



# **Horse Gulch Fill Quarterly Inspection Report**

**Second Quarter 2020**


**Trapper Mining Inc.  
Trapper Mine  
Craig, Colorado**

TRAPPER MINING INC.  
CRAIG, COLORADO

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HORSE GULCH FILL  
QUARTERLY FILL CERTIFICATION

I, Tonia Marie Perkins, a Licensed Professional Engineer in the State of Colorado, in accordance with 2CCR407-2, Section 4.09.1(11), have conducted a quarterly inspection of the Horse Gulch Fill construction. This quarterly inspection was conducted on June 25, 2020. The fill was inspected for stability, and no appearance of instability, structural weakness, or other hazardous condition was observed during the inspection. Construction during this quarter has been under my supervision, and to the best of my knowledge and belief, has been consistent with the design approved by the Colorado Division of Reclamation, Mining, and Safety.

  
Tonia Marie Perkins  
CO PE 43864



6/29/2020  
Date

June 29, 2020

# Horse Gulch Fill Quarterly Inspection Report

## Second Quarter 2020

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I certify that this report was prepared by me.

  
Tonia Marie Perkins  
CO PE 43864  
Mining Engineer  
Trapper Mining, Inc.



## 1.0 Introduction

In compliance with Rule 4.09.1 (11) of the *Regulations of the Colorado Mined Land Reclamation Board for Coal Mining*, a quarterly inspection and report on the construction and associated activities of the Horse Gulch Fill (HGF) at Trapper Mine in Craig, Colorado has been completed. The quarterly inspection was conducted on June 25, 2020, by Tonia M. Perkins, a licensed professional engineer in the State of Colorado. Construction activity related to the fill has been consistent with the approved design. Details of this design can be found in Agapito Associates, Inc.'s (AAI) *Horse Gulch Fill Stability Analysis*, dated May 29, 2009.

No appearances of instability, structural weakness, or other hazardous conditions were observed. Both the south west side of the fill and the north east spoil side of the fill were inspected this quarter. The area where cracks were detected on the top south portion of the dump during the first quarter of 2013 inspection was checked. There was no additional cracking found.

The two spots above the 7350' elevation on the south side of the dump that showed some differential settling in the second quarter of 2013 were inspected and there was no additional settling (Photographs 1 and 2). These two sites were surveyed on June 26, 2020 (via drone). The recent survey shows the volume for the north depression is less than the volume from the 2019 survey. The south depression's volume is more than 2019 survey but less than the 2018 survey. The vegetation growth has caused discrepancies with the calculated volumes. It appears there has been no change in volume for either depression areas in the past year. Monitoring these areas on a regular basis will continue. The table below shows how the recent survey compares to the surveys done on June 8, 2018 and June 26, 2019 (via drone):

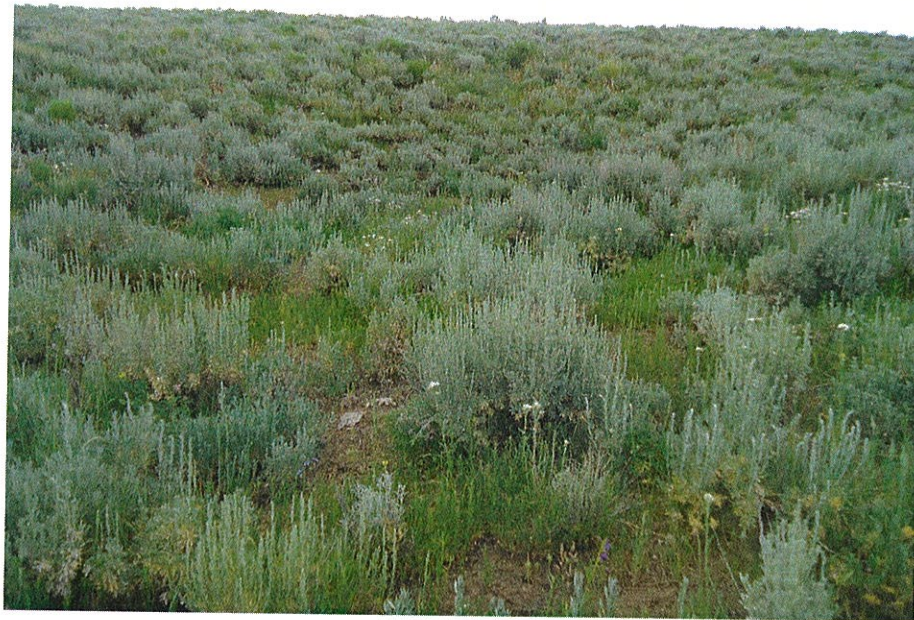
Date	North Depression Cyds.	South Depression Cyds.
June 8, 2018	281	119
June 26, 2019	259	101
June 25, 2020	247	115

The area where a spring was discovered during the third quarter 2011 inspection was inspected. During the time of the inspection, the water flow was approximately less than a tenth of a gallon per minute.

June 29, 2020



*Photograph 1: South Site above the 7350 Bench Elevation (6/25/2020)*



*Photograph 2: North Site above the 7350 Bench Elevation (6/25/2020)*

## **2.0 Critical Construction Periods**

### **2.1 Removal of All Organic Material and Topsoil**

Topsoil and organic material removal activities were not conducted during the quarter.

### **2.2 Placement of Underdrainage Systems**

The underdrainage system was completed in the first quarter of 2010; additional work on this system is not anticipated. During the time of the inspection, there was approximately a gallon per minute of water flow. (Photograph 3).

### **2.3 Installation of Surface Drainage Systems**

Both the north and south surface drains were inspected (Photographs 4 and 5). At the time of the inspection there was no water flow.

### **2.4 Placement and Compaction of Fill Materials**

There was no placement of material or contour work done on the fill this quarter. All of the required material for the fill has been placed and compacted. It's anticipated there will be no more additional fill material placed on the fill.

Photograph 6 depicts the west facing slope of the fill in the area where the slope of the fill is at 3H: 1V.



*Photograph 3: Water from the Underdrainage System (6/25/2020)*

June 29, 2020



*Photograph 4: North Surface Drain Looking East (6/25/2020)*



*Photograph 5: South Surface Drain Looking Southeast (6/25/2020)*



*Photograph 6: West Side Fill 3H: 1V Face Looking East (6/25/2020)*

## **2.5 Revegetation**

Seeding activities did not occur this quarter. There is one topsoil pile located on the fill. The only area on the fill that requires any topsoil and seeding is located under the topsoil pile.

## **3.0 References**

Agapito Associates, Inc. (2009), "Horse Gulch Fill Stability Analysis" submitted to Trapper Mining, Inc., May 29.

Colorado Division of Minerals and Geology (1980), "Regulations of the Colorado Mined Land Reclamation Board for Coal Mining," revised 9/14/05, Section 4.09.1.