


**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: Belveal Gravel Pit	MINE/PROSPECTING ID#: M-2001-056	MINERAL: Gravel	COUNTY: Elbert
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: February 17, 2016	INSP. TIME: 11:45
OPERATOR: Elbert County	OPERATOR REPRESENTATIVE: Ted Dole	TYPE OF OPERATION: 110c - Construction Limited Impact	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$0.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 21, 2016	

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----- <u>NA</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	(ST) STIPULATIONS----- <u>NA</u>

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 Belveal Gravel Pit (Permit No. M-2001-056) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. Ted Dole represented the operator during the inspection. The site is located approximately 20 miles northeast of Rush, Colorado in Elbert County. The site can be accessed from the south off of Co Rd 22. The affected land is owned by Robert L. Belveal. The approved post-mining land use is rangeland.

This is a 110c operation permitted for 9.9 acres to mine sand and gravel for construction and maintenance of county roads. An Acreage Reduction (AR-01) approved on 05/05/2011 released 0.94 acres of undisturbed land in the southern portion of the original permit area, so that the 0.94 acre haul road could be added to the permit area in the permit Amendment (AM-01) approved on 05/09/2011. The permit area (**see enclosed Google Earth image of site**), excluding the haul road, is rectangular in shape, and composed of approximately 8.96 acres. The permit area is situated adjacent to and south of an unnamed stream that drains southeast to Horse Creek when carrying water. A series of historic drainage control berms are present in the southern half of the permit area, oriented roughly north-south. These structures will be mined through. The approved maximum mining depth is approximately 25 feet. According to the approved mining plan, the operation will begin mining the northern portion of the site, and work southward in mining phases A through E. Mined material will be pushed into stockpiles on the pit floor, then hauled off site. Material will not be processed on site. Working faces will be maintained at a 3H:1V slope gradients during mining. Salvaged topsoil will be stored at the edges of the active pit. Berms may be constructed along the eastern and southern edges of the active pit to prevent sediment from being transported to the adjacent creek. The operation is approved for intermittent status to operate less than 180 days per year.

The approved reclamation plan includes grading all disturbed slopes to 3H:1V or flatter, transitioning to a gentle 2% slope on the eastern side of the site, replacing any remaining overburden at a depth of approximately 8 inches, replacing topsoil at a depth of approximately 6 inches, and revegetating the site with a native grass mixture. The approximately 0.94 acre haul road will also be reclaimed.

At the time of the inspection, it was partly cloudy and windy, with some snow cover remaining. A permit sign was posted at the main entrance to the site off of Co Rd 22 (**Photo 1**). The permit boundary was delineated with metal stakes. The site was not active during the inspection. However, Mr. Dole stated the county hauls off from the site every year, which is in accordance with the operation's intermittent status. The active pit is located primarily in mining phase A, with a depth of approximately 10-12 feet below ground surface. The excavation is oval in shape, with pit walls graded flatter than 3H:1V (**Photos 2-5**). A material stockpile is stored on the pit floor (**Photo 6**). Topsoil is stored along the edges of the pit, and appear to be stable (**Photo 7**). The current pit has reached its lateral extent within the permit boundary to the north, east, and west. The operation stripped an area south of the active pit in preparation for mining phase B (**Photos 8 and 9**). However, according to Mr. Dole, the gravel is not good quality south of the pit. Therefore, the overburden was replaced, and the topsoil will be replaced in the near future. Currently, the salvaged topsoil is stockpiled along the eastern and western edges of this area (**Photo 10**). The Division estimates the operation has disturbed a total of approximately 4.75 acres (3.75 acre pit area plus ~ 1 acre haul road).

Mr. Dole indicated that better gravel may exist to the west of the current permitted area. Therefore, the operator is considering submitting a Conversion application to go from a 110c permit to a 112c permit, incorporating acreage to the west into the permit area. If the operator wishes to release the undisturbed southern portion of the current permit area, this could be done at any time by submitting an Acreage Reduction request.

Overall the site appeared to be stable. This concluded the inspection.

PHOTOGRAPHS



Photo 1. View of permit sign posted at main entrance to site off of Co Rd 22.



Photo 2. View looking northwest from southern edge of pit, showing western pit wall graded to flatter than 3H:1V slope gradient.



Photo 3. View looking northeast from southern edge of pit, showing eastern pit wall graded to flatter than 3H:1V slope gradient.



Photo 4. View looking west from northern edge of pit, showing northern pit wall graded to flatter than 3H:1V slope gradient.



Photo 5. View looking south from northern edge of pit, showing eastern pit wall graded to flatter than 3H:1V slope gradient.



Photo 6. View looking southwest, showing material stockpile stored on pit floor near haul road entrance to pit.



Photo 7. View looking east, showing topsoil stockpile stored at edge of eastern pit wall.



Photo 8. View looking southeast across area south of active pit that was stripped, but good quality gravel not found. Overburden was replaced, and topsoil will be replaced and area revegetated.



Photo 9. View looking north across area south of active pit that was stripped, but good quality gravel not found. Overburden was replaced, and topsoil will be replaced and area revegetated. Note active pit in background.



Photo 10. View looking east, showing topsoil stripped from area south of active pit, stockpiled along edge of stripped area. Topsoil appears stable, but will need to be replaced across disturbed area as soon as possible to protect area from erosion.

Inspection Contact Address

Ted Dole
Elbert County
218 Cheyenne Street
Kiowa, CO 80117

Enclosure: Google Earth images of site

CC: Wally Erickson, DRMS

M-2001-056 / Belveal Gravel Pit / Elbert County

Red Outline = 9.9 acres = Approved Permit Area (8.96 acres + 0.94 acre haul road)

Blue Outline = 4.7 acres = Disturbed Area (3.75 acres + 0.94 acre haul road)

(Image data from 8/28/2013)

Google earth

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M2001-056



1000 ft

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