## 1618816 Alberta Ltd Final Report November 2018

Work Dates: August 1, 2018 to September 2, 2018 (16 days total worked on program) Participants: Jim Davies, Matt Davies, Joe McIntyre, Labourers Reporting: Darrell Mathison, Bill Leary

## YMEP Grant #18-036 Placer

An exploration program was developed and implemented during the 2018 season for upper Granite Creek to assess mineral values and mining potential upstream(Claims Brodie 14-15) of the existing mining downstream(claims Brodie 1-9). To accomplish this, an access trail 1.3 km was constructed by John Deere 452 excavator and levelled with bull dozers (D6 & D9) from the current mining area to an area immediately upstream of the glacial moraine features between the two regions. The access allowed the 452 excavator into the test area to dig 5 trenches (test pits) in established areas of interest and complete the initial reclamation of the test areas. The access was retained for future activities. Test area (Brodie 14 & 15) prior to trenching and equipment access



Looking downstream towards glacial moraines upstream of the active mining area



Claim map illustrating relative locations of claims, current workings and test area



			Trench	Sampling			
Test Trench	Location		Dimension	Dimension & Depth	Sampling Volume (yd3)	Values /yd3	Test depths
1	8N 496583.99828	7081212.18885	30' x 90'	30' x 30' x 26' Deep	865	0.5 gm/yd3	25*
2	8N 496681.50679	7081058.74815	30' x 60'	30' x 30' x 16' Deep	530	Groundwater	No sample
3	8N 496635.56312	7081047.68857	200' x 300'	100' x 150' x 60' Deep	55,575	0.7 gm/yd3 & 0.9 gm/yd3	27' & 47'
4	8N 496560.04211	7081147.80637	30' x 90'	30' x 30' x 26' Deep	865	0.8 gm/yd3	25'
5	8N 496573.30095	7081130.88216	30' x 90'	30' x 30' x 26' Deep	865	0.5 gm/yd3 - wet	25'
					Total 58,700		
Trenches were	initially opened up by t	he D9 and the excavato	r dug the sampling are	a to reach the maximum depth a	acheivable. Bedrock not reached		

NOTE: Sampling run through long tom for value assessments of each test area by Matt Davies & Dan

Work program value based on sample volumes @ \$2/yd3 and 4 days working on access construction with the excavator and bulldozer and 2 operators.

Digital photo documentation was lost in transfer/download and was not recoverable. This loss was not brought forward until after we had shut down and departed the site for the 2018 season. If this data is critical we can readily forward additional photos of the test pits and reclamation work early in the 2019 season.





Panning stratigraphic layer from test pit 3 NOTE: Access trail on side hill behind bull dozers Looking upstream to headwaters of Granite Creek

Results:

Trench 1 & 5 had similar showings in the dug profile. Heavily mixed surface deposit consisting of large angular slide rock bound by a mix of silts and fines extended to a depth of 3-4 feet. Stream washed gravels extended down through the remaining depth with coarser washed boulders showing up at depth. Expected layers which contained viable gold downstream were not found (black, oxidized hard pan and the darker washed gravels). The depth reached 20' before moving to testing areas 2 & 3 at the mouth of the moraine blow out (current channel).

Trench 2 was abandoned at 20' as well with serious water flows preventing meaningful testing and analysis. Moving into an old perched stream channel at test area 3 resulted in moving away from the water concerns and allowed a serious attempt at reaching bedrock. The initial opening was done by bulldozer and then a 452 excavator dug the remainder to a depth of 60' with a single step down to extend the boom length. Bedrock was not achieved. The black hard pan was located at 15-20' with the bull dozer and well washed gravels and boulders were encountered below this layer. At 40-45' the material nature changed to the darker gravels encountered downstream as pay units. Layers of mixed glacial waste were also encountered throughout this lower section indicating sequential laying down of glacial melt materials and overlaying the pay units with waste.

Trench 4 was an attempt to locate shallower pay gravels and define the nature of the defined surface ridges running parallel to the valley and the stream flows. The ridges tested to be large talus rock ridges laid down by glacial movement and consist of coarse angular rock. There are 3 obvious ridges that form a distinctive geological formation in the test area. The areas between the ridges at test area 4 were dug to 20'. The surface was heavily covered by angular slide rock with glacial waste inter mixed to a depth of 5-6'. Underneath the water washed gravels reappeared and extended to the depth reached (20'). These materials have been extensively mixed with glacial waste rock and gravels indicating multiple glacial melts being guided by the coarse rock ridges into melt channels.



Test locations for #1, #5 and #4 with access entering the 'meadows' from left to right looking upstream

## Conclusions:

Significant glacial disturbance over several glacial periods has resulted in a more difficult channel to define than expected. The shallow bedrock expected was also not located beyond the valley walls indicating deeper mining ground than anticipated.

Additional sampling will be required to define the pay channel(s) through the valley.

