YUKON PROSPECTING

PROGRAM

LAURIE DOWNES

SIXTYMILE, YUKON TERRITORY

July 31 to mid-September, 1993

SUMMARY REPORT

Designation/Application # 93-105 for 93/94 Field Season

Mineral Prospecting Program

Name of Lease:	Unnamed Right Limit Tributary of Big Gold Creek Four mile prospecting lease # 9080
Location:	Sixtymile, Yukon Territory Dawson Mining District Claim Sheet NTS #116-C-2b-c Longitude: 140° 45.5'W Latitude: 64° 03'N Longitude: 140° 51.5'W Latitude: 60° 05'N
Author:	Laurie Downes P.O. Box 4388 Whitehorse, Yukon Y1A 3T5
Prepared for:	Energy & Mines Branch of Yukon Government Box 2703 Whitehorse, Yukon Y1A 2C6
Dates of Prospecting:	July 31st to mid-September, 1993

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Holder: Four Mile Prospecting Lease/Laurie Downes
Name of Lease: Unnamed Tributary of Big Gold Creek
Time employed in preparing report: one week

INTRODUCTION

In the summer of 1993, I travelled to the Sixtymile District of the Yukon. I prospected on the property known as an Unnamed Gulch--tributary of Big Gold Creek. Weather was highly favourable. I worked on a Yukon Mining Incentives Program aimed at mineral exploration and development.

HISTORY OF AREA

The Sixtymile area gold camp has been worked by hand panning, dredge, and by shaft sinking since the latter part of the 1880's. In my own time, it has been caterpillar tractors and backhoe equipment that have been the most productive operations.

The immediate area that I am interested in is a four mile Unnamed Gulch heading up in the west and with a gentle grade to the east, terminating at Big Gold Creek. Big Gold Creek runs south to meet the Sixtymile River.

I have, this season, discovered old cabins and old shafts with the remains of windlasses, these are near the upper end of the Gulch.

TOPOGRAPHY AND VEGETATION

This gulch for the first mile upstream is very narrow. The sides are very steep, rocky, and tree covered (black spruce and poplar). The creek area is willow brush and spruce. This limit of the creek seems to be a fault area, striking north and south and cutting across the creek valley.

The next mile upstream opens up fairly wide and is very swampy. The left limit rises very gently to the north and the creek proper flows at the extreme right limit. Small spruce and brush are scattered around, a small gulch runs in from the left limit in this area feeding the main creek. The right limit is very steep and spruce covered.

The next and upper two miles narrows down again and is heavily forested with spruce trees, the creek rises in this area, canyon like, and dead ends, the creek water is thus provided by the surrounding hills.

LOCATION AND ACCESS

This Unnamed tributary of Big Gold Creek is located in the Sixtymile gold fields of Yukon, near the boundary of Alaska. The area is accessed by the Top of the World Highway via a ferry from Dawson City, Yukon. The highway is seasonal and well maintained. The ferry

is serviced by the Territorial Government and runs from approximately mid-May to early October, dependent on weather conditions. An early mining start-up may begin by use of a temporary ice bridge in March from Dawson City.

GEOLOGY

Nasina Series--Oldest Yukon rock group, consisting of quartzite mica schist, biotite gneiss, and metamorphic rocks. The Sixtymile area is volcanic, there is an absence of glaciation.

The geology of this Gulch on the creek valley is permafrost vegetation and muck overlying gravel and sediments. The surrounding hills appear to be mostly porphyries, and andesites, the fault area is a buff to brown sharp gravelly rock. All of the creek rocks in the lower end of the creek are stained a chocolate brown colour. There are traces of an old river bed (cemented conglomerates) across the downstream valley. This old river bed is very prominent to the south Sixtymile River area and east across Big Gold Creek. Bedrock in the upper three miles is a white coloured sericite schist?

CLIMATE

The weather in the mountainous area of the Sixtymile country can be very extreme. Snow still appears on the ground in late May and flurries can even be expected in July or August. Daylight is almost continuous during May, June, and July. Heavy rains are quite common in this country. Electrical storms with hail can be expected. Rainfall can vary greatly from summer to summer, but some mining seasons can be very pleasant. June and July can be very hot and from August the fifteenth on, cold and wet weather can be expected, but will vary with some beautiful fall days, the local leaves and vegetation are into fall colours at this time.

TESTING GULCH CREEK FOR MINERALS RESULTS AND RECOMMENDATIONS

I spent approximately two months on a daily basis, weather permitting, travelling back and forth on the creek, panning at intervals--most of my time was taken up digging two shafts on the first mile with a pick and shovel, my first experience at this method--it certainly isn't easy. I have more respect now for the so called oldtimers? These shafts were approximately 75 feet apart and were dug beside the bank away from the creek due to the wet swampy conditions, other than a few very fine colours, the gold content was just about nil.

I had better results on the upper part of the creek, not with gold, but my pans contained very fine disseminated copper particles. I took a lot of pans in this area and they were all consistent, copper also was stuck on or impregnated in the bedrock schist. My father was quite interested in this discovery and will further prospect this and adjoining areas next year. Further sampling should be done in the creek for placer gold, further sampling of bedrock will be required. Shafts should be dug a little deeper, bedrock has probably not been reached. There are positive signs of mineralization on my four mile prospecting lease.

Description of random grab sample rock types collected:

Porphyry with hematite stain

Gneiss with copper on it, lying on surface

Quartz porphyry with copper on it, lying on surface

Rusty weathered quartz with graphite, heavy, older rocks, mica inclusions in quartz

Layered gneiss with quartz intrusions

Rusty filled vugs in quartz

Graphite quartz, common in area

Quartz porphyry, buff coloured stain, quite common, coming off hills at bottom end of creek

Samples of quartz with reddish pink stain

Quartz with mica and green stain in it, malachite color?

Graphite schist

Very black carbonated, laminated sooty schist-like graphite

I brought many sample bags with me to Whitehorse for testing and assaying this winter.

The following pages will outline my daily diary and of the work I undertook.

DAILY DIARY

July 30th:
Left Whitehorse at 11:15 a.m., arrived at camp 9:30 p.m., after a long hot drive. A warm evening, unloaded supplies at camp. I am delayed in my prospecting program due to my mother being in hospital.

July 31st, 7°:
I got a good night's sleep, settled myself in at camp and got organized. A pleasant, sunny afternoon. I went for a walk up the gulch to look things over. Saw caribou tracks up gulch trail. Big game is very plentiful in Sixtymile area.

August 1st, 10°, sunny day:
I left camp early in morning. Panned at bottom end of creek, sand, silt, gravel like, specks of schist, concentrate is a little magnetic in pan, probably due to black sands.

August 2nd, 12°, another sunny day, a little wind, full moon tonight:
A refreshing morning, rain fell heavily overnight. There is a trail that passes by my creek about a mile's walk up. I noticed much fallen rock at confluence of Big Gold Creek and Unnamed Tributary. A fault runs along this area. Panned up farther today, steep sides to creek, hard to pan in places. Gravel has a slightly copper stain to it, and can be chocolate brown when wet. Very fine specks of gold, pyrite, little quartz pebbles, different assortment of mineral grains in pans. Lightly magnetic pans, magnetite?

August 3rd, 10°, overcast:
Gravel in pans is composed of small, sharp angular clasts, chocolate brown in colour. Rocks at creek are a little bigger, all stained in brown, reddish surface colour. Found some heavy rocks, porphyries, they are older rocks, water worn by creek action.

August 4th, -2° in morning:
A cool morning's walk. Studied the fault area, at bottom end, looking up southerly to Little Gold Creek. Rocks are heaved along in a fairly straight line. Panned, the creek has a steady flow of cold, clear water. Picked up rock samples, porphyry quartz on valley floor. Dug into black muck at the end of a little gulch running into creek, silvery specks of biotite, black mucky vegetation, sand and gravel, no colours.

August 5th, 1°, windy and sunny, cooler working weather today:
Walked up creek about a mile and a half. There is a fault running across the valley, north to the Top of the World Highway. Interesting. Creek is widened in this area

so a good testing spot. Just past this spot is mossy vegetation. Creek soon becomes narrow again with dense bush before widening. I came across the remains of a cabin on a hill and as I moved upstream, saw a shaft, hand dug from early days. Enough walking for today.

August 6th, 2°, an overcast day, rained:
Cleaned camp, did washings.

August 7th, 10°, overcast morning, a few drops of rain in a.m., sunny and warm in the afternoon for the most part:
Studied maps in the morning. Panned fault area at second tributary--water flowing from down north hills running into main creek. Gravel has pieces of quartz in it. Schist, quartz, graphite, chocolate brown gravel. Gneiss is stained so brown it is black in colour. Grains of copper in pans. Gneiss, schist, gravel, is 1/4 to 2" size, big rocks as well in pans.

August 8th, 8°, windy and sunny, cloudy and rainy late in evening:
I got more samples from southwest of tributary. On creek bank 6' to 8' up bank, right limit downstream, magnetic, quartz and schist pebbles in pans. Water is a reddish colour in small streams flowing in areas nearby, hematite mineralized? Got great colours of disseminated copper. Getting more interesting, samples were at the surface of bedrock, flat angular schist. Pans contained graphite, a mixture of schist, quartz, mica, metamorphised quartz. Coarser material below. Schist is a silvery grey with brown tones.

August 9th, 4° by noon, windy and sunny, frost this a.m.:
Panned in creek at schist area. Chocolate brown gravel again, quartz pebbles, schist, slates brownish black in colour, not too much in copper colours, specks of pyrite.

August 10th, 3°, frost:
Stayed at camp today, hauled water, fixed up camp, washing.

August 11th, 5°, cool afternoon, rain:
Rested and worked around camp.

August 12th, 0° this a.m., sunny and windy:
Decided to head back up creek early in a.m. Got bags of soil samples a mile and half up creek. Dug a few test holes, carried too heavy a load to camp, my back pack couldn't handle the load, straps broke, I'll know better for the next time.

August 13th, 0°, frost, overcast and windy:
Panned at Big Gold Creek, my samples from yesterday, using tub and big screen. Colours showed disseminated copper, bornite, chalcopyrite, pyrite.

13
August 14th, 0°, overcast, windy, sunny mixed weather, a little rain in p.m.:
Panned in an area of plentiful gravel up past schist bedrock, buff in colour, biotite, schist, gneiss, no magnetics. Coarser gravel samples, angular. More panning showed broken up schist, gneiss, slightly magnetic.

14
August 15th, 10°, frost, weather has been great:
Getting my exercise, walked two miles up, gravel is chocolate brown colour again. Took samples on south side of creek, earthy digging, quartz, slates, graphite schists. Heading downstream I got soil samples by creek side half a mile down, moss covered, granular material, sedimentary muck with sand, silt, small clasts. Picked raspberries near camp early evening.

15
August 16th, 12°, a nice day, frost in a.m.:
Walked up a steep mountainside, straight up, approximately 1500 feet from bottom end of creek. There is a vegetation change of colours on poplar trees, bright red in colour. An indication of mineralization? Will further soil sampling with a partner, as I do no want to be working on hills alone, lots of grizzlies in this part of the country. Porphyritic rocks were only type collected.

16
August 17th, -2°, frost in a.m., rain in late afternoon:
Began working on a test hole by hand with pick and shovel. A fault comes through this area, studied maps and papers later on.

17
August 18th, 5°, frost in a.m., sunny, warm, and windy:
Shovelling most of day, bagged a sample.

18
August 19th, -2° in a.m., windy:
Took photos on gulch, lower end, and of old cabins I found near the mouth of creek and just below it, on Big Gold. More shovelling and digging.

19
August 20th, -2°, frost, same as yesterday, a nice day:
Shovelling, more samples show conglomerate like little pieces made into bigger ones, fault gouge, a lot of clay like material, little rounded boulders of grey quartz, graphite black stain inside quartz.

20
August 21st, -2° once more and frost, overcast, windy:
Shovelling, cool working weather for digging.

August 22nd, 4°, high frost, a terrible day, rained steadily:
Cleared iron outdoors around camp, got soaked, stayed indoors remainder of day, baked and read, could use the rest.

August 23rd, 3°:
Another day of downpours, studied manuals, prospector course material.

21
August 24th, -2°, overcast and cool:
More shovelling at test hole #1, brought back samples, white, greyish quartz material, matrix is clayish material.

22
August 25th, -4° a.m. cloudy:
Tidied up test hole and took photos at end of day. Shaft is 5′ X 5′ X 7′ approximately. Round-shaped greyish, good sized rocks.

23
August 26th, -2°, lots of frost a.m., a sunny morning and overcast mixed nice afternoon, cool evening:
Decided on plans to start another hole approximately 75′ away from hole #1. Holes will both be 100′ from creek. Did some panning at creek near camp, a few very fine gold colours from test hole #1.

24
August 27th, 2°, a beautiful day, sunny til 8:30 p.m.:
Panned samples at Big Gold creek just below where I am camped. Saw a little fine gold from random soil sample bags.

25
August 28th, 2°, overcast and windy in a.m., turned out to be a beautiful day:
Panning two miles up creek, large quartz samples of rocks composed of graphite, sheen look of rainbow colours in quartz. A little ways below this area pans contained clasts of shale 1/2 to 1″ size some stained lightly rusty red on sides, also quartz clasts with mica, dark gravel, thin layers of schist, sandy gravel. I picked blueberries in hill sides, plentiful at this time.

August 29th, overcast, frosty, rained in evening:
Laundry day, baked, painted.

26
August 30th, 4°, overcast, windy, rainy:
To Dawson before noon for mail, propane, supplies, returned 7 p.m.

27
August 31st, 5°, overcast:
Sampling up creek, not quite two miles. Found magnetics, quartz, schist, pebbles in pan, thin sheets of broken off layers of graphite, black in centre, a little clast of quartz as I moved up creek, approximately 2,000 feet, pans contained silvery grey quartz.

28
September 1st, 6°, frost, overcast in a.m., but beautiful afternoon:
Up creek, sampling just over two miles. Took photos of valley and of cabin, shaft. gravel contained quartz pebbles, a lot of schisty, sandy gravel, very flat particles of thin schist. Moving down creek a little gravel, was mucky schist, phyllite like samples, came across a green diopside?, emerald glossy in a schist-like rock.

29
September 2nd, 8°, a nice day, warm and sunny:
Got busy at my shovelling of second hole.

30
September 3rd, 4°, frost:
Digging shaft, material is a buff grey colour.

31
September 4th, -5° a.m., cool, overcast, sunny by late afternoon:
Did map work, panned samples towards end of day.

32
September 5th, -5°, overcast bright a.m and p.m., windy, mild evening:
Wandered up creek panning an bagging grab samples. A friend arrived near dinner time, went for a walk up to old cabins at mouth of creek. Saw moose and wolf tracks.

33
September 6th, 8°, very mild morning, overcast til noon:
My company left by noon. Shovelling test hole #2, quartz in samples, looks like part of old creek channel, more water worn material.

34
September 7th, 0°, another mild morning:
Shovelling all day. Shaft to be similar in size to first hole.

35
September 8th, 0°, no frost again, a nice hot fall day:
Digging shaft.

36
September 9th, 0°, no frost:
Shovelling all day, not easy work, it rained through the night.

September 10th, 6°, no frost, overcast, cool evening, no rain:
Read books and studied rocks, cleaned camp, wet ground, damp outside

37
September 11th, -3°, slight frost, sunny for a short while in a.m. and sun out at 2:00 p.m.:
Just about finished my second test hole, shovelling once more.

September 12th, 3°, a wet day:
Looked through manuals of both prospector courses, sewed, hauled water, a couple visitors in late afternoon for awhile.

38
September 13th, -2°, overcast morning and afternoon, sunny by dinner time:
Finished my work on second shaft. Basalt like pieces, bottom side of some rock material looks sheared, striations, quartz intrusions.

September 14th, 8°, sunny and warm:
Hung out washing, cleaned, painted.

39
September 15th, 3°, a sunny afternoon, a little breezy, cool evening:
Nights getting colder, winter is not far away. Panned test holes, just about nil gold in the pans, doesn't look like bedrock has been quite reached, need to dig shafts further.

40
September 16th, 8°, warm evening:
To Dawson in morning, shopped, got mail, mining recorder.

41
September 17th, 0° in a.m., overcast, sun out later at 5:00 p.m.:
A sign of winter coming. Panned samples, a little better than a mile and a half up creek, more schist, gneiss in pans. Small angular clasts, flat particles, garnetiferous like, buff grey in colour, non-magnetic.

42
September 18th, -10°, overcast, gusty:
Studied rocks, read old mining reports. Good walking up creek four miles to end, saw animal tracks of mother bear and two cubs, also many moose tracks, frozen ground, cooled off at top end of creek at 6:00 p.m., clouded over, my hands were cold at creek, dug a few creek samples at upper end before going back, also grab samples. Light snow upon my return by 8:30 p.m., starting to get dark earlier, -10° at late evening.

43
September 19th, mild a.m., cloudy til 1:30 p.m., cooled off quickly, light snow:
Organized my samples, chipped rocks, used hand lens, microscope. Have to think of getting wood for stove.

September 20th, 0°, snow melted, warm a.m., a little sun and overcast, evening was mild:
Hauled water, baked, sewed.

44
September 21st, 2°, mild, light showers, cleared to a sunny windy day, -1°by 7:00 p.m.:
Panned samples at creek nearby, tub and screen method with gold pan.

45
September 22nd, -2°, cold morning:
Panned in morning once it warmed up a little. Studied rocks, saw a porcupine later in day.

46
September 23rd, -10°, a bright cool windy day:
Examined rocks in pans, read mineral books. Too cold to work around creek, hauled wood for wood stove.

September 24th, -5° in a.m., 0° by 7:00 p.m.:
Cleaned up camp, organized boxes, getting ready to leave soon for Whitehorse. Using lots of wood.

47
September 25th, -14°, a cool evening:
Northern Lights, a sunny a.m. til 4:00 p.m., when sun went down, 0° by 7:00 p.m. Snow fell about 9:30 p.m., watched it come in form Sixtymile valley. Looked over prospector report business today and got more wood around nearby area.

48
September 26th, -5°:
Four inches of snow on ground, snow shovelling in morning. Chipped rocks for examining, cleaned up yard for winter, put things away in storage, moved propane tanks.

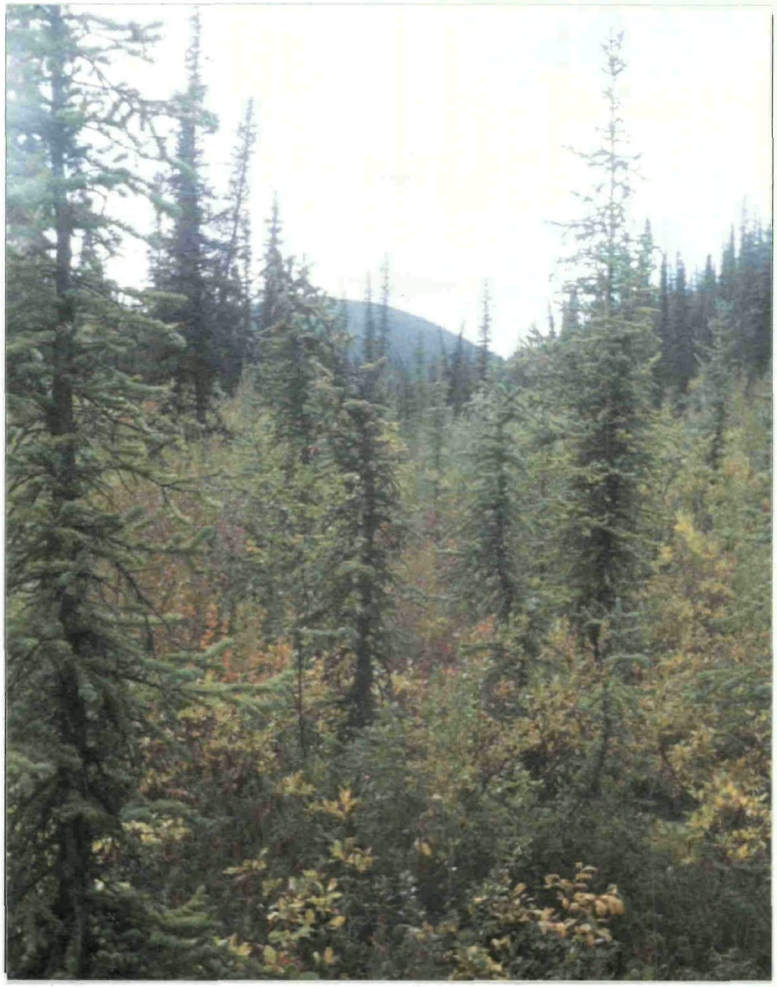
49
September 27th, -16°:
A beautiful warmer afternoon. Snow melted a little, but stayed on ground, -8° by bedtime. Looked over mineral books, cleaned out cupboards and fridge, hauled water, creeks are starting to freeze up, ice layers covering surface. Kept warm.

September 28th, -10°:
Cloudy, overcast all day, snowed in morning til 7:00 p.m. Another four or five inches. Indoor research work.

September 29th, -4°:
Warm morning compared to last couple days. Loaded up suburban of rock and soil samples, clothing and dry goods.

50
September 30th, -4°, a little light snow:
Thought I better get on my way before any more amount of snow falls, a big hill to travel up and out of camp. Packed a lunch, extra gas, my dogs and I left by noon. Arrived in Whitehorse early in morning next day to summery weather conditions. My lawn is a couple feet high! End of a busy prospector season.

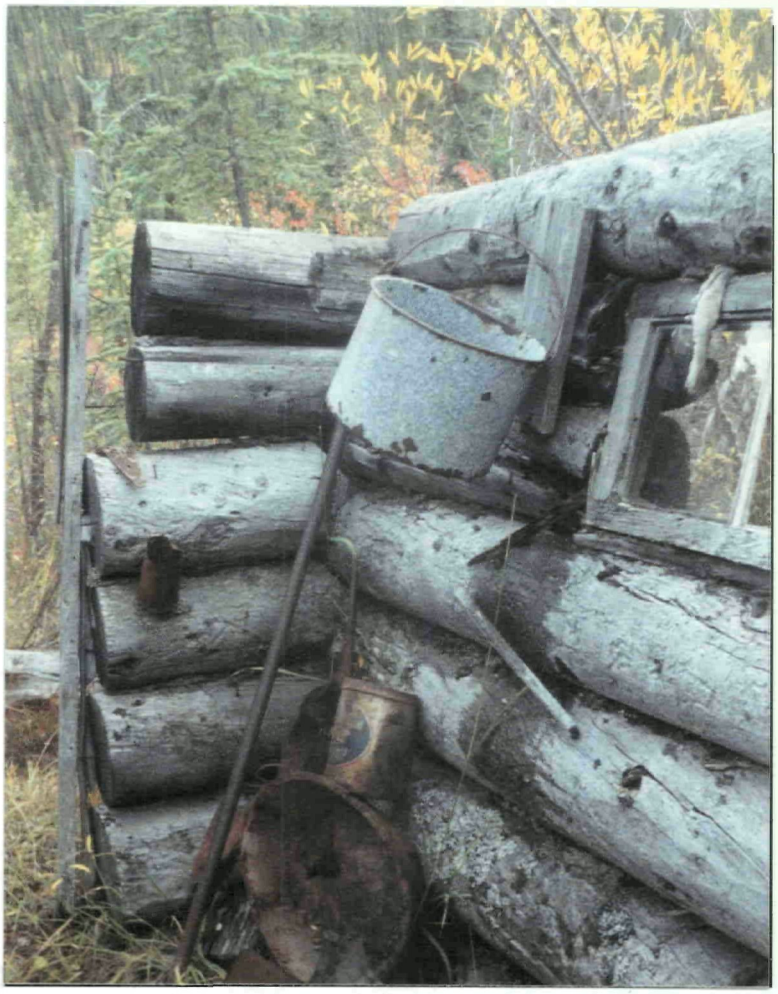
1. Taken from mouth of creek. Creek runs horizontally in front of black spruce.



2. Looking west at upper end of creek. Very dense bush in most of area.

3. Fallen rock beside confluence of Unnamed Tributary and Big Gold, edge of fault zone.

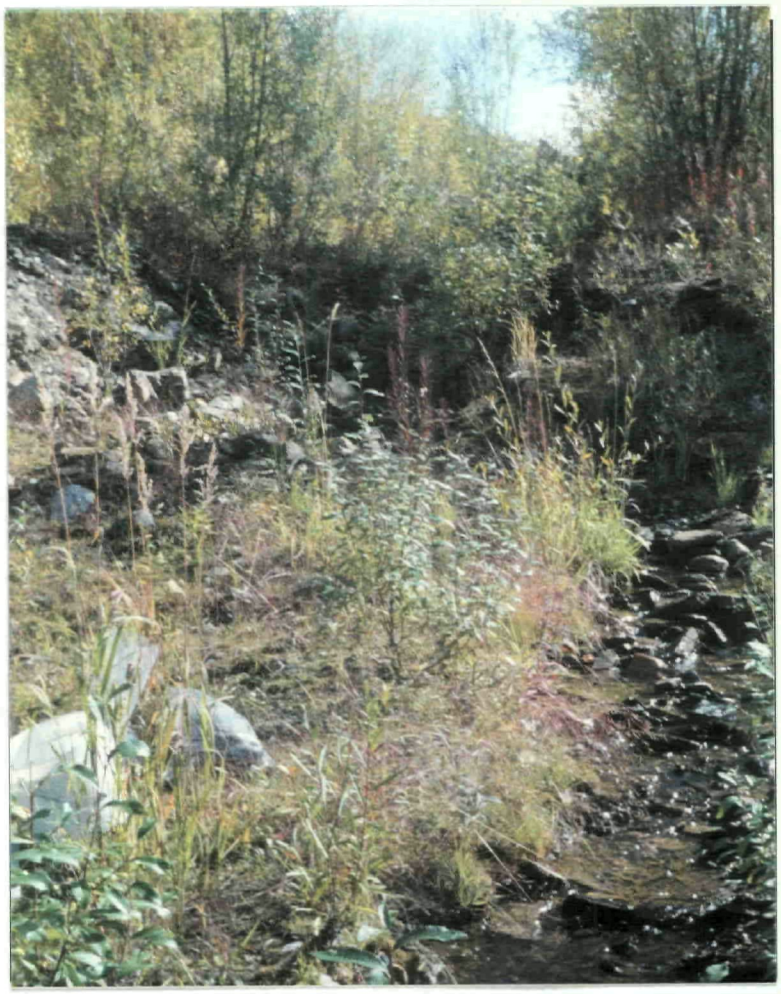
4. Showing steep hill sides.



5. Old cabin still stands from 1800's at bottom end of creek. Steam pipes still accompanies cabin.

6. Gold pan.

7. Another cabin remains standing on Big Gold Creek near bottom end of Unnamed Tributary. Shaft (not shown) is immediately beside it.



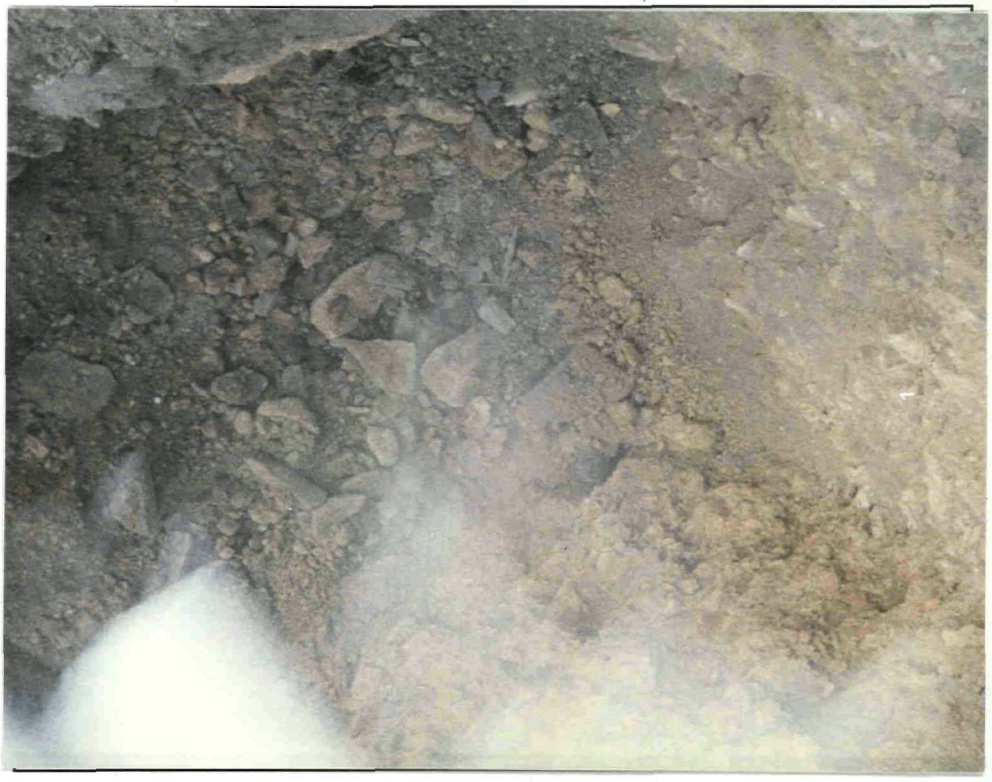
8. Tributary Gulch towards end of creek.

9. Test hole # 1.

10. Test hole # 1.

11. Test hole # 1. Approximately 7 feet deep.

12. Test hole # 2.



13. Bottom of test hole # 2.

14. Remains of cabin approximately two miles up creek upon hill side.

15. Old miner's hand dug shaft near his cabin (above) in middle of flat valley. Old windlass in foreground.

16. Valley looking directly east down Unnamed Tributary Creek. Cabin remains to left.

17. Remains of same cabin as in picture 16. Two miles upstream.

Chemex Labs Ltd.

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Project :
Comments:

Page Number 1-A
Total Pages 1
Certificate Date: 04-FEB-94
Invoice No . I9410760
P O. Number .
Account LND

CERTIFICATE OF ANALYSIS A9410760

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
SAMPLE #01	205	226	< 5	< 0.2	0.13	2	110	< 0.5	< 2	0.03	< 0.5	< 1	242	67	1.35	< 10	< 1	0.04	< 10	0.02	45
SAMPLE #02	205	226	< 5	1.0	0.25	26	150	< 0.5	< 2	0.01	< 0.5	1	291	11	0.70	< 10	< 1	0.12	< 10	0.01	40
SAMPLE #03	205	226	< 5	1.2	0.44	4	320	< 0.5	< 2	0.02	< 0.5	1	377	18	0.97	< 10	< 1	0.25	< 10	0.04	40
SAMPLE #04	205	226	< 5	< 0.2	0.09	6	30	< 0.5	16	12.15	0.5	1	85	1	2.12	< 10	< 1	0.02	< 10	6.02	1020
SAMPLE #05	205	226	< 5	< 0.2	4.28	84	1290	< 0.5	< 2	0.62	< 0.5	11	59	27	2.94	< 10	< 1	0.10	20	0.09	700
SAMPLE #06	205	226	< 5	< 0.2	0.13	< 2	40	< 0.5	< 2	0.41	< 0.5	1	418	26	0.65	< 10	< 1	0.01	< 10	0.23	105
SAMPLE #07	205	226	< 5	< 0.2	1.43	< 2	230	< 0.5	< 2	0.85	< 0.5	9	47	11	3.42	< 10	< 1	0.13	20	1.20	1080
SAMPLE #08	205	226	< 5	< 0.2	1.39	6	170	< 0.5	< 2	0.48	< 0.5	10	32	8	3.52	< 10	< 1	0.08	20	1.09	760
SAMPLE #09	205	226	< 5	< 0.2	1.87	2	390	< 0.5	< 2	0.47	< 0.5	14	44	10	5.05	< 10	< 1	0.19	20	0.71	800
SAMPLE #10	205	226	< 5	< 0.2	1.86	6	80	< 0.5	< 2	1.43	< 0.5	12	37	30	3.86	< 10	< 1	0.11	20	0.66	905

CERTIFICATION

Chemex Labs Ltd.

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Project .
Comments:

Certificate Date: 04-FEB-94
Invoice No . 19410760
P O Number
Account LND

CERTIFICATE OF ANALYSIS A9410760

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
SAMPLE #01	205	226	< 1	0.01	2	70	4	< 2	< 1	3	< 0.01	< 10	< 10	8	< 10	20
SAMPLE #02	205	226	< 1	0.01	6	60	22	2	< 1	4	< 0.01	< 10	< 10	8	< 10	16
SAMPLE #03	205	226	4	0.01	12	1090	22	< 2	1	17	< 0.01	< 10	< 10	64	< 10	46
SAMPLE #04	205	226	< 1	< 0.01	14	310	22	2	3	179	< 0.01	< 10	< 10	7	10	86
SAMPLE #05	205	226	< 1	< 0.01	10	2410	6	6	15	49	< 0.01	< 10	< 10	95	< 10	60
SAMPLE #06	205	226	< 1	0.01	7	70	4	< 2	< 1	10	< 0.01	< 10	< 10	5	< 10	12
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SAMPLE #08	205	226	< 1	0.08	6	1340	6	2	9	46	0.10	< 10	< 10	111	< 10	96
SAMPLE #09	205	226	< 1	0.29	12	1030	10	2	6	95	0.02	< 10	< 10	72	< 10	82
SAMPLE #10	205	226	< 1	0.11	14	2650	6	2	10	246	0.08	< 10	< 10	176	< 10	68

CERTIFICATION

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o' DOWNES, LAURIE **

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Account LND

CERTIFICATE OF ANALYSIS A9410759

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
SAMPLE #01	217	229	25	< 0.2	0.39	4	980	< 0.5	< 2	0.13	< 0.5	4	130	38	1.29	< 10	< 1	0.08	< 10	0.04	165
SAMPLE #02	229	205	5	0.2	0.32	4	790	< 0.5	< 2	0.07	0.5	2	194	26	0.64	< 10	< 1	0.08	< 10	0.04	85
SAMPLE #03	217	229	20	< 0.2	1.03	14	470	< 0.5	< 2	0.35	< 0.5	12	145	14	3.58	< 10	< 1	0.14	10	0.36	1100
SAMPLE #04	217	229	< 5	< 0.2	1.20	2	300	< 0.5	< 2	0.38	0.5	9	160	18	1.91	< 10	< 1	0.13	20	0.44	170
SAMPLE #05	217	229	15	< 0.2	1.07	16	310	< 0.5	< 2	0.45	< 0.5	13	67	19	4.52	< 10	< 1	0.12	20	0.40	1130
SAMPLE #06	217	229	< 5	< 0.2	0.69	14	260	< 0.5	< 2	0.24	< 0.5	7	223	22	2.49	< 10	< 1	0.16	10	0.46	400
SAMPLE #07	217	229	10	< 0.2	1.13	18	340	< 0.5	< 2	0.36	0.5	9	345	30	2.75	< 10	< 1	0.21	20	0.32	495
SAMPLE #08	217	229	< 5	2.8	0.66	24	240	< 0.5	< 2	0.33	1.5	10	169	105	3.29	< 10	< 1	0.21	20	1.77	965
SAMPLE #09	217	229	< 5	0.2	0.66	16	300	< 0.5	< 2	0.50	< 0.5	8	231	42	2.36	< 10	< 1	0.14	10	0.53	590
SAMPLE #10	217	229	< 5	< 0.2	0.85	6	250	< 0.5	< 2	0.30	0.5	10	212	86	2.40	< 10	< 1	0.14	10	0.62	595
SAMPLE #11	217	229	< 5	< 0.2	0.73	10	240	< 0.5	< 2	0.17	< 0.5	9	306	32	2.39	< 10	< 1	0.19	10	0.21	645
SAMPLE #12	229	205	< 5	< 0.2	0.57	8	210	< 0.5	< 2	0.37	< 0.5	7	188	25	1.78	< 10	< 1	0.17	10	0.16	410
SAMPLE #13	217	229	5	< 0.2	0.80	8	180	< 0.5	< 2	0.30	< 0.5	9	131	25	3.02	< 10	< 1	0.12	10	0.30	325
SAMPLE #14	217	229	< 5	< 0.2	0.82	16	240	< 0.5	< 2	0.15	< 0.5	8	406	17	2.37	< 10	< 1	0.20	10	0.26	370
SAMPLE #15	217	229	< 5	< 0.2	1.45	8	330	< 0.5	< 2	0.46	< 0.5	9	118	18	2.11	< 10	< 1	0.13	20	0.51	225
SAMPLE #16	217	229	< 5	< 0.2	0.59	18	360	< 0.5	< 2	0.29	< 0.5	8	157	38	2.45	< 10	< 1	0.11	10	0.45	800

CERTIFICATION _____

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave , North Vancouver
British Columbia, Canada V7J 2C1
PHONE 604-984-0221

DOWNES, LAURIE **

P.O. BOX 4388
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Y1A 3T5

Project .
Comments·

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Total Pages 1
Certificate Date 04-FEB-94
Invoice No : I9410759
P O Number :
Account LND

CERTIFICATE OF ANALYSIS A9410759

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
SAMPLE #01	217	229	2	< 0.01	6	320	14	< 2	3	25	< 0.01	< 10	< 10	21	< 10	40
SAMPLE #02	229	205	< 1	< 0.01	4	110	58	< 2	1	20	< 0.01	< 10	< 10	11	< 10	86
SAMPLE #03	217	229	< 1	0.04	16	870	12	< 2	4	26	0.02	< 10	< 10	60	< 10	88
SAMPLE #04	217	229	< 1	0.02	20	720	14	< 2	4	28	0.04	< 10	< 10	45	< 10	102
SAMPLE #05	217	229	< 1	0.04	18	1200	8	2	7	32	0.03	< 10	< 10	78	< 10	96
SAMPLE #06	217	229	< 1	0.01	21	670	20	< 2	2	14	0.01	< 10	< 10	31	< 10	94
SAMPLE #07	217	229	< 1	0.03	22	690	26	< 2	4	22	0.02	< 10	< 10	41	< 10	154
SAMPLE #08	217	229	< 1	0.01	21	350	210	< 2	4	26	< 0.01	< 10	< 10	23	< 10	278
SAMPLE #09	217	229	1	0.02	23	930	16	2	3	21	0.01	< 10	< 10	33	< 10	110
SAMPLE #10	217	229	1	< 0.01	46	630	16	< 2	3	10	0.01	< 10	< 10	31	< 10	144
SAMPLE #11	217	229	< 1	0.01	30	560	12	2	2	11	< 0.01	< 10	< 10	27	< 10	110
SAMPLE #12	229	205	< 1	0.01	23	1720	16	< 2	1	15	< 0.01	< 10	< 10	23	< 10	82
SAMPLE #13	217	229	< 1	0.01	24	930	8	2	2	13	0.01	< 10	< 10	30	< 10	96
SAMPLE #14	217	229	< 1	0.01	25	580	14	< 2	2	9	< 0.01	< 10	< 10	33	< 10	88
SAMPLE #15	217	229	< 1	0.02	20	720	14	2	5	35	0.06	< 10	< 10	53	< 10	92
SAMPLE #16	217	229	< 1	0.01	18	750	16	2	2	17	0.01	< 10	< 10	34	< 10	84

CERTIFICATION: Thai D Ma

(Y U K O N P L A T E A U)

140° 51.5' W long
60° 05' N Lat

140° 45.5' W long
64° 03' N Lat.

UNITED STATES OF AMERICA
CANADA

Little Gold 4161
Davis Creek
Poker Creek
Little Gold Creek
Glacier Creek
Big Gold Creek
Five Mile Creek
Sixtymile
Airfield
Condition Unknown
Miller Creek
Wellesley Pass
SIXTY MILE

126
126A
127

3783
4515
4000
3500
3400
3100
3000
2800
2700
2500
2400
2300

07 06 05 04 03 02 01 00 99 98

64°00′
141°00′ 55′ 50′ 45′ 40′

27 km
05′

PRODUCED BY THE CANADA CENTRE FOR MAPPING, DEPARTMENT OF ENERGY, MINES AND RESOURCES. INFORMATION CURRENT AS OF 1989. PUBLISHED 1991.

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Roads	Routes	2 lanes or more / 2 voies ou plus	less than 2 lanes / moins de 2 voies
loose or stabilized surface, all weather	gravier, aggloméré, toute saison		
loose surface, dry weather	de gravier, temps sec		
unclassified road or street	route non classée ou rue		
cart track	de terre		
trail, cut line or portage	sentier, percée ou portage		

FOR COMPLETE REFERENCE SEE REVERSE SIDE POUR UNE LISTE COMPLÈTE DES SIGNES, VOIR AU VERSO

SIXTYMILE

CANADA UNITED STATES OF AMERICA
CANADA ÉTATS-UNIS D'AMÉRIQUE

Scale 1:50 000 Échelle

Miles 1 — 0 — 1 — 2 — 3 Miles
Metres 1000 — 0 — 1000 — 2000 — 3000 — 4000 Mètres

Information concerning bench marks and horizontal survey monuments can be obtained from Geodetic Survey, Canada Centre for Surveying, Ottawa.

Pour tout de s'adre

CONVERSION SCALE FOR ELEVATIONS

Metres 30 20 10 0 — 50 — 100
Feet 100 50 0 — 100 — 200 — 300 — 400 — 5

CONTOUR INTERVAL 100 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1927
Transverse Mercator Projection

Sy

LEGEND

Note: this legend is common to maps 1282A, 1283A and 1284A

NORTHERN PART

CENOZOIC

QUATERNARY

26 — *Unconsolidated glacial and alluvial deposits*

CRETACEOUS AND TERTIARY (?)
UPPER CRETACEOUS AND LATER (?)

22 — *MONSTER FORMATION*: 22a, brown-weathering, thin-bedded, brown chert-grain sandstone, siltstone, shale, and fine chert-pebble conglomerate

MESOZOIC

20a — *Orange- to brown-weathering diorite and gabbro; altered equivalents; may be older than 20*

TRIASSIC

16 — *Black-weathering, platy, black limy shale and limestone; thin bands of grey- to buff-weathering limestone*

PERMIAN

15 — *TAHKANDIT FORMATION: white, light grey, and dark grey chert, cherty limestone, and limestone*

CARBONIFEROUS TO PERMIAN

14 — *Buff-weathering, dark grey, thin- to medium-bedded limestone; minor black shale, chert, and chert-pebble conglomerate; 14a, dark shale, argillaceous limestone, and thin-bedded brown sandstone; minor chert-pebble conglomerate; 14b, black- and silvery-weathering shale and slate; minor platy, buff-weathering grey limestone, impure sandstone*

DEVONIAN TO CARBONIFEROUS
MIDDLE DEVONIAN TO CARBONIFEROUS

13 — *Black shale, argillite, and slate, black platy limestone, chert; minor chert-pebble conglomerate and quartzite; 13a, Nation River Formation: brown-weathering fine chert-pebble conglomerate and chert-grain sandstone may, in part, be younger Monster Formation (22)*

DEVONIAN
LOWER MIDDLE DEVONIAN

11 — *Limestone, dark grey, brown and black, massive to thin-bedded, very fine grained, buff-grey-weathering*

10 — *Limestone and dolomite, light grey and dark brownish grey, fine to medium grained, mostly alternating dark and light beds 2 to 5 feet thick*

SILURIAN (?) TO MIDDLE DEVONIAN

12 — *Dark grey-weathering, black, thin-bedded, platy limestone, commonly argillaceous and locally siliceous, and interbedded black chert*

ORDOVICIAN AND SILURIAN

9 — *ROAD RIVER FORMATION: mainly interbedded black chert and black argillite, also grey-green, olive-green, and grey chert and grey-green argillite; minor quartzite, and chert-pebble conglomerate*

8 — *Grey and buff-weathering dolomite and limestone, mostly medium to thick bedded; minor platy black argillaceous limestone and dolomite (may include some 9, 10, and 11); 8a, grey- to dark grey-weathering, dark volcanic rocks mainly partly serpentinized, brown-weathering grey-green limy tuff and argillite, and thin-bedded brown limestone*

CAMBRIAN
MIDDLE (?) AND UPPER CAMBRIAN

6 — *Buff, brown, and grey-weathering, thin- to medium-bedded limestone, and grey-weathering thin- to thick-bedded dolomite; minor brown and green shale and orange-weathering dolomite*

LOWER CAMBRIAN TO ORDOVICIAN (?)

7 — *Grey-weathering, brown to buff limestone and limestone conglomerate*

CAMBRIAN (?)

5 — *Mainly brick-red, thick-bedded to massive sandstone and red to buff massive conglomerate; minor red shale; local andesitic or basaltic flows and sills*

PRECAMBRIAN

PROTEROZOIC

2 — *Orange-weathering, platy, grey-green dolomite, dark slate; minor phyllite and quartzite; 2a, pink-, orange- and grey-weathering dolomite, grey and maroon shale, white, green and mauve quartzite, minor conglomerate, mottled green and maroon shale and black limestone; 2b, buff and orange dolomite, dark shale; minor quartzite limestone and conglomerate; 2c, massive cherty and quartzose, grey dolomite; thin-bedded, buff-weathering, grey dolomite; minor black shale and white quartzite; 2d, buff-weathering dolomite-boulder conglomerate; 2e, dark shale and argillite, buff-weathering, grey siltstone; minor buff- to orange-weathering dolomite*

1 — *Mainly dark grey, grey-green, and black, thin-bedded argillite, slate and phyllite; minor grey quartzite, orange-weathering dolomite, and conglomerate; 1a, grey-weathering, thinly laminated, silicated limestone*

METAMORPHIC ROCKS SOUTHWEST OF TINTINA TRENCH
(occurs only on Map 1284A, Dawson)

E — *Reddish brown-weathering, dark green serpentinized ultrabasic rocks*

D — *Fine- to medium-grained, granitic textured, quartz-biotite gneiss; minor quartzite, quartz-mica and biotite-chlorite schist, and quartz-feldspar pegmatite*

C — *Dark weathering greenstone and handed amphibolite gneiss; minor chloritic quartz-mica schist, graphitic quartz-mica schist, quartzite, and limestone*

B — *KLONDIKE "SCHIST": mainly buff weathering, light pale green quartz-muscovite-chlorite schist, and schistose, chloritic quartzite, with all intermediate rock types also present; minor silvery muscovite schist, fine-grained quartz-biotite gneiss, thinly laminated quartz-graphite-sericite schist and quartzite*

A — *NASINA "SERIES": grey and grey-green, micaceous quartzite; dark grey, light grey and silvery quartz-mica schist; minor fine-grained quartz biotite gneiss, graphitic schist and quartz-muscovite-chlorite schist; Aa, higher rank metamorphic rocks with biotite and garnet; Ab, coarsely crystalline, whitish limestone*

SOUTHERN PART

QUATERNARY

26 — *Unconsolidated glacial and alluvial deposits*

TERTIARY

25 — *Quartz porphyry*

24 — *Dark grey and brown andesite and basalt, commonly porphyritic; minor shale, sandstone, and conglomerate*

23 — *Poorly consolidated, brown, buff, and grey, arkosic and micaceous sandstone, light and dark shale, poorly sorted conglomerate; minor lignite*

CRETACEOUS

21 — *21a, fine- to coarse-grained, uneven textured, biotite granodiorite and biotite quartz monzonite; 21b, mainly hornblende and hornblende-biotite syenite, commonly porphyritic (potassium feldspar phenocrysts), uneven textured, mostly medium grained, locally fine or coarse grained; minor diorite*

20 — *Orange- to brown-weathering diorite and gabbro; altered equivalents; 20a, may be older*

19 — *Mottled green and maroon shale and brown-weathering, thin-bedded, brown siltstone, commonly limy*

18 — *KENO HILL QUARTZITE: grey and blue-grey, massive quartzite; minor slate and phyllite, commonly graphitic, argillaceous quartzite; 18a, thin-bedded and phyllitic quartzite, graphitic and chloritic slate and phyllite; minor limestone and massive quartzite; 18b, as 18 but may be older*

JURASSIC

17 — *LOWER SCHIST division: dark grey argillite, slate, and phyllite, commonly graphitic, thin-bedded dark grey quartzite, platy to phyllitic quartzite; minor phyllite and limy quartzite; 17a, probable equivalent ?*

TRIASSIC

16 — *Black-weathering, platy, black limy shale and limestone; thin bands of grey- to buff-weathering limestone*

PERMIAN

15a — *Limestone with some chert*

ORDOVICIAN AND SILURIAN

9 — *ROAD RIVER FORMATION: mainly interbedded black chert and black argillite, also grey-green, olive-green, and grey chert and grey-green argillite; minor quartzite, and chert-pebble conglomerate*

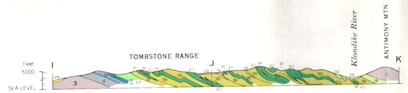
PRECAMBRIAN AND/OR LATER

4 — *Dark brown- and green- to light grey-weathering dark green volcanic rocks, commonly with calcite filled vesicles, breccia, tuff, and agglomeratic; minor interbedded shale, chert, siltstone, and limestone; 4a, dark brown to dark green-weathering dark green volcanic rocks, commonly with calcite-filled vesicles, breccia, tuff, and agglomeratic. Interbedded with 2d and may be older. 4b, dark green, fine-grained andesite*

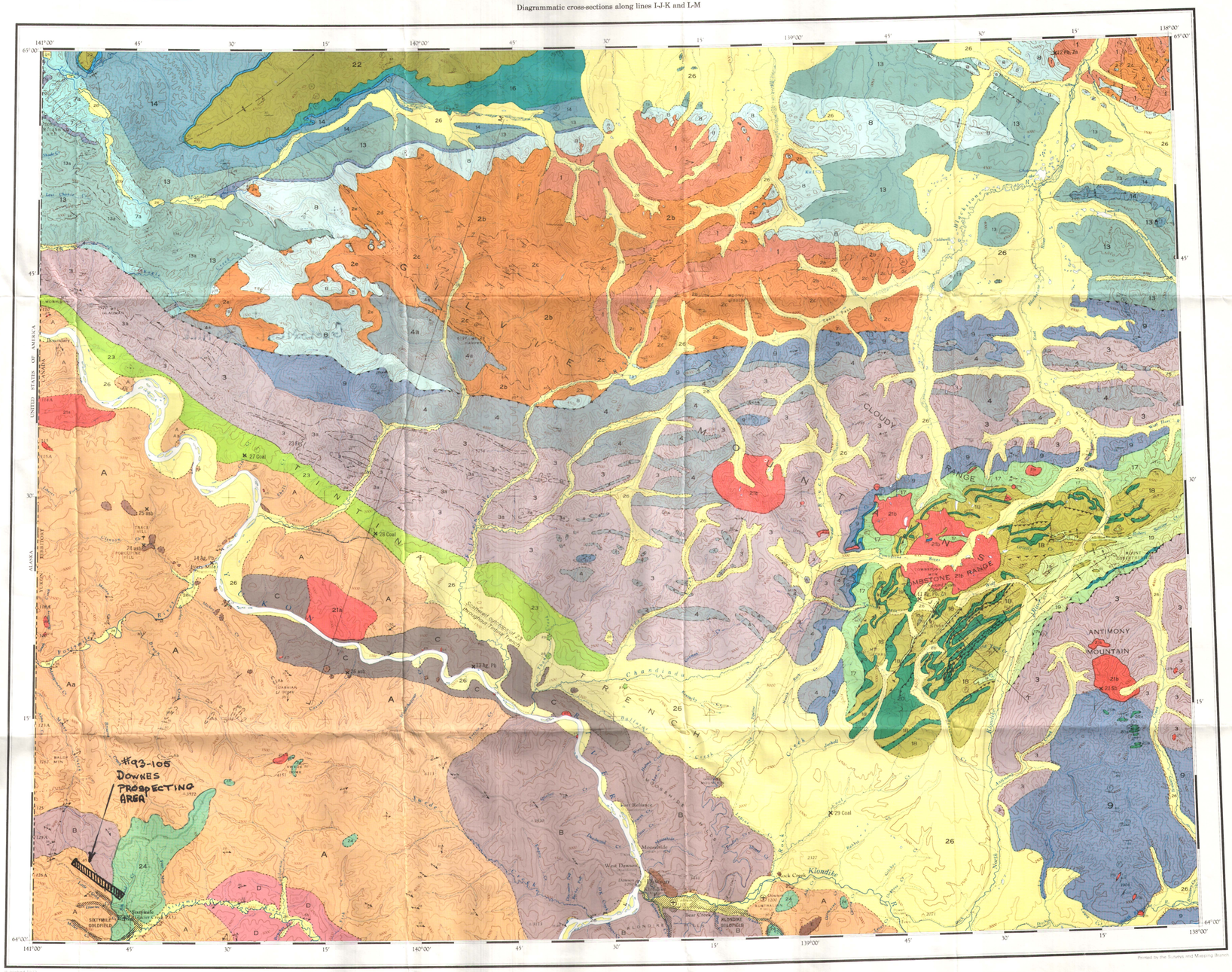
PRECAMBRIAN AND/OR CAMBRIAN

3 — *Mainly buff- brown- and rusty-weathering, gritty quartzite, sandstone and quartz-pebble conglomerate; black, maroon and green shales, and slates; schistose quartzite, quartz chlorite schist, quartz-mica schist and phyllite; minor limestone and black chert; 3a, thin- to medium bedded, dark grey limestone*

Geological boundary (defined, approximate, assumed)
Bedding, tops known (horizontal, inclined, vertical)
Bedding, tops unknown (dip known)
Bedding, estimated attitudes, may in part be of foliation; horizontal, inclined, vertical (dip: g, gentle; m, medium; s, steep)
Foliation (horizontal, inclined, vertical)
Fault (defined, approximate, assumed)
Thrust fault (teeth in direction of dip; defined, approximate, assumed)
Anticline (defined, approximate; arrow indicates plunge)
Syncline (defined, approximate; arrow indicates plunge)
Anticline, syncline (overturned)
Fossil locality
Mineral occurrence — 24 asb ×
Goldfield



Diagrammatic cross-sections along lines I-J-K and L-M



Printed by the Surveys and Mapping Branch

Issued 1972

Copies of this map may be obtained from the Geological Survey of Canada, Ottawa

INDEX MAP

MINERALS

Antimony	Sb	*Lead*	Pb
Asbestos	asb	*Silver*	Ag
Coal	C	*Tin*	Sn
Copper	Cu	*Tungsten*	W
Gold placer	Au	*Zinc*	Zn
Iron	Fe		

Geology by L.H. Green and J.A. Roddick, 1961

To accompany GSC Memoir 364 by L.H. Green

Geological cartography by the Geological Survey of Canada

MAP 1284A

GEOLOGY

DAWSON

YUKON TERRITORY

Scale 1:250,000

Miles 4 0 4 8 12 Miles
Kilometres 6 0 6 12 18 Kilometres

Magnetic declination 1970 varies from 31°33' easterly at centre of west edge to 33°17' easterly at centre of east edge. Mean annual change decreasing 3.7'

Elevations in feet above mean sea-level

Base-map at the same scale published by the Surveys and Mapping Branch in 1954, 1957 and 1958. Roads were revised by the Geological Survey of Canada for this edition

Any revisions or additional information known to the user would be welcomed by the Geological Survey of Canada

Copies of the topographical edition of this map may be obtained from the Map Distribution Office, Department of Energy, Mines and Resources, Ottawa

The following names have not been approved by the Canadian Permanent Committee on Geographical Names: Trace Hill, McCann Hill, Porcupine Hill, Woodchopper Creek, Monster River, East Blackstone River, Spotted Fawn Gulch

116 G-116 F(E1/2)	116 H	106 E
116 B-116 C(E1/2)	116 A	106 D
1284A	1283A	1282A
115 O-115 N(E1/2)	115 P	105 M
711A	1143A	890A

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO GEOLOGICAL SURVEY OF CANADA MAPS

DAWSON
YUKON TERRITORY