

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:
Andersen Farms	M-2006-050	Sand and gravel	Lincoln
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Amy Eschberger	December 10, 2015	10:00
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	Ame Sichberger	December 22, 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 Andersen Farms site (Permit No. M-2006-050) 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 14 miles northeast of Genoa, Colorado. Access to the site is off of Co Rd 35. The pit is situated on Dugout Creek, which only flows during heavy storm events. When carrying water, the creek flows eastward. The affected land is owned by D & J Andersen Farms, Inc. The approved post-mining land use is rangeland.

This is a 110c operation permitted for 7.6 acres (see enclosed Google Earth image of site) to mine sand and gravel for county road maintenance. This is an intermittent operation. The approved permit area includes a portion of Dugout Creek. The approved mining plan allows for extraction of the creek bed to a maximum depth of 6 feet, and extraction in a pit adjacent to the northern creek bank to a maximum depth of 12 feet. Efforts will be made to maintain all mined slopes at a 3H:1V gradient. The operator committed to leaving the southern (high) creek bank undisturbed. The operator also committed to working to keep stormwater runoff from draining into the creek from the pit area, which may require the construction of a berm along the southern edge of the pit. The approved reclamation plan calls for grading all disturbed slopes to 3H:1V or flatter, replacing topsoil at an average depth of 6 inches on disturbed land outside of the creek bed, and revegetating that land with a rangeland seed mixture. A berm will be left along the southern edge of the reclaimed pit, so that it can hold water for livestock use after reclamation.

At the time of the inspection, the weather was partly cloudy and warm, and the ground was dry. No standing water was observed in the pit area or in the creek bed (**Photo 1**). A permit sign was posted at the main entrance to the site off of Co Rd 35 (**Photo 2**). The permit boundary was properly delineated with metal posts (**Photo 3**). The site was not active at the time of the inspection, and no equipment was present on site. According to the operator, the site is active every year, which is in accordance with its intermittent status. All mining activities appeared to be restricted to the north side of the creek. The creek bed itself appeared to have not been mined in some time. The horseshoe-shaped pit opens up to the south, with the mined slopes at 3H:1V or flatter (**Photos 4-8**). The pit was approximately 8-10 feet deep. The northern mined slopes exhibited some erosional damage which the operator should continue to monitor and repair as needed. In addition, the pit appears to no longer be separated from the creek by a berm. A small earthen berm was observed along the southern and eastern edges of the pit in the inspection report for 03/16/2011. The Division recommends the operator restore the berm along the southern edge of the pit to help keep stormwater runoff from draining into the creek from the pit area.

Two topsoil stockpiles (one much smaller than the other) were stored north of the mining area (**see Photo 8**). These stockpiles appeared to be stable with vegetative cover (primarily annual weeds). The approved reclamation plan allows for importing additional topsoil for reclamation if needed. Native grasses, forbs, and annual weeds are volunteering across the disturbed area. The creek banks upstream (**Photo 9**) and downstream (**Photo 10**) of the site appeared to be preserved, showing no evidence of erosion. Overall, the site appeared to be stable. No problems were observed.

#### PERMIT #: M-2006-050 INSPECTOR'S INITIALS: AME INSPECTION DATE: December 10, 2015

#### **PHOTOGRAPHS**



**Photo 1.** View looking east (downstream) in portion of Dugout Creek inside permit area, showing creek bed was dry during inspection.



Photo 2. View of permit sign posted at main site entrance off of Co Rd 35.



**Photo 3.** View looking northeast, showing metal post marking southwestern corner of permit boundary.



Photo 4. View looking southwest across mined pit located north of Dugout Creek.



Photo 5. View looking south across northwestern mined wall of pit with slopes of 3H:1V or flatter.



Photo 6. View looking southeast across center of mined pit located north of Dugout Creek.



Photo 7. View looking east across mined pit located north of Dugout Creek.



**Photo 8.** View looking east across northern edge of mined pit. Note topsoil stockpile stored north of pit, stable with vegetative cover (primarily annual weeds).



**Photo 9.** View of Dugout Creek upstream from permit area, showing creek banks appear stable with no erosion problems observed.



**Photo 10.** View of Dugout Creek downstream from permit area, showing creek banks appear stable with good vegetative cover.

## Inspection Contact Address John DeWitt

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

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

CC: Wally Erickson, DRMS

# M2006-050 / Andersen Farms Pit / Lincoln County

Red Outline = 7.6 acres = Approved Permit Area



Google earth

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