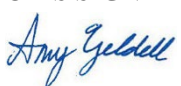




**MINERALS PROGRAM INSPECTION REPORT**  
**PHONE: (303) 866-3567**

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.

<b>MINE NAME:</b> Duck Creek Mine	<b>MINE/PROSPECTING ID#:</b> M-2013-022	<b>MINERAL:</b> Oil shale	<b>COUNTY:</b> Rio Blanco
<b>INSPECTION TYPE:</b> Monitoring	<b>WEATHER:</b> Clear	<b>INSP. DATE:</b> August 9, 2023	<b>INSP. TIME:</b> 12:00
<b>OPERATOR:</b> Shale Tech International Services LLC	<b>OPERATOR REPRESENTATIVE:</b> Justin Bilyeu	<b>TYPE OF OPERATION:</b> 110(2) - Hard Rock Limited Impact	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Partial Bond	<b>BOND AMOUNT:</b> \$395,882.86	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>INSPECTOR(S):</b> Amy Yeldell	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> August 22, 2023	

**GENERAL INSPECTION TOPICS**

The following inspection topic(s) were identified as having a **Problem (PB)**, which includes correction actions and a deadline whereby the Operator must demonstrate compliance with the conditions of the Permit and the requirements of the Act and Rules. Failure to address the corrective actions by the deadline may cause the Division to escalate the Problem to a **Possible Violation (PV)** and schedule the issue for formal hearing before the Mined Land Reclamation Board (Board).

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

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

**INSPECTION TOPIC:** Financial Warranty

**PROBLEM/POSSIBLE VIOLATION:** Problem: During the application process the Operator provided the Division with a unit cost for importing topsoil. The Division needs to update its reclamation cost estimate and therefore needs an updated cost for importation of topsoil.

**CORRECTIVE ACTIONS:** Please provide the Division with quotes from at least three companies for the cost to purchase and deliver 1,800 CY topsoil to the mine by the corrective action due date. Once received, the Division will use an average cost when updating the reclamation cost estimate.

**CORRECTIVE ACTION DUE DATE:** 10/23/23

**OBSERVATIONS**

This inspection was conducted as part of the Colorado Division of Reclamation, Mining and Safety normal monitoring program. The Duck Creek Mine is a 110(2) Hard Rock permitted Oil Shale Mine site located west of County Road 24x, in Rio Blanco County. Amy Yeldell of the Division conducted the inspection. Justin Bilyeu represent Shale Tech International Services, LLC.

The site is permitted for 5 acres with a maximum disturbance of 3 acres. At this time its estimated that approximately 1.75 acres are disturbed. The site was inactive at the time of the inspection. This site was previously permitted under an NOI. No additional (new) disturbances have occurred since the mining permit was issued. No mining has taken place and all highwalls appear to be in a similar condition as compared to the previous inspection. The historical excavation is approximately 100 LF of vertical highwall at 20-30 ft. tall with pad below (see photos one and two). No fuel, equipment or buildings are located on site.

Overall the site appears stable and well maintained. A drainage bisects the access road to the mine. A new 48" stormwater culvert and bridge has been installed since the last inspection (See Photo Three). This feature was discussed in the mine plan however no design specifications were provided with the drainage report. The culvert is to be removed upon completion of mining. Additionally for stormwater control a small excavated pit on the south edge of the existing disturbed footprint has been installed (See Photo Four).

Evidence of cows was observed based on foot path and introduction of noxious weeds along their trail (See Photo Four). No noxious weeds were observed near the mining highwall. The operator is encouraged to manage noxious weeds introduced within the mine site to avoid the potential future reclamation delays if populations become established.

A mine sign was posted at the entrance to the mine site as required by Rule 3.1.12(1). The information depicted was correct/ up to date and the sign was of sufficient size (See Photo Five). The permit boundary of the affected land was clearly delineated pursuant to Rule 3.1.12(2).

The Division currently requires a financial warranty amount of \$395,882.86 for this site. The bond was last recalculated in 2013 with the permit issuance. In an effort to ensure the Financial Warranty adequately reflects the actual current cost of fulfilling the requirements of the approved reclamation plan the Division will be updating the reclamation cost estimate. If the current bond is found to be insufficient the Division will send a Notice of Surety Increase under a separate cover.

Approximately 1,800 CY of topsoil will need to be imported for final reclamation per the approved Reclamation Plan. During the application process the Operator provided the Division with a unit cost for importing topsoil. The Division needs to update its reclamation cost estimate and therefore needs an updated cost for importation of topsoil. This is cited as an inspection problem. Please provide the Division with quotes from at least three companies for the cost to purchase and deliver topsoil to the mine by the corrective action due date. Once received, the Division will use an average cost when updating the reclamation cost estimate.

On the 2021 and 2022 Annual Report the operator indicated that the site was active in 2021. The Division received clarification from the Operator that the activity on site was the installation of the culvert and retention pond area. No actual mining took place. Given that mining has not yet commence the site is not subject to Temporary Cessation (TC) Rules 1.13.

Responses to this inspection report should be directed to Amy Yeldell at the Division of Reclamation, Mining and Safety, Room 215, 1001 E 62<sup>nd</sup> Ave, Denver, CO 80216. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us

**Inspection Contact Address**

Justin Bilyeu  
Shale Tech International Services LLC  
1354 County Road 246  
Rifle, CO 81650

EC:  
Travis Marshall, Senior EPS, Grand Junction DRMS

**PHOTOGRAPHS**



Photo 1: Historical highwall overview and retention pond below





Photo 2: Existing highwall overview



Photo 3: New culvert bridge crossing





Photo 4: Retention pond and evidence of cows



Photo 5: Mine sign and entrance from access road