## **PROSPECTOR JOURNAL**

**YMEP 15-003** 

The Brewery Creek Placer Property

**Hand Shafting Program** 

Laura Creek

Budweiser Claims (P516404 – P516432) Brewmaster Claims (P5159278 – P5159279) 2 Mile Prospecting Lease (ID001194)



April 7<sup>th</sup> – August 7<sup>th</sup>2015 Written by Clayton Jones

## *Summary*

Between the dates of April 4<sup>th</sup> to August7<sup>th</sup>, 2015, Clayton Jones completed a placer test program on Laura Creek using hand shafting methods. Laura Creek is a right limit tributary of the Klondike South River and drains the past producing Brewery Creek hard rock gold mine. The Brewery Creek placer property consists of 31 contiguous placer claims and one 2 mile placer prospecting lease. The property is located 55 km due east of Dawson City YT, accessible via a 45 minute drive from Dawson City via paved and gravel roads. The program was designed to test the lower end of Laura Creek for its placer potential and confirm the continuity of placer gold downstream from the 2014 discovery shaft, located 3 km upstream. The 2014 discovery shaft averaged 0.29 grams gold or \$10.07 (assuming \$1350/Oz @ 80 % purity) / firm cubic yard of gravel and the 2015 shaft location contained historic shafts immediately upstream. Refer to figure 2 for the 2015 shaft location in relation to the 2014 shaft. The program was dived into two phases: the spring shaft excavation stage and the summer sluicing stage. The program consisted of a total of 56 man days.

The spring shaft excavation stage consisted of 43 man days and took place between the dates of April 7<sup>th</sup> to May 6<sup>th</sup> 2015. Milo Mielniczuk was hired as a field assistant for 19 days. The shaft was accessed daily via an 8 km snowmobile trail from a Camper Van base camp setup on the Brewery Creek Access Road near the Lee Creek Bridge. Refer to figure 6 showing a map with the base camp and snowmobile trail locations. A day shelter was also setup at the shaft site. The shaft was excavated using electric jack hammers powered by a generator. The shaft excavations were brought to the surface using a windlass and stored in piles on the surface for sluicing in the summer. The vertical shaft dimensions were approx. 29' X 3' X 3'. The entire stratigraphy was frozen with 20.5 ft. of alternating units of organic muck and gravel overlying 7.5ft. of an auriferous disorganized cobble boulder gravel resting on an irregular decomposed bedrock (mineralized limestone surface) at 28 ft. The bottom of the shaft was expanded into a 4.5' X 4' X 5' chamber. A total of 12 ft. of horizontal drift with an approximate dimension of 4.5' high and 3' wide was completed. A total of approximately 16 cubic yards of material was excavated from the shaft.

The summer sluicing phase of the program was completed by Clayton Jones. This phase was completed over a few different time frames due to his personal work schedule conflicts; the sluicing program consisted of a total 11 days that took place over three distinct time frames: May  $8^{th} - 12^{th}$ , May  $24^{th} - 28^{th}$ , and August  $3^{rd} - 7^{th}$ . The broken programs resulted in additional mob and demob of the camp and sluice equipment that in combination with the remote setting and unforeseen problems that arose, the sluice program took longer than anticipated. All sluice equipment was hiked into site via a 2 km walking trail that followed a portion of the snowmobile trail route used during the shafting phase of the program. A pup tent camp was erected on site for the duration of the program. A total of 7.4 cubic yards of gravel was sluiced using a portable 4 ft long High Banker Keen sluice box powered by a gas powered 2" water pump. The specific location of the gravel, volume of gravel processed, and weight of gold recovered was recorded for later grade calculation. A total of 0.365 grams of gold was recovered from 5.4 cubic yards of chamber and drift material. This equates to an average of 0.068 gram gold or \$ 2.36 (assuming \$1350/Oz Au @ 80 Percent Purity) per loose cubic yard of the lower 3.5 ft gravel and 1 ft of bedrock. A 1

cubic yard of test from the upper 5 ft of gravel resting on the pay gravel (18.5 – 23.5 ft) contained anomalous course gold that visually appears to represent less than \$ 2.00 / cubic yard gravel. No weights were obtained.

A total of 2 days was used for demob of all the program equipment and reclamation of the shaft site.

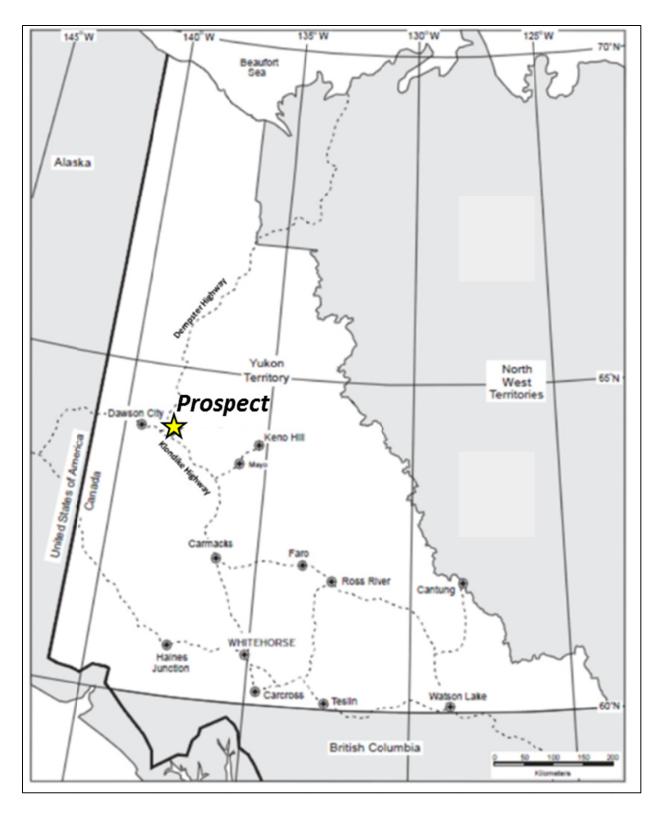


Figure 1. Location map for the Laura Creek Placer Prospect

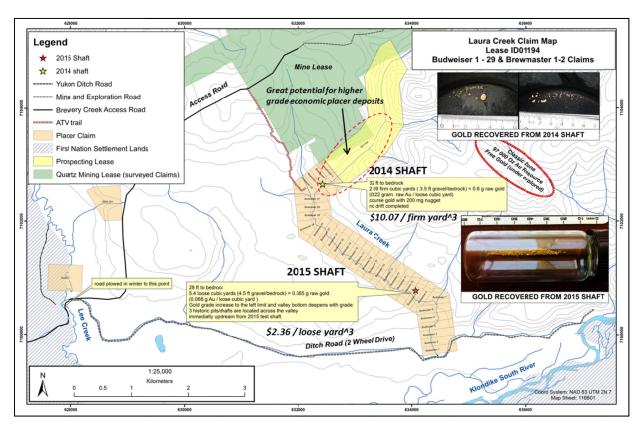


Figure 2. Brewery Creek Placer Property claim map with shaft locations and results.

# April 4<sup>th</sup> – 6<sup>th</sup>

• Drive from Vancouver to Whitehorse with the majority of the program equipment.



Figure 3. The 1983 Dodge Prospector Camper Van Loaded up and Yukon Bound

## April 7<sup>th</sup>

- Do grocery shop and grab last minute (forgotten) supplies from Whitehorse
- Pick Milo up at the Airport and Drive to Dawson City

### April 8<sup>th</sup>

- Mob all camp gear and shafting equipment to Lee Creek Bridge (2 trips with van and trailer from Dawson City)
- Hauled gear stored in wall tent in Dawson City to van using the snowmobile sleigh
- Set up Base Camp at the Lee Creek Bridge on the Brewery Creek Access Road.
- Met Sylvein Montreuil who is the owner of the Cooky Placer Claims immediately upstream from the Lee Creek Bridge. He lives year-round in an 80 year old Cabin originally built and lived in by the Yukon Consolidated Gold Corp's ditch engineer.
- Met two trappers who are using the old ditch road to access their trapping lines and cabins past the mouth of Laura Creek (east).



Figure 4. Camper van base camp (Lee Creek)

Figure 5. Hauling gear from storage to van in Dawson City

### April 9<sup>th</sup>

- Sled was very difficult to start in the cold (spent 3 hours trying to start it)
- Snowmobile to the mouth of Laura Creek via the trappers packed snowmobile trail along the old ditch road.
- Using snowshoes, a reconnaissance mission was done to find the best route from the mouth of Laura Creek to the shaft location.
- We attempted to snowmobile the route but the dry fluffy snow caused the heavy mountain sled (2002 RMK 800,152 track) to sink and get stuck constantly

- Using snowshoes and a chain saw Clayton packed in a trail to the start of the staking line
  (approx. half way to the shaft location). The trail had to be walked twice in order to make it wide
  enough for the sled.
- Snowmobile wouldn't start again even though warm. We now know it is a flooding issue. We had to unscrew spark plugs and drain excess fuel by turning over the engine several times and using a lighter to ignite the vapor fumes that were forced from the cylinders out through the spark plug holes.
- Milo returned to camp and mobbed in a load of gear to the intersection of the new snowmobile trail and ditch road (mouth of Laura Creek). Milo couldn't get the snowmobile running again after having lunch at the base camp. Clayton had to walk 7 km back to camp.
- Refer to figure 6 for the base camp, shaft, and snowmobile route location.

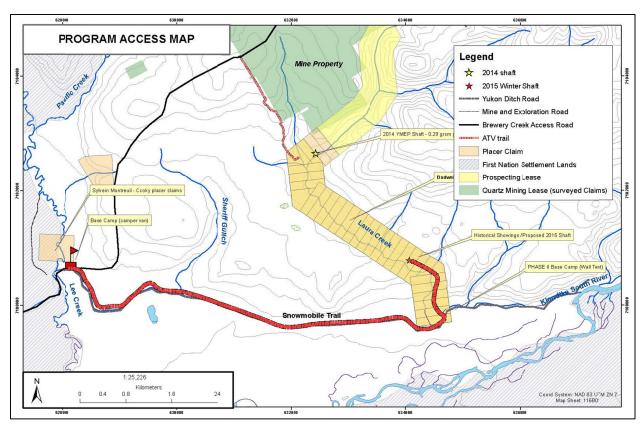


Figure 6. Program access map showing base camp (red building with flag) snowmobile trail route (thick red line) and the 2015 shaft location (red star)



Figure 7. Using snowshoes to pack the 1.25 km portion of the snowmobile trail connecting the shaft location to the Ditch Road.



Figure 8. Burning the excess fuel in the snowmobile cylinders caused by the flooding carburetor.

### April 10th

- Hard to start the sled again. When clearing the cylinders (turning over engine without spark plugs in) gas poured out. Serious flooding issue!
- We called the mechanic (Dustin from Endurance Automotive in Dawson City) using the satellite phone to help diagnose the problem. We found out it is most likely the reed valve which is an expensive fix and parts would be 2 weeks away which is not an option. The most annoying part of this ordeal is that the sled got a \$700 service just before the program, in hopes to combat a problem like this.
- The mechanic however gave us some tips to combat this problem. We now turn the fuel off every time we turn off the machine (stops fuel form leaking into cylinders) and pour un-mixed gas down the cylinders and with full throttle, turn over the engine. Almost every time this works. We no longer have starting issues!
- Late start today
- Milo continues to mob gear from base camp to the start of the newly packed trail intersection with the ditch road.
- Clayton continues to pack in the remainder of the snowmobile trail following the staking line.
- The first trip up the trail with the snowmobile was great until we reached the freshly packed trail (today) which caused the snowmobile to keep bogging down and getting stuck (we learnt the trail needs at least one day to harden up). It took 30 minutes of digging and extreme exhaustion to get it unstuck and turned around (no reverse!).
- Milo hit a bump on the sled and was ejected off the sled and then immediately was hit by the trailing toboggan. No major injuries, just embarrassment.
- We bumped into the trappers again on the trail and had a nice chat. It was strange meeting people out here in what we thought was a relatively remote part of the world.



Figure 9. A smoky flooding snowmobile in the morning



Figure 10. Getting the snowmobile stuck on the freshly packed snowmobile trail



Figure 11. Snowmobile trail following the staking line

## April 11<sup>th</sup>

- All shafting gear is mobbed into site.
- Wall tent is set up at the shaft site and wood burning stove is plumbed in.
- Milo commenced excavating with jack hammer while Clayton started setting up the windlass platform.
- A bundle of firewood was cut and stacked for the program.
- Return to Dawson to get fuel and shower up
- Because of the flooding issue, the snowmobile is using approximately 12 liters on return trip (this is like 4 X normal!!)
- The shaft is located on the Budweiser claim 9 (P516412) at approximate GPS coordinates: UTM Zone 7 633997 m E 7100771 m N



Figure 12. Clayton follows the loaded snowmobile with a chain saw, cutting any stumps or trees that cause problems for the snowmobile.



Figure 13. Shaft base camp (wall tent) with the shaft excavation to the right



Figure 14. Laura Creek looking downstream from the shaft location



Figure 15 Clayton Jones (left) and Milo Mielniczuk (right) breaking ground for the shaft

# April 12<sup>th</sup>

- Clayton continues to build the Windlass Platform while Milo excavates the shaft
- Manual Bucket Pulley system was installed
- Completed 6 ft of vertical shaft



Figure 16. The shaft setup manual windlass (pulley bucket system) with the first gravel stockpiled to right



Figure 17. Warming up in the wall tent shaft base camp

# April 13<sup>th</sup>

- Clayton finished installing the windlass platform and milo excavated to 8.5 ft. deep
- The first gravel was encountered at 6.5 ft (sandy pebble gravel)
- Snowed very hard with 6 inch accumulation throughout the day



Figure 18. The shaft at 6 ft deep and windlass setup half complete.

## April 14<sup>th</sup>

- Extremely cold! Had to learn how to deal/combat this.
- Had to bring the little generator inside the camper van to warm up before starting (too cold to turn over) which in turn was used to power an electric forced air propane heater (propane tank was also previously warmed inside the camper van) to warm the engine of the snowmobile as it would not start.
- Slow start (didn't leave until 10 30 am)
- Milo got frost bite while taking a poop in the woods in the early morning
- Shaft material is now being manually hauled out by buckets
- Installed a rope ladder to help get in and out of the shaft much easier.
- Despite the extreme cold temperatures, ground water rose to the surface in a few localities along the trail creating small ponds of water. We packed in an alternative route just in case the pooling water got deeper in the near future.
- We encountered 2nd gravel today at a depth of approx. 10ft (oxidized pebble cobble gravel).



Figure 19. Excavation to 10 ft. depth



Figure 20. Using an electric generator to run a forced air propane heater to warm up the snowmobile engine in order to start in extreme cold



Figure 21. The same rope ladder created for the 2014 shaft was used again for the 2015 shaft



Figure 22. The bizarre pooling of water on the surface in extreme cold temperatures (note the snowmobile trail cuts directly across the pool)

# April 15<sup>th</sup>

- Extreme cold again!
- Slow start, had to heat up engine again in the morning. Rolled out at 11:30 am
- New oxidized gravel is very compact with little matrix (clast supported). This gravel unit was slower to break through with the jack hammer. Excavated only 1.5 ft to the overall depth of 13 ft
- Went into town to get a hot shower, supplies and food. We slept the night in the camper van plugged into the Bonanza hotel.



Figure 23. A bone chilling morning sun rise on Laura Creek



Figure 24. Heating up pizza pockets for lunch and melting snow for drinking water



Figure 25. The Dempster Highway, Dawson City bound (it is so cold the defrost won't melt the ice off the windshield)

## April 16<sup>th</sup>

- Did grocery shop and got supplies in the morning in Dawson City (Napa, NIS, Home Hardware, Trading Post, General Store, and AFD).
- Return to shafting site by noon
- Excavated 3 ft to reach 16 ft. total. A second organic layer is encountered.
- A moose with babies was seen on the commute to and from the shafting site.



Figure 26. Mama moose hanging out in the Laura Creek Valley

## April 17<sup>th</sup>

- Continued to excavate the organic unit.
- A grey colored organic rich gravel was encountered at approximately 20 ft (end of day).

## April 18<sup>th</sup>

- Milo panned several pans of the new gravel encountered in the shaft and discovered a small
  color. Getting water for panning was very difficult as the creek was entirely frozen. The
  combination of melting snow in a pot on the stove and heating up rocks on the stove and then
  placing them in a tote with snow was slow going but allowed for enough water to process a few
  pans of gravel.
- Encountered larger cobbles and boulders, at depth, that required chiseling apart. Only excavated an additional 2 ft to a total of 22 ft.
- Ventilation was installed (drier venting hooked up to 120 volt bathroom fan)
- Northern lights were truly amazing. This was the first time Clayton or Milo saw such intense northern lights previously only seen in photographs and videos.



Figure 27. The shaft setup with gravel stock piled outward from the shaft.



Figure 28. Beautiful dancing northern lights over the Camper Van

# April 19<sup>th</sup>

- Excavated to 25 ft. depth. Slow going due to larger cobbles and boulder being encountered.
- Milo gets bored waiting for gravel to be hoisted to the surface so he constructed a bow and arrow and attempted to catch a grouse. He failed.

## April 20<sup>th</sup>

- The brand new 100 lb (36 ft lb) demolition Jack hammer dies (electrical problem).
- Milo takes apart the electrical components of the jack hammer and trouble shoots the problem while Clayton continues to excavate the shaft material using the smaller jack hammer (Hilti TE 905) previously only used for shaping the walls.
- We excavated to 28 ft. to a more clay rich oxidized angular gravel unit. It appears to be decomposed bedrock. This is great news as our main jack hammer just died and the small jack hammer is slow going.
- Went into town for shower and supplies. Slept in wall tent in town at the Druid Exploration Lot.



Figure 29. The brand new 100 lb (36 ft - lb) demolition hammer is out of service after less than 10 days of use.

## April 21st

- The generator continually kept dying on us. We discovered it was because it was running low on oil and automatically shutting off. We did not have any oil on site so we tilted the generator so it would think it had enough oil (not the best idea but it saved us time).
- Reached highly decomposed limestone bedrock with quartz veining and mineralized felsic volcanic dykes at 29 ft.
- Approx. 1 inch accumulation of snow throughout the day.
- Milo heated up water on the stove and used heated rocks to melt snow in a tub for test panning
  the bedrock gravel contact. The pans showed only 1 -2 good size colors every other pan so a
  little bit discouraging but still better than nothing. We now know the creek is auriferous though
  the length of valley however it does not appear to be economic at this exact location.
- A shaft log was created now that bedrock was reached.



Figure 30. Looking up the shaft from the bottom at 29 ft deep



Figure 31. Upper photo shows melting water on the stove and thawing gravel in the pan. The lower photo shows a relatively course grain of gold recovered from a pan of gravel resting on bedrock (center of photo).

### **Shaft Log**

0-6 ft

#### Organic peat mud mixture with ice wedges.

· Woody debris at base of unit with preserved logs.

6 - 8.5 ft

### Sandy pebble gravel (clast supported) with sub angular clasts

- Interpreted as present day Laura Creek channel gravels deposited as it meandered across the valley surface.
- Upper and lower contacts are undulating.

8.5 – 9.5 ft.

#### **Organic Muck**

• Woody debris and preserved leaves

9.5 - 13.5 ft.

### Pebble Cobble gravel (patchy oxidation with local zones more oxidized then others)

- Pebble cobble gravel angular to sub rounded clasts (clast supported)
- · Very compact and difficult to break up compared to any other gravel units encountered in the shaft stratigraphy

13.5 - 18.5 ft.

#### **Organic Muck**

- Birch bark, leaves, sticks and large 30 cm diameter tree trunks
- No laminations
- Mostly silt with increased woody matter at base

 $18.5 - 20.5 \, ft.$ 

#### Poorly stratified sandy pebble cobble gravel unit (disorganized)

20.5 - 27 ft.

#### Disorganized cobble boulder gravel

- Dark brown silty grit matrix with rounded flattened cobbles and boulders.
- Local manganese staining in gravels. The bedrock contact grades into decomposed bedrock that is bright orange.

27 – 29 ft.

### Limestone with quartz veining and felsic volcanic dykes (Highly fractured, decomposed, and oxidized).

- Undulating bright orange oxidized bedrock surface.
- Mineralized (pyrite) felsic volcanic dykes.

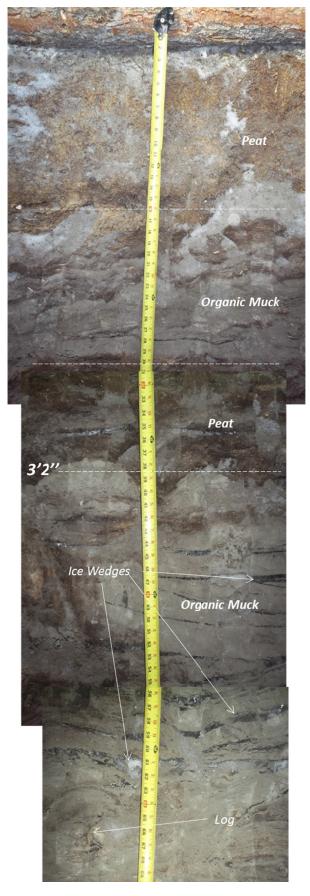


Figure 32. Shaft Stratigraphy (0' – 6'9")



Figure 33. Shaft Stratigraphy (6'9" – 11'7")



**Figure 34. Shaft Stratigraphy (11'7" – 17'2")** Page 31



Figure 35. Shaft Stratigraphy (17'2" – 22'6")



Figure 36. Shaft Stratigraphy (22'6" – 26'11")

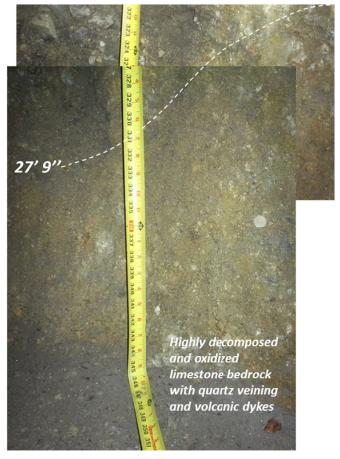


Figure 37. Shaft Stratigraphy (26'11" - 28'9")

## April 22<sup>nd</sup>

- Electric Winch (powered by battery that is constantly charging by gas powered generator) is installed on the windlass platform and a large barrel is now used to haul up bigger quantities of material. We are now hauling 6 buckets to the top instead of a single bucket. This greatly reduced the time the person jack hammering had to wait for the buckets to be hauled to the surface, dumped, and returned down. A small drift was cut into the wall so the man down the hole could hide as the heavy bucket is winched to surface, just in case it somehow broke and the bucket came tumbling down.
- The winch was specially purchased for this program as it has a unique very fast line speed of 34 ft. per minute. Most conventional winches move 3 X slower.
- We created a chamber at the bottom of the shaft by expanding the base of the shaft.
- Chatted with Sylvain who informed us that he staked a placer lease on Laura Creek around the time Noranda Exploration discovered the Brewery Creek hard rock Deposit. He told us that Noranda forced him to abandon the claim and called him out for nuisance staking. No work was done by Sylvain. This sounded like a very similar situation that the Brewery Creek Placer property is facing now with the present mine owners (Golden Predator Mining Corp); however only a quarter century later.



Figure 38. Unique bedrock wedge observed at the base of the shaft



Figure 39. Milo is happy to pull up the barrel of dirt using the electric winch; until today he was manually hauling it up using a rope and pulley.

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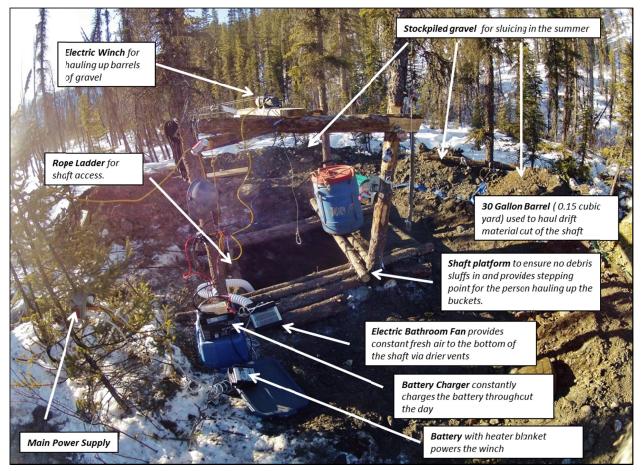


Figure 40. The modernized shaft setup

#### April 23<sup>rd</sup>

• Chamber is continued and finished with approximate dimensions of 4.5 X 5 X 5 ft. height (was 3 X 3 previously).

## April 24<sup>th</sup>

- Wolfs are howling at the bottom of Laura Creek in the morning and tracks are seen everywhere at our shaft site.
- The drift is started (left limit). The process is slow and very tiresome as the heavy jack hammer is difficult to hold horizontal.
- A 3 ft wide by 4 ft high by 1.5 ft long with tapered walls (semi-circle) is completed.

## April 25<sup>th</sup>

- Drift is continued to the left limit for half the day (3 ft. horizontal completed) and a new second drift is commenced on the right limit.
- Saw a lynx on the way home. Nearly jumped onto the sled.

## April 26<sup>th</sup>

- The drifts were continued (5 ft horizontal total on the left limit and 2.5 ft horizontal total on the right limit)
- Milo is finding a color in every pan of the bedrock gravel mix from the drifts.
- We were forced to demob due to the deteriorating (melting) snowmobile trail.
- We demobed the base camp tent and non-shafting gear (left jack hammer, generator, and windlass setup, etc).
- Three snowmobile trips were required to remove all gear not being used for the sluicing portion of the program.
- The demob was difficult as the snowmobile kept sinking off the trail into the mushy melted snow.
- The shaft was insulated with Styrofoam and an insulated tarp. The perimeter was fenced off so no wildlife or humans would fall into the shaft.
- Head into town for the celebration of successfully completing the shaft and drifts.
- Flight is booked for Milo to return home.



Figure 41. Looking towards the right limit drift.



Figure 42. Looking towards the left limit drift



Figure 43 Clayton (left) and Milo (right) have a celebratory beer 29 ft underground



Figure 44. The chamber and right limit drift.



Figure 45. Demobing gear out on a melting trail (note no snow on the south facing hillside in the background of the photo)



Figure 46. A bare patch in the fast melting snowmobile trail

#### April 27<sup>th</sup>

• Drive to Whitehorse and drop Milo off at airport.

#### April 28th to 29th

Return to Dawson and have a day off (Laundry).

## April 30<sup>th</sup>

- Clayton returns on his own to continue the left limit drift
- Based out of a camper van at Lee Creek on the Brewery Creek Mine access road and commuting 6 km by ATV via the snow covered ditch road and hiking 2 km from where Laura Creek intersects the ditch road.
- Gravels are jack hammered from the walls until the 0.15 cubic yard (30 gallon) barrel is full and then he climbs to the top and uses the electric winch to bring it to the surface. The buckets were dumped beside the shaft and shoveled away from the shaft into piles.
- 7 full barrels were completed in the day (approx. 1 loose cubic yard of material).



Figure 47. Left photo shows the ATV used to gain access to the shaft. Right photo shows Laura Creek breaking up and causing access issues.

#### May 1st

- Expanded the upper section of gravel unit (18.5 23 ft.)
- A make shift scaffolding was set up 5 ft. from the bottom and used to stand on while expanding the walls. This process was slower and only 4 barrels were hauled to the surface (0.6 cubic yard)

## May 2<sup>nd</sup>

- 5 buckets hoisted from the left limit drift (0.75 cubic yard)
- Pull start broke on generator but was fixed.
- Water was melted with stove and used for test pans. Similar results as before (1 2 colors every other pan).

## May 3<sup>rd</sup>

- 5 buckets hoisted from left limit drift (0.75 cubic yard).
- Decided to jack hammer a hole in the ice over top of the creek in order to get access to water for panning. This proved much harder than I anticipated due to the thickness of the ice sheet.



Figure 48. Digging a hole in the frozen creek to find fresh water for panning

#### May 4<sup>th</sup>

- Excavate a unique down creek depression in the bedrock.
- 5.5 buckets hoisted to the top (0.80 cubic yard).

#### May 5<sup>th</sup>

• Excavate 6 barrels from left limit (1 cubic yard)

#### May 6<sup>th</sup>

- Mapped in dimension of drift and shaft as best as possible. Due to irregular dimensions of the
  drifts the volume of gravel will need to be calculated using loose volumes determined by
  keeping track of the number of buckets sluiced instead of an in-situ volume calculation (firm
  volume).
- Video tapped the shafting process. See video link. https://www.youtube.com/watch?v=pn\_CqoyCChc
- 2 nice size colors were found in a single pan at the end of the left limit drift. The drift is entering a more oxidized unit of gravel as the bedrock continues to deepen towards the center valley bottom.
- 6 buckets excavated from the left limit to complete a 9 ft horizontal drift.

#### **Shaft/Drift Dimensions**

Left Limit Drift - 9ft long - 3ft wide - 4.5ft high tapering to 2 ft at the very end (semi-circle shape)

**Right Limit Drift** – 3ft long, 3ft wide, 4.5ft high tapering to 1 ft at the end (bedrock ledge dipping to the left limit and downstream).

Chamber 4.5 X 4 X 5 high

Upper Disorganized Gravel shaft portion (18.5 - 23 ft ) resting on top of drift gravels 3.5 X3.5 X3.5

- \*\*Bedrock is 2 ft higher on the upstream end of shaft (over 4.5 ft. distance)
- \*\*Downstream pocket 2 ft. high, 1.5 ft. wide and 4 ft. long



Figure 49. The 9 ft. left limit drift.



Figure 4. Stockpile of gravel for sluicing.



Figure 51. Stockpiled gravel for sluicing

## May 8<sup>th</sup>

- Conduct a reconnaissance mission to see if gravels have thawed enough and sluicing can commence.
- The property was accessed by ATV along the ditch road and a walking trail from the intersection of Laura Creek and Ditch road.
- Gravels appeared to be thawed.
- Sluice box and fuel was hiked in 2 km from Laura Creek via the winter snowmobile trail route (snow melted). This took 3 return trips for a total of 12 km.
- Access was getting difficult as Laura Creek and the ditch water levels began to rise with the spring melt. Trees were cut down and placed over the creek as walking bridges.
- The sluice box and pump was set up beside the left limit drift gravel pile.
- A Keen A52 high banker sluice box was used for processing the gravel. The sluice box is 10" wide and 4.5 ft. long and is equipped with patented keen rifles and blue 3M miner's moss and green miner's carpet. The sluice box was equipped with a Keen High banker hopper. The hopper base is 18"X 18" and has spray bars incorporated into the design. There is 0.5" metal classifier at the base of the hopper with an additional custom made ¼ inch mesh mat overtop of classifier. This was the same sluice box used for processing the gravel in the 2014 shaft, located just 3 km upstream.
- A few buckets were run through the sluice to ensure good working order. A second sluice box was set up below the first sluice box and acted as a quality control measure.
- Commute from Dawson City today.



Figure 52. Sketchy log crossing over Laura Creek



Figure 53. Another sketchy log crossing over the ditch

## May 9<sup>th</sup>

- Sluiced 64 buckets (11.5 litres/bucket) of drift material. This equates to approximately 1 loose cubic yard including the 2 buckets ran through the sluice the day earlier.
- A significant amount of relatively course placer gold was recovered. The bottom sluice box contained very little gold so recovery was assumed to be good. During transportation (2 km hike, 6 km ATV ride) the lid to the vile containing the gold concentrate opened and the gold was lost amongst my gear in the backpack. I learnt to tape the lids!
- It is postulated the content of gold was approximately 0.1 grams.
- Stayed the night on site in pup tent.



Figure 54. Sluice box water pump (note Laura Creek is flowing on top of thick ice sheet and overflowing into the forest)



Figure 55. Sluice box setup.



Figure 56. Counting device used to keep track of the number of buckets sluiced



Figure 57. Sluicing base camp

## May 11<sup>th</sup> & 12<sup>th</sup>

- Sluiced two cubic yards of left limit drift gravel (see figure 58)
- Getting similar results to the first cubic yard sluiced (see figure 59 60 for gold recovered from individual cubic yards)
- Hike out with camp and return to Dawson



Figure 58. Gold recovered from 2 loose cubic yards sluiced

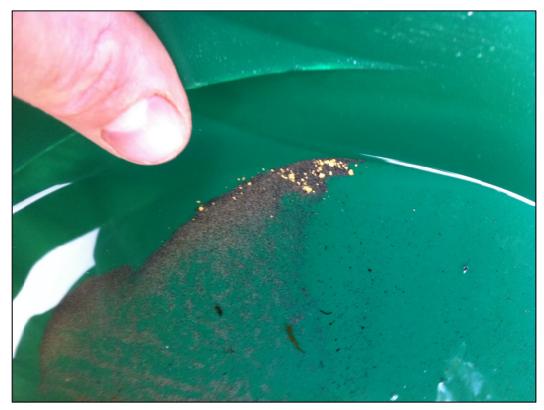


Figure 59. One loose cubic yard of left limit drift (middle of drift)



Figure 60. One loose cubic yard of left limit drift (middle of drift)



Figure 61. Shows boulders and cobbles (left) recovered from sluicing 3 cubic yards of drift



Figure 62. Shows the finer sand and silt (right) recovered from 3 cubic yards of sluiced drift

#### May 14<sup>th</sup>

- Jeff Bond, Surficial Geologist with the Yukon Geological Survey came out to the shaft site for a
  property visit and helped describe the shaft stratigraphy and provide a depositional setting for
  the lower auriferous gravel.
- Unfortunately the shaft filled with water, despite thoroughly insulating the top with styrofoam and an insulated tarp.
- The benches were prospected for placer potential instead.

#### May 24<sup>th</sup> – 28<sup>th</sup>

- Sluiced 3.4 cubic yards (of drift)
  - 1.4 cubic yards sluiced of the far end of left drift (see figure 63)
  - o 1 cubic yard of chamber
  - 1 cubic yard of right limit drift (see figure 65)
  - The sluice box setup must be periodically moved around the stock piled gravels in order to maximize efficiency. Each setup takes approximately 1 hour and is done once a day after a cubic yard is sluiced.
- The far end of the left limit visually contained more gold than any other portion of the shafts and drifts. This also correlates with dropping bedrock to the left limit (see figure 63).
- A pup tent camp was set up on site beside the shaft.
- I awoke to a bear chewing on the gas tanks and fire hosing for the pump in the morning. They scared easy and ran away luckily. Another jerry can wrecked.
- I had to hike the sluice box out as I was not returning for a couple months due to my work schedule. The pump was left onsite. The river flooded significantly since I hiked in on the 24<sup>th</sup> of May and my ladder bridge was almost swept away. The bank of the creek was washed out and the ladder fell into the creek but luckily I tied the one end to a tree. I was forced to bush wack through the thick vegetation along the right limit of Laura Creek and back to the truck instead because I was unable to cross the creek via the ditch road.
- I got a crew of guys from Druid Exploration to help fish out the \$700 borrowed ladder out of the raging creek.



Figure 63. Gold recovered from a 1.4 loose cubic yards of the far left limit end of the drift, this appeared to be the richest section of the drift.

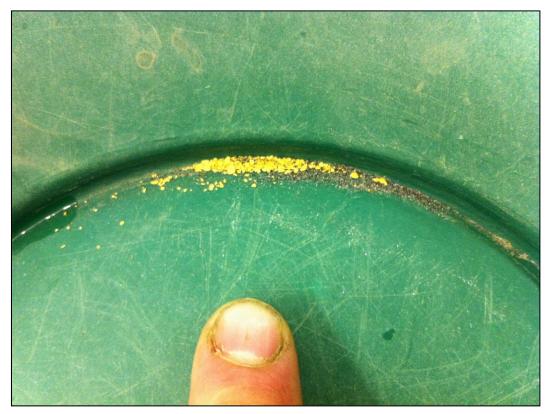


Figure 64. Gold recovered from 3.4 loose cubic yards sluiced of drift.



Figure 65. Gold recovered from 1 loose cubic yard of the right limit drift (Note not as rich the left limit, figure 59 - 60).



Figure 66. Gold recovered from 5.4 loose cubic yards of drift and chamber. The total raw gold weight is  $0.365~\rm grams$ .



Figure 67. Upper photo of the ladder before Laura Creek flooded and incised the bank wall causing a massive hunk of creek bank to collapse into the creek. Lower photo shows the ladder almost fully submerged when flow increased and consumed the ladder.

## August $4^{th} - 7^{th}$

- 1 day demob, 1 day reclamation, 2 days sluicing (upper gravel and right limit).
  - o 1 cubic yard sluiced of upper disorganized gravel (18.5 23 ft) resting on the drift gravel
    - Anomalous gold was recovered with a single course gold grain (see figure 68 for photo of gold)
  - o 0.3 cubic yards sluiced bedrock dip on the downstream side of shaft
    - This visually appears much richer than the average drift material and may be due to the fact it represents solely the 2 ft of gravel resting on bedrock and the 1 ft of bedrock (see figure 69 for photo)
    - Several striated pebbles and cobbles were noted in this gravel sluiced (see figure 70).
- All program gear was hiked out to the Ditch road following the winter snowmobile route to the ditch road. From the ditch road the ATV was used to transport the gear to the truck located where Laura Creek intersects the Ditch rd.
- This included 6, 2 km return trips for a total of 12 km. The major items removed were the 1 full 20 liter gas can, sluice boxes, pumps and hosing, miscellaneous gear.
- Reclamation included spreading out all the gravel piles to a smooth surface, burning or removing all garbage on site, dis assemble the windlass setup, and permanently cap the shaft with 2X6 planks.



Figure 68. Gold recovered from 1 loose cubic yard of the upper portion of the disorganized gravel resting on the drift gravel (18.5 - 23 ft.) Note the course grain to right.



Figure 69. Gold recovered from just 0.3 loose cubic yard of a downstream bedrock dip (represent 2 ft gravel and 1 ft bedrock)



Figure 70. One of several cobbles that contained striated surfaces. Note these were only found in a bedrock dip near the bedrock contact

# THE END