

CALDER CREEK PLACER PROJECT

SHAFTING AND TRENCHING

Property Description – Placer Claims	
PM 1-12	P508672 – P508683
PM 13	P515146
DG	P516177
1 MILE PLACER LEASE	IDO1196

Report By:
Gary Lee
Whitehorse, Yukon
April, 2015

Location: 63° 48' N, 139° 10' W
NTS: 115 O 14a
Mining District: Dawson, Yukon
Commodity: Placer Gold

GPS-NAD 83 Zone 7

Shaft Locations: CC-2 590724E, 7075487N
CC-3 590460E, 7075730N
CC-4 590298E, 7075662N
CC-5 590225E, 7075790N
Proposed CC-6 590660E, 7077564N

SUMMARY

Calder Creek is an under explored placer creek in the Klondike gold fields located 40 km south of Dawson City, Yukon. To-date there has been no commercial production from the creek,

Two shafts by Panarc Resources Ltd, yielded insignificant gold returns. Three separate hand trenching and shafting locations by Gary Lee also yielded insignificant results. Results are inconclusive since one site bottomed out in transported weathered bedrock and the other two sites have yet to reach bedrock. Two shafts were flooded out by flowing underground water (CC-3 and CC-4).

Gary Lee plans to return this summer in order to excavate shaft CC-5. This shaft is in solid permafrost from surface down to bottom (20 Ft. deep) and thus far is not prone to flooding. During summer the minor amount of thawing occurs in the walls and this water is easily absorbed by the muck pile. When CC-5 is sealed off for the night, the wet walls start to freeze back leaving an insignificant amount of water on the bottom.

It is recommended that shafts CC-3 and CC-4 only be excavated in winter, thus avoiding flooding.

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1.0 INTRODUCTION

This report describes exploration work for placer gold on Calder Creek (See Figures 1, 2, 3a and 4 for location)

The program began in April of 2014 with timbering of the top of shaft CC-2. This shaft had reached a depth of 23 feet the year before. However, after studying the muck pile on August 11, with Jeff Bond (YTG Geologist), it was determined that shaft CC-2 had bottomed out in weathered transported bedrock. With no sign of any gravel in the 45 foot deep auger hole 60 feet upstream (CC13-01), it was decided that this location was of low priority.

Shaft CC-3 was collared on June 15, 2014 by Gary Lee and Dimitri Spassov, both from Whitehorse. A TE1500 Hilti electric jack hammer was used to break up the permafrost. It was hauled out by hand with buckets. At the 12 foot mark a tripod and pulley was installed. Buckets were then hauled out by winch. Due to underground water flow the walls began thawing and caving. Consequently, the shaft was timbered with plywood to the 12 foot level.

Mike Power arrived from Whitehorse on June 28. A drill blast operation deepened the shaft to the 23 foot level. Excessive rainfall caused an accelerated deterioration of the walls. At this point the shaft was timbered to the 14 ft. 9 in. level. It was too narrow to timber any further, so it was temporarily abandoned. The plan is to deepen CC-3 in winter when the ground is completely frozen. Figures 2 and 5 show the test site locations. Photographs are in Appendix 3.

CC-4 was collared to test the bottom of an old existing cat trench. Bedrock was observed on the lower part of this trench. A total depth of 27 feet (8 ft. high trench plus new 19 ft. deep trench and shaft) was tested before flooding out. Here again it was decided to postpone this site to winter when all the ground is frozen.

CC-5 was collared on August 9, 2014. This shaft was sunk to a 20 foot depth with no water problems. It is on the northeast exposure in stunted spruce and can be excavated in summer, since the area is permanently frozen to surface immediately under the moss.

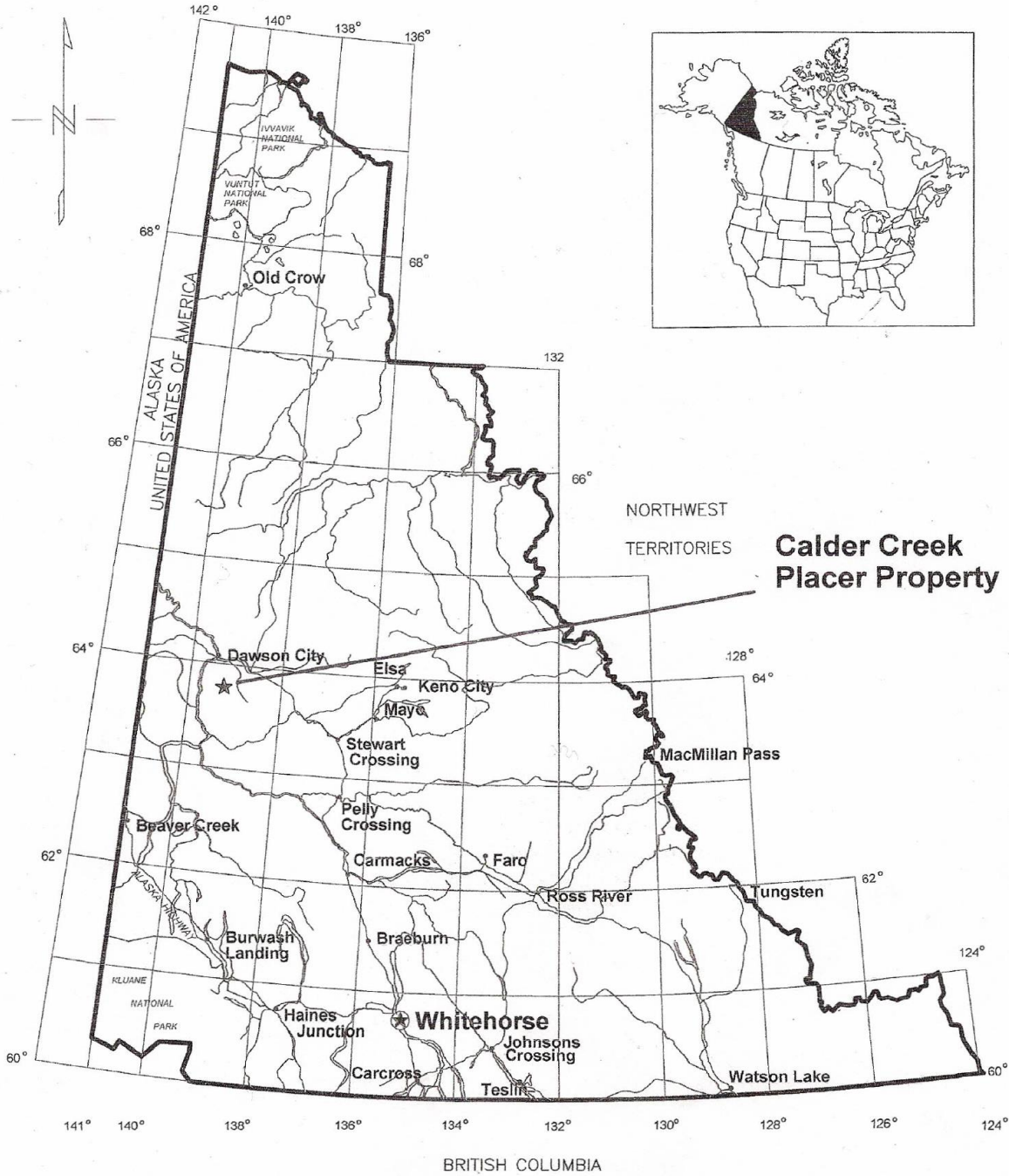
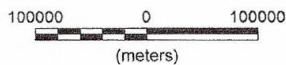
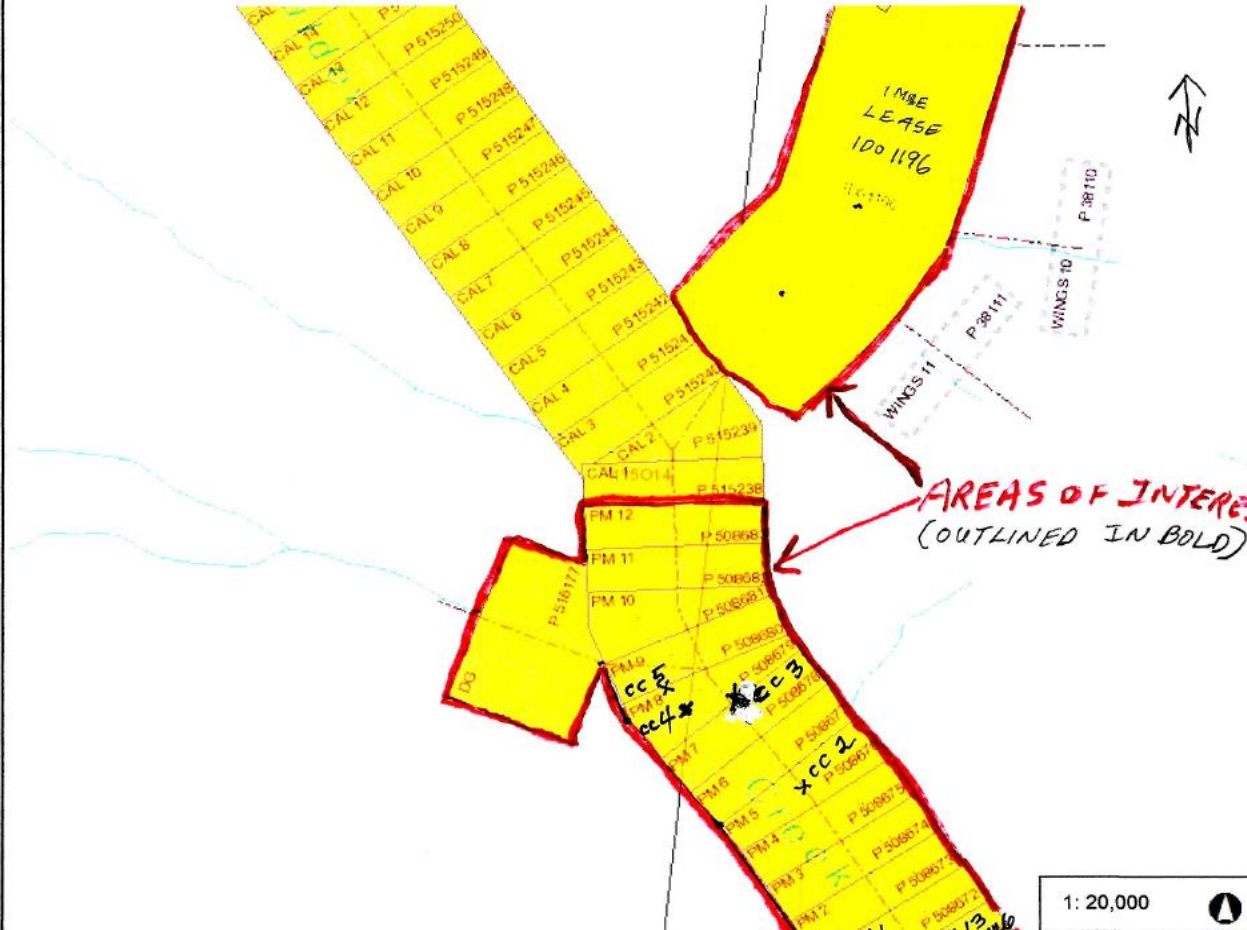


FIGURE 1

Page 2



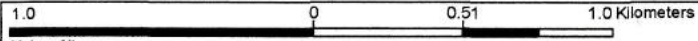
CALDER CREEK PLACER PROPERTY	
Figure 1. Property Location Map	
NTS: 115014	Mining District: Dawson
Datum: NAD83	Projection: UTM Zone 7N
	Date: 2015



- Legend**
- New Placer Claims
 - Placer Claims (50K)
 - Active and Pending
 - Expired
 - Prospecting Leases**
 - Active and Pending
 - Expired
 - Adjoin Placer
 - Placer Mining Land Use Permi**
 - Class 3
 - Class 4
 - Placer Baselines (unsurveyed)
 - Placer Baselines (surveyed)
 - Coal Exploration License**
 - Active and Pending
 - Expired
 - Coal Mining Lease**
 - Active and Pending
 - Expired
 - Surveyed Mineral Claims
 - Current Class 1 Notifications
 - Areas defined by OIC
 - First Nation Surveyed Lands - Ca
 - First Nation Unsurveyed Lands
 - Areas withdrawn from staking
 - Settlement Lands (Surveyed)**
 - A: Surface and Subsurface Rights
 - B: Surface Rights

AREAS OF INTEREST
(OUTLINED IN BOLD)

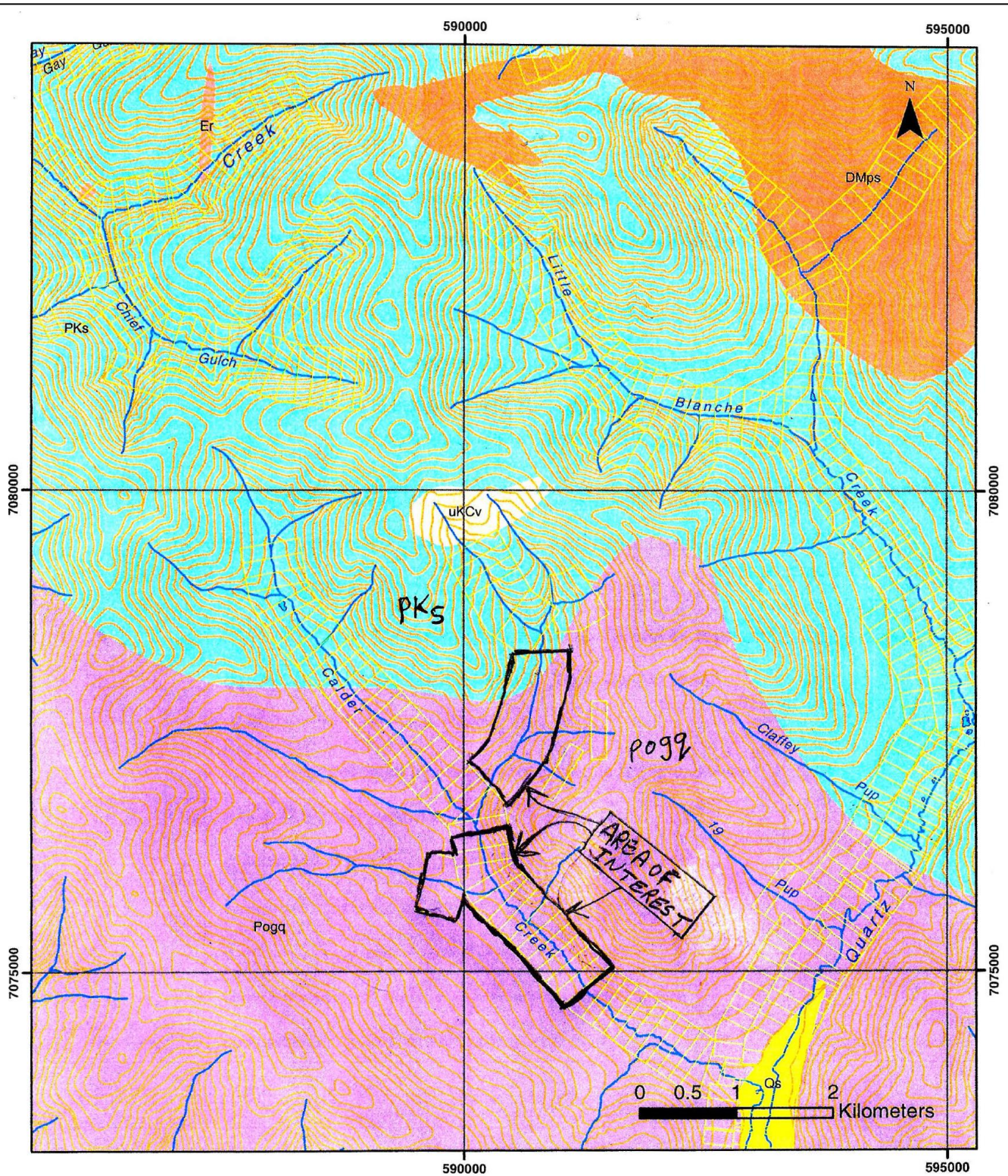
1: 20,000



Yukon Albers
Produced from: Yukon Mining Viewer

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise available. THIS MAP IS NOT TO BE USED FOR NAVIGATION.
Date Printed: 10 Nov-2014

Notes
CALDER CREEK
CLAIM MAP
NTS 115 014a
FIGURE 2
PAGE 3



GORDEY, RYAN 2002 MAP OPEN FILE # 4970

FIGURE 3a
Page 4

Bedrock Geology of Calder Creek area
UTM Zone 7, Nad 83
1:50,000 scale
NTS 115014

Bedrock Geology – Calder Creek area







-  Qs Quaternary: fluvial silt, sand and gravel
-  Er Eocene porphyry: Smokey quartz and K-feldspar phyric rhyolite
to rhyodacite stocks and dykes, and possible rare flows
-  Pogq Permian Orthogneiss: orthogneiss derived from quartz monzonite; refers to highly strained, mafic poor Sulphur Creek orthogneiss
-  PKs Permian Klondike Schist: muscovite-chlorite-quartz-feldspar schist, chlorite schist, chlorite phyllonite; local cleaved lapilli tuff with preserved primary texture
-  uKcV Upper Cretaceous Carmacks Group: rhyodacite and dacite, commonly biotite and hornblende phyric, dominated by lesser andesite and basalt; minor rhyolite
-  DMps Devonian-Mississippian quartz-mica schist: undivided metasedimentary rocks dominated by metapsammite, semipelite and metapelite; commonly quartz-garnet-biotite-muscovite schist possibly derived from siliceous siltstone; commonly finely interlayered with garnet metapelite; commonly contains members of micaceous quartzite; rare conglomerate; grades locally to paragneiss

FIGURE 3b
Page 5

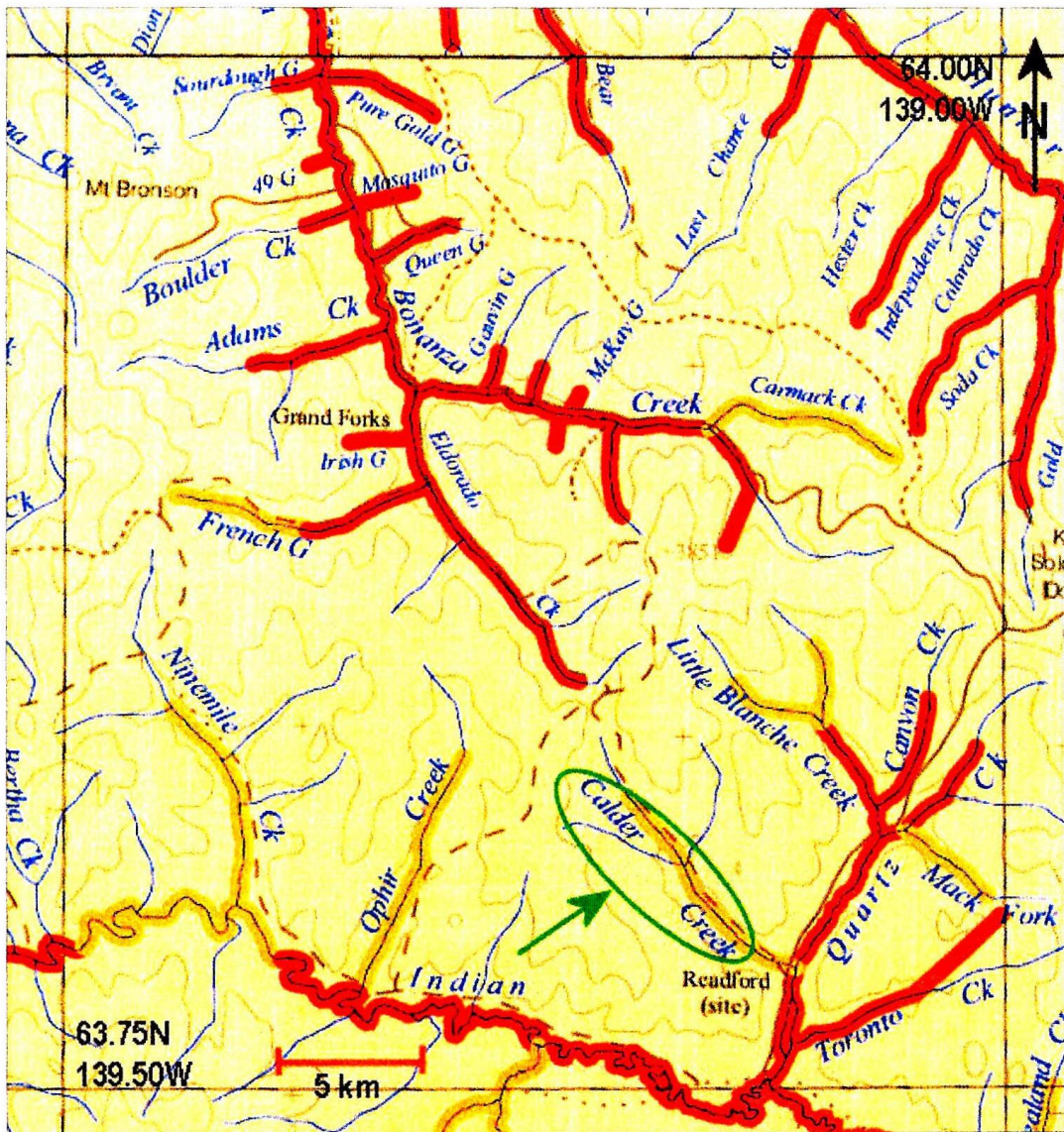
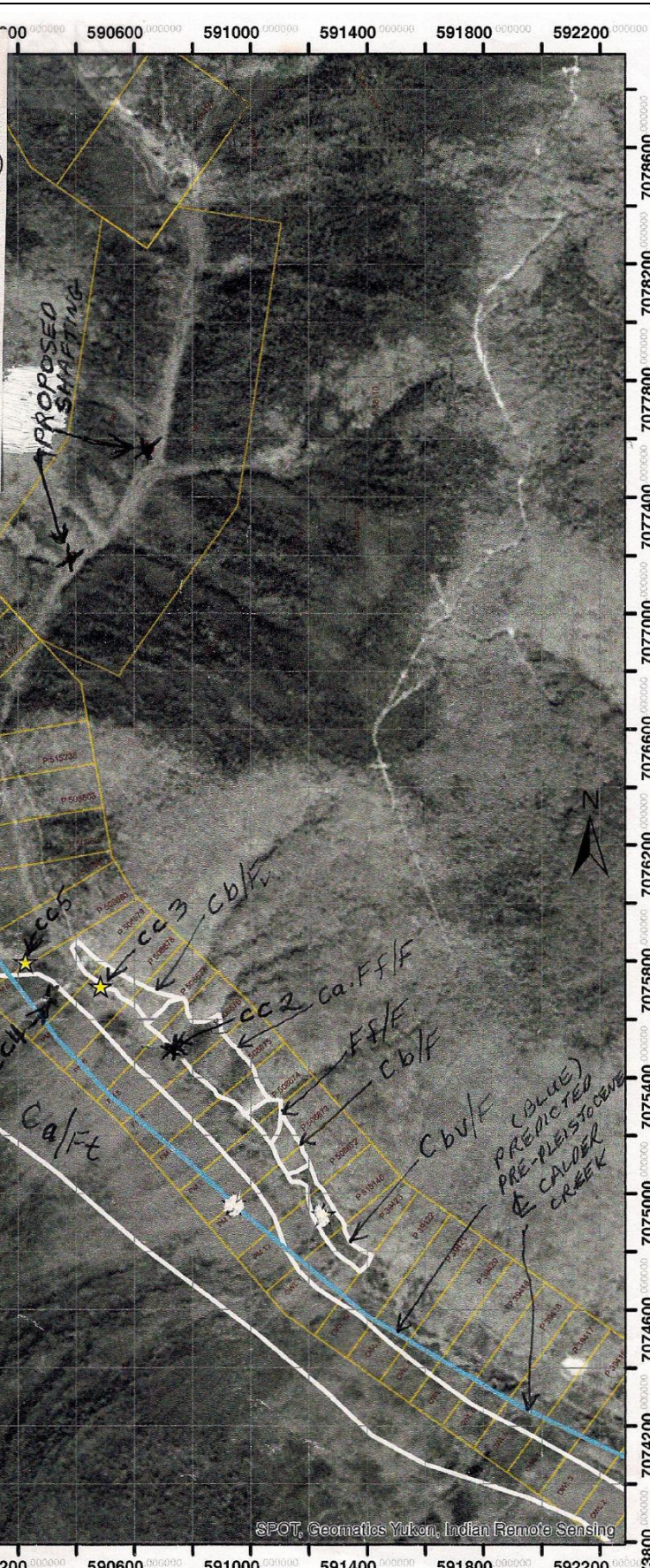


Figure 4. Extract from Lowey *et. al.* (2001) showing placer producing creeks (red) and creeks with known placer occurrences (orange).

FIGURE 4
PAGE 6

Surficial Geology of Calder Creek

- Ca\Ft: Colluvial apron of loess (muck) over a pre-Pleistocene fluvial terrace
- Ca\Ft: Colluvial apron veneer of loess (muck) over a pre-Pleistocene fluvial terrace (thinner overburden than Ca)
- Cb\Ft: Colluvial blanket of loess and weathered bedrock over a fluvial gravel
- Ca.Ff\F: Colluvial apron of loess and fluvial fan debris over a fluvial gravel
- Ff\F: Fluvial fan debris over a fluvial gravel
- Cb\F: Colluvial blanket/veneer of loess and weathered bedrock (thinner than Cb) over a fluvial gravel



CALDER CREEK
PLACER PROJECT

GOOGLE EARTH MAP
BY JEFF BOND (VTG
GEOLOGIST)
NTS 115014
NOV. 2014 FIGURE 5
SCALE 1:20,000 Page 7



2.0 LOCATION AND ACCESS

The Calder Creek Property is located on Calder Creek, a tributary of Quartz Creek in the southern portion of the Klondike Placer District in the Dawson Mining District, Yukon. The property is centered at approximately 63° 48' N 39° 10' W (Figure 1). The property is 62 km by road from Dawson City with a 4x4 truck. The road route to the property is as follows:

From	Distance (km)	Remarks
Dawson – Hunker Road	14.7	Highway
Hunker Road to Summit	25.6	Maintained gravel road
Hunker Summit to Quartz Creek Road turnoff	7.5	Maintained gravel road
Quartz Creek Road turnoff to Calder Creek road	11.4	Miner's road
Calder Creek Road junction to southern property boundary	3.1	Miner's road

There are open areas on the property which would serve as landing zones for light helicopters. The nearest helicopter charter bases are in Dawson City.

3.0 PROPERTY DESCRIPTION

The Calder Creek Property consists of 14 un-surveyed Placer Claims plus a 1 mile lease staked under the Yukon Placer Mining Act and recorded in the Dawson Mining District (Figure 2). Claim information is summarized below:

Table 1: Claim Information

Claim Name	Grant Number	Expiry Date
PM 1-12	P508672 – P508683	March 6, 2026
PM 13	P515146	February 19, 2022
DG	P516177	July 3, 2020
“1 Mile Lease”	IDO1196	July 3, 2015

Gary Lee can earn a 50% interest from Panarc Resources Ltd. in the property by conducting work over the next three years. The claims can be maintained in good standing indefinitely by performing \$200.00 per claim per year.

4.0 EXPLORATION HISTORY

The Calder Creek Property is located on Calder Creek, a tributary of Quartz Creek in the Klondike District. The creek has been explored in a cursory and intermittent manner since the discovery of gold in the Klondike, most recently in the 1980's (Laberge, 2002). There is no recorded production in the portion of the creek covered by the claims. G. Lee stated that the last extensive exploration in the area occurred in the 1980's. J Simcox drilled on the upper reaches of Calder Creek above the currently staked claims but reported no significant results. On the lower reaches of Calder Creek, there is a large cleared area and a trench in the upper (red) gravels on the right limit of Calder Creek on the Calder Creek Placer Property. This trench was sited to test an apparent bench gravel southwest of the main channel of Calder Creek. In addition, one old shaft near the main channel of the creek at the upper (upstream) end of the Calder Creek Placer Property was located during the 2012 exploration program. It likely dates from the 1970's based on the artifacts found there. It had no significant muck pile and likely was quite shallow. Five shafts were collared between 2012 and 2014 by Panarc and Gary Lee. Three of these five are on-going.

GPS-NAD 83 Zone 7

Shaft Locations: CC-2 590724E, 7075487N
 CC-3 590460E, 7075730N
 CC-4 590298E, 7075662N
 CC-5 590225E, 7075790N
Proposed CC-6 590660E, 7077564N

5.0 PHYSIOGRAPHY AND CLIMATE

The Calder Creek Property is located in the Yukon Plateau on the south flank of King Solomon's Dome. Topography in the area consists of convex, rounded hills and steep, incised creeks at elevations above 500 m and with broader valleys and more gentle creek gradients below this elevation. Elevation on the property ranges from 900 m on the surrounding hills and ridges to 450 m in the lower reaches of Calder Creek. Outcrop is very sparse and bedrock exposures are limited largely to cuts along the access road. Permafrost is common on north facing slopes; no depth to the base of permafrost has been documented in the area.

The property area is covered by black spruce on north facing slopes and a mixture of black spruce and poplars on south facing slopes. Large areas of thick willows and alders are found in the creek bottoms in burned over areas. The property is below tree line which occurs at about 1000m in this area.

The climate in the property area consists of long, cold winters, short hot dry summers and short spring and fall seasons. At Dawson City, the closest nearby community, average monthly temperatures range from -22.5C in January to +23.1C in July. The area receives annual precipitation of 32.4 cm of rain and snow (rain equivalent) (Environment Canada, 2011).

6.0 REGIONAL BEDROCK GEOLOGY

The regional geology in the property area is summarized by Gordey and Ryan map - open File #4970. The property lies in the Yukon-Tanana Terrane of the Cordillera, south of the Tintina Fault. The following surficial units and bedrock formations are mapped in the property area: Figures 3a and 3b describe the bedrock geology. Regional map (open file #4970) shows area of interest consisting of Permian Orthogneiss: orthogneiss derived from quartz monzonite; refers to highly strained mafic poor Sulphur Creek orthogneiss (Pogq). Outcrops are few and far between. The above description applies to area (in old trench) below target CC-4 where bedrock (orthogneiss) was observed. However, the weathered transported (weathering rinds) bedrock on bottom of shaft CC-2 is possibly a rhyolitic type of rock. This could either be an Eocene porphyry (...K-feldspar) phyric rhyolite (Er) or an Upper Cretaceous Carmacks Group: rhyodacite and dacite commonly brotite and hornblende phyric, dominated by lesser andesite and basalt; minor rhyolite (ukCv) – Derek Torgerson and Lara Lewis (YTG geologists – 2014 pers. Comm.). Transported weathered bedrock (Jeff Bond-YTG geologist pers. Comm.) consisting of muscovite schist was noted on the bottom of shaft CC-3. The corresponding geological unit to this on Figure 3b & 3a is Permian Klondike Schist (PKs). Obviously the last two units have not been mapped on the Gordey map (open file #4970) at the shaft locations due to lack of outcrops in the area. It is unknown as how these varying bedrock units are related to the possibility of placer gold deposition. Shaft locations can be found on Figures 2 and 5.

7.0 PLACER EXCAVATIONS AND SURFICIAL GEOLOGY

Figure 4 on page 6 (Lowey's map) shows the producing placer gold creeks surrounding Calder Creek. Calder Creek is shown to have gold occurrences. However, it has never seen commercial production. It also shows its headwaters with Eldorado Creek which was the richest gold producer in the Klondike. Calder Creek is under explored (reconnaissance has shown large areas with no sign of past exploration such as old shaft dumps).

Figure 5 on page 7 shows surficial geology of Calder Creek area overlain on a google earth map (Jeff Bond-YTG Geologist). Most of shaft CC-2 encountered a colluvial apron of loess and fluvial fan debris (Ca Ff/F). Rounded fluvial gravel seems to be absent from shaft CC-2 (Power, Mar 14, 2013-shaft log). Also, no gravel was encountered in the two auger holes 60 ft. (CC13-01) and 120 ft. (CC 13-02) upstream from CC-2. CC13-01 was 45 feet deep and CC13-02 was 21 feet deep. It is speculated that CC13-02 could not penetrate the hard bedrock at the depth of 21 feet.

Shaft CC3 did hit some sandy rounded gravels as indicated by the excellent aquifers the gravels made causing flooding problems. This shaft hit weathered transported bedrock (Jeff Bond-YTG Geologist) composed of muscovite schist (see CC-3 log in appendix). The muscovite schists contained sub-rounded clasts of schist indicating this rock unit is not in place. This shaft must go deeper in order to hit final bedrock.

The predicted Pre-Pleistocene Calder Creek centre line (in blue) is shown on J. Bond's map on page 7 figure 5. Shaft CC-5 "is perhaps the most important location because this is where a Calder Creek tributary has incised through the entire width of the bench. If there is a pay streak located near the Pre-Pleistocene centre-line on the bench, this tributary would have concentrated the pay streak as it cut through the bench" (Bond, J.). This bench is described as Ca\Ft in Figure 5. Shaft CC-5 hit rusty red gravels at 19 feet 3 inches and will be deepened later this year. Shaft CC-5 is permanently frozen to surface, hence can be sunk in summer provided efforts are made to insulate the collar. Photographs in appendix 3 show CC-5 located in an area of stunted spruce on the northeast exposure.

Site CC-4 was excavated in the bottom of an existing old cat trench. Parts of this trench are visible on the google earth map on page 7 Figure 5. CC-4 consists of an old cat trench 8 feet deep, combined with new hand dug trench (2014) to a total depth of 12 ft. 6 inches. It was then reduced to shaft size (36 in. x 42 in.) and deepened from 12 ft. 6 in. to 27 ft. before becoming flooded (2015). Being an old stripped area, the permafrost thawed down and acted like a big funnel (see pictures in appendix) channeling the water into the shaft via an aquifer (silty sand gravels). Appendix 1 has the log for site CC-4. Two significant gold colours were panned at the 4 foot to six foot six inch level. A bulk test was then taken with a "high banker" sluice box and pump. The above results could not be repeated. Testing in various places along the existing cat trench should be repeated. Since very, very small colours (too small to measure or weigh) were encountered in gravels continuously from the 10 ft. to 15 ft. level, this shaft must be deepened to bedrock. It is hoped bedrock will not be too deep since, it outcrops lower down in the old cat trench. As in the case with CC-3, CC-4 should be excavated in the winter in order to avoid a timbering and pumping operation.

There are two proposed shaft locations for the one mile lease. The upper one closer to the mid-point of the lease is preferred (GPS co-ordinates 590660E, 7077564N). Second choice is the lower site (GPS co-ordinates 590371E, 7077166N).

8.0 SAMPLING AND TESTING FOR PLACER GOLD

Ten litre (1/2 a 20 litre pail) samples were taken at intervals every one-to- one and a half foot depth in each shaft. These samples were washed and screened down to a minus 3-4 millimetre screen. Oversize was inspected for any coarse gold. Undersize was panned down to a point where heavies such as black sand and fine colours could be distinguished. All gold would be counted, measured and weighed; if sufficient size and quantity was encountered.

9.0 CONCLUSIONS AND RECOMMENDATIONS

- 1) Shaft CC-3 bottomed out (23 ft. level) in transported weathered bedrock and should be deepened to final bedrock; preferable in winter.
- 2) Shaft CC-4 is presently in gravel and should be deepened to bedrock; preferably in winter. The upper 4 ft. to 6 ft. 6 in. level of the old trench (CC-4) should be retested for placer gold.
- 3) Shaft CC-5 is the best target and hit gravels at approximately the 20 foot level. This shaft should be deepened to bedrock. It can be deepened in summer.
- 4) Shaft CC-6 should be collared at 590660E, 7077564N in order to test the mid-point of the mile lease.

5) 10.0 REFERENCES CITED

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APPENDIX I

TRENCH AND SHAFT LOGS

APPENDIX 1

CALDER CREEK PROJECT – Shaft CC-3
Log of Shaft CC-3 GPS 590460E,7075730N
To July 10, 2014 (Depth 23 ft.)

NAD 83
 ZONE 7

DEPTH FT.-IN. FROM - TO	MATERIALS DESCRIPTION (SHAFT CC-3)	GOLD	NOTES
0 - 0'3"	Organics – Humous, Moss	Nil	
0'3" – 1'6"	Yellow-brown sticky clay ('gobs') with 30% up to 1 inch rounded and subangular micaceous pebbles, occasional rounded " quartz pebble	Nil	
1'6" – 2'0"	Black muck (root matter) with small wood pieces	Nil	
2'0" – 2'6"	Brownish yellow gravel with clay matrix, has rounded pebbles	Nil	
2'6" – 4'0"	Brown clay soil – all fines no rock or wood	Nil	
4'0" – 6'0"	Fine brown semi-dry clay soil (no rocks)	Nil	
6'0" – 9'0"	Grey fine semi-dry soil – all fines – no rocks, no wood	Nil	
9'0" – 10'9"	Brown gravel with coarse sandy matrix on Jun 19 made a little water; up to 4in. angular rocks plus some 4 in. rounded quartz rocks, up to 10% old splintered wood	Nil	Thawed
10'9" – 11'5"	Medium to coarse sandy matrix with up to 2 in. rounded quartz pebbles and sub-rounded other rocks, 30% old splintered wood, on June 20 made about 5 litres water	Nil	Thawed
11'5" – 12'2"	Brown sandy gravel with 20% rounded (2" to 6") pebbles; making water	Nil	Thawed
12'2" – 13'0"	Black root mass (black muck) with 10% wood chunks	Nil	?
13'0" – 14'9"	Brown sandy silty gravel with 10-20% rounded flat pebbles (2 in. to 3 in.0)	Nil	?
14'9" – 19'0" Permafrost	Brown fine silty sandy matrix (occasionally a little wood), 15-20% rounded and angular rocks roughly 3-4 in., 1-2% rounded quartz pebbles, at 16 ft.,. flow direction towards creek	Nil	September – August Walls started freezing back when flooded PERMAFROST
19'0" – 19'8" Permafrost	50% large (up to 10' x 12") rounded boulders, matrix is coarse sand and small pebbles	Nil	
19'8" – 23'0" Permafrost	Fine soft weathered muscovite schist, ie: transported weathered bedrock colluvium (Klondike Schist) with the large boulders sitting on top (19'0"-19'8") of this schist unit, it could be confused with bedrock; it is best described as a grey-brown very poorly sorted fine matrix supported gravel (?). Clasts consist of soft crumbly sub-rounded to sub-angular flat muscovite schist	Nil	

APPENDIX 1

CALDER CREEK PROJECT Log of CC-4 (Trenching with Shaft in Bottom) GPS (NAD 83, Zone 7) 590298E, 7075662N

DEPTH FT.- IN. INTERVAL	MATERIALS DESCRPTION	GOLD	NOTES
0 to 4 ft.	Colluviated fluvial gravel with long transported weathered bedrock (gneiss) and loess, 50% matrix (silt and sand), 50% clasts – pebble cobble gravel largest clasts in rafting near surface say at 20 cm immediately under the humous, matrix gets silty up towards top ie. Gets sandier as one goes down	Nil	Part of existing trench wall
4 ft. to 6 ft. 6 in.	Pebble cobble gravel clasts sub-angular to sub-rounded, 70% clasts, 30% matrix is coarse sand and gravels moderate to well sorted, well oxidized (rusty red) clasts are gneiss, quartz and schist	2 Colours .6mmx.7mmx 2mm .2mmx.2mmx.1 mm	Part of existing trench wall, bulk sample yielded no colours
6 ft. 6 in to 10 ft.	Organics plus slide material from existing trench walls, consists of mixture of above gravels; in situ gravel is untested	Nil	New hand dug trench 4ft.x3ft. at bottom of old trench
10 ft. to 10 ft. 6 in.	Brownish sandy gravel minor silt, up to 4 in. rounded cobbles. Upper contact of this moderately well sorted layer indicates start of virgin material.	Nil	New hand dug trench 4ft.x 3ft. at bottom of old trench
10 ft.6 in. to 11 ft. 6 in.	Brown sandy gravels, minor silt, up to 6 in. rounded cobbles	1 very, very small colour (could only be seen with 10x lens)	New hand dug trench 4ft.x 3ft. at bottom of old trench
11 ft. 6 in. to 12 ft. 6 in.	Tan colour silty sandy gravel with up to 3 in. diameter rounded pebbles	1 very small colour plus garnet and black sand	New hand dug trench 4ft.x 3ft. at bottom of old trench
12 ft. 6 in. to 13 ft. 6 in.	Brown silty sandy gravels, 20% rounded rocks up to 10 in. in diameter, sticky silty clay stuck to some of the rocks	2 very, very small colours plus garnets and black sand	Reduced to shaft size (36 in. x 42 in.)
13 ft. 6 in. to 15 ft.	Wet sandy silty rusty brown gravel 20-30% rounded clasts up to 4 inches in diameter, one rounded boulder was 15 in. in diameter	2 very, very small colours plus black sand	Reduced to shaft size (36 in. x 42 in.)

APPENDIX 1

CALDER CREEK PROJECT Log of CC-4 (March 2015) GPS (NAD 83, Zone 7) 590298E, 7075662N

DEPTH FT.-IN. INTERVAL	MATERIALS DESCRIPTION	GOLD	NOTES
15 ft 0in. to 15 Ft 10 in.	Rusty brown silty sand with 10% rounded 2-5in. orthogneiss rocks + 7in rounded quartz cobbles 20% angular to sub angular orthogneiss rocks (1-4in in diameter)	1 colour Thin 1mm in diameter	Quarter size area of black sand
15 ft. 10in. to 17 ft. 0 in.	Brown rusty sandy silt with 30% rounded orthogneiss rocks up to 4in in diameter. 10% angular to subangular (1to 4in) orthogneiss rocks. Sticky clay on pebbles and cobbles Two large (15in long) rounded boulders (granitic??)	Nil	Dime size area of black sand
17 ft. 0 in to 18 ft. 6 in.	Brown silty sand 20-30% rounded and angular orthogneiss rocks (1/2 to 4in), 4 large (up to 15in) boulders both quartz and orthogneiss	1 colour Thin 1/4mm in diameter	Dime size area of black san
18 ft. 6in to 19 ft. 1 in.	Brown silty sand, more sand than upper levels, 20% rounded to sub angular 1-4 in. corks (orthogneiss) no boulders.	3 colours Less than 1/5 mm in diameter, thin	Dime size area of black san
19 ft.1 in. to 20 ft. 4 in.	Brown silty sand with 20% rounded to sub-rounded rocks (orthogneiss) 1 to 4 in diameter	Nil	Quarter size area of black sand
20 ft. 4 in. to 21 ft. 11 in.	Brown silty sand with some rusty brown areas. 20% rounded to subrounded 1-4in. diameter orthogeniss rocks. 4 rounded 5-7 in diameter quartz cobbles.	1 colour thin 1/5mm in diameter	Quarter size area of black sand
21 ft. 11 in. to 22 ft. 7 in.	Brown silty sand with small rusty brown areas. 20% round and sub-rounded orthogneiss rocks (.1 to 4in diameter), 2 flat 6-7in. sub angular orthogneiss rocks	1 very small colour	Almost no black sand
22 ft. 7 in. to 24 ft. 0 in.	Brown silty sand with occasional rusty area. 20% rounded to sub-rounded 1-4 in. orthogneiss rocks. 1 round 4in quartz rock.	Nil	Very little black sand, thawed
24 ft. 0in To 24 ft. 8 in.	Wet brown silty sand, some rusty areas, 30% round to sub-rounded and sub 1-5 in. orthogneiss rocks 1 round 4 in. quartz rock	Nil	Thawed wet ½ Dime size black sand
24 ft. 8 in. To 25 ft. 3 in.	Brown silty sand with 20% 1-3 in. diameter rounded and sub-angular orthogneiss rocks (less rock over 1in. diameter)	Nil	Thawed water in bottom ½ dime black sand
25 ft. 3 in. To 25 ft. 8 in.	Brown silty sand 30% round to sub-round 1-3 in. diametr orthogneiss rocks + 1-3 in. round quartz rocks	1 very small colour	Thawed wet ½ dime size black sand

APPENDIX 1

**CALDER CREEK PROJECT
Log of CC-4 (March 2015)
GPS (NAD 83, Zone 7) 590298E, 7075662N**

DEPTH FT.-IN. INTERVAL	MATERIALS DESCRPTION	GOLD	NOTES
25 ft. 8 in. To 26 ft. 3 in.	Brown silty sand 30% rounded to sub-rounded 1-4 in. diameter orthogneiss rocks	Nil	Thawed wet 1/2 dime size black sand
26 ft. 3in. To 27 ft. 0 in.	Brown silty sand 30% rounded to sub-rounded 1-4 in. diameter orthogneiss rocks	Nil	Thawed wet 1/2 dime size black sand

APPENDIX 1

**CALDER CREEK PROJECT
Log of Shaft CC-5
GPS (NAD 83, Zone 7) 590225E, 7075790N**

DEPTH FT.-IN. INTERVAL	MATERIALS DESCRIPTION	GOLD	NOTES
0 ft. 0 in. to 6 in.	Moss and roots	Nil	Northeast exposure stunted spruce shaft collar 46in. x 40in.
6 in. to 2 ft.	Brownish grey clayey silt, no rocks	Nil	
2 ft. to 3 ft. 6 in.	Brown silty sandy gravel both small angular and rounded pebbles and clasts up to 8 inches in diameter 1-2% rounded quartz	Nil	
3 ft. 6 in. to 4 ft. 10 in.	Deep rusty red sandy, silty gravel; lots of both rounded and angular pebbles; occasional rounded quartz cobbles up to 5 in.	Nil	
4 ft. 10 in. to 12 ft.	"Black muck" grey-black silty clayey muck, not rocks	Nil	
12 ft. to 15 ft. 6 in.	"Black muck" grey-black silty clayey muck, 50% water (ice), 5% pebbles sub-rounded to angular	Nil	
15 ft. 6 in. to 19 ft. 3 in.	Grey-black muck very fine matrix (clay) no sand or silt, pans to 10% pebbles less than ½ in. diameter; most pebbles angular with some sub-angular; occasional sub-rounded quartz pebble and minor rounded wood under 2 in. High water content (30-50% by volume) when thawed.	Nil	
19 ft. 3 in. to 20 ft. 1 in.	Rusty red sandy silty gravel, 30% small pebbles both angular and sub-angular, occasional rounded quartz pebbles and large cobbles up to 5 in. diameter, occasional round wood fragment under 2 in. diameter. Pebbles and cobbles consist of gneiss, schist and quartz. It is classed as an immature gravel.	Nil	

APPENDIX 2

CREW LOGS

APPENDIX 2

**SHAFTING - CALDER CREEK PROJECT
Daily Log - Summary**

DATE 2014	ACTIVITY	Number of Days		
		Mike Power	Gary Lee	Helper
Apr 2	Load and check gear		1	
3	Mobilize to Dawson City, pick up lumber		1	
4	Haul gear to Calder Creek		1	
5	Haul gear to camp		1	
6	Repairs to camp, cut and haul firewood		1	
7	Cut trails, haul gear to Shaft CC-2		1	
8	Open collar of CC-2 with jackhammer		1	
9	Jackhammer and muck out ice to 4 ft. deep		1	
10	Haul plywood to CC-2 plus mag. part way		1	
11	Build shaft ladders and finish haul, mag.		1	
12	Jackhammer shaft CC-2 to 5 feet, start timbering		1	
14	Widen collar of CC-2 with jackhammer, begin grouting		1	
15	Pour concrete, timber and jackhammer		1	
16	Pick up concrete in Dawson City, pour concrete, jackhammer		1	
18	Square shaft with drill plus timber		1	
20	Pack up return to Whitehorse		1	
June 11	Check out equipment and load		1	
12	Expedite and pick up groceries, supplies		1	1
13	Mobilize to Calder Creek		1	1
14	Repairs to camp, haul gear		1	1
15	Drill & muck out CC-3 shaft		1	1
16	Drill & muck out, timber and grout		1	1
17	Drill & muck out to 6 ft. 9 in., timber round		1	1
18	Drill & muck out to 9 ft. timber to 8 ft.		1	1
19	Drill & muck out to 10 ft. 9in.		1	1
20	Drill & muck out 11 ft. 3 in.		1	1
21	Drill & muck out 11 ft. 9 in., cut compressor trail		1	1
22	Construct winch site, blast mat etc.		1	1
23	Drill & muck CC-3 to 12'2" and clear compressor trail		1	1
24	Square shaft with drill and drive to Dawson City		1	1
25	Load plywood, 2x4, 2x2 etc. Expedite, freeze meat, etc		1	1
26	Shaft flooded (8 ft.), bail out, square off (hilt)		1	1
27	Stake 1 mile lease		1	1
28	Timber shaft with drill, drive to Dawson City	1	1	1
29	Drill and blast + Hilti drill to 13 ft. 5in.	1	1	1
30	Drill and blast + Hilti drill	1	1	1
	SUBTOTALS	3	36	19

APPENDIX 2

**SHAFTING - CALDER CREEK PROJECT
Daily Log - Summary**

DATE 2014	ACTIVITY	Number of Days		
		Mike Power	Gary Lee	Helper
July 1	Drill and blast + Hilti drill, Gary stake claim.	1	1	1
2	Drill and blast + Hilti drill, Gary to Dawson City	1	1	1
3	Drill and blast + Hilti drill, Gary returns with supplies	1	1	1
4	Drill and blast + Hilti drill	1	1	1
5	Drill and blast + Hilti drill	1	1	1
6	Mike returns to Whitehorse Rain-shaft flood, pour concrete, construct shaft cover, 12' ladder	1	1	1
7	Mix and pour concrete, timber to 14 ft. 9 in.		1	1
8	Finish timbering, jackhammer and muck		1	1
9	Mix and pour concrete, make new safety shaft cover		1	1
10	Fix winch, log shaft, pour concrete		1	1
11	Pack up, drive to Whitehorse		1	1
	Subtotals from page 1	3	36	19
	TOTALS	9	47	30
	No. of person days – April 2 to July 14, 2014 9+47+30 =	86		

APPENDIX 2

SHAFTING - CALDER CREEK PROJECT Daily Log - Summary

DATE 2014	ACTIVITY	Number of Days	
		Gary Lee	Helper
Aug 7	Pick up supplies Mobilize to Dawson City	1	
9	Mobilize to Calder Creek, flag trail – creek crossing	1	
10	Cut ATV trail, build creek crossing	1	
11	Bulk sample trench with Jeff Bond plus dewater shaft #CC-3	1	
12	Cut and clear area BTM of trench and start digging	1	
13	Excavate CC-4 to 4 x 6 x 2 feet deep and pan	1	
14	Excavate CC-4 to 4 x 6 x 4 feet deep and pan	1	
15	Excavate CC-4 to 5 feet deep and pan	1	
16	Excavate CC-4 36 in. x 42 in. x 6 ft. deep	1	
17	Excavate CC-4 to 17 ft. deep, pan and flag TR. to CC5	1	
18	Cut trail to CC-5 site, backhaul trees	1	
19	Clear shaft CC-5 site, jackhammer to 2 ft.	1	
20	Shaft CC-5 jackhammer to 3 ½ ft. and pan	1	
21	Shaft CC-5 jackhammer to 4.0 ft.	1	
22	Shaft CC-5 timber to 4 ft. and grout	1	
23	Get supplies in Dawson City	1	
24	Return to Calder Creek, grout (cement) CC-5	1	
25	Finish grouting around timber CC-5	1	
26	CC-5 jackhammer to 4.3 ft. and pan	1	
27	CC-5 jackhammer to 4 ft. 10 in. and pan	1	
28	CC-3 pan 10 litre samples & CC-5 to 5 ½ ft.	1	
29	CC-5 jackhammer to 7 ft. deep	1	
31	CC-5 jackhammer to 8 ft. deep and pan	1	
Sep 1	CC-5 timber shaft to 8 ft. depth	1	
2	CC-5 jack hammer to 10 deep	1	
3	CC-5 jackhammer to 11 ft. deep and pan	1	
4	CC-5 jackhammer to 12 ft. deep and pan	1	
7	CC-5 jackhammer to 12 ft. 8 in.	1	
8	CC-5 Install ladders and to 13 ft. 2 in.	1	
9	CC-5 jackhammer to 14 ft. and pan	1	
11	CC-5 jackhammer to 15 ft.	1	
	SUBTOTAL	31	

APPENDIX 2

**SHAFTING - CALDER CREEK PROJECT
Daily Log - Summary**

DATE 2014	ACTIVITY	CC-4		Number of Days	
		Gary Lee	Helper		
Sep 15	CC-5 jackhammer to 15.7 ft. and pan	1			
16	CC-5 jackhammer to 16 ft. 5 in.	1			
17	CC-5 jackhammer to 17 ft. 3in and pan	1			
18	CC-5 jackhammer to 18 ft. 2 in.	1			
19	CC-5 jackhammer to 19 ft. and pan	1			
21	CC-5 jackhammer to 19 ft. 6 in.	1			
22	CC-5 jackhammer to 20 ft. 1 in. and pan	1			
23	Close shaft, pull ladders, pack up, drive to Dawson City	1			
24	Demobilize to Whitehorse	1			
	Subtotals from page 1	31			
	No. of person days Aug 7-Sep 24, 2014	TOTALS	40		

APPENDIX 2

2015 Y.M.I.P – Target Evaluation Project SHAFTING - CALDER CREEK PROJECT 15-059 Daily Log - Summary

DATE 2015	ACTIVITY	CC-4		Number of Days	
		Gary Lee	Helper		
Feb 24	MON from Whitehorse to Dawson	1			
25	Drive up to Grand Forks, Attempt to break trail (Snowmobile) to Calder – No Go	1			
Mar 1	Snowmobile 23km to Calder from Upper Bonanza Crk.	1			
2	Camp duties, break trails, haul gear to CC-4	1			
3	Fall skid, cut & split firewood, finish hauling gear to shaft site	1			
4	Hilti Jack Hammer & Excavate Shaft 11 to 12 ft.	1			
6	Hilti Jack Hammer & Excavate Shaft 12 to 13 ft.	1			
7	Hilti Jack Hammer & Excavate Shaft 13 to 14 ft.	1			
8	Hilti Jack Hammer & Excavate Shaft 14 to 14 ft. 9 in.	1			
9	Hilti Jack Hammer & Excavate Shaft 14ft. 9 in. to 15 ft. 10 in.	1			
10	Hilti Jack Hammer & Excavate Shaft 15 ft. 10 in. to 16 ft. 6 in.	1			
11	Hilti Jack Hammer & Excavate Shaft 16 ft. 6 in. to 17 ft.	1			
12	Hilti Jack Hammer & Excavate Shaft 17 ft. to 17 ft. 10 in.	1			
13	Hilti Jack Hammer & Excavate Shaft 17 ft. 10 in. to 18 ft. 6 in.	1			
14	Hilti Jack Hammer & Excavate Shaft 18 ft. 6 in. to 19 ft. 1 in.	1			
15	Hilti Jack Hammer & Excavate Shaft 19 ft. 1 in. to 19 ft. 8 in.	1			
16	Hilti Jack Hammer & Excavate Shaft 19 ft. 8 in. to 20 ft. 4 in.	1			
17	Hilti Jack Hammer & Excavate Shaft 20 ft. 4 in. to 21 ft.	1			
18	Snowmobile 23 km to truck – Dawson for supplies	1			
19	Gov ploughing road – drove truck to Calder, plus Jack hammer & Excavate Shaft 21ft to 21 ft. 3 in.	1			
20	Hilti Jack Hammer & Excavate Shaft 21 ft. 3in to 21 ft.11 in.	1			
21	Hilti Jack Hammer & Excavate Shaft 21 ft. 11 in to 22 ft. 7 in	1			
22	Construct timber collar on shaft, install ladders & firewood	1			
23	Hilti Jack Hammer & Excavate Shaft 22 ft. 7in. to 23 ft. 3 in.	1			
24	Hilti Jack Hammer & Excavate Shaft 23 ft. 3 in to 24 ft.	1			
25	Hilti Jack Hammer & Excavate Shaft 24 ft. to 24 ft. 8 in.	1			
26	Hilti Jack Hammer & Excavate Shaft 24 ft. 8 in. to 25 ft. 3 in.	1			
27	Hilti Jack Hammer & Excavate Shaft 25 ft. 3 in to 25 ft. 8 in.	1			
28	Begin timbering shaft CC-4	1			
29	timbering shaft CC-4	1			
30	Hilti Jack Hammer & Excavate Shaft 25 ft. 8 in. to 26 ft. 3 in.	1			
31	Drive to Dawson to report	1			
	Subtotals	32			

Apr 3	Hilti Jack Hammer & Excavate Shaft 26 ft. 3 in. to 27 ft. 0 in.	1	
4	Timber shaft to 26 ft. level	1	
9	DeMOB to Whitehorse	1	
		TOTALS	35



APPENDIX 3

PHOTOGRAPHS

SHAFT CC-3

CALDER CREEK



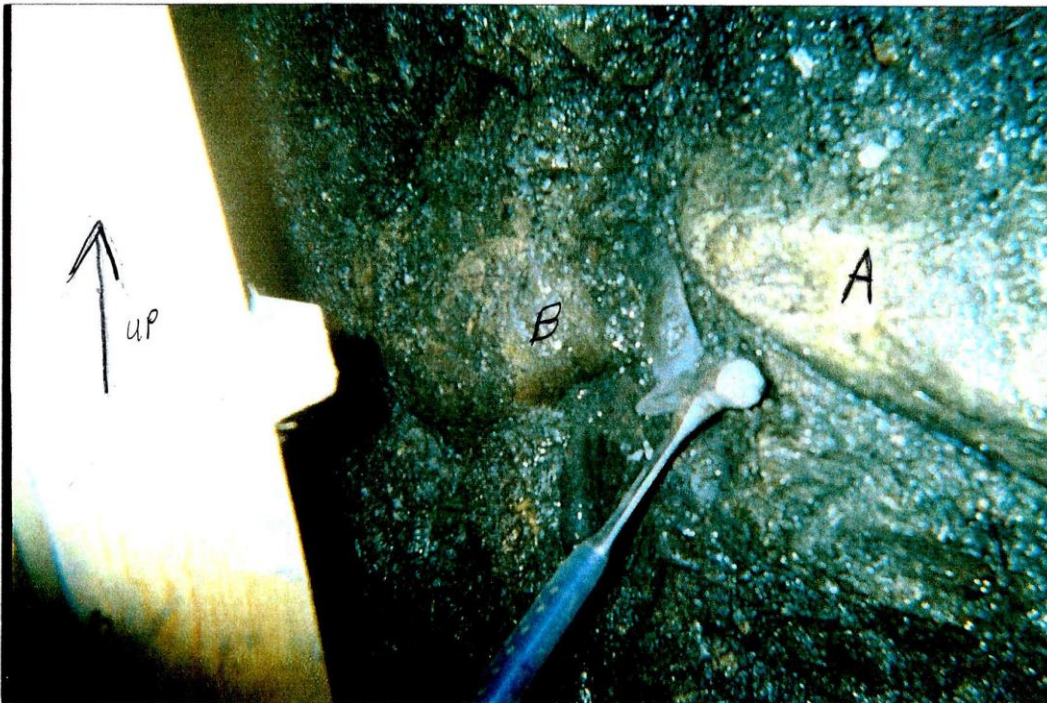
SHAFT CC-3 FLOODED



SHAFT CC-3 PUMPED OUT ON SEPT 23, 2014
NOTE: FOAM-WATER HAS INCREASED FROM
DRIPPING TO FLOWING (RATE 4 FT. DEPTH/DAY)
PUMPED OUT 22 FOOT LEVEL



SHAFT CC-3 LOOKING UP TO TIMBER
ON JULY 7, 2014 TIMBERED TO 14 FT. 9 in.



SHAFT CC-3

A & B UP TO 12 INCH ROUNDED BOULDERS
SITTING ON WEATHERED MUSCOVITE SCHIST
FROM 19 FT. 0 in. TO 19 FT. 8 in.



SHAFT CC-4
BEFORE TIMBERING



BOTTOM OF SHAFT CC-4
PRIOR TO FLOODING



SHAFT CC-4



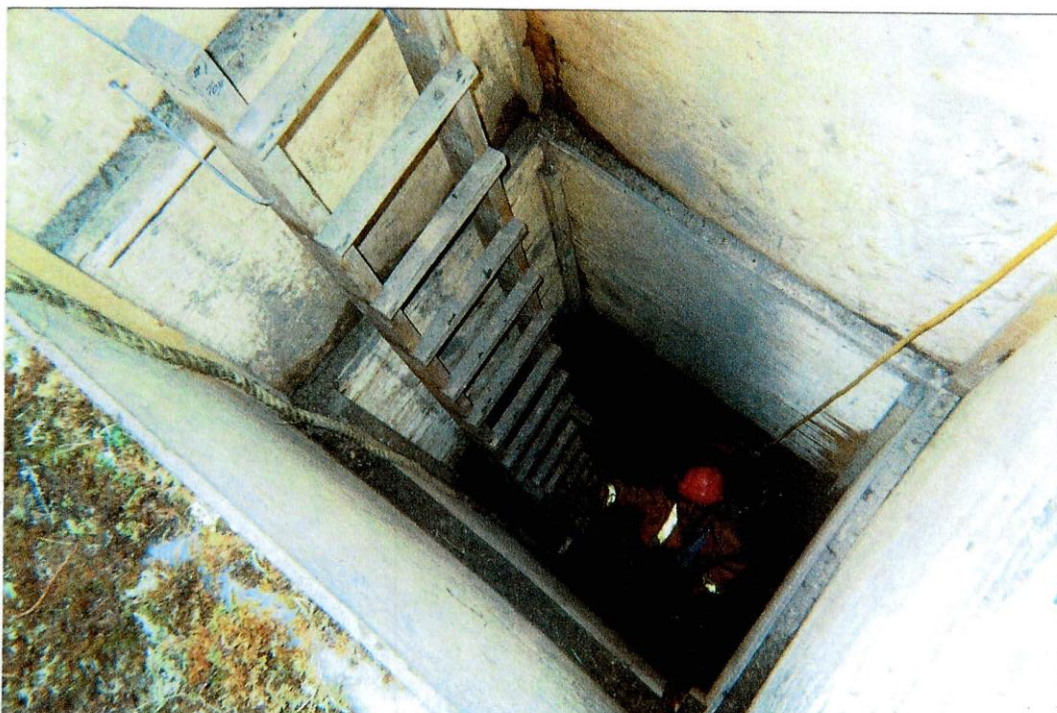
THAWED WET AT BOTTOM CC-4
MARCH 27, 2015

SHAFT CC-5

CALDER CREEK



SHAFT CC-5 APPROX. 250 METRES NORTHWEST AND
ACROSS CREEK FROM CC-3
NOTE: STUNTED SPRUCE (NORTH EAST EXPOSURE)
PERMAFROST IS PERMANENTLY FROZEN TO
WITHIN ONE FOOT OF SURFACE UNDER THE MOSS



SHAFT CC-5 GARY STANDING AT THE 19 FOOT LEVEL
TIMBERED TO 8 FEET

SHAFT CC-5



SHAFT CC-5 NOTE ICE ON SHAFT WALL. DURING EXCAVATION, ICE ON WALLS WILL PARTIALLY THAW, FLOW DOWN AND REFREEZE SIMILAR TO STALAGMITES.



CC-5 GRAVELS AT 19 TO 20 FOOT LEVEL
NOTE: NO WATER AT BOTTOM OF SHAFT