YEIP 2006 -003

2006

YMIP 06-003

115 H-04

Caveman Project

Daily Description of Work YMIP / 06-002 Caveman Project by Brad Mackinson

The main objective of this project was to determine whether placer deposits in lower Ruby Creek will pay well enough to mine. Different sizes of operations require varying pay values. So as to avoid any confusion I have used the American dollar as the standard for all values in this report. As the price of gold can vary day to day I used a fixed price of \$600.00 U.S. Due to time factors I tried choosing sites that would not require moving the creek.

Equipment used for this test program was already on site as part of my existing placer operation. John Deere 750 dozer. John Deere 544 wheeled loader. Bucyrus Erie 15H excavator. Kodiak 4" water pump. Trommel Wash Plant five feet in diameter. Support equipment and vehicles.

August 29TH. Towed the trommel down valley behind the dozer to Test Site # 1. Road was to narrow in places so had to unhook and remedy the situation. This test was near the bottom of the Caveman group of claims on P41452 about 150 feet below post # 2 on the West side of the valley. As is typical in this lower portion of the valley the willows are over 12 feet high and dense. Each move required a fair sized area just as a staging ground. A smaller plant would have been more suitable but I had to use what I had. A total area of about 200' x100' x 2' was stripped of vegetation and silt. Spent 3 hrs moving trommel and 4 hrs stripping.

August 30th. About 7hrs was spent stripping as well as preparing a pad for the trommel, settling ponds and a protective berm. Took 4 Wheeler up to camp and started the hoe. Hauled 4 wheeler back down to the test site in the back of my truck then drove back to camp to get the hoe. Once I got the hoe on site I had to do the 4 wheeler / truck thing again in order to get the loader and sluice runs. Tara arrived about 11 p. m.

August 31st. We got things all together and flashed up by 11 a.m. Sluiced for 6 hrs. I had to spend quite a bit of time screwing about with dozer as quarters were to tight. Due to the flat gradient of the creek we had to set the box up high. This in turn meant less water getting to the box due to lift.

September 02nd. Spent about 6 hrs sluicing. Dozed material out of hole to about 5 feet deep but ground water is coming into the hole quite fast. Used the loader to pack material to the hoe and move some tailings. Will have to berm higher around end of sluice runs to keep water from coming back into the hole. Should have spent a couple of days digging a long drain but winter is coming.

September 3rd. Spent about 5 hrs sluicing and Tara is looking like a pro now. Still has to figure out to handle the big rocks faster. Due to all the water coming into the pit I had to widen things out again so as to be able to walk hoe down and still have space to stockpile material.

September 5th. Walked hoe down into the hole and dug material out for the loader to haul. Real pain trying to dig under water. Some clay showed up so must be near some kind of bottom. Lots of large boulders down there. Walked hoe down into the pit at the end of the day to try and get a better portion of dirt from down deep. Hooked onto to several rocks that I could not budge. Would need a much larger hoe to consider a 'floater' as a mining option.

September 6th. Sluiced the final few yards and spent some time on site restoration. Placed concentrate into 5 gallon pails and will deal with these later as time seems to be getting crucial now. Lots of time to do a good job at panning in my nice warm shop at home. Dismantled sluice runs and hoses. Everything should be ready to move tomorrow.

September 7^{th.} Walked dozer up to do stripping of staging area and some site preparation. Went back down and towed trommel. Site #2 is about 80 feet above post #1 on claim #P41457. Bush is quite dense in this area and as the creek gradient is rather flat I guessed that pay values would not change dramatically. Silt overburden was about a 3-foot average at this site. Chose to set up closer to the east bank this time even though a fair distance from the creek. Need space to get around. Got everything moved up from site #1.

September 9th. Completed setting up plant, pump, hoses, and sluice runs, Got ponds done and sluiced a few hours.

September 10th. Sluiced about 6 hrs and built up pond berms. Digging feed material out with loader. Quarters seem to be quite tight again.

September 11th. Had to push material into the hole as it was becoming to narrow for the loader. Sluicing a much higher portion of top material than I would like. Ground water is becoming a problem so will have to stockpile material with the hoe again. Sluiced about 6 hrs and have to start stacking tails higher or clear more brush.

September12th. Walked hoe into pit and dug out material. Hit large boulders again that I could not move. Sluiced about 3hrs and then repeated process. Stockpiled with loader and moved tails. Have to use dozer every so often to keep things straightened out and flat.

September 13th. Took dozer up to prep site #3 while Tara finished sluicing stockpiled material. Stripped staging and work area for about 7 total hours. Walked down a couple of times to move tails with loader. Might freeze tonight so cleaned out box and threw into pails.

September 14th. Built a pad for the trommel and then went down and towed it up. Loaded up pump and hoses, fuel barrels, blocking and so forth. Eventually got everything to site #3. Site #3 is about 80 feet below post #2 on P41458 on the west side of the creek.

September 16th. Sluiced about 6 hrs. Initial feed with loader and build ponds with dozer. Black muck in pit area and had to strip more off. Ground water became a nuisance right away. I can see now why I haven't spent much time on testing in the past. Spent several hours digging to depth with hoe. Once again encountered many large boulders that I could not move. Lots of water.

September 17th. Sluiced about 6 hours and called it quits. Have pretty well decided that not much is accomplished when digging in water. Long drains are out of the question due to the time factor. My hoe is just to light and slow. Took dozer up to start prepping site #4 while Tara finished sluicing. Cleaned out box and dismantled things.

September 20th. Moved everything up to site #4. SITE #4 is 80 feet below post #2 on claim P41459. Decided to try a different strategy this time and spent several hrs digging a long trench to below the water level. I stockpiled this material in a long narrow pile. This in turn created quite a deep settling pond. We set the sluice plant much farther away and I was able to create some shallow holes above this main trench.

September 21st. sluiced 7 hours and used loader to feed hoe four hours. Straightened out ground and built up pond berms with dozer for two hours. Should have set up like this right from the beginning as things are going much smoother.

September 22nd. Sluiced 4 hours and started prepping next site with dozer. Using loader a lot more but makes everything work better. Cleaned sluice material into pails.

September 23rd. Spent 4 hours completing stripping and prep of site #5. Moved trommel up. Site #5 is about 150 feet above post #2 on claim P41460 in the central part of the valley. Moved pump and hoses and all equipment up. Hoe worked six hours digging stockpile as on test site #4. This site is even better as there is an old creek channel directly below that can be used for ponds.

September 24th. Cleaned up old channel and built berms to hold water. Sluiced four hours after getting everything hooked up. Used loader two hours for stockpiling and tails.

September 25th. Sluiced six hours and mainly used loader again for feeding hoe and tails. Leveling out with dozer one hour.

September 26th. Froze hard last night so had to heat water to thaw out box. Sluiced remaining material in four hours. Cleaned out box into pails then flattened area. Dismantled everything and moved all back to camp. Did not accomplish as much as I would have liked but should still have fairly representative values to base future plans on.

Conclusion

If I were going to tackle a substantial test program again I would take the time to build a more suitable plant that would be easier to move as well as lower hopper height. Even so; it was good to have this opportunity through YMIP to afford the necessary time involved. Trying to juggle several different projects was rather hectic. If I ever use this program again it will be for a sole purpose.

Test site #1. Average pay value of \$ 2.20 per cu. yd.

Test site #2. Average pay value of \$ 2.30 per cu yd.

Test site # 3. Average pay value of \$2. 42 per cu, yd.

Test site # 4. Average pay value of \$3,46 per cu. yd.

Test site # 5. Average pay value of \$ 4. 36 per cu. yd.

Property Description (General): Map sheet 115 H-4

Ruby creek is approximately 40 air miles north of Haines Junction, Yukon; and is part of the Whitehorse Mining District. Road access is gained from Silver City which is 35 miles up the Alaska Highway from Haines Junction. From this point there is app. 32 miles of typical bush road. Much heavy equipment and fuel trucks have traveled this route over past years and permits are no longer required. An alternate winter route has also been used in the past but requires permits.

The property sits in what is now referred to as the Kluane Metamorphic Assemblage (KMA). The main rock type of this area is composed of a quartz-mica shist. Some areas of Olivine Serpentinite have surface exposures, although much of the area is heavily covered in glacial debris. In Ruby creek valley there is some evidence of a significant intrusive event possibly related to fault action. The Denali Fault Zone which generally follows the Shakwak Trench passes through and by the western portion of the KMA.

The Killermun Lake or Ruby Range gold property is located approximately five miles east of Ruby Creek. Environmental concerns have hampered this development due to its location. As there is already development and road access on Ruby Creek, I do not think this will be such a major issue. The closest anology to the Killermun property is the Juneau Gold Belt which is about 400 km to the southeast.

Placer Mining:

Most creeks in the area have produced placer gold since the turn of the century. The most significant producers within the KMA have been Gladstone Creek and 4th of July. Renewed interest has been taking place as reserves in more traditional areas such as the Klondike are depleted. My operation on Ruby Creek is considered very small scale.

Ruby Creek has many old shafts and workings still visible from turn of the century miners. A camp of over 300 people was once established here and even had a post office. Most miners moved on to the gold rush in Chisana, Alaska, after only a few years. My placer operation is the first to actually use mechanized equipment on the creek to any extent. It always amazes me to see the amount of work these old-time miners were able to accomplish by hand.

Placer Mining Observations:

Even though I have recovered crystalline gold for several years I did not consider the fact that the gold may be local until recently. I had always assumed that the gold was transported for many miles via glacial activity. After showing my samples to various miners and geologists I finally clued in. Another factor that peaked my interest was that I noticed quite significant quartz veins cutting through the decomposed shist bedrock. I had already backfilled several large veins before deciding to watch for a lode source.

During the past season, I also noticed that my gold values seemed to be decreasing as work progressed upstream. The percentage and size of my crystalline gold also appeared to be declining. It seemed that my gold recovery picked up if my tailings had a lot of green rock. This rock was local shist with a layer of green waxy looking material that I now assume may be due to chloritization. The gravels of Ruby Creek are composed mainly of localized clasts. I decided that perhaps I should stake some quartz claims. I took only a minimal number of samples at present to satisfy my curiosity.

Old-tme miners must have done extensive testing before sinking their shafts or drifts. It was interesting to note how well these old workings fit with my higher soil sample readings. This leads me to believe that they would have also have thoroughly explored the rim-rock areas for ore exposures. Bostock reports indicate that the old-time miners were

aware of the crystalline gold.