



**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.

<b>MINE NAME:</b> Murdock Gravel Pit	<b>MINE/PROSPECTING ID#:</b> M-1983-112	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Kiowa
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Amy Eschberger	<b>INSP. DATE:</b> October 11, 2018	<b>INSP. TIME:</b> 08:30
<b>OPERATOR:</b> Kiowa County	<b>OPERATOR REPRESENTATIVE:</b> Allen Watts	<b>TYPE OF OPERATION:</b> 110c - Construction Limited Impact	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<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> Cloudy	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> November 26, 2018	

### 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>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>N</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>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(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 was a normal monitoring inspection of the Murdock Gravel Pit (Permit No. M-1983-112) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. Allen Watts represented the operator during the inspection. The site is located approximately 8 miles southwest of Sheridan Lake, Colorado in Kiowa County. Access to the site is from the northwest off Co Rd J. **Photos 1-10** taken during the inspection are included with this report.

This is a 110c operation permitted for 9.2 acres to mine sand and gravel for use in county road construction and maintenance (see enclosed mining plan map). No material processing occurs on site. Mined material is directly hauled off site for use or temporarily stockpiled on the pit floor until needed. An existing pit was incorporated into the permit area. The permitted operation expanded the pit southward, westward, and eastward. The permit area is circular in shape with a straight northern boundary following the property line.

The approved post-mining land use for the site is agricultural. The approved reclamation plan for the site includes grading all disturbed slopes to 3H:1V or flatter, replacing 9-12 inches of topsoil on disturbed land, and seeding the land with a native grass seed mixture. Technical Revision No. 1, approved in 2000, clarified that enough topsoil would be salvaged on site to meet the requirements of the reclamation plan.

The site was not active during the inspection. A permit sign was posted at the main site entrance. The corners of the northern permit boundary were delineated by T-posts. The rest of the permit boundary was delineated by a topsoil berm which has now been used for reclamation. The site is currently in final reclamation. The operation completed final grading and topsoil replacement of the pit area in Fall of 2017. The site was seeded in early November of 2017. The Division observed that pit slopes have been graded to the approved final configuration of 3H:1V or flatter. The pit floor is graded to allow the pit to drain to the east. Some ponded water was present in the pit during the inspection due to a recent storm event.

Vegetative cover of the pit area consists primarily of annual weeds at this time. However, the Division did observe some grasses growing in rows from where the site was drill-seeded last Fall. While the site is undergoing revegetation, pit slopes are more susceptible to erosion. No significant erosion problems were observed. However, some minor rilling was observed along pit walls, particularly at the western edge of the pit. Mr. Watts indicated the operation will continue to monitor the site during reclamation, repairing any significant erosion damage, controlling weeds, and interseeding the site as necessary to establish a good stand of native grasses. Successful revegetation of the site may require a few more growing seasons.

Pursuant to Rule 3.1.3, the operator has five years to complete final reclamation once mining has ceased. In this case, final reclamation began in Fall of 2017. Therefore, the operator has until Fall of 2022 to complete reclamation of the site.

The operator appears to be following the approved reclamation plan. No problems were observed.

This concludes the report.

### **PHOTOGRAPHS**



**Photo 1.** View looking south across western pit slope which was graded to 3H:1V or flatter then seeded in November 2017. Vegetative cover of the pit area consists primarily of annual weeds at this time.



**Photo 2.** View looking southeast across pit from its northwestern edge. Note some ponded water on pit floor due to recent storm event.



**Photo 3.** View looking east across northern pit slope which was graded to 3H:1V or flatter then seeded in November 2017. Vegetative cover of the pit area consists primarily of annual weeds at this time.



**Photo 4.** View looking north across western pit slope which was graded to 3H:1V or flatter then seeded in November 2017. Vegetative cover of the pit area consists primarily of annual weeds at this time.





**Photo 5.** View looking south across southwestern pit slope which was graded to 3H:1V or flatter then seeded in November 2017. Vegetative cover of the pit area consists primarily of annual weeds at this time.



**Photo 6.** View looking east across southern pit slope which was graded to 3H:1V or flatter then seeded in November 2017. Vegetative cover of the pit area consists primarily of annual weeds at this time.



**Photo 7.** View looking north across pit from its southern edge. Note some ponded water on pit floor due to recent storm event.



**Photo 8.** Close-up view of ground at southeastern edge of pit, showing some grass growth present along rows from drillseeding done last Fall.





**Photo 9.** View looking northwest across pit from its eastern edge. Note eastern pit slope (shown in foreground) is graded to flatter than 3H:1V.



**Photo 10.** View looking west across northern pit slope which was graded to 3H:1V or flatter then seeded in November 2017. Vegetative cover of the pit area consists primarily of annual weeds at this time.

**Inspection Contact Address**

Allen Watts  
Kiowa County  
P.O. Box 591  
Eads, CO 81036

Encl: Approved Mining Plan Map

CC: Michael Cunningham, DRMS



# Site Map

EXHIBIT C - PART 3  
first replacement

located in the Southeast quarter of  
section 27 Township 19S Range 44W

lin=224ft



William J. and Larry W. Weber  
property

