




**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.

<b>MINE NAME:</b> Golden Wonder Mine	<b>MINE/PROSPECTING ID#:</b> M-1978-091-UG	<b>MINERAL:</b> Gold	<b>COUNTY:</b> Hinsdale
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Lucas West	<b>INSP. DATE:</b> October 11, 2021	<b>INSP. TIME:</b> 10:15
<b>OPERATOR:</b> LKA International Inc.	<b>OPERATOR REPRESENTATIVE:</b> Kye Abraham	<b>TYPE OF OPERATION:</b> 110d - Designated Limited Impact	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$136,046.10
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> October 21, 2021

**The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.**

**INSPECTION TOPIC:** Hydrologic Balance

**PROBLEM/POSSIBLE VIOLATION:** Possible Violation: Water quality monitoring and treatment operations at the site are not operating in accordance with the approved permit held by DRMS and is in various states of disrepair. Specifically, the mine water conveyance system designed to deliver the portal discharge to the Mine Water Pond has become obstructed allowing untreated mine water to bypass the mine water pond and enter the lined stormwater Pond. In addition, the mine water pond and stormwater ponds are at maximum capacity with no freeboard to allow for additional inputs from stormwater precipitation or the mine water. In accordance with Technical Revision 4, mine water is to be collected, treated and discharged via the sump system in Deadman Gulch. Also, stormwater is to be impounded, sampled, treated if necessary and discharged via the sump system in Deadman Gulch. The sump has become silted in with sediment and is inoperable at this time.

**CORRECTIVE ACTIONS:** The above listed Possible Violations require immediate action. The Operator shall, within 30 days of the date of this report, make any and all necessary repairs to the water treatment system and resume water treatment and discharge operations in accordance with the approved DRMS AND WQCD Permit. The Operator shall comply with all monitoring and reporting requirements of the applicable permits, treat and discharge all affected waters including the water contained within the mine water pond and stormwater ponds. The mine water pond should be treated and discharged such that sufficient freeboard is established to receive inputs from precipitation and mine discharge water to sustain the system during the winter months. In addition the conveyance system that delivers mine water discharge to the mine water pond should be repaired and reestablished to prevent mine water discharge from bypassing the water treatment system. The stormwater pond should be monitored, treated if necessary and discharged such that sufficient freeboard is established to receive inputs from storm water and snowmelt during the winter months. Please note that stormwater treatment and discharge if necessary may be required throughout the winter months to ensure compliance with applicable water quality regulations. The Operator shall also make repairs to the stormwater control structures as discussed on site immediately. Resumption of treatment operations should be conducted immediately and written documentation and photo documentation shall be submitted to the Division within 30 days of the date of this report. In addition the Operator shall provide to the Division a written narrative supported by photo documentation, detailing the repairs that have been made, a summary of the volume of water treated, and discharged including the water quality reports detailing the quality of the discharge water to ensure compliance with the applicable permits. This report should be provided to the Division within 60 days of the date of this report.

Water treatment operations and written verification thereof shall resume and be provided to the Division within 30 days of the date of this letter, no later than Friday November 26, 2021. The follow up, detailed report shall be provided within 60 days of the date of this letter, no later than Monday December 27, 2021.

This issue is being cited as a possible violation of the Mined Land Reclamation Act, Pursuant to C.R.S. 34-32-116(7)(g) and a Reason to Believe a Violation Exists and Notice of Hearing before the Mined Land Reclamation Board is forthcoming under a separate cover.

**CORRECTIVE ACTION DUE DATES:** 11/26/2021 and 12/27/2021

**INSPECTION TOPIC:** other

**PROBLEM/POSSIBLE VIOLATION:** Problem: Trash and refuse was noticed on the site. This is a problem at this time for failure to dispose of refuse in a manner that controls unsightliness or deleterious effects of such refuse pursuant to C.R.S. 34-32.5-116(4)(e). A large amount of drill core boxes were observed around the 3 level portal area. The boxes have been left unsecured, and dispersed across the site and the surrounding area.

**CORRECTIVE ACTIONS:** The operator shall submit a written notice to the Division with photo documentation, that the trash has been removed from the site by the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 12/13/21

## **OBSERVATIONS**

This inspection was conducted as part of the normal monitoring program for active mines, established by the Colorado Division of Reclamation, Mining and Safety's Active Mines Program. The Golden Wonder Mine is listed as an active 110-d Operation, located in Hinsdale County, approximately 2.5 miles southeast of Lake City at an elevation of 9895 feet. Public access to the site is controlled by a series of locked gates. The permit area consists of 3.5 acres in support of the underground extraction of gold and the approved reclamation plan supports a post-mining land use of wildlife habitat. The Division currently holds \$136,046.10 in financial warranty for the site. A reclamation cost estimate was not performed as a result of this inspection, but will be conducted and sent to the Operator under a separate cover. Fourteen photos accompany this report to illustrate the observed site conditions.

The site was not active during the day of the inspection, and various mining related equipment is stored on site. The proper mine identification sign was posted at the entrance to the site, and the permit boundaries were easily identifiable. The permit area consists of two major components, the 6 level portal area and up gradient lies the 3 level portal area. The 6 level portal area is the focus of the mining operation and contains the portal, portal pad, shop facility, mine water collection pond, stormwater collection pond, crusher area, materials storage areas and waste rock dump. The 6 level portal area was closed and secured with a locking metal gate, seen in Photo One. The closure was verified secure, and showed no signs of vandalism or attempted unauthorized entry. At the time of the inspection, the portal was not discharging, however for most of the year a discharge is present. The average discharge typically flows at approximately .5 to 1 gallon per minute (GPM). When the portal is discharging, mine water is routed to the lined mine water collection pond, shown in Photo Two. The mine water collection pond is lined with a synthetic liner, and is in marginal condition. The pond also acts as a settling pond for suspended solids contained within the mine discharge and sediment build up was observed in the bottom of the pond. The pond level is high, with minimal available freeboard to account for precipitation, snow melt or additional mine discharge. Though the portal was not discharging at the time of the inspection, the conveyance pipe that diverts water to the mine water collection pond was visibly obstructed, and has been for some time. For an unknown duration, the mine water has established a preferential flow path, bypassing the mine water pond, flowing around the edge and reporting to the stormwater collection pond untreated. Visible evidence of impaired water quality in the form of mineral staining was observed within that flow path. The flow path can be seen in Photo Three. As detailed in the corrective actions of this report, the Operator shall immediately mobilize any and all personnel and equipment necessary to make repairs to the treatment system, and resume water quality treatment, discharge and monitoring operations.

Located adjacent to the mine water collection pond, is the mine water treatment tank shown in Photo Four. The mine water treatment system was addressed in Technical Revisions 3 and 4. The tank was empty at the time of the inspection, and shows evidence of improper placement. The tank does not sit on a competent foundation, and has settled during use, resulting in a significant lean that will need to be corrected prior to use. Visual evidence of impaired water quality was also observed on the tank in the form of red staining around the base of the tank. Mine water treatment is achieved by the addition of chemicals to achieve water quality standards, and discharge via PVC pipe to the collection sump located down gradient in Deadman Gulch. The sump was observed, and can be seen in Photo Five. The sump acts as a collection and mixing pond for mine discharge water, as well as waters from Deadman Gulch that have been routed around the disturbed area. The sump contained no water, and has become silted in. As part of the Corrective Actions required

under this report, the Operator shall immediately mobilize any and all personnel and equipment necessary to clean out the sump and restore it to a proper functioning condition prior to use.

Stormwater flows are controlled along the access road leading to the 6 level portal area by way of a bar ditch and periodic culverts before reaching the pad. Three culverts have been installed along the access road, two of which are completely plugged preventing flow. An example of the plugged culverts can be seen in Photo Six. The two culverts that are plugged are the two closest to the 6 level portal area. The plugged culverts result in stormwater flowing down the access road, across the portal pad and into the stormwater collection pond. No evidence of significant erosion was noted as a result of the plugged culverts, however it has resulted in increased stormwater storage in the stormwater collection pond. The pond can be seen in Photo Seven and similar to the mine water collection pond is lined with a synthetic liner. It too, appears to be at or near its maximum capacity, additional stormwater inputs will result in unmanaged discharge into Deadman Gulch. Onsite discussions with the Operator indicated that repairs to the stormwater controls could wait until the spring of 2022, however given the interaction of the stormwater controls with the mine water and stormwater ponds on site, repairs to the stormwater control structures should be conducted immediately. Please note that stormwater monitoring, treatment if necessary and discharge may be required through the winter months to ensure compliance with Colorado Water Law which requires impounded storm water be released within 72 hours.

Observations made during this inspection related to the hydrologic systems of the site including the mine water discharge, treatment operations and stormwater controls are of the utmost concern and require immediate action. Water quality monitoring and treatment operations at the site are not operating in accordance with the approved permit and are in various states of disrepair. Please see the possible violation and corrective actions detailed on pages one and two of this report. The Operator shall comply with all provisions of the corrective actions within 30 and 60 days respectively. Documentation of completed corrective actions must be received by the Division no later than **Friday November 26, 2021 and Monday December 27, 2021.**

Taking observations made during this inspection as well as details from the approved reclamation permit, Division staff has evidence and reason to believe a violation of the Mined Land Reclamation Act exists. A Reason to Believe a Violation Exists and Notice of Hearing before the Mined Land Reclamation Board is forthcoming and will be sent to the Operator under a separate cover.

Other surface facilities associated with the 6 level portal area include a shop facility, shown in Photo Eight, which is in good condition and was secure. The shop facility shows no signs of damage, vandalism or attempted unauthorized entry. Adjacent to the shop lies a diesel powered generator, storage container and crusher equipment used for sizing ore material prior to exportation. The crusher equipment can be seen in Photo Nine, and is in marginal condition. Located at the shoulder of the portal pad, lies the waste rock dump. The waste rock dump appeared stable at the time of inspection but did show signs of monitored erosion along its face. These erosional features should be monitored by the Operator in the future. Conversations with the Operator indicate that the waste rock dump has not been used in years, and will not be used in the future. The materials storage area is located just to the north of the portal and consists of a concrete pad with pre-cast blocks used as walls and a low grade ore stockpile. The materials can be seen in Photo Ten. The low grade ore stockpile is covered to prevent exposure to precipitation, and the concrete pad contains remnants of iron ore slag that was imported to the site for previous iterations of a passive water treatment system.

Throughout the 6 level portal area, various mining related debris and equipment is scattered. The Operator should conduct an extensive site cleanup and organization as soon as is practical. With the impending winter conditions, access to the site will soon become impossible, and therefore should be conducted as soon as access can be gained in spring or summer of 2022.

The secondary portion of the permit area is the 3 level portal area. This area consists of a secured portal, portal pad, waste rock dump and equipment storage areas. The three level portal, shown in Photo Eleven, was observed to be secured and showed no signs of vandalism or attempted unauthorized entry. Unlike the 6 level portal, the 3 level portal does not have an associated discharge. The portal pad and waste rock dump appeared stable at the time of the inspection and no signs of settling, slumping or erosion was noted. Various mining related equipment is stored at the 3 level portal area and is scattered and disorganized. As is the case with the 6 level area, a general site cleanup and organization should be conducted during the summer of 2022.

The 3 level portal area has been used as a staging area for drilling operations associated with the Operator's currently held NOI, file no P-2018-010. As a result of using the area for staging, a significant pile of cardboard drill core boxes were left unsecured on site. The main pile, seen in Photo Twelve has been exposed to the elements and dispersed across the site and surrounding areas by wind. Photos Thirteen and Fourteen show the scattered boxes that were observed. This is being cited as a problem for failure to dispose of refuse in a manner that controls unsightliness or deleterious effects of such refuse pursuant to C.R.S. 34-32.5-116(4)(e). The Operator shall conduct cleanup and removal of all associated trash and debris, specifically the cardboard drill core boxes at the 3 level. Cleanup efforts should be conducted within 60 days of the date of this report, and the Operator shall provide photo documentation that all items have been removed from the site. Photo documentation should be received by the Division no later than **Monday December 13, 2021**.

The overall footprint of the site is in marginal condition, extensive site cleanup and organization should be conducted as soon as conditions allow. No evidence of settling, slumping or erosion was noted during the inspection and no state-listed noxious weeds were identified. 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. Direct contact can be made at the Division's Grand Junction Field Office, by phone at 303-866-3567 Ext. 8187 or by email at lucas.west@state.co.us.

#### **Inspection Contact Address**

Kye Abraham  
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CC: Travis Marshall, Senior Environmental Protection Specialist  
Russ Means, Active Mines Program Director, Minerals  
Jeff Fugate, DRMS Minerals AGO Counsel  
Andrea Nestler, CDPHE, WQCD



## **PHOTOGRAPHS**





























### GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>PV</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</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----- <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>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