YUKON MINING INCENTIVES PROGRAM

MARTEN CREEK CONFLUENCE TARGET EVALUATION FOR PLACER GOLD

YMIP PROJECT 98 - 049

APRIL 27, 1998 - JANUARY 31, 1999

TRANSVERSE MERCATOR PROJECTION CO-ORDINATES
latitude 64^0 17' - longitude 140^0 40'
PLACER CLAIM SHEET 116C-7
Placer Claims P21203, P21204

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1. Introduction/Property Description

The placer gold target which I evaluated is in the confluence area of Marten Creek. Marten Creek is a left limit tributary of the Fortymile River located approximately 15 miles upstream of the confluence of the Yukon and Fortymile Rivers. The map coordinates are latitude 64^0 17' and longitude 140^0 40'. The claims which I investigated on this project are numbered P21203 and P21204. The property can be found on placer claim sheet and NTS map sheet 116C-7. The area investigated is plotted on **Maps 3 and 4** of this report.

There is good summer season road access to this claim block. A 10 mile bush road connects with the government maintained Clinton Creek road and Top of the World Highway. The claims are approximately 70 road miles or 40 air miles from Dawson City. Access to the property is shown on **Map 1**.

Marten Creek has a mainstem of approximately 4½ miles in length. The Marten Creek drainage is shown on the accompanying aerial photo, **Map 2**. The valley has steep walls and is fed by numerous small gulches and draws. The width of the creek channel varies between 8 and 20 feet, depending upon rainfall. The grade of the creek is moderately steep. Much of the valley is in permafrost, although some areas in the creek are thawed.

The 2 claims I investigated encompass the confluence of Marten Creek and the Fortymile River. In this area, the Marten Creek valley flares out into a wide plain approximately 2,000 feet in length, and approximately 500 feet in width. A strip approximately 100 feet wideadjacent to and parallel with the river bank is vegetated with poplar, willows, and rosebushes, indicating that the ground is thawed. The rest of the deposit is vegetated with thick moss and black spruce, common to frozen ground.

Marten Creek is classified as a Type 4 (non-fish bearing) stream and an effluent discharge of 2 ml/l of settleable solids is permitted under the Yukon Placer Authorization. A current water licence is in place for the property.

2. Summary of Previous Relevant Investigations

Marten Creek was mined using hand methods during the Fortymile gold rush, between 1886 and 1896, and again in the early 1900's, and also in the 1930's. It was originally known as Log Cabin Creek because of the number of miners cabins located over its length. Marten Creek was well known as a coarse gold producing stream, although the paystreak was said to be narrow and difficult to follow. Reportedly, miners were unable to drift out from their shafts due to pockets of toxic gas and to thawed ground which they encountered.

The ground was drilled in 1964 and some mining was done with a small cat by a prospector from Whitehorse. Results of this work are unknown.

I have held claims on the creek since 1974. Exploration work which I have performed on the property over the years includes excavator trenching, bulk sampling, and drilling. This work has confirmed a narrow channel of pay gravel in the bottom of the valley over the lower reach of the creek. I also drilled some holes on a bench deposit up the creek which defined a mineable placer gravel deposit.

Gold from Marten Creek has a purity of .84 to .85. While it was reportedly a coarse gold producer, most of the gold which I have found in my exploration work is relatively fine grained, although not as fine as the gold found in the Fortymile River.

3. Objectives

The objective of this target evaluation was to examine the gravel reserves at the confluence of Marten Creek and the Fortymile River. As part of my drilling program in 1997, I drilled a hole on the left limit of the creek at the mouth. This hole, approximately 25 feet deep, yielded 0.7 grains of gold; this translated to a grade contained of 1 ounce of gold in 100 bank cubic yards of gravel over the entire gravel depth. Because of the encouraging results from this drill hole and the potentially large volume of gravel contained at the confluence of the creek, I wanted to undertake a more detailed evaluation of the area. I designed an exploration program with the following objectives:

- to estimate the grade of the ground.
- to define the limits of the pay gravel.
- to confirm the depths of the overburden.
- to determine a bedrock profile.
- to establish which areas are thawed and which are frozen.
- to examine the suitability of the deposit for dredge mining.

4. Equipment Used

I used the following equipment to perform various tasks over the course of the exploration project:

- A 6" auger drill mounted on a Nodwell carrier was used to drill the property.
- A D6C Caterpillar dozer was used to clear snow from on-property access trails, to prepare pads for the drill, to strip vegetation preparatory to trenching work, to reestablish and improve an access ramp to the river, and to clean up after the drilling and trenching was complete.
- A UH10 Hitachi excavator equipped with a long stick, and trenching bucket was used to excavate pits and trenches.
- A 920 Caterpillar loader was used to transport drill samples, and to pack other heavy items over the project site.
- A 4x4 ATV was used to support the project on site.

Preparing an access ramp

- A 1 foot by 4 foot long tom equipped with Nomad matting, a 1" gas powered portable water pump, a 8" Tyler screen, a 18" electrically powered spiral gold wheel, and various

miscellaneous cleanup and sample processing tools and equipment were used to process the drill samples and to run a bulk sample from a pile of gravel excavated from a test pit.

5. Work Performed

I laid out this project in five phases. The first phase included preliminary preparatory work and familiarization with the ground. The second phase was the drilling work. The third phase was excavation of pits and trenches. The fourth phase of the project was processing a bulk sample from one of the test pits, and the fifth phase consisted of mapping the project area, incorporating the results obtained from the work performed.

5. 1. Phase 1: Preliminary Work

In early April I had the D6C dozer brought in to clear snow from the access roads and cat trails on the property. This preperatory work ensured that the trails would be dry and stable enough to carry out the project early in the summer season without causing rutting. My aim was to thereby minimize reclamation work.

I spent 2 days traversing the property taking pan samples from the exposed gravel banks, using the results of this work to help plan the project. Locations of grab samples are plotted on **Map 5a**. Results of this panning are given in **Table 1**. I worked with an assistant for 2 days, surveying and laying out lines for the drill holes, and slashing bush. I flagged out a base line paralleling the river bank, shooting levels at 50 meter intervals. The baseline line totalled 635 m in length, 435 m downstream, and 200 m upstream from the confluence of Marten Creek. From this base line I flagged transverse lines at right angles on intervals of 50 m. See **Map 5** for the location of the baseline and transverse lines.

5.2. Phase 2: Drilling

I brought the dozer, the loader, and the service/welding and fuel trucks to the project site from the Fortymile Placers mine site, located approximately 1½ miles upstream on the Fortymile River, to support the drilling. I had the 6" auger drill, mounted on a Nodwell carrier, trucked from Dawson City to Clinton Creek. The drill was walked approximately 10 miles from Clinton Creek to the project area.

Drilling with 6" auger drill on the property

I drilled 24 holes, totalling of 446 lineal feet. I began the work by drilling a series of 8 holes, spaced at 50 m intervals along the baseline paralleling the river on the left limit of the creek. I drilled 3 holes at 50 m intervals along the baseline on the right limit of the creek. As drilling progressed, I panned samples continuously from the drill cuttings; my intent was to gain information to help further define and modify the drill program so that the footage drilled would provide maximum results. I drilled 12 additional holes over the grid, formed by the transverse lines, in areas which showed promising results from panning of drill cuttings. I assigned numbers to the drill holes and flagged and labelled their locations. I kept notes as to the location of each hole as well as the composition and depth of material encountered. **Map 5** shows the location of the drill holes. Depths of drill holes are given on **Table 2**.

I saved all of the drill cuttings, with the exception of the sand and muck overburden, bagging them in woven polyethylene sample bags, approximately 50 lbs. per bag, and labelling them with the hole number and the depth that the material was retrieved from. I consolidated and stored the bags for processing later.

I demobilized the drilling phase of the project and sent the drill and carrier back to Dawson; the heavy equipment was returned to the mining cut.

I set up a sample processing station, located at our mining camp on Marten Creek, to process the drill cuttings, consisting of a total of approximately 3 cubic yards of gravel. I treated the samples in the following manner:

- I assembled and sorted all of the bags of gravel from the hole to be processed.
- I weighed the bag of material to be processed.
- I fed the drill cuttings from the bag through the long tom sluice, using a small shovel, to classify and wash the gravel; the heavy concentrate was trapped in the sluice mats. I panned the tailings from the long tom periodically to ensure that it was performing properly, and that gold was not being lost.
- After I had run all the bags of gravel from the drill hole being processed, I cleaned up the long tom. I pulled the sluice mat (nomad matting) and rinsed it thoroughly in a tub of clean water, to liberate the concentrate which was trapped in it.
- I collected the heavy concentrate (approximately 5 to 10 lbs) from the rinse tub and saved it in a plastic sample bag.
- I rinsed the mats again and flushed the long tom to ensure that there was no contamination between sample units.

After I had reduced the drill cuttings to their heavy concentrate component, I was ready to perform the final step in the processing, gold and heavy mineral recovery. I processed each bag of concentrate in the following manner:

- I set up a 4 lead spiral gold wheel at a relatively shallow angle and ran the concentrate through it, reducing the volume by approximately 90%.

- I set the gold wheel at a steeper angle, and reduced the water volume and the speed of the gold wheel. I fed the concentrate into the wheel slowly using a small ladle. This step further reduced the heavy mineral component to magnetite, bits of steel from the drill bit, and free gold particles.
- I dried the concentrate on a propane burner over low heat to avoid spattering. I spread the dried concentrate onto a white porcelain plate and counted and examined the gold particles using a magnifying lens. I noted the number of colours and their characteristics, such as size, shape, angularity, and colour.
- I saved this small amount of heavy concentrate in a small labelled zip-lock bag.
- I rinsed the gold wheel thoroughly in preparation for processing the next sample, to avoid the possibility of cross contamination.

Table 2 outlines the results of the sample processing.

5.3 Phase 3: Trenching

I am not confident in projecting grade figures based on drilling only. My approach to this project was to use drilling to target specific areas of interest for further evaluation by digging trenches and pits. The drilling indicated that the area with most potential was the downstream section of the flat, which fronts an island gravel bar in the river channel.

I assembled the heavy equipment to be used in the excavation work and support vehicles at the project site.

Trenching with the excavator

I stripped the vegetation from an area approximately 100 feet long by 40 feet wide at the location where I proposed to excavate my first trench. I then excavated through 3 to 4 feet of thawed sand, at this depth encountered 3 to 5 feet of frozen sand overburden; below the overburden was a layer of 4 to 6 feet of thawed placer gravel in the back end of the trench; the gravel deepened to approximately 16 feet at the end close to the river; I dug 2 to 3 feet into the bedrock below the gravel deposit. The trench was approximately 90 feet long by 8 feet wide located at a right angle to the baseline. This trench is referred to as excavation A on **Map 5**.

I dug a series of 3 pits over a distance of approximately 100 feet, along the river bank parallel to the baseline. These pits were located in the same area as the trench. I excavated these pits in

thawed material, encountering 12 feet of gravel and taking up 2 to 3 feet of the underlying bedrock. I reached the ground water table at approximately 8 feet into the gravel, or 4 feet above bedrock. These pits are labelled B, C, and D on **Map 5**.

I took gravel samples out of the excavator bucket, panning continuously as the work progressed. I took larger samples of 70 - 80 lbs. from the walls of each of the excavations for later evaluation. I retrieved between 6 and 13 samples from each excavation.

I also dug a pit close to Marten Creek where the valley begins to narrow, excavating 7 feet of creek gravel and 2 to 3 feet of slaty bedrock. I took 5 pails of samples. Additionally, I left a pile of approximately 2 to 3 yards of this material to evaluate by processing a bulk sample. This pit is labelled E on **Map 5**.

After completing the excavations, I used the heavy equipment to perform restoration work. I backfilled the holes, levelling the sites and capping them with overburden to promote revegetation. I slashed leaning trees and salvaged usable wood. I returned all of the heavy equipment back to the Fortymile Placers mine.

Spreading overburden to restore trench site

I processed the 70 - 80 lb. bags of gravel samples from the excavations, using the same method which I used to process the drill cuttings. Results of this sample processing are given in **Table 3**.

5.4 Phase 4: Bulk Sampling

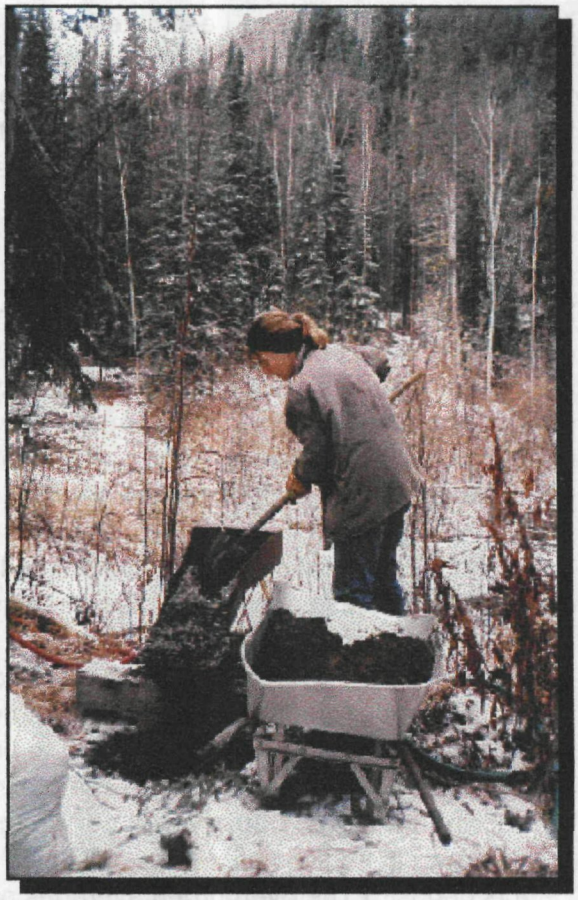
I found particularly encouraging results in the samples obtained from the pit which I excavated in the area where the valley narrows. I thought that it would be useful to process a bulk sample from the pile of material which I had stockpiled from this pit for this purpose.

Because I was not able to execute this phase of the project until mid-October, when temperatures were below freezing at night, it was necessary to thaw the gravel before sluicing it.

I processed this bulk sample in the following manner:

- Using a pick, shovel and bar I collected five 100 lb bags of gravel from the stockpile and brought them indoors to thaw.
- That evening I built 2 fires on the stockpile and allowed them to burn overnight.
- The following morning I set up the long tom sluice and sluiced the material which I had

collected in the bags (which was now thawed) and also the gravel which had been thawed by the previous night's fire. I positioned the long tom sluice so that process water and tailings were directed into the pit (which I had not completely backfilled so that it could be used for this purpose). Setting up in this manner ensured that there was no discharge of water or tailings to the watercourse. I shovelled the thawed material from the stockpile into a wheel barrow and wheeled it over to the long tom for sluicing. I also sluiced the 5 bags of gravel which I had thawed indoors.



Sluicing the bulk sample

- After all of the thawed material was sluiced for the day, I pulled the sluice mats, brought them indoors, and rinsed them to recover the concentrate. I saved the concentrate to be processed later. I also stored the pump and water hose inside overnight to avoid freezing.

- I obtained wood for the coming night's thawing fire by doing more slashing and cleanup work around drill and excavation sites. I lit a fire in the late evening so that it could burn overnight, and thus provide thawed gravel for sluicing the following day.

- I repeated this burning down process daily until I had excavated a shaft through the frozen stockpile. By taking a sample through the stockpile, I obtained a representative sample from the gravel excavated from the pit.

- I processed the concentrate, and evaluated it, using the same method which I used for processing the drill cuttings and the gravel samples obtained from the excavations.

Results of this bulk sample are given in **Table 3**.

5.5 Phase 5: Mapping the Project Area

I wrapped this project up by mapping the surface topography and tying it to the bedrock profile obtained from interpretation of drill logs and trenching information. I also differentiated thawed ground from permafrost in this mapping. The frost line is plotted on **Map 5b**.

I extended my transverse survey lines across the river channel in the winter when the channel was frozen. I cut holes in the ice covering the channel and took soundings. This allowed me to extend my bedrock mapping of the area out into the river channel (the main

channel runs on bedrock.) I estimated the bedrock profile underlying the gravel bar, fronting the gravel deposit, by tying bedrock levels obtained from drilling and excavating in the bank, to bedrock levels obtained from sounding the river channel. I plotted sections through transverse line 1 to obtain a profile of deposits A and C. I mapped the section through transverse line 5 to profile deposit B. These sections are shown **Map 6**.

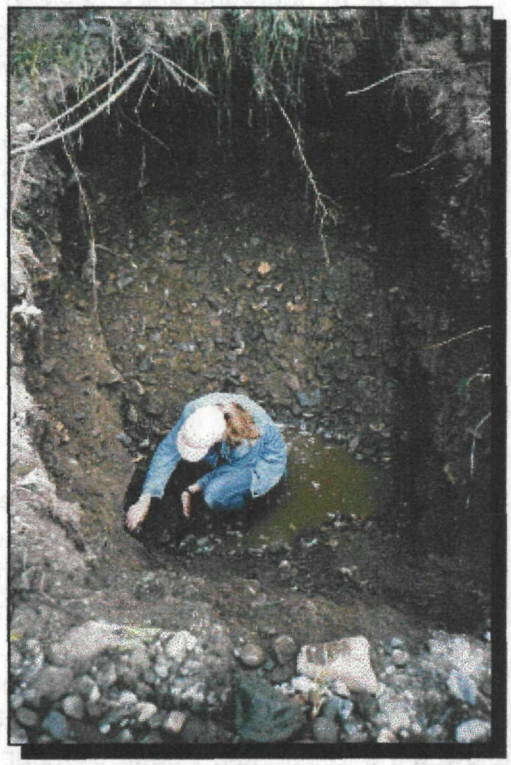
6. Results and Conclusions

The composition of this placer deposit is complex. I had originally envisioned this area to contain one large homogeneous gravel body. My work showed that parts of the confluence area does not contain any gravel: the entire back end of the flat consists of muck resting on bedrock; both the extreme upstream and downstream sections of the bench are composed of barren colluvium overlain by muck; as well, a hump of bedrock covered by 10 feet of muck, runs at a right angle to the baseline, through the middle of the deposit.

Based on my exploration work I have defined three distinct gravel bodies. The nature and composition of these deposits is discussed as follows:

- **Deposit A:** This deposit straddles the mouth of the creek. It is approximately 200 m long by 75 m wide, and has a gravel section depth of approximately 5 meters. I have calculated the volume of this deposit to be roughly 75,000 bank cubic meters or 95,250 bank cubic yards. I have assigned a preliminary grade estimate to this deposit of approximately **264 cubic yards per ounce of placer gold,** based on values yielded by sampling the drill holes. (I use drill holes 1, 8, 9, 12,13, 15, and 20 to calculate values for this deposit.) The overburden averages approximately 8 to 10 feet in depth. Approximately half of the deposit is located in thawed ground. The gravel in this deposit appears to be mostly of river origin, rounded well washed and coarse. The bulk sample which I processed from excavation E at the back end of this deposit showed better grade, approximately **194 cubic yards per ounce of placer gold**.

- **Deposit B:** This gravel body is located close to the downstream limit of the confluence area. It is approximately 100 m long by 45 m wide by 5 m deep, translating to 22,500 cubic meters, or 28,575 cubic yards, of minable material. Based on drill results, I calculated grade figures for this deposit to be approximately **237 bank cubic yards per ounce of placer gold.** I used the sample results from drill holes 3, 11,18 to calculate grade figures for this deposit. Based on results of samples taken from trenching, I calculated grade figures for this same deposit to be **286**



Sampling pit at ground water depth

discounted as waste, the grade projected from trenching is increased to **207 bank cubic yards per ounce of placer gold**. The gravel deposit is overlain by approximately 8 to 10 feet of sandy overburden. Approximately two thirds of this deposit is thawed. The gravel is similar to deposit A, consisting of rounded, well washed coarse aggregate, probably of river origin.

- **Deposit C:** This placer deposit consists of a relatively narrow strip of gravel located directly behind deposit A. The gravel body consists of broken angular gravel which undoubtedly originated in, and was washed down, the creek valley. This gravel is located on a rise in the bedrock profile in the confluence area. This small gravel body is approximately 100 m long by 25 m wide with gravel depth of approximately 2 m, giving it a volume of approximately 5,000 cubic meters or 6,350 cubic yards. Based on results from drill holes 14 and 16, I calculated a grade figure of **509 bank cubic yards per placer ounce**. Although this is a low projected grade, I believe that this deposit could be of significance because the gold retrieved from the drill samples appeared quite angular under magnification and had an orange colour indicating that this is a placer deposit of creek, rather than river origin. It could contain a paystreak on bedrock which was not encountered by the drilling. More work would have to be done to confirm this theory.

- **Deposit D:** This gravel deposit is located in the creek channel and in the adjacent banks of the creek, in the area where the Marten Creek valley narrows. It could be mined as an extension of deposit A or could be developed as a separate unit. This gravel is of creek origin. The bulk sample which I processed at the downstream end of the deposit projected a grade of 194 cubic yards per ounce. Because this grade is similar to the grade of gravel sampled further up the creek in past years. I believe this grade is valid over a 150 m length (to the location of previous evaluation work). I have calculated the volume of this deposit to be 150 m x 20 m x 3 m, for a total volume of 9,000 cubic bank meters or 11,430 bank cubic yards.

Deposits A and B could be mined by dredging. Much of the ground in both of these deposits is thawed. The frozen section, if stripped in advance, would thaw naturally. These deposits are particularly attractive in that they could be incorporated into a river bar dredge mining project. They could either be mined integrally as part of the bar gravel unit, or held in reserve to mined when high water interrupts bar mining. The grade, while not spectacular, would support a dredging operation profitably.

The work which I performed on this project does not reflect the values which I obtained from one hole that I drilled the previous season. This hole, located approximately in the centre of deposit A, yielded some coarse gold colours and indicated a value of 1 ounce per 100 cubic yards. Based on this anomalous drill hole, I have confidence that there are zones of enrichment in this deposit, which would add to the viability of the ground.

I had hypothesized that the main channel of the river had once flowed on the left limit, opposite limit of the river to its present course. The work which I preformed confirmed this theory. Based on the bedrock profile which I mapped, I found that the bedrock depth was deeper on the left limit of the valley floor. This indicates that the river channel did flow against the left limit of the valley in a previous era. I had hoped to locate an enrichment streak created by outflow from Marten Creek in this previous channel. I did not locate the paystreak

that I was looking for. A tighter drill pattern might delineate a higher grade pay zone, however, since I did prove up a mineable (low grade) deposit, my recommendation is to mine the ground with the reasonable expectation of encountering zones with better gravel grades.

I had assumed that there would be a larger volume of mineable gravel in this area. The project was valuable in delineating the limits of the mineable gravel, and in determining the volume of gravel in the project area. The survey work based on drilling and taking levels provided the necessary bedrock and ground water data to confirm that the deposit is suitable to support a dredging operation. I was able to differentiate the thawed reserves from the frozen ground using the information generated.

I feel that this project was successful. I defined minable sections of ground at the confluence of Marten Creek. Although values could be considered low grade at the current gold price, they are sufficient to support mining. A floater dredging operation can process gravel at a cost of less than $1 per yard (plus stripping costs). The gravel in the deposits which I delineate has a projected value of between $1.40 and $2.00 (Canadian dollars) per cubic yard at a gold price of $290US. Additionally, I am confident that higher grade pay zones resulting from the influence of Marten Creek would be encountered when the ground is mined.

TABLE 1 - Results from Grab Samples of 8 to 10 lbs.

Sample	# Colours	Comments
1	0	taken in cutbank where road crosses creek, approx. 2' into gravel, creek wash
2	0	taken in cutbank of road left hand side, approx 1' into gravel, creek wash
3	0	taken in cutbank under approx 6' muck, 1' into gravel, creek wash
4	0	taken on exposed gravel bar, right limit of creek, surface gravel, angular creek wash
5	0	same bar approx 30' downstream, some black sand
6	0	creek gravel bar, right limit, 1' into gravel, creek gravel
7	0	bar gravel from right limit, surface of bar
8	0	right limit bar, surface gravel
9	0	bar at mouth of creek, mostly creek gravel, very little black sand
10	0	delta of creek outwash formed at mouth, fine gravel, very little black sand
11	3	river bar gravel at foot of river bank, 8' of muck over, good black sand & heavy conc.
12	0	taken in bank in river gravel, 8' of muck over, 2' down from surface of gravel
13	2	sample taken behind boulder on bar, approx 10' from bank, lots of black sand, 1 lrg flake
14	3	taken on bar at surface 6' from bank, all colours fine
15	0	taken in bank, over 8' of muck, at gravel-muck interface
16	0	some gravel, mostly slide rock, no black sand
17	0	same as 16, upstream
18	0	same as 16, upstream
19	0	creek gravel in bank, approx 1' down
20	0	bar gravel, approx 10' from bank, mixture of creek & river gravel, good black sand & heavies
21	3	bar gravel at bank-bar interface, from surface, 2 flakes, 1 very fine
22	1	bank gravel at bank-bar interface, 1 very fine colour
23	1	bar gravel, approx 8' out from bank, approx 6" into gravel, good black sand, small flake
24	0	bank gravel, approx 2' down from gravel-muck contact
25	3	bar/bank gravel, taken at bar-bank interface, 2 flakes, 1 very fine colour
26	2	taken in bank at bank-muck contact, very fine colours
27	4	taken at bar-bank interface, dug into gravel approx 1', 3 big flakes, 1 very fine

Table 1 cont. - Results from Grab Samples of 8 to 10 lbs.

Sample	# Colours	Comments
28	0	taken on bar approx 6' from bank, behind large boulder, lots of black sand
29	0	taken at bank-bar interface
30	1	taken in cut bank by road, creek gravel, colour barely visible
31	0	creek gravel in road cut bank
32	0	creek bar gravel
33	0	creek bar gravel
34	1	taken in cut bank in road, river gravel, very fine colour
35	0	taken in road cut bank
36	0	taken in road cutbank at muck-gravel contact
37	2	taken in bank at muck gravel contact,

TABLE 2
Results from samples from 6" Auger Drill Holes

Drill Hole #	Total Depth in ft.	Depth Drilled in feet OB /Gravel/Bdrk			Weight Samps in lbs	# of Clrs	Yd³ per oz	Comments
1	30	13	15	2	360	187	98	river gravel, top 10' of gravel sandy, very rounded gravel, rusty coloured gold, thawed ground
2	17	9	1	7	182	30	311	thin layer of rounded river gravel on muck, thawed ground
3	32	10	22	–	380	146	133	top 2' of gravel creek origin, remainder rounded river gravel , sandy overburden, some lrg flakes, thawed ground
4	12	9	–	3	52	0	–	no gravel encountered, thawed ground
5	25	8	13	4	330	0	–	gravel section slide rock/colluvium from hillside, angular schist chips, thawed ground
6	15	10	4	1	82	0	–	sand overburden, rounded river gravel, thawed ground
7	17	10	5	2	135	7	979	10' sandy muck overburden, river gravel, frozen ground
8	25	11	13	1	275	86	163	sand overburden, river gravel, some large colours, greasy grey clay with bedrock, hematite & magnetite, thawed ground
9	32	10	17	5	380	94	207	sand overburden, hit water in hole, possible gold loss from wet ground, mostly fie colours, schist bedrock, thawed ground
10	14	5	2	7	180	0	–	muck overburden, very sandy gravel, not much coarse, soft schist bedrock, thawed ground
11	14	8	4	2	110	31	179	sand overburden, fine colluvial gravel, good sized colours, lots of lack sand, frozen ground
12	27	5	21	1	460	110	214	sand overburden, 1st 2' gravel is creek origin, remainder coarse rounded river gravel, thawed ground
13	27	5	19	3	420	50	428	dry muck overburden, 2' creek gravel overlying 17' river gravel, hard schist bedrock, frozen ground
14	17	7	7	3	180	18	505	2' dry muck over 5' sand overburden, creek gravel, soft bedrock with graphitic schist, frozen ground, flaky orange coloured gold
15	32	5	27	–	580	103	286	sand overburden, 2' creek gravel, remainder of gravel is very coarse cobbles with little fine material, did not reach bedrock, thawed ground
16	13	5	5	3	150	15	512	black muck overburden, creek gravel, lots of black sand, fine orange stained colours, frozen ground
17	26	12	5	9	310	0	–	black muck overburden, angular schisty slide rock/creek gravel, soft bedrock, frozen ground
18	16	5	7	4	210	27	399	sand overburden, sandy layer in gravel section, mixture of creek and river gravel, fine colours, frozen ground
19	16	7	5	4	200	2	–	black muck overburden, creek gravel/slide rock, fine colours, 3 ' soft bedrock, 1' hard schist
20	11	4	5	2	150	17	452	sandy overburden, river gravel, fine colours, frozen ground

TABLE 2
Results from samples from 6" Auger Drill Holes - continued

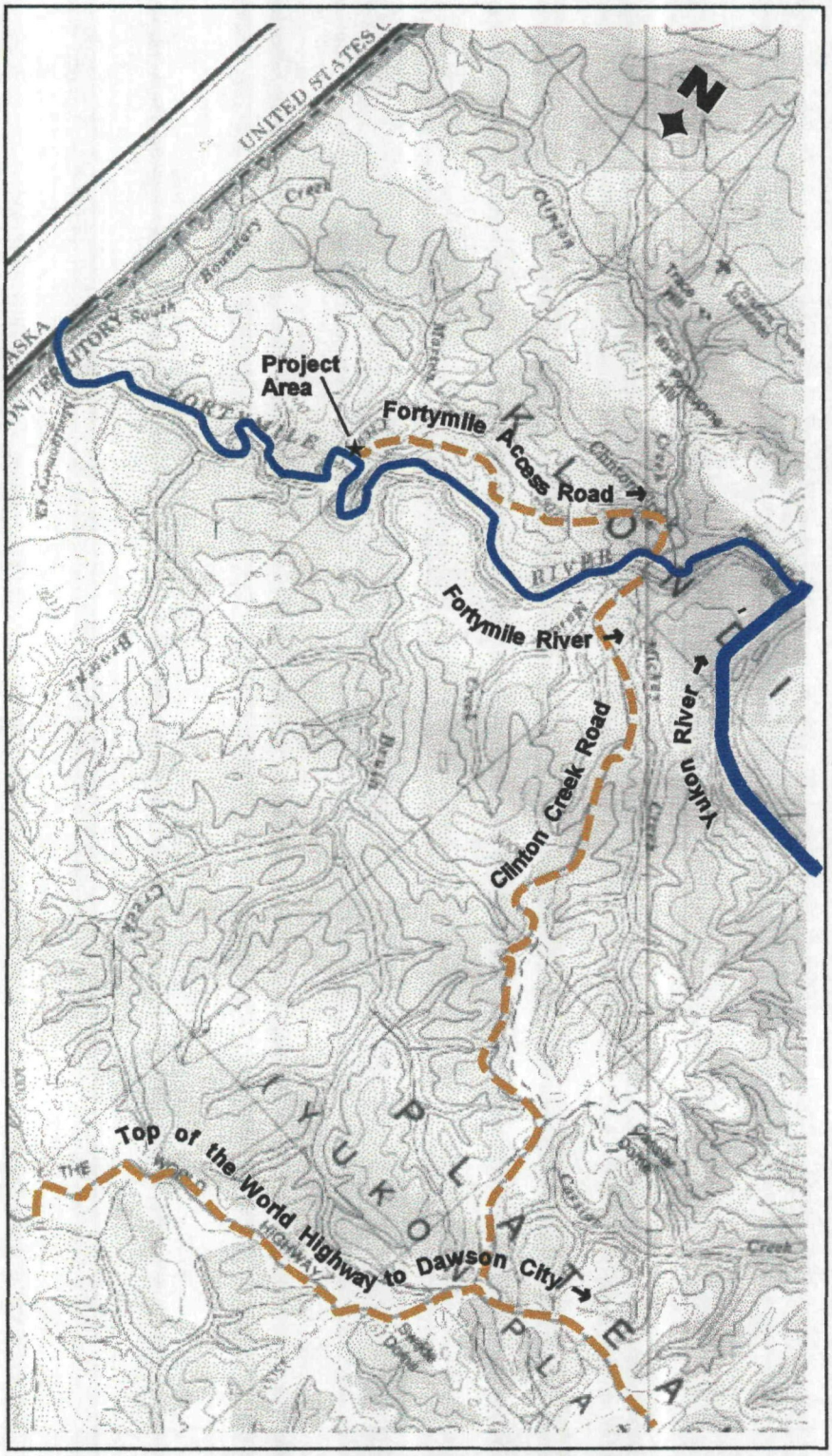
Drill Hole #	Total Depth in ft.	Depth Drilled in feet OB /Gravel/Bdrk			Weight Samps. in lbs.	# of Clrs	Yd³ per oz	Comments
21	7	5	1	1	50	0	–	3' sand over 2' muck, thin layer of creek gravel, frozen ground
22	10	5	3.5	1.5	90	0	–	sand overburden, fine river gravel? with creek gravel, frozen ground
23	10	4	–	6	120	1	–	sand overburden, no gravel, soft bedrock, flaky colour, frozen ground
24	22	10	11	1	220	50	225	sand overburden, river gravel, hard schist bedrock, some large flakes, lots of black sand, thawed ground, dry hole (surprisingly)

Table 3 - Results from Samples from Excavations

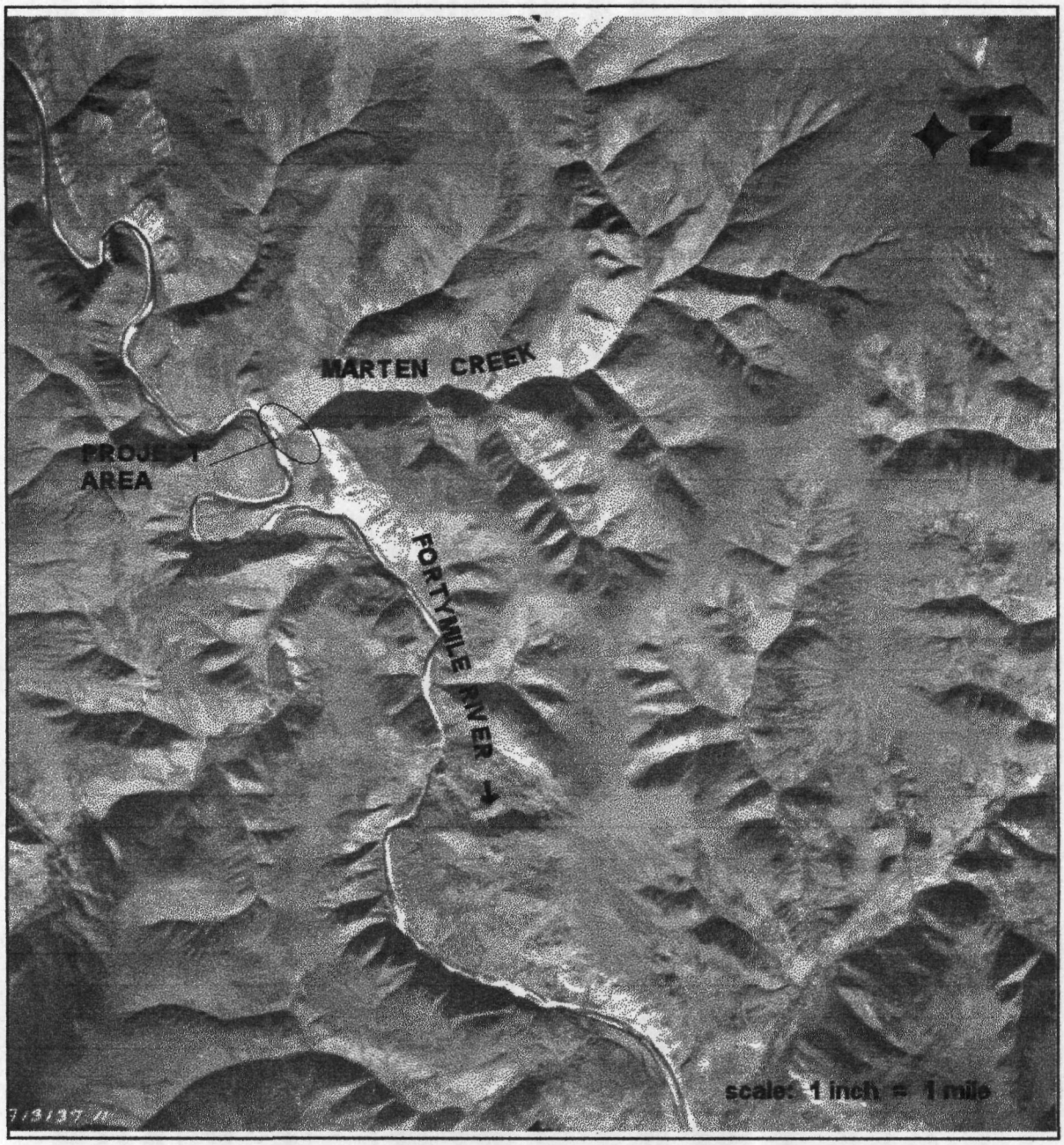
Excav #	Sample #	Weight in lb.	# of Colours	Grade yds^3/oz	Comments
A	1	70	5	720	taken from surface gravel, back end of trench
	2	80	7	584	2' down into gravel, washed river gravel, fine colours
	3	75	9	418	3.5' down into gravel, lots of black sand
	4	80	11	371	gravel on bedrock, hard schist, 2 good size flakes
	5	50	4	654	taken in 2' of bedrock
	6	70	13	277	40' from back of trench, 2' into gravel
	7	65	15	218	40' from back of trench, 5' into gravel, 3 big flakes
	8	70	18	200	40' from back end of trench, bedrock/gravel interface, 9' deep
	9	75	32	117	front end of trench, 2' into gravel, very fine colours, lots blk sand
	10	60	17	183	front end trench, 6' into gravel, redidsh gravel, 2 flakes
	11	80	11	371	front end trench, 12' into gravel, fine pea gravel, little black sand
	12	80	47	87	front end trench, 16' into gravel, on bedrock, 12 nice flakes
	13	80	52	79	front end of trench, 16'-18', gravel and bedrock, 8 flakes
	total	935	241	329	**average grade excavation A = 329 yd^3/oz**
B	1	70	15	240	out of first bucket at gravel surface
	2	80	14	292	2.5' down fine rusty stained gravel, 3 nice flakes
	3	50	19	138	6' into gravel, coarse rock, bright gold typical of Fortymile
	4	65	6	545	8' into gravel, starting to get water seepage, finer gravel
	5	70	16	225	12' into gravel, bits of bedrock,
	6	70	13	277	12' down, on bedrock, probably sluff from pit
	total	405	83	286	**average grade excavation B = 286 yd^3/oz**
C	1	60	13	239	gravel surface 1st bucketful, fine colours, good black sand
	2	80	22	186	3' into gravel, 2 flakes, coarse gravel
	3	75	37	102	6' into gravel, 9 nice flakes, lots of black sand
	4	55	11	253	8' down, at ground water level
	5	60	13	239	10' down, 5 nice sized flakes, 1 curved piece of gold +20 mesh
	6	65	10	327	bedrock sluff gravel mixture, fine colours
	total	395	106	224	**average grade excavation C = 234 yd^3/oz**

Table 3 - Results from Samples from Excavations - continued

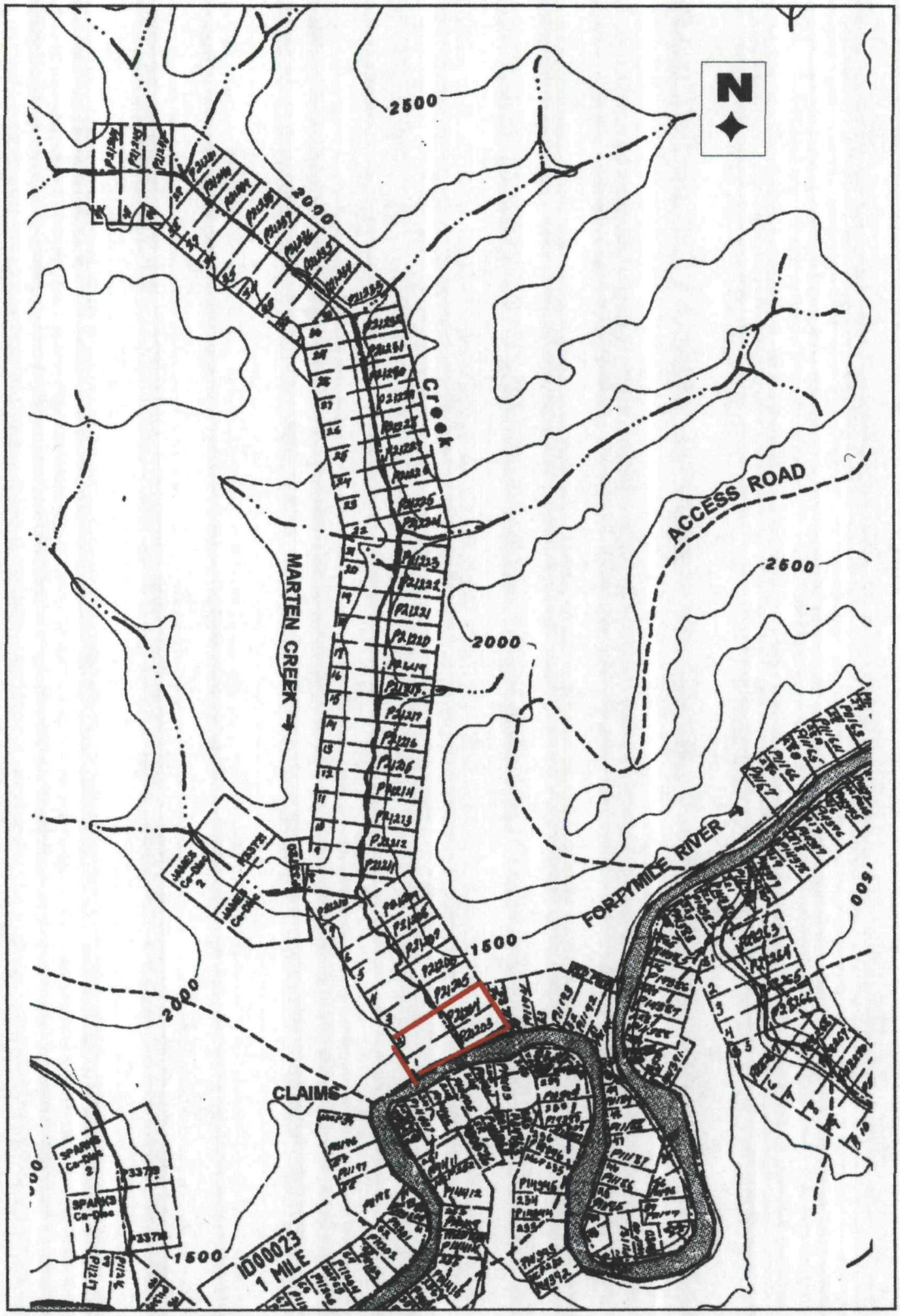
Excav #	Sample #	Weight in lb.	#of Colours	Grade yds^3/oz	Comments
D	1	55	3	929	surface gravel, 1st bucketful, very fine colours
	2	55	3	929	3' into gravel, 1 flake, little black sand
	3	65	6	545	6' into gravel, very fine colours, reddish gravel
	4	60	2	1557	8'-9' into gravel, ground water level, very fine colours
	5	70	4	903	12' into gravel, fine pea gravel, rusty coloured, 1 flake
	6	80	9	454	bedrock, gravel, and sluff, 2 flakes, good black sand
	total	385	27	886	**average grade excavation D = 886 yd^3/oz**
E	1	50	1	--	surface gravel from 1st bucket, small flake
	2	60	0	--	2' into gravel, creek origin, little black sand
	3	60	0	--	4' into gravel, little black sand
	4	75	7	--	6' into gravel, very fine slivers of gold
	5	60	4	--	8' into gravel, nice little piece of gold +20 mesh
	6	70	0	--	8' - 9' into gravel on bedrock
	7	1 loose yd^3	1.9 grains	194	bulk sample of 1 loose cubic yard was sluiced yielding 1.9 grains of gold (480 grains = 1 troy ounce) Grade of ground was calculated in bank cubic yards per ounce of gold. (1 bank cubic yard = 1.3 loose cubic yards)*



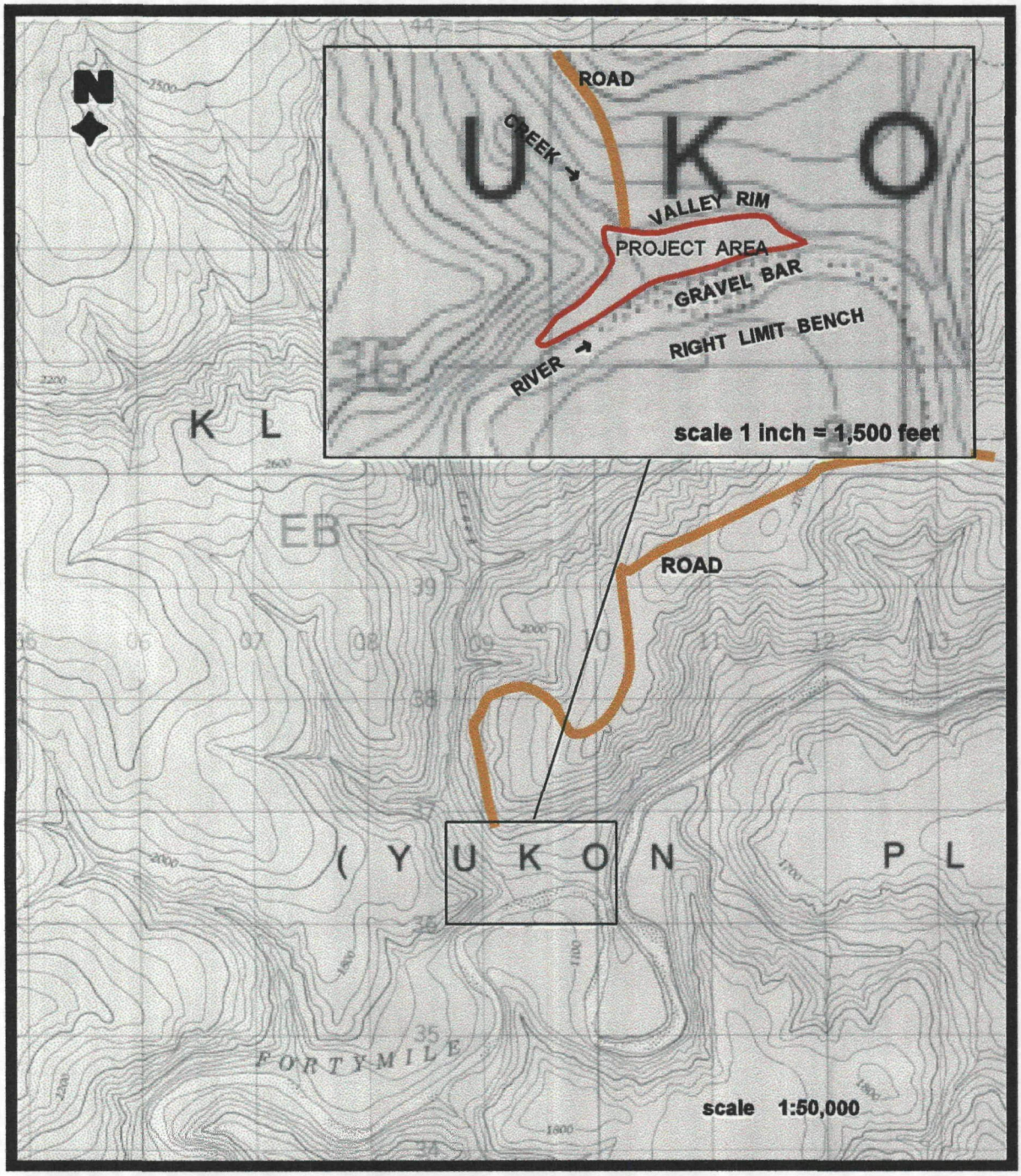
MAP 1 - PROPERTY LOCATION - PORTION OF 116C - 7
scale: 1 inch = 4 miles



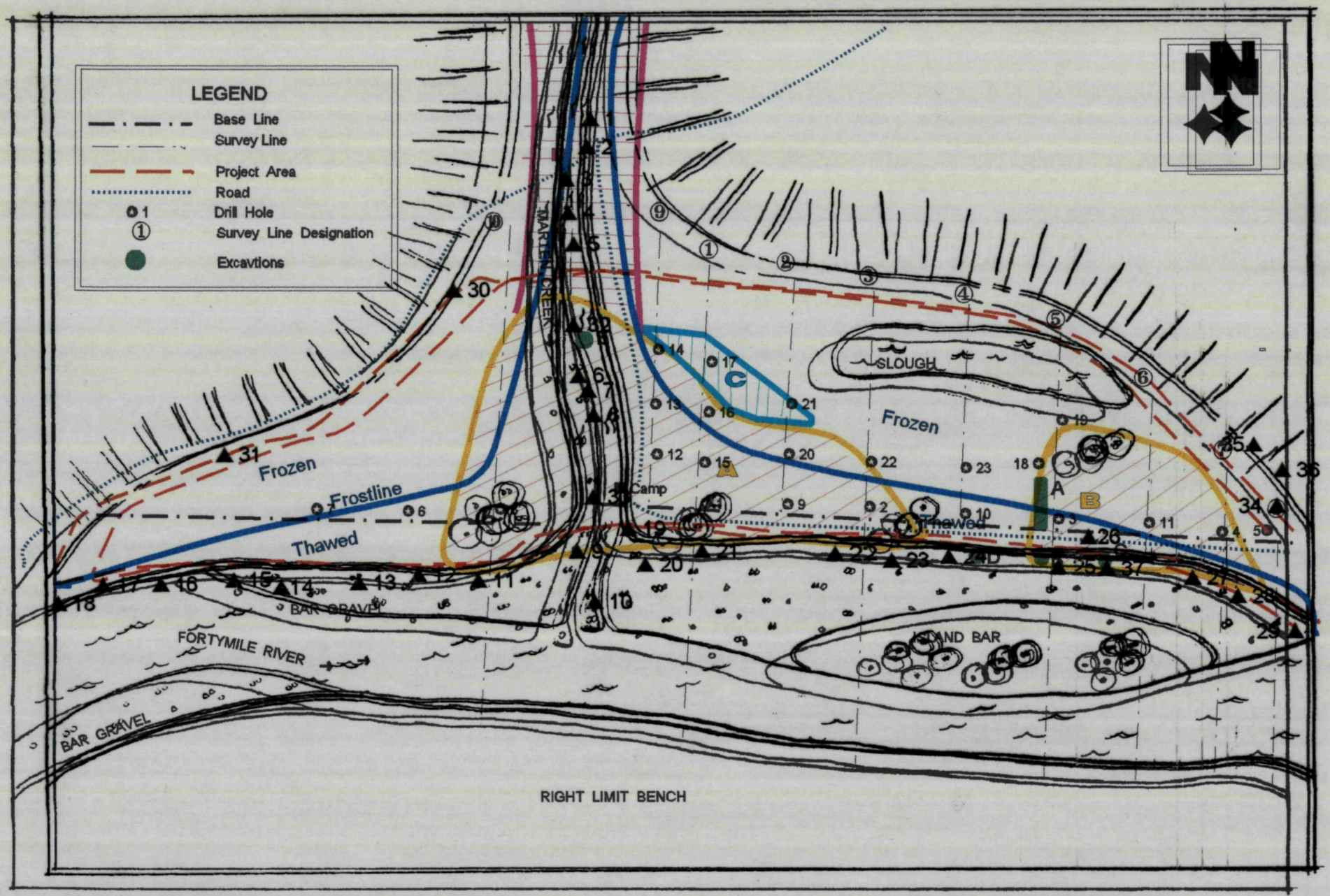
MAP 2 - AERIAL PHOTO SHOWING PROJECT AREA AT CONFLUENCE OF MARTEN CREEK & FORTYMILE RIVER



MAP 3 - CLAIMS INVESTIGATED **Portion of Claim Sheet 116C-7**
scale: 1:31,680

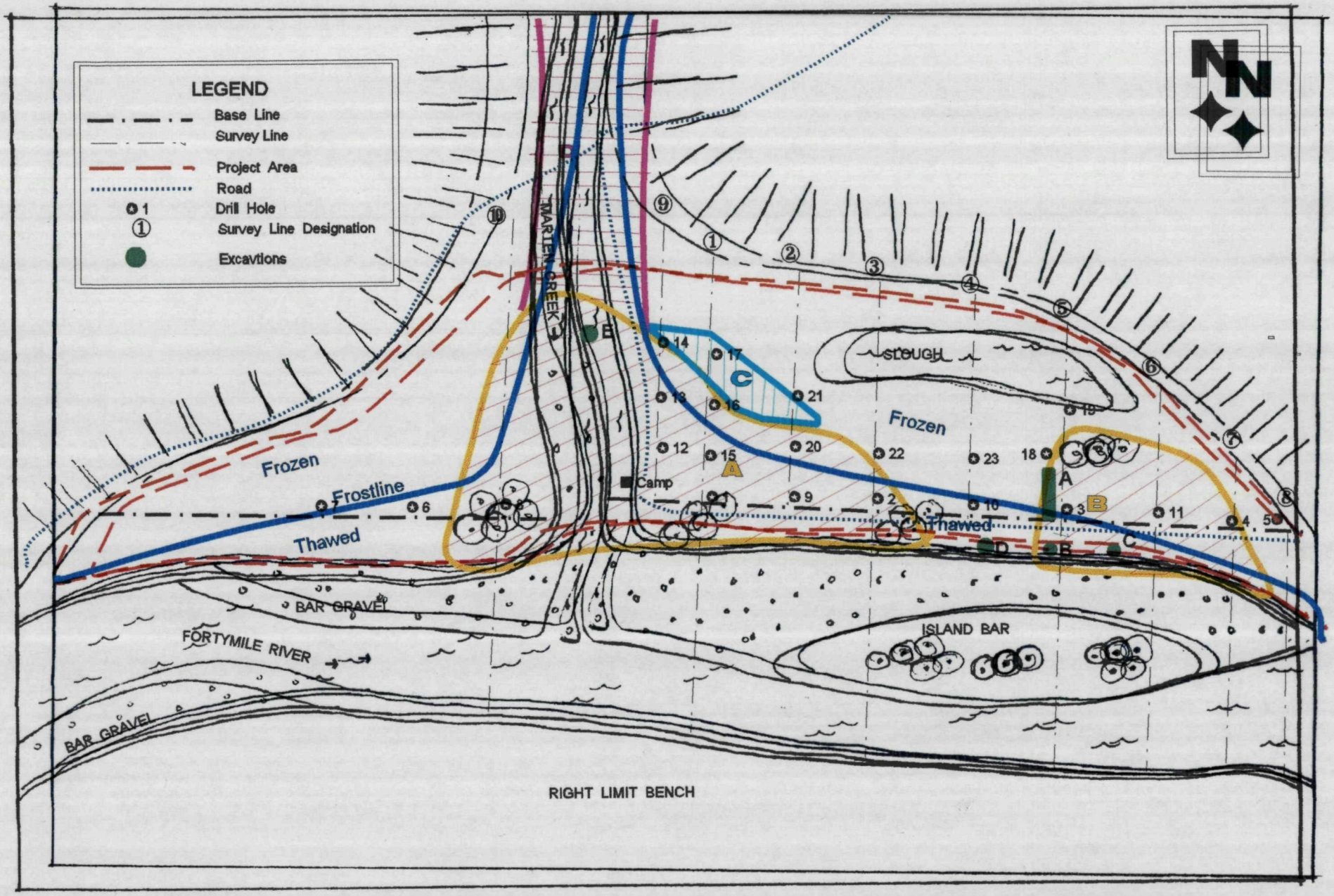


MAP 4 - PROJECT AREA - NTS MAP 116C - 7



MAP 5 LOCATION OF DRILL HOLES AND SURVEY LINES OF FROST

scale: 1 cm = 30 m (approx)

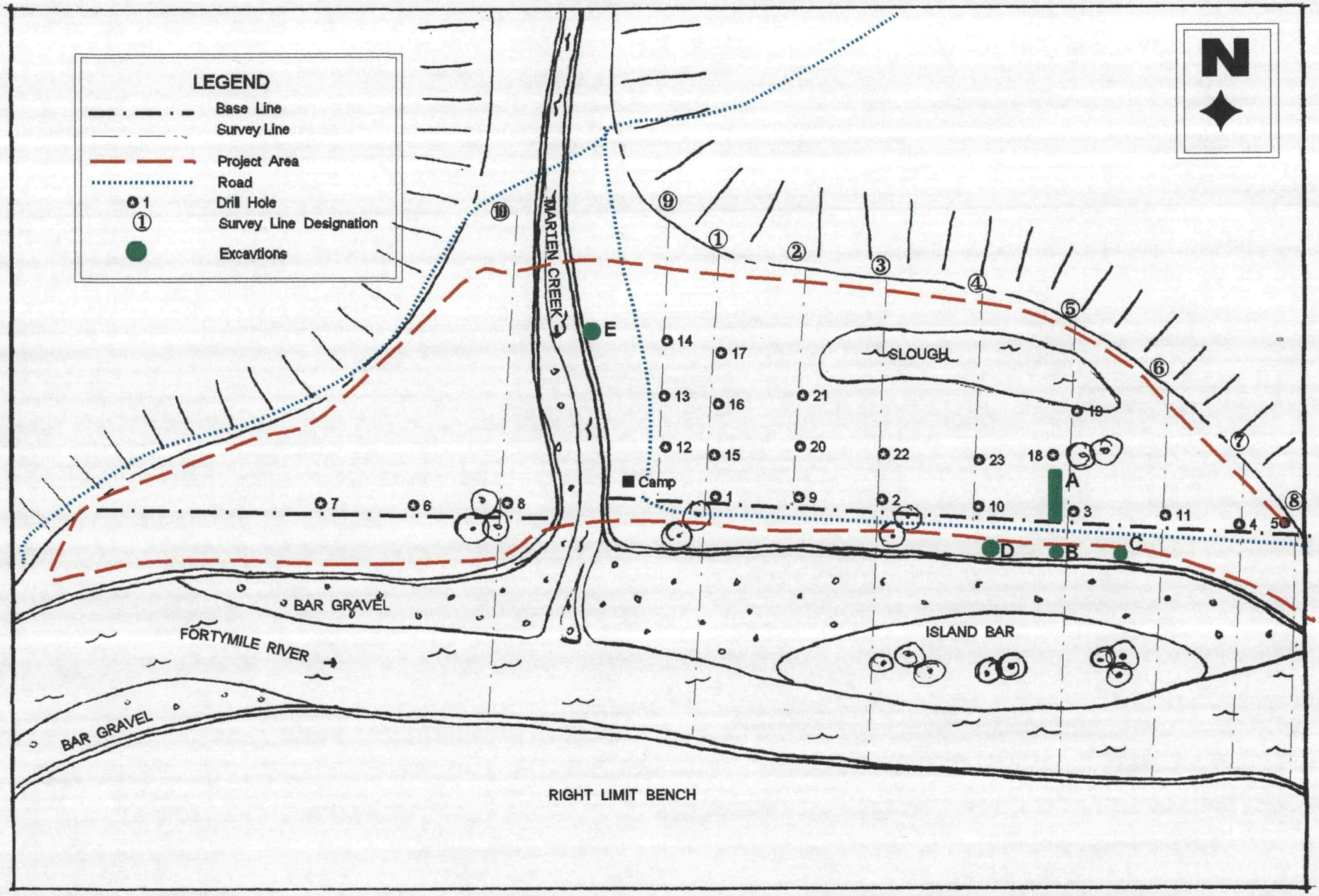


MAP 5b - OUTLINE OF GRAVEL DEPOSIT, SURVEY LINES OF FROST

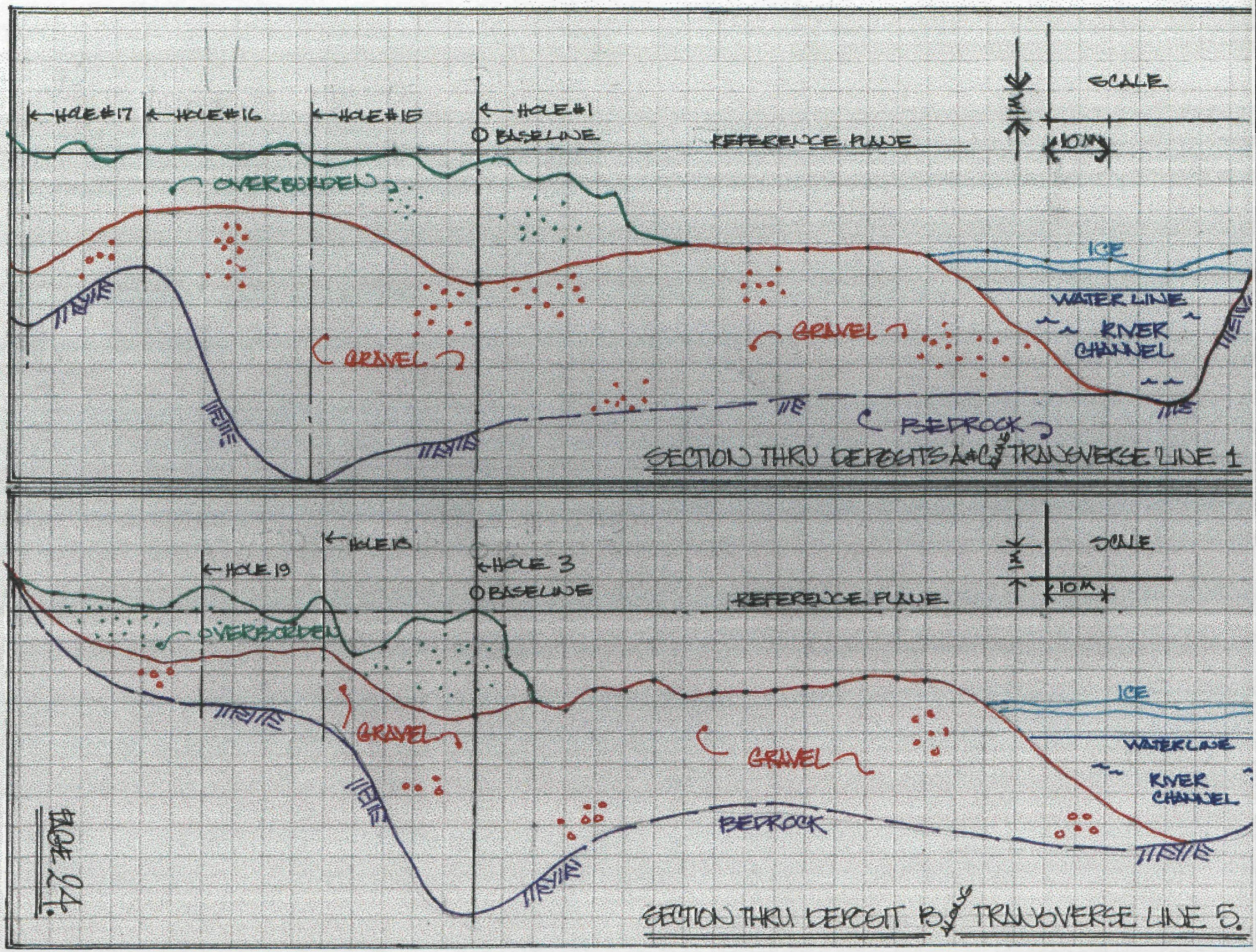
scale: 1 cm = 30 m (approx)

MAP 5 - LOCATION OF DRILL HOLES AND SURVEY LINES

scale: 1 cm = 30 m (approx)



MAP 5 - LOCATION OF DRILL HOLES AND SURVEY LINES **scale: 1 cm = 30 m (approx)**


HOLE #17
HOLE #16
HOLE #15
HOLE #1
BASELINE
REFERENCE PLANE
SCALE
10M
OVERBURDEN
GRAVEL
GRAVEL
ICE
WATER LINE
RIVER CHANNEL
BEDROCK
SECTION THRU DEPOSITS A & C TRANSVERSE LINE 1
HOLE 19
HOLE 18
HOLE 3
BASELINE
REFERENCE PLANE
SCALE
10M
OVERBURDEN
GRAVEL
GRAVEL
ICE
WATERLINE
RIVER CHANNEL
BEDROCK
SECTION THRU DEPOSIT B & TRANSVERSE LINE 5.
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Additional Information

People who worked on the project

Leslie Chapman	Dawson City
William Claxton	Dawson City
Thomas Claxton	Dawson City
Sylvain Fleurent	Dawson City

Property investigated

Placer Claims P21203, P21204

Total volume of excavations

The total volume of excavations carried out is 1,229 bank cubic yards.

Report preparation

Leslie Chapman and William Claxton prepared the report in 50 manhours.