




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety 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: Henderson Mine	MINE/PROSPECTING ID#: M-1977-342	MINERAL: Molybdenum	COUNTY: Clear Creek, Grand
INSPECTION TYPE: Monitoring	INSPECTOR(S): Peter Hays	INSP. DATE: November 1, 2019	INSP. TIME: 09:00
OPERATOR: Climax Molybdenum Company	OPERATOR REPRESENTATIVE: Aaron Hilshorst	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$37,993,785.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 19, 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>NA</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</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

The Henderson Mill was inspected by Peter Hays with the Division of Reclamation, Mining and Safety (Division/DRMS) as part of the Division's monitoring inspection program. Mr. Aaron Hilshorst with Climax Molybdenum - Henderson Operations (Henderson) was present during the inspection.

Groundwater and Surface Water

The focus of this inspection was to discuss and observe the groundwater and surface water compliance facilities and locations at the Mill. The point of compliance (POC) groundwater wells MLGW-7 and MLGW-15 were observed and discussed during the inspection. Compliance well MLGW-ACR was not accessible due to a locked gate at the entrance of the ranch property. The Operator reported the previous problem with iron-reducing bacteria in the well was resolved with the treatment of the well.

Surface water sampling locations WFR-20 and WFR-40 were discussed but could not be observed due to the amount of snow on the access roads to the locations. The East Branch Reservoir and Mill Process Water Storage Tanks (Mill EPF 1.1 and 1.2) were discussed and the Williams Fork Pump station, intake diversion structure and surface water sampling point WFR-003 was observed during the inspection.

The seep water collection systems (EPF 1.5) and the Ute Park Pump Station (EPF 1.7) were discussed and observed during the inspection. The Interceptor Well Field (EPF 1.6) was discussed and observed. The well field was updated under TR-23, TR-25 and TR-28. All of the extraction wells were operational except for MLEX-2, which was not pumping due to low water levels in the well.

The ultimate canal which is included as part of EPF-3.1 was observed from the access road from north to south. The water surface was ice covered but the canal appeared to be operating as designed.

1-Dam Seep Water Project – TR-30

The 1-Dam Seep Water Collection and Return System Improvements project approved under TR-30 by the Division on November 1, 2018 is complete. The road was observed as part of the inspection of the seep water collection inspection. The Operator reported the final survey for the as-built drawings was scheduled to be completed soon.

3-Dam Seepwater Return Line Clean-Out Port Project – TR-31

The 3-Dam Seepwater Return Line Clean-out Port project approved under TR-31 by the Division on July 10, 2019 is complete. The project could not be observed during the inspection due to a semi-truck blocking the access road.

Fire Water Line Incident

On November 6, 2019, Henderson provided written notification of a fire water line incident. The leak area was covered with ice and snow limiting the observation of the area. However, the leak area was consistent with the follow-up notice provided by the Operator as required by Rule 8.1 and 8.2.

MNGW-1 NPL Exceedance

On November 6, 2019, Henderson provided written notification of an NPL exceedance for pH at groundwater compliance well MNGW-01. The exceedance was discussed during the inspection.

Photographs taken during the inspection are attached. If you need additional information or have any questions, please contact me at Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at 303.866.3567 x 8124, or by email at peter.hays@state.co.us.

Inspection Contact Address

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PHOTOGRAPHS



View of the Williams Fork pump station



View of the William Fork diversion structure and sampling location WFR-003



View of MLGW-7



View of MLGW-15



View of completed 1-Dam seep road raise project looking south from north canal junction



View of the Ultimate Canal