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.

MINE NAME: Ensminger Pit	**MINE/PROSPECTING ID#:** M-2002-068	**MINERAL:** Gravel, sand and clay	**COUNTY:** Phillips
INSPECTION TYPE: Monitoring	**WEATHER:** Clear	**INSP. DATE:** May 25, 2023	**INSP. TIME:** 12:00
OPERATOR: Rick Ensminger	**OPERATOR REPRESENTATIVE:** Rick Ensminger	**TYPE OF OPERATION:** 110c - Construction Limited Impact	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** Complete Bond	**BOND AMOUNT:** $10,000.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
INSPECTOR(S): Amber Michels	**INSPECTOR'S SIGNATURE:** 	**SIGNATURE DATE:** July 17, 2023

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Reclamation Success
PROBLEM: The current reclamation plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-110(1)(a)(VII) and (IX) and C.R.S. 34-32.5-116 (1). The operator must provide sufficient information to describe or identify how the operator intends to conduct reclamation.
CORRECTIVE ACTIONS: The operator shall submit a Technical Revision, with the required $216 revision fee, to update and clarify the current approved reclamation plan to reflect existing and proposed activities by the corrective action date.
CORRECTIVE ACTION DUE DATE: 8/16/23

INSPECTION TOPIC: Sediment Control
PROBLEM: An erosion gully was observed on-site. This is a problem at this time for failure to protect the affected land from erosion pursuant to C.R.S. 34-32.5-116(4)(j).
CORRECTIVE ACTIONS: The Operator shall provide photo documentation to the Division verifying erosion the gully has been repaired, and that the site has have been reconstructed and stabilized to prevent erosion damage by the corrective action date.
CORRECTIVE ACTION DUE DATE: 8/16/23

INSPECTION TOPIC: Signs & Markers
PROBLEM: The affected area boundary markers are missing or incorrectly placed. This is a problem for failure to maintain boundary markers around the affected area as required by Section 3.1.12(2) of the rule.
CORRECTIVE ACTIONS: The Operator shall conduct a survey and replace the boundary markers in the correct location(s). The Operator shall provide proof to the Division that this has been done by the corrective action date.
CORRECTIVE ACTION DUE DATE: 8/16/23

OBSERVATIONS

This inspection was conducted as part of the Division's routine monitoring program for permitted operations. Amber Michels, with the Division of Reclamation, Mining and Safety, conducted the inspection while Rick Ensminger, the Operator, accompanied.

The Ensminger Pit is a Construction Materials 110c Operation which is approved to affect 9.9 acres of land. Affected lands will be reclaimed to support a wildlife habitat post-mining land use. The site is located two miles southwest of Haxtun, Colorado. I met Rick Ensminger at the mine site which is located south of County Road 28, one-half mile west of County Road 3.

General Compliance with the Mining Plan:

The plan for this site initially was to mine within the creek bed of the North Fork of Frenchman Creek. Excavation of the mining pit began north of the creek, and expanded northward (Figure 2). From there, mining progressed from east to west within the pit. The Operator stated that the pit would sometimes contain large amounts of water from the creek spilling into it, and the Operator has since built a berm made of primarily clay and sandy material found onsite by pushing it up against the southern wall of the pit to attempt to keep water out of the pit (Photo 4: Map 1(B)). The Operator stated that this has helped keep large amounts of water out, but water still seeps into the pit from below the berm (Photos 10-12: Map 1). Additionally, the Operator has excavated a small area south of the original pit that does lie within the creek bed (as seen in Map 1(C)). Currently, there is a highwall approximately 200' long and 10'-15' high along the western border. The Operator stated that they have finished mining, and would like to enter final reclamation.

Reclamation:

The Operator stated that they plan to reclaim the highwall along the western border this summer. The Division reminds the Operator that the approved grade for the east and west slopes according to the current reclamation plan is a 4H:1V slope. The Operator has conducted reclamation of the northern boundary of the pit within the past few years and stated that it was seeded a few years ago. The northern boundary has been graded at a 3H:1V slope, pursuant to the approved reclamation plan. The vegetation planted on the slope has begun to grow and is becoming established. There is a shallow scarp that extends from the east to the west side of the slope (Photos 16 and 17). The Division expressed concern about slope failure but the Operator stated that they believe the slope has settled and will not continue to erode. The Division cautions the Operator to monitor the scarp to ensure that it doesn't grow. If the scarp continues to erode, the Operator will need to regrade and re-seed the slope in compliance with Rule 3.1.9(5).

A problem has been cited above for the need to revise the current reclamation plan. Upon observation of the current site conditions, and review of the approved reclamation plan, the Division believes the currently approved reclamation plan is no longer adequately designed for the site. This is due to the reclamation plan being designed to reclaim a pit within the creek bed itself, and because the majority of mining was conducted north of the creek bed, and has now been subsequently separated from the creek (see Figure 2 and Map 1), a new plan is required that will address how the north area will be reclaimed in compliance with rule 6.3.4. Additionally, a new Exhibit E Site Map and Reclamation Map designed in compliance with Rule 6.3.5(3) will need to be provided. The Operator has until the corrective action date to submit an application for a Technical Revision fort the Reclamation Plan.

Hydrologic Balance:
Standing water was observed onsite within the creek bed south of the main pit (Photos 2-6: Map 1(C)) and in shallow ponds within the north pit (Photos 8, 12, and 19: Map 1). As stated above, the Operator constructed a berm using clay materials to attempt to keep the water within the creek bed and out of the northern pit. The area of Haxtun, CO and surrounding areas had recently received high amounts of rainfall, and were experiencing an excess of water compared to average conditions. The Operator stated that he is aware that the water is to remain in the creek, and is actively attempting to find a solution the keep the northern pit dry.

Financial Warranty:
The current bond held by the Division for this site is in the amount of $10,000. Pending an updated reclamation plan, required by the Division, a new financial warranty will be calculated upon the plan's approval.

Sediment Control:
The Division did not observe excess sediment entering the creek bed. However, in the north east corner of the northern pit, there is an erosion gully that appears to have been caused from the run-off from the Operator's shop area running downslope into the pit (Photo 19: Map 1). **A problem has been cited** for erosion. The Operator will need to repair the erosion in this corner, and submit photo evidence that this has been completed by the corrective action date.

Signs and Markers:
A mine sign was observed at the north-east corner of the site. The sign is in compliance with Rule 3.1.12(1). However, it is obscured by branches that may need to be trimmed if they continue to grow (Photo 20: Figure 1: Map 1).
Only one boundary marker was observed on-site. The north-east corner t-post was placed next to the mine sign (Photo 20: Map 1). The Operator also stated that there had been one marking the south-east corner just prior to the inspection, and that it had been knocked down. The Division took a photo from the location where the Operator stated the post had been (Photos 1 and 2: Map 1). The Operator also stated that there were t-posts for the northern boundaries prior to the inspection, but they were taken down to farm in these areas (see cropland north of active pit on Map 1, and Figures 1-2).

A problem was cited above for failure to maintain boundary markers delineating the approved affected area in accordance with Rule 3.1.12(2)(a). The Operator shall conduct a survey to replace the missing boundary markers. The Operator must submit photo evidence and/or GPS coordinates that indicates that boundary markers have been installed.

Topsoil:
The Operator had stockpiled topsoil prior to excavation and placed stockpiles in various locations around and above the pit. During the inspection, the only remaining stockpile is placed above and to the west of the pit's western boundary (Photos 4, 5, 12, and 13: Map 1). The other topsoil piles have since been used in reclamation of the pit area. The remaining topsoil pile appeared to be well vegetated, stable, and away from mining disturbance in compliance with Rule 3.1.9(3).

Conclusion:
This concludes the Division's Inspection Report; a map displaying topics discussed during the inspection and a subset of corresponding photographs that were taken during the time of the inspection are included below. If

you need additional information or have any questions, please contact me by email at amber.michels@state.co.us or by telephone at (720) 836-0967.

Inspection Contact Address
Rick Ensminger
P.O. Box 276
Haxtun, CO 80731

Enclosure: 2023 DRMS Cost Estimate

CC: Jared Ebert, DRMS

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS---------- N	(FN) FINANCIAL WARRANTY-------- N	(RD) ROADS---------- N
(HB) HYDROLOGIC BALANCE---------- Y	(BG) BACKFILL & GRADING---------- N	(EX) EXPLOSIVES--------- N
(PW) PROCESSING WASTE/TAILING---- N	(SF) PROCESSING FACILITIES------- N	(TS) TOPSOIL---------- Y
(MP) GENL MINE PLAN COMPLIANCE- Y	(FW) FISH & WILDLIFE---------- N	(RV) REVEGETATION---- N
(SM) SIGNS AND MARKERS---------- PB	(SP) STORM WATER MGT PLAN---- N	(RS) RECL PLAN/COMP-- PB
(ES) OVERBURDEN/DEV. WASTE--------- N	(SC) EROSION/SEDIMENTATION--- PB	(ST) STIPULATIONS------- N
(AT) ACID OR TOXIC MATERIALS------- N	(OD) OFF-SITE DAMAGE----------N	

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

PHOTOGRAPHS

Photo 1: Looking north from the approximate location of the south-east corner marker.

Photo 2: Looking west from the approximate location of the south-east corner marker.

Photo 3: Looking west at the pit area located within the creek bed.

Photo 4: Looking north-west at the pit area located within the creek bed. The arrow points to the south side of the separation berm built by the Operator. Circled is the topsoil pile located above the highwall in the northern pit.

Photo 5: Looking west across the berm/divider created by the Operator in hopes of keeping water from the south side where the Frenchman Creek runs, out of the northern pit area. Yellow arrow points to the topsoil pile located above the highwall.

Photo 6: Looking south-west at the portion of the pit within the creek bed.

Photo 7: Looking north at the north-eastern corner of the northern pit.

Photo 8: Looking north-west at the reclaimed northern slope.

Photo 9: Looking west at the western boarder of the northern pit.

Photo 10: Looking south along the central southern border of the northern pit. This is where the Operator stated that water seeps through the berm from the creek on the south side.

Photo 11: Looking north-west at moist sediment caused by the seepage of water from the south pit to the north pit.

Photo 12: Looking north-west at the seepage to where it pooled in the western portion of the northern pit.

Photo 13: Looking west at the highwall along the northern pit's western border. Located above the wall is a vegetated and stable topsoil pile.

Photo 14: Looking north along the western border of the northern pit.

Photo 15: Looking south along the western border of the northern pit.

Photo 16: Looking north at the scarp that runs from the east to the west along the top of the recently reclaimed slope.

Photo 17: Looking north-west at the northern most corner of the northern pit.

Photo 18: Looking at the north-east corner of the northern pit.

Photo 19: Looking down into the pit from the north-east corner of the northern pit. An erosion gully leads from the Operator's shop area down into the pit.

Photo 20: Looking west at the permit sign and north-east permit boundary marker. The sign is partially obscured by branches.

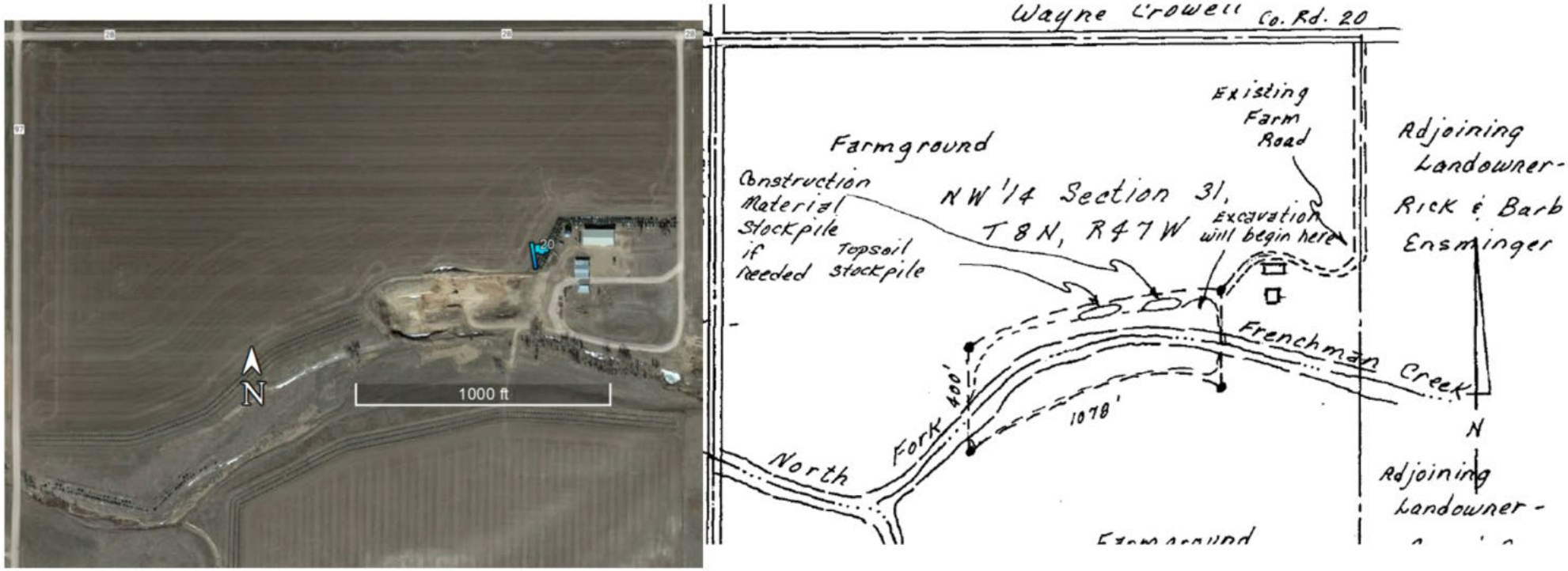
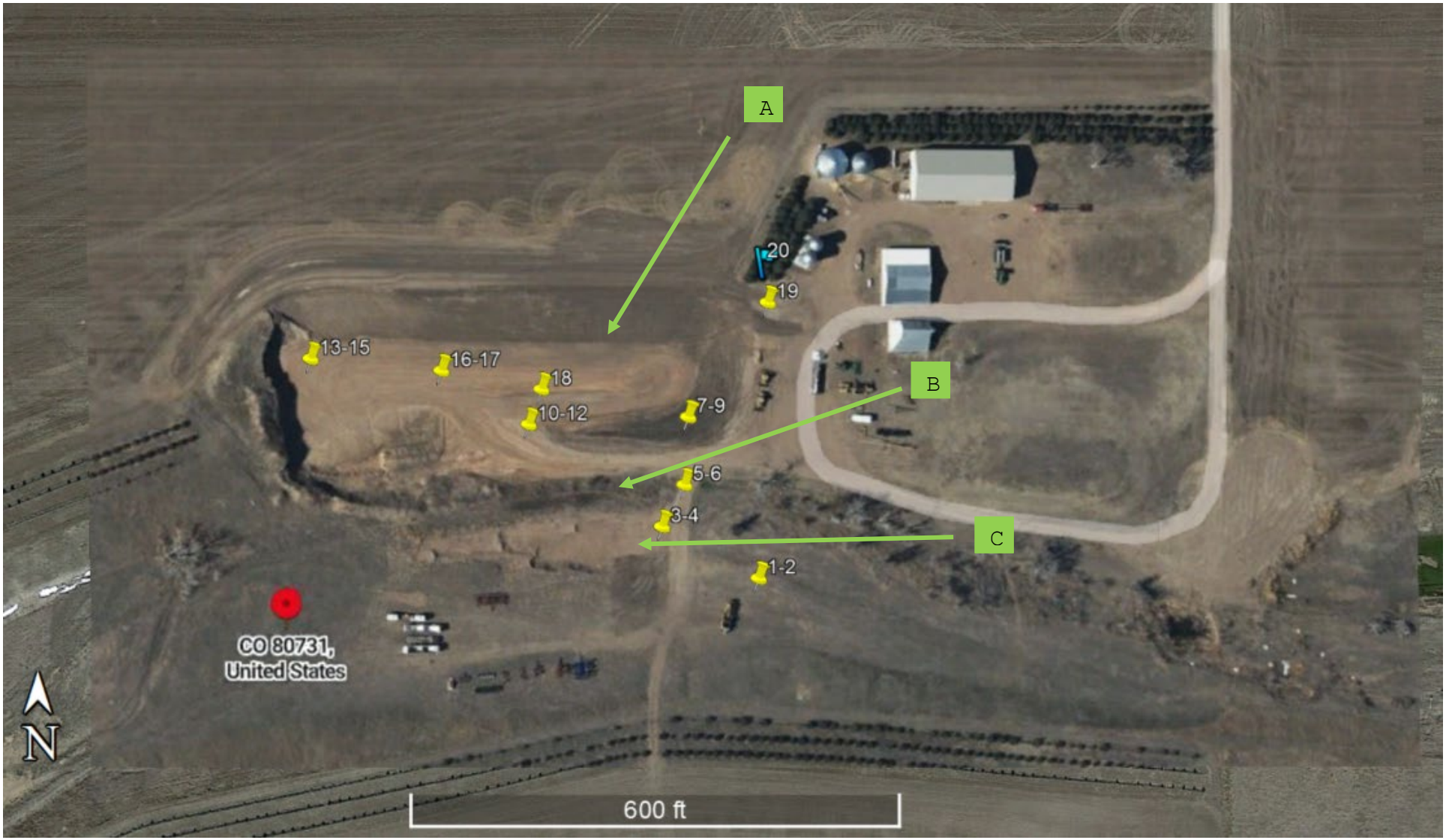


Figure 1: (Left) Areal map generated using Google Earth Pro. The Google Earth image is dated September 2016. The blue flag with the number 20 corresponds to Photo 20 and indicates the remaining in-situ t-post boundary marker on-site. (Right) A clip from the approved mining map that illustrates the approved permit boundaries (dashed polygon with dimensions of 400' x 1078').



Map 1: Map generated using a more recent (not dated) map image from Bing Maps in combination with the image overlay function in Google Earth Pro. The Bing Map provides a more representative image of the current site conditions than the most recent image on Google Earth Pro (most recent image is in G.E.P is from September 2016). The blue flag represents the location of the t-post boundary marker observed in place during the 2023 inspection, and corresponds with Photo 20 (see Figure 1). The yellow push pin icons represent the locations where the photos were taken during the 2023 inspection. The green arrows represent:

A) the northern pit, B) the clay berm separating the northern pit from the creek bed, C) the small southern pit within the creek bed of Frenchman Creek.

Figure 2: Images gathered from Google Earth Pro to provide a timeline of mining activities and the separation of the main pit from the Frenchman Creek. A) 1998 aerial view depicting the site area prior to mining activities. B) 2006, early mining progress. Mining began north of the creek bed. C) 2011, mining remains north of the creek bed. D) 2013, water flows into the pit area from the creek south of the pit area.