

Additional Sheet
2020 Annual Report
Coal Creek Resources
M-1988-044
Schmidt Construction Company
Anniversary Date: March 28

Status in Past Year: As the operation closed in late 2018-very early 2019, work shifted to reclamation activities only. Much of the last year was spent with backfilling and grading the final pit. This involved removing highwalls and very steep slopes and backfilling by cut and fill on the south end of the pit where the topography immediately after conclusion of the mining included a lot of very difficult topography. Elsewhere, the final shape of the pit began to appear. Fine tuning of parts of those slopes are still needed and will need to be coordinated with the creation of a drainage course and an outlet to the drainage immediately east of the pit. Additional backfilling will likely be needed next to the outlet to provide a smooth transition as the existing basin near the outlet is obviously too deep to produce an easy transition without a great deal of earthwork at the outlet. Backfilling will reduce the amount of earthwork needed in the actual outlet.

The plant site was also worked on to a considerable extent. Equipment was removed and grading of the remaining surface begun. There is still some equipment present that needs to be moved elsewhere or dismantled and scrapped. Some of that equipment is over 30 years old and is not in a serviceable or even repairable condition. Corrosion after being partially buried for much of its life has destroyed its structural integrity and functionality.

Sediment ponds have been allowed to drain as much as possible so backfilling will produce stable ground. That draining is a slow process as the bottoms and sides of the ponds are covered with a thick coating of fine clays that have little porosity. Evaporation is probably the most effective drying source.

Sediment removed from the ponds has been sitting long enough now that it can be moved and used as backfill at the pit area or for filling depressions and pits around the plant site.

At the time of this report it is estimated that about 60% of the reclamation is essentially completed. Most of that has been done at the pit and that is where most of the work needed to be done.

Expectations for the Next Year: It is expected that all remaining reclamation will be completed this year. One problem facing the effort early in this permit year is the unknown effect of the Covid-19 pandemic on the availability of personnel to actually do the work. This is a major factor influencing everything on the planet to one extent or another. So, completion of the reclamation cannot be assured in the stated timeframe due to the unpredictable effect of the pandemic on personnel. So the following **assumes** the pandemic will not have a major impact on this work.

Pit Area: Besides completing the backfilling on the south end of the pit, a drainage plan needs to be developed so an appropriate cut can be made through the northeast wall that leads to the nearby drainageway. This will include two or three shallow basins along the channel to reduce flow velocity and intensity. Then a final outlet needs to be designed and built. The original planned outlet would have been much further to the north, but the mining never got that far so an outlet where the pit is now that would have the same characteristics is needed.

When all of this is finalized topsoil around the perimeter of the affected area and soil and overburden stored in the large stockpile on the west side of the operation will be spread. Caution needs to

be exercised as to the timing of the topsoiling. Topsoiling at the height of the summer monsoon would be a big mistake because thunderstorms could induce a lot of erosion that would need to be repaired. Preferably, topsoiling would not be done until later in September or even October with planting occurring shortly afterward and a bit beyond the actual first freeze date - colder soil will help reduce premature germination.

Plant Area: A good deal of the reclamation here will be done as pond cleanings are hauled to the pit for use as backfill on the south end of the pit. The rest will be used to help fill sediment basins and other irregularities in the topography. Then these areas will be graded to produce a smooth topography similar to what was originally there.

The large topsoil stockpile will finally be accessed and removed for topsoiling areas. As this area is infested with a moderate to strong population of knapweed and because this is not likely to be done until topsoiling in the pit is being done there may be time to intensively treat the entire topsoil pile surface to kill off existing weed populations. That, of course, does not remove the seed bank already established in the soil. But because the total volume of soil relative to the much smaller volume of soil containing the seed bank is quite large, transfer of the seed bank to topsoiled areas will be less of a problem than would exist if the total volume of soil was smaller. It will still be a problem for weed control in the post reclamation environment, but that should be manageable. **No soil from this stockpile will be used at the Pit because that area is comparatively weed free at present.** Transferring the soil would only make any weed problems at the Pit worse.

It is hoped that the topsoiling can be completed by October so this area can be seeded at the same time as the Pit Area.

Drainage and erosion should not be a major problem here and probably much less than it was at some of the older reclamation areas where it was rarely a significant problem. Here slopes will be much more gentle than other older reclamation areas. That said, super-sized, late season thunderstorms can still present a hazard.