

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:		
Weaver Quarry	M-1986-085	Sandstone (silica, stone, quartzite)	Larimer		
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:		
Monitoring	Amy Eschberger	March 11, 2021	10:15		
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:			
Loukonen Bros. Stone Company	Michael Loukonen	110c - Construction Limited Impact			
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:			
Normal I&E Program	Complete Bond	\$16,350.00	\$16,350.00		
DATE OF COMPLAINT: POST INSP. CONTACTS:		JOINT INSP. AGENCY:			
NA None		None			
WEATHER: INSPECTOR'S SIGNATURE:		SIGNATURE DATE:			
Clear	Clarry Erebeuger	March 17, 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 <u>Y</u>	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>NA</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 N
(SM) SIGNS AND MARKERS Y	(SP) STORM WATER MGT PLAN Y	(RS) RECL PLAN/COMP Y
(ES) OVERBURDEN/DEV. WASTE Y	(SC) EROSION/SEDIMENTATION \underline{Y}	(ST) STIPULATIONS <u>N</u>
(AT) ACID OR TOXIC MATERIALS <u>NA</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 was a normal monitoring inspection of the Weaver Quarry (Permit No. M-1986-085) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). The operator was represented by Michael Loukonen during the inspection. The site is located less than one mile southwest of Masonville, CO in Larimer County. The main access to the site is from the south off of Co Rd 27. A permit sign is posted at the gated entrance to the site. It should be noted, this permit is located adjacent to and partially overlaps another 110c permit held by the same operator called the Starks Quarry, Permit No. M-2001-114. **Photos 1-14** taken during the inspection are included with this report.

This is a 110c open quarry operation permitted for 7.5 acres (see enclosed Google Earth image of site) to mine sandstone for decorative and construction use. The sandstone is pried loose along bedding planes, cut by machines, and stacked on pallets for sale. No blasting methods are used by this operation. All materials are extracted with hand tools or light equipment. The operation began mining from an existing historic quarry located near the center of the permit area, expanding it generally southward (see enclosed mining plan map). The western half of the permit area consists of quarry disturbances along the eastern face of a ridge. The active highwall is located at the southwestern edge of the permit area. This highwall is estimated to be approximately 5 feet in height and 175 feet in length, with near vertical slopes. The rest of the quarry disturbance consists of exposed sandstone with natural slopes of 2H:1V to 2.5H:1V, waste rock stockpiles, and quarry roads. The Division estimates the quarry disturbance area to cover a total of approximately 4 acres.

The eastern half of the permit area consists of a flat shop/storage area at the base of the ridge. Prior to the Cameron Peak wildfire which impacted the site in 2020, a shop building, mobile home/office, and storage shed were present in this area. However, the shop building and storage shed burned down in the fire, leaving only the mobile home/office. A low-lying waste rock berm lines the eastern edge of this area. Stacked stone and wooden pallets are stored along its perimeter. A few empty overhead fuel tanks and some miscellaneous pieces of equipment are stored in this area. A lined irrigation ditch runs north-south across the western edge of the shop/storage area. This ditch will not be impacted by the mine operation.

The site was not active at the time of the inspection. However, according to the operator, the site is active every year in accordance with its intermittent status (less than 180 days per year). The operator is currently working to acquire laborers for this summer. The permit boundary is delineated by white posts. The operator had corrected some of the boundary marker locations in response to a problem cited after the Division's last inspection conducted on April 23, 2015. The posts appeared to be in the same locations as shown in the photos submitted with the operator's corrective action response received on June 2, 2015.

As noted above, the permit area for this site partially overlaps the operator's larger Stark Quarry permit area (see enclosed Google Earth image of site showing both permit areas). In previous inspection reports, the Division has recommended the operator submit a Conversion application to change one of the 110c permits to a 112c permit that covers all the affected lands at the site. Upon the Division's approval of this application, the operator could then request a full release of the remaining 110c permit (covered under the new 112c permit area). Doing this would remove any ambiguity regarding the permit boundary and the activities authorized by the permit. If the operator chooses not to submit a Conversion application to combine the permit areas, the Division recommends the operator be very careful not to conduct activities in a permit area which are not approved for that particular permit, and to be diligent in maintaining the boundary markers for both permits so the permit areas can easily be differentiated by both mine staff and Division inspectors.

The approved post-mining land use for the site is wildlife habitat. The reclamation plan calls for backfilling any highwalls to a minimum 2H:1V slope, spreading out waste rock stockpiles, replacing approximately 3 inches of

topsoil on disturbed areas, and revegetating the land with the following seed mixture: Big Bluestem, Sideoats Grama, Switchgrass, Yellow Indiangrass, Western Wheatgrass, and Mountain Mahogany. The eastern shop/storage area will not be revegetated as it will continue to be used for parking and storage by the landowner. The existing access road which runs north-south across the shop/storage area will remain for reclamation.

After conducting this inspection, the Division reassessed the required financial warranty for reclaiming an estimated 4 acres of quarry disturbance at the site. The currently held financial warranty amount of \$16,350.00 was found to be adequate for reclaiming the disturbance in accordance with the approved reclamation plan.

This concludes the report.

Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at <u>amy.eschberger@state.co.us</u>.

PHOTOGRAPHS



Photo 1. View looking west at waste rock piled near center of quarry disturbance area.



Photo 2. View looking northwest at waste rock piled near northwestern edge of quarry disturbance area.



Photo 3. View looking north across small work area created near center of quarry disturbance area.



Photo 4. View looking north across active quarry area from top of highwall. Note exposed sandstone with natural slopes of 2H:1V to 2.5H:1V.



Photo 5. View looking northeast across active quarry area from top of highwall. Note shop/storage area visible in background (at base of ridge).



Photo 6. View looking east across active quarry area from top of highwall.



Photo 7. View looking south across active quarry, showing exposed sandstone with natural slopes of 2H:1V to 2.5H:1V. Note portion of highwall visible at top right, approximately 5 foot high with near vertical slopes.



Photo 8. View looking east from northeastern edge of quarry disturbance area, showing shop/storage area below. Note blackened areas below from recent wildfire.



Photo 9. View looking south across shop/storage area toward main site entrance.



Photo 10. View looking southwest across shop/storage area. Note quarry disturbance area in background.



Photo 11. View looking west across shop/storage area, showing mobile home/office that remains in this area (other buildings burned in recent wildfire). Note quarry disturbance area in background.



Photo 12. View looking northwest across shop/storage area. Note quarry disturbance area in background.



Photo 13. View looking north across shop/storage area. Note mined sandstone stacked along perimeter of this area.



Photo 14. View looking north at lined irrigation ditch which runs north-south across western edge of shop/storage area. This ditch was dry during the inspection.

Inspection Contact Address

Michael Loukonen Loukonen Bros. Stone Company 12993 N Foothills Hwy Longmont, CO 80503

- Encls: Google Earth image of site showing Weaver Quarry permit area Mining Plan Map Google Earth image of site showing both Weaver Quarry and Starks Quarry permit areas
- CC: Michael Cunningham, DRMS

M-1986-085 / Weaver Quarry / Loukonen Bros. Stone Company (110c)

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Dark Red Outline = 7.5 acres = Permit Area (location approximated based on permit maps) Yellow Line = 176 feet = Approximate Length of Active Highwall (Image data from 7/17/2019)

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M2001-114/M1986-085 - Starks Quarry/Weaver Quarry - Loukonen Bros. Stone Company

Red Outline = 9.12 acres = Permit Area for Starks Quarry (location approximated based on permit maps) Dark Red Outline = 7.5 acres = Permit Area for Weaver Quarry (location approximated based on permit maps) (Image data from 7/17/2019)

