90-087

ROCK CHIP SAMPLES

(1)

21/05/90
BAL-1
CHIP
↑ 082
42

Ridge west of upper Ballarat Ck, approx. 150' (45m) above valley floor, 100' above large open pit.

CI = 5 Mafic: Qz 70% Ampl 3% Fs 15% Opaques 1% Bi 5% Musc. 1%

3cm qz band with banded gneiss. Bands range from ½ to 13cm wide and alternate with bi-act-amp rich with minor muscovite along ~~foliat~~ cleavage planes. Cleavage of qz rich layers occurs along the margin with amphibolite layers.

Sample consists of medium grained rounded qz with euhedral milky (feldspar?) minerals, with minor biotite dispersed through out. Qz veinlets parallel foliation and are rimmed by epidote. 1% square shaped silvery opaque mineral that tarnishes brown red color. Leaves brown rust imprints like pyrite. Non magnetic. Also f.g disseminated py

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24/05/90
BLK-1
GRAB

- taken from opencut on Blueberry Ck

Weakly bedded (2-4cm) to massive blue grey limestone. medium grained, readily fizzes in cold dilute HCl <1% f.g cubic diss. py/po in sample.

24/05/90
BLU-2
GRAB

- taken from open cut on Blueberry Ck

Orange weathering black colored poorly foliated amphibolite calcareous schist with calcite/ankerite? lenses/bands parallelling foliation. Minor muscovite along foliation planes. Ca vnlets + cutting sample <1mm in size 5-10% f.g biotite, <1% v.f.g py.

ROCK CHIP SAMPLES

24/05/90 GRAB Blu-3	- from pit (opencut) on Blueberry Ck translucent qz with orange stained bands of $FeCO_3$ coated by massive layered soft grey submetallic mineral (moly?). High grade value of metal (16% of sample).
26/05/90 BAL 2 GRAB	-from camp massive ochre colored limonite/goethite hematite rich rock - qz core 50/50 weak foliation present/or just result of hem. veining. Quartzite flooded by $FeOx$ veining
26/05/90 BAL 3 GRAB	-from camp - large boulder of similar stuff as above - more qz. Break open and have translucent qz nucleus $2cm^2$ surrounded by massive V.F.g grey qz grading outwards to red chalcedonic looking (hem stain) qz. Outside composed of ochre colored qz + hem vugs. trace aspy.
27/05/90 BAL-4 GRAB	-located approx. 300m above present camp, from creek bed dark green massive coarse grained amphibolite Elongated crystals to 1cm length showing 2 good cleavages, 60°/120°. Interlocking crystals. Minor calcite veinlets crosscutting rock, 1-2% square py, medium grained white feldspar forms 10% of rock.
27/05/90 BAL-5 GRAB	- as above - As above with 5-10% py, up to 3mm in size.

Rock Chip Samples

24/06/90
GRAB
Blu-6
(1601)

Au, Ag, Cu
Pb, Zn, As
Sb

from creek level around old pit on Vivi claim, downstream from pit.

Orange/white mottled subrounded boulder of orange to yellow stained medium grained qz with accessory minerals (sandstone, weakly min?) cut by 2cm clear vuggy qz veins. Within sandstone matrix is spots of weathered, sub metallic black opaque mineral with a black streak.

24/06/90
GRAB
Blu-5
(1602)

Au, Ag, Cu
Pb, Zn, As
Sb

grab from bank just below sloughed pit on Vivi claim

Translucent/opaque white fractured qz vein material with rind of muscovite schist on one side. No visible sulfides

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24/06/90
Blu 4
GRAB
(1603)

Au, Ag, Cu,
Pb, Zn, As,
Sb.

from same area as Blu-5
Highly fractured yellow to brown stained qz vein material with open space features as elongated gashes cut by irregularly bending schistose bands < 1cm wide.

18/06/90
GRAB
(1604)
Bal-6

Au, Ag, Cu,
Ni, Co, Pb,
Zn, Cd, As,
Sb

from bank of test pit on unnamed left trib of Ballarat, between Danny's Ck and Dianne Ck.

Light green silicified quartz rich volcanic(?) - possibly breccia - cut by numerous translucent qz veinlets (stockwork). Unable to decipher host/parent lithology.

Rock Chip Samples

28/06/90 GRAB BAL-7 (1605) Au, Ag, Cu, Ni Co, Pb, Zn, Cd, As, Sb	taken from window ledge of cookshack Other half of Bal 4
	Same as Bal-4.
3/07/90 CHIP BAL-8 (1606) Au, Ag, Cu, Ni, Pb, Co, Zn, Cd, As, Sb	located approx post 1 placer claim ~29122
	Decomposed to weathered black to dark green bedrock sample from placer cut.
	Heavy, biotite - phlogopite? amphibolite with ~90% chlorite - muscovite/sericite <5% ~~pyrite~~ po as irregular cubes with a silver/bronze color Magnetic. Black minerals, (amphiboles) also magnetic in places Some py present. 1mm qz or fs stringers cut sample.
3/07/90 CHIP BAL-9 (1607) Au, Ag, Cu Ni, Pb, Co Zn, Cd, As, Sb	same location, 5M eastward.
	Same rock as BAL-8 only more amphibole (hbl), 5-10% chlorite. sericite. 10% feldspar as clear white colored laths and present as 2mm stringers cutting sample. 5% silver po, magnetic.
3/07/90 ~~CHIP~~ BAL-10 FLOAT (1608) Au, Ag, Cu, Co, Ni, Pb, Zn, Cd, As, Sb	same location, float or bank
	Same rock as 8 and 9 but more weathered. Sulfides out on one side leaving boxworked texture. Po tarnished irridescent bronze. Very magnetic specimen, 20% feldspar, 10-15% po

ROCK CHIP SAMPLES

3/07/90	
BAL-11	12cm QUARTZ lenses within amphibolite
CHIP	located 20m downstream from
	BAL 8-10. Oriented 120/60 NE
(1609)	
Au, Ag, Cu,	Massive fine grained brown tinted
Ni, Co, (S	/qz lenses. Crystals interlocked and
Pb, Zn, Cd,	subrounded.
As, Sb	
3/07/90	from creek 80m upstream of
BAL-12	post 1 placer claim 29123.
GRAB	
FLOAT	Float sample of vuggy white qz with
	10% massive/stringer dark grey to black
(1610)	metallic mineral. Has a brownish reddish
	streak. Hematite? Has a platy habit.
Au, Ag, As,	Also 1% V.F.g py in the qz.
Co, Cu, Ni,	
Pb, Cd, Sb	
11/07/90	
BAL-13	FROM left bank of cut, 100' above
CHIP	the sluicebox
(1611)	
	non-magnetic, massive black amphibolite
REE	medium grained enstatite/hornblende
	with minor micas (light brown) and
	2% py as pods irregularly disseminated
11/07/90	from middle of cut, as above
CHIP	
BAL-14	as above, increase in biotite (to 10%)
(1612)	very little py.
REE	
11/07/90	from middle of cut, 150' above box
BAL 15	
CHIP	coarse grained as above, magnetic,
(1613)	minor light (apple) green inclusions -
	apatite?, less biotite (<5%)
REE	

ROCK CHIP SAMPLES.

Lulu Ridge

9/7/90	<50m south of post FAR 11 claim.
Lu-1	
FLOAT	yellow-brown colored quartz knob buried in
(1614)	ground around bi sc- qfsc outcrop
Au, Ag, As,	Quartz contains drusy infilled red stained
Co, Cu, Cd, Pb	(hem?) vugs.
Sb, Zn	

10/7/90	THISTLE MTN.
THIS-1	4" x 36" white qz lense within hornblendite
CHIP	dyke atop Thistle Mtn. west of peak
(1615)	
Au, Ag, As	vitreous qz with <1% fine grained cubic
Cd, Co, Cu, Pb	metallic lustered dk grey mineral (sphal?)
Zn, Sb	parallels foliation

	THISTLE MTN
10/7/90	5" x 36" white qz lens within qfsc d/c
THIS-2	atop Thistle Mtn, south of old repeater tower
CHIP	
(1616)	vitreous qz with 2% cubic, 6 sided crystals
Au, Ag, As	of dk grey mineral as above, with
Cd, Co, Cu,	red sheen, pale white yellow streak,
Pb, Zn, Sb	scratched by knife pressed hard. (H=5)
	parallels foliation.

19/7/90	THISTLE MTN.
THIS-3	ridge west of Post 2 FAR 21/22, north of
CHIP	NEAR 13/14 elev. 1360 m
(1617)	
	3" chip of quartz rich layer in a f.g.
	muscovite quartzofeldspathic schist.
	Bounds Thistle Mtn. hornblendite on the
	north. No mineralization

19/7/90	THISTLE MTN
THIS-4	ridge west of post 2 FAR 21/22, south
CHIP	of NEAR 13/14 elev. 1330 m
(1618)	
	quartz-garnet silicified zone within
	hornblendite. Rock is f.grained mafic
	with interstitial quartz-garnet. Very
	heavy and hard.

ROCK CHIP SAMPLES

19/7/90	THISTLE MTN
THIS-5	ridge west of post 2 FAR 21/22, south of
CHIP	post 1 NEAR 13/14 elev. 1280m
(1619)	
	quartz lens 6m long x .3m wide stained
	stained red along fracture surfaces
	White barren quartz.

19/7/90	THISTLE MTN.
THIS-6	ridge west of post 2 FAR 21/22, south of
THIS-7	post 1 NEAR 13/14 elev. 1260m
CHIP	
(1620)	interlocked qz >> garnet-mafic unit within
(1621)	hornblendite ridge Stained rust red
	Possible quartzite lens (pre-hornblendite)

6/9/90	100 FT ABOVE BALLARAT VALLEY, 50 FT SOUTH POST 1
BAL-16	P29124
FLOAT/GRAB	
1622	apparent west-east striking qz vein as
Au Ag As Sb	float continuing up hillside. Very vuggy in
Cu Zn Pb	spots

1622	White, massive quartz vein (lens?) with
cont'd	vugs infilled with druse quartz.
	Massive qz cut by (intruded around)
	deep brown weathering limonite-wad
	rich rock fragments and stringers.

6/9/90	
1623	as before location
BAL-17	
FLOAT/GRAB	same rock type. Vuggy qz with brown
Au, Ag, As,	coloring feldspar altering to clays and
Cu, Pb, Sb, Zn	limonitic seams punctuating white to
	translucent massive qz. Vein width
	appears to be 52cm

6/9/90	
BAL-20	from bedrock in cut approx at post 1
1624	P29123
FLOAT,	
Au, Ag, As	same rock as 1622 - 1623.
Cu, Pb, Sb, Zn	

ROCK CHIP SAMPLES

6/9/[illegible]
1624
BAL 18

approx 250 feet north of post 1 P29123 in cut, from Bedrock

Hydrothermally altered Pelly Gneiss phyllite. Cut by quartz "stockwork" veining. Appears to be a metamorphosed granodiorite. Faulted/jointed along foliation of 066/80SE

6/9/90
BAL-21
1627
FLOAT

from cut approx 50 feet north of post 1 P29124.

same qz vein as described in 1622/1623

6/9/
BAL-19
1625
FLOAT

from cut approx 50 feet north of post 1 P29124

Massive milky white to translucent vuggy qz vein cut by siderite/limonite infilled fractures and fenses. 10% patchy cubic silver metal, soft with black streak graphite?

DAILY JOURNAL 1990

MAY 10: Arrival @ Ballarat Creek.

Ron Moisson and I travelled down the Yukon River with Jerry Kruse from Midway landing to the mouth of Ballarat Creek which is 66 km upstream of the Yukon-Stewart Rivers confluence. We arrived to open up a camp which will be our basecamp / boarding rooms during prospecting. The camp is located 18 km along dry-weather road from the mouth of the creek.

May 11-14: Camp opening, arrival of Caley's Dream Inc.

Four days of camp and road repair made the living conditions and travelling conditions tolerable. Caley's Dream Inc., the owners of the camp arrived on May 12.

TRAVERSE 90-1 MAY 15: 8 km traverse down unnamed creek NTS 115J/14

An old road leads over from Ballarat Creek along the west ridge and into the south fork of Kirkman Creek to join with the road leading up that stream. ATV access is possible on this road, and was utilized to get to the headwaters of an unnamed creek that flows southerly into the Yukon River. Information about this creek was supplied by prospector Maynard Fuhre. The name of the creek is Touleary Creek, although on the topographic and claim maps show Touleary Creek being the next right limit tributary downriver.

Two men mined the mouth of the creek in 1953 then suspended operations (pulled out) when the steamships quit the river in 1954. The mouth of the creek enters the Yukon River 55km upstream of the Yukon-Stewart confluence.

A cat trail follows along the first 5km of the creek. This road was extended from the miner's original road as assessment work for claims that have now lapsed. At the mouth of the creek are two old collapsed cabins. Three hundred metres upstream are old shafts infilled by water and remnants of flumes used for ground sluicing. The workings are on an old creekbed or possible tributary that parallels the

creek. The tributary (old creekbed?) has been widened by a small machine (1950's - D6), and bedrock appears shallow, less than 5m below the surface. The creek has been stripped for 1km from the mouth (assessment work?), and above this widens to 30m wide with a gentle gradient to the 3km mark. From 5 to 7km the valley is constricted into a canyon. Here it meanders and flows rapidly. There is a rectangular, 4x3m pit alongside old claim posts at the upper limit of this canyon. This pit was probably dug at the same time as the pits near the mouth of the creek. Benches can be seen on either side of the creek, although this is not definite since no gravels were located. The pit is on an old creekbed on the left bench of the present stream, at the outside of a meander. At this point, a flat bottomed tributary enters from the right. The creek becomes a flat, wide, gently graded stream for 500m. After this it gradually steepens to its headwaters where it starts from mossy, spruce covered slopes.

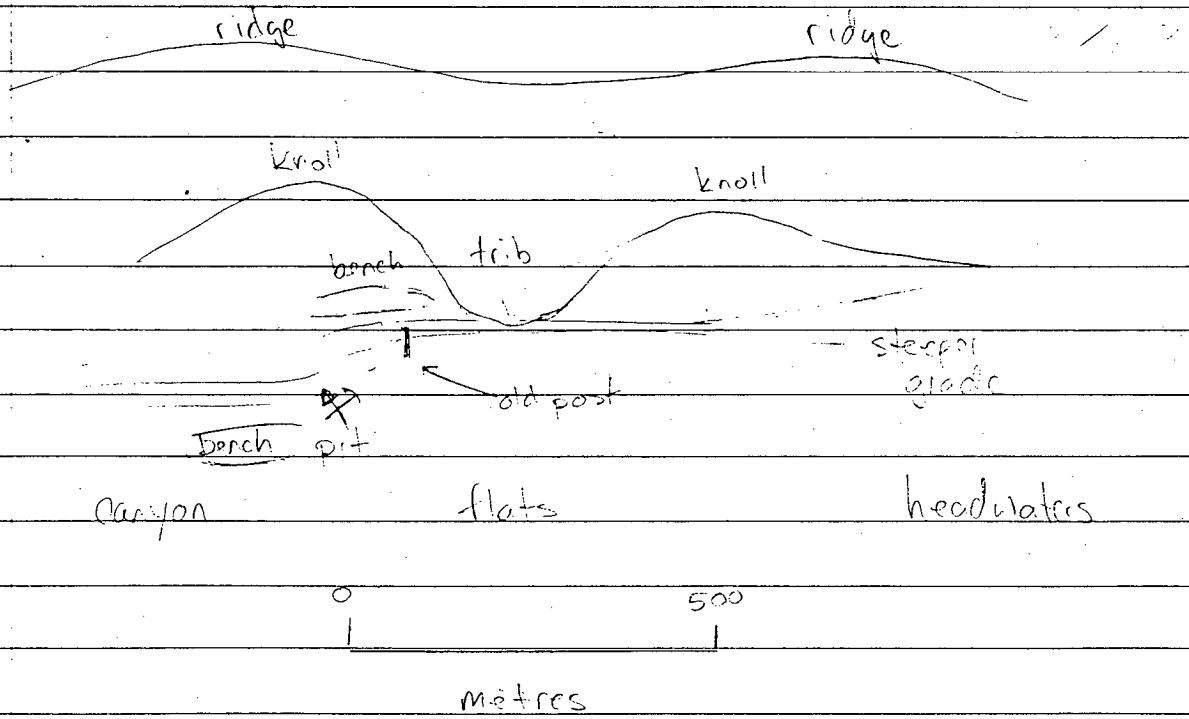
Rocks in outcrop were rare, and consisted of a gneissic variety composed dominantly of quartz/feldspar bands and thinner grey to black bands interlayered with quartz

muscovite schists - Small assymetric folds could be differentiated with the gneiss, and general orientation of foliation was 064/52SE. TRAVE

The creek bed was mostly covered by glacier and gravels could not be determined.

Sketch of (Touleary) unnamed creek at 7 km from the mouth.

Longitudinal section looking west



MAY 16: 5km traverse on Agate Creek NTS 115 O/2

TRAVERSE 115 O/3

90-2

Agate creek drains easterly off Thistle Mountain into McRae Creek 1200M above the confluence of McRae-Barker Creek. Barker Creek drains northerly into the Stewart River 37 km above the Stewart-Yukon confluence. Barker Creek, which was first mined in 1898 is noted for its rich benches. Agate Creek may be a source for the gold.

The creek was mostly covered by ice and gravels could not be determined. It is incised 1 metre into the moss and flows over organic material and rock where the ice was melted. The whole valley is swampy, making hand shafting a difficult task. The valley itself is 30 to 40 m wide, with the creek occupying about 2m width. In places the valley narrows to 15m, approximately 3km from its headwaters. North facing slopes are steep and moss covered, south facing slopes are gently sloped with poplar and spruce groves.

No indications of old workings was seen, but an old line and posts dated 1969 were followed for the last 3km.

The ridge from the peak of Thistle Mtn.

to Agate Creek was walked and outcropping consisted of muscovite quartz schists with up to 10% biotite. Interlayered with the schist was silicious gneiss. Bull quartz boudins to 30 cm thickness follow along foliation which trends 060/52SE dip. The northeastern slope of Thistle Mtn, which forms the ridge between Agate and Thistle Creek is composed of biotite-muscovite quartzite and massive grey quartzite.

Ma

MAY 17: 1.8 km traverse down headwaters of Thistle Creek, NTS 115 O/3.

TRAVERSE 90-3

Thistle Creek drains north from Thistle Mtn for 2.5 km then bends and flows west into the Yukon River 32 km above the Yukon-Stewart confluence. Ma

It has been the most productive creek in the area and was dredged at one time. It is currently being explored by the Hughes-Lang Group for placer deposits.

At the headwaters the valley is narrow and steep, less than 10 m wide. Large spruce cover the lower west facing slopes, open mossy slopes are found to the east. At 1 km from the headwaters the valley opens to 20m width and gravel

benches are located 3-4 m above the present creek bed. Another 500m downstream the valley widens to 100m and flattens into a meandering creek and swampy ground immediately after a short canyon. There are a series of shafts (3 in total) lined parallel to the creek here. The creek has a coarse gravel base.

May 18: office day

Studying claim maps 1150/3, 1150/2, 1155/14, 1155/15 produced four more creek traverses. Time was spent writing up the journal and tidying maps.

May 19: contracted out to Caley's Dream Inc.

Hauled waterpipe to the camp from the mouth of Ballarat Creek for Caley's Dream Inc.

May 20 5 km traverse down Lulu Gulch NTS 115 G/3

TRAVERSE 90-4

Lulu Gulch drains westerly off Thistle Mtn, then north into Thistle Ck, 15.6 km upstream from where Thistle Ck. meets the Yukon River. The mouth of Lulu Gulch is located 1.6 km downstream from the upper limit of dredged ground on Thistle Ck.

The traverse down Lulu Gulch started 1.6 km from its headwaters. The upper end of the gulch is steep and narrow. The east facing to ~~Nor~~ south facing lower slopes are covered by thin spruce and thick willow groves. The west and north facing slopes are frozen, mossy and contain stunted spruce. At 1.2 km into the traverse, a large alluvial fan is seen on the tributary entering from the south. On the west side of this draw prominent outcropping can be seen. This area is a target for further prospecting and possible hand shafting.

The creek opens up into a wide 5m meandering channel 800 m. further downstream from this fan. The meanders are forming gravel bars and islands in the current stream. Flood deposits are abundant in this area as well. The wide channel continues for approximately 400m then narrows into a canyon. Just beyond the canyon is a flat area (possible bench?) about ~~te~~ 3m above the right side of the creek with old cut trees. A quick

look failed to uncover old workings. The channel again widens to about 4m and carries a coarse gravel bottom to the end of the traverse. The grade is moderate to slight. F

Travelling back upstream I came across an old wood box or poles that would have been used to carry their gravels to the creek for sluicing. I flagged up to the traverse line for reference as I was not chaining back upstream and cannot give an accurate location. Swamp grass had grown through and around the box indicating it must predate any modern prospecting

- Outcrop was minimally exposed, with most occurring on the hillslope west of the alluvial fan. The draw that we walked down to access Lulu Gulch was filled with large talus blocks of amphibolite grade metamorphic rocks containing hornblende altering to actinolite, biotite and feldspar.

May 21: Office day, prospecting on Ballarat Ck. NTS 115 J/14

The first part of this day was spent updating maps and the journal. By afternoon I was up above the placer camp looking around an old pit. The pit is located on lease PL 8432 on the right limit of the creek at a small draw. The dirt has been piled around to dam up the draw and was probably used for some ground sluicing. Moss and trees have since grown on the cast-off pile indicating the workings are old. The pit is about 7m above the present creek bed and is infilled by water, making depth calculations impossible. The pit itself measures 45 x 9 m. An attempt was made by myself to expose the dirt/rock piles looking for possible mineralization but the amount of dirt is immense. I travelled up the draw looking for more workings but couldn't find anything of interest. Rock exposed above the open cut/pit is composed of schist-gneiss containing 1/2 to 10 cm thick bands of quartz-feldspar hornblende biotite and quartz feldspar muscovite rich ~~to~~ units. Muscovite defines foliation which is oriented 082/42 south. Cleavage of the ~~qtz~~ leucocratic bands is along the boundaries of the mafic layers. A sample of a 3cm quartz rich band bearing qz veinlets rimmed by epidote following foliation was taken here. Mineralization within the

sample consisted of square opaque metallic mineral (py?) tarnished rusty red. Sample was non-calcareous and non-magnetic. Sample labelled Bal-1. Pit trends 276°.

May 22 Snow.

Heavy rain and snow forced an indoor day. Plans were made and preparations made for a traverse up Discovery Pup, over the ridge and along Blueberry Creek, all located on NTS 115O/3.

May 23 4km traverse along Discovery Pup NTS 115O/3

TRAVERSE 90-5

Discovery Pup is the largest feeder of Kirkman Creek and flows southerly into that creek 4 km upstream from the confluence of Kirkman / Yukon River. It is named Discovery Pup because it was just below this feeder that the original discovery claim was staked on Kirkman in 1898. Kirkman Ck. itself is located 45 km upstream from the confluence of the Yukon and Stewart Rivers. The creek was stampeded in 1914 when up to 40 men worked the benches and main channel during the winter.

There is an old boiler and steampoints and also a few shafts where Discovery Pup meets with Kirkman Creek. The hills on either side of the Pup are steep and lined with groves of poplar and birch. The valley is very wide at the mouth,

approximately 40 m, and flood deposited gravels are visible around here. At 1km upstream the valley narrows to a 10m wide canyon ~~the~~ with a steep grade overtop large rocks and coarse gravels. Ice was covering the creek except for a 1m wide section. An old cut line, probably an old claim line, can be followed along the east bank for 2km. The valley opens up to 30m width 400m above the canyon, but the grade remains steep. The channel is pushed against the left or east bank here. The right bank is gently sloped and covered by spruce. No old workings were seen on the creek, but the traverse mainly followed the steeper left bank and any shafts would be located on the right gently sloped banks.

The outcropping seen was minimal but large boulder fields were crossed that contained leucocratic augen gneiss that appears to be of granodioritic composition. The augens or porphyroblasts were 1 cm subrounded ~~felds~~ milky white feldspars, elongated parallel to foliation/lineation of biotite grains. Up near the headwaters, the rocks were sericite muscovite schists altered by qz-cp-hem veining and local silicification.

May 24: Traverse over from Discovery Pup to Blueberry Creek and 3.3 km traverse up Blueberry Creek NTS 115 O/3

TRAVERSE

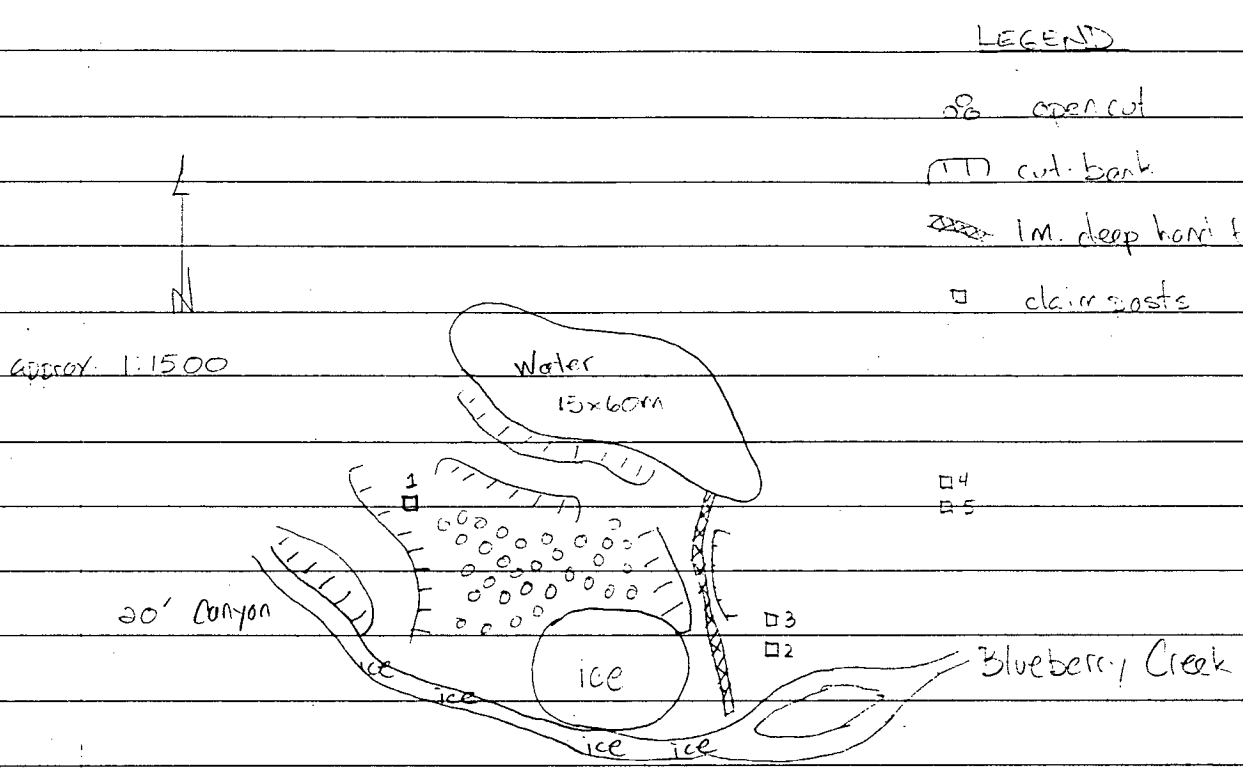
90-6 The ridge between Discovery Pup and Blueberry Creek contained biotite feldspar-quartz schist. The hillside drops very steeply (avg. 35°) into Blueberry Creek.

The traverse up Blueberry Creek covered the open upper half of the creek. Blueberry feeds into Thistle Creek 6 km downstream from Lulu Gulch and is about 2.4 km upstream from the lower end of the dredged ground on Thistle Clk.

Blueberry was hand mined at its mouth and in 1948 to 1949 reportedly had the nicest and coarsest gold of the Thistle area.

The creek is incised into the overburden about 1.5 m and has a 15m to 30m wide valley at the beginning of the traverse. About 250m into the traverse we came upon a large, deep water body on the right side of the creek. This water body measured 60x15m in diameter and had an opencut between it and the creek. There were ~~three~~ four separate mineral claims in the area of which only one, the Big Red, YA 87982 is in good standing. This claim is located on the claim map v nearly 700m downstream from

its true location.



pit about 10' above creek level

Posts
1 Placer post 2, Fred Stretch June 29/86
2 Big Red, post 1, 1500R, 1500N FRED Stretch
3 Min 1, post 1, 1500L, 1500S Bill Lyons
4 Quartz claim, post 1, tag YA84642
5 Quartz claim, post 1, tag YA84643

The open-cut appeared old, and was probably done by horse and scraper, as the dirt pile to the east was covered by 3-4 inch poplar and 1½ inch spruce. Also the pile was not fanned the way bulldozers make them. A small hand trench, about 1m wide by 1m deep led from the upper (south) bank of the water body towards the creek, but couldn't have been a flume as it never attains creek or water body level. The bank south of the water body was about 1m above the open cut and 3 m above the water level of the body. The open cut was dominantly composed of decomposed micaceous schists and scattered throughout were blocks of fractured bull white quartz. Three grab samples were taken from this pit.

Blu-1 Weakly to moderately bedded blue grey coarsely crystalline limestone. <1% fine grained cubic py in sample.

Blu-2 Orange weathered, black calcareous quartz-amphibde schist with graphitic coatings along foliation. Calcite/ankerite veinlets parallel foliation. <1% very fine grained py in sample.

Blu-3 Translucent to white opaque quartz with orange staining along fractures. 10% massive soft grey mineral, graphite, on one side of sample.

The grade of the creek starts to increase from this point onwards. The traverse continued up to where Blueberry Creek forks at its headwaters and continued along an old cut line following the right fork. Quite often the creek became narrow and canyon-like, with small waterfalls during its course. Until into the fork, the right side of the creek gently slopes for about 200m, while the left side climbs steeply.

Very little outcrop was seen on the traverse. Outcrop seen was mostly covered by ice and could not be assessed. This occurred around the large water body. No other signs of work were seen.

May 25: De-mobilize from Blueberry Creek NTS 115O/3.

A full day was taken up by marching over a ridge west of the one we took to access Blueberry Creek, then following our line along the right side of Discovery Pup. Rocks seen on the ridge between the two creeks were more grey to black weathering muscovite quartz biotite felsic schists.

May 26: Office day

The day was spent preparing claim forms and work plans for placer leases as well as compiling lists of claims to research ownership and expiry dates.

May 27: Dawson City.

Travelling to Midway landing with Ron Moisson and Jerry Kruse, then onto Dawson City in Ron's 4×4 Dodge truck.

May 28: Dawson City

The day was taken at the mining recorder's filing claims and leases and researching ownership and expiry dates of existing claims on map sheets 115 J/14, 115 J/15, 115 O/2 and 115 O/3.

May 29
- June 3 Vancouver

June 4 Whitehorse

I went and talked to David Downing in the morning. I showed him the rocks taken off Blueberry Creek as well as the silvery mineral being recovered in the sluicebox by Caley's Dream. This silvery mineral is white grey with a very slight black tarnish. It is ductile and sectile. It is also formed as crystals rather than nuggets. The source bedrock is apparently a dark green to black massive amphibolite. David was oriented towards it being a bismuth mineral, maybe a telluride, whereas I thought it might be platinum.

After talking to David Downing I went

to the mining recorders to pick up the assay coupons and research the claims on map sheet 115J/15 and 115J/10 that are located in the Whitehorse mining district.

I next took the silver sample up to Indian and Northern Affairs Canada out on Range Road. Bill Lebarge was not in, so I talked to Dennis . He thought the silver mineral is native silver or a telluride. He looked at it with the binocular microscope and seemed puzzled by the crystal shape being so pristine, if it had been transported very far, it should be pounded like gold.

While at INAC I researched Thistle Mtn. for the silver prospect The only lode deposit within the area was on Blueberry Creek and is a Pb-Cu vein called the Black Fox. Information on this deposit is in GSC memoir 79 by D.D. Cairnes. I also found the Uranium prospect and platinum prospects. The uranium is located just north of the headwaters of Packer Creek, which originate on the other side of a ridge that ~~feeds~~ forms a large tributary of Ballarat Ck, locally known as Dianne Creek. The platinum is on the northern flanks of pyroxene mountain and is

occurring as placer platinum in the sluices of the placer miners on Walhalla Ck, a tributary or continuation of Scroggie Creek.

The Black Fox Mineral claim is reportedly north of Blueberry Creek, near its head, 1850' above the mouth of Blueberry Ck. Therefore, the pit seen while staking the lease up Blueberry Creek probably isn't the Black Fox. Another discrepancy is that the govt shows the Black Fox located on Lulu Gulch and not Blueberry Creek. The deposit or showing is a 3 foot thick quartz vein trending magnetic north 17° east (approx. 350° true north) and dips 30° to the northwest. It locally contains galena, chalcopyrite, pyrite and malachite.

After finishing at INAC I took my samples into Northern Analytical Laboratories to have them analysed and assayed for Au, Ag, Pb, Cu, Zn plus other specific minerals for certain samples. I forget to get a copy of the requisition form.

June 5: Whitehorse

I went back to Range Road to finish off my research at INAC and find out what the mystery mineral was. Dennis told me it is silver, possibly with other metals. Bill Leblanc was in and Dennis introduced me to him. He hadn't heard of native silver ever being in that area, so his curiousity became aroused. I invited him out to the creek if he wants to come.

I next looked through the GSC OF 1363 1683 and 1364 1684 which are the RGS stream sediment data for the Stewart and Snag mapsheets. Very little useful information could be obtained from them for the Thistle Mtn. area. One tributary on Dianne Creek had 35 ppb gold, and Discovery Pup had 38 ppm Uranium near its mouth.

I then went onto the Yukon Forest Service and obtained airphoto photocopies of my area from Bob Stubbs.

June 6 Whitehorse

It was a rather confusing day filling out a Land Use Permit and a Road assistance form for the planned access we have into the areas we have staked. I also visited the Whitehorse Copper Mine.

June 7 Whitehorse

The only geologically oriented thing I did was talk to Gerald Hayes, assayer and president of NAL.

June 8 Whitehorse

June 9-10 Whitehorse

June 11 Whitehorse to Midway

Spent the whole day loading a semi-truck with equipment for Caley's Dream, then drove out to Midway for an overnight stay then off in the morning (down river).

June 12 Ballarat

Downriver to Ballarat Creek with Maynard Fuhre of Caley's Dream Inc.

June 13. 2 km traverse down the north fork of Kirkman Creek NTS 115 O/3.

TRAVERSE

40-7 Started the traverse on the southside of the headwaters of the north fork of Kirkman Creek. Kirkman Creek flows easterly from Thistle Mtn into the Yukon River 45 km upstream from the Stewart/Yukon Rivers confluence.

We headed down into the creek valley and noticed a brilliant white circular object about 500' above the valley on the north hillside. Climbing up to this object revealed it to be a huge 2×2m square knob of bull white quartz. There were lots of quartz lenses and knobs around this area within a host rock of chlorite muscovite schist. This area will be better prospected later on as an old slash trail leads into it from further up the headwaters of Kirkman Creek.

We descended back into the creek and crashed through the thickest bush encountered yet. The creek valley is narrow, less than 10m wide

and the stream drops steeply, cascading over many little waterfalls. The first tributary encountered came from the right and was very steep itself, dropping off almost into cliffs at its mouth. Just after this tributary, the valley flattens and widens to 20m. Outcrop can be seen along the north hillside forming cliffs of quartz muscovite schists and phyllites. The first draw from the south or on the left enters the creek 650m into our traverse. The mouth of this creek is level with Kirkman Creek and does not steepen until nearing its headwater. This forms a wide (300-400m?) valley area.

The main creek now has 5 times the water volume and is a 1 to 1.5m wide stream. The valley narrows back to 20-30m width and the stream now is pushed against the left bank whereas upstream it was confined mostly to the right bank. This is a good location for a bench or old streambed. At the 1600m point of our traverse the stream has incised 5m below the valley floor, which is now over 50m width. This occurs just upstream from a large tributary entering from the right. This tributary has also cut through the terrace about 5m. After this tributary the stream follows its channel at the same level as the valley.

Why this large terrace is here but not downstream is strange. Perhaps a large water/mudslide came out of the tributary at one time and dammed up the main creek. It is also interesting to note that where this tributary joins Kirkman, both creeks were bone dry and only swampy ponds (stagnant) were visible on the surface. No limestone was seen, so karsting can be ruled out. Who knows where the stream goes? Does it follow some old shafts or drifts?

June 14. 1.6 km traverse up the south fork of Kirkman Creek NTS 115 J/14

TRAVERSE

90-8

Ron Moisson and I started where the north and south forks of Kirkman Creek join, and started hiking upstream along the right bank of the south fork. Once out of the common valley of the two forks, the south fork valley narrows to 15 m and is bounded by steep sidehills. The stream cuts into the south facing hillside which has a flat intermittent terrace (possible bench) along it about 6 m above the present creekbed. This bench seems to alternate between the north and south banks. All draws entering Kirkman Creek are steep and narrow, so much

that they don't show on the claim sheet.

Outcrop is visible on the north hillslopes, forming cliffs. The rock appears to be actinolite chlorite schists with varying amounts of quartz-feldspar and ~~biotite~~ muscovite. The rock weathers rusty colored. Structural data could not be obtained but apparent strike is northeast and dips moderately to steeply to the northwest for foliation. JUN

Just after entering the steep valley of Kirkman south, we crossed over to the left bank and followed it for the length of the traverse. To come back we returned through thick wet bush along the right bank. Three hundred metres downstream from the end of our traverse we came across an old pit. About 30m downstream from this were 3 pits and a collapsed 8'x8' old timers cabin. According to Maynard Fuhre, who drilled on this fork in 1953, they quit drilling just downstream of this cabin, so it must predate the 1950's. A little more downstream we found two more pits, both cribbed. The pits were located near the creek to right against the steep north hillside, a width of 40 m. Once more, just downstream of these last pits was an old trench approximately 13m long. Leading into it was an old cat trail

that becomes the road leading to the mouth of Kirkman Creek. Elevation where this road meets the road that traverses the ridge between Ballarat and Kirkman Creeks is 770 m, and

JUNE 15 Ballarat Creek NTS 115J/14

I went downstream from camp to look around the old placer workings (1983 to 1985) located on the Tara-2, Tara 46 thru 52 and Oro 1-3 claims. The gold that came from this cut was along the left side of the creek and is also the first occurrence of the amphibolite unit, which is the host for the silvery mineral. The right side of the creek bore no gold or carried very poor values. Two tributaries enter around this point, one from the left and the other from the right. Above these tributaries, the gold values on the whole valley were uneconomical, at least to the end of the claims owned by what is now Caley's Dream Inc. The possibility that the left tributary was the gold source justified digging a large test pit near its mouth to ~~test~~ evaluate the creek. No significant gold values were encountered in this pit. A test pit was placed across the valley at the mouth of the right tributary. No gold values,

or very poor ones, were obtained there. Analysing airphotos of the area, shows a slide just upstream from the end of the property that diverted Ballarat Creek and also a locally named left tributary known as Danny's Creek. However this slide happened in 1985, therefore eliminating the theory that Danny's Creek was diverted in ancient times and is the actual source of the gold. Test pits were also placed on this creek as well, and turned up nothing

— According to Maynard Fuhre, gold values had decreased downstream to a point that it was no longer economic to mine in the 1930's, this occurring about 1/2 mile above the 1983-1985 worked ground. Therefore a valid conclusion is that the old valley was steep and canyon like, causing pockets of gold to concentrate where it flattened, and the 1983-1985 cut happened to be one of these pockets It is interesting to note that the valley is also much wider at that location than upstream.

I drove the ATV around the cut looking for bedrock, but recent sedimentation obscured all traces. The tailing piles were very large fan-like features of mixed rock and were not very useful.

I walked up the tributaries to check the pits but they were all partially filled by water and sediment. I did take one float sample of a

light green silicified volcanic (greenstone) that contained translucent quartz veinlets. This sample has yet to be sent out for assay

The amphibolite unit, mentioned earlier, could not be seen in the cut, but occurs as outcrop downstream alongside the road leading to the Yukon River. This unit most likely represents metamorphosed gabbro or diorite sills and dykes within the Yukon Group metasediments. The potential of this rock being the silver/platinum/bismuth (?) metal source warrants further investigation and possible staking of mineral claims over this area.

June 16: Office day

Today was spent updating the journal and redoing the maps, to plot on traverse lines and geology on two different sheets as the one was getting crowded and planning out mineral claims to be staked.

June 17: Preparations for 5 day prospecting trip.

The ATV was serviced and food was cooked up, as well as all prospecting gear packed for a planned 5 day staking and

prospecting trip into Blueberry Creek to cover the large pit found while staking the placer lease. We are going to access Blueberry via the ridge leading from Thistle Mtn. between Lulu Gulch and the north fork of Kirkman Creek.

June 18: Attempt Blueberry

We took the ATV up to the ridge via the road between Kirkman and Ballarat creeks. When we got to the point where we have to leave the road and follow a trail through the bush, we found we did not have the wrenches to take off the trailer from the back of the bike. We then wasted a good hour or two hammering away at the bolt and finally gave up and returned to camp wet and frustrated.

June 19: Attempt Blueberry

After making sure we had the right tools this time, we once more took off up to the ridge. We had to shuttle our supplies across the mountain and finally got to a point where we could not go any further. This happens to be on the north slope of the head of Kirkman

Creek. From here, we faced an eight to ten kilometre hike to where we wanted to stake. As it poured rain and hail around 8:00pm. we gave up yet again and returned back to Ballarat camp. We decided to access Blueberry via Discovery Pup and had to inform the camp of our change in plans as well.

June 20: 5 km traverse on Discovery Pup NTS 115 O/3.

TRAVERSE 90-9

Ron and I travelled up the right side of the Pup this time. It is a gently sloped, spruce covered slope until it steepens, then the major tree cover becomes deciduous. No workings were discovered on this side. The reason for the name of Discovery Pup is that the Discovery claim on Kirkman Creek occurred around the mouth of this tributary. Although no workings were seen, the creek bears flood gravels in a few places (the ice was gone) and the right bank is high enough and favourable enough (appears terrace-like) to warrant shafting.

The creek bed is a mixture of sands (both coarse and fine) and bedrock derived boulders in a 1m incised, 2 to 3 m wide channel. Rocks along the right side of the creek

were identical to the left side and are feldspar porphyroblastic quarto-feldspathic schist (gneiss?). We camped in our old camp of Discovery Pup that night. JU TRAV

JUNE 21: Hike into Blueberry camp NTS 115 o/3

TRAVERSE 90-10 We travelled about 1km further upstream Discovery Pup then hiked up overtop the ridge and down into Blueberry Creek, about 0.5 km east of where we previously accessed the creek. Rock types were feldspathic-biotite quartz schists covered by moss. No outcropping was seen. We arrived at the old pit where we want to start staking and spent the afternoon setting up camp. It was interesting to note that where the ice was located as a large, semi circular glacier just below (south) of the open cut is a 20 m diameter, sloughed in pit. This pit appears to be the Black Fox. Elevation at this pit is 693m.

June 22: Staking mineral claims on Blueberry Creek NTS 1150/3

TRAVERSE 90 11 Ron and I started out from post 1 FRED STRETCH'S Big Red mineral claim. We threw our claims odd left even right for the full 1500' width. It is interesting that Fred has his claim to the ~~west~~ east of the pit and heads north, 1500' right (east). ?? He misses the hole!

We took bearings of true north (360°) and overstaked the Big Red.

The valley is almost 200 m wide, all of the gently sloped spruce covered vegetation on the right side of the stream. The left bank is a steep, near cliff, and continues steeply to the ridge that divides Blueberry from Discovery Pup. The right side starts to climb steeply at the 200m mark from post 1 V1V 1.

Rocks, both talus and outcrop, were absent along the north traverse, a distance of 3 full slope corrected claim lengths. The last set of claims placed us on the north, downhill side of the ridge, overlooking an unnamed drainage into Blueberry Creek. Our elevation at this point was 920m.

We turned off at bearing 090° and placed two claims into the drainage until we were at the proper location for continuing our claim block

due south. Talus exposure was all quartzite with 3% actinolite and chlorite along the planes of foliation. Foliation itself was very poorly developed.

Staking southwards back into Blueberry we crossed more quartzite talus. The slope starts to flatten out 300m from Blueberry Creek and gently slopes into the creek 90m south from the end of claims, the IAN 6 and 7 claims. We then followed the creek back to camp looking for signs of work, but rare were seen.

June 23: Staking mineral claims south of Blueberry Creek NTS 1150/3.

TRAVERSE 90-11 We travelled south up the steep hillside for one claim length throwing 1500' left and right. Rock talus along here consisted of a quartz biotite feldspar schist. The slope is so steep that working would not be feasible on this side of the creek. Shafts should be placed on the right hand or north side of the creek.

Later on in the afternoon I hiked upstream to where we finished staking the IAN claims and recheck my altimeter. Again I followed the creek back downstream, this time along the right bank and did not see any workings.

June 24: Prospecting around the Black Fox pit, Blueberry Creek NTS 115 O/3.

I looked around the pit and traversed down the creek looking for mineralization. The pit was caved in and partially filled with water, but the bank of the creek south of the pit was cut away by the ice and exposed a 2 foot thick yellow stained white opaque quartz vein striking northeast and dipping northwest shallowly, which correlates with D.D Cairnes report in G.S.C memoir 79. Two samples of the quartz vein were taken and labelled Blu-4 and Blu-5. Walking down the creek you entered into a canyon-like channel about 6m [illegible] either bank. Banded, blue grey limestone float was in abundance here. Rock exposure along the south bank was a quartz rich biotite schist. Another sample, Blu-6, was taken from the creek here and is probably quartzite from upstream.

June 25: Hike out of Blueberry Creek NTS 115O/3

We walked out of Blueberry Creek and descended into Discovery Pup approximately 500 m above our number 2 placer post. We then travelled down the right side of the stream to our ATV and returned to Ballarat camp. No workings

were seen and the streambed was dominated by medium gravels and cobbles of various lithologies.

June 26: office day JV

Spent the day cleaning up and writing out my field notes as well as putting the geology and sample locations onto my good maps. I also sat down and wrote out my rock sample descriptions.

June 27: Staking mineral claims on Ballarat Creek NTS 115J/15

JV

I went down to Dianne Creek, the first large tributary of Ballarat, and placed two hardrock claims starting at the mouth. Dianne Creek headwaters share the ridge with Pedlar Creek headwaters, which bears the uranium rich water. As well, there is a tributary to Dianne Creek that had a weakly anomalous government geochemical sample on it (35 ppb Au). Testing of Dianne Creek near its mouth did not yield any gold. A magnetometer survey done over the mouth showed mag. highs on the west side of the main Ballarat valley as well as highs upstream on Dianne Creek. I hiked over to the west side, which is where we placed some shafts in 1980, but just came upon swamp and vegetation. The mag high cannot be

substantiated without trenching. Note that the shafts never got to bedrock due to flooding.

June 28: Upriver to Midway Lodge.

Ron and I took one of the boats upstream to Midway and headed into Whitehorse. Ron had to do business in town and have his back fixed, so I went along to talk to David Downing and Jim Symington, who both work for the YTG.

June 29: Whitehorse

I first went to see Jim Symington about our application for road assistance. We had not heard anything on it for almost a month. I could not pick up the mail, so I had no idea if we had a letter confirming our application. Jim was not in so I popped over to see David Downing. However I was beat out by some other soul so I went back to my hotel room and described rock samples and filled out assay forms. I have found it better to label the samples in the field, mark their location on the map, take any structural measurements, then describe it back in camp where I can use my toys. This time I waited for town.

mainly because this was an unplanned trip. After finishing with my rocks I went for lunch (who can you reach during lunch hour in whitehorse?) and returned to Jim's office. He was in, so I chatted with him and he gave me a photocopy of the letter they sent out. I left the office a little unsure if we were going to get assistance for our roads. David Downing was still not in so I phoned the lab (NAL). Gerald Hayes was not in either. This is Friday afterall. Finally D. Downing had time for me at 4:00 pm so I intercepted him and asked a few questions. I then dashed over to the lab to take in my samples and pick up the results from previous shipments. The hardcopies were still not available. After the lab shut down, Gerald and I ran some tests on the silvery mystery mineral. It turns out to be amalgam, a mixture of Hg and Ag with Au. We only analyzed a small amount and didn't weigh it, so values on it could not be ascertained. However it did go to the detection limit for silver.

June 30: Whitehorse to Midway.

We left Whitehorse around 3:00 p.m and arrived in Midway around 7:00 to fix Rambo, our wonderful boat. We decided to get an early start in the morning.

July 1: Downriver to Ballarat Creek.

We got our early start and arrived at Ballarat Creek by 10:30 am. At 12:30 pm the people from Midway Lodge phoned camp to say we were on our way. Around 2:00 pm a truck showed up to take us to camp. Not a fun day. I spent the rest of the afternoon planning the best way to stake Thistle Mtn. with mineral claims.

July 2: Office day, preparation for 7 day prospect trip.

I spent the day trying to catch up on my bookwork and also gathered everything we needed for a 7 day trip into Lulu Gulch, where we would cover the north flanks of Thistle Mtn with mineral claims. We also serviced the ATV's.

July 3: Sampling placer cut on Ballarat Creek NTS 115J/14

I took Ron up to the present cut on Ballarat Creek to show him what creek gravels look like. We then hiked up to the large pit which has been partially drained when the backhoe was up there stripping ground. We poked around the pit for a while then went back to the cut. I took some chip samples of the bedrock, black, massive to foliated amphibolite which covers the whole cut. I labelled the samples Bal 7-12 and gave them assay numbers 1605 to 1610. The samples were magnetic and contained blebs of pyrrhotite and fine grained disseminated cubes of pyrite. One sample, was a 12cm brown colored quartz lens oriented 120/60 NE, parallelling foliation. (Bal -11, 1609)

July 4 Accessing Lulu Gulch NTS 115O/3

We spent the day on the ATV's getting our gear down into Lulu Gulch approximately where the government maps place the Black Fox mineral prospect. The area is open and sparsely vegetated so a large pit should be seen from atop Thistle Mtn. None can be seen. Set up camp

July 5 Staking mineral claims FAR 1-6, NTS 115 O/3.

TRAVERSE 90-12

Ron took the ATV up to the road to pick up some claimposts. I hiked to the summit of Thistle Mtn looking at talus fields as I went. Rock types are placed on the claim-geology map NTS 115 O/3, and varied from biotite rich quartzofeldspathic schist to quartzo-feldspathic muscovite and muscovite-quartz schist.

We used the peak of Thistle Mtn as our location point and started bearing true north. By the end of the day, we crossed Lulu Gulch at point 180m on line FAR 5/6. After finishing off the claim, we hiked down to the creek and followed the right or north side down to camp. No pit was seen.

July 6 Staking FAR 7-18, NTS 115 O/3

TRAVERSE 90-12

We traversed upslope to where we left off yesterday and finished our line north. Posts 2 FAR 7/8 are on top of the north ridge of Lulu Gulch among garnet bearing amphibole quartz feldspar schist. The line north went to posts 2 FAR 9/10, then we turned west to cross 3000' to get to #1 posts south. While

traversing westwards we through a couple of claims to the right, covering the headwaters of an unnamed draw between Dollar and Pinnacle Gulches. TRA
Once headed south, we crossed over the north ridge of Lulu again, with the rock type over here consisting of muscovite quartz schists. The slope down into Lulu Gulch was heavily vegetated and once we hit the creek, we headed upstream to our camp looking for the pit. No success We have now covered 3000' of the headwaters of Lulu Gulch.

July 7 Staking FAR 19-22, NTS 115 O/3

TRAVERSE 90-13 After strolling back along the creek to our line downstream we continued on the south slopes of Lulu Gulch at bearing south. Posts 2 FAR 21/22 found us just on the Lulu side of the west ridge that runs from Thistle Mountain between Kirkman Creek and Lulu Gulch. A quick glance at the rock type revealed hornblendite, elongated amphibole laths lineated or acicular in a finer grained felsic matrix. Lightning forced us off the ridge.

July 8. Prospecting along Lulu Gulch NTS 115 O/3.

TRAVERSE 90-14

Ron and I walked downstream from camp looking for the Black Fox pit and also intent to relocate the old dump box we had found on May 20. I stayed on the right slope just below treeline while Ron travelled along the creek. We did not find any workings for the 2.5 km down to the dump box. The box measures 2 feet by 2 feet and is held together by manufactured nails so it can't be from the turn of the century. The box is in a slight depression overgrown by swamp grass and moss. This depression has short wood logs along two sides of it which may be cribbing.

We travelled up and down the creek for almost 1/4 mile (400 m.), then hiked up a right limit tributary looking for shafts. None were located.

I can only surmise that the box is on top of the old shaft or was carried upstream by the old timers before being tossed out. We trekked back to camp along different routes and still found no workings.

JULY 9 Prospecting the north ridge of Lulu Gulch NTS 115 O/3

Ron and I hiked to the top of the ridge north of the creek and started to map and break open outcrop. Rock type is located on the geology sheet for 115O/3 and was a mixture of quartzite, gneiss-schist and biotite quartz feldspar schist with garnet. Thee are many quartz lenses within these rock types (except the quartzite) and though not all were opened, we found nothing in the ones we looked at. Sampling is difficult because if the rock appears barren you don't know whether it carries values or not and cost would be too high to sample everything. We kept our eyes open for shear zones and alteration but none of the latter was found and the sheared quartzofeldspathic schists did not appear mineralized.

The rock grades into a garnet-amphibole quartzofeldspathic schist as you go west towards post 2 FAR 7/8. Foliation across all units is generally oriented 060/60se.

Once at the highest point on the ridge, we followed the spine north off our claims mapping chlorite muscovite schist and quartzite with layers of white feldspar. This ridge runs between Dollar Gulch and the unnamed gulch that we staked the headwaters of.

We traversed back to the highest point and headed west along the ridge to our other claim line. Rock graded from garnet bearing to biotite rich to muscovite rich

quartzose schists.

Only one sample was taken off the ridge, near posts 9 FAR 9/10. It was labelled Lu-1 and was a yellow red stained quartz lens in biotite quartz schist. Assay ticket number is 1614.

July 10: Hike out of Lulu Gulch to Ballarat camp NTS 115O/3, 115J/14

Demobilizing Lulu camp and getting back to base occupied the full day. Two chip samples, THIS-1 & THIS-2, were taken from the west ridge of THISTLE MTN. Both samples came from white quartz lenses, THIS-1 in a hornblendite host, THIS-2 in a biotite quartz schist. Both contained a dark grey cubic mineral with a metallic luster and red sheen. A pale yellow white streak may pin it down as sphalerite. The occurrence of this mineral was spotty in the quartz lens and could not be found elsewhere or in quantities at the sample sites.

July 11: Office day

Most of the day I spent filling out claim forms while Ron cleaned up our gear and stowed it away. I then added the geology, sample locations and traverse routes to

My maps. I prepared to go to Dawson City tomorrow to record the claims.

July 12: Upriver to Midway Lodge.

I followed Jerry Kruse, who made a fuel run to Ballarat, upriver and stayed overnight at the lodge.

July 13: Dawson City

I spent the full day recording 40 mineral claims and researching ownership and expiry dates on all claims on maps 115 O/3, O/2, J/14 and J/15

July 14-15 Dawson City

Days off, back downriver the evening of the 15th.

July 16: 1.5 km traverse up the north fork of Kirkman Creek NTS 115 O/3

TRAVERSE

90-16 Ron and I took the ATV over the ridge to the junction of the Kirkman Creek forks. We travelled 1 mile upstream looking for workings in the wide, gently sloped valley. The left slope has the creek against its toe and climbs sharply to a ridge while the right slope

has a gradual rise for 200m before taking off at steep angles. About 800m from the junction the right side becomes a terrace. In fact the whole right side seems to step up to different benches for the whole 1.5 km distance, then stays constant in a narrower valley. The 1.5 km mark placed us atop the canyon where Kirkman Creek seems to go underground. I travelled back along the benches looking for gravels and Ron followed the creek. Once back at camp, Maynard Fuhre asked us about the large pit located on the left side of the creek about 600 m from the fork junction. We did not see this pit, so another traverse is required.

July 17: Staking mineral claims NEAR 1-12, NTS 115O/3, 115J/14.

TRAVERSE 90-17

Ron and I took the ATV to the peak of Thistle Mtn. and continued the FAR 1/2 claim line southwards. Vegetation consisted of thick underbrush and moderate spruce cover once on the lower slopes. The upper slopes had small cliff-like outcrops of muscavite quartz schists with varying amounts of biotite.

At the 381 m point, line NEAR 9/10, the compass needle started to deflect easterly. Once across an upper tributary, it seemed to correct itself. We probably passed over one of the black amphibolite sills which contain magnetite.

We crossed Ballarat Creek at 140m on line NEAR 11/12. We were located across the valley from the large pit on Ballarat Creek at 240m on this same line.

Rock talus seen at posts 2 NEAR 11/12 is granodiorite schist of the Kelly Gneiss group mapped by Tempel-Kluit (1974)

July 18: Staking NEAR B-30, NTS 115O/3, 115J/14

Traverse 90-18

We took the other ATV to the ridge and continued a line south from posts 2 FAR 21/22. The route took us across the upper catchment for the north Kirkman fork then over the ridge and along the upper right slopes of Ballarat valley.

Quartzite talus is seen around posts 2 NEAR 23/24. Vegetation is thick and going was difficult trying to keep a straight line. We started climbing out of Ballarat valley on line NEAR 27/28. We reached the ridge that the road runs along at 150m on line NEAR 29/30. The rock on the ridge appeared similar to the granodiorite Kelly Gneiss. When we ended our line, we were 5m northwest of the ridge road. We then picked up the bikes and headed into camp. I'm leaving the prospecting of the south Thistle ridge for a later date.

July 19: Prospecting the west ridge of THISTLE MTN., NTS 115 O/3

TRAVERSE 90-19

We started at posts 1 NEAR 13/14 and started mapping and sampling the ridge that elongates west from Thistle Mountain. The ridge was all hornblendite with varying amounts of muscovite in the fine grained quartz feldspar matrix. The grain size of the mafics varies from long laths to 5cm x 1cm in size to fine grained biotite-amphibole crystals. Where the ridge widens to the north you come upon quartz dominant quartzofeldspathic schists but the contact is under the surface and can only be inferred parallel to the contact seen between posts 1 NEAR 13/14 and posts 1 NEAR 1/2.

Foliation across the outcrop generally trended 060 with 50 to 80 degrees SE dip. Jointing was primarily 040/vertical.

Five chip samples were taken and labelled THIS-3-7. Two samples were of white quartz lenses (1617, 1618); one was of silicified hornblendite (1619); and two samples of garnet quartz altered (silicified) hornblendite (1620, 1621). Locations of these samples are on the sample location map for this area.

July 20 Office day

I spent the day updating my maps and catching up on the diary. I also filled out the 30 claim forms needed for the hardrock Ran and I staked.

July 21: Office day

I spent the day roughing out promotional prattle on the placer leases that Sparkling Minerals has staked. I also wrote an update on the project for two investors, Jack Andersen and Danny Miller.

July 22: Office day

I continued roughing out my 'creek reports'. So far I covered No-name Creek, Agate Creek, and the south fork of Kirkman Creek.

July 23: Office day

One more day spent on polishing the above reports and roughing out Lulu Gulch and Blueberry Creek.

July 24: Contracted out to Caley's Dream Inc.

JULY 25: 1.2 km traverse up the south fork of Kirkman Creek
NTS 1150/3

TRAVERSE

90-20 I went out with Maynard Fehr and he staked the first mile of the south fork on Kirkman Creek, while I followed the trail Ron and I had taken before to the old cabin and shafts. The skid road takes off 1/4 mile from post 1 and continues for almost 1/4 mile. From the end of the road, which culminates in the 40 foot overgrown trench, it is another 1/4 mile to the first shafts, then 42 m upstream to the cabin. From the cabin it is 326 feet to the final shaft and 1500 feet to post 2 placer lease. Post 2 is located approx. 30 m above a tributary entering from the left limit. The valley is narrow and starts to have an increased gradient. We put a claim on top of the placer lease which took us to a slightly wider valley with an obvious bench along its right limit.

July 26: ½ office, ½ Caley's Dream Inc.

With the crew out I kept getting interrupted in the office to come help put things together so Caley's Dream can get back to mining. A helicopter flew in that noon with Kelvin Leary from Dawson district forest service and Peter X from Transportation. They wanted to see our road right of way for the RTAP program but fog & rain prevented them from achieving this task.

July 27: Contracted to Caley's Dream Inc.

July 30:

July 31: Downriver to Tulare (No-name) Creek with Maynard Tuhre and Deric Dodge. NTS 115 5/14

All three of us loaded up in the yellow boat and travelled downstream to inspect and sample the mouth of Tulare Creek. The creek was staked in 1948 by J. Kirkman who named the creek after his hometown in California. Some of the shafts seen around the mouth may be his. Panning from the old cut found one flake of gold for 8 seven pans. However, on Ballarat Creek the gold pan is not a reliable prospecting tool. One pan was taken of gravels above a bedrock

rim outcropping in the creek. Concentrates were abundant but no gold was seen. I followed the old ditch that was used for the ground sluicing, and it appears to be an old streambed that was dammed off by the miners.

August 1: Upriver to Whitehorse with Deric Dodge.

August 2: Whitehorse

Filing claims in the mining recorders.

August 3-8 Vancouver

Spent one day typing up reports on the creeks traversed.

August 9-13: Contract to Caley's Dream Inc.

August 14: Ballarat Creek NTS 115J/14, 115J/15

Back to the mystery of the gold source for downstream on Ballarat. Just below a left limit tributary that forms the east fork of Ballarat Creek is a flat 300m long plateau about 30 feet above the main creek on the right (south) hand side with the

idea this might be a bench that the gold was washed from, I hiked up and found a bank where I might be able to expose any gravels. I tried in a couple of spots but the ground was frozen solid about two feet down, just through the moss and surface thawed soil.

I then travelled up the east fork of Ballarat for one mile, following a cat road that was put in to test the creek. The test pits have filled to the level of the valley with water. About 2500 feet (800m) up the tributary are three old shafts and a couple of steampoints. The creek meanders across a wide u-shaped valley floor (150-200 feet wide) and is overgrown by swamp grass and moss. Rock seen is subrounded and transported downsteam

From here, I went back towards camp and hiked up another left limit tributary, this one entering kilometers downstream from camp. The mouth of the tributary hosts a large log work shop and remnants of the old camp of Ballarat mines who mined the creek in the 1950's. The creek is underground at this point and doesn't appear on the surface for almost 300m upstream. At this point a huge old dam across half the narrow (20'-30') valley can be seen. Off this dam a flume follows along the east bank that provided water

to the camp. A little further upstream is part of a co-discovery claim owned by Maynard Fuhre. A shaft was sunk to bedrock at this point and has since filled with water. There are two other shallow pits less than 250m further upstream. These were placed by the same men who did the shaft below. The creek is narrow and fairly deep in places. It contains enough water to sluice but the valley would be too narrow to effectively mine.

August 15 -19 Contract to Caley's Dream Inc.

August 20 5 km traverse up unnamed l.l. tributary of Ballarat Creek, NTS 115J/15 (l.l. = left limit).

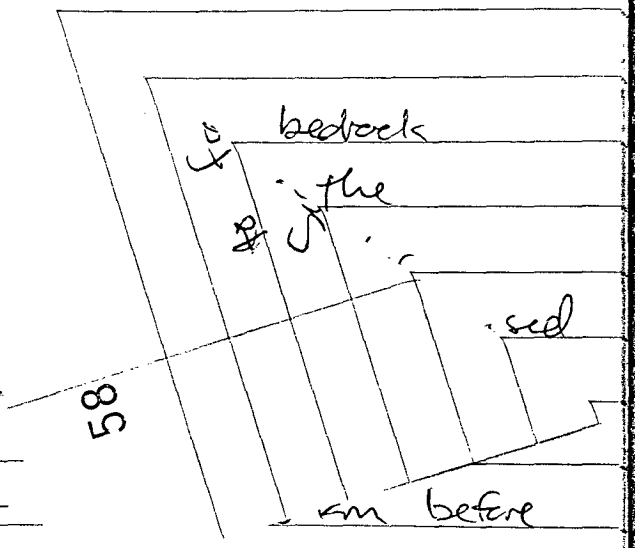
Pouring Rain

This unnamed tributary of Ballarat Creek is locally known as Dianne Creek. Maynard Fuhre, Bob Gates and I placed several shafts across the valley where Dianne flows into Ballarat. This occurred during 1980. Tara-Pacific (now Crew Natural Resources) optioned this ~~grou~~ tributary in the mid 80's and has carried out magnetometer surveys over various parts of the creek. The surveys were done by MPH consulting first

and later by Yukon Engineering
A good line has cut (a 5' swath) along the creek valley and old flagging is visible from an elapsed placer lease. There is a 1500' discovery claim at the mouth owned by Lee Olynyk but the above ground is all open. Maynard Fuhr walked a D8K approximate total distance of 0.5 miles up this valley in the early 1980's when he owned the property. He dozed three large pits down to bedrock and reports poor results, however testing was only done with a goldpan. The test holes are filled with water and the dirt piles are overgrown by willow and young alder. A look around the piles did not reveal much as no shovel or pick was along for excavating.

Only 300 metres upstream of the last pit a 5 foot square depression with a "ditch" approx 50' long trending parallel to the creek, going downstream can be found. A better look is required here for the depression appears to be a possible collapsed drift. Visibility is very poor at this time.

The stream wanders all over indicating the drainage is old. Oxbow sloughs and old dry channels are seen along the whole



creek, although they
midstream.

The valley is even
until narrowing at th
a c right limit dra
creek valley the valley
creek grade steepens for
opening at and flattening into a wide
flood plain area. This area exists for even
200m then the valley starts to climb
steeply as creek grade increases.

The amount of water in this creek
is amazing at the moment. The creek is
30 feet wide in places due to all the
rain.

October 10: Walk the excavator into the north fork of Kirkman Creek and place holes to bedrock.
NTS 115 0/3

Maynard Fuhre and I walked the hoe
onto his placer lease 800 metres upstream
from where the north fork of Kirkman crosses
the road leading down to the north. At
this location, ~~the~~ a large area had been
stripped by the bulldozer and a 50 foot long
trench was taken down through large boulder

to frost. This was done on October 1 and September 30 to satisfy the requirements to convert the lease to claims.

The valley is 400 feet wide with a large stream bed often pushed tightly against the left limit of the valley. The south (left) side is a steeply rising hill with the north side comprising a gentle slope for 200 m before rising steeply. The excavator placed holes down alongside the creek where the ground is thawed. The holes were taken to bedrock then the material (sloughed in gravels + bedrock) was washed through a 1 Yd test box. Small flecks of gold were found but nothing could be considered above background value. The hoe placed a couple more holes in this area, then placed a trench across the stripped area to expose an area for thawing next year.

I took the hoe 2000 feet further upstream and placed two holes along the creek where the main valley narrowed down to 200' width. The first hole encountered frost at 8 feet. The second hole went 15 feet thawed ground to bedrock. The large boulders seen downstream were not encountered. It is

interesting that upstream here the bedrock was 3' deeper than downstream. The tested material revealed nothing better than background. The bedrock was comprised of decomposed black to green actinolite-chlorite schist (Yukon group hornblendite).

I next took the hoe down below the stripped area approximately 1000' and tried two holes, either side of creek, but could not overcome the seepage. These two holes were abandoned and the hoe was taken over to the south fork of Kirkman Creek.

October 11: South fork Kirkman Creek. NTS 115J/14

The south fork was walked and notes were taken on June 14. Since then, the number of shafts clustered around the cabin (in a 500ft radius) number 9. Handmining must have occurred here.

The old road used to skid in the drill in the 1950's was reopened and I took the hoe into the creek to place some holes to bedrock. The first two holes were spaced 100m apart, 400m upstream of the #1

placer lease post. Bedrock was reached at 14' and is composed of decomposed actinolite-chlorite schist of the Pelly gneiss amphibolite.

Gravels were stockpiled around the shafts and as the day was getting late, we panned some of the material. The pans were getting nice coarse flakes.

October 10: Test south fork of Kirkman Creek NTS 115J/14

We returned to Kirkman Creek to sluice the gravels through our test box. I went to the top of the hill to try and get our road across Thistle mtn to connect with the Scroggie Road. The day was a waste for me as the road is not possible without great expense.

Maynard Fuhre took over the sampling on Kirkman Creek. Three more holes were placed going upstream to bring a total of five. I wanted to have the hoe go up to the old workings area and put a hole down, but they did not get that far. Overburden is 3 to 5 feet and gravels continue for 6 to 8 feet before hitting the decomposed bedrock. The gravels were sluiced but very little gold was panned.

October

October

October

The test box is the same one we used for testing our placer cuts on Ballarat Creek but the skids were cut off so we had to build a ramp for it. I don't think the grade was as steep and the water was forming ice in the sluice box wherever you weren't running material through. Regardless of what the problem was, the box did not work well as a large coarse nugget was found in the very bottom of the box. The lower mat was never cleaned between holes, so where it came from is not definite but it showed up at the last hole, nearest to the old shafts. This fact has just invalidated all our testing and the gravels must be resluiced next season to obtain a true representation of what may be in the ground.

October 13-14: Building road into No-name Creek NTS 115J/14

October 15: Testing on No name Creek.

October 16:

The bulldozer started a road down the creek and stripped an area above the draw where we brought the equipment into the creek.

The creek is in a 40 foot wide steep walled valley with no possible alternatives for a channel but straight down the valley. There are no possible benches or slide covered channels as on Ballarat Creek, mainly concluded from the valley width. I figure the paystreak, if present must be somewhere in the valley on the western side of the creek (since the creek is almost right to the east slopes). Other than 6 feet west of the creek, the ground is frozen. Bedrock is only 9' ~~at the~~ deep at the creek and increases to 12' at the edge of frost, due to climbing slopes. The gravels are coarse, pebbly to small boulders. There aren't any large boulders. Bedrock is black decomposed Pelly Group Amphibolite with abundant biotite. Five holes were started, four taken to bedrock, and three tested. The spacing from the furthest hole downstream (300 feet below the draw confluence) to the furthest upstream is 500 feet (200 feet above the confluence). Water seepage did not occur until near bedrock. The upstream hole turned up burnt wood on its east limit, so someone must have started and given up on the shaft.

The material was washed through our

wonderful test box. The weather was even colder so that the gold pans would slush up as soon as you took them out of the water.

We boiled water and poured it down the box after and before a test. The gold was present in very satisfying amounts however the lower half of the box gave better pans than the upper half so once more we are losing gold and the ground must be retested.

The holes suffer from sloughing, so control on the materials ran through the box was difficult. I tried to get the two feet of gravel above bedrock and one foot into bedrock, however water seepage and sloughing caused dilution of the gravels.

A log was not taken on the holes however organic overburden is not existent. About two feet of moss occur overtop sandy brown soil. Gravels are coarse pebbly with local lithology rock and boulders.

The gold obtained was coarse, solid 3 dimensional stuff, indicating (inferring) that we came near the paystreak if not on it. The gold upstream of the drum was finer, but the same amount was taken out as the holes down below when you

put them on a per yard basis.

The bulldozer broke down in the afternoon of the sixteenth so we had to get it and the hose out of the creek. This is part of the reason the testing was not done with more control. The upstream ~~east~~ side could have been tested on the east side of the creek as the stream is more centrally located in the valley here. And the draw we built the road down into could have been tested as ~~the~~ a possible source for the coarse gold found just downstream of its confluence. The major problem in the testing tho, was the weather. It was just too late to be trying ~~out~~ to sluice material.

Northern Analytical Laboratories ltd.

June 14,1990 Work Order # 34639

Farrell Anderson

Assay Certificate For Samples Provided

Sample	ppb Au	ppm Ag
BAL-1	<5	
BAL-2	215	
BAL-3	140	
BAL-4	292	0.5
BAL-5	195	
BLU-1	165	0.8
BLU-2	13	0.4
BLU-3	183	0.2

Au -- 30g Fire Assay/AAS
Ag -- Aqua-regia Digestion/AAS

Applied Science Technologists and Technicians of British Columbia
6992
GERALD F. HAYES
A.Sc.T.

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

Northern Analytical Laboratories ltd.

June 14,1990 Work Order # 34659

Farrell Anderson

Assay Certificate For Samples Provided

Sample	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Co	ppm Bi	ppm Mo
BAL-1	7	51	17				4
BAL-2	24	258	106				4
BAL-3	30	108	61	38			<1
BAL-4	56	106	17				<1
BLU-1	61	125	21				3
BLU-2	63	32	20				4
BLU-3	222	1	27		5	88	9

Metals -- Aqua Regia Digestion/AAS Geochem

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105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE REPORT MAILED: July 13/90

GEOCHEM PRECIOUS METALS ANALYSIS

Northern Analytical Labs. Ltd. PROJECT WO#34639 FILE # 90-2254
105 Copper Road, Whitehorse YT Y1A 2Z7

SAMPLE#	Au ppb	Pt ppb	Pd ppb
BAL 3	60	1	2
BAL 4	85	3	24

30 GRAM SAMPLE FIRE ASSAY AND ANALYSIS BY ICP.
- SAMPLE TYPE: Bead

SIGNED BY. C. Leong D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

CAVENDISH ANALYTICAL LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3B1
Ph:(604)299-2560 Fax:299-6252

CERTIFICATE OF ANALYSIS

TO : NORTHERN ANALYTICAL LAB LTD.
105 COPPER RD.
WHITEHORSE YUKON

PROJECT : 34639
TYPE OF ANALYSIS : ICP

CERTIFICATE # : 90621D
INVOICE # : GENERAL JUNE
DATE ENTERED : JUNE 21\1990
FILE NAME : I621D
PAGE # : 1

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM U	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	PPM B	% AL	% K	% SI	PPM W	PPM BE
	BAL-5	2	171	6	38	0.6	40	63	363	6.39	5	NA	ND	ND	154	1	2	2	213	2.80	0.62	1	57	1.87	175	0.16	333	2.06	0.00	0.03	6	6
	STANDARD B	30	154	106	122	0.6	12	5	130	0.81	26	303	ND	ND	20	2	5	21	11	0.56	0.02	8	165	0.29	284	0.02	33	0.32	0.01	0.04	24	1

CERTIFIED BY : W. Pinnell

Northern Analytical Laboratories ltd.

July 5,1990

Work Order # 34686

Farrell Anderson
Sparkling Minerals

Assay Certificate For Samples Provided

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
1601	<5	<0.1	11	141	19	51	3
1602	19	<0.1	8	207	38	64	4
1603	<5	<0.1	13	58	33	55	6
1604	<5	<0.1	3	35	36	124	29
1605	<5	<0.1	202	17	25	77	8

Sample	ppm Ni	ppm Co	ppm Cd
1604	46	17	6.8
1605	9	8	10.2

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A.Sc.T.

Au -- 30g Fire Assay/AAS
Metals -- Aqua Regia Digestion/AAS Geochem

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Northern Analytical Laboratories ltd.

July 23,1990

Work Order # 34739

Farrell Anderson
Sparkling Minerals

Assay Certificate For Samples Provided

Sample	ppb Au	ppm Ag	ppm Cu	ppm Ni	ppm Co	ppm Pb	ppm Zn	ppm Cd	ppm As	ppm Sb
1606	<5	<0.1	66	12	139	14	51	1.1	60	<1
1607	<5	<0.1	121	11	247	10	34	1.6	106	2
1608	<5	<0.1	139	16	333	2	35	1.6	124	1
1609	<5	<0.1	6	8	31	5	8	<0.1	97	<1
1610	3446	<0.1	<1	10	<1	2	9	<0.1	82	<1
1614	10	<0.1	11	11	1	5	11	0.2	96	<1
1615	12	<0.1	<1	2	<1	2	16	<0.1	91	<1
1616	12	<0.1	<1	7	<1	<1	8	0.1	122	<1

Au -- 30g Fire Assay/AAS
Metals -- Aqua Regia Digestion/AAS Geochem

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Northern Analytical Laboratories ltd.

August 16,1990

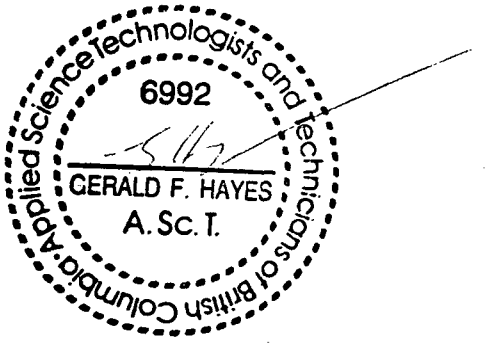
Work Order # 08278

Farrell Anderson
Sparkling Minerals
Bag 2780
Whitehorse, Yukon
Y1A 3V5

Assay Certificate For Samples Provided

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn
1617	16	0.1	31	16	68
1618	5	0.5	122	11	19
1619	<5	0.1	11	10	12
1620	<5	<0.1	6	15	11
1621	<5	<0.1	16	8	13

Au -- 15g Fire Assay/AAS
Metals -- Aqua Regia Digestion/AAS Geochem



ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

CERTIFICATE OF ANALYSIS

TO : NORTHERN ANALYTICAL LABORATORY LTD.
105 COPPER ROAD
WHITEHORSE, Y.T.

PROJECT : ?

TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 90469
INVOICE # : 10625
DATE ENTERED : 90-09-26
FILE NAME : NAL90469
PAGE # : 1

PREFIX	SAMPLE NAME	PPM W
P	1617	2
P	1618	2
P	1619	20
P	1620	50
P	1621	40

CERTIFIED BY : C. Rossbach

Northern
Analytical
Laboratories ltd.

September 20,1990

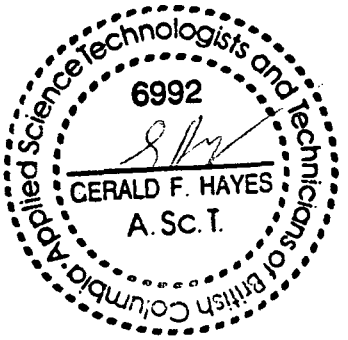
Work Order # 08377

Sparkling Minerals
Bag 2780
Whitehorse, Yukon
Y1A 3V5

Assay Certificate For Samples Provided

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
1622	50	0.5	465	64	3370	70	77
1623	13	0.8	432	83	132	42	71
1624	51	0.4	15	40	185	18	62
1625	>5000	53.0	10	>10000	4110	<1	56
1626	675	1.8	7	382	182	<1	43
1627	108	0.4	5	33	44	<1	40

Au -- 30g Fire Assay/AAS
Metals -- Aqua Regia Digestion/AAS Geochem



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Northern Analytical Laboratories ltd.

September 20,1990

Work Order # 08377

Sparkling Minerals
Bag 2780
Whitehorse, Yukon
Y1A 3V5

Assay Certificate For Samples Provided

Sample	oz/t Au	% Pb
1625	0.925	1.53

Au -- 1AT Fire Assay/Grav
Pb -- Aqua Regia Digestion/AAS Assay

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BLUEBERRY CREEK

steep valley

PUP

wide, flat valley

65' valley

DISCOVERY

30' valley

150' valley

KIRKMAN CREEK

LULU GULCH

6'

10'

alluvial fan

steep, narrow valley

+4883

60' valley

25'

10'

steep, narrow valley

flat draw

10'

30'

flats

100' valley

10'

70' valley

steep, narrow valley

10'

steep, narrow valley

steep valley

150' valley

flats old creek channel

30' valley

old creek channel

100'

30'

THISTLE CREEK

300' valley

flats

steep valley

AGATE CREEK

130' valley

300' valley, flats

BARKER CREEK

NORAE CREEK

very steep scree

139°00'W

63°00'N

70' valley

710'

old channel right bank

15'

old creek channel, left bank

60' valley

old meandering stream

BALLYKAT CREEK

90'

100' valley floor

70' valley

old creek channel

wide, open valley

YUKON RIVER

SPARKLING MINERALS

CREEK GEOMORPHOLOGY

SCALE 1:31680

1500 0 1500 3000 4500 6000

FEET

N

Based on NAD 83 N.S.I.F.

LEGEND

- 15' — BENCH, HEIGHT ABOVE CREEK
- ... GRAVELS
- CANYON
- SWAMP
- ROCK SLIDE

139°00' E

115 O/2	115 O/2
115 J/14	115 J/15

63°00' N

SPARKLING MINERALS

GEOLOGY

SCALE 1:31680

1500 0 1500 3000 4500

FEET

ELEVATIONS IN FEET ABOVE SEA LEVEL
CONTOUR INTERVAL AT 1000 FT.

MAGNETIC NORTH 33°E

N

139°60'E

115 O/3	116 O/2
115 J/14	115 J/15

63°00'N

YUKON RIVER

LEGEND

PELLY GROUP

- Psn — SCHIST - GNEISS : UNDIFFERENTIATED PELLY GNEISS
- Pgb — AMPHIBOLITE : DARK GREEN TO BLACK METAMORPHOSED GABBRO ; ALTERS TO CHLORITE - ACTINOLITE SCHIST
- Pg — AUGEN GNEISS : STRONGLY LINEATED LEUCOCRATIC FELDSPAR PORPHYRITIC GRANITE GNEISS
- Pgd — GRANODIORITE SCHIST : STRONGLY FOLIATED TO GNEISSIC TEXTURED BIOTITE GRANODIORITE

YUKON GROUP

- Yhb — HORNBLENDITE : WEAKLY FOLIATED, COARSE GRAINED HORNBLENDE MUSCOVITE QUARTZ DIORITE/GABBRO
- Yqz — QUARTZITE : WEAKLY TO STRONGLY FOLIATED QUARTZITE ; MINOR INTERBEDDED PHYLLITES AND QUARTZ GNEISS
- Yqm — QUARTZ - MUSCOVITE SCHIST : GREY WEATHERING STRONGLY FOLIATED QUARTZ MUSCOVITE - BIOTITE SCHIST ; GRADES INTO QUARTZITE
- Yqf — QUARTZ - FELDSPAR SCHIST : GREY-BROWN WEATHERING STRONGLY FOLIATED AND CRENULATED QUARTZ - FELDSPAR - BIOTITE - MUSCOVITE SCHISTS

OUTCROP

GEOLOGIC CONTACT

FOLIATION

AXIAL TRACE (ASSUMED) OF OVERTURNED FOLD

SPARKLING MINERALS

SAMPLE LOCATIONS

SCALE 1:31,680

1500 0 1500 3000 4500

FEET

ELEVATIONS IN FEET ABOVE SEA LEVEL
CONTOURS SPACED 1000' APART

MAGNETIC NORTH 43° E

LEGEND

- □ 1610 — SAMPLE SITE, NUMBER
- 10' — TEST SITE, DEPTH TO BEDROCK (FEET)
- — — — ROAD: 4WD ACCESSIBLE
- (1605) — DUPLICATE SAMPLE

116 O/3	115 O/2
116 J/14	115 J/15

63°00'N

139°00'E

Blu-1
Blu-2
Blu-3
1601
1602
1603
1614
1617
1615
1616
1619
△ 4883
1618
1620
1621
BAL-1
1622
1623
1625
1626
1627
1624
1610
1606
1607
1608
1609
BAL-2
BAL-3
BAL-4 (1605)
BAL-5
1604
YUKON RIVER
3500
2500
1500
15'
12'
9'
10'
63°00'N
139° 00'E