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: Precious Mine	**MINE/PROSPECTING ID#:** P-2013-008	**MINERAL:** Gold, palladium and platinum	**COUNTY:** Crowley
INSPECTION TYPE: Monitoring	**INSPECTOR(S):** Amy Eschberger	**INSP. DATE:** October 4, 2017	**INSP. TIME:** 15:00
OPERATOR: Catalix International, LLC	**OPERATOR REPRESENTATIVE:** Gerald Korinek	**TYPE OF OPERATION:** MP - Mineral Prospecting	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** Complete Bond	**BOND AMOUNT:** $5,800.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Clear	**INSPECTOR'S SIGNATURE:** Amy Eschberger	**SIGNATURE DATE:** November 2, 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---------- Y	(FN) FINANCIAL WARRANTY-------- Y	(RD) ROADS---------- Y
(HB) HYDROLOGIC BALANCE---------- Y	(BG) BACKFILL & GRADING---------- NA	(EX) EXPLOSIVES--------- NA
(PW) PROCESSING WASTE/TAILING---- NA	(SF) PROCESSING FACILITIES------- NA	(TS) TOPSOIL---------- NA
(MP) GENL MINE PLAN COMPLIANCE- Y	(FW) FISH & WILDLIFE---------- N	(RV) REVEGETATION---- NA
(SM) SIGNS AND MARKERS---------- Y	(SP) STORM WATER MGT PLAN---- Y	(CI) COMPLETE INSP---- Y
(ES) OVERBURDEN/DEV. WASTE--------- NA	(SC) EROSION/SEDIMENTATION--- Y	(RS) RECL PLAN/COMP-- NA
(AT) ACID OR TOXIC MATERIALS------- NA	(OD) OFF-SITE DAMAGE---------- Y	(ST) STIPULATIONS------- NA

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

OBSERVATIONS

This was a normal monitoring inspection of the Precious Mine NOI (P-2013-008) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). The operator, Catalix International, LLC was represented by Gerald Korinek during the inspection. The site is located approximately 3.5 miles northwest of Manzanola, Colorado in Crowley County. The site can be accessed from the north via Co Rd A. The site is situated on an alluvial terrace north of the Arkansas River and Lake Canal. The affected lands were owned by Fred Korinek until he passed away in July of 2017. The affected lands are now owned by Gerald and Randall Korinek. This NOI is associated with a 110d permit (M-2013-008) also called Precious Mine.

This is a mineral prospecting operation permitted for 0.5 acre to investigate gold, palladium, and platinum in the Pierre Shale. The operation will use existing roads for access. The operation was authorized to drill up to 6 boreholes, half of which were to be located within an existing pre-law disturbed area (within the M-2013-008 permit area; drillholes DH1-DH3), and the other half to be located hundreds of feet to the west, on the other side of an ephemeral drainage (drillholes DH4-DH6). The operation was also authorized to dig a small exploratory pit or trench in the eastern portion of an existing pit located south of the M-2013-008 permit area and drillholes DH1-DH3. Up to 15 tons of shale material could be removed from the excavation and transported off site for laboratory testing and analysis. Little to no topsoil is available to salvage in the excavation area, as it is an existing pit with shale exposed at the surface. A copy of the NOI map showing borehole locations and the excavation area are enclosed with this report.

Reclamation of the excavation area is to include grading slopes to 3H:1V or flatter, and potentially spreading any loose soil or shale fines recovered during the operation as a growth medium. The operation might also use topsoil salvaged by the mine operation to the north (however this operation never commenced). The disturbance is to be seeded with a rangeland grass mixture including Vaughn Sideoats grama (9.00 PLS/acre), Lovington Blue grama (3.00 PLS/acre), Native Sand dropseed (0.50 PLS/acre), Arriba Western wheatgrass (1.00 PLS/acre), and Galleta grass (0.50 PLS/acre). The operator may choose to also reclaim the western portion of the existing pit, but this would only be required by the Division if the current operation disturbs the area. Exploratory boreholes will be no more than 50 feet deep and approximately 4.5 inches in diameter. Reclamation of the boreholes will include filling them with coated bentonite pellets, and seeding the area with the same grass seed mixture to be used for the pit area.

At the time of the inspection it was cloudy and cool. The Division first observed the excavation area located south of the M-2013-008 permit boundary (**Photos 1-3**). The entire disturbance is approximately 0.4 acre in size. Disturbance in this area includes two trenches that are 8-10 feet in height and approximately 20 feet and 40 feet in length. Disturbance also includes a north facing cut wall along the southern edge of the pit area which is approximately 50 feet in length and 8-10 feet in height. A few small stockpiles of shale material are stored on the pit floor. Native grasses, shrubs, and annual weeds are volunteering across the pit area. It was difficult to distinguish newer disturbance from older, existing disturbance due to similar vegetative cover across the area. However, the Division believes at least the two trenches were disturbed more recently. For reclamation of this area, the Division would recommend the operator use the stockpiled material in the eastern portion of the pit to backfill the two trenches as much as possible. Any unbackfilled slopes may be cut and filled to gradients of 3H:1V or flatter. All areas that were disturbed by the operation will need to be seeded with the approved seed mixture.

The Division also observed the three drill locations (DH1-DH3) within the M-2013-008 permit area. Borehole DH1 (**Photo 4**) was found at the far southern edge of the M-2013-008 permit area, near the NOI pit area. This borehole appeared to be approximately 8 feet deep and dry. The Division could not find an open borehole at the DH2 location, which is just north of the DH1 borehole. However, at the DH2 location, the Division did observe

a slight depression and gray colored (possibly slurry) material surrounding the depression (**Photo 5**). It appears the borehole has been filled in, possibly naturally. Borehole DH3 (**Photo 6**) was found near the center of the M-2013-008 permit area. This borehole appeared to be approximately 4 feet deep and dry.

According to Mr. Korinek, boreholes DH4-DH6 were drilled on the west side of the drainage in the locations indicated on the NOI map. He believes these holes are unreclaimed. The Division recommends the NOI disturbance be reclaimed as soon as possible, including the boreholes and excavation area. Pursuant to C.R.S. 34-32-113(5.5)(e) and Rule 5.7, a drill hole permanent abandonment final report shall be submitted to the Division within 12 months after (non-artesian) drill holes have been abandoned. A blank copy of this report was given to Mr. Korinek during the inspection, as he indicated he would be the one completing the reclamation. A copy of the abandonment final report is also enclosed with this report.

This concludes the inspection.

PHOTOGRAPHS

Photo 1. View of one of two exploration trenches dug into shale in northeastern portion of existing pit.

Photo 2. View looking west across existing pit, showing shale material stockpiled on pit floor.

Photo 3. View looking south across existing pit, showing shale material stockpiled on pit floor and north-facing cut wall present along southern edge of pit.

Photo 4. Close-up view of borehole DH1 located at southern edge of M-2013-008 permit area. Borehole was approximately 8 feet deep and dry.

Photo 5. Close-up view of borehole DH2 location north of borehole DH1. No open borehole was observed. A small depression surrounded by gray colored (possibly slurry) material was observed (circled). This borehole appears to be filled in, possibly naturally.

Photo 6. Close-up view of borehole DH3 located near center of M-2013-008 permit area. Borehole was approximately 4 feet deep and dry.

Inspection Contact Address

Bryant Harris
Catalix International, LLC
1333 Lockhill Selma
San Antonio, TX 78213

Enclosures: NOI Map showing borehole locations and excavation area in relation to 110d permit area
Mineral Prospecting Drill Hole Permanent Abandonment Final Report

EC: Gerald Korinek via email at: korineksand@gmail.com
Bryant Harris via email at: harris-bryant@sbcglobal.net

NW Corner Section
19 Township 22 S
Range 57 W
3" ALUM CAP
LS 9853

Gary Proctor

Pending 110D
Application Area

DH1
DH2
DH3
DH4
DH5
DH6

Soil from this area may be used on exploration area to improve revegetation

Voluntary reclamation regrading area

Exploratory excavation area. No more than 15 tons to be removed.

West Quarter Corner

Lake C

Legend

- Fences
- Overhead Powerlines
- Water/Drainages
- DH2
- Section Lines

Notes: Most topo from site survey. Extreme northern contours from USGS map.

Revisions	By	Date

Designed:	
Drawn:	
Checked:	
Approved:	

Date
05/21/12

Scale
1" = 50'

Greg Lewicki And Associates
11541 Warrington Court
Parker, CO USA 80138
Phone (303)-346-5196
E-Mail - info@lewicki.biz

NOI Map
Precious Mine
Catalix International, LLC

RECEIVED
OCT 02 2013
Division of Reclamation, Mining & Safety

COLORADO LICENSED
KEVIN E. LAMICQ
0047151
PROFESSIONAL ENGINEER
09/30/13

0' 50' 100' 150'

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

1313 Sherman Street, Room 215
Denver, CO 80203

MINERAL PROSPECTING DRILL HOLE
PERMANENT ABANDONMENT FINAL REPORT

Pursuant to the terms of 34-32-113(5.5)(d) and (e) of the Act and Rule 5.7 of the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations, abandonment reports shall be submitted to the Division within 60 days of abandonment for any drill hole with artesian flow, or within 12 months of abandonment for any other drill hole.

	P
(PROSPECT SITE NAME)	**(PROSPECT NOI No.)**

I. DRILL HOLE: Drill Hole I.D. No.

For this Section I, please attach completed drill hole logs **OR** complete the following information:

(Total Depth)	(Depth of Unconsolidated Material)	(Depth of Penetration into Bedrock)

Was water encountered: No ☐ Yes ☐ if so, at what depth(s):

Was water encountered in either Volcanic or Sedimentary Rock: No ☐ Yes ☐

Date Drilled: Date Permanently Abandoned:

II. OPERATOR (PROSPECTOR) :

(Name)	
(Address)	
(City) (State)	
(Zip) (Telephone No.)	

DRILLER:

(Name)	
(Address)	
(City)	(State)
(Zip)	(Telephone No.)

III. LOCATION:

The following information is required for ALL prospecting drill holes:

[ ] 1/4 of the [ ] 1/4 of Section [ ] Township [ ] Range [ ]

[ ] Prime Meridian [ ] County

If the area has not been surveyed, supply the Longitude [ ] West and Latitude [ ] North, or attach a location map, preferably a USGS Quad.

The following additional information is required for artesian flowing holes:

[ ] Feet [ ] North [ ] South from the [ ] South [ ] North section line

[ ] feet [ ] east [ ] West from the [ ] west [ ] East section line

NOTE: In the case of closely spaced drill holes having similar geologic and hydrologic characteristics, the Operator may, with the approval of the Division, submit a single consolidated final report including the location of all drill holes and a description of abandonment technique. In such case, complete one abandonment final report form and attach a list of drill hole locations. If more space is needed to provide any of the information for this form, please attach separate sheets.

IV. Complete Either Subsection **A** or **B**:

PERMANENT ABANDONMENT (Check either box 1 or subsection 2 boxes as appropriate and provide the requested information)

[ ] 1. Plugged dry hole, method of plugging: [ ]

Depth at which concrete plug set: [ ] feet below ground surface.

[ ] 2. Sealed Hole (when groundwater is encountered):

[ ] 2a. Neat Cement Grout, top to bottom: grout mixture used:

[ ]

Intervals grouted (feet beneath ground surface, method and materials):

[ ]

[ ] 2b. Neat Cement Grout, interval grouting: grout mixture used:

[ ]

Intervals grouted (feet beneath ground surface, method and materials):

[ ]

[ ] 2c. Abandonment Fluid Mixture (Such as Sodium Bentonite with Polymer) Brand Name:

[ ]

Marsh Funnel viscosity of abandonment fluid: sec.

Type of surface plugging used:

Depth at which plug set: feet below ground surface,

Method:

☐ 2d. Other method used with approval of the Division of Reclamation, Mining and Safety; describe in detail method and materials used on a separate attached sheet.

B. CONVERSION TO A WATER WELL

State Engineer's Permit No.: (attach copy of permit)

County Where Well is Located:

Water Well Use:

V. METHOD OF RECLAIMING DRILL SITE SURFACE DISTURBANCE:

The Operator who conducted the prospecting drill operation states that the information set forth hereupon is true to the best of their knowledge.

(Name of Operator's Representative) (Title)

(Signature of Operator's Representative) (Date)