




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: Jones Pit East	MINE/PROSPECTING ID#: M-1987-009	MINERAL: Sand and gravel	COUNTY: Prowers
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: March 26, 2019	INSP. TIME: 11:40
OPERATOR: Prowers County	OPERATOR REPRESENTATIVE: Mark Dorenkamp	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$0.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: June 3, 2019	

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>Y</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 Jones Pit East (Permit No. M-1987-009) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. Mark Dorenkamp represented the operator during the inspection. The site is located approximately 4 miles northeast of Granada, CO in Prowers County. Access to the site is from the south off Co Rd JJ. **Photos 1-14** taken during the inspection are included with this report.

This is a 112c operation permitted for 26.9 acres to mine sand and gravel for use in county road construction and maintenance (see enclosed Google Earth image of site). The site is situated on a fluvial terrace along the eastern edge of Buffalo Creek. The county took over the permit in 1996, at which time, the southern half of the current permit area had been mined. The permit was converted to a 112c operation through the Conversion application approved in 2001, which expanded the permit area to the north (see enclosed mining plan map). The sand and gravel deposit outcrops at the surface in some areas. Little to no overburden is present on site. The sand and gravel deposit is approximately 6-8 feet thick along the previously mined eastern edge of the permit area, and was expected to thicken as the operation advances into the hillside (north). A small mobile crushing/screening plant may operate on site as needed. Mined material will be stored mainly in the southern portion of the permit area. Salvaged topsoil will be stored at the southern and northern edges of the permit area.

The approved post-mining land use for the site is rangeland. The reclamation plan calls for grading all disturbed slopes to 3H:1V, retopsoiling disturbed land at a depth of 4-6 inches, and revegetating the site with a rangeland grass mixture including Blue grama, Sideoats grama, Western wheatgrass, and Sand dropseed. According to the approved reclamation plan map, all internal haul roads will be reclaimed.

At the time of the inspection, the weather was clear and sunny, and the ground was mostly dry. A permit sign was posted at the main site entrance off Co Rd JJ. The permit boundary corners were marked with metal posts painted yellow. Additionally, the eastern and western permit boundaries were delineated by barbed wire fencing, and the southern permit boundary was delineated by the county road. The site was not active during the inspection. The operation was approved for intermittent status in 2014 to operate for less than 180 days per year. According to the operator, mining activities in recent years have primarily included hauling off from stockpiled material. The southern half of the permit area was mined first by the previous operator, leaving an approximately 15 foot high pit wall along the eastern edge of the site. This pit wall has been graded to 3H:1V and is revegetated with native grasses and shrubs. However, there are a few areas where the reclaimed slopes have been redisturbed to repair erosion damage. These areas will need to be regraded to the approved final slope configuration and revegetated for final reclamation. Several material stockpiles are stored on the pit floor in the southern half of the permit area. A large topsoil stockpile, left by earlier mining activities, is stored at the southwestern edge of the permit area. This stockpile was stable with good grass cover.

In the more recently disturbed northern half of the permit area, the pit is being expanded to the north. A west-facing pit wall approximately 15 feet in height remains along the eastern edge of the permit area where the pit has been mined out. The operation has graded the eastern pit wall to 3H:1V or flatter. Portions of the graded areas are vegetated with grasses and shrubs, while other portions are still bare and will require retopsoiling and revegetating for final reclamation. The northern active mine wall is approximately 450 feet in length with varying slope gradients. The eastern edge of the active mine wall is approximately 15 feet in height with large rocks outcropping at the surface, while the western edge of the mine wall thins out to approximately 3-5 feet in height. An area north of the active mine face, approximately 1.6 acres in size, has been stripped in preparation for advancing the pit. However, according to Mr. Dorenkamp, the operation may not continue expanding the pit to the north given the number of large rocks encountered in this area. A large topsoil stockpile is stored at the northeastern edge of the permit area. A few small material stockpiles are stored on the pit floor.

Overall, the site appears to be stable with native grasses and shrubs volunteering across much of the disturbed areas. The Division estimates the operation has disturbed a total of 21.8 acres. The pit has been mined out to the east and mostly to the west, with only approximately 300 feet left to mine at the north end of the permit area. If the operation has completed mining the site, the Division recommends the operator work to complete final reclamation of the site as soon as possible. The permit will be considered active even after mining ceases, as long as the operation continues to haul off from stockpiled material. However, once these activities have concluded, the operation will have five years to complete final reclamation of the site per Rule 3.1.3.

This concludes the report.

Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at amy.eschberger@state.co.us.

PHOTOGRAPHS



Photo 1. View looking southeast at reclaimed eastern highwall in southern half of permit area.



Photo 2. View of material stockpile stored on pit floor in southern half of permit area.



Photo 3. View looking northeast across previously mined southern half of permit area.



Photo 4. View looking east across previously mined southern half of permit area. Note material stockpiles stored on pit floor in this area.



Photo 5. View looking west at large topsoil stockpile stored at southwestern edge of permit area. Note this stockpile is stable with good grass cover.



Photo 6. View looking east at reclaimed eastern highwall in southern half of permit area, showing redisturbed portion (circled) which will require regrading and revegetation for final reclamation.



Photo 7. View looking east at portion of highwall in northern half of permit area which has been graded to 3H:1V.



Photo 8. View looking east at portion of highwall in northern half of permit area which has been graded to 3H:1V and revegetated.



Photo 9. View looking north at eastern edge of active mine wall in northern half of permit area.

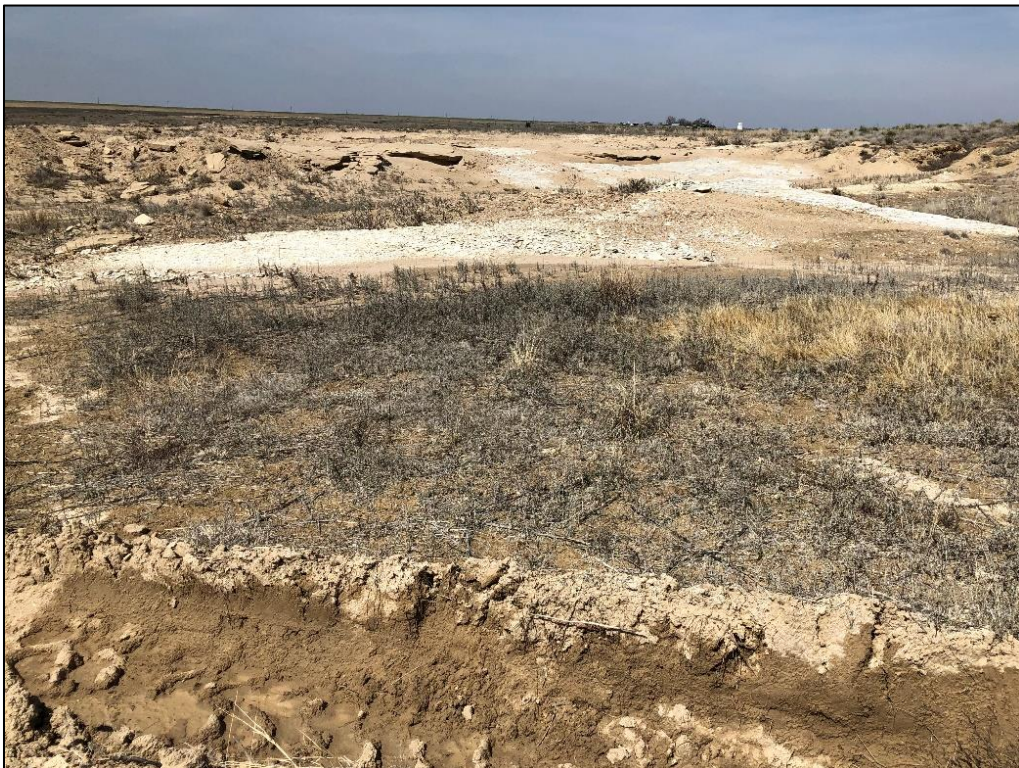


Photo 10. View looking north at western edge of active mine wall in northern half of permit area.



Photo 11. View looking south from top of active mine wall, showing eastern highwall graded to 3H:1V or flatter.



Photo 12. View looking southwest across pit from top of active mine wall.



Photo 13. View looking across stripped area just north of active mine face. Note topsoil stockpile stored at northeastern edge of permit area (in background).



Photo 14. View looking south across western edge of pit floor in northern half of permit area. Note a few small material stockpiles stored in this area.

Inspection Contact Address

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Prowers County
301 S. Main St., Ste. 215
Lamar, CO 81052

Encl: Google Earth image of site
Approved mining plan map

CC: Michael Cunningham, DRMS

M-1987-009 / Jones Pit East / Prowers County

Red Outline = 26.9 acres = Approved Permit Area (approximate location based on approved maps)
(Image data from 6/12/2017)

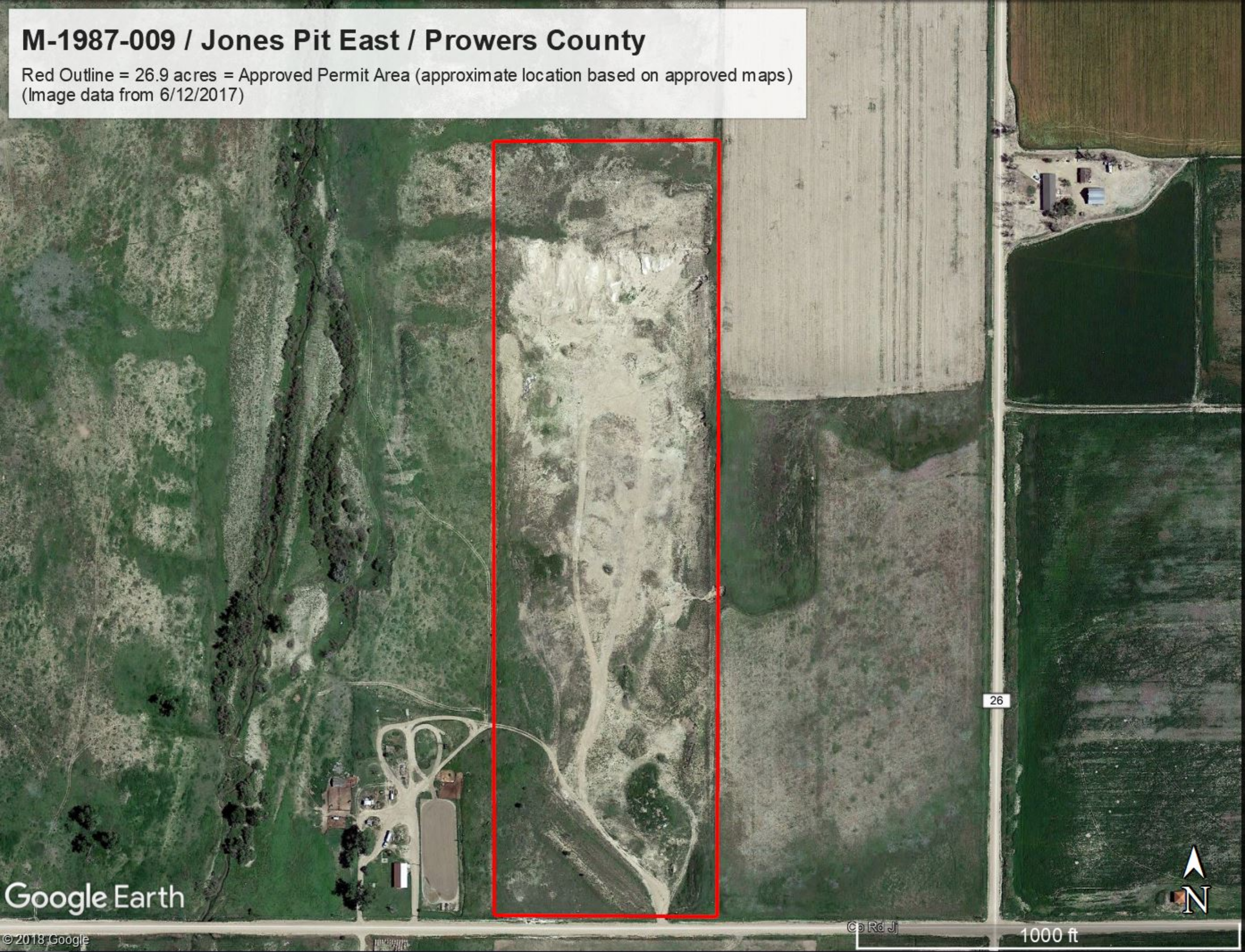


EXHIBIT C - PRE MINING AND MINING PLAN MAP

