

# 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:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Climax Mine	M-1977-493	Molybdenum	Lake, Summit
<b>INSPECTION TYPE:</b>	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Multi Person Inspection	Amy Yeldell	June 16, 2022	10:30
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:	
Climax Molybdenum Company	Eric Detmer	112d-3 - Designated Mining Operation	
<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	<b>BOND AMOUNT:</b>	
Normal I&E Program	None	\$91,011,850.00	
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGE	NCY:
NA	DRMS	DRMS	
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DAT	E:
Clear	1 9	June 27, 2022	
	Amy geldell		

# **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>N</u>	(FN) FINANCIAL WARRANTY <u>NA</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>N</u>	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>Y</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>Y</u>	(SP) STORM WATER MGT PLAN Y	(RS) RECL PLAN/COMP Y
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION Y	(ST) STIPULATIONS <u>Y</u>
(AT) ACID OR TOXIC MATERIALS <u>N</u>	(OD) OFF-SITE DAMAGE <u>NA</u>	

Y = Inspected / 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 Colorado Division of Reclamation, Mining and Safety (Division) normal monitoring program. Climax Mine is a 112d-3 Molybdenum mine and milling operation located in Summit, Eagle and Lake County and is accessed from Colorado State Highway 91. The site consists of 14,000 permitted acres, of which approximately 8,000 acres have been affected. The Division currently holds \$91,011,850.00 in Financial Warranty for the site. Eric Detmer represented Climax Molybdenum Company and accompanied Amy Yeldell and Clayton Wein of the Division on the inspection.

Division staff first checked in at the guard station at the main gates located on the east side of HWY 91. The weather was clear during the inspection, nearly all of the snow on site has melted. Roads were well maintained and the site was completely accessible.

The following areas were inspected: Ceresco Seepage Collection System, 5 Shaft Pump System, Storke Wastewater Pump System, Warrens Pump System, Robinson Lake and Dam, Robinson Lake Barge System/Pump Station, and Robinson Lake Seepwater Pump System.

## Ceresco Seepage Collection System:

The Ceresco Seepage Collection System was first observed from atop the Ceresco Ridge haul road then the length of the collection ditch was followed. The purpose of this EPF is to intercept potentially impacted runoff and route it to the camp drainage which passes through water treatment as a means of protecting the Arkansas watershed. No water was observed in the ditch as the majority of snowmelt is gone. The ditch appeared free of debris or obstructions.

## 5 Shaft Pump System:

Next the 5-Shaft Pump System was observed. The 5-Shaft Pump System is a dual purpose EPF. First, in order to protect the Arkansas watershed quality it collects potentially impacted water and pumps it over to the Tenmile basin for treatment prior to discharge. This is stormwater that becomes impacted as it goes through the open pit and collects in the underground workings. Secondly, it also works to maintain the water level in underground workings below the apex of the Mosquito Fault, a level in which the Arkansas Basin could impacted. All water collected from the 5-Shaft is pumped through the Storke Pipeline to the ETDL and where it is treated in the Tenmile process circuit. Overall the 5-shaft Pump System appeared to be in good working order. No apparent leaks were observed and generally the building was well maintained. Backup pumps and parts were on site to ensure uninterrupted functionality.

## Storke Wastewater Pump System:

The storke wastewater pump system is an EPF that works alongside the 5-shaft Pump system to protect the Arkansas watershed. Seepage water and stormwater collected from the 5-Shaft next reports to the Storke Wastewater Pump System where it is pumped to the Tenmile basin for treatment and discharge. There are also two concrete lined ponds that collect the seepage and stormwater from the Storke Yard. These ponds are completely fenced and concrete was in good shape. Water was observed entering the ponds through discharge pipe to the pond at a low rate. That water is then pumped to the ETDL where it mixed with other mine collected water prior to treatment in the Tenmile Basin. The floor within the building was wet during the inspection but no apparent source of a leak was identified. One of the four pump pedestals was empty, so potentially there was a repair in progress. All water reports to the in floor sumps which appeared to be effectively managing the water.

## Warrens Pump System

Warrens Pump System (Warrens Station) is located adjacent to Robinson Lake. It collects water from Tim's pond and 1 Dam seepage water where it is to be settled and then pumped into the SDP located within the Tenmile basin. The overall condition of the pond is good, water was below the outlet height and banks appear stable.

# Robinson Lake and Dam, Pump Station and Seepwater System:

Robinson Lake is located within the Eagle watershed. Robinson Lake is used as the primary water storage facility. Water collected in the lake is pumped back to the mill to be used as process water and re-circulated throughout the mill. Lime is added to the pond to pretreat the water prior to it reaching the mill. There is a noticeable color difference between Tim's pond, Warren's pond and Robinson Lake based on differences in water chemistry. Overall the lake appears functional with no signs of excessive bank erosion or sluffing.

At the base of Robinson Dam is a seepage collection system. The dam face appeared to be in good shape with no evidence of settling, slumping or erosion. Any water is collected in the small pond at the base of the dam then pumped back into Robinson Lake for future use. The pump station pond was dry, well vegetated and stable. The pump station building itself was only briefly inspected due to noise inside the buildings. Pumps were actively operating providing water to the mill. No leaks were identified and good housekeeping practices were in place.

The Robinson Lake Seepwater Pump Station pond was also inspected. The pond appeared to be stable and the banks were well vegetated. Water was well below the keyed in wall height indicating that pump systems are functional.

No Problems or Possible Violations were identified during this inspection.

Responses to this inspection report should be directed to: Amy Yeldell at the Division of Reclamation, Mining and Safety, Rm 215, 1001 E 62nd Ave, Denver CO 80216. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us

## **Inspection Contact Address**

Diana Kelts Climax Molybdenum Company Highway 91, Fremont Pass Climax, CO 80429

EC: Travis Marshall, Senior EPS, Grand Junction DRMS Dustin Czapla, DRMS Lucas West, DRMS Clayton Wein, DRMS Eric Detmer, Climax

# **PHOTOGRAPHS**









