

## MINE SITE INSPECTION NARRATIVE

COMPANY: MINEREC, Inc.

MINE: North Thompson Creek

PERMIT NO: C81025

DATE OF INSPECTION: September 15, 2020

WEATHER: Sunny and calm, temperatures in the low 80s

COMPANY OFFICIAL: None

Division of Reclamation, Mining and Safety Personnel (DRMS): Rob Zuber

OSMRE OFFICIAL: Dan MacKinnon #554

### Overview

OSMRE conducted a complete oversight inspection with DRMS personnel on September 15, 2020, which concentrated on records and inspecting all water diversions and impoundments. This inspection found three areas of concern: a few records were missing from the public files; the sagging of a pipe transporting portal discharge into a surface ditch; and a surface channel that had been breached directing flow into a stream buffer zone. This site was otherwise stable and functioning as designed.

No enforcement actions were issued as a result of this inspection.

### Records Review

During a check at the Garfield County building in Glenwood Springs, several reports for the North Thompson Creek Mine were not found (e.g. the 2019 ARR and the 2020 reports for pond inspections). These should be placed in the public file.

### Field Inspection

We began the field inspection with an overview of the mine and its history. We then hiked to the underground discharge pipes and walked the entire drainage. A PVC pipe diverts water from two reclaimed portals to the surface; according to a DRMS visual approximation, it was discharging at a normal volume at the time of inspection (Figure 1). Orange precipitate was seen where the pipe discharges into the ditch; this is normal according to DRMS and the orange precipitate was only present within the first few feet of this ditch at the time of inspection (Figure 2). The bridge that supports a section of this pipeline is in disrepair, and only two of the three cables that anchored this pipe to the bridge were functioning at the time of inspection (Figure 3). The lack of proper support caused a sag in

the pipe; this pipe should be further supported to prevent the sag. DRMS has been monitoring the bridge and will discuss its condition and re-stabilization of the pipe with the operator.

The aeration ditch which collects the water from the discharging portals was functioning as designed at the time of inspection. Long Pond was holding water and had a family of ducks present (Figure 4). This pond discharged into a fully competent ditch, then into another stable pond (T-1 Pond). Pond T-2 was also holding water. Another ditch led water to Pond 9, which was also fully functional at the time of inspection. All ponds and ditches to this point were fully functional.

The ditch connecting Pond 9 to the Refuse Pond was breached and discharging water into the stream buffer zone (Figure 5). The surface flow from this breach meandered 50-75 feet downslope where it appeared to infiltrate into the soil, well before reaching the stream (Figure 6). DRMS contacted the operator who repaired the breach by September 17, 2020 as confirmed by DRMS' inspection report.

#### Monitoring and Maintenance Items

- Place the missing documents in the Garfield County building in Glenwood Springs.
- Re-stabilize the portal pipe to the bridge.
- Continue to monitor all ponds and ditches.



Figure 1 - Portal Discharge at a normal flow rate at the time of inspection.



Figure 2 - Portal Discharge precipitate; only seen a few feet further than the pipe and not seen in any other ditch or pond.



Figure 3 - Although difficult to see in this picture, one support of the portal pipe attaching it to the bridge failed, creating a sag in the pipe. The pipe should be re-supported to eliminate this sag.





Figure 4 - A paddling of ducks on The Long Pond.

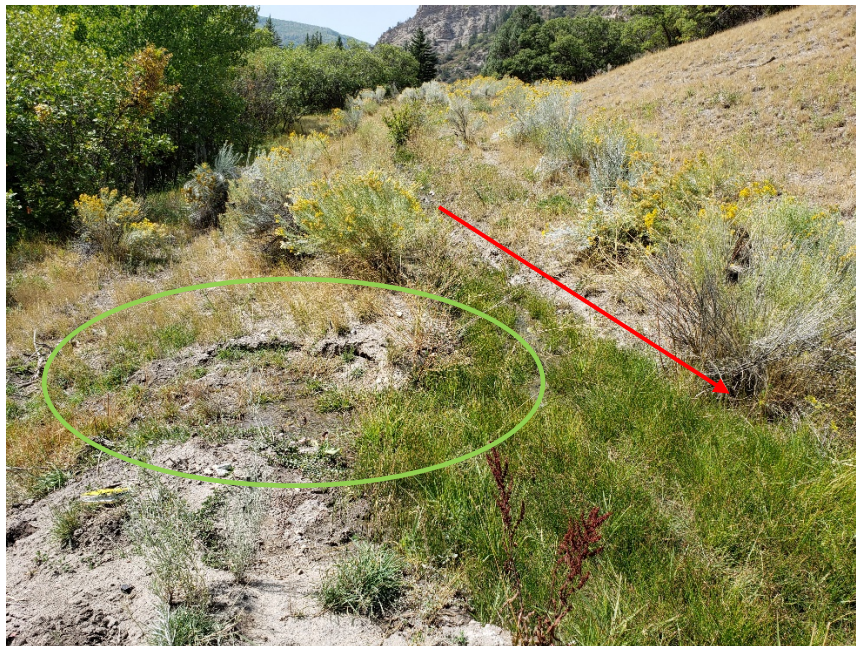


Figure 5 - The breach (green oval) of a ditch (red arrow) leading from Pond 9 to the Refuse Pond required repair, which DRMS confirmed upon re-inspection on September 17, 2020.





Figure 6 - Water flow (green oval) from the breach in the ditch (Figure 5) into the stream buffer zone. This breach only created surface flow 50-75 feet from the ditch and did not reach the stream; instead it infiltrated into the groundwater.