



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

November 7, 2023

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

RE: Duck Creek Mine, Permit No. M-2013-022, Unresolved Problem(s) Noted in a Past Inspection Report

Dear Mr. Bilyeu:

According to records kept by the Division of Reclamation, Mining and Safety, some problem(s) noted in a past mine site inspection report have not been corrected. If the problem(s) have already been corrected, documentation of the corrective actions taken to correct the problem(s) must be submitted to our office.

Please see the enclosed inspection report for the above noted mine site, issued as a result of a past inspection of this site. Problems noted in this report that remain unresolved according to our records, have been highlighted.

To avoid potential future enforcement actions for non-compliance with State Statutes, Rules and Regulations, and/or conditions specified in your permit for this site, you must submit compliance documentation with the corrective actions by **Friday, December 01, 2023**.

If you require additional information, or have questions or concerns, please feel free to contact me.

Sincerely,

Amy Yeldell
Environmental Protection Specialist

Enclosures: DRMS Inspection Report from August 9, 2023

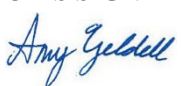
EC: Travis Marshall, Senior EPS, DRMS





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: Duck Creek Mine	MINE/PROSPECTING ID#: M-2013-022	MINERAL: Oil shale	COUNTY: Rio Blanco
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: August 9, 2023	INSP. TIME: 12:00
OPERATOR: Shale Tech International Services LLC	OPERATOR REPRESENTATIVE: Justin Bilyeu	TYPE OF OPERATION: 110(2) - Hard Rock Limited Impact	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Partial Bond	BOND AMOUNT: \$395,882.86	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Amy Yeldell	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: 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----- PB	(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 62nd 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