

General Information	
Date	5/23/2019
Project Name	Rifle Quarry
Operator	Colorado Lien Company
Serial Number	COC-077876
Project Classification	Plan of Operations
Project Location	T4S R92W Sec15, Garfield County
Inspection Purpose	Reclamation site inspection
Time Period Onsite	1 hour
Attendees	Jessica Lopez Pearce, BLM Geologist (report author)
	Carla DeYoung, BLM Ecologist

New Remarks

On May 23, 2019, I inspected the Colorado Lien Company Rifle Quarry with BLM Ecologist Carla DeYoung to check on final reclamation progress of the remaining 1.65 permitted acres and ensure compliance with the Final Reclamation Plan (which was authorized July 1, 2016). The weather was cloudy with temperatures in the 40's.

I observed the access road blocked per the Final Reclamation Plan. There was evidence of approved alternative growth media and mulching material (a combination of fish emulsion solids, spent grain solids, spent potato mash solids, mulch, and topsoil) on the surface of the road; however, it appeared to be dried out and washed away in some areas, exposing bare rock and mineral soil. There was significantly more vegetation along the sides and down the middle of the old road than in the wheel ruts. Thistle and mullein were observed growing on the access road. Signage was present at the southeast corner of the main quarry area.

The 1.65-acre site includes a highwall on the north side and a backfilled and regraded area to the south. The backfilled quarry floor terminates to the east with an east-facing, 20-foot high, approximately 2:1 slope. There is a bermed access route up the eastern slope to the recontoured quarry floor. The eastern slope, the quarry floor, the northern upper access bench, as well as most of the remaining quarry area contained alternative growth media and mulching material. However, some of this material had washed away, exposing bare rock and mineral soil. It was a wet winter and vegetation was starting to grow within the quarry floor. Vegetation from the spring growing season covered approximately 75% of the recontoured quarry floor. Sage, yarrow, blue flax, and purple mustard were prevalent. We also observed invasive species including mullein, cheat grass, bull thistle, and common burdock. The mullein, thistle, and burdock must be eradicated by the operator. Future inspections will monitor the revegetation within the reclaimed area.

There were several 24" tall sediment control windrows running perpendicular to the west-to-east gradient on the quarry floor. These windrows were fairly effective at trapping sediment and eroded growth media. The vegetation on the quarry floor also appeared to prevent erosion. There was evidence of gullying and erosion of material in channels on the quarry floor. The channelization and erosion wasn't extensive, but additional erosion could occur if measures are not taken. The westernmost sediment berm was near failure. The operator



must ensure adequate sediment control within the site. Future inspections will continue to monitor effectiveness of sediment control.

Recommended Changes to Operations or Corrective Actions Needed

- BLM requires Pete Lien and Sons to perform noxious weed removal within the Rifle Quarry. In order to conduct weed spraying activities on public lands, Pete Lien and Sons will need to submit a Pesticide Use Proposal to the CRVFO. Please contact Kristy Wallner, CRVFO Weeds Coordinator, at 970-876-9023 or kwallner@blm.gov to learn the process of submitting and receiving approval for your PUP. Processing time for a PUP may take approximately 60 days. Alternatively, Pete Lien and Sons may consider manual removal of these weeds as this would not require a PUP and at this point there were no large infestations. <u>Within 30 days of receipt of this report, Pete Lien and Sons must either initiate the PUP process or conduct manual weed removal.</u>
- Within 30 days of receipt, Pete Lien and Sons must take steps to prevent erosion and ensure adequate sediment control and soil stability within Rifle Quarry.

Photo Summary



Photo 1: Grasses, forbs, and Scotch thistle were observed growing in the middle and along the sides of the access road, but there was very little vegetation success within the wheel ruts. Clipboard for scale.





Photo 2: Looking west to the quarry floor. The heavy winter precipitation has helped revegetation efforts.



Photo 3: Mullein was observed growing on the quarry floor. Clipboard for scale.





Photo 4: Looking south to the westernmost stormwater berm. The berm showed evidence of having been overtopped recently. Additionally, sediment is accumulating upstream from the berm. This berm is in need of maintenance.



Photo 5: Looking southeast from the upper bench on the north side of the quarry. Two years ago, the grasses were abundant and green on the slope between the upper bench and lower bench. Some grasses are sprouting this year.





Photo 6: Looking east from the western end of the quarry floor. Gullying and erosion are beginning on this end of the site.