




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: Mahogany Research Project – Public Land Prospecting	MINE/PROSPECTING ID#: P-2003-018	MINERAL: Oil shale	COUNTY: Rio Blanco
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy C. Yeldell	INSP. DATE: August 6, 2019	INSP. TIME: 08:00
OPERATOR: Shell Frontier Oil & Gas Inc.	OPERATOR REPRESENTATIVE: Johana Neuman	TYPE OF OPERATION: MP - Mineral Prospecting	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$2,656,462.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: September 12, 2019	

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>NA</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</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>Y</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</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 as part of the Colorado Division of Reclamation, Mining, and Safety normal monitoring program. The Mahogany Research Project-Public Land Prospecting is a Hard Rock NOI located in Rio Blanco County. Amy Yeldell of the Division conducted the inspection. Johanna Neuman, Samantha Baker, and Greg Ackerman represented the Operator. Paul Daggett of the White River Field Office was also present.

The permitted NOI includes a total of 48.69 acres and has a current bond of \$2,656,462.

All hydrology wells have been abandoned and pads have been reclaimed. The last reclamation efforts were completed in 2015 and now are awaiting adequate vegetation establishment. Over all pads are stable with no signs of erosion. All mining related debris has been removed from the site(s). Specific observations of each pad are listed below,

Pad-56-16-199: Gate at the access road needs to be pulled. Long access road to pad. Vegetation on road and access road looks good. Diverse and dense, no weeds observed.

Pad 58-14-199: Vegetation has been established but overall cover not adequate. Pad is heavily grazed. There is a small depression that still needs to be graded, as slopes are steeper than a 3H: 1V

Pad 1-11-299: Pad has good desirable plant establishment. Clusters of Russian thistle should be sprayed before it threatens desirable plants and deteriorates site.

*Pad 2-2-299: Long access road. Temporary hot fence was installed around pad area to keep out wild horses and to avoid over grazing. Vegetation within pad is lush and diverse.

*Pad 3-1-299: Access road and pad look good. Very little cheatgrass. Native grasses are dense, few shrubs have begun to establish.

*Pad 4-1-299: Short access road with sparse vegetation and some weeds. Pad looks good with only a few weeds but native vegetation should be adequate next spring.

Pad 6-13-299: Long access road that was a pre-existing two track. Some weeds with desirable vegetation being spotty but on its way to establishing at adequate densities. The pad is mostly shrubs and the grasses have been grazed hard. No weeds. Grasses need to bounce back and overall desirable densities need to be increased.

*Pad 7-18-298 Lots of shrubs with sparse native grasses but very little Cheatgrass. Vegetation density and diversity is comparable to surrounding vegetation.

*Pad 11-16-298: CR goes through middle of pad. Water line recently replaced, some of the old line still located on site. No weeds present. Adequate densities of native vegetation.

Pad 12-22-298: Adequate density and diversity, native species appear to be well established. Cheatgrass clusters are out competing natives and should be treated.

Pad 13-14-298: Adequate density and diversity, native species appear to be well established. Cheatgrass clusters out competing natives and should be treated. Includes access road.

*Airplane Ridge Road (Public Portion): Through road to private lands. No reclamation completed to date.

*Indicates pads where final reclamation has been achieved. Pursuant to statute, NOI's cannot be partially released except under rare circumstances. Pads need to be monitored and maintained while waiting for the other pads within an NOI to also achieve final reclamation. Once all areas associated with an NOI have met the reclamation requirements final release/NOI termination should be sought.

Responses to this inspection report should be directed to Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. 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

Johana Neuman
Shell Frontier Oil & Gas Inc.
3737 Bellaire Blvd.
Houston, TX 77025

Enclosure

CC:

Travis Marshall, Senior EPS, Grand Junction DRMS
Paul Daggett, White River Field Office, BLM

PHOTOGRAPHS











