



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.

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|---------------------------------------|---|--|-----------------------------|
| MINE NAME: Gravel Pit No 8 | MINE/PROSPECTING ID#: M-1977-485 | MINERAL: Sand and gravel | COUNTY: Baca |
| INSPECTION TYPE: Monitoring | INSPECTOR(S): Amy Eschberger | INSP. DATE: November 19, 2014 | INSP. TIME: 09:30 |
| OPERATOR: Baca County | OPERATOR REPRESENTATIVE: James Adams and Kurt Eskew | TYPE OF OPERATION: 112c - Construction Regular Operation | |

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| REASON FOR INSPECTION: Normal I&E Program | BOND CALCULATION TYPE: None | BOND AMOUNT: NA |
| DATE OF COMPLAINT: NA | POST INSP. CONTACTS: None | JOINT INSP. AGENCY: None |
| WEATHER: Clear | INSPECTOR'S SIGNATURE: <i>Amy Eschberger</i> | SIGNATURE DATE: June 30, 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.

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|---|--|----------------------------------|
| (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>Y</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> | (SB) 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 Gravel Pit No 8 (Permit No. M-1977-485) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. James Adams and Mr. Kurt Eskew represented the operator, Baca County for the inspection. The site is located approximately 15.5 miles west of Campo, CO on land owned by T.W. Ratliff. The pit is situated along a rise in between East and West Sand Canyon approximately 2 miles north of where they confluence into the main Sand Canyon drainage. The site can be accessed from the west by Co Rd 13. The approved post-mining land use is rangeland.

This is a 112c operation permitted for 106 acres to mine sand and gravel for county road maintenance. The maximum mining depth is approximately 30-35 feet. The maximum allowed disturbed acreage at any time is 20 acres (as of TR-01 approved 01/07/2008). The operation maintains 3H:1V slopes as material is extracted. Mining began in the northwestern portion of the permit area and will continue southward and eastward. An area of approximately 4.5 acres located north of the current pit is considered pre-law disturbance. The approved mining plan states that this area will not be disturbed by this operation.

At the time of the inspection, the weather was clear, cool and sunny, and the ground had some snow cover. A permit identification sign was posted at the main site entrance off of Co Rd 13 (**Photo 1**). This sign includes the permit number as required; however, pursuant to Rule 3.1.12(1), it should also include the operator's name and a statement that the permit was issued by the Colorado Mined Land Reclamation Board (MLRB). Although the site name is not required to be on the permit sign, the sign currently displays "Ratliff Pit" as the site name. To be consistent, the operator might consider correcting this to the site name listed with the Division, which is "Gravel Pit No 8". The permit boundary was delineated by metal posts and rock piles. The mine was not active during the inspection. However, a few trucks were parked near the entrance. Mr. Adams and Mr. Eskew stated that material is processed and/or hauled off from this site every year, which is in compliance with its intermittent status.

The Division estimates that approximately 17 acres have been disturbed by the operation thus far (see enclosed Google Earth image of site), which is in compliance with the maximum allowed disturbance. However, before expanding much farther, the operator should consider submitting a Technical Revision to increase the maximum allowed disturbed acreage. Otherwise, some acreage will need to be reclaimed according to the approved reclamation plan to offset the additional disturbed acreage. Current disturbance includes an oval-shaped pit that is approximately 30 feet deep with slope gradients of 3H:1V or flatter (**Photos 2-7**), topsoil berms stored along the top edges of the pit walls (**Photo 8**), a few material stockpiles stored on the pit floor (see **Photos 2 and 5**), and a dirt haul road that runs along the western edge of the pit. Some erosional damage was observed mainly on the eastern and some portions of the western pit walls, including several rills and a few small gullies (**Photo 9**; also see **Photos 2 and 7**). However, a fair amount of native grasses and some yucca have begun to establish along these walls, which should help stabilize the slopes until they are expanded or reclaimed. The operator should continue to monitor and repair any erosional damage as necessary, which should include stabilizing gullies to prevent them from widening as mined slopes sit inactive.

The approved reclamation plan calls for grading all mined slopes to 3H:1V or flatter, replacing a minimum of 6 inches of topsoil on disturbed areas, and revegetating the site to rangeland. It appears that the existing access road will also be reclaimed. As long as the operation does not disturb the area of pre-law disturbance located just north of the pit, this area will not require reclamation work. Some of the slopes in the pre-law disturbed area are steeper than 3H:1V (1H:1V in places), and have some minor erosional damage (a larger gully is present at the far northern edge of the area). However, overall, the area appears to be stable with native grasses, shrubs, and trees establishing throughout (**Photo 10**). It was suggested in the inspection report from 10/06/2005 that the operator at least regrade and seed the pre-law slopes when reclaiming the current pit, as to provide long-term

stability for this site. Nonetheless, it will be up to the operator to decide whether to reclaim any areas that were not disturbed by this permitted operation.

It should be noted here that the map included with recent annual reports (see enclosed annual report map submitted on 09/04/2014) does not adequately depict the permit boundary, the current affected area, the acreages to be affected or reclaimed in the next report year, or the location(s) of stockpiled topsoil. The Division recommends the operator submit a more accurate map with the next annual report (due by 09/11/2015). A Google Earth image with the above items indicated would be acceptable.

No problems were observed on site at the time of the inspection.

PHOTOGRAPHS



Photo 1. View of permit sign posted at main site entrance off of Co Rd 13. A permit sign should include the permit number (already included here), a statement that the permit was issued by the CO MLRB, and the operator's name.

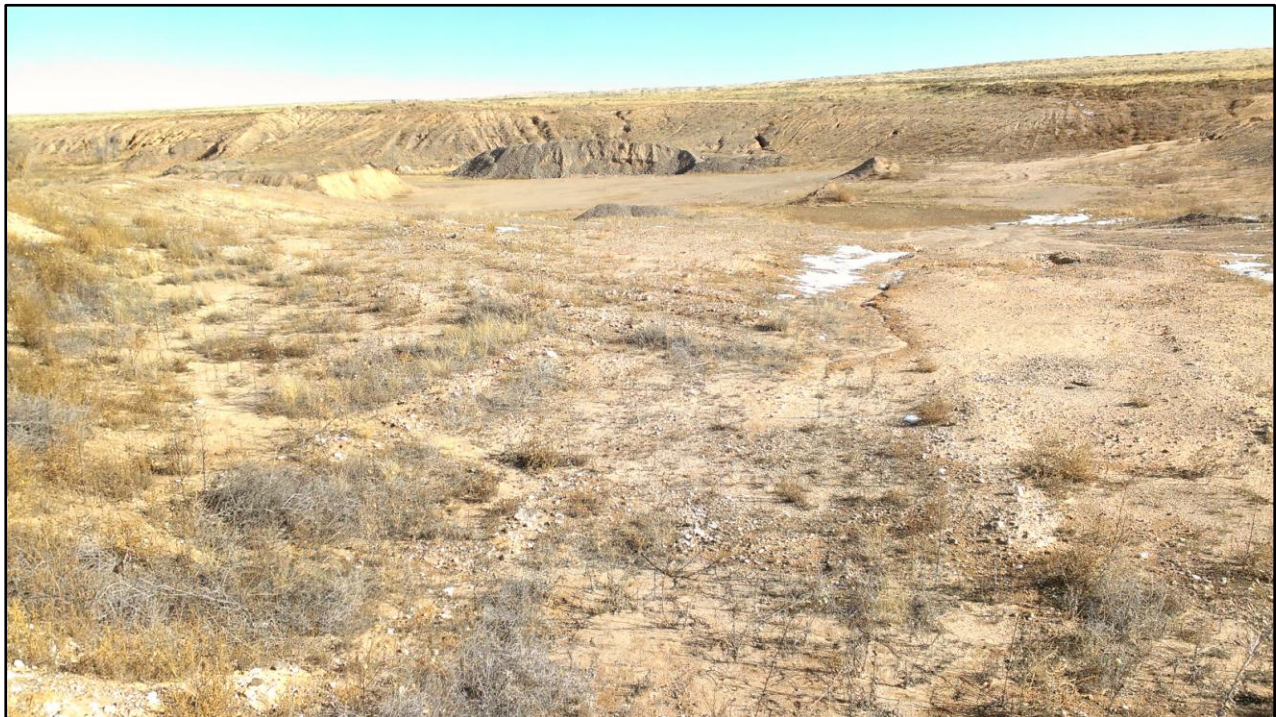


Photo 2. View looking northeast into pit from top of southwestern pit wall. Note mined material stockpiled at center. Also note some erosional damage present on eastern slopes.



Photo 3. View looking south at southern pit wall, showing slopes graded flatter than 3H:1V.



Photo 4. View looking southwest into pit from top of eastern pit wall, showing slopes graded flatter than 3H:1V. Note native grasses and shrubs establishing across pit slopes.

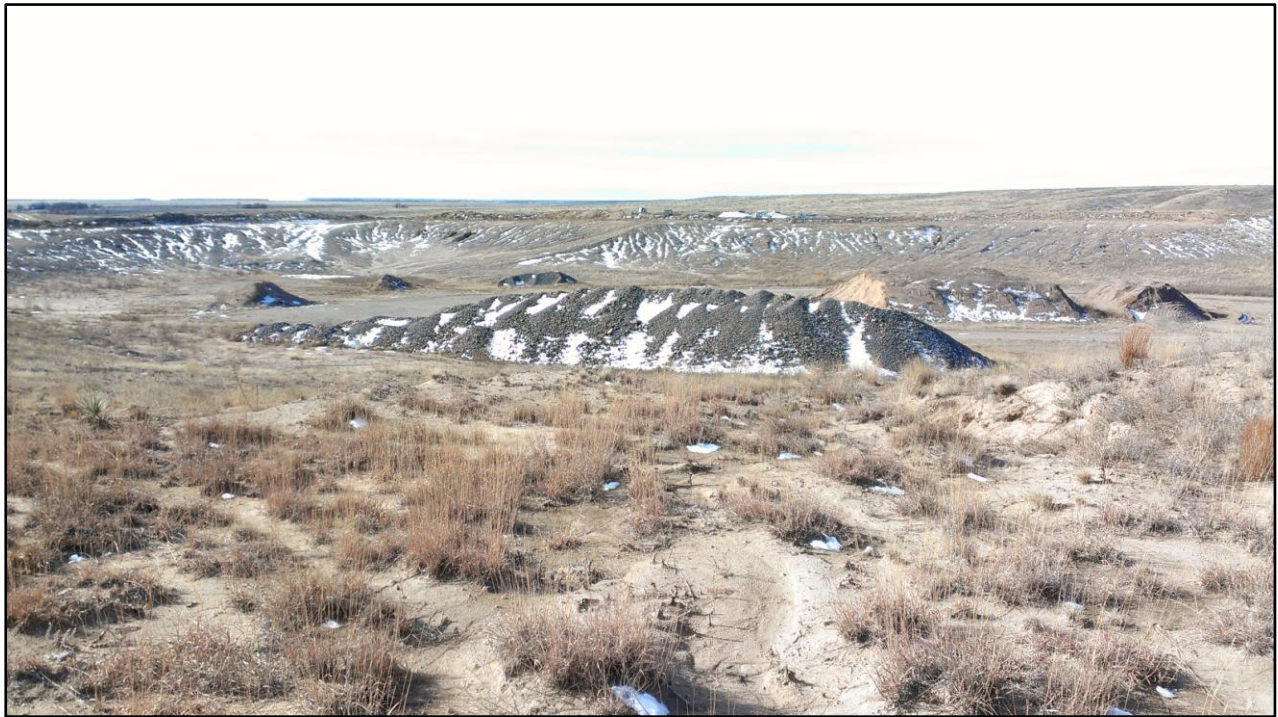


Photo 5. View looking west into pit from top of eastern pit wall, showing slopes graded flatter than 3H:1V. Note native grasses and shrubs establishing across pit slopes. Also note mined material stockpiled at center.



Photo 6. View looking northwest into pit from top of eastern pit wall, showing slopes graded to 3H:1V. Note native grasses and shrubs establishing across pit slopes.



Photo 7. View looking southwest from northern portion of pit floor, showing western pit wall graded to near 3H:1V. Note some native grasses establishing across the slope. Also note some minor erosional damage present along some portions of the slope.



Photo 8. View of portion of topsoil berm stored along top of southern pit wall. Note berm appears to be stable with some vegetative cover (mainly Russian thistle).

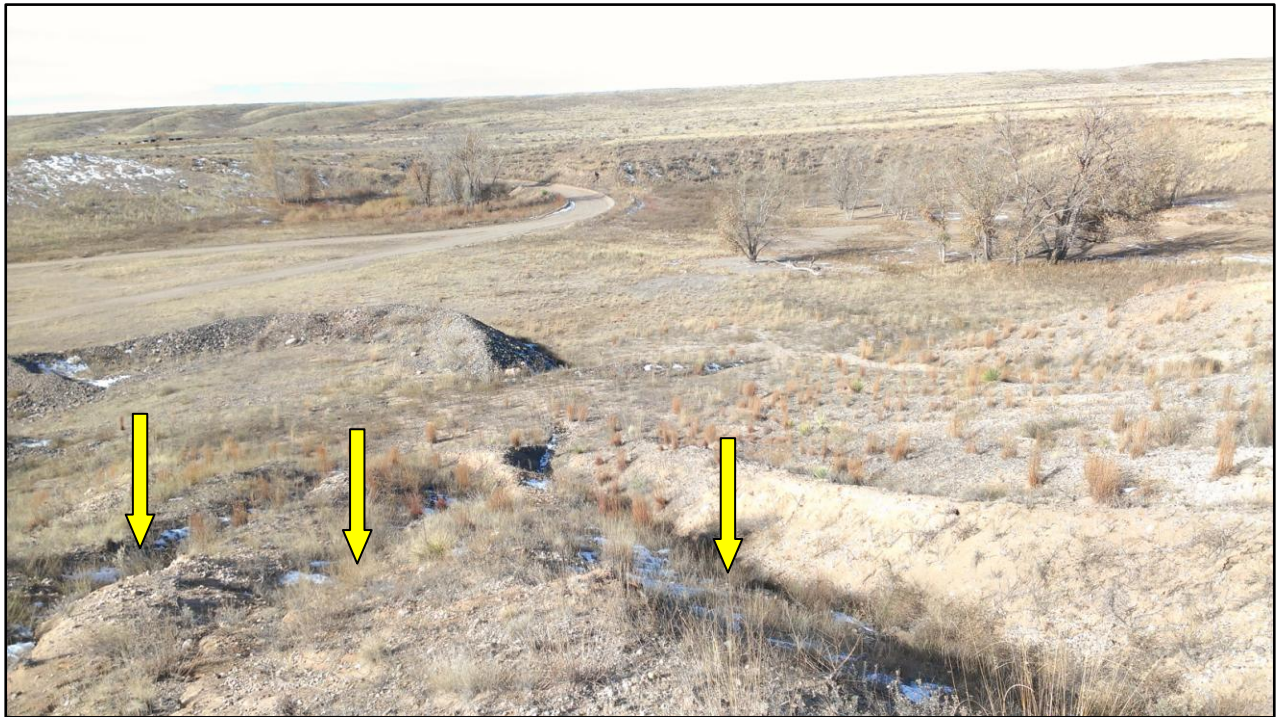


Photo 9. View looking west from top of eastern pit wall, showing a few gullies forming along the eastern slope (indicated). Note some establishment of native grasses across this slope. Also note pre-law disturbance (at right) separated from active pit by access road (at left).



Photo 10. View looking northwest into pre-law disturbed area located north of active pit. Note native grasses, shrubs, and trees establishing throughout this area.

Inspection Contact Address

Dean Ormiston
Baca County
741 Main St., Suite 1
Springfield, CO 81073

Enclosure(s): Google Earth image of site
Annual Report map submitted 09/04/2014

CC: Cindy Parsons
Baca County Administrator
741 Main St., Suite 1
Springfield, CO 81073

Wally Erickson, DRMS

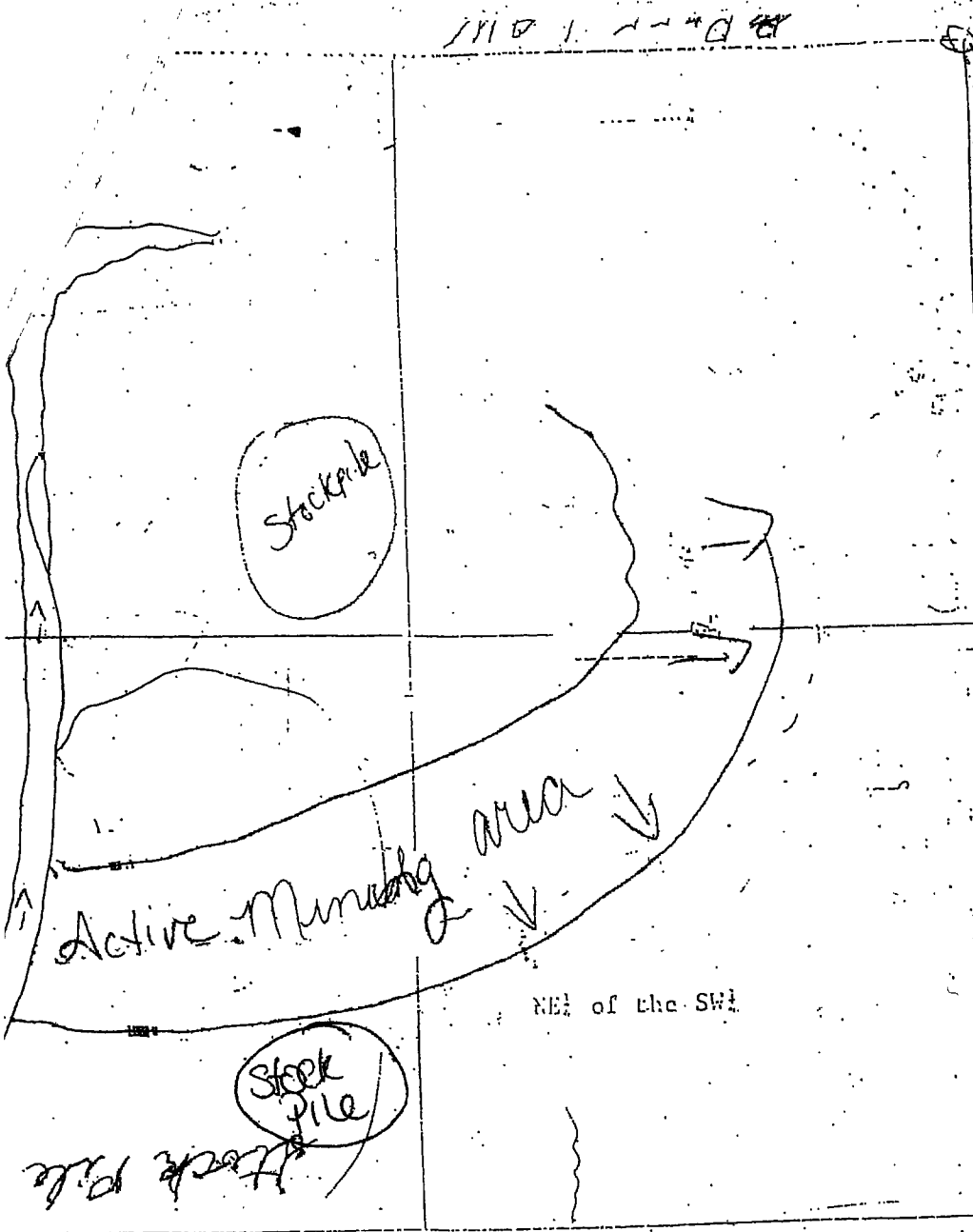
M-1977-485 / Gravel Pit No 8 / Baca County

Red Line = Approved Permit Area = 160 acres

Blue Line = Disturbed Area = 17 acres (as of 11/19/2014 inspection)

Green Line = Pre-Law Disturbance = 4.5 acres





Map scale - Each Square = 50 feet

- X - indicates topsoil stockpile
- ⊗ - indicates windmill

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DIVISION OF RECLAMATION
 MINING AND SAFETY

