

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/PROSPECTING ID#:	MINERAL: COUNTY:
M-2012-032	Lead, silver and gold Ouray
INSPECTOR(S):	INSP. DATE: INSP. TIME:
Bob Oswald	January 9, 2014 10:00
OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:
LJ Trujillo	112d-1 - Designated Mining Operation
BOND CALCULATION TYPE:	BOND AMOUNT:
None	\$277,078.00
POST INSP. CONTACTS:	JOINT INSP. AGENCY:
None x	None
INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Vot knil	January 13, 2014
-	INSPECTOR(S): Bob Oswald OPERATOR REPRESENTATIVE: LJ Trujillo BOND CALCULATION TYPE: None POST INSP. CONTACTS: None INSPECTOR'S \$IGNATURE:

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 Y	(RD) ROADS <u>NA</u>	
(HB) HYDROLOGIC BALANCE <u>N</u>	(BG) BACKFILL & GRADING <u>NA</u>	(EX) EXPLOSIVES <u>N</u>	
(PW) PROCESSING WASTE/TAILING <u>NA</u>	(SF) PROCESSING FACILITIES \underline{Y}	(TS) TOPSOIL <u>NA</u>	
(MP) GENL MINE PLAN COMPLIANCE- <u>NA</u>	(FW) FISH & WILDLIFE <u>NA</u>	(RV) REVEGETATION <u>NA</u>	
(SM) SIGNS AND MARKERS <u>N</u>	(SP) STORM WATER MGT PLAN <u>NA</u>	(SB) COMPLETE INSP <u>NA</u>	
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION <u>N</u>	(RS) RECL PLAN/COMP <u>NA</u>	
(AT) ACID OR TOXIC MATERIALS <u>NA</u>		21 23	
Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited			

OBSERVATIONS

This was a routine inspection conducted by the Division as part of its monitoring of 112 DMO permits. The operator named on page one was present throughout the inspection. Besides the inspector named on page one, Russ Means from DRMS was also present during the inspection. The site was active at the time of the inspection, mainly with tasks related to the completion of the underground milling facility and ore processing equipment. The mill is not completed yet, although start-up was expected as soon as the end of January 2014 possibly. There were no surface activities related to earthwork, hydrologic (monitoring wells) or stormwater control structures, and the operator stated that there was no mining occurring at this time.

The required permit ID sign was observed posted at the entrance gate to the permitted area. Permit boundary markers were not inspected at this time due to snowy conditions. After the snow clears in spring 2014, the operator is to install adequate permit boundary markers. This is not a problem at this time.

The inspection did not include inspection of significant portions of the surface areas of the permit, since most of the site was covered in snow that has not been plowed away. One of the few surface features inspected was the location where the recently-approved mine water handling valve box will be installed near the Revenue tunnel portal. The valve box will be used to house the valves needed to control and direct mine discharge to perforated pipes and/or to the lined leach field. The box to be installed was observed; it was fabricated from heavy steel plate and contains several chambers for sediment deposit, cleanout and energy dissipation. It has a 16-inch diameter inlet and 8-inch diameter outlet bulkheads with control valves. The valve box may be installed fairly soon. The piping and liners will be installed in the spring.

The portal structures at the underground shop are complete and stable, and appear to provide secure closures. The shop space is completed, with overhead lighting and rails set into the concrete floor. The backup generator trailer has been moved to a location between the filter building and the propane tanks. Most mine parts and equipment are now stored on the pad just north of the filter building.

The filter building at the mill tunnel portal is nearing completion. The outside bay doors are installed, the water tanks and pumps are in place, and reagent mixing tanks are connected. Upstairs the two filter presses are nearly completely installed, and the offices, control room and assay lab are close to completion. There are no chemicals stored at the site presently.

The mill space is close to completion also. Previous inspection reports have described the lighting, electric switch gear and cable installation, concrete floor and sumps, and mill circuit equipment in the main mill space. The mill was inspected again, and the tanks, piping, cabling, and controls were found to be more complete. Delivery of crushed ore to the ball mill is the first stage in the main mill space.

Other new items observed in the mill included the first process circuit for extracting gold from the ore, immediately after it leaves the ball mill. Significant changes have been made since the last inspection (on 11/1/13) to the system of conveyors and crushers for delivering the ore to the ball mill. The tunnels housing the conveyors and crushers that lead off from the mill tunnel are now largely completed. They have been provided with lighting, ventilation, concrete floors and containment sumps, and adequate massive concrete foundations for the elevated crushers and conveyor equipment. There is a secondary escapeway to the ore haulage tunnel, connected to the main Revenue tunnel.

The stockpile of low-grade ore is still present on the surface of the site, and has not been disturbed. It is expected to be the first material to be run through the mill for testing the equipment, which may occur in a few weeks.

The operator was reminded that the mine site structures, plus milling and ore handling equipment are considered to be "Environmental Protection Facilities" (EPFs). As such, they are to be installed and constructed strictly according to the approved designs in the permit, inspected and certified by a Colorado-registered PE, and reported to the Division. If changes are needed for any of the EPFs the operator must notify the Division to confirm whether a permit revision is needed. The operator must provide the Division with final "as-built" diagrams and designs of the EPFs. The Division is to be notified regarding the construction of key, important structures to allow the Division to inspect as needed. Also, the Division must be notified about initial start-up of important processes and facilities, such as the milling circuits, to allow the Division to inspect and observe.

No further areas or items were inspected at this time. No problems were observed.

For questions related to this report, please contact this inspector at the Division's Durango Field Office: DRMS – Durango Field Office 691 CR 233, Room A-2 Durango, CO 81301 Telephone 970-247-5193

Inspection Contact Address Rory Williams Star Mine Operations, LLC 1675 Larimer Street, Suite 820 Denver, CO 80202

EC: John Trujillo, Star Mine Operations, LLC, 219 10th Ave, Ouray, CO 81427 (sent electronically) Greg Lewicki and Assoc. (sent electronically)

PERMIT #: M-2012-032 INSPECTOR'S INITIALS: RCO INSPECTION DATE: January 9, 2014

PHOTOGRAPHS





Shop portal



Valve on mine water valve box





Outlets of mine water valve box



Interior of valve box



Inlet of mine water valve box





Valve box, inlet side

Parts storage area north of filter building



Filter building and backup generator (white trailer)



Reagent mixer



Reagent mixing tanks



Mill water storage tanks and pumps



Filter press



Filter press



Locked-out switch gear in mill facility



View of ball mill and mill circuits, from 3rd level deck



Gold extraction equipment, mill 3rd level



Potosi Peak, elev. 13,786 ft, north of Revenue Mine