




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: London Mine	MINE/PROSPECTING ID#: P-2016-020	MINERAL: Silver and gold	COUNTY: Park
INSPECTION TYPE: Monitoring	INSPECTOR(S): Michael A. Cunningham	INSP. DATE: June 20, 2017	INSP. TIME: 14:00
OPERATOR: Minewater Finance LLC	OPERATOR REPRESENTATIVE: Joe Harrington	TYPE OF OPERATION: MP - Mineral Prospecting	
REASON FOR INSPECTION: Normal I&e Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$40,670.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: State Engr. (Water Resources)	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: July 6, 2017	

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Hydrologic Balance

PROBLEM/POSSIBLE VIOLATION: Problem: The exploration drill holes which were completed under Phase 1 of the NOI have exhibited artesian flow at the surface. This is a problem pursuant to Hard Rock Rule 3.1.6(1) which requires disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quantity or quality of water in surface and groundwater systems to be minimized.

CORRECTIVE ACTIONS: The Operator shall update the Division as to which of the drill holes will be abandoned and which will be converted to monitoring wells and shall provide a timeline for completing the work.

CORRECTIVE ACTION DUE DATE: 8/07/17

OBSERVATIONS

The inspection was conducted by Michael Cunningham and Wally Erickson of the Division of Reclamation, Mining and Safety (Division). Joe Harrington with Minewater Finance LLC was also present for the inspection. The London Mine is located 4.8 miles west of Alma, Colorado. The site is situated on Mosquito Creek at an elevation of 11,360 ft. The commodities of interest are gold and silver.

On May 23, 2017, the Division received a Modification Application (MD01) for the London Mine NOI. The Modification Application addressed Phase 2 of prospecting which includes drilling two 24" boreholes to a depth of 1,000 ft. The drill holes will penetrate the Belden Shale which overlies the Paleozoic Aquifer and will be used to dewater the area surrounding the mine workings. The borehole drilling will be conducted under a general well permit issued by the Division of Water Resources (DWR). The boreholes will be used to produce water from the Belden-shale confined Leadville Limestone/Paleozoic Aquifer. The proposed dewatering activities will facilitate future underground drilling and exploration by reducing the risk of creating artesian flow into the mine workings which could further degrade the quality of water discharging from the Water Tunnel.

Pumps will be installed into the dewatering wells and the water level above the pumps will be maintained at 250'. The pumps are 70' long and will be set 50' above the bottom of the boreholes. Water from the boreholes will be routed into the Ophir tunnel via 12" HDPE pipe. Water which enters the mine will be treated and will be discharged through the authorized discharge location at the Water tunnel. The Operator plans to keep the boreholes open in perpetuity. However, if the wells are not permitted to operate in perpetuity, they will be sealed with neat cement grout for the entire length of the wells.

The boreholes will initially be drilled at 8". If the permeability is lower than what is needed to dewater the surrounding workings, the Operator will proceed with acid injection. Hydrochloric acid will be injected at a 2-5% concentration. The Belden-shale sections containing pyrite mineralization will be isolated with acid resistant grout. Acid injection will be conducted under written authorization from the Colorado Department of Public Health and Environment. In addition, the EPA Underground Injection Control (UIC) Program will be consulted prior to acid injection to determine if an UIC Permit is required.

The Division also inspected the exploration holes which were drilled under Phase 1 of the NOI. The Prospector drilled 3 of the 6 holes which were proposed. One exploration hole was drilled at location No. 3 and two exploration holes were drilled at location No. 5. The Prospector notified the Division in June that they discovered artesian conditions at the exploration holes. Water was encountered during drilling, but did not result in artesian flow immediately after drilling was complete. The artesian flow at each drill hole is approximately 1-2 gpm. The water from the drill hole at location No. 3 was flowing off of the drill pad and comingling with snow-melt runoff before flowing into South Mosquito Creek. The water from the drill holes at location No. 5 was flowing into the mud pit and was fully contained at the time of the inspection. One of the proposed boreholes under Phase 2 will be drilled at location No. 5 adjacent to the two exploration drill holes. The Prospector has indicated the drill holes may be converted to monitoring wells and used in conjunction with the dewatering wells.

The Division consulted with DWR regarding the artesian flow from the exploration drill holes. The Division was informed the flow from the exploration drill holes would need to be controlled at the conclusion of

prospecting activities or as soon as is practically possible. The Division holds a financial warranty in the amount of \$10,170.00 to cement grout the entire depth of the drill holes. The artesian flow from the drill holes has been cited as a problem and will require corrective action by the Operator. Please see the first page of the report for additional information.

This concluded the inspection.

PHOTOGRAPHS



1. Drill holes at location No. 5.



2. Artesian flow captured in mud pit at location No. 5.



3. Drill hole at location No. 3.



4. Artesian flow from location No. 3 flowing into South Mosquito Creek.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SW) STORM WATER MGT PLAN---- <u>N</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	(ST) STIPULATIONS----- <u>N</u>

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

Inspection Contact Address

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