



COLORADO


Division of Reclamation,
Mining and Safety

Department of Natural Resources

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.

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|--|--|---|------------------------------|
| MINE NAME: AMSO RD&D Project-Phase 1 | MINE/PROSPECTING ID#: P-2008-046 | MINERAL: Oil shale | COUNTY: Rio Blanco |
| INSPECTION TYPE: Mineral Prospect Inspection | INSPECTOR(S): Travis H. Marshall | INSP. DATE: September 25, 2018 | INSP. TIME: 12:00 |
| OPERATOR: American Shale Oil, LLC | OPERATOR REPRESENTATIVE: Bruce Smith | TYPE OF OPERATION: MP - Mineral Prospecting | |
| REASON FOR INSPECTION: Normal I&e Program | BOND CALCULATION TYPE: Complete Bond | BOND AMOUNT: \$46,789.00 | |
| DATE OF COMPLAINT: NA | POST INSP. CONTACTS: U.S.BLM | JOINT INSP. AGENCY: None | |
| WEATHER: Clear | INSPECTOR'S SIGNATURE:  | SIGNATURE DATE: October 10, 2018 | |

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.

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|---|---|----------------------------------|
| (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>NA</u> | (SF) PROCESSING FACILITIES----- <u>NA</u> | (TS) TOPSOIL----- <u>Y</u> |
| (MP) GENL MINE PLAN COMPLIANCE- <u>NA</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>NA</u> | (RS) RECL PLAN/COMP-- <u>Y</u> |
| (ES) OVERBURDEN/DEV. WASTE----- <u>NA</u> | (SC) EROSION/SEDIMENTATION--- <u>Y</u> | (ST) STIPULATIONS----- <u>NA</u> |
| (AT) ACID OR TOXIC MATERIALS----- <u>NA</u> | (OD) OFF-SITE DAMAGE----- <u>Y</u> | |

Y = Inspected and found in compliance / 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 normal monitoring program established by the Colorado Division of Reclamation, Mining and Safety (DRMS). The ASMO RD&D Project is an in-situ Oil Shale Prospecting site located approximately 25 miles west of Rio Blanco, Colorado southwest of Piceance Creek Road. Bruce Smith of Western Water and Land Inc. accompanied DRMS staff during the inspection.

The main focus of the inspection was to observe the reclamation that has been completed at the site and observe the revegetation efforts completed in the fall of 2016.

All components of the project were observed during the inspection. All final grading and topsoil placement was completed as noted in the November 23, 2017 inspection report. All disturbed areas were seeded and mulched. Fencing to keep livestock and wildlife off of the reclaimed areas remained intact.

The 2018 growing season was very dry therefore the lack of precipitation hindered the growth of the revegetated areas. Many desirable grasses were growing along with a few shrubs including rubber rabbit brush. Cheat grass was observed at various locations but is not seen as a problem due to the operator being aware of the infestation and having an active weed management program.

No evidence of erosion or off site damage from erosion was observed. All stormwater control structures were in good repair.

No problems or violations were observed during the inspection.

Photos that show the conditions observed during the September 25, 2018 inspection are included at the end of this report.

Responses to this inspection report should be directed to Travis Marshall at the Division of Reclamation, Mining and Safety, Grand Junction Field Office, 101 South 3rd Street, Room 301, Grand Junction, Colorado 81501, phone no. (970) 241-2042.

PHOTOGRAPHS





Inspection Contact Address

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