



**COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY**  
**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> Keeling Pit	<b>MINE/PROSPECTING ID#:</b> M-1991-081	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Huerfano
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Tyler V. O'Donnell	<b>INSP. DATE:</b> January 15, 2016	<b>INSP. TIME:</b> 11:15
<b>OPERATOR:</b> Sam Keeling	<b>OPERATOR REPRESENTATIVE:</b> Sam Keeling	<b>TYPE OF OPERATION:</b> 110c - Construction Limited Impact	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$14,737.42
<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> <i>Tyler O'Donnell</i>	<b>SIGNATURE DATE:</b> June 10, 2016

**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>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(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---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SW) STORM WATER MGT PLAN---- <u>Y</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	(ST) STIPULATIONS----- <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). Sam Keeling, the Operator, was present during the inspection.

The Keeling Pit is located in Huerfano County approximately 4.5 miles northwest of La Veta, Colorado. The Keeling Pit is a 9.9-acre 110c Construction Materials Reclamation Permit. The permit was issued September 1992. The primary commodity being mined at the site is sand and gravel. The approved post-mining land use is rangeland. The mine site was surrounded by the following land uses: rural residential, and rangeland.

No problems or possible violations were observed during the inspection. During the inspection, the sky was slightly overcast. There was partial snow cover, covering approximately 85% of the ground. The site was not operational during the inspection. There were several pieces of mining equipment scattered throughout the site. There was 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. It appears that all mining related disturbance has taken place on top of the Middle Creek terrace. The current affected land is a circular pit excavation in the central portion of the approved permit boundary. It appears that the site may have been idle for several years, no recent activity was observed in the pit (equipment marks, tracks, or wheel marks). At the present time it appears that the mining operation had affected approximately 4 acres throughout the life of mine.

### **Backfilling and Grading:**

There was a highwall around the entire perimeter of the affected land boundary. The Highwall was a circular excavation. The highwall was approximately 20 feet high and 1,200 feet long. No exposed groundwater was observed. When completing final reclamation, the Operator will need to grade all slopes to 3H:1V or flatter to comply with the approved reclamation plan. All slopes appeared to be structurally stable.

### **Financial Warranty:**

The current amount of financial warranty the Operator has on deposit with the State is \$14,737.42. 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. The operator stated during the inspection that the western portion of the site has less gravel, also the mining face is getting close to the southern permit boundary. Reclamation liability could be reduced by reclaiming the western and/or southern portions of the highwall.

### **Hydrologic Balance:**

There was no evidence of excessive erosion. There appeared to be no significant impacts to the prevailing hydrologic balance. All stormwater is captured in the pit.

### **Gen. Compliance With Mine Plan:**

The operation appeared to be following the approved mine plan. All mining activity appeared to be within the approved affected land boundary. There were several pieces of mining equipment scattered throughout the site. There was also a crushing plant right at the entrance to the site near the access road.

### **Roads:**

The access road outside of the affected land boundary was rutted out, it appears that the access road has been used frequently, the access road services both the mining operation and the surrounding land; however the access road is not a public road. It appears that the landowner uses the access road to access his pastures. The internal pit haul road and ramp appeared to be stable.

**Revegetation:**

There was some plant growth throughout the current affected areas. The plant growth in the current affected areas appeared to be volunteer vegetation, comprised 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.

**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. Some of the boundary markers were difficult to quickly identify. The Operator should consider using different markers or identifying the boundary of affected land a little better, maybe fluorescent painted t-posts.

**Topsoil:**

There were a topsoil stockpiles located on top of the highwall around portions of the site. Topsoil had been salvaged in advance of mining. The topsoil stockpiles were well vegetated, thus providing good protection from erosion. There appeared to be an adequate amount of topsoil around the site to reclaim the current mining disturbance.

**Inspection Contact Address**

Sam Keeling  
P.O. Box 361  
La Veta, CO 81055

cc: Wally Erickson, DMRS

**PHOTOGRAPHS**



**Photo 1:** Western side of the pit. Highwall was near vertical.



**Photo 2:** central portion of the pit. Highwall was near vertical.





**Photo 3:** Topsoil along the eastern side of the pit.



**Photo 4:** Topsoil along the western side of the pit.