




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Colony Shale Oil Project	MINE/PROSPECTING ID#: M-1980-047	MINERAL: Oil shale	COUNTY: Garfield
INSPECTION TYPE: Monitoring	WEATHER: Snowing	INSP. DATE: November 18, 2024	INSP. TIME: 09:00
OPERATOR: Caerus Cross Timbers LLC	OPERATOR REPRESENTATIVE: Ed Seymour	TYPE OF OPERATION: 112 - Hard Rock Regular Operation	
REASON FOR INSPECTION: High Priority	BOND CALCULATION TYPE: None	BOND AMOUNT: \$9,500,00.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Amy Yeldell	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: December 2, 2024	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This inspection was conducted in response to the succession of operator request that was submitted on October 11, 2024. The inspection was conducted by Amy Yeldell of the Colorado Division of Reclamation, Mining and Safety (Division). The Colony Oil Shale Project is a Hard Rock 112 permitted site located northwest of Parachute Colorado in Garfield County. The entire mine was inspected, excluding the underground areas. Colony consists of 5,712.05 acres with a maximum disturbance of 527 acres. The Division currently holds a financial warranty in the form of a corporate surety in the amount of \$9,500,000.00. Ed Seymour represented Caerus and accompanied the Division on the inspection.

* Indicates areas minimal reclamation tasks remain and/ or where final reclamation has been achieved and areas are eligible for release.

A revised Reclamation Plan has been submitted under TR-18.

Site Specific Observations:

*Area 4 Alternate access road. The road area is self-reclaimed and only identifiable by white PVC posts delineating affected lands. Vegetation consists of mature sage and perennial grasses. The gate and jersey barrier have been removed since the previous inspection. This portion of Area 4 is eligible for release.

Area 4 Lower Building Area. Within the area to the west side of the road are three large buildings and three smaller shed type structures. These structures are proposed to stay under TR-18. The Division did not enter any buildings. There is a weather station, which is proposed to be removed. Above the laboratory area accessed by a separate road is a fueling area. There is a concrete secondary containment structure with two fuel tanks inside. The Operator also proposes to keep these features in place.

There are also several single electrical poles and wire connecting Area 4 and 5. This power is not tied into the power grid (Excel) and will be removed.

Area 5 Upper Building Area. There are three larger buildings/ shops located in this area. Additionally, there is a smaller yellow generator building and 1000-gallon propane tank. All three of the buildings are currently in use to store road maintenance equipment. Under TR-18 these features are proposed to remain. Only the overhead electrical utility will be removed.

Area 5 Pullout. The norther portion of area 5 is a pull out just before the mine bench. The large white empty tank has been removed. Equipment was located on site and Initial civil work and contouring has begun.

Lower 6B pad area. There is a plugged and abandoned gas well located within this bench. Additionally, there is also an open monitoring well with submersible pump. The previously noted miscellaneous wire and culverts in the northeast corner of the pad have been removed. For safety the helicopter pad will remain in place. The west or entrance of the pad will remain for parking/pull off of the main road. These two areas will be delineated, and all other areas will be seeded.

*19B / 6A bench road. There is a bench above the main road that goes from the first switch back to above the portal entrance. This area is used to access the bench for rock fall mitigation. It was indicated that this area has largely self-reclaimed and additional work would create a greater disturbance. Contouring is impractical so only establishment of vegetation is necessary for reclamation.

6B Upper - Mine Bench. Removal of the 6ft steel culvert is impractical and the mine bench and road will likely remain. Ensure that sufficient documentation is provided to support the proposed post-mining land configuration of the mine bench and pipped creek. This includes but is not limited to NDE testing of the steel pipe to assuage concerns of potential collapsing and subsidence. Closure methods have been proposed and were selected from the IMP Bid Spec Book for the portal closures and ventilation shaft.

8B Summit Laydown Yard. This is a graveled pad located on top the ridge. The building has been removed but there are two foundations that remain on site. Given that nails stick up it is impractical to leave it in place. Within the revised Reclamation Plan address this feature. There is also a weather station and solar panels on the southwest corner of the pad. If this feature cannot be repurposed provide details for its reclamation. The perimeter of this pad will need to be pulled back to help blend. Anything that is not significantly graded will require decompaction. The Operator also discussed not topsoiling this area given the cost to haul topsoil in. Justification beyond cost and a sound alternative must be provided to ensure reclamation success.

Area 10B. This area is largely self-reclaimed and mostly comprised of perennial grasses. The slope, though steeper than a 3H:1V are stable and well established. Some minor grading will be required where area 15B intersects 10B. There is also an abandoned well (pipe) in the rip-rap spillway area.

Area 10C Loop Road. There are several wells located on the north side of the loop road. Over the summer the wells were tested to determine which one(s) will remain vs being plugged. The list of wells was provided in the TR. The pump house and well near the gate area also proposed to stay.

Area 18D, E and F North Valley Fill. There is an upper and lower haul road associated with this area that will need to be reclaimed. The majority of the northwest side of this area is cut/fill general dozing. The northeast edge of disturbance will likely need to be pulled back. Areas 18E and F have lots of random highwalls and pits that will need general shaping. There is one large overburden pile located within this pad. A foundation is also located on the west side below the back haul road. The entire pad area will need to be decompacted and topsoiled prior to revegetation.

Area 18A Switch yard. This is where the transmission lines terminate. Electrical equipment needs to be removed. The South side of the pad area needs to be pulled back. Additional sloping and general contouring is necessary on the northwest side.

Availability Of Records:

On November 5, 2024, the Division filed Technical Revision Request (TR-18) which updates the Reclamation Plan and provides bonding inputs. Prior to the TR being filed on October 17, 2024, the Division issued adequacy review #1. The current decision date for TR-18 is March 8, 2025.

Acid And Toxic Materials:

Several pole mounted transformers were observed. These items shall be properly disposed of when removing electrical utilities.

Backfilling and Grading:

Details regarding grading should be provided in the Reclamation Cost estimate. Details should include by area the push grade, material type and consistency in addition to overall volume. Contouring in general should aim to obtain a 3H: 1V or less slope as feasible by surrounding topography.

Explosives:

Explosives are not used in conjunction with this mining operation.

Financial Warranty:

The Division currently requires a financial warranty amount of \$9,500,000 for this site. The Division is in the process of reviewing the adequacy of the current financial warranty. Given the inadequacy of current Reclamation Plan and the Reclamation Cost Estimate the Division is unable to complete its review at this time. The bond will be reviewed as part of TR-18.

Hydrologic Balance:

Water was not observed discharging from the northern portal on the mine bench given the season. However please specifically address how this discharge will be addressed within the revised Reclamation Plan.

Roads:

Ensure that all roads to remain are indicated as so on the map.
Given the recent snow the entire site was not accessible due to snow drifting on the roads.

Right of Entry:

Careus is in the process of transferring the permit to QB Energy who acquired the asset. Currently SO-2 is incomplete.

Reclamation Success:

No areas were evaluated for reclamation success. TR-18 is revising the Reclamation Plan.

Topsoil:

It was indicated that previously salvaged topsoil will not be utilized given that it is successfully reclaimed. Importation of topsoil, fertilizer and amendments will be used in lieu of salvaged topsoil.

Responses to this inspection report should be directed to: Amy Yeldell at the Division of Reclamation, Mining and Safety, Rm 215, 1001 E 62nd Ave, Denver Co 80216. Direct contact can be made by phone at 970-210-1272 or via email at amy.yeldell@state.co.us

Inspection Contact Address

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Enclosure

CC:

Travis Marshall, Senior EPS, Grand Junction DRMS

PHOTOGRAPHS



Area 4a gate and jersey barriers removed



Generator building to stay, transformers on electrical poles to be removed



Area 5 buildings remain for road maintenance



Civil work has begun on Upper 5



Upper 6 no changes to mine bench to date.



Contouring and blending necessary on 10B to 15B



Area 18-Load carry stockpile for blending to avoid damaging existing vegetation.