

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:
Oaklands Ranch	M-1989-092	Gravel	Douglas
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Tyler V. O'Donnell	March 14, 2016	13:00
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Oaklands Ranch	David Curtis	112c - Construction Regular Operation	

REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:		
Normal I&E Program	Complete Bond	\$12,000.00		
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:		
NA	None	None		
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:		
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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>N</u>	(FN) FINANCIAL WARRANTY Y	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE Y	(BG) BACKFILL & GRADING Y	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES <u>N</u>	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>Y</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS Y	(SW) STORM WATER MGT PLAN <u>Y</u>	(CI) COMPLETE INSP <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP Y
(AT) ACID OR TOXIC MATERIALS Y	(OD) OFF-SITE DAMAGE <u>N</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 normal routine monitoring inspection was conducted by Tyler O'Donnell of the Division of Reclamation, Mining and Safety (Division). Oaklands Ranch (Operator), was represented by David Curtis during the inspection.

The Oaklands Ranch pit is located in Douglas County approximately 3 miles south of Sedalia, Colorado. The permit was converted from an 110c permit to a 112c permit in July 2008. The Oaklands Ranch pit is a 25.69-acre 112c Construction Materials Reclamation Permit with a maximum allowed disturbance of 10 acres. The primary commodity being mined at the site is sand and gravel. The 112c Construction Materials Reclamation Permit was issued in October of 1989. The approved post-mining land use is Pastureland. The mine site was surrounded by the following land uses: residential, agricultural, and rangeland.

No problems or possible violations were observed during the inspection. During the inspection, the sky was clear and the ground was dry. The site was not active during the inspection; however, it appears that the site sees frequent mining activities. It appears that all mining related disturbance has taken place on top of the Plum Creek terrace or creek bench. It appears that mining started at the crest of the terrace/bench and progressed to the west. There were several pieces of mining equipment and a processing plant located within the northern central portion of the permitted site. There were a lot of; vehicles, scrap metal, construction equipment, and farm equipment scattered around, both the affected land and areas outside of the affected land boundary. The Operator had several other pieces of equipment and parts for mining equipment and processing equipment scattered through the affected lands. At the present time it appears that the mining operation had affected approximately 9 acres throughout the life of mine, with approximately 4 to 5 acres in various phases of reclamation. The Operator was in the process of backfilling and grading the northern and eastern highwalls. It appears that portions of the pit floor have been final graded and vegetation has begun to establish on reclaimed portions of the pit floor. The majority of the area previously affected by the mining operation, has been graded to approximately 2H:1V or flatter.

Acid And Toxic Materials:

There appeared to be an adequate secondary containment structure around the petroleum storage tank. The secondary containment structure appeared to have enough volume to contain all contents of the fuel tank, plus an additional 10% or more capacity beyond the total capacity of stored petroleum products.

Backfilling and Grading:

The Operator started mining on a terrace/creek bench located on the west side of Plum Creek, thereby leaving the side slope facing the creek undisturbed. The current pit had been mined down approximately 20 feet, thus leaving the pit floor 10-15 feet higher than the bottom of Plum Creek. Because the Operator started mining the pit to the west of the crest of the Plum Creek terrace/bence and mined to the west, the Operator has left undisturbed land between the pit floor and Plum Creek. The undisturbed land between Plum Creek and the Pit floor essentially looks like and functions as a large sight berm, between the pit floor and Plum Creek. The Division misunderstood the pre-mining topography during the review of TR-02, as a correction the Operator intends to leave the existing, pre-mining topography on the east side of the creek bench/terrace and not mine through the creek bench or terrace. The Operator plans on leaving undisturbed land between the creek and the pit, the Operator is not filling an area to create a berm. There were highwalls around all 3 sides of the current pit excavation, the excavation daylighted to the southeast. The highwalls were approximately 20 feet high and contained a total cumulative length of approximately 2H:1V. No exposed groundwater was observed. At the time of the inspection all slopes appeared to be structurally stable. The western highwall appeared to be graded to 4H:1V or flatter. The Operator was in the process of backfilling and grading the northern and eastern highwalls with imported material. The Operator

stated that the imported material came from a nearby subdivision development and that the material consisted of just general soil. The approved permit did not allow the Operator to import inert fill from off-site. Following the inspection but prior to the inspection report being written, the Operator submitted TR-03, which contained the notice of inert fill as required by Rule 3.1.5(9).

Financial Warranty:

The current amount of financial warranty the Operator has on deposit with the State is \$12,000. The reclamation cost estimate for this site was updated during the file review for this inspection. It was determined that the current required financial warranty amount is adequate. The financial warranty will most likely be raised during the Division's next monitoring inspection unless the reclamation liability is reduced. The reclamation liability can be reduced by reclaiming portions of the affected land. Reclamation liability could be reduced by reclaiming the northern and eastern portions of the excavation. The northern and eastern portions of the excavation would be easy to reclaim because this area has been nearly mined out on both sides, there are little to no reserves left between the highwalls and the permit boundary on both the north and east sides of the pit.

Hydrologic Balance:

There was no evidence of excessive erosion. There appeared to be no significant impacts to the prevailing hydrologic balance. All most all of the stormwater would be captured within the pit.

Gen. Compliance With Mine Plan:

All mining activity appeared to be within the approved affected land boundary. The Operator has constructed the Pole Barn for storing hay and wood as approved in TR-02.

Roads:

The internal pit haul road appeared to be stable and well maintained.

Revegetation:

There was some plant growth throughout the current affected area. The plant growth in the current affected area appeared to be volunteer vegetation, composed of native vegetation and annual weeds. There was some plant growth on the stockpiles and a little vegetative growth elsewhere in the active mining area. No noxious weeds were observed during the inspection.

Reclamation Success:

The Operator appeared to be conducting concurrent reclamation. Several portions of the site have been graded to 4H:1V or flatter. Other portions of the site still have vertical highwalls that the operator was in the process of backfilling. Several areas of the pit floor have been graded to 4H:1V. It appears that topsoil may have been spread over approximately 2 acres scattered around the site. The scattered areas around the pit floor have begun to fill in with desired native volunteer vegetation. The approved permit requires all slopes to be graded to 4H:1V or flatter. The Approved permit states that the site will be reclaimed to be haved with a grass alfalfa mix; thereby supporting the approved post-mining land use of pastureland.

Sediment Control:

There was no evidence of excessive erosion (rills, gullies, or sediment fans).

Signs and Markers:

A mine I.D. sign was located at the entrance to the mine site. The permit boundary was marked by t-posts and a 3 wire fence. The Sign is damaged and may need to replacing in the new future.

Topsoil:

It appears that topsoil had been salvaged in advance of mining. There was a topsoil stockpile located just northwest of the current pit excavation. Also the amount of topsoil salvaged appears to be barely adequate to complete final reclamation, additional topsoil should be salvaged when new areas are opened up for mining.

CONCLUSION

The Operator has mined just shy of 10 acres. The Operator is nearing the maximum allowed disturbance and the Operator has nearly depleted the reserves on the northern and eastern sides of the current disturbance. The Operator is encouraged to begin reclaiming portions of the pit that are mined out. The Approved post Mining land use is pastureland, the Operator must reclaim the site to support the use of the site as a hay meadow.

Inspection Contact Address

David Curtis Oaklands Ranch 1613 N Perry Park Rd Sedalia, CO 80135

cc: Wally Erickson, DRMS

PHOTOGRAPHS



Photo 1: Active mining area nearing the northern permit boundary.



Photo 2: West side of the remaining terrace, Creek bench.



Photo 3: Western highwall, the Operator was backfilling and grading this portion of the pit. The slope was 4H:1V or flatter.



Photo 4: Topsoil stockpile in the northwestern portion of the current affected lands.