



Minerals Exploration/Sampling/Testing Inspection
U.S. Department of the Interior
Bureau of Land Management
Royal Gorge Field Office



The BLM has conducted an inspection of your operations, which concludes whether the documented operations on file with BLM are compliant or non-compliant. Any non-compliance issues are reported in the Additional Actions Necessary section of this inspection.

Operation Type: ☐ 3802 Pre-10/21/1976 ☒ 3802 Post-10/21/1976 ☐ 3809 included

Date: Aug 18, 2020 Time: 11:15 Weather: Sunny	Operation Name: Dawson-Green Mtn., El Plomo section Operator: Zephyr Case Number: N/A CDRMS Number: P-2020-002
<u>Attendees</u> BLM: S. Carter, K. Berger, S. McClernan Operator(s): Not Present Other(s): Tim Cazier (CDRMS), Two drillers with Godbe Drilling	<u>General</u> Operation(s) are in compliance with documentation on file <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Operation(s) and disturbance on-site coincide with the operations and access on file <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

Inspection Purpose: ☐ Pre-Operations ☒ General ☐ Final ☐ Trespass ☐ Complaint

Inspection Items	Compliant	Non-Compliant	N/A
1. Method of Operations			
Drilling, Trenching/Surface Excavation & Underground Excavation			
a. Drilling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Pad/Platform Construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Drill/Drilling Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Mud Pits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Borehole Abandonment/Monitoring Well Conversion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Borehole Status: <input type="checkbox"/> Complete <input checked="" type="checkbox"/> Incomplete	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Pad/Platform Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Trenching/Surface Excavation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Trench/Excavation Construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Trench/Excavation Stability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Excavation/Reclamation Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Trench/Excavation Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Underground Excavation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Portal Construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Portal Stability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Blasting Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Status: <input type="checkbox"/> Internal <input type="checkbox"/> External	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Excavation/Reclamation Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. Portal Reclamation/Conversion of Entry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Site Conditions			
a. Material/Waste Rock Management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Erosion & Stormwater Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Man-made Structures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d. Weed Management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Safety Conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Interim Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Interim Management Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Inspection Items	Compliant	Non-Compliant	N/A
3. Housekeeping			
a. Container Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Spills/Leaks Observed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Hazardous Substances/POL Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. General Housekeeping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Access			
a. Road Management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Berms	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Security	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Signage	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Surface Water Controls	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Quality Assurance/Quality Control			
a. Routine Site Conditions Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Air, Water, Noise, Other Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Monitoring Reporting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Regulatory Submittals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Agency/Entity Permits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Final Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. Drill holes/Sample locations:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Access Roads/Landing Area:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Revegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Removal of Structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Free of Trash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. BLM RGFO Solid Minerals FINAL Reclamation Standards met:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. WSA (3802 regs)			
a. Access: No construction and/or major improvements and maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Trees: ≥2" at the base not cut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Equipment: No use of tracked vehicles or mechanized earth moving equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Vehicles: No use of motorized vehicles over other than open use areas and trails	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. No construction or placing of any mobile, portable, or fixed structure on BLM for more than 30 days	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. No use of explosives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. No operations have caused changes to a water course	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional Information and Actions Necessary by the operator

- 1.a.
- i. The drilling structure for EP-20-01 that was constructed onsite on 8/1/2020, is still in place. Images 1 and 2.
 - The water pump was operating during the site visit and still runs continually. Image 3.
 - There are two hoses, each with a diameter of <2", that extend from the water pump to the rig platform. These hoses displayed little movement vertically (none laterally) and were mostly extended across rocky areas and a small drainage. No disturbance associated with the hoses was observed. Image 4.
 - ii. EP-20-01 started on 8/5/2020:
 - The entire hole is being cored.
 - As of today, the depth of hole is 755' and is being drilled at a 60° angle. Surface casing is 15' hwt, additional casing to 317'.
 - There are still no additives being used in the drilling fluids at this time, just water. Water is pumped up from the creek to use for a drilling lubricant. Any excess water is filtered through a separator, which is a centrifuge that separates the solids or drill cuttings from the drilling water that is then recirculated. Any cuttings are stored in a drum off to the side of the platform. This configuration has changed from last time, but the process is still the same as the last visit. Images 5 and 6.
- 2.b. There was a waterline blowout that just occurred prior to our arrival at the platform. After looking at the ground around the platform where this occurred, no erosional features were observed. Image 7.
- 2.e. A fire extinguisher and signage remain onsite regarding diesel fuel, no smoking. Radios present on the working platform. A straight line to the top of the hill from the rig is marked with pink flagging, so workers know where to go to obtain cell service.
- 3.a.
- The drum containing cuttings (after being filtered through the separator) has been replaced. The new one is a plain black drum, with no previous labeling visible. The separated cuttings are stored in this drum until they are of sufficient quantity to be removed from the site. Empty drums are located in a tote on the side of the platform. Image 5. **These drums need to be labeled with contents and can be done manually with a permanent marker.**
 - A stock tank is used for secondary containment of the water pump, and is located in the same position adjacent to the creek. A plywood roof has been installed over the pump. Image 3.
 - Diesel fuel for the water pump is still being sourced from a 50-gallon, lined container adjacent to the pump. An additional lined container is now also located adjacent to the container in service. This was done in case fuel runs out sooner than expected. Image 8.
 - Secondary containment/tubs still being used for equipment on platform.
 - Visqueen still lines the top of the wooden platform, as a barrier from the working site to native ground below. However, there are some evident holes in the liner. The drillers stated they are waiting on the right supplies, in order to repair the liner. The ground underneath did not show any staining or issues that could be associated with operations on the platform, other than the water line blowout. Images 9 and 10.
 - Three small plastic containers containing Liqui-Drill are onsite, in case it is required as an additive during the drilling process. The SDS sheet is available, as needed. The labels marking these containers have fallen off (but were still located onsite). **These containers need to be labeled with their contents.** Image 11.
- 3.d. The porta potty is contained. Routine servicing has not been needed yet. When it is required, it will be conducted by helicopter. The tank is removed and replaced with an empty one, as needed. No staining or discharge was observed in the area around the porta potty. Porta potty is still tethered to the platform and appeared stable. Image 12.

4. All access is still being conducted by a walking a trail from the Grape Creek Trail Head (north of the State section) or by helicopter. There is still only one landing site identified for use with EP-20-01, which does not include a portable structure. There is no visible disturbance from the landing activity in this area. Images 13 and 14.

- 5.a.
- Drill site is manned 24-hours a day, utilizing two shifts.
 - General monitoring includes site conditions, housekeeping, water pump, drill platform conditions.
 - Preventative maintenance checks of the water pump are conducted when it is being refueled.

5.c. All water usage is still being metered at the drill platform location and usages are reported to multiple authorizing agencies daily.

Final Notes

General Comments:

- There is still vegetation visible below and around the drilling platform. Images 2 and 10.

Date inspection shared with CDRMS: 8/21/2020

Date inspection shared with Operator: 8/21/2020

Images

Image 1:



Comment: Overall EP-20-01; red arrow indicates the rig location

Image 2:



Comment: General overview of EP-20-01 drill site

Image 3:



Comment: Red arrow indicates water pump, with new roof, location along creek

Image 4:



Comment: Red arrow indicates water hoses

Image 5:



Comment: Red arrow indicates drum that is receiving the sediment after the separator

Image 6:



Comment: Red arrow indicates separator

Image 7:



Comment: Close-up of ground just after water line break

Image 8:



Comment: Additional lined, diesel container

Image 9:



Comment: Rig platform, red arrow indicates Visqueen barrier that needs repaired

Image 10:



Comment: Below rig platform, red arrow indicates area affected by recent water line blowout

Image 11:



Comment: Liqui-Drill containers

Image 12:



Comment: Porta Potty at EP-20-01

Image 13:



Comment: Helicopter landing area for EP-20-01

Image 14:



Comment: Close-up view of the helicopter landing area for EP-20-01



STATE OF
COLORADO

Cazier - DNR, Tim <tim.cazier@state.co.us>

8/18/2020 Site Visit

1 message

Carter, Stephanie S <sscarter@blm.gov>
To: Angela Bellantoni <angela@envalternatives.com>
Cc: "tim.cazier" <tim.cazier@state.co.us>

Fri, Aug 21, 2020 at 8:44 AM

Please let me know if you have any clarifications or questions.

Thanks,

Stephanie Carter, P.G.

Geologist

Field Office Program Lead, Mining Law & Mineral Materials

U.S. Dep't of the Interior Region 7 – Upper Colorado Basin

BLM, Royal Gorge Field Office

[3028 East Main Street](#)

[Canon City, Colorado 81212](#)

Phone (719) 269-8551



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