

COLORADO Division of Reclamation, Mining and Safety Department of Natural Resources

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:	
Detroit City Mine		M-2017-003	Gemstones	Park	
INSPECTION TYPE:		INSPECTOR(S):	INSP. DATE:	INSP. TIME:	
Monitoring		Michael A. Cunningham	September 29, 2017 12:30		
OPERATOR:		OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:		
Colorado Calumet Co Inc		Graham Sutton	110(1) - Hard Rock Limited Impact		
REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:		
Normal I&E Program		Partial Bond	\$27,153.00		
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:		
NA		None	None		
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DATE:		
Snowing	U	il C.f	November 16, 2017		

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 Y	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE Y	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES <u>NA</u>	(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 Y	(ST) STIPULATIONS <u>N</u>
(AT) ACID OR TOXIC MATERIALS <u>Y</u>	(OD) OFF-SITE DAMAGE <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

OBSERVATIONS

The inspection was conducted by Michael Cunningham of the Division of Reclamation, Mining and Safety (Division). Graham Sutton was present on behalf of Colorado Calumet Co, Inc. The Detroit City Mine is located approximately 6 miles west of Alma, CO in Park County. The site is situated above Buckskin Creek and sits at an elevation of 11,440 feet. The Operator is approved to operate intermittently. The commodity of interest is gem stones and all mining will occur underground.

Gen. Compliance With Mine Plan:

The Operator is currently developing the portal, which has been advanced approximately 160' underground. The Division inspected the entire length of the portal. During the inspection, the Operator was constructing the secondary escapeway which will daylight above the portal in an old prospecting pit.

Under the approved sampling plan, the Operator is required to conduct geochemical sampling of the waste rock to determine if the material has the potential to generate acid. On August 17, 2017, the Division received the results of the first geochemical sampling. The sample was taken approximately 60 feet in the portal. The results of the whole rock analysis and acid-base accounting indicated the waste rock has the potential to generate acid. According to the Operator, a small pyrite vein was intersected which accounted for the results of the geochemical sampling. The Operator will conduct additional sampling as the portal development continues. The Operator anticipates future sampling will be more representative of the material to be mined and will not be acid generating.

The Division approved Technical Revision No. 1 on September 26, 2017, which addressed the offsite disposal of acid-generating material. The Operator will dispose of approximately 20 cubic yards of material at a licensed disposal facility. The acid generating material was stockpiled near the site entrance and was ready for transport to the disposal facility. The Operator is reminded to provide the Division with a copy of the chain of custody upon removal of the material.

Signs and Markers:

The permit sign was not posted at the site entrance as required by Rule 3.1.12. However, the Operator provided evidence the permit sign was posted following the inspection.

This concluded the inspection.

PERMIT #: M-2017-003 INSPECTOR'S INITIALS: MAC INSPECTION DATE: September 29, 2017

PHOTOGRAPHS



1. Future location of secondary escapeway.



2. Overview of access road, photo taken from above portal.



3. Photo of portal.



4. Equipment storage area.

Inspection Contact Address Bryan Lees Colorado Calumet Co Inc 3375 W Powers Circle Littleton, CO 80123

CC: Wally Erickson, DRMS