

# 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.

M-1977-493 INSPECTOR(S):	Molybdenum	Lake, Summit		
INSPECTOR(S):				
	INSP. DATE:	INSP. TIME:		
Lucas West	July 23, 2020	10:05		
<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:			
Diana Kelts	112d-3 - Designated Mining Operation			
REASON FOR INSPECTION: BOND CALCULATION TYPE: BOND AMOUNT:				
BOND CALCULATION TYPE:	BOND AMOUNT:			
None	\$91,011,850.00			
POST INSP. CONTACTS:	JOINT INSP. AGENCY:			
None	None			
CTOR'S SIGNATURE:	SIGNATURE DATE:			
211	August 4, 2020			
the				
	OPERATOR REPRESENTATIVE: Diana Kelts BOND CALCULATION TYPE: None POST INSP. CONTACTS: None	OPERATOR REPRESENTATIVE: Diana KeltsTYPE OF OPERAT 112d-3 - DesignatedBOND CALCULATION TYPE: NoneBOND AMOUNT: \$91,011,850.00POST INSP. CONTACTS: NoneJOINT INSP. AGEI NoneTOR'S SIGNATURE:SIGNATURE DAT		

#### **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>N</u>	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES $\underline{Y}$	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS Y	(SP) STORM WATER MGT PLAN <u>N</u>	(RS) RECL PLAN/COMP <u>N</u>
(ES) OVERBURDEN/DEV. WASTE Y	(SC) EROSION/SEDIMENTATION <u>N</u>	(ST) STIPULATIONS Y
(AT) ACID OR TOXIC MATERIALS <u>N</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**

This inspection was conducted as part of the normal monitoring program established by the Colorado Division of Reclamation, Mining and Safety. Climax is a 112d-3 Molybdenum mining and milling operation located primarily in Summit County. The site consist of 14,000 permitted acres with approximately 8,000 acres of affected lands. The site is bisected by Colorado State Highway 91 and public access is controlled by a guard station at the main gates. The Division currently holds \$91,011,850.00 in Financial Warranty for the site. Ten Photos accompany this report to illustrate the current site conditions.

The inspection was focused on the following areas:

- Storke Interceptor and Wastewater Pump Station
- McNulty Overburden Storage Facility
- 5 Dam Pump System
- 5 Dam Crest Raise
- Mayflower Tunnel Bypass Riser Construction

## Storke Interceptor and Wastewater Pump Station

The Storke Interceptor and wastewater pump station are located just south of the main pit area, adjacent to the 5 shaft area in the Arkansas Basin. The Storke Interceptor collects water from the out slopes of one of the main pit haul roads and reports it to the Storke Wastewater Pump Station. The interceptor ditch was observed and appeared to be functioning as designed. Free from trash, debris and large boulders, the interceptor can be seen in Photo One. The interceptor, as well as other inputs, reports to the Storke Wastewater pump station. The pump station consists of two lined ponds, seen in Photo Two that are pumped by a series of pumps to the East Tailings Delivery Line (ETDL) and ultimately report to the Sludge Densification Plant (SDP) for the first stage of treatment. The pump house building was secure at the time of the inspection. All lines, pumps and equipment located within the pump house were in good condition and functioning as designed at the time of the inspection. The pumps can be seen in Photo Three. No problems or possible violations were noted in this area.

#### McNulty Overburden Storage Facility (OSF)

On June 23 the Operator reported a failure of the underdrain system that had been installed in the McNulty OSF. The underdrain system failed to convey water as it was intended due to high flows. The flow, however was controlled and reported to the McNulty ditch and ultimately to the SDP therefore no loss of containment occurred. The underdrain system was installed under the OSF and was intended to catch surface water as it infiltrated through the overburden. Recent downturns in activity caused less overburden to be deposited on top of the drains, creating a shorter residence time for surface water to infiltrate and report to the drains. Repairs have been designed and will be implemented during the month of August. At this time, a small amount of water can be seen flowing from the toe of the slope. Photo Four shows the flow as it exits the toe of the overburden pile. The flow that is bypassing the system is reporting to McNulty Ditch and flowing to the SDP. Flow was also observed discharging from the underdrain outfall structure, Seen in Photo Five, suggesting that the underdrain is functioning, however some flow is still bypassing the drain. At it's peak the flow that

was bypassing the underdrain system flowed to a sediment control berm adjacent to the Topsoil Stockpile area. The holding pond and sediment control berm appeared to be functioning as designed and showed no damage from the increased flows. The sediment control berm can be seen in Photo Six.

#### 5 Dam pump system

The 5 dam Clear Water Ponds were observed and appeared to be functioning as designed. The ponds, as seen in Photo Seven appeared to possess adequate free board as they report to the 5 dam pump system. The pump system and building were in good condition at the time of the inspection. The interior of the pump building can be seen in Photo Eight. Everything within the pump building is being stored in a neat and orderly fashion and no items of concern were observed in the area.

#### 5 dam Crest Raise

At the time of the inspection a crest raise of the 5 dam was in progress. The crest raise has been completed in Cell 1, where tailings are currently being deposited. Cells 2 and 3 are in construction and will be operational within the coming weeks. A photo of the crest raise construction can be seen in Photo Nine. No tailings were actively being deposited at the time of the inspection. The crest raise construction appears to be in compliance with the approved plans and no problems were observed at this time.

## Mayflower Bypass Tunnel #2 Riser Construction

Adjacent to the Mayflower Tailings Storage Facility the #2 riser is being constructed as it ties into the Mayflower Bypass Tunnel. Discussions with the contractor on site indicate that construction re-bar has been placed and inspected and the anchor bolts were in process of being tested. The first of several concrete pours is expected to happen the week of July 27, with subsequent pours to follow. A photo of the construction area can be seen in Photo Ten.

Throughout the areas that were inspected no problems or possible violations were noted at this time. The overall footprint of the site was in excellent condition and free from excessive trash and debris. All responses to this report should be directed to Lucas West at the Colorado Division of Reclamation, Mining and Safety at 1313 Sherman Street, Room 215, Denver CO, 80203, by phone at (303) 866-3567 Extension 8187 or by email at lucas.west@state.co.us.

#### **Inspection Contact Address**

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

#### PERMIT #: M-1977-493 INSPECTOR'S INITIALS: LJW INSPECTION DATE: July 23, 2020

#### **PHOTOGRAPHS**











Photo Six: View north, showing the sediment control berm adjacent to the McNulty Topsoil Storage Piles. During peak flows of the underdrain failure, slows were retained by the berm and ultimately flowed to the SDP. The berm appeared to function as designed during that time and no signs of damage were observed.





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