




**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.

<b>MINE NAME:</b> Klement Pit	<b>MINE/PROSPECTING ID#:</b> M-2007-076	<b>MINERAL:</b> Gravel and sand	<b>COUNTY:</b> Cheyenne
<b>INSPECTION TYPE:</b> Surety Release Inspection	<b>INSPECTOR(S):</b> Timothy Cazier, P.E.	<b>INSP. DATE:</b> December 8, 2020	<b>INSP. TIME:</b> 10:45
<b>OPERATOR:</b> Cheyenne County	<b>OPERATOR REPRESENTATIVE:</b> Jim Brown	<b>TYPE OF OPERATION:</b> 110c - Construction Limited Impact	
<b>REASON FOR INSPECTION:</b> Surety Release Requested	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$0.00	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> December 9, 2020	

**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>N</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

## **OBSERVATIONS**

This inspection was conducted by Tim Cazier (DRMS) as part of a surety reduction request. The Permittee (Cheyenne County) was represented by Mr. Jim Brown during the inspection. The Klement Pit is accessed from Cheyenne Co Rd 53 and is located approximately 2.5 miles north of US 40 (near the town of Arapahoe). This is a 110c sand and gravel mine. It was not operating at the time of the inspection.

The site was observed to not yet meet the following standards approved in the reclamation plan.

### **Backfilling and Grading:**

Grading has not been completed. Some slopes are steeper than 3H:1V (see **Photo 1**) and other areas remain to be graded (see **Photos 2** and **3**). Post mine gradients will be no steeper than 3H:1V [*Reference: 11/16/2007 PAR response - revised reclamation map*]. Erosion rills were observed on the north end (see **Photo 4**). These will need to be repaired prior to release.

### **Revegetation:**

Vegetation has not been established. Some volunteer growth was observed on the north end of the pit (see **Photo 4**). I advised Mr. Brown the DRMS prefers to see the result of the seeding effort after at least two growing seasons to be assured the perennial cover is being established prior to release. The Natural Resource Conservation Service recommended the following seed mixture which was approved by the DRMS:

<u>Variety</u>	<u>Species</u>	<u>PLS/Acre*</u>
Western Wheatgrass	Rosanna	16
Switchgrass	Grenville	4
Green Needlegrass	Lodorm	10
Little Bluestem	Pastura	7
Big Bluestem	Kaw	11
Blue Grama	Lovington, Hachita	3
Sideoats Grama	Vaughn, Niner	9

\* Seed Drill rates (rates to be doubled if broadcast seeding)

**Signs and Markers:** The permit sign had been knocked face down making the permit number unreadable (see **Photo 5**). I recommended to Mr. Brown the number be re-painted on the sign and replace the sign near the entrance gate rather than closer to the north end of the pit where it had been. The sign will need to be present until the DRMS releases the site from reclamation responsibility.

### **Topsoil:**

The quantity of topsoil that will be salvaged during mining will be 5 inches and subsequently replaced during reclamation. [*Reference: 11/16/2007 PAR response #6*]

### **Summary:**

The DRMS will deny the request for a surety release based on the observations summarized above.

Please contact Tim Cazier (303)328-5229 [mobile] or email at [tim.cazier@state.co.us](mailto:tim.cazier@state.co.us) if you have any questions regarding this report

## **PHOTOGRAPHS**



Photo 1. Regraded portion near 3H:1V on left, incomplete grading on right (looking north).



Photo 2. Incomplete grading in SE corner of pit (looking NE).



**PHOTOGRAPHS (cont.)**



Photo 3. Incomplete grading on south end of pit (looking south).

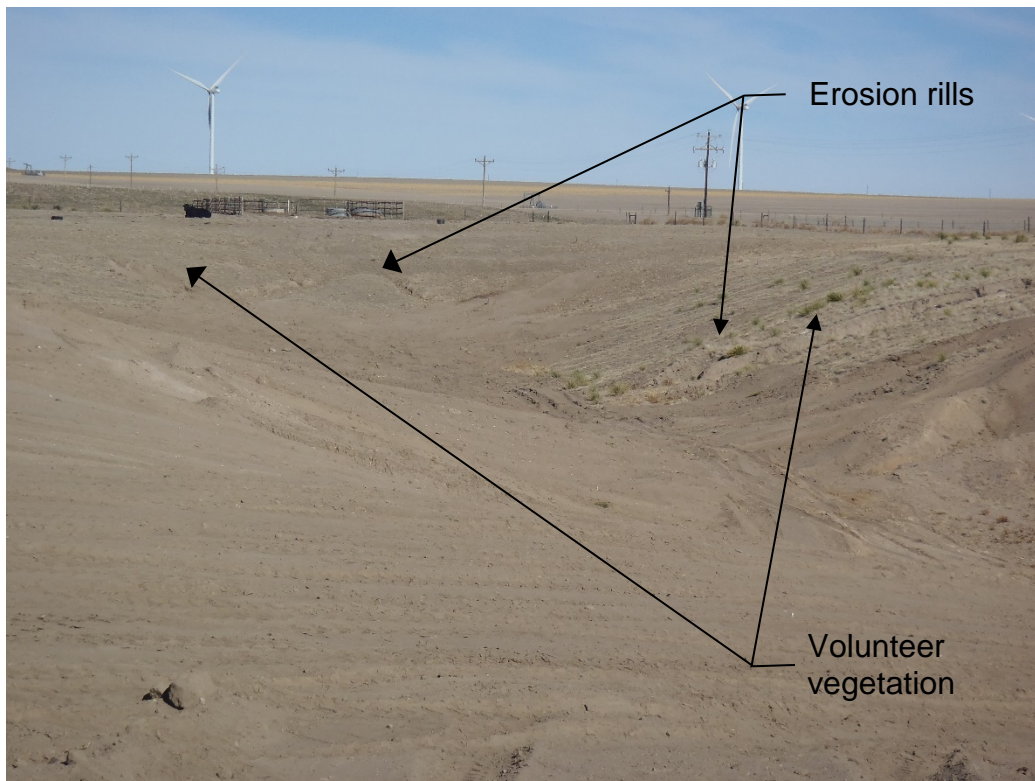


Photo 4. Erosion rills and volunteer vegetation on north end (looking NNE).

**PHOTOGRAPHS (cont.)**



Photo 5. Permit sign needing repair.

**Inspection Contact Address**

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ec: DRMS file