1990 Exploration

on

BELL CREEK PLACER LEASE
Clear Creek Area
Dawson Mining District, Yukon

for

Randfontein Metals Inc.

The Property covers Placer Lease PL8404
recently staked into Placer Claims

Centred on
137°18'W 63°50'N

in N.T.S. Sheet 115 P/14

September 1990

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Report #152

This report has been examined by the Geological Evaluation Unit under Section 41 Yukon Placer Mining Act and is recommended as allowable representation work in the amount of $ 10,011.91.

for Chief Geologist, Exploration and Geological Services Division, Northern Affairs Program for Commissioner of Yukon Territory.

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1.0 INTRODUCTION

In August of 1990, Paul A. Hawkins & Associates Ltd. was commissioned by Mr. Richard J. Rienstra of Randfontein Metals Inc. to examine the Placer Lease #PL 8404 on Bell Creek held by Mr. Keith Dye and report on its potential. Such examination and report were to be completed within a limited budget.

Mining Rights to the property, consisting of a one mile Prospecting Lease, have been recently converted into 10 Placer claims. Keith Dye has signed an option agreement with Richard J. Rienstra (in trust for Randfontein Metals Inc.) to assign his interest to Rienstra subject only to a 10% Gross Production Royalty and conditional upon certain rental payments/Advance Royalties with a buy out provision.

The original "Lease to Prospect #8404" was staked out on August 18, 1989 by Keith Dye and granted under Section 92 of the Yukon Placer Mining Act on the 22nd of September 1989 (see Appendix). This one mile lease is located 762 m (2,500 feet) upstream from Bell Creek's confluence with the Left Fork of Clear Creek. The property runs 1690 m upstream and extends not more than 304.8 m on each side of the Baseline established down the centre of the valley. The property covers about 98 hectares (242 acres).

Upon conversion to claims, a yearly work commitment of $200 per 152.4 m (500 ft.) wide claim along the creek is required plus $10.00 per claim per year as a renewal fee. The minimum yearly costs associated with maintaining the 10 claims are therefore $2,100.00 due on or before August 18th of each year plus any payments due under the option agreement.

The property was examined by the writer alone between August 15-22 and accompanied by R.J. Rienstra between August 23 and 24th.

The report is based on the results of this examination; on the writer's personal knowledge of the Clear Creek Area; and a study of the available government reports.

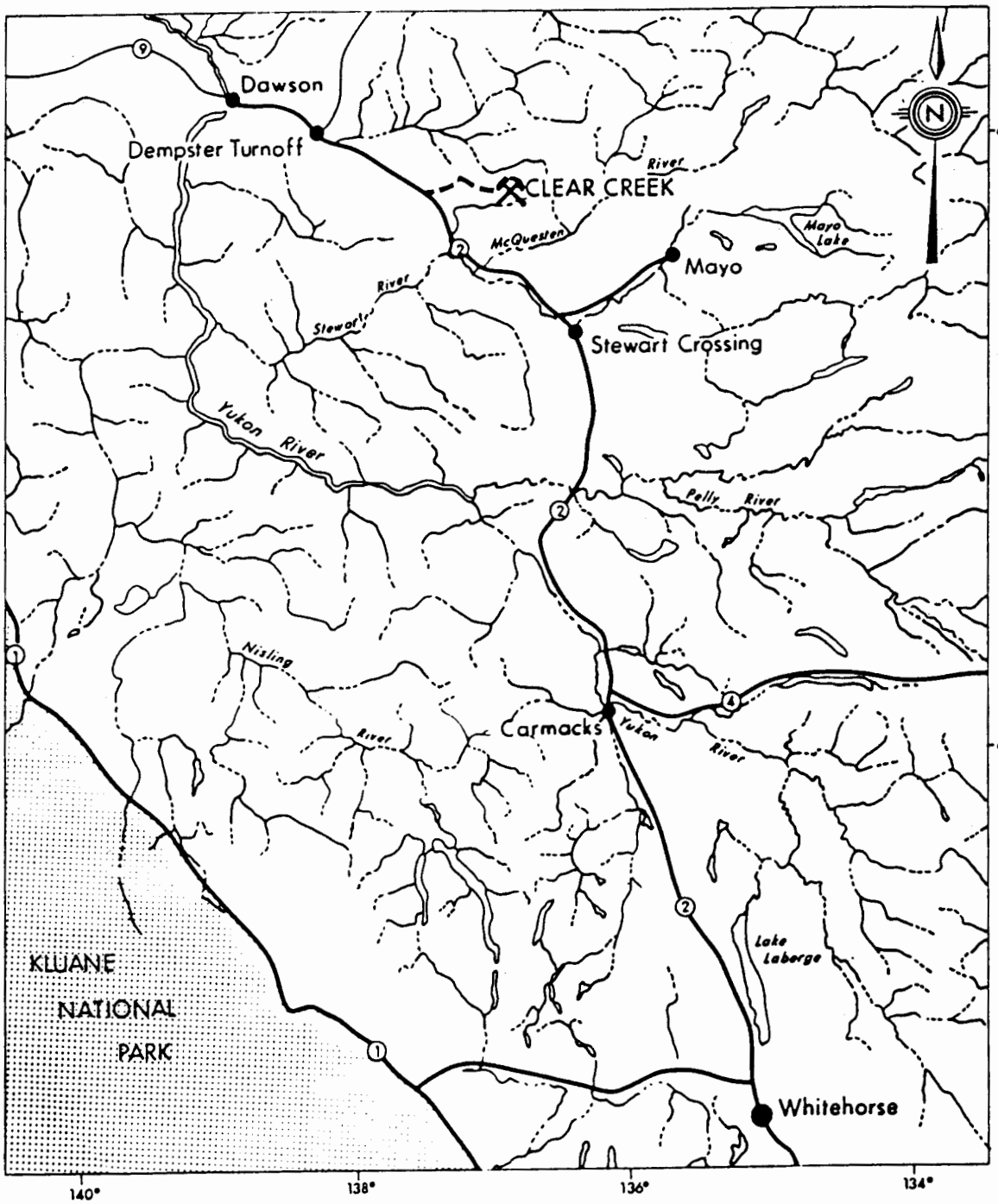
Any gold recoveries or weight of gold mentioned in this report are raw gold weights. No corrections were made at this time for fineness which runs between 730 and 860 for gold from the Clear Creek Area.

1.1 Location and Access

Bell Creek is located within the Clear Creek drainage basin. Clear Creek is located 115 km ESE of Dawson City, Yukon as shown on Drawing A90-147-01. The Placer Lease and subsequent claims are located off the left fork of Clear Creek on a southeast flowing tributary. The property lies within the Dawson Mining District. The property is accessible off the Klondike Highway (#2), 90 km east of Dawson, then 32 km east along a good gravel road to Clear Creek itself, then 2 km north along the placer mining road on the floor of the Clear Creek Valley as shown on Drawing A90-147-03. Most of Bell Creek is accessible by a relatively good gravel road and only some of the local access trails to the creek bed warrant the use of 4-wheel drive vehicles.

The 1990 trenching program was restricted to the lower portions of the lease or the first claim as shown on Drawing A90-147-04.

Most supplies may be obtained in Whitehorse 432 km to the south, the capital of the Yukon Territory. Whitehorse has scheduled jet service to Vancouver with several flights a day. Whitehorse has a population of 19,000 and is the business centre for the Yukon. It is connected by all-weather roads to the Alaska sea ports of Skagway and Haines. The Klondike Highway (#2) provides access to the Alaska and Stewart Cassiar Highways which connect the Yukon to the south.



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RANDFONTEIN METALS INC.
CLEAR CREEK AREA
LOCATION MAP

WHITEHORSE MINING DISTRICT, YUKON

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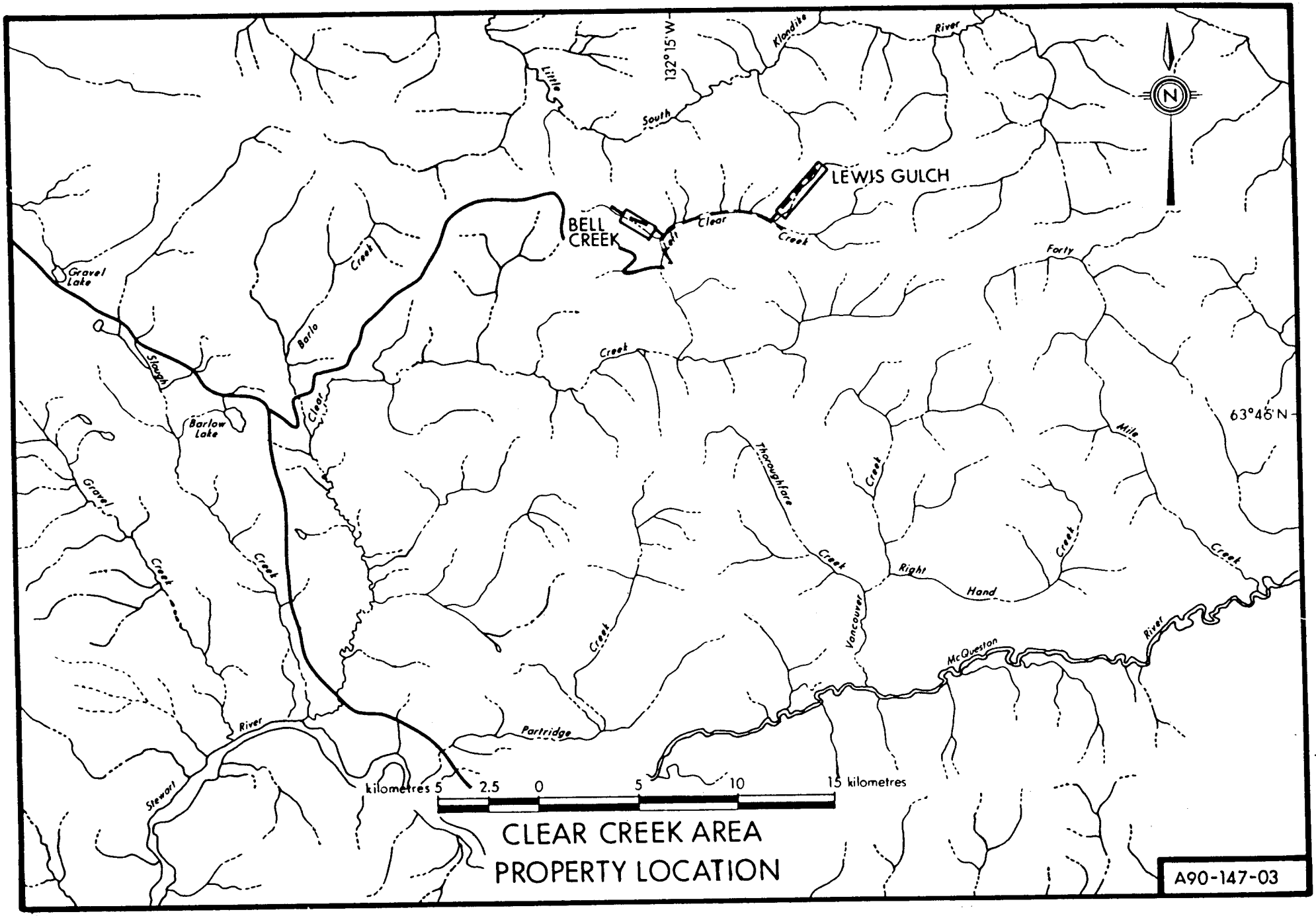
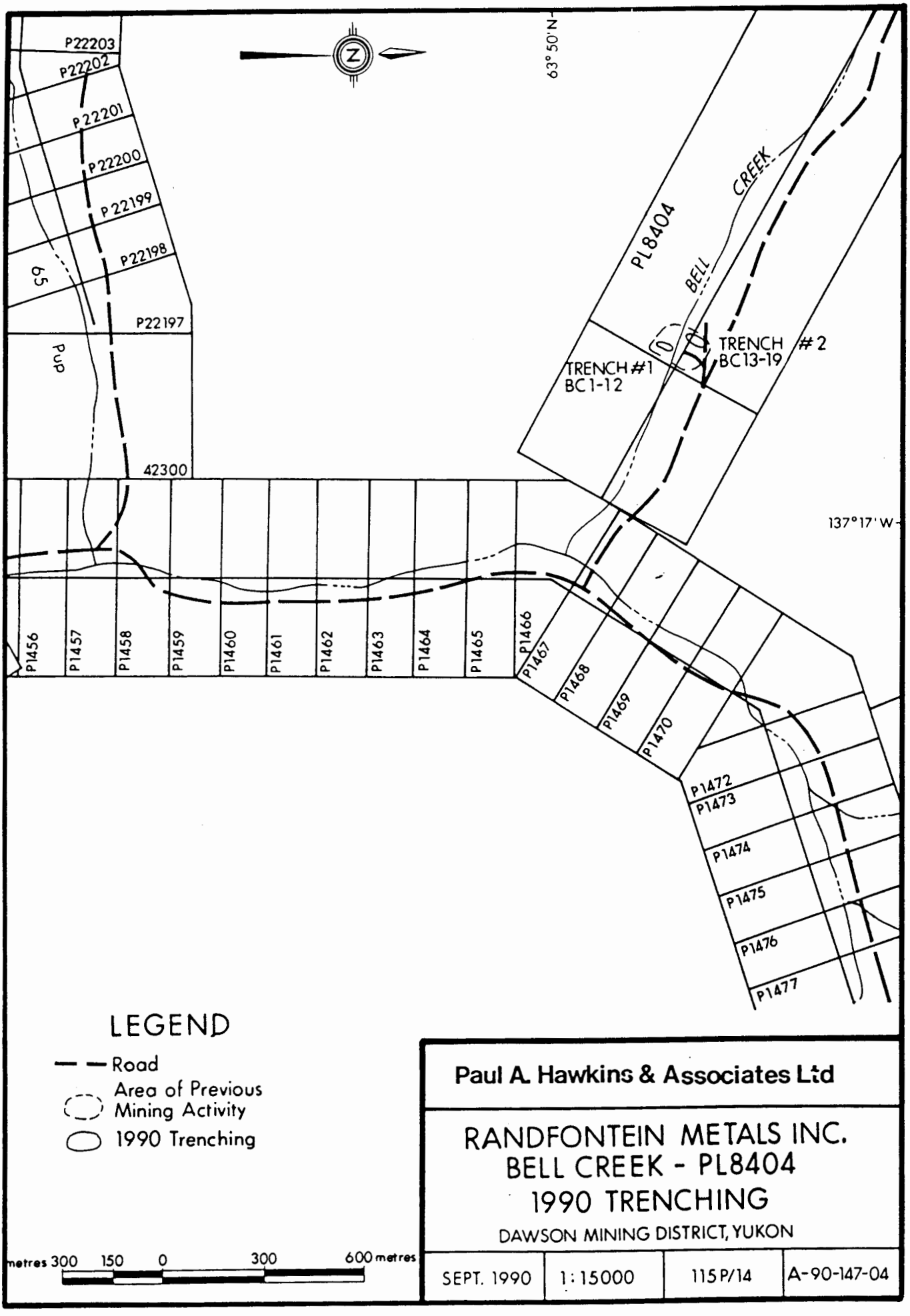

132°15'W
Little South Klondike River
LEWIS GULCH
BELL CREEK
Clear Creek
Gravel Lake
Barlo Creek
Slough
Barlow Lake
Clear Creek
Forty Mile Creek
63°45'N
Thoroughfare Creek
Gravel Creek
Creek
Creek
Creek
Right Hand Creek
Creek
Creek
Vancouver
McQuesten River
Partridge
River
Stewart
kilometres 5 2.5 0 5 10 15 kilometres
CLEAR CREEK AREA
PROPERTY LOCATION
A90-147-03


63° 50' N
137° 17' W
P22203
P22202
P22201
P22200
P22199
P22198
P22197
65
PUP
42300
PL8404
BELL
CREEK
TRENCH #1
BC1-12
TRENCH #2
BC13-19
P1456
P1457
P1458
P1459
P1460
P1461
P1462
P1463
P1464
P1465
P1466
P1467
P1468
P1469
P1470
P1472
P1473
P1474
P1475
P1476
P1477
LEGEND
Road
Area of Previous Mining Activity
1990 Trenching
metres 300 150 0 300 600 metres
Paul A. Hawkins & Associates Ltd
RANDFONTEIN METALS INC.
BELL CREEK - PL8404
1990 TRENCHING
DAWSON MINING DISTRICT, YUKON
SEPT. 1990
1:15000
115P/14
A-90-147-04

Locally a limited amount of supplies including groceries and fuel can be obtained at Stewart Crossing or at the Dempster Highway turn-off both about 100 km away from the property.

The property lies just outside of the Yukon Indian Land Claim Withdrawal made to facilitate the settlement of Native Land Claims. Current road access into the property area crosses an area withdrawn although an access corridor remains outside the claim area. Future mine access will likely not be adversely affected except for increased concerns likely in the areas of resource management and environmental impact by the new agencies created by the final settlement.

1.2 Physiography

The property lies off the left fork of Clear Creek on a south east flowing tributary. Clear Creek itself is located east of the Tintina Trench, which is a northern extension of the Rocky Mountain Trench system and is characterized by a broad zone of intense fracturing, faulting and shearing which produces a dramatic change in topography. The Stewart River flows part way through this broad very wide valley.

The area is subdued locally, generally rounded mountains with broad "U" shaped valleys and narrower "U" shaped to "V" shaped tributaries with rougher mountains raising to the east as the West Ridge. The Bell Creek Valley can be classified as a relatively narrow "U" shaped valley becoming a "V" shaped valley at its headwaters.

The elevation of Clear Creek as the Left Fork enters the main creek is 725 m. Where Bell Creek enters the Left Fork of Clear Creek the elevation is 790 m and its headwater elevations reach 1005 m. The hills above the creek reach a maximum of 1280 m. The grade in the creek bed averages about 3%. The creek bed meanders somewhat in the flatter sections of the valley bottom. Bell Creek drains into the well developed "U" shaped valley of Clear Creek.

Clear Creek flows into the Stewart River which itself flows into the Yukon River to the north.

The climate of the area is typical for the central Cordilleran with long winters and moderate temperatures. Break-up begins in April and freeze-up starts in October. Snow returns to the higher elevations in September. Temperatures range from 30°C in August to -45°C in January. Rainfall is relatively light with most of the moisture coming in the form of snow.

The property area is well wooded except for an area cleared for previous test mining. The tree line is about 1300 m in elevation. The forest cover is made up of white spruce, lodgepole pine, balsam, black spruce, poplars, white birch, willow and alder. Some commercial timber values likely exist in some of the unmined valley bottoms and side hills. Above the tree line in areas like along the access road, dwarf birch, labrador tea and moss covered slopes with some grassy meadows occur. Mountain cranberry, blackberries, raspberries, gooseberries, black and red currants and strawberries are also present.

Black and Grizzly bears are present within the area along with populations of Moose, Fox, Rabbit and other small wildlife.

1.3 Property History

Gold was first reported in the Yukon in 1850 by Hudson's Bay Company Explorer, Robert Campbell, at Fort Selkirk. Gold placers in the Yukon Basin were worked as early as 1880 but it was not until 1896 when gold was discovered on the tributaries of the Klondike River the rush began. This major discovery was made by George Carmack and his two native companions, Skookum Jim and Tagish Charles on Bonanza Creek. Within three months of the discovery 500 claims had been staked and the Yukon entered a new era with the Klondike Gold Rush of '96.

The first prospecting in the general area likely occurred in 1885. In 1895 coarse gold was found in several tributary creeks flowing into the Stewart River. In 1898 gold was discovered on Clear Creek and was explored and mined in the 1900s. Parts of Clear Creek were mined by dredge in the post World War II days.

In the mid 1960s most Yukon placer operations ceased. It was not until the early 1970s with the rising price of gold that new interest resulted in most historic producing streams being restaked. Most of these operations were family run with some small junior companies also operating at various profit and loss levels.

The Clear Creek area, like the rest of the Yukon Placer industry was reactivated in the late 1970s. Several family oriented operations remain today on the main parts of the creek which were not mined out in the past either due to depth or other conditions which prevented their extraction.

Queenstake Resources renovated the old 350 ton bucket line dredge and recovered some 12,579 oz. Au between 1979-1987. The dredge mined 2250 yd^3 per day and had an operating cost of about $2.31 per yd^3. Economic reserves accessible to the dredge were apparently mined out in 1987. The dredge was apparently operated on the Right Fork of Clear Creek just above the Forks.

In 1990 four operations were active on Clear Creek near Bell Creek. John Klassen's operation located about 3 km north of the forks on the Left Fork of Clear Creek processed about 80 yd^3 an hour using an all Caterpillar operation using one D9H Cat bulldozer, two 966D loaders and a 935 backhoe. About 7 km above Bell Creek on the Left Ford of Clear Creek, Nels Harper used two Caterpillar tractors and two loaders to feed 50-90 yards per hour in his operations. A further 4 km upstream, Rat River mining was processing 35-45 yd^3 per hour using one Caterpillar Tractor and a loader. Another operator was active on 65 Pup, 1.5 km downstream of Bell Creek just adjacent to Bell.

All four operators currently active in the area are apparently profitable. Some of the ground in the main part of Clear Creek has no doubt been mined several times. Mining now appears to be concentrated on buried channels previously missed due to depth of overburden cover or positions on the side of the valley bottom which resulted in them being missed. Thickness of overburden or waste apparently restricts the economics of some operators.

No detailed search of records for previous claim or lease holders was made at the Mining Recorder Office in Dawson. Field evidence suggests that the property has been staked several times in the past. The old timers likely worked the active creek in the early 1900s to a limited extent, no evidence exists of large scale mining. Several small old test pits exist along the creek and were likely dug within the last 20 years. This is likely the timeframe when road access was developed into Bell Creek. The lower 150 m of the lease has also been previously stripped, but is now well vegetated indicating that it was never mined. Several other test pits were subsequently dug in this stripped area plus another area about 450 m further upstream with a small backhoe.

The depth of overburden was likely a deterrent to full scale mining at that time. Thus the creek except for perhaps during the 1900s has never been extensively mined compared to the main part of Clear Creek if at all.

Production records maintained by the Mining Recorder indicate that between 1978 and 1988, 34,429 oz. of gold was reported to be produced on Clear Creek.

Although the Clear Creek Area has never matched the production of the main Klondike Gold Fields, it still is an important satellite camp. In 1990 about 4,000-5,000 oz. of gold should be produced from the four operations alone currently on the Left Fork of Clear Creek.

1.4 Regional Geology

The Clear Creek area is underlain by Late Precambrian Metasedimentary rocks and Cretaceous granitic intrusives which were mapped in 1964 (Bostock, 1964). These metasedimentary rocks of the area include mica schist, quartzite, limestone, phyillites and slate. The Cretaceous intrusives are part of the Coast Range Plutonic Intrusive suite of granite-granodiorite-monzonite rocks. Late Tertiary fine and coarse grained clastics are also found to the west of the property area. There are no significant known lode prospects in the Clear Creek Area.

The Surficial Geology of the Clear Creek Drainage Basin was mapped in 1983 (Morison, 1983). The Clear Creek drainage basin is beyond the range of both the Reid and McConnel Cordilleran Ice Sheets (Bostock, 1964; Hughes et al, 1969). The main significance of this is that during the Reid and McConnel ice ages the basin was predominantly undergoing fluvial erosion and downcutting rather than being covered with Ice. Evidence of continental glacial features are found up to 945 m, above which it appears to be unglaciated, while below that level, remnant landforms are attributed to a Pre-Reid advance.

In the Clear Creek area, although above the Cordilleran Ice Sheet, it was still high enough to support independent Alpine Glaciation. Alpine glacial drift likely associated with Reid glacial activity has been mapped at the headwaters of Left Clear Creek (Morison, 1985). The surficial deposits present in the area include Reid alpine drift, pre-Reid glacial landforms, Quaternary valley bottom and buried alluvium, slope colluvium and late Tertiary clastic sediments (below pre-Reid glacial drift).

The creek and gulch auriferous placer deposits in Clear Creek area are a result of the downcutting and subsequent gravelly stream sedimentation during the Reid and McConnel glacial intervals.

The gravels of the main part of Clear Creek were likely deposited in a braided river environment. The occurrence of a braided river environment in a relatively wide

valley bottom would suggest that concentrations of placer gravel should occur vertically throughout the sequence. Therefore, the distribution of the gold should also be laterally discontinuous reflecting a likely multi-channel river environment. Thus a continuous "paystreak" on the bedrock surface is not likely in the main Clear Creek Valley given the fluvial environment of depositions.

The distribution of detrital gold in gulch gravels on tributary creeks to Clear Creek (narrower valleys) should be laterally more confined. This would be consistent with minimum lateral stream migration in the incised narrower valleys which have not reached their base levels yet. On these narrower valleys a "paystreak" could be possible on the bedrock surface depending on the occurrence and distribution of detrital gold in the local creek environment.

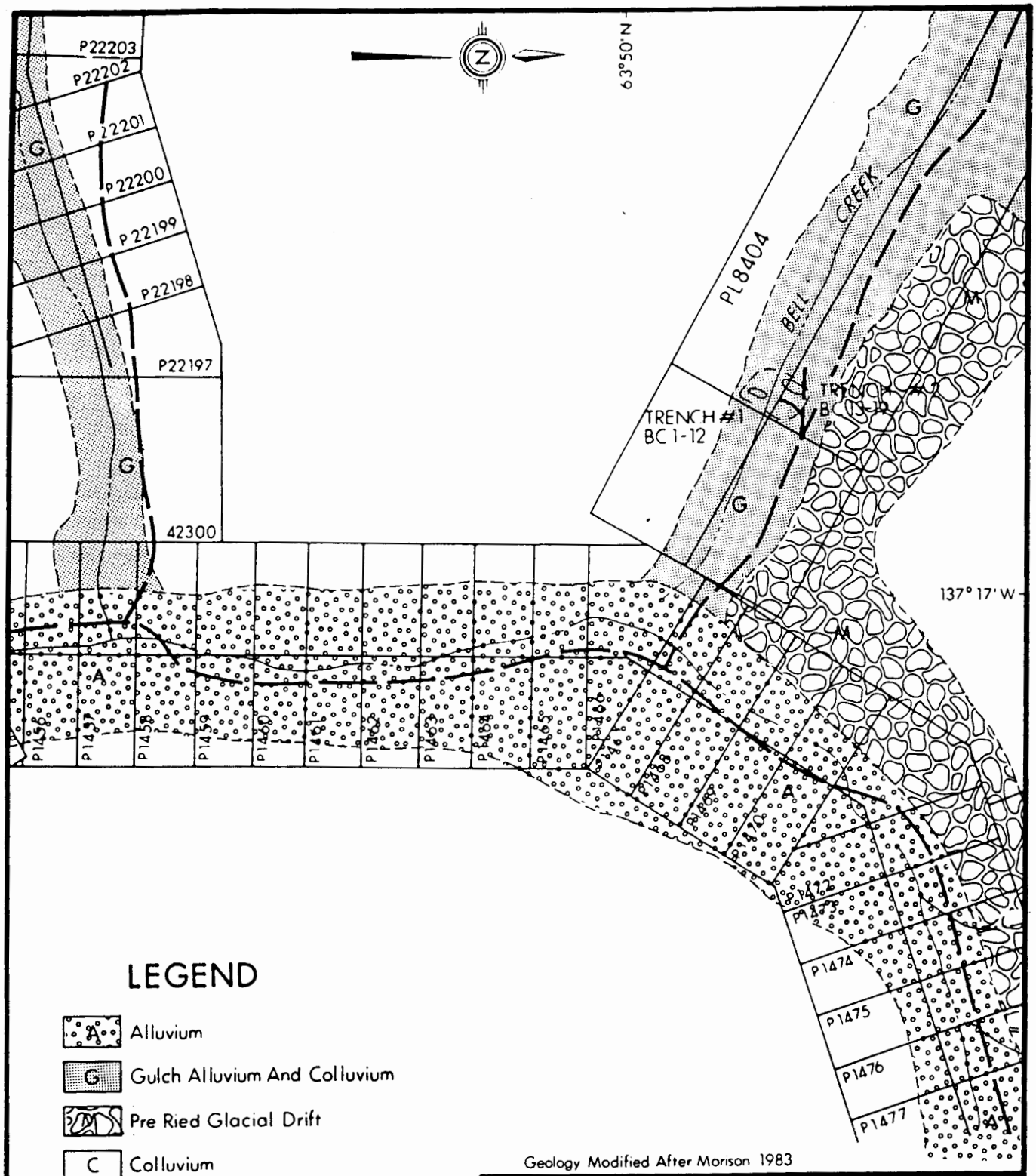
One of the affects of pre-Reid glaciation was to bury old gravel below glacial drift. Some of these buried channels are auriferous and one is now currently being mined at the mouth of the Left Fork of Clear Creek.

The affects of multi-period glaciation combined with deposition/erosion present a complex geological history for the surficial materials in the Clear Creek Area.

1.5 Property Geology

The Bell Creek Valley is likely underlain largely by schistose metasediments best described as micaceous schists. Several outcrops are present on the east side along the access road. A small Coast Range intrusive has been mapped north of the headwaters of Bell Creek (Bostock, 1964).

The surficial deposits of the Bell Creek were mapped on a regional basis at a scale of 1:50,000 in 1983 (Morison, 1983) as shown on Drawing A90-147-09. This mapping indicated that the bottom of Bell Creek was covered with Quaternary Age (Recent) alluvium plain of stream deposits with colluvial material from the valley walls. Also present to the NE side of the lower valley are glacial drift and morainal deposits of a Pre-Reid ice advance. This indicates the surficial deposits in the valley bottom are of recent origin but may represent the reprocessing of older material.



LEGEND

- Alluvium
- Gulch Alluvium And Colluvium
- Pre Ried Glacial Drift
- Colluvium
- Road
- Area of Previous Mining Activity
- 1990 Trenching

Geology Modified After Morison 1983

metres 300 150 0 300 600 metres

Paul A. Hawkins & Associates Ltd

RANDFONTEIN METALS INC.
BELL CREEK - PL8404
SURFICIAL GEOLOGY

DAWSON MINING DISTRICT, YUKON

SEPT. 1990	1:15000	115P/14	A-90-147-09

Initial examination of the creek gravel indicated variable deposits of fine to medium sand bands with the general stream bed consisting of coarse to medium gravel with subrounded clasts. Clasts usually were made up of 40-60% of the gravel and consisted of largely micaceous schist with 10% Quartz vein material. Some quartz vein material carried disseminated pyrite. Upon panning, a good tail of fine grained pyrite was easily obtained. Most pans also contained some fine colors. Very little black sand was present.

No outcrop is visible in the valley bottom although outcrops are present on the valley walls. Examination of old trenches indicated bedrock was in excess of 6 m and had not been reached by past test pits.

The presence of fine colors in most material and ease in obtaining it from panning likely generated interest in the creek, however, the deep overburden likely prevented full evaluation.

2.0 PLACER MINING

The word "Placer" comes from spanish, colloquially meaning a place where gold can be easily recovered from gravel. In the direct translation it also means pleasure, suggesting that placer mining was considered a pleasure compared to hard rock mining.

Placer mining deals with the mining of loose material, such as sand, gravel and mud. This contrasts with hard rock mining. Placer mining uses gravity and density differences to recover heavy minerals from the lighter gravel constituents in which they are naturally mixed.

Gold with specific gravity of 19.3 is one of the heaviest minerals found in nature. Gold is only one of a group of heavy minerals typically present in placer deposits. Other common ones include magnetite, hematite, platinum minerals, scheelite, cassiterite, native copper and many of the metallic sulfides such as pyrite, chalcopyrite and marcasite.

In placer mining operations, water is used as the transporting or washing agent in which the lighter unwanted sand or gravel is washed away, leaving behind the heavy mineral (hopefully gold) in the sluice box or jig.

Since the early days of the Klondike Gold Rush methods for the mining placer deposits have improved greatly with the advent of trucks, bulldozers and other heavy equipment. Gold recovery systems have, however, remained about the same with some advances in the recovery of fine gold. A sophisticated system, however, does not necessarily guarantee complete gold recovery.

Auriferous placer deposits consisted of natural occurring concentrates of heavy minerals within the stream or river environment of their deposition. During this

process the rock is broken down, the finer and lighter fragments are transported downstream by run-off water, the heavier minerals because of their higher density, tend to travel less distance and remain closer to bedrock. This happens because the stream's velocity cannot support the gold nugget's weight. The smaller the size of the gold the better able the water flow is to move it. The coarseness or size of gold nuggets is generally a measure of the distance travelled in the water.

Most of the richest gravels are those that lie closest to the bedrock in a bedrock channel. Gold can also lie above bedrock on false bottoms or elsewhere due to other stream processes. The key to finding gold in placer deposits is to find old stream channels or paystreaks where the gold has been concentrated over time by natural processes. The location of these auriferous channel deposits is dependant on the geomorphology of the area and the geological history of the stream. Exploration is required to locate these deposits which have escaped mining by previous prospectors.

2.1 1990 Field Program

The 1990 field program was undertaken between August 15 to 23 and again on August 31st. The writer was accompanied on August 15 and 16 by Orest Curniski, a prospector who is an associate of the Vendor of the property and Richard Rienstra, a director of Randfontein Metals Inc. between August 21 to 23 and on the 31st.

The first two days of the examination were spent prospecting the full length of the one mile lease and review of other operations on Clear Creek.

Prospecting or initial examination of Bell Creek indicated that there was some previous work undertaken on the property by previous holders. Several small areas have been cleared and a number of shallow test pits have been dug. The valley floor in the lower part of the lease was about 200 m wide before reaching the break in slope. Bell Creek meanders within the central 100 m of this. Initial panning of a number of samples showed several fine #3 colors in surface material and from old test pits.

Two areas were selected for trenching on the lower 150 m of the lease based on the area having been previously stripped and a logical mining operation starting point as shown on Drawing A90-147-04.

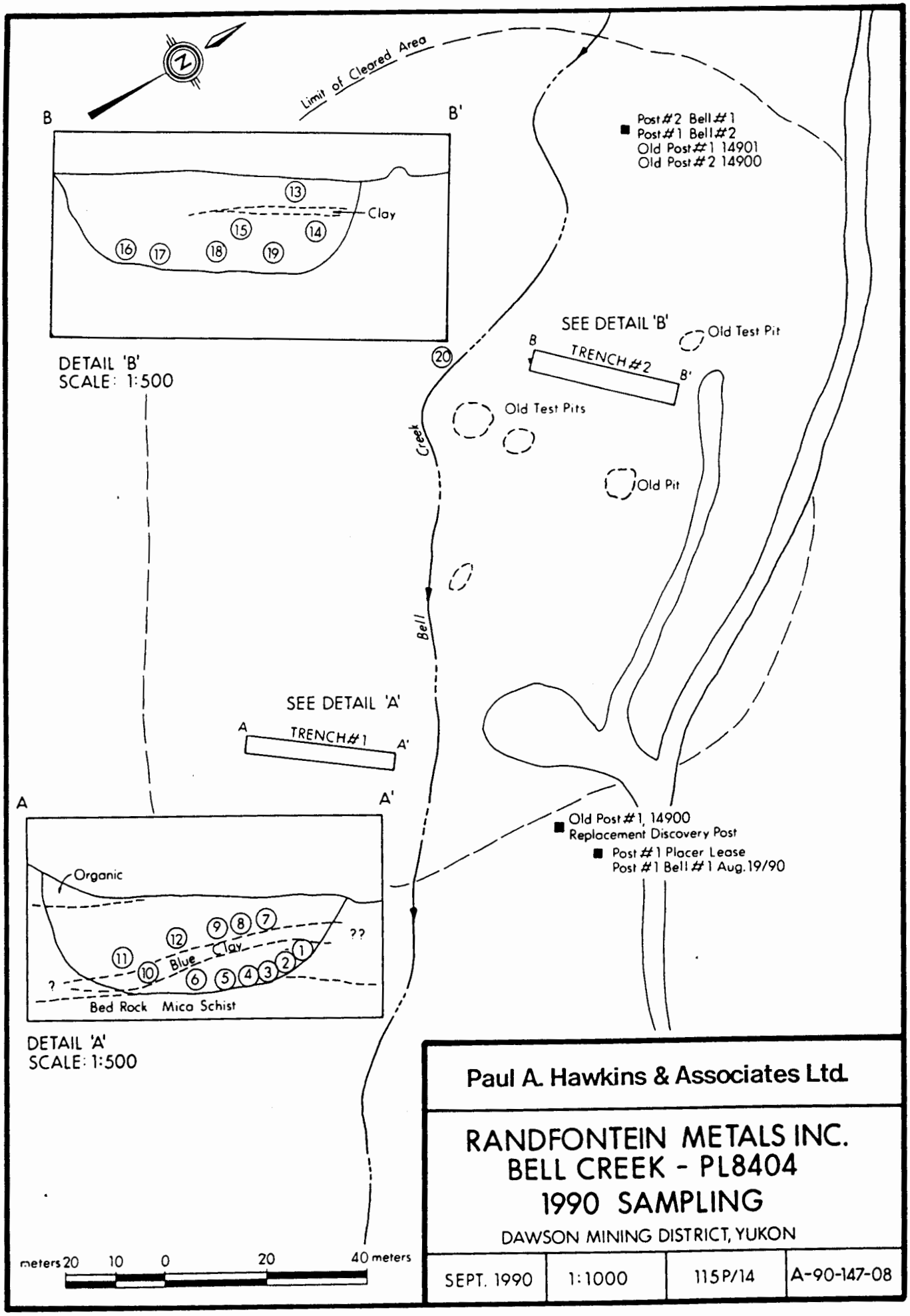
A Caterpillar 235 backhoe was used to dig two trenches about 90 m apart. The trenches were 30 m x 3 m in size. The backhoe was equipped with a 2½ yd^3 rock bucket. The maximum digging depth of the backhoe is 8.08 m.

In the first trench near the bottom of the lease, a series of 12 samples were obtained as the trench was dug. Samples were laid out around the trench using the maximum reach of the backhoe. Sample volume was generally about 2 yd^3. These large samples were subsequently resampled for processing in a small mini-plant. Seven samples were also taken from the second trench. One sample was also taken from the adjacent creek bank.

The mini-plant used to process the samples consisted of a small 0.3 m x 0.6 m trommel feeding through a 0.3 cm (⅛") screen to a 0.3 m x 1.2 m vibrating sluice. The ruffles were made of 2.5 cm angle iron mounted above a vibrating rubber matte. This portable plant is ideally suited for small scale testing and is capable of recovering very fine gold. The plant is capable of processing about 0.20 yd^3 per hour if the material washes well, less if sample contained clay.

The mini-plant was powered by a 1000 watt Yamaha gasoline generator which also powered a smaller electric water pump which provided water for the sluice and clean-ups. Where distances were greater to the creek than the electric pump could handle, a small two cycle gasoline pump was used as a supply pump for the electric pump.

Sample volume run through the plant was measured with 22.73 litre plastic pails which when filled to 80% capacity using a 25% swell factor contain 0.0237 yd^3 or 1/52.5 yd^3. Sub-samples ranged from 2 to 4 pails. Each sample took between 1-2 hours to process including clean-up.


Limit of Cleared Area
B
B'
13
Clay
15
14
16
17
18
19
DETAIL 'B'
SCALE: 1:500
Post #2 Bell #1
Post #1 Bell #2
Old Post #1 14901
Old Post #2 14900
SEE DETAIL 'B'
Old Test Pit
B
TRENCH #2
B'
20
Old Test Pits
Creek
Old Pit
Bell
SEE DETAIL 'A'
A
TRENCH #1
A'
A
A'
Organic
12
9
8
7
??
11
Clay
Blue
10
6
5
4
3
2
1
?
Bed Rock Mica Schist
DETAIL 'A'
SCALE: 1:500
Old Post #1, 14900
Replacement Discovery Post
Post #1 Placer Lease
Post #1 Bell #1 Aug. 19/90
meters 20 10 0 20 40 meters
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RANDFONTEIN METALS INC.
BELL CREEK - PL8404
1990 SAMPLING
DAWSON MINING DISTRICT, YUKON
SEPT. 1990
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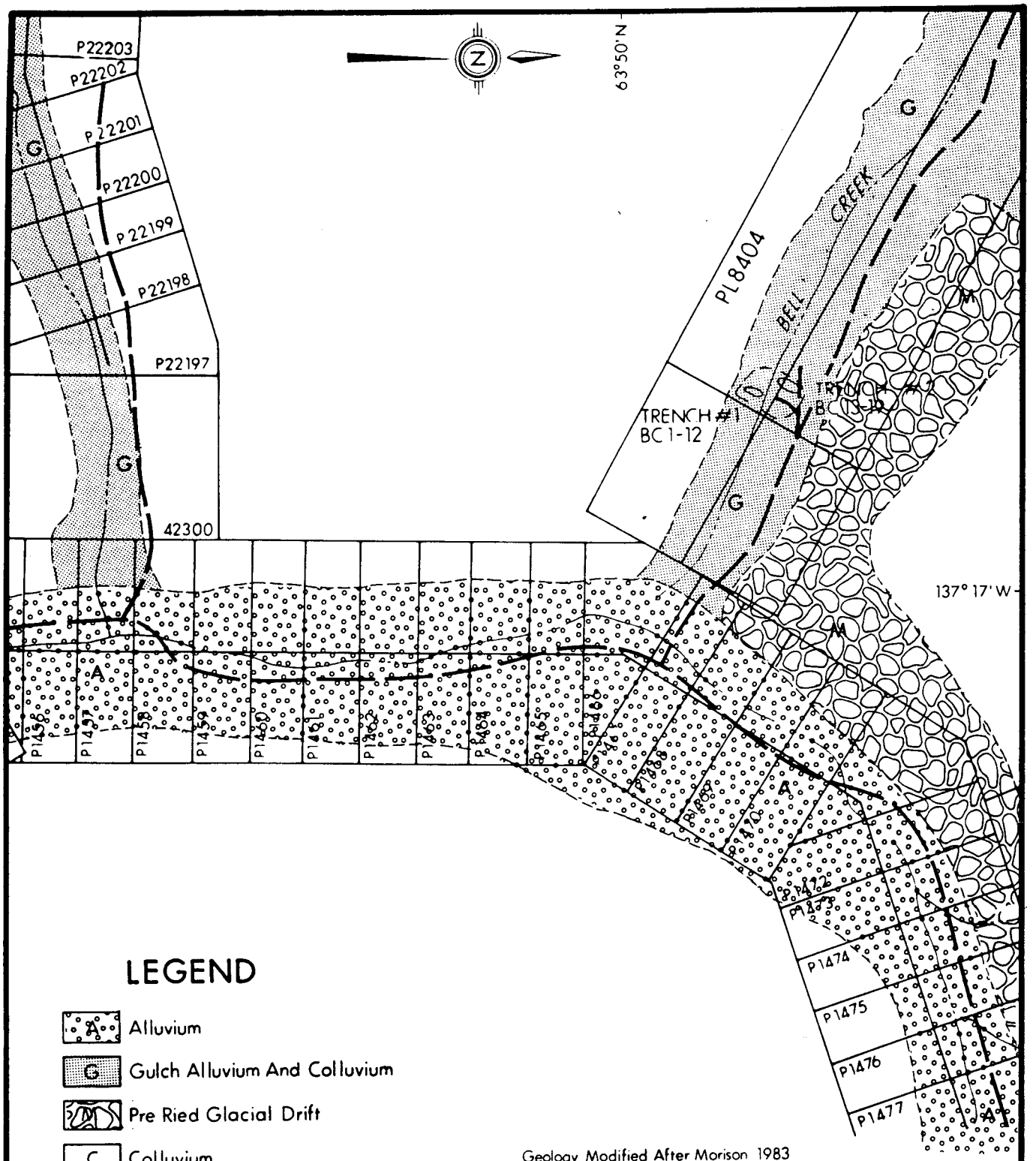
A-90-147-08



LEGEND

- A — Alluvium
- G — Gulch Alluvium And Colluvium
- Pre Ried Glacial Drift
- C — Colluvium
- Road
- Area of Previous Mining Activity
- 1990 Trenching

metres 300 150 0 300 600 metres

Geology Modified After Morison 1983

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BELL CREEK - PL8404
SURFICIAL GEOLOGY

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A heavy mineral concentrate was taken from the first three riffles (hereafter called the concentrate), where the majority of the gold should report. The material in the lower riffles was stockpiled for a later composite sample. The tails from each sample were also grab sampled to check to see if any gold escaped the sluice.

The heavy mineral concentrate was carefully rinsed from the sluice and had a volume of about 2 litres or half a gold pan. This concentrate would clean-up to about 50 gm by careful panning. Any coarse gold was hand picked and placed in small plastic vials. The 50 gm concentrate was then placed in kraft paper soil sample bags. The bags were air dried and forwarded to Loring Laboratories for gold analysis by Mercury Amalgamation. The weight of the hand picked gold was added to the amalgamation weights to calculate the equivalent mg/yd^3 for each sample. The grab samples from the sluice tails were checked for gold using conventional FA/AA techniques. All laboratory results are shown in the Appendix.

2.2 1990 Program Results

Field programs indicate that auriferous channel gravels occur on the property. These channels are restricted in size and are covered with waste material including a Blue Clay band. These auriferous gravels are above cut-off grade for a medium sized efficient operation. The largest piece of gold found to date was a #2 color weighted 3.937 mg. Most colors were #3 colors and under 0.1 mg in weight. With larger samples and better sampling statistics more representative values could be expected.

The trenches and sample locations are shown on Drawing A90-147-08. Results and short descriptions are presented in Table 1 and Table 2. Processing Records are provided in the Appendix.

Trench #1

Sample BC-1C returned 132.3 mg/yd^3, the highest of all samples from a brown gravel which carried some quartz vein material along with some clay. A lot of pyrite was also present in the final concentrate. This sample was the closest to the centre of the valley of Bell Creek. The water flow of about 1400 l per minute prevented extension of the trench across the creek without major diversion.

About sixty #3 and two #2 colors were seen in the concentrate from this sample. The character of the gold was very flaky. This material likely represents the target zone for further development. The minor amount of clay present (2-5%) in the sample may be contaminating the sample and balling up the gold since gold has the tendency to be picked up by clay if the clay is not completely broken up by water.

The gravel was clast supported reddish brown in color with 60% oversize (+0.3 cm) of large subrounded to subangular micaceous schist and 10% quartz vein material. Very little black sand was present. This sample and the channel it comes from hold the most promise.

Sample BC-2 appears to be a washed gravel but failed to show any major amount of gold but did show a significant amount of pyrite. The sample was similar to BC-1 except with a slightly higher over size content of clasts.

Sample BC-3 was likely just above bedrock and contented low only marginal gold values with lots of very fine pyrite. This slightly reddish yellow brown gravel contained subangular clasts with minor clay present.

Samples BC-4, 5 and 6 are additional samples near the bedrock surface in the bottom of the trench. The gravel was very cold and permafrost is likely close. Testing failed to show any substantial gold, above the 2-5 #3 colors seen in the concentrate before going in the sample bag. These samples were likely outside of the channel found in BC-1.

TABLE 1

BELL CREEK TRENCH #1 SAMPLE LISTING						
Sample No.	Volume	Pan Factor	Recovered Gold (mg.)	Calculated Gold mg./yd^3	Sample Location	Sample Description
BC-1C	2 pails	26.25	5.040	132.3	Old Channel?	Qtz. boulders with lots of py
BC-2C	2 pails	26.25	.366	9.6	Near bedrock	Yellow brown gravel
BC-3C	2 pails	26.25	2.606	68.4	On bedrock	Brown gravel some clay
BC-4C	2 pails	26.25	.103	2.7	Old Channel	Subangular gravel minor clay
BC-5C	2 pails	26.25	.278	7.3	On bedrock	Red brown gravel
BC-6C	4 pails	13.125	.325	4.3	Near bedrock	Green brown gravel, flakes of mica
BC-7C	2 pails	26.25	.670	17.6	Above false bottom	Red brown gravel with clay, lots of py.
BC-8C	2 pails	26.25	.238	6.2	Old Channel	Green brown gravel, subrounded, some clay
BC-9C	2 pails	26.25	.143	3.7	Clay Flow?	Blue grey clay bed 3 ft. thick
BC-10C	2 pails	26.25	1.414	37.1	Above Clay	Red brown gravel above clay
BC-11C	2 pails	26.25	.244	6.4	Above Clay	Subangular gravel, lots of py
BC-12C	2 pails	26.25	.093	2.4	Old Channel	Red brown gravels, subangular

TABLE 2

BELL CREEK TRENCH #2
SAMPLE LISTING

Sample No.	Volume	Pan Factor	Recovered Gold (mg.)	Calculated Gold mg./yd³	Sample Location	Sample Description
BC-13C	3 pails	17.50	.124	2.2	Above clay band	Green grey gravel with some clay
BC-14C	2 pails	26.25	4.154	109.0	Below clay band	Browny grey clayey gravel
BC-15C	4 pails	13.125	.650	8.5	Sand bar?	Brown sand, fine py
BC-16C	4 pails	13.125	.065	.9	Old Channel	Red subangular gravel
BC-17C	2 pails	26.25	.102	2.7	Old channel or clay	Brownish grey gravel with clay
BC-18C	2 pails	26.25	.146	3.8	Near bedrock	Brownish green gravel with minor clay
BC-19C	4 pails	13.125	.124	1.6	Near bedrock	Dark grey brown gravel with clay
Adjacent Areas						
BC-20C	4 pails	13.125	.091	1.2	Creek Bed	Washed gravel
BC-21C	51 pails	1.029	.500	.5	Bell Creek Trenches	Bell Creek lower Riffle Composite

Samples BC-7, 8, 9, 11 and 12 were taken above a false bottom caused by a thick clay bed as shown in Drawing A90-147-08. These samples returned only minor values in gold but contained lots of fine pyrite. The gravel likely represents a more recently worked gravel than below the false bottom. These upper gravels may, however, host economic amounts of gold elsewhere but here they have to be considered waste.

Sample BC-10 was from the 0.6-1.2 m thick blue clay bed. As exposed in the trench, the clay dips away from the centre of the valley. The clay itself contains 30% medium grained fragments and itself returned 37.1 mg/yd^3 gold.

The clay bed appears to also confine a water table in the upper gravels while leaving the lower gravels below the clay relatively dry except near the bottom of the trench near bedrock and permafrost.

Trench #2

Trench #2 is located about 90 m further upstream from the first trench near several old, much shallower, test pits. A 0.3-0.6 m thick clay bed also occurred in this trench at about 3 m depth. Fast water inflow prevented trench mapping.

Sample BC-13 of gravels just above the clay indicated lower gold values and gravel deposits largely of sandy gravel with a minor amount of clay in clast supported matrix. Clasts were largely a micaceous schist.

Sample BC-14 just below the clay bed was a muddy red brown green clayey gravel. It was difficult to wash because of its clay content but returned 109 mg/yd^3 of gold. This sample yielded a #2 color which weighted 3.937 mg. This was the second best sample from the property. This gravel is likely a bedrock channel gravel. It may or may not be related to channel gravel sampled in BC-1.

Sample BC-15 yielded a #2 color which weighted 0.495 mg but only ran 8.5 mg/yd^3. This low result perhaps represents poor sampling statistics with such small samples. Lots of fine pyrite with minor black sand was seen in the final concentrate. This sample may have been a sand bar.

Samples BC-16, 17, 18 and 19 yielded low gold values across the rest of the trench.

Adjacent Areas

One other area adjacent to trench #2 was also sampled. Sample BC-20 was taken as a grab from across the creek on the 3 m high exposed bank. The top 0.6 m was a medium grained sand while the lower 2.4 m was a subrounded clast supported gravel. Some black sand was present in the final concentrate but no visible gold was seen.

Bell Creek Composite and Tails Grab Samples

A composite sample (BC-21) of the lower ruffles from all the samples from Bell Creek was reprocessed as a double check of the sluice's performance. The final concentrate of the reprocessing yielded only 0.5 mg of gold. This indicates that very little gold escaped the first two ruffles of the test plant. This was confirmed by FA/AA analysis of the composite itself and each sample's tails which indicated gold values of 5 ppb or less in all samples. Tails samples are designated by a postscript "T" after sample number. All analysis is shown in the Appendix.

2.3 Discussion

The Bell Creek property on which Randfontein Metals Inc., holds an option to acquire a 100% undivided interest in, hosts auriferous channel gravels. Trenching conducted on the lower 150 m of the property indicates that in two separate locations auriferous channel gravels occur at depths of 5 to 8 m on the bedrocks surfaces.

Previous test pits on the property likely never reached below 3 m to reach these auriferous gravels.

The auriferous channel gravels are covered by a low grade upper gravel between 2.4 m and 9 m thick which could be a mixture of gulch style alluvium and colluvium material from the valley sides. Just below this upper gravel a 0.6 m to 1.2 m thick bank of blue clay occurs. The source of this clay band is not clear, although blue clay is not uncommon in the Clear Creek area, such a thickness is anomalous. The lower gravels may be pre-Reid in age while the upper gravels may be of more recent age and not have undergone sufficient stream processing to concentrate gold in economic quantities.

The occurrence of auriferous channels at depth on bedrock in the central part of a relatively narrow valley is more typical of a gulch environment. Whether the two occurrences of auriferous channel gravels are directly related to each other is unclear. The auriferous channel gravels are typical in color and makeup to others found in the Clear Creek area.

Gold content in the lower channel although not excessively high, is still indicative of the concentrating stream environment. The size and shape of the large #2 gold colors indicates large volume samples are likely required to fully assess the property..

The presence of clay above and in the auriferous gravels may have caused problems in sampling and will likely require the use of a trommel to deal with any clay in any future test program or mining to efficiently recover all the gold present in the gravel and clay.

2.4 Conclusions

The Bell Creek Valley hosts auriferous channel gravels of a gulch type which were likely never reached by previous operators. Panning of near surface materials

in the valley commonly yields several colors from every pan but does not yield economic amounts of gold upon testing. This likely led previous land holders, upon shallow testing, to abandon the property after failing to see economic amounts of gold thus leaving untouched the deeper lower gravels below the clay.

Gravels found to date, although marginal in grade, have to be considered justification for further larger volume sampling to determine more exact grades. The property therefore is of merit and warrants additional work along its length and perhaps examination of the discovery claim below it.

2.5 Recommendations

The property warrants additional exploration to more fully access its potential. A two phased program of geological mapping and surveying followed by test mining of 500 yd^3 of auriferous channel gravel is recommended.

The program of geological mapping and surveying would consist of mapping the surficial deposits of Bell Creek and running survey profiles up and across the creek valley. Planning and selection of testing mining sites would also be made.

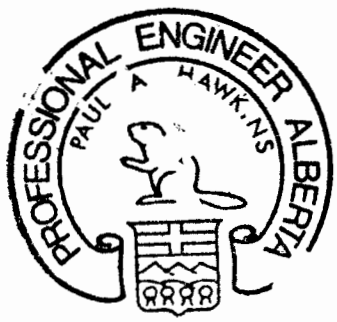
Test mining at several sites should be conducted with no less than 100 yd^3 per site to obtain a more representative gold recovery. Heavy equipment consisting of a Caterpillar 235 Backhoe, D-6 Caterpillar tractor, 50 yd^3 per hour test plant with a trommel and Bobcat would be required. Such a program would cost about $50,000, as shown below in Table 3.

TABLE 3

PROPOSED BUDGET - 1991 BELL CREEK

Geological Mapping & Surveying	$	15,000.00
Test Mining Program		30,000.00
Engineering & Report Writing		5,000.00
TOTAL:	$	50,000.00

Such a program would more fully evaluate the property.



Paul A. Hawkins, P.Eng.
Principal
Paul A. Hawkins & Associates Ltd.

October 9, 1990
Calgary, Alberta

CERTIFICATION

I, Paul A. Hawkins, of 72 Strathlorne Crescent S.W., in the City of Calgary, in the Province of Alberta, hereby certify:

1. That I am a member of both the Association of Professional Engineers, Geologists and Geophysicists of Alberta and the N.W.T.

2. That I am the Principal of the firm Paul A. Hawkins & Associates Ltd. which holds a Permit #P4521 to practice Engineering in Alberta.

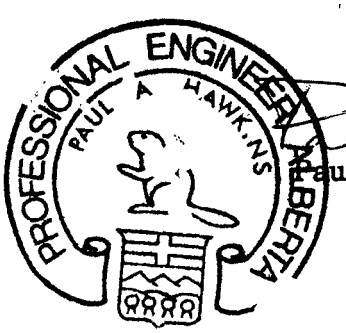
3. That I am a graduate of Queen's University with a Bachelor of Science degree in Geological Engineering.

4. That I have worked continually as a practicing geological engineer for the past 13 years.

5. That I have no interest in the property, nor do I hold shares in Randfontein Metals Inc. or any associated company.

6. That I have visited the property on August 15-24, 1990 and I am familiar with the area geology and mineral potential.

7. I have based statements and judgements in this report on my property visit and other work conducted under my supervision or direction.



Paul A. Hawkins, P.Eng.

Calgary, Alberta
October, 1990

REFERENCES

Bostock, H.S., 1964.
Geology - McQueston River - Yukon Territory
Geological Survey of Canada
Map #1143A

Hughes, O.L., Campbell, R.B., Muller, J.E., and Wheeler, J.O., 1969.
Glacial limits and flow patterns, Yukon Territory,
south of 65°N latitude.
Geological Survey of Canada.
Paper 68-34.

Morison, S.R., 1983a.
Surficial geology of Clear Creek drainage basin, Yukon Territory.
(NTS Sheets 115P11, 12, 13, 14)
D.I.A.N.D.
Open File Release 1983.

Morison, S.R., 1983b.
A sedimentologic description of Clear Creek
fluviatile sediments 115 P.
Central Yukon; in Yukon Exploration and Geology 1982.
D.I.A.N.D. Geology Section Pub.
Whitehorse, P. 50-54.

Morison, S.R., 1985.
Placer Deposits of Clear Creek.
Drainage Basin 115P, Central Yukon
in Yukon Exploration and Geology 1983.
D.I.A.N.D.
Whitehorse, P. 88-93.

APPENDIX

Indian and Northern Affairs Canada | Affaires indiennes et du Nord Canada

LEASE TO PROSPECT
YUKON PLACER MINING ACT

☒ New	☐ 1st Renewal	☐ 2nd Renewal
Mining District: DAWSON		Number: 8404

By This Lease to Prospect made under and by virtue of Section 92 of the Yukon Placer Mining Act and in consideration of receipt of the fees as prescribed by subsections (8) and (13) of the said Section, the Commissioner hereby grants to Keith Dye of Box 5395, Whitehorse, Y.T. Y1A 4Z2. the right to prospect for one year commencing on the 22nd. day of September, 19 89, and ending on the 22nd. day of September, 19 90 on the lands described hereunder.

DESCRIPTION

DAWSON MINING DISTRICT - Bell Creek 115-P-14

1 Mile Creek Prospecting Lease

Commencing from Post #1 which is on Bell Creek approximately 2,500 feet upstream from its confluence with Clear Creek, thence upstream a maximum distance of One (1) mile and not to exceed Post #2. (The location extends not more than 1,000 feet on each side of the baseline.)

THIS Lease is issued subject to the following terms and conditions:

1. The term of this lease shall be one year, renewable, subject to subsection 92(11) of the *Act*, for two additional periods of one year each if the lessee satisfies the Commissioner of the lessee's financial ability and intention to thoroughly prospect during such additional period and has otherwise complied with the *Act* and the terms and conditions of this lease.
2. It is a term and condition of this lease that, prior to the termination of the year, the lessee shall furnish evidence, supported by affidavit, to the satisfaction of the Commissioner that he has incurred during the year an expenditure of at least

   One thousand dollars ($1,000.00) in prospecting operations by recognized methods upon the location itself, in accordance with the proposal submitted in support of the application for the lease, or as amended, and attached hereto as Appendix A, or such reasonable alternative as the Commissioner may consider satisfactory, such evidence to include:
   (a) evidence of physical work on the ground, and
   (b) a statement of expenditures (supported by receipts, where applicable, on request) in sufficient detail to show reasonable costs of labour and direct operating costs of equipment expended on actual prospecting operations by recognized methods on the location itself, exclusive of other costs such as costs of mobilization, transportation of personnel and equipment, travel time, access, camps, food, lodging and capital costs, and
   (c) a report of physical work accomplished (including dimensions and volumes of excavations, etc.), a description of material encountered (overburden, stream-gravel, bedrock, permafrost, etc.) and a description of the sampling method employed or the reason for no sampling having been done, and
   (d) a plan or map showing the locations of the physical work.
3. The lessee shall comply with all applicable legislation, including the *Northern Inland Waters Act*, the *Occupational Health & Safety Act*, and, where applicable, the *Territorial Lands Act*, and any Regulations or Orders made pursuant thereto.
4. This lease conveys no right to mine, other than for purposes of prospecting and small-scale testing.
5. While this lease remains in force the lessee is not eligible to make application for another lease to prospect.
6. The lessee shall not assign, transfer or sublet the rights described in this lease, or any portion thereof, without the consent in writing of the Minister of Indian Affairs and Northern Development being first had and obtained.
7. If the evidence of expenditure referred to in paragraph 2 above is not furnished before the termination of the year, or is not satisfactory, the lessee is not entitled to a renewal of the lease, to grant of any placer mining claim staked within the lease during the year, or to make application for consent to assign, transfer or sublet any rights described in the lease.

Signed at Whitehorse Yukon,

This 22nd. day of September, 19 89.

ORIGINAL SIGNED BY R.G. RONAGHAN

R.G. Ronaghan
Regional Manager, Commissioner of Yukon Territory

802-6000-10 (6-84)

Canada

To: PAUL A. HAWKINS & ASSOCIATES LTD.,
300, 444 - 5th Avenue S.W.,
Calgary, Alberta T2P 2T8

ATTN: Paul Hawkins

File No. 33694
Date September 28, 1990
Samples Rock

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	Weight (mg)
"Material in Vials"	
BC-1-6	0.113
BC-1-7	0.529
BC-1-14	3.937
BC-1-15	0.485

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

To: PAUL A. HAWKINS & ASSOCIATES LTD.,
300, 444 - 5th Avenue S.W.,
Calgary, Alberta T2P 2T8

ATTN: Paul Hawkins

File No. 33694
Date September 28, 1990
Samples Rock

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	Initial Weight (g)	Gold mg
"Assay Analysis"		
SC-1C	19.03	0.192
SC-3C	10.67	2.084
LG-1C	9.94	0.581
LG-2C	3.49	0.188
LG-3C	8.93	0.481

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

To: PAUL A. HAWKINS & ASSOCIATES LTD.,
300, 444 - 5th Avenue S.W.,
Calgary, Alberta T2P 2T8

ATTN: Paul Hawkins

File No. 33694
Date September 28, 1990
Samples Rock

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	Initial Weight (g)	Gold mg
"Amalgamation Analysis"		
BC-1- 1C	10.71	5.040
BC-1- 2C	49.71	0.366
BC-1- 3C	38.42	2.606
BC-1- 4C	20.09	0.103
BC-1- 5C	28.95	0.278
BC-1- 6C	5.66	0.212
BC-1- 7C	27.16	0.147
BC-1- 8C	30.80	0.238
BC-1- 9C	15.34	0.143
BC-1-10C	24.01	1.414
BC-1-11C	17.14	0.244
BC-1-12C	20.63	0.093
BC-1-13C	4.41	0.124
BC-1-14C	9.57	0.217
BC-1-15C	9.65	0.165
BC-1-16C	46.99	0.065
BC-2-17C	32.21	0.102
BC-2-18C	4.88	0.146
BC-2-19C	31.37	0.124

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month unless specific arrangements are made in advance.

Assayer

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300, 444 - 5th Avenue S.W.,
Calgary, Alberta T2P 2T8

ATTN: Paul Hawkins

File No. 33694
Date September 28, 1990
Samples Rock

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	Initial Weight (g)	Gold mg
BC-2-20C	6.26	0.091
BC-1-21C	42.21	0.500

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

To: PAUL A. HAWKINS & ASSOCIATES LTD.,
300, 444 - 5th Avenue S.W.,
Calgary, Alberta T2P 2T8

ATTN: Paul Hawkins

File No. 33694
Date September 28, 1990
Samples Rock

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	PPB Au	PPM Ag
Geochemical Analysis		
SC-1-T	<5	-
SC-1-I	5	-
LG-1-T	10	-
LG-2-T	75	-
LG-3-T	<5	-
BC-2-TAILS COMP	5	-
BC-1- 2T	<5	-
BC-1- 3T	<5	-
BC-1- 4T	<5	-
BC-1- 5T	<5	-
BC-1- 6T	<5	-
BC-1- 7T	<5	-
BC-1- 8T	5	-
BC-1- 9T	5	-
BC-1-10T	5	-
BC-1-11T	<5	-
BC-1-12T	<5	-
BC-1-15T	<5	-
BC-2-13T	<5	-
BC-2-14T	<5	-
BC-2-16T	<5	-
BC-2-17T	<5	-
BC-2-18T	<5	-
BC-2-19T	5	-
BC-1-20T	<5	-
29676-DD-1	3100	32.0

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer

PLACER SAMPLE PROCESSING RECORDS

Paul A. Hawkins & Associates Ltd.

Mailing Address:
72 Strathlorne Cr. S.W.
Calgary, Alberta T3H 1M8
Canada
(403) 246-1992

FAX (403) 265-4573

Downtown Office:
300 - 444 - 5th Ave. S.W.
Calgary, Alberta T2P 2T8
Canada
(403) 242-7745

2 pails

PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-1 Date August 17

Serial No. ____

Dry Weight ____ lbs.; Volume 2X5 gals; How measured 2 Pails

How Processed Mini [illegible]

Processed by Paul Hawkins Title ____

Others present [illegible]

Visible gold :60 #3 colors; 2 #2 colors; 0 #1 colors. No visible gold ( );

Gold weight ____ milligrams Estim. fineness ____

Gold removed: Manually ( ); By amalgamation ( ); Other ____

Character of Gold: Fine or flaky (✓); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks Fine gold

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan (✓);

Remarks Very little Black Sand lots of pyrite

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks ____

Weight of black sand in sample ____ : Lbs. black sand per cubic yard ____

Amount of black sand is: Large ( ); Medium ( ); Small (✓);

Screen was used in washing process: No ( ); Yes (✓); Size of openings 1/8"

60 % Oversize; 40 % Undersize;

Remarks Qtz boulders [illegible] [illegible] Sub rounded

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks Brown water some Clay balls

Muddy water indicated by washing: Little ( ); Moderate ( ); Much (✓).

Grade of sluice or rocker ____ in./ft.; Source of wash water Electric pump

Notes: lots of [illegible]

1/ Number the same as FIELD RECORD sheet, which see.

2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

Paul A. Hawkins & Associates Ltd.

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Canada
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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-2 Date August 18/90

Serial No. _____

Dry Weight ? lbs.; Volume 2 pails; How measured 2 pails

How Processed Mini Plant

Processed by Paul Hawkins Title Principal

Others present Alone

Visible gold : 10 #3 colors; _____ #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky (✓); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks lots of fine pyrite

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (✓); Size of openings 1/8"

70 % Oversize; 30 % Undersize;

Remarks _____

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks Yellow brown wash

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water electric pump

Notes: Possible washed gravel some clay

Angular Qtz fragments

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

Paul A. Hawkins & Associates Ltd.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-3 Date August 10/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2 Pails

How Processed Mini Plant

Processed by Paul A. Hawkins Title _____

Others present Alan

Visible gold : 5 #3 colors; 0 #2 colors; 0 #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky (Very Fine ✓); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks Very Fine lots of pyrite

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan (✓);

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____: Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small (✓);

Screen was used in washing process: No ( ); Yes (✓); Size of openings 1/10"

60 % Oversize; 40% % Undersize;

Remarks Some Clay Boy

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks Brown Wash

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Slight Reddish Yellow Brown gravel mine clay

Sub-angular pyritic gravel

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

Paul A. Hawkins & Associates Ltd.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-4 Date August 10/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2 pails

How Processed Mini Plant

Processed by Paul D. Hawkins Title _____

Others present Alone

Visible gold : 3 #3 colors; _____ #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky (✓); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks Very few flakes

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks N/A

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____: Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (✓); Size of openings 1/8"

80 % Oversize; 20 % Undersize;

Remarks Sub-angular gravel, possible old channel

Material washed: Easy ( ); Normal ( ); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little (✓); Moderate ( ); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Washs well, silty inner clay some sorting evident

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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Canada
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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-5 Date August 18/90

Serial No. BC-1-5-

Dry Weight _____ lbs.; Volume _____; How measured 2 pails ?

How Processed Miniplant

Processed by Paul H. Hawkins Title _____

Others present Mark

Visible gold : 2 #3 colors; _____ #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky (✓); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks Very fine, some py

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (✓); Size of openings -1/8"

80 % Oversize; 20 % Undersize;

Remarks sub-angular phyllite clasts

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Yellow Red Brown Colour Limonite fine pyrite

lots of fine pyrite

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

Paul A. Hawkins & Associates Ltd.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. _____ Date _____

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured _____

How Processed _____

Processed by _____ Title _____

Others present _____

Visible gold : 6 #3 colors; 1 #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky (✓); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks _____

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (✓); Size of openings _____

_____ % Oversize; _____ % Undersize;

Remarks _____

Material washed: Easy (✓); Normal ( ); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: _____

_____

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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2nd Sampl

PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-7 Date August 20/90

Serial No. ________

Dry Weight ________ lbs.; Volume ________; How measured 2 pails

How Processed Mini Plant

Processed by Paul Hawkins Title ________

Others present [illegible]

Visible gold: 3 #3 colors; ____ #2 colors; ____ #1 colors. No visible gold ( );

Gold weight ________ milligrams Estim. fineness ________

Gold removed: Manually ( ); By amalgamation ( ); Other ________

Character of Gold: Fine or flaky (✓); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks lots of fine Pyrite

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks Trace [illegible] sand

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks N.A.

Weight of black sand in sample Trace; Lbs. black sand per cubic yard ________

Amount of black sand is: Large ( ); Medium ( ); Small (✓);

Screen was used in washing process: No ( ); Yes ( ); Size of openings 1/8"

50% Oversize; 50 % Undersize;

Remarks [illegible] schist [illegible]

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks Wash [illegible] water

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker ________ in./ft.; Source of wash water ________

Notes: Red Brown Water, Some clay.
[illegible] fine pyrite present

1/ Number the same as FIELD RECORD sheet, which see.

2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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Clear [illegible] 1st m Aug 20th

PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-8 Date August 20/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2 pails

How Processed Mini-plant

Processed by Paul Hawkins Title _____

Others present Alan

Visible gold : _____ #3 colors; _____ #2 colors; _____ #1 colors. No visible gold (✓);

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks lots of fine gold

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks Mixes with sand.

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks N/A

Weight of black sand in sample mini- ; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small (✓);

Screen was used in washing process: No ( ); Yes (✓); Size of openings 1/8" -

30% % Oversize; 70% % Undersize;

Remarks sub Round flat Clastic, macous flakes

Material washed: Easy (✓); Normal ( ); Difficult ( );

Remarks Green Brown Wash Some blue Clay

Muddy water indicated by washing: Little ( ); Moderate ( ); Much (✓).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Possible [illegible]

1/ Number the same as FIELD RECORD sheet, which see.
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#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-9 Date August 19/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2 pails

How Processed Mini Sluice

Processed by [illegible] Title _____

Others present _____

Visible gold : 6 #3 colors; _____ #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks Nice V. G.

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks lots of fine gold

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____: Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes ( ); Size of openings _____

_____ % Oversize; _____ % Undersize;

Remarks _____

Material washed: Easy ( ); Normal ( ); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little ( ); Moderate ( ); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Blue Grey Clay with Red Brown Sandy clay - Likely false Bottom
lots of fine gold in pan

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-~~96~~ 00 Date August 10/96

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2 pails carried

How Processed Mini Plant

Processed by Paul Hawkins Title _____

Others present None

Visible gold : _____ # 3 colors; _____ # 2 colors; _____ # 1 colors. No visible gold (~~✓~~);

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks _____

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (~~✓~~); Size of openings _____

40% % Oversize; 60 % Undersize;

Remarks _____

Material washed: Easy ( ); Normal ( ); Difficult (~~✓~~);

Remarks Lots of Blue Clay

Muddy water indicated by washing: Little ( ); Moderate ( ); Much (~~✓~~)

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Blue clay with Red iron above it Talc clay

1 miner break down of Vibrator during Process

1/ Number the same as FIELD RECORD sheet, which see.
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#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-11 Date August 19/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2 pails

How Processed Mini Plant

Processed by Paul Hawkins Title _____

Others present _____

Visible gold : _____ #3 colors; _____ #2 colors; _____ #1 colors. No visible gold (✓);

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks Lots of py

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____: Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small (✓);

Screen was used in washing process: No ( ); Yes (✓); Size of openings _____

30 % Oversize; 70 % Undersize;

Remarks looks like some [illegible]

Material washed: Easy (✓); Normal ( ); Difficult ( );

Remarks Sun [illegible]

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: [illegible]

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Watch and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-1-12 Date [illegible]

Serial No. _____

Dry Weight _____ lbs.: Volume _____; How measured 2 pails

How Processed Mini Plant in Rain

Processed by Paul Hawkins Title _____

Others present Alone

Visible gold : _____ #3 colors; _____ #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks lots of pyrite

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (✓); Size of openings 1/0 "

40 % Oversize; 60 % Undersize;

Remarks _____

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little ( ); Moderate ( ); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Red Brown Water sub artesian boiler

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BCZ13- Date August 22/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured Appx. 15

How Processed Mini - Plant

Processed by Paul Hawkins Title _____

Others present Richard Rienstra

Visible gold : _____ #3 colors; _____ #2 colors; _____ #1 colors. No visible gold (✓)

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks _____

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample NONE; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small (✓)

Screen was used in washing process: No ( ); Yes (✓) Size of openings 1/9"

30 % Oversize; 70 % Undersize;

Remarks Sub angular red brown sandy clay

Material washed: Easy ( ); Normal (✓) Difficult ( );

Remarks Sore clay balls

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Muddy green gray water minor clay

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-2-14 Date August 22/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2 pails

How Processed Mini-plant

Processed by Paul Hawkins Title _____

Others present Richard Rienstra

Visible gold : 1 #3 colors; 1 #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky (✓); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks lots of fine pyrite sand

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (✓); Size of openings 4 mm

60 % Oversize; 40 % Undersize;

Remarks _____

Material washed: Easy ( ); Normal ( ); Difficult (✓)

Remarks Clay

Muddy water indicated by washing: Little ( ); Moderate ( ); Much (✓)

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: some Mud, Red Brown Green Clay gravel

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC- -15 Date August 23/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 4 pails

How Processed _____

Processed by Paul Hawkins Title _____

Others present _____

Visible gold : 6 #3 colors; 1 #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks some very fine pyrite

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____: Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small (✓);

Screen was used in washing process: No ( ); Yes (✓); Size of openings 1/8"

60 % Oversize; 40 % Undersize;

Remarks Oversize are Sub rounded, Undersize are angular.

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little ( ); Moderate ( ); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: grey Brown Sand some black sand fine pyrite, ~~sand~~ Silty

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. 16 Date August 21

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured Approx

How Processed _____

Processed by _____ Title _____

Others present _____

Visible gold : _____ #3 colors; _____ #2 colors; _____ #1 colors. No visible gold (✓)

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks _____

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes ( ); Size of openings _____

60 % Oversize; 30 % Undersize;

Remarks Rusty Qtz boulders / sub rounded in Schist

Material washed: Easy ( ); Normal ( ); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little ( ); Moderate ( ); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Rusty Red Gravel / sub rounded some clay lots fine Qtz sand

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-17 Date August 21/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2

How Processed _____

Processed by _____ Title _____

Others present _____

Visible gold : 6 #3 colors; _____ #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks _____

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____: Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small (✓);

Screen was used in washing process: No ( ); Yes ( ); Size of openings _____

60 % Oversize; 40 % Undersize;

Remarks Angular to Sub Angular to sub rounded large, Schist

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Redish Grey Browny, near bedrock

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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Several Samples Aug 21/90

PLACER SAMPLE

PROCESSING RECORD

Sample No. B-2-15 Date August 21/90

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 2 pails

How Processed [illegible]

Processed by [illegible] Title _____

Others present _____

Visible gold : _____ #3 colors; 1 #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks lots of hematite and some py

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (✓); Size of openings 1/2

50 % Oversize; 50 % Undersize;

Remarks [illegible]

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks Brown [illegible]

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: [illegible] - blue clay

fine micaous sand

1/ Number the same as FIELD RECORD sheet, which see.
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#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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15" Screen Screen Size

PLACER SAMPLE

PROCESSING RECORD

Sample No. B-2-19 Date Aug 21/95

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 4 pails

How Processed Mini Sluice

Processed by Paul Hawkins Title _____

Others present _____

Visible gold : 1 #3 colors; _____ #2 colors; _____ #1 colors. No visible gold ( );

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks _____

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks _____

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample _____; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes (✓); Size of openings ½"

_____ % Oversize; _____ % Undersize;

Remarks Some Qtz fragments, largely schist

Material washed: Easy ( ); Normal (✓); Difficult ( );

Remarks _____

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: Mini Sluice _____

_____

1/ Number the same as FIELD RECORD sheet, which see.
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#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

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PLACER SAMPLE

PROCESSING RECORD

Sample No. BC-20 Date August 23

Serial No. _____

Dry Weight _____ lbs.; Volume _____; How measured 4pails

How Processed _____

Processed by _____ Title _____

Others present _____

Visible gold : _____ # 3 colors; _____ # 2 colors; _____ # 1 colors. No visible gold (✓);

Gold weight _____ milligrams Estim. fineness _____

Gold removed: Manually ( ); By amalgamation ( ); Other _____

Character of Gold: Fine or flaky ( ); Coarse or shotty ( ); Smooth ( ); Rough ( );

Remarks _____

When panning, does Gold tend to ride over top of black sand ( ); or stay down on pan ( );

Remarks Black sand some present

Does Gold amalgamate readily: Yes ( ); No ( );

Remarks _____

Weight of black sand in sample Some ; Lbs. black sand per cubic yard _____

Amount of black sand is: Large ( ); Medium ( ); Small ( );

Screen was used in washing process: No ( ); Yes ( ); Size of openings _____

70 % Oversize; 30 % Undersize;

Remarks _____

Material washed: Easy (✓); Normal ( ); Difficult ( );

Remarks Bank Sample 2m thick gravel .6 m sand 2.4m Snow on gravel

Muddy water indicated by washing: Little ( ); Moderate (✓); Much ( ).

Grade of sluice or rocker _____ in./ft.; Source of wash water _____

Notes: _____

1/ Number the same as FIELD RECORD sheet, which see.
2/ #3 colors consist of gold particles weighing less than 1 milligram;
#2 colors weigh between 1 and 4 milligrams;
#1 colors weigh over 4 milligrams.
Weigh and note individual colors weighing 10 milligrams or more.

Sample No. _____