

**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:		MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Mendenhall Pit		M-2004-027	Sand and gravel	Otero
<b>INSPECTION TYPE:</b>		INSPECTOR(S):	<b>INSP. DATE:</b>	INSP. TIME:
Monitoring		Amy Eschberger	June 29, 2017	10:50
OPERATOR:		<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERA	TION:
Otero County		Lex Nichols	112c - Construction Regular Operation	
<b>REASON FOR INSPECTION:</b>		BOND CALCULATION TYPE:	<b>BOND AMOUNT:</b>	
Normal I&E Program		None	\$0.00	
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGE	NCY:
NA		None	None	
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DATE:	
Clear	0 5 .		July 19, 2017	
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# **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 Y	(SF) PROCESSING FACILITIES Y	(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>	(SP) STORM WATER MGT PLAN Y	(CI) COMPLETE INSP Y			
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION $\underline{Y}$	(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					

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## **OBSERVATIONS**

This was a normal monitoring inspection of the Mendenhall Pit (Permit No. M-2004-027) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. Lex Nichols represented the operator during the inspection. The site is located approximately 6 miles southwest of Rocky Ford, Colorado in Otero County. The site can be accessed by turning south off Co Rd Ee onto an un-named dirt road, then travelling approximately 3.5 miles to enter the permit area from the north. The affected land is owned by H. Barton Mendenhall, Trustee, Mendenhall Family Revocable Trust. The approved post-mining land use is rangeland.

This is a 112c operation permitted for 25 acres to mine sand and gravel for use in county road construction and maintenance. The site is situated on a high terrace rising approximately 100-150 feet above adjacent stream valleys in the Arkansas River Valley. The original approved permit area consisted of 724 acres before 699 undisturbed acres were released with the Division's approval of Acreage Reduction No. 1 on January 18, 2013. The operation began in the northern portion of the current permit area and moved generally southward. The operation will mine a maximum depth of 20 feet from the ridge top. A mobile processing plant is to operate on site. The maximum allowed disturbance at any time is 25 acres. Any available topsoil is salvaged during operations and stored along the pit perimeter for use in reclamation. The operator may import additional topsoil as needed for reclamation. The approved reclamation plan includes grading all disturbed slopes to a gradient of 3H:1V or flatter, replacing 6-8 inches of topsoil on disturbed land, and revegetating the land with a rangeland grass seed mixture recommended by the local Natural Resources Conservation Service. The existing main access road will remain for use by the landowner. The permit file includes a letter from the landowner dated July 20, 2004 requesting the access road remain after reclamation for ranch access.

The site was not active at the time of the inspection. However, according to the operator, the site is active every year by extracting, processing, or hauling off from stockpiled material. The operation plans to start crushing again this fall. A permit sign was posted at the main entrance to the site. The corners of the approved permit boundary were marked with posts. The Division estimates the operation has disturbed a total of approximately 18.3 acres (see enclosed Google Earth image of site), with portions undergoing reclamation. A mobile processing plant operates in the north-central portion of the permit area (**Photos 1 and 2**). A small equipment storage area is present in the northeastern corner of the permit area (**Photos 3**). The operation stores pit run and processed material in the northwestern and central portions of the permit area (**Photos 4-7**). The active mining face is along the western edge of the pit (**Photos 8 and 9**). Highwalls in this area are up to 15 feet in height with slope gradients of approximately 1H:1V to 2H:1V.

The southern pit wall (**Photos 10 and 11**) was graded to the final approved slope gradient of 3H:1V and seeded in fall of 2016. The eastern portion was graded flatter than 3H:1V. The Division observed some early grass growth along the southern pit wall mixed with annual weeds. It appeared the revegetation of this area was off to a good start. The eastern portion of disturbance (**Photos 12-18**) was graded to slope gradients of 4H:1V or flatter, retopsoiled, and seeded in spring of 2017. The slopes of this area blend well with surrounding topography. The Division observed mainly annual weeds growing in this area at this time. However, since the area was just seeded this spring, it may take a few more growing seasons before grasses are really coming in. The operator should continue to monitor the growth of desired vegetation in areas under reclamation, and implement the weed control plan as necessary so grasses have a chance to establish. The Division estimates approximately 4.8 acres of disturbance is in reclamation, including the eastern portion of the site and the southern pit wall. The Division observed a few topsoil stockpiles stored at the northwestern and western edges of the pit which appeared to be stable (**Photos 19 and 20**). Most likely, the operator will need to import additional topsoil for reclamation of remaining disturbed areas, as allowed by the approved reclamation plan.

No evidence of excessive erosion was observed. The operator appears to be following the approved mining and reclamation plans for the site. No problems were observed.

#### **PHOTOGRAPHS**



**Photo 1.** View looking east at mobile processing plant located in north-central portion of permit area.



**Photo 2.** Closer view of mobile processing plant located in north-central portion of permit area.



**Photo 3.** View of small equipment storage area located in northeastern corner of permit area.



**Photo 4.** View looking west at material stockpile stored in central portion of permit area.



**Photo 5.** View looking north at material stockpile stored in northwestern portion of permit area.



**Photo 6.** View looking west at material stockpile stored in western portion of permit area.



**Photo 7.** View looking west at material stockpile stored in central portion of permit area.



**Photo 8.** View looking west at southern portion of active mining face along western edge of pit.



**Photo 9.** View looking west at northern portion of active mining face along western edge of pit.



**Photo 10.** View looking south at southern pit wall in reclamation. Slope has been graded to 3H:1V and seeded.



**Photo 11.** View looking west at southern pit wall in reclamation, showing slope has been graded to 3H:1V (flatter along eastern portion).



**Photo 12.** View looking northeast at area in northeastern portion of site in reclamation. Area has been graded to flatter than 3H:1V, retopsoiled, and seeded.



**Photo 13.** View looking east at area in northeastern portion of site in reclamation. Area has been graded to flatter than 3H:1V, retopsoiled, and seeded.



**Photo 14.** View looking north at area in northeastern portion of site in reclamation. Area has been graded to flatter than 3H:1V, retopsoiled, and seeded.



**Photo 15.** View looking southeast at area in eastern portion of site in reclamation. Area has been graded to flatter than 3H:1V, retopsoiled, and seeded.



**Photo 16.** View looking south at area in southeastern portion of site in reclamation. Area has been graded to flatter than 3H:1V, retopsoiled, and seeded.



**Photo 17.** View looking east at area in southeastern portion of site in reclamation. Area has been graded to flatter than 3H:1V, retopsoiled, and seeded.



**Photo 18.** View looking east along southern edge of pit in reclamation. Area has been graded to flatter than 3H:1V, retopsoiled, and seeded.



**Photo 19.** View of topsoil stockpile stored at northwestern corner of site, which was partially used for recent reclamation work.



Photo 20. View of topsoil bermed along edge of western pit wall.

## **Inspection Contact Address**

Lex Nichols Otero County 13 West 3rd St., Room 208 La Junta, CO 81050

Enclosure: Google Earth image of site

CC: Wally Erickson, DRMS

# M2004-027 / Mendenhall Pit / Otero County

Red Outline = 25 acres = Approved Permit Area Blue Outline = 18.3 acres = Disturbed Area (Image data from 3/19/2016)

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