

General Information	
Date	9/9/2019
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)
	Stephanie Buckreis, BLM Park Ranger
	Scott Norman, Pete Lien & Sons, Inc. Quarry Superintendent

New Remarks

On September 9, 2019, I inspected the Rifle Quarry with BLM Park Ranger Stephanie Buckreis and Pete Lien & Sons, Inc. Quarry Superintendent Scott Norman to check on the progress of final reclamation within the remaining 1.65 permitted acres and ensure compliance with the Final Reclamation Plan (which was authorized July 1, 2016). The weather was clear and sunny with temperatures in the high 50'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 had washed away in some areas, exposing crushed rock. There was significantly more vegetation along the sides and down the middle of the old road than in the wheel ruts.

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. The soil appeared to be holding moisture from the previous night's rain. However, some of the material had washed away, exposing crushed rock. It was a wet winter, but it has been a relatively dry summer. Most of the vegetation in the main quarry area was dried and brown. Vegetation from the summer growing season covered approximately 60-65% of the recontoured quarry floor. Yarrow and London rocket, an annual mustard, were the most abundant species. We also observed invasive species including mullein and Bull thistle. The mullein and thistle 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 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 will occur if measures are not taken. The westernmost sediment berm had become overtopped, as sediment had built up to the top of the berm on the up-gradient side. 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 the noxious weeds as this would not require a PUP and at this point there were no large infestations. Within 30 days of receipt of this report, Pete Lien and Sons must either initiate the PUP process or conduct manual weed removal.
- 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 and forbs 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.





Photo 2: Looking west to the quarry floor. Dried and brown London rocket, an annual mustard, is abundant on the south-facing slope.



Photo 3: Mullein was observed growing on the far eastern side and within the quarry.





Photo 4: Looking north to the revegetation on the upper bench slope. Some sage was growing in this area.



Photo 5. Bull thistle was observed on the upper bench of the reclaimed quarry. Clipboard for scale.





Photo 6. Looking northwest to the westernmost stormwater berm. Sediment is accumulating upstream from the berm, causing it to overtop with sediment and stormwater. This berm is in need of maintenance.



Photo 7: Grasses were growing well in the shade on the southern side of the quarry floor.





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