reclaim Transect 3

Missing photo

Reference Transect

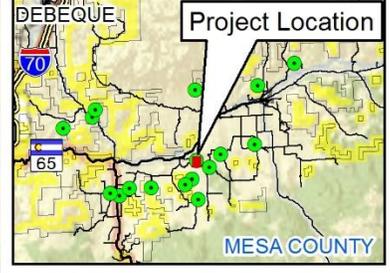
Final Reclamation Site Percent Foliar Cover by Species

Caerus Oil and Gas		
Location:	O18 1095	
Date:	7/18/2019	
Plot:	Final Reclamation	
Scientific Name	Common Name	Foliar Cover
Graminoids		
Aegilops cylindrica	jointed goatgrass	10.0
Bouteloua curtipendula	sideoats grama	0.7
Bromus inermis	smooth brome	5.3
Bromus tectorum	cheatgrass	28.0
Dactylis glomerata	orchardgrass	0.7
Elymus lanceolatus	thickspike wheatgrass	2.7
Koeleria macrantha	prairie Junegrass	1.3
Phleum pratense	timothy	0.7
Psathyrostachys juncea	Russian wildrye	2.0
Thinopyrum intermedium	intermediate wheatgrass	23.3
Grass cover subtotal		74.7
Desirable grass cover subtotal		36.7
Forbs/Succulents		
Alyssum simplex	alyssum	1.3
Chorispora tenella	crossflower	0.7
Convolvulus arvensis	field bindweed	0.7
Medicago sativa	alfalfa	5.3
Forb cover subtotal		8.0
Desirable forb cover subtotal		5.3
Shrubs		
Shrub cover subtotal		0.0
Desirable shrub cover subtotal		
Trees		
Desirable trees cover subtotal		0

Bold = Desirable Species

Final Reclamation Site Percent Foliar Cover by Species		
Caerus Oil and Gas		
Location:	O18 1095	
Date:	7/18/2019	
Plot:	Reference	
Scientific Name	Common Name	Foliar Cover
Graminoids		
Achnatherum hymenoides	Indian ricegrass	8.0
Bromus tectorum	cheatgrass	26.0
Hesperostipa comata	needle and thread	18.0
Sphaeralcea coccinea	scarlet globemallow	6.0
Grass cover subtotal		58.0
Desirable grass cover subtotal		32.0
Forbs/Succulents		
Alyssum desertorum	desert madwort	2.0
Ceratocephala testiculata	curveseed butterwort	2.0
Descurainia sophia	herb sophia	4.0
Forb cover subtotal		8.0
Desirable forb cover subtotal		0
Shrubs		
Artemisia tridentata ssp. wyomingensis	Wyoming big sagebrush	2.0
Krascheninnikovia lanata	winterfat	2.0
Shrub cover subtotal		4.0
Desirable shrub cover subtotal		4.0
Trees		
Desirable trees cover subtotal		

Bold = Desirable Species



O18 1095,
39.18593,
-108.04266

Legend

- Pad Transect
- Reference Transect

Pad Status

- Final Reclamation Monitoring
- Interim Reclamation Monitoring

- BLM Field Office

O18 1095
Caerus Oil & Gas
BLM
Grand Junction Field Office
Vegetation Monitoring 2019

WestWater Engineering
 Consulting Engineers & Scientists

0 200 400
 Feet