




COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Revenue Mine	MINE/PROSPECTING ID#: M-2012-032	MINERAL: Ag, Au, Pb	COUNTY: Ouray
INSPECTION TYPE: Monitoring	INSPECTOR(S): Bob Oswald	INSP. DATE: July 23, 2014	INSP. TIME: 10:00
OPERATOR: Star Mine Operations, LLC	OPERATOR REPRESENTATIVE: John E Trujillo	TYPE OF OPERATION: 112d-1 - Designated Mining Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$277,078.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: August 7, 2014

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>NA</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>NA</u>	(RV) REVEGETATION---- <u>NA</u>
(SM) SIGNS AND MARKERS----- <u>Y</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>Y</u>	(OD) OFF-SITE DAMAGE----- <u>NA</u>	(ST) STIPULATIONS----- <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 by the Division as part of its monitoring of 112d-1 permits, and to provide an introduction to several other DRMS staff who were touring permitted operations on the west slope. In addition to the operator representative named on page one, who was present throughout the inspection, others representing the operator included Clint Fletcher and Dave Rigsby. Division staff present included Russ Means, Wally Erickson, Amy Eschberger, Elliott Russell, Tyler O'Donnell, Luke West, and Julie Murphy (AG). Surface and underground activities at the site were ongoing on the day of the inspection. This report does not name all of the mine personnel who were involved in presenting information or leading the group through the mine and its facilities, but the Division wishes to express its appreciation to all.

The site and the operation are complex, and an orientation was provided by the operator. The orientation began with a short safety training session from the operator, and overviews were provided by some of the onsite mine managers. The tour of the operation then began with the group going by rail to an active underground mining area on the Virginus vein. Drifting and stoping on the vein were explained, then mucking by slusher, and hauling to the where it was dumped into the crushing gallery. In most cases, all ore stays underground, until it is completely processed, with only concentrates and tailings reaching the surface.

The processing of the ore was presented, by primary and secondary crushers in the crushing gallery, then conveying it to the ball mill, followed by processing in the cyclone and the series of different flotation cells, where the tails and the concentrates are finally separated. The ore from this mine comes from several different veins, each with its unique combination of minerals, from which the operation extracts silver, lead, gold, copper, and zinc. The operator is still refining the mill circuits and equipment for optimal metals extraction, and for cleanest tails product. The concentrates are bagged for hauling from the site in one-ton super-sacks. The tails are dewatered in the filter presses to the proper moisture content, before they are to be disposed of on the surface. No production-level operation has occurred, although the small test runs are producing an accumulating amount of tails. These are temporarily stored on the pad, awaiting geochemical testing prior to permanent disposal. The mill is fully contained with no discharges. All water is recycled, since the extraction of metals and sulfides from the tails is complete, and the water is neutral and sediment-free.

Due to time constraints, very little of the surface operation was inspected, though discussion included explanation of the mine water handling systems, water quality monitoring program, and tailings disposal. Much of the current activities revolve around details in the approved EPP. The operator is reminded that water quality monitoring is an ongoing high priority, that surface water handling structures must be installed according to the approved plans, and that the mill cannot ramp up to production level operation until the Division has reviewed final as-builts and approved them. The operator must also analyze samples of the preliminary tails, to ensure that they may be permanently disposed of on the surface.

At this time there are no problems noted, and the bond is sufficient. (The operator is reminded that there are several site changes pending the Division's approval of technical revision TR-04, which will also involve a bond increase. Activities to be approved under TR-04 may not commence until the bond increase is provided. Further information regarding the TR-04 will be sent to the operator under separate cover.)

There will be a transfer of the permit to a new operator in the coming weeks. Until the transfer, this report will be sent to both the current operator and the upcoming successor operator.

For questions related to this report, please contact this inspector at the Division's Durango Field Office: telephone 970-247-5193, or 303-866-3567 ext 8175.

All written correspondence should be sent directly to the Division's Denver Office:
Division of Reclamation, Mining & Safety
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Denver, CO 80203

Inspection Contact Address

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EC: John E Trujillo, Star Mine Operations, Ouray (via email)
Dianna Stoopnikoff, Fortune Minerals, Canada (via email)

No photographs were taken during the inspection.