

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:	
Byzantine Quarry	M-2007-014	Limestone (general), Fremont	
		granite, granite gneiss and	
		(silica, stone, quartzite)	
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE: INSP. TIM	E :
Monitoring	Timothy Cazier, P.E.	June 15, 2021 11:00	
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Byzantine Quarry LLC	Dan Tezak	112c - Construction Regular Operation	
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:	
Normal I&E Program	Partial Bond	\$90,052.00	
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:	
NA	None	None	
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:	
Clear	him alt	September 24, 2021	

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>Y</u>	(FN) FINANCIAL WARRANTY Y	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE Y	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>Y</u>
(PW) PROCESSING WASTE/TAILING Y	(SF) PROCESSING FACILITIES \underline{Y}	(TS) TOPSOIL <u>NA</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>Y</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS Y	(SP) STORM WATER MGT PLAN Y	(RS) RECL PLAN/COMP NA
(ES) OVERBURDEN/DEV. WASTE Y	(SC) EROSION/SEDIMENTATION Y	(ST) STIPULATIONS Y
(AT) ACID OR TOXIC MATERIALS Y	(OD) OFF-SITE DAMAGE <u>Y</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 regular monitoring program. The Permittee (Byzantine Quarry LLC) was represented by Mr. Daniel Tezak. The Byzantine Quarry access road is located approximately 2.5 miles north of Hwy 50 on Fremont Co Rd 69. This is a 112c mine producing primarily decorative stone for landscaping. It was not operating at the time of the inspection. However, evidence of recent activity was observed in the form of product stockpiles (see **Photo 1**).

<u>Availability of Records</u>: Annual fees are paid through December 2020. The required annual geotechnical report was submitted with the 2020 report. The previous inspection was on May 3, 2017. The approved post-mine land use is rangeland. There are no open infractions. Both the surface and minerals are privately owned.

Acid And Toxic Materials: No acid or toxic materials are stored on site.

<u>Excess Spoil and Dev. Waste:</u> There are two overburden storage areas on site stockpiled by the first Permittee (Larsen Colorado): one west of the access road across from the truck scale and one on the north end of the active pit (see **Photo 2**).

<u>Explosives:</u> Mr. Tezak stated he blasts about once per year and that he keeps blasting records at the T.H.E. office off Tunnel Drive. Buckley Powder provides the explosives. The nearest structure is of CR29 about 0.4 miles to the southwest on the other side of a high ridge.

<u>Financial Warranty</u>: The \$90,052 bond held by the DRMS was last updated in 2013 as part of surety reduction request (SR-01) changing the seed mix. The 2013 bond estimate covers 50 acres of reseeding. As only 18 acres are currently disturbed, this amount is adequate for the current mine disturbance.

Fish and Wildlife: No impact to wildlife was observed.

Hydrologic Balance: No standing water was observed in the pit and no exposed groundwater was observed.

<u>Gen. Compliance with Mine Plan:</u> The operation is in Phase I (about 60 acres) and appeared to be in compliance with the approved mine plan. The maximum allowed disturbed area is 104 acres. Google Earth was used to measure the disturbed area, which was estimated to be approximately 16 acres, based on 2019 imagery. The annual report states 18 acres are disturbed. Highwalls were estimated to be 30 feet in height (see **Photo 3**). Benches are well over the required minimum of 55 feet in width (Google Earth measurements indicate the bench width varies between 120 and 160 feet). These wide benches are needed to limit large slope failures due to the dipping slope of the bedrock geology (see **Photo 4**). Some tension cracks (see **Photo 5**) and evidence of movement (see **Photo 6**) were observed on the bench.

<u>Off-site Damage</u>: The operation appeared to be confined to the permit boundary, based on Google Earth review and site observations.

Processing Waste: No processing waste was observed.

<u>Roads</u>: Haul and access roads did not appear to be a source of sediment that could be tracked offsite. Mr. Tezak stated dust control methods are implemented once or twice a week when operating and once per month during the winter.

<u>Right of Entry:</u> The site is owned by Byzantine Quarry LLC, the Permittee.

<u>Reclamation Success</u>: No reclamation has been initiated.

<u>Revegetation:</u> No noxious weeds were observed.

<u>Sediment Control</u>: No erosion problems were observed and no BMPs were needed at the time of the inspection.

<u>Support Facilities On-site</u>: Only the truck scale and scale house were observed on site. Mr. Tezak uses a contractor that brings in portable equipment to crush and screen rock.

<u>Signs and Markers</u>: The permit sign was properly posted (see **Photo 7**) and affected area boundary markers were observed on the east side (see **Photo 8**). The drainage on the south end is essentially coincident with the south affected area currently being mined. The west side of the Phase 1 area is over 900 feet west of the current disturbance limit. The affected area boundary on the north is north of the access road from CR 69 and approximately 1500 feet north of the truck scale. As such, the current boundary markers are considered adequate.

Permit Stipulations: There are two permit stipulations:

1. During each year when development and/or production blasting occurs in the quarry, the Operator shall include a geotechnical section into the annual reclamation report providing updated geotechnical observations and measurements and associated recommendations for quarry development to provide a safe highwall during operations and a long term stable highwall at the time of reclamation. In particular, the geotechnical observations and measurements will include evaluation of the presence or absence of clay filling in geologic structures that dip out of the quarry face, and will evaluate any changes in orientation, spacing, and roughness of geologic structures observed relative to the observations documented in the initial report.

2. The Applicant must commit to preparing a blasting report for each shot. These reports must be retained by the Operator for at least three years and be available for inspection by the DRMS on demand. Please remember to prepare these reports and keep them on file for at least 3 years. The specific requirements for the blasting report were detailed in the Division's 2013 inspection report.

<u>Storm Water MGT Plan</u>: No oil or fuel spills observed. Mr. Tezak stated there are six discharge points and one sediment pond (see **Photo 9**). The stormwater management plan is kept in the office in Pueblo. Stormwater drains to the pit and infiltrates.

Structures: No structures were observed within 200 feet of the affected area.

Please contact Tim Cazier (303)866-3567 ext. 8169 or email at <u>tim.cazier@state.co.us</u> if you have any questions regarding this report.

PERMIT #: M-2007-014 INSPECTOR'S INITIALS: TC1 INSPECTION DATE: June 15, 2021

PHOTOGRAPHS



Photo 1. Product stockpiles on pit floor (looking NNE).



Photo 2. Overburden stockpile (north end of active pit, looking NE).

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PHOTOGRAPHS (cont.)



Photo 3. Typical highwall (mid bench looking SW, note dipping bedrock at crest).



Photo 4. Exposed dipping bedrock (looking NNW).

PHOTOGRAPHS (cont.)



Photo 5. Tension crack and evidence of movement (mid bench, looking south).



Photo 6. Evidence of bench movement – limit appears to be safely offset from highwall.

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PHOTOGRAPHS (cont.)



Photo 7. Permit sign (at gate approximately 800 ft west of CR 69).



Photo 8. East side affected area markers (looking north).

PHOTOGRAPHS (cont.)



Photo 9. Sediment pond (south end looking east, east boundary marker circled).

Inspection Contact Address

Dan Tezak Byzantine Quarry LLC 1087 East Holiday Drive Pueblo West, CO 81007

ec: DRMS file Dan Tezak, Byzantine Quarry