

COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY 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:
Gunkel Pit No 31	M-1993-088	Gravel	Baca
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Amy Eschberger	November 20, 2014	11:00
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Baca County	Jason Freiberger and Race Chenoweth	112c - Construction Regular Operation	

REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program	None	NA
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	ann Eichberger	July 10, 2015

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 NA	(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 NA	(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 Y	(SB) COMPLETE INSP Y
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP Y
(AT) ACID OR TOXIC MATERIALS NA	(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 Gunkel Pit No. 31 (Permit No. M-1993-088) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. Freiberger and Mr. Chenoweth represented the operator, Baca County during the inspection. This site is located approximately 13 miles northwest of Springfield, CO, on land owned by Zora Gunkel Estate. Access to the site is from the west off of Co Rd 23. The site is bisected by Sand Creek which flows east when carrying water. However, this creek only flows during big storm events. The approved post-mining land use is rangeland.

This is a 112c operation permitted for 160 acres to mine gravel for use in county road maintenance. The maximum mining depth is approximately 35 feet. The maximum allowed disturbance at any time is 20 acres (as of TR-01, approved 01/07/2008). The operation maintains approximate 2H:1V to 3H:1V slopes as material is extracted. The operation began mining in the southwestern portion of the permit area and is advancing mainly to the east. The approved mining plan states that mining will proceed eastward south of Sand Creek and will then continue north of the creek. The operation will not disturb the creek bed.

At the time of the inspection, the weather was clear, cool and sunny, and the ground was dry. A permit identification sign was posted at the main entrance to the site off of Co Rd 23 (**Photo 1**). This sign included the operator name; however, the permit number was weathered and hard to read. Also, pursuant to Rule 3.1.12(1), it should include a statement that the permit was issued by the Colorado Mined Land Reclamation Board (MLRB). The Division recommends the operator replace this sign and include, at a minimum, the information listed above. The permit boundary was delineated by property fencelines. The mine was not active during the inspection, and no equipment was present on site. However, the county extracts and/or hauls material off site every year, which is in compliance with its intermittent status.

The Division estimates that approximately 19.8 acres have been disturbed by this operation (see enclosed Google Earth image of site), which is in compliance with the maximum allowed disturbance. However, before expanding the pit much farther, the operator will need to either fully reclaim a portion of the site (according to the approved reclamation plan) or submit a Technical Revision (see enclosed form) to the approved mining plan to increase the maximum allowed disturbed acreage to more than 20 acres. Current disturbance includes a horseshoe shaped pit with mined walls mainly daylighting to the north and west (**Photo 2**), topsoil and overburden stockpiles stored above the pit along the southern permit boundary (**Photos 3** and **4**), and a separate topsoil stockpile stored immediately north of the main access road (**Photo 5**). The topsoil and overburden stockpiles appeared to be stable with some vegetative cover. The southern (north-facing) highwalls are approximately 25-30 feet in height and have slope gradients of 2H:1V to 3H:1V (**Photos 6** and **7**). The eastern mined slopes were graded to mainly 4H:1V and have some native grasses volunteering across them (**Photo 8**).

The northern mined slopes were graded to 4H:1V or flatter and have some native grasses, yucca, and weeds establishing across them (**Photo 9**). However, the county has had some difficulties establishing vegetative cover on the uppermost portion of the northern slope (**Photo 10**). In this area, the ground is mainly bare with some patchy vegetative growth. During the inspection, Mr. Freiberger and Mr. Chenoweth indicated the county intends to interseed this portion of the northern slope and will either crimp in straw mulch or apply manure to the area. The approved reclamation plan allows for either of these methods. All mined slopes appeared to be stable, showing no evidence of excessive erosion. No problems with state-listed noxious weeds were observed.

The approved reclamation plan calls for grading all slopes to 3H:1V or flatter, replacing a minimum of 6 inches of topsoil on disturbed areas, and revegetating the site to rangeland. The dirt access road that enters the pit from the southwest will not be reclaimed.

PHOTOGRAPHS



Photo 1. View of permit sign posted at main site entrance off of Co Rd 23. Permit number in top-left corner is hard to read. The Division requires permit signs to include the permit number, operator name, and a statement that the permit was issued by the CO MLRB.



Photo 2. View looking east across pit from southwestern edge. Only a portion of the southern mining wall is shown at right.



Photo 3. View looking west from southeastern edge of disturbance, showing topsoil stockpile (at right) stored along southern edge of pit, adjacent to southern permit boundary (at left, marked by fenceline).



Photo 4. View looking southeast from southwestern edge of disturbance, showing overburden stockpile stored above pit, adjacent to topsoil stockpile shown in **Photo 3**.



Photo 5. View looking northwest from southwestern edge of disturbance, showing topsoil stockpile (indicated) stored immediately north of haul road.



Photo 6. View looking south from pit floor, showing southern mining walls with slope gradients of mainly 2H:1V to 3H:1V.



Photo 7. View looking west from southeastern edge of pit, showing southern mining walls with slope gradients of mainly 2H:1V to 3H:1V.



Photo 8. View looking southeast, showing portion of eastern mining wall graded to mainly 4H:1V. Note some native grasses volunteering across slopes.



Photo 9. View looking east across northern mined slopes graded 4H:1V or flatter. Note vegetative cover establishing across area, particularly portion in background.



Photo 10. View looking south from northern mined slope, showing upper portion of northern slope where establishing desired vegetation has been more difficult.

Inspection Contact Address

Glen Ausmus Baca County 741 Main St., Suite 1 Springfield, CO 81073

Enclosure(s): Google Earth image of site

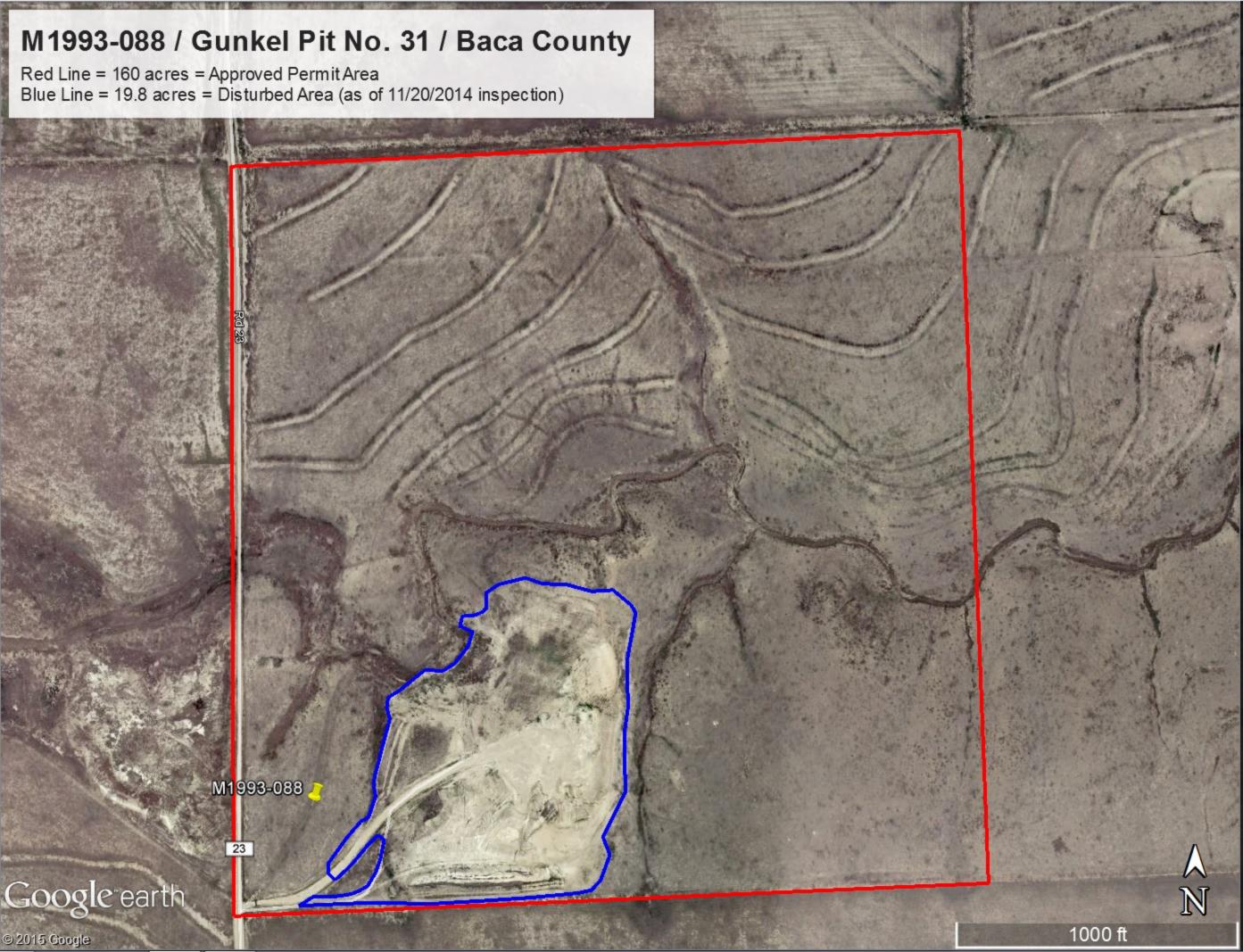
Technical Revision form

CC: Cindy Parsons

Baca County Administrator 741 Main St., Suite 1

Springfield, CO 81073

Wally Erickson, DRMS





COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY 1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M-	Site Name:	
County	TR#	(DRMS Use only)
Permittee:		
Operator (If Other than Pern	nittee):	
Permittee Representative:		
Please provide a brief descri	ption of the proposed revision:	
which does not have more the Environmental Protection Planets this definition. If the the Division may require the to the permit.	Rules, a Technical Revision (TR) is: "a nan a minor effect upon the approved or lan." The Division is charged with dete Division determines that the proposed resubmittal of a permit amendment to me considered "filed for review" until the a	r proposed Reclamation or ermining if the revision as submitted revision is beyond the scope of a TR, ake the required or desired changes
Division (as listed below by expedite the review process. determine if it is approvable TR, you will be notified of s day review period there are	permit type). Please submit the appropriate After the TR is submitted with the appropriate within 30 days. If the Division requires specific deficiencies that will need to be still outstanding deficiencies, the Divisible lime, in writing, to provide the require	priate fee with your request to propriate fee, the Division will additional information to approve a addressed. If at the end of the 30 ion must deny the TR unless the
sufficient information to the	nat for the submittal of a TR; however, in Division to approve the TR request, in accurately depict the changes proposed	cluding updated mining and
Required Fees for Technical your request for a Technical	Revision by Permit Type - Please mark Revision.	k the correct fee and submit it with
Permit Type 110c, 111, 112 construction materials, and 112 quarries	Required TR Fee \$216	Submitted (mark only one)
112 hard rock (not DMO)	\$175	
110d, 112d(1, 2 or 3)	\$1006	