

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:
Raymond Enderson Pit	M-2000-066	Sand and gravel	Lincoln
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Amy Eschberger	December 10, 2015	11:00
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:	
Lincoln County	John DeWitt, Mark McHone	110c - Construction Limited Impact	

<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	BOND AMOUNT:		
Normal I&E Program	None	\$0.00		
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:		
NA	None	None		
WEATHER:	<b>INSPECTOR'S SIGNATURE:</b>	SIGNATURE DATE:		
Clear	Amer Sichberger	December 29, 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 <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 NA	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>Y</u>	(SW) STORM WATER MGT PLAN <u>Y</u>	(CI) COMPLETE INSP Y
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP Y
(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 Raymond Enderson Pit (Permit No. M-2000-066) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety. Mr. John DeWitt and Mr. Mark McHone represented the operator, Lincoln County during the inspection. The site is located approximately 23 miles northeast of Genoa, Colorado. Access to the site is off of Co Rd 41. The site is situated on the South Fork of the Arickaree River, which only flows during heavy storm events. When carrying water, the river flows eastward. The affected land is owned by Raymond L. Enderson. The approved post-mining land use is rangeland.

This is a 110c operation permitted for 9.9 acres (see enclosed Google Earth image of site) to mine sand and gravel for use in county road maintenance. This is an intermittent operation. The approved permit area includes a section of the Arickaree River and a stockpiling area located north of the river. The approved maximum mining depth is 6 feet. Material extracted from the river bed is pushed up the northern bank and stored there for load out. In the approved mining plan, the operator committed to restricting extraction to the river channel, and not mining the river banks. The approved reclamation plan for this site includes grading all disturbed slopes to a 4H:1V or flatter gradient, ripping any compacted areas of disturbed land outside of the river bed, and revegetating that land with a rangeland seed mixture. Only the portion of the haul road inside the permit area will be reclaimed. No topsoil is required for reclamation since no extraction is to occur outside of the river bed.

The Division recently approved a Technical Revision (Revision No. TR-04) on 04/02/2015 to update the mining plan map and reclamation plan map to more accurately define the permit boundary using GPS coordinates. This was part of the county's recent initiative to make sure all of their permitted sites are in compliance with regards to properly delineating the approved permit boundaries.

At the time of the inspection, the weather was partly cloudy and breezy, and no standing water was observed on site. The creek bed was dry. A permit sign was posted at the main site entrance off of Co Rd 41 (**Photo 1**). The permit boundary was properly delineated with metal posts (**Photo 2**). The site was not active at the time of the inspection, and no equipment was stored on site. However, according to the operator, this site is active every year, which is in compliance with its intermittent status.

The Division observed a shallow depression (approximately 1-2 feet in depth) in the river bed where material was extracted and pushed up to the northern bank (**Photos 3 and 4**). This depression was approximately 400 feet in length down the river channel. Outside of this depression, the river bed appeared to be relatively flat and even. A few small stockpiles of material were stored along the northern bank (**Photos 5 and 6**). In a few areas along the northern bank, it appeared that the operation continued a little too far out of the channel while extracting (**Photo 7**). This has left a few small trenches along the northern river bank. If the operator wishes to mine the river banks or land outside of the river, a Technical Revision will need to be submitted to revise the mining plan and reclamation plan. Otherwise, the Division recommends the operator restrict all extraction activities to the river bed as committed to in the original permit. The stockpiling area located north of the river had native grasses (primarily blue grama and buffalograss) and some yucca volunteering across the disturbed land (**Photo 8**).

The river channel upstream (**Photo 9**) and downstream (**Photo 10**) of the mining area appeared to be preserved, showing no evidence of erosion. Overall, the site appeared to be stable. No problems were observed.

#### PERMIT #: M-2000-066 INSPECTOR'S INITIALS: AME INSPECTION DATE: December 10, 2015

### **PHOTOGRAPHS**



Photo 1. View of permit sign posted at main site entrance off of Co Rd 41.



Photo 2. View looking south, showing metal post marking northwestern corner of permit boundary.



**Photo 3.** View looking east (downstream), showing the shallow depression left in the river channel where material was excavated.



**Photo 4.** View looking south across the river, showing the center of the shallow depression left in the river channel where material was excavated.



**Photo 5.** View looking south, showing material stockpiled along northern river bank where it was pushed up from the river bed.



**Photo 6.** View looking west, showing side of material stockpile stored along northern river bank where it was pushed up from the river bed.



**Photo 7.** View looking north from inside river channel, showing small trench that was dug into the northern river bank.



**Photo 8.** View looking west across the stockpiling area located just north of the river. Note native grasses and some yucca volunteering across the disturbed land.



**Photo 9.** View looking southwest (upstream) from mining area, showing river channel appears to be preserved with no evidence of erosion. Note edge of depression (at left) where material is extracted.



**Photo 10.** View looking east (downstream) from mining area, showing river channel appears to be preserved with no evidence of erosion.

# Inspection Contact Address John DeWitt

John DeWitt Lincoln County P.O. Box 39 Hugo, CO 80821

Enclosure(s): Google Earth image of site showing approved permit area

CC: Wally Erickson, DRMS

# M2000-066 / Raymond Enderson Pit / Lincoln County

Red Outline = 9.9 acres = Approved Permit Area

M2000-066

41

Google earth

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