YUKON TERRITORIAL GOVERNMENT
EXPLORATION INCENTIVES PROGRAM
PROJECT EIP-89-052

# PLACER EXPLORATION ON FORTYMILE RIVER:

89-052

**Sampling**
**June 13, 1989 - September 2, 1989**

DREDGING LEASE:
DL83/4

TRANSVERSE MERCATOR PROJECTION CO-ORDINATES
141 47' longitude - 64 21' latitude
PLACER CLAIM SHEET 116C-7

prepared by
W. CLAXTON & L. CHAPMAN for
FORTYMILE PACIFIC JOINT VENTURE
Box 460, Dawson City
Yukon, Y0B-1G0

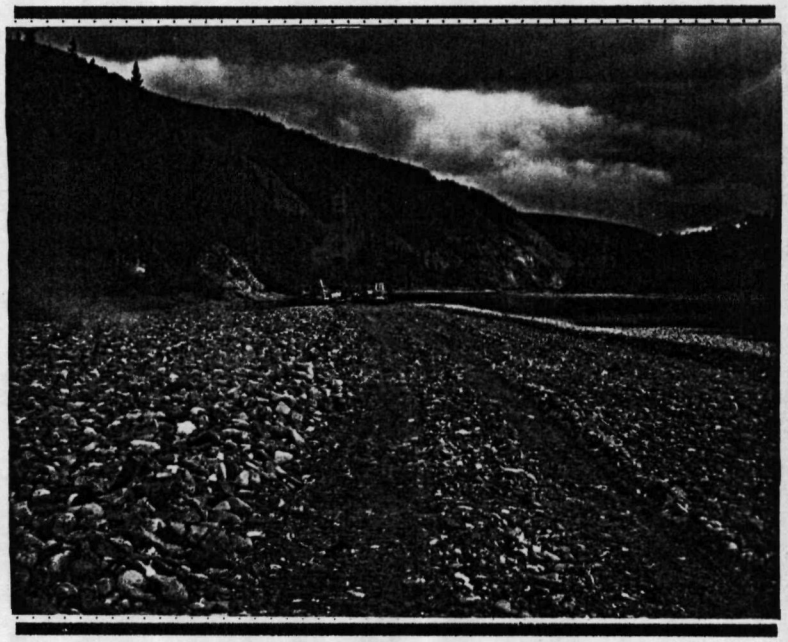
TABLE OF CONTENTS

# 1. BACKGROUND

## 1.1 Description of the Fortymile River

The Fortymile is a swift flowing river with an average grade of 7 feet per mile. While most of the drainage is located in Alaska, the last 23 miles of the river flow through the Yukon, emptying into the Yukon River 46 miles downstream from Dawson City. The river channel meanders and has many bends. The area has not been glaciated.

The wetted perimeter of the river averages 700 feet, with a main channel of approximately 200 feet at average flow. The Fortymile drains approximately 17,000 square kilometres, with a flow varying from 0 in the late winter to a two year flood of 800 cubic meters per second. The mean flow during the mining season is 100 c.m.s. The drainage of the Fortymile is considered to be arid with an average annual rainfall of 13 inches, which includes an average of 60 inches of winter snowfall.



TYPICAL FORTYMILE RIVER BAR

Due to the arid climate, the Fortymile runs very low during the summer, exposing large gravel bars. These gravel bars make up the mineable reserves of the dredging leases. The water level fluctuates due to summer rainfall from very low water levels to high enough to cover the bars and keep them scoured free of overburden and vegetation. The gravel bars are thawed, making them suitable for dredging.

### 1.2 Gold Production History

Gold was first discovered on the Fortymile River in 1886, precipitating the first major Yukon gold rush. In 1887 $200,000 worth of gold, more than 14,000 ounces, were mined with pick, shovel, and rocker, by some 200 miners. The town of Fortymile was established at the confluence of the Fortymile and Yukon Rivers. As well as fine bar gold, coarse nuggets were being found. The Fortymile district was the first area in which wood fires were used to thaw shafts in order to gain access to the rich gravel and coarse gold at bedrock depths.

Between 1906 and 1911, a dredge worked the Fortymile 8 miles upriver from its mouth. This project was abandoned with the advent of the First World War. In the early 1930's, another dredging operation was initiated 11 miles upriver from the mouth, at the confluence of Bruin Creek and the Fortymile River. On the American section of the river, mining has been continuous and extensive, with numerous dredging and cat operations.

## 2. PROJECT DESCRIPTION

The Fortymile Pacific Joint Venture controls 22 claims from claim P23935 to claim P23937, and the portion of Dredging Lease 83/2 fronting these claims. This exploration project was conducted on this two and a half mile stretch of river, the lower end of which is situated approximately five miles from the confluence of the Fortymile and the Yukon Rivers. The upper section of the property is bounded by the Fortymile River canyon. See map M1 for the location. We concentrated on the thawed reserves located on the river bars, and the thawed bank gravels adjacent to these bars, where the water table is high enough to float dredging equipment.

The objective of this exploration project was to determine the feasibility of mining the submerged gravel reserves of this section of the Fortymile River. In order to accomplish this objective we designed a program with three areas of focus. These were 1)exploration of the character and content of the gold in the gravel, 2)an analysis of a method of mining these reserves, and 3)exploring licensing of the method and its ability to meet environmental conditions imposed in the licence.

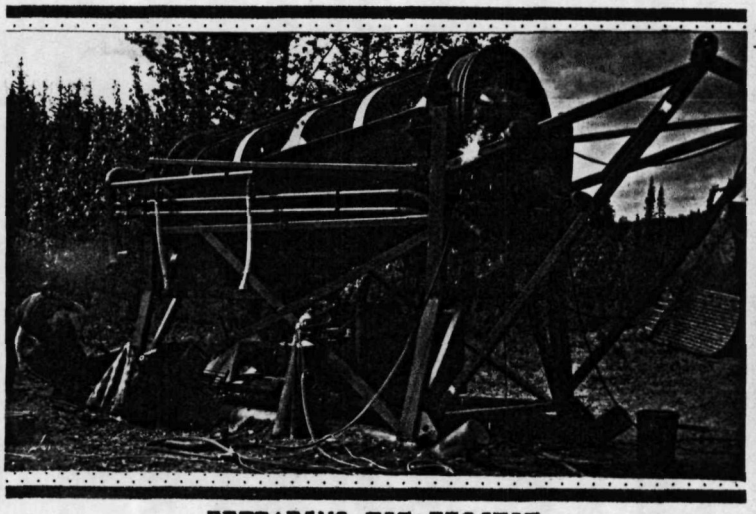
We felt that it was necessary to work on all three of these aspects simultaneously because the successful implementation of this mining method on a commercial scale depends on sufficient recoverable reserves, a method of extracting them, and regulatory permission to proceed.

Because this section of river was undeveloped, it was necessary to construct approximately one and a half miles of road to gain access to the property, partly on rocky sidehill valley rim and partly on the permafrost river valley floor. The route of the road is shown on map M2.

ROAD CONSTRUCTION

Equipment, camp, and supplies were assembled at a staging area in the old Clinton Creek town site while the new road was being constructed. A fuel depot was established at Clinton Creek so that full loads of fuel could be hauled as close as a fuel tanker could haul to the project location. As well the sluice plant was assembled and mounted on skids to facilitate dragging it over the bush road to the site. Other dredgeplant components including the barge were constructed at the exploration site.

Work was begun on this project before we obtained Y.T.G. exploration funding. This report outlines the total project development from its commencement in April 1989, as well as work performed with Exploration Incentives funding, which started in July



PREPARING FOR PROJECT

## 3. EQUIPMENT USED

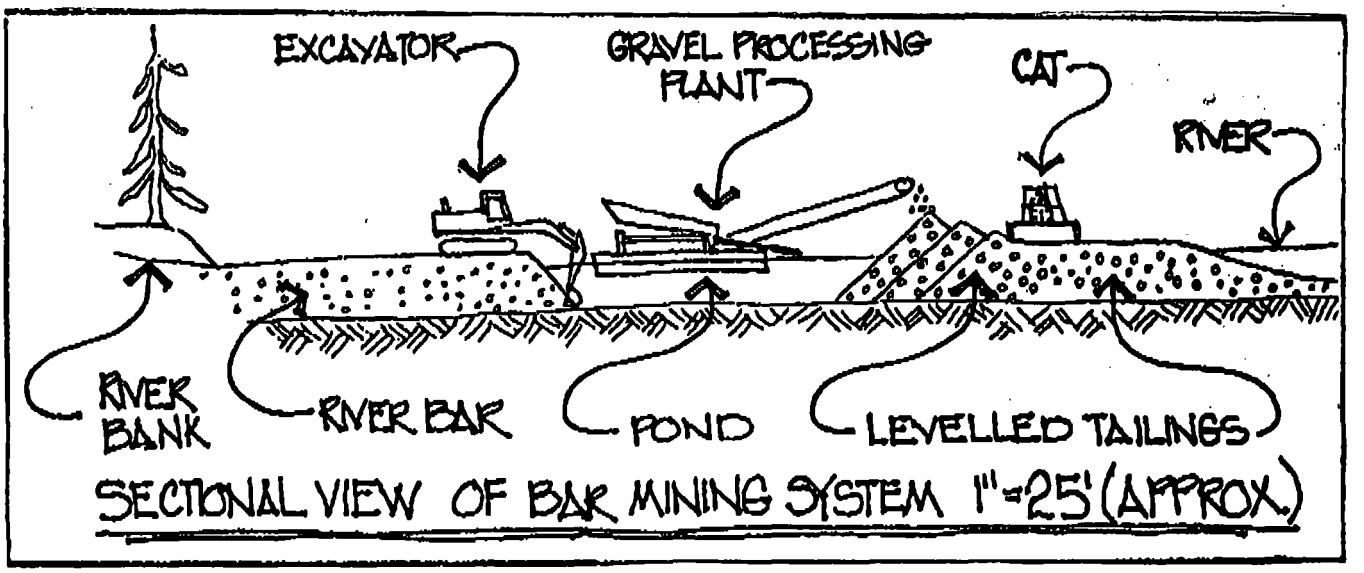
The following equipment was used:

- 213 Cat hydraulic excavator, equipped with 36 inch rock bucket and long (9 foot 6 inch) stick was used for road construction, excavation of sample pits, and feeding the processing plant during both the dry land and floating bulk samples.
- D6C Cat dozer with angle blade and ripper was used for road construction, moving the camp and equipment into the site, filling in sample pits, reclamation work from bulk sampling and other general duties.
- 920 Cat loader was used in road construction, and general duties.
- Cat model 12 grader was used in road construction.
- Trommel with 4 foot diameter barrel was used in bulk samples.
- 35 KW generator with 220 volts, 3 phase was used to power the trommel and pump.
- 4 inch Flygt 13 horsepower electric submersible pump was used for water supply for bulk samples.
- service truck with tools and wire-feed welder was used for fabricating the plant and floats as well as maintenance and repairs.
- 1 ton fuel truck was used for hauling fuel from Clinton Creek fuel supply base.
- Gold Hound 4 lead spiral gold wheel was used to process samples and clean up concentrates from the bulk samples.

## 4. DREDGING METHOD

This is a method of mining river bars to bedrock depth without operating in the river channel. The processing plant floats in a pond dug on the river bar by a backhoe-excavator. Material excavated from the pond is fed to the floating processing plant, where it is washed and screened. The fine gravel, which contains the gold, is processed through sluice boxes which capture the gold. The oversize tailings are stacked by conveyor in the far end of the pond. In this manner a moving settling pond is created, as the excavator retreats from the pond face and the tailings stacker fills in the back end of the pond. The processing plant is anchored by winch lines to boulders on the bar, and thus can be manoeuvred along the pond face to keep it in front of the excavator.

Reclamation occurs simultaneously with excavation, as the tailings from the conveyor are levelled with minimal cat work. The accompanying drawing illustrates the mining method.




The dry-land based bulk sample that we ran allowed us to assess the size of the screen mesh in the trommel for its suitability for splitting the oversize barren material from the fine gold baring material, which was processed through the sluice runs. Also this gave us an opportunity to work bugs out of the sluice plant. We found that we were losing a significant amount of gold. We added more sluice runs and decreased the mesh size in the trommel so that less gravel was going through the recovery system. The screen mesh was changed from 9/16" to 3/16" and four sluice runs 22" by 96" were added to the recovery system. The plant was then prepared for use on the barge. To accomplish this, the barge was constructed and a tailings conveyor was added to the plant.

After running three bulk samples with the plant floating, we found that the gravel was not getting washed sufficiently in the trommel. The 3/16" screen was too fine and we found gold being carried out with the coarse tailings. We installed a 1/4" mesh screen to get more open screen area.

The gravel processing aspect of the operation was effective. However, we were not able to excavate the gravel on and into bedrock in some cases. This was due in part to inexperience of excavator operators not used to digging blind, beneath the water. A longer reach on the backhoe would

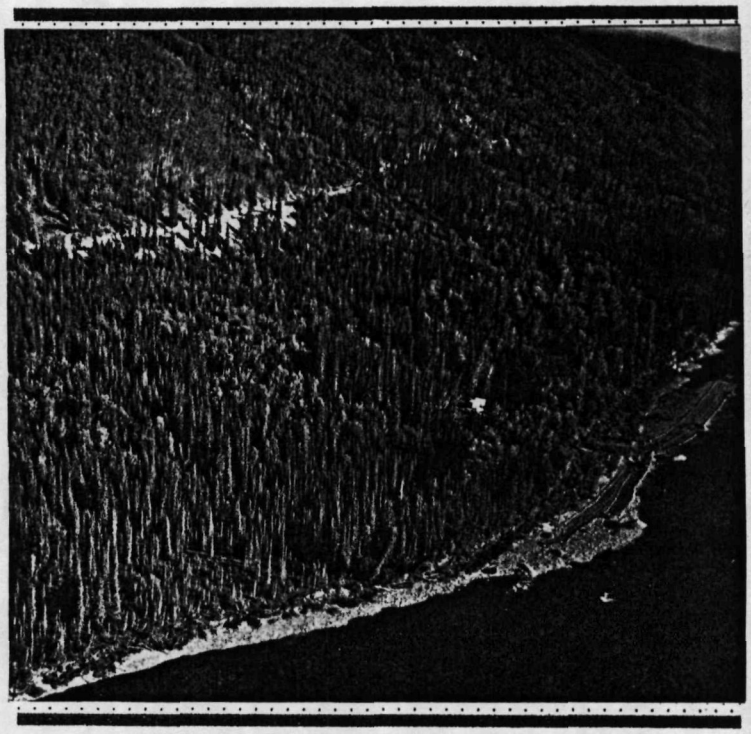
help in cleaning bedrock. Gold recovery could be improved. The use of more sophisticated gold recovery devices, such as Knelson concentrators would probably improve the rate of recovery.

## 5. GRAVEL ANALYSIS

Sampling was done to establish grade figures for the gravels on the river bars. We also wanted to establish the character of the gold and its recoverability. We were looking at the boulder content of the gravel, and also did an analysis of proportion of gravel in various sieve sizes. The depth of the gravel and the type of bedrock were also investigated.

The property was first sampled using grab samples from the exposed gravel on bars and banks. These samples were approximately 6 to 7 pounds, a small gold pan full. These samples were taken to establish both gold presence and the character of the gold. The results of this hand sampling are outlined on table T1. While the number of colours were logged, no attempt was made to establish grade figures because samples were too small and obtained from top gravel only.

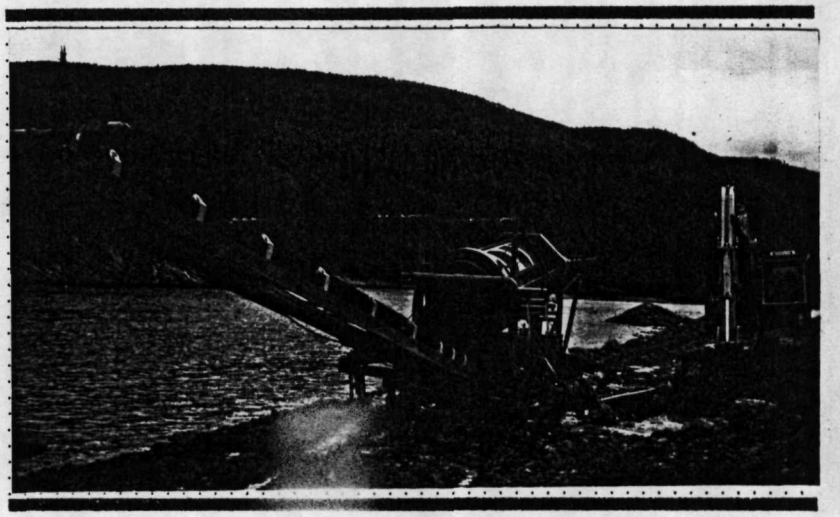
Pits were dug with the excavator on the bar fronting the camp in order to get a more accurate idea of grades and gravel volume as well as bedrock depth, bedrock composition, and gravel character. Sixteen pits were dug and sampled with a gold pan. An average of 5 samples of 6-7 pounds each were taken from each pit, and panned. Results of these samples are shown in Table T2.



EXPLORATION PITS ON RIVER BAR

Larger samples were taken and processed through the gold wheel. Results of these larger hand samples are shown on Table T3.

A land based bulk sample was processed through the trommel. The objective of this sample was to determine recoverability of the gold, comparing projected grade of samples taken from the trenches with actual gold recovered in the plant. A sample run of approximately 20 loose yards was processed and the sluice runs were cleaned up. The concentrate was processed with the gold wheel.



LAND BASED BULK SAMPLE

Following the land-based bulk sample, five bulk sample runs were made with the plant floating on the barge. These bulk samples varied from 1,100 yards to 2,400 yards and the results are tabulated in Table T4.

BULK SAMPLING WITH PLANT FLOATING

We felt that bulk samples were required to determine grade analysis which could be relied on for mining purposes. Our reasons for this are as follows:

1) while with dry land mining, barren sections can be stripped so that pay grade is enhanced, with the dredging method the whole gravel section must be processed. This results in an overall lower grade of material mined, since both barren and paying

gravel sections are processed. Therefore it is important to establish grade as accurately as possible, since profit margin will often be low.

2) Because the gold in the river bars is very fine, bulk sampling gives the grade which can actually be recovered. Processing small lab-size samples is generally more efficient than actual processing of gravel in production mining.

3) Because with this mining method the operator cannot see the cut face which is submerged under water, gold loss can be expected since bedrock will not be as thoroughly excavated as in dry land mining.

4) Apart from determining the percentage of gold which can be recovered using this mining method, we were able to determine the viability of using the method on the Fortymile River. Building this prototype operation on a pilot scale for sampling gravels allowed us to confirm viability before committing to a production scale outfit. We were also able to perform a cost analysis of this mining method using this pilot scale bulk sampling operation as a base case.

5)While close pattern drill sampling can be effective, drilling wet ground is costly and time consuming since churn drilling must be used and casing must be driven. Costs rival bulk sampling and not as much is learned.

## 6. LICENSING AND ENVIRONMENTAL COMPLIANCE

Because this mining method is new to the Yukon there was no precedent for the Water Board and the Department of Fisheries to follow in developing environmental regulation for the operation. We held discussions with DFO, and the Yukon Placer Implementation Review Committee to develop an acceptable set of operating conditions.

In our water licence, the Water Board required a berm to be constructed between the operation and the river, sufficient to meet a one in two year flood design standard. We were allowed to release effluent with .2 ml/litre of suspended solids to the river, as this is the standard required of Type 2 streams. However since this type of operation is self contained using recycled water from the dredge/settling pond, there is no direct discharge to the river. Occasionally when we were operating

there was some seepage of effluent through the gravel bar to the river. The ml/litre were so low as to be unmeasurable and mg/litre had a maximum level of 10 mg/litre, far below the allowed level of 200 mg/litre. This discharge had a maximum value of 10 mg, far below the standard which we were allowed. We did not know before we tried operating with this method whether seepage would be a problem, so we were pleased that the environmental impact of the operation was so slight.

Reclamation of the bar after mining was also very successful. Tailings were levelled and contoured with the cat. When the bar is scoured by ice at next spring breakup no evidence of mining will remain.

## 7. CONCLUSION

Our exploration project was successful because we determined that each of the following three requirements for a production scale operation were met:

1) recoverable gold reserves,
2) a viable method to mine them,
3) achievable environmental standards.

Having established the viability of the method and identified reserves on a portion of the property, our next step is to perform a comprehensive test program for the dredging reserves on the rest of the property. This will be done with backhoe trenching on the thawed bar and bank reserves over the entire 2 miles of the property in the 1990 mining season.

# APPENDIX 1 - TABLES

## INFORMATION FOR THE INTERPRETATION OF TABLES

Work done with Fortymile gold in previous years has shown that, on average, it takes 163,484 colours to make one troy ounce of Fortymile gold.

The weight of one bank cubic yard of gravel was assumed to be 3,200 lb.

Grade figures have been calculated in terms of the number of yards required to produce of gold. These calculation were made from the samples as follows:

1. number of samples per yard =
   3,200 lb. per yard - X lb. per sample
2. number of colours per yard =
   number of colours per sample x samples per yard
3. number of yards per ounce =
   163,484 colours per ounce - number of colours per yard

**TABLE 1**

**Results of Preliminary Grab Samples**

| SAMPLE # | WEIGHT in LB. | # OF COLOURS | COMMENTS |
|---|---|---|---|
| 1 | 6 | 3 | small flakes |
| 2 | 6.5 | 1 | |
| 3 | 6 | 10 | fine colours |
| 4 | 7 | 7 | large garnet |
| 5 | 6 | 5 | 1 large flake |
| 6 | 6.5 | 0 | |
| 7 | 6.5 | 8 | |
| 8 | 6 | 4 | orange flake |
| 9 | 7 | 0 | |
| 10 | 6 | 15 | fine colours |
| 11 | 6 | 4 | lots of black sand |
| 12 | 6.5 | 9 | 2 thick flakes |
| 13 | 6 | 21 | very fine |
| 14 | 7 | 0 | |
| 15 | 6 | 5 | garnets |
| 16 | 6.5 | 3 | |
| 17 | 6 | 1 | |
| 18 | 6 | 14 | 3 flakes |
| 19 | 6 | 11 | lots black sand |
| 20 | 6.5 | 0 | |
| 21 | 6 | 1 | |
| 22 | 7 | 9 | fine colours |
| 23 | 6 | 13 | 2 flakes |
| 24 | 6 | 30 | 1 small chunk |
| 25 | 6.5 | 4 | |

TABLE 1 (continued)

Results of Preliminary Grab Samples

| SAMPLE # | WEIGHT in LBS. | # of COLOURS | COMMENTS |
|---|---|---|---|
| 26 | 6 | 12 | fine colours |
| 27 | 6 | 2 | |
| 28 | 7 | 0 | |
| 29 | 6 | 20 | lots of black sand |
| 30 | 6.5 | 9 | garnets |
| 31 | 6 | 11 | 4 flakes |
| 32 | 6 | 5 | orange flake |
| 33 | 7 | 3 | |
| 34 | 6.5 | 10 | fine colours |
| 35 | 6 | 8 | flake |
| 36 | 7 | 4 | lots of black sand |
| 37 | 6 | 30+ | many very fine colours |
| 38 | 6.5 | 19 | 6 flakes, 3 of them large |
| 39 | 6 | 5 | |
| 40 | 6 | 0 | |
| 41 | 7 | 3 | lots of black sand |

TABLE 2

RESULTS OF PAN SAMPLES FROM PITS

| PIT # | SAMPLE # | WT LB | # COLOURS | GRADE YDS/OZ | AV. GRADE PIT YDS/OZ |
|---|---|---|---|---|---|
| | 1.1 | 6 | 5 | 61.4 | |
| | 1.2 | 6 | 16 | 19.2 | |
| 1 | 1.3 | 6.5 | 7 | 47.5 | 39.9 |
| | 1.4 | 7 | 12 | 29.8 | |
| | 1.5 | 6.5 | 8 | 41.5 | |
| | 2.1 | 6 | 8 | 38.3 | |
| | 2.2 | 6.5 | 19 | 17.5 | |
| 2 | 2.3 | 6.5 | 5 | 66.5 | 38.8 |
| | 2.4 | 7 | 11 | 32.5 | |
| | 2.5 | 7 | 9 | 39.7 | |
| | 3.1 | 6.5 | 12 | 27.7 | |
| | 3.2 | 7 | 25 | 14.3 | |
| 3 | 3.3 | 6.5 | 9 | 36.9 | 35.5 |
| | 3.4 | 6 | 5 | 61.3 | |
| | 3.5 | 7 | 16 | 22.4 | |
| | 4.1 | 6 | 35+ | 8.8 | |
| | 4.2 | 6.5 | 14 | 23.7 | |
| 4 | 4.3 | 6.5 | 8 | 41.5 | 24.3 |
| | 4.4 | 7 | 21 | 17 | |
| | 4.5 | 6 | 10 | 30.7 | |
| | 5.1 | 7 | 14 | 25.5 | |
| | 5.2 | 6.5 | 26 | 12.8 | |
| 5 | 5.3 | 6.5 | 5 | 66.5 | 31.5 |
| | 5.4 | 6.5 | 18 | 18.5 | |
| | 5.5 | 6 | 9 | 34.1 | |

TABLE 2 (continued)

RESULTS OF PAN SAMPLES FROM PITS

| PIT # | SAMPLE # | WT LB | # COLOURS | GRADE YDS/OZ | AV GRADE PIT YDS/OZ |
|---|---|---|---|---|---|
| | 6.1 | 6.5 | 3 | 110.8 | |
| | 6.2 | 6.5 | 6 | 55.4 | |
| 6 | 6.3 | 6 | 8 | 38.3 | 55.3 |
| | 6.4 | 7 | 9 | 39.7 | |
| | 6.5 | 7 | 11 | 32.5 | |
| | 7.1 | 6 | 14 | 21.9 | |
| | 7.2 | 6.5 | 2 | 166.1 | |
| 7 | 7.3 | 6.5 | 9 | 36.9 | 140.4 |
| | 7.4 | 7 | 3 | 119.2 | |
| | 7.5 | 7 | 1 | 357.7 | |
| | 8.1 | 6.5 | 0 | -- | |
| | 8.2 | 6.5 | 4 | 83.3 | |
| 8 | 8.3 | 7 | 1 | 357.7 | 276.9 |
| | 8.4 | 7 | 0 | -- | |
| | 8.5 | 6 | 1 | 306 | |
| | 9.1 | 6.5 | 0 | -- | |
| | 9.2 | 6.5 | 2 | 166.1 | |
| 9 | 9.3 | 6 | 0 | -- | 415.4 |
| | 9.4 | 7 | 1 | 357.7 | |
| | 9.5 | 7 | 1 | -- | |
| | 10.1 | 6.5 | 21 | 15.8 | |
| | 10.2 | 6 | 16 | 19.2 | |
| 10 | 10.3 | 7 | 10 | 35.8 | 25.8 |
| | 10.4 | 7 | 9 | 39.7 | |
| | 10.5 | 6.5 | 18 | 18.5 | |

TABLE 2 (continued)

RESULTS OF PAN SAMPLES FROM PITS

| PIT # | SAMPLE # | WT LB | # COLOURS | GRADE YDS/OZ | AV GRADE PIT YDS/OZ |
|---|---|---|---|---|---|
| | 11.1 | 7 | 25+ | 14.3 | |
| | 11.2 | 6.5 | 12 | 27.7 | |
| 11 | 11.3 | 7 | 5 | 71.5 | **35.2** |
| | 11.4 | 6.5 | 8 | 41.5 | |
| | 11.5 | 6.5 | 16 | 20.7 | |
| | 12.1 | 6.5 | 5 | 66.5 | |
| | 12.2 | 6.5 | 5 | 66.5 | |
| 12 | 12.3 | 7 | 1 | 357.7 | **87.4** |
| | 12.4 | 7 | 0 | -- | |
| | 12.5 | 6.5 | 8 | 41.5 | |
| | 13.1 | 6.5 | 2 | 166.1 | |
| | 13.2 | 6.5 | 0 | -- | |
| 13 | 13.3 | 7 | 3 | 119.2 | **207.7** |
| | 13.4 | 6 | 1 | 306 | |
| | 13.5 | 6.5 | 2 | 166.1 | |
| | 14.1 | 6 | 0 | -- | |
| | 14.2 | 6.5 | 5 | 66.5 | |
| 14 | 14.3 | 7 | 12 | 29.8 | **61.5** |
| | 14.4 | 6.5 | 8 | 41.5 | |
| | 14.5 | 6.5 | 2 | 166.1 | |
| | 15.1 | 7 | 2 | 178.8 | |
| | 15.2 | 6.5 | 0 | -- | |
| 15 | 15.3 | 6.5 | 9 | 36.9 | **66.5** |
| | 15.4 | 6.5 | 11 | 30.2 | |
| | 15.5 | 6.5 | 3 | 110.7 | |

TABLE 2 (continued)

RESULTS OF PAN SAMPLES FROM PITS

| PIT # | SAMPLE # | WT LB | # COLOURS | GRADE YDS/OZ | AV GRADE PIT YDS/OZ |
|---|---|---|---|---|---|
| | 16.1 | 7 | 0 | -- | |
| | 16.2 | 6.5 | 1 | 332.3 | |
| 16 | 16.3 | 6 | 4 | 76.7 | 237.3 |
| | 16.4 | 6.5 | 0 | -- | |
| | 16.5 | 7 | 2 | 178.8 | |

AVERAGE GRADE.....111.2 YDS/OZ

TABLE 3

RESULTS OF 100 LB. SAMPLES FROM PITS

| PIT # | SAMPLE # | # COLOURS | GRADE YDS/OZ | AV GRADE PIT YDS/OZ |
|---|---|---|---|---|
| | 1.1 | 120 | 42.6 | |
| 1 | 1.2 | 106 | 48.2 | 45.4 |
| | 2.1 | 128 | 39.9 | |
| 2 | 2.2 | 108 | 47.3 | 43.6 |
| | 3.1 | 125 | 40.8 | |
| 3 | 3.2 | 135 | 37.8 | 39.3 |
| | 4.1 | 255 | 20 | |
| 4 | 4.2 | 160 | 31.9 | 25.9 |
| | 5.1 | 141 | 36.2 | |
| 5 | 5.2 | 165 | 31 | 33.6 |
| | 6.1 | 105 | 48.7 | |
| 6 | 6.2 | 112 | 45.6 | 47.2 |
| | 7.1 | 61 | 83.8 | |
| 7 | 7.2 | 15 | 340.6 | 160 |
| | 8.1 | 35 | 146 | |
| 8 | 8.2 | 16 | 319 | 233 |
| | 9.1 | 21 | 243.3 | |
| 9 | 9.2 | 8 | 638.6 | 440.9 |
| | 10.1 | 200 | 25.5 | |
| 10 | 10.2 | 171 | 29.9 | 27.7 |
| | 11.1 | 260 | 19.6 | |
| 11 | 11.2 | 304 | 16.8 | 18.2 |

TABLE 3 (continued)

RESULTS OF 100 LB. SAMPLES FROM PITS

| PIT # | SAMPLE # | # COLOURS | GRADE YDS/OZ | AV GRADE PIT YDS/OZ |
|---|---|---|---|---|
| | 12.1 | 50 | 102.2 | |
| 12 | 12.2 | 81 | 63.1 | 82.6 |
| | 13.1 | 33 | 154.8 | |
| 13 | 13.2 | 20 | 255.4 | 205.1 |
| | 14.1 | 140 | 36.5 | |
| 14 | 14.2 | 51 | 100.2 | 68.4 |
| | 15.1 | 42 | 121.6 | |
| 15 | 15.2 | 125 | 40.9 | 81.3 |
| | 16.1 | 16 | 319.3 | |
| 16 | 16.2 | 65 | 78.6 | 198.9 |

AVERAGE.....109.4 YDS/OZ

Note: Samples were taken in 20 litre pails and assumed to have a weight of 100 pounds.

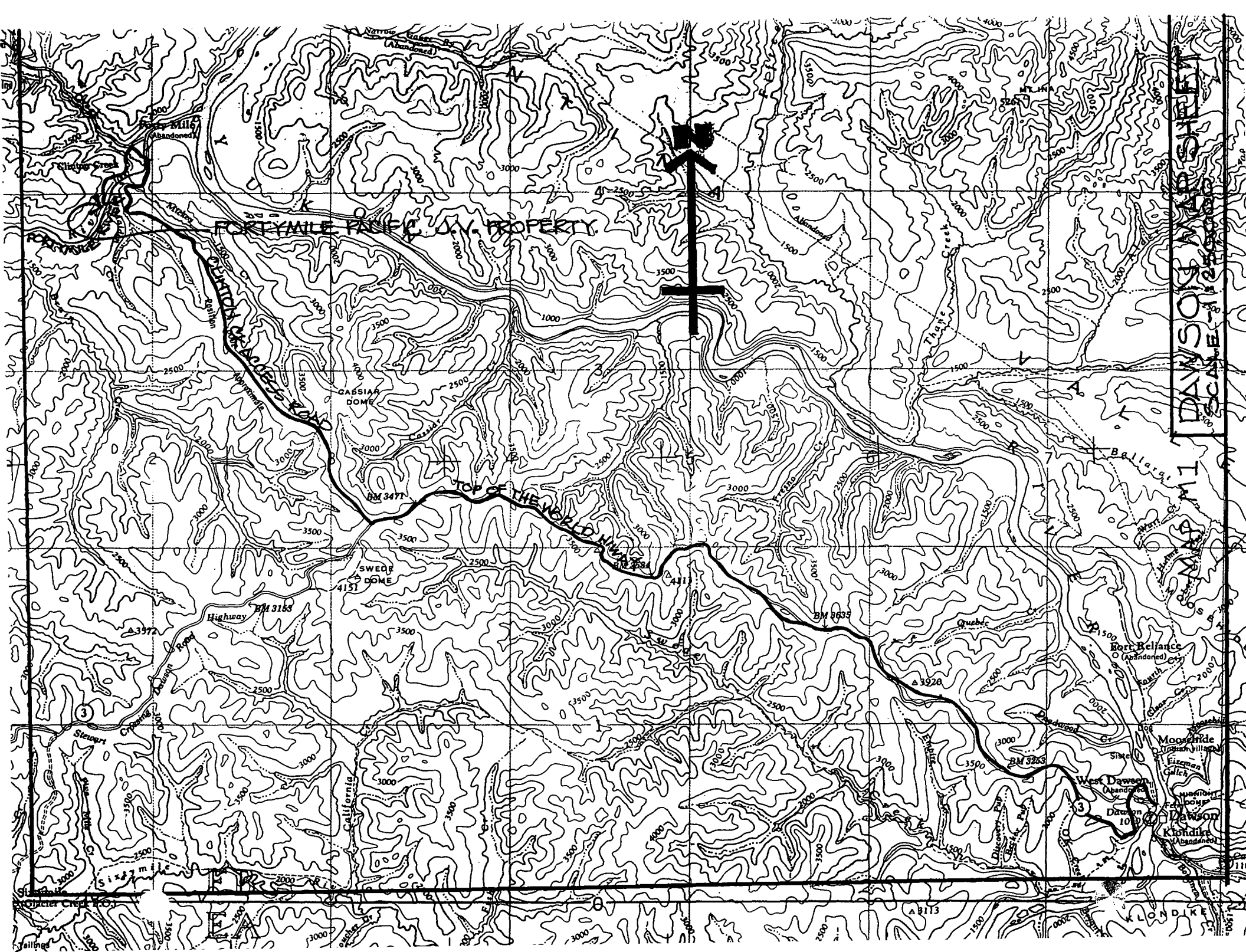
## TABLE 4

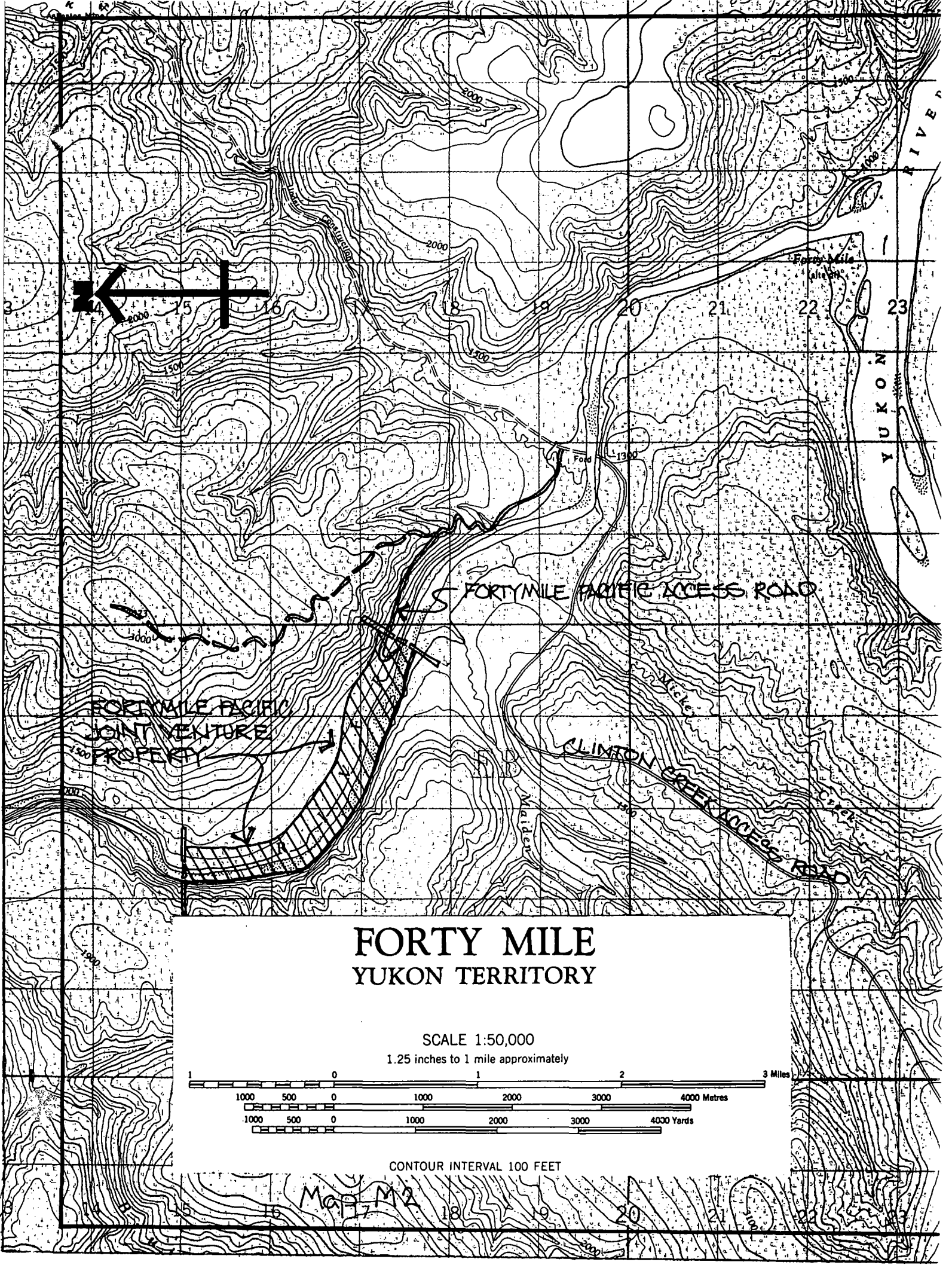
## RESULTS OF BULK SAMPLES

| SAMPLE # | IN-PLACE YARDS MOVED | TROY OZ. RECOVERED | GRADE YDS/TROY OZ |
|---|---|---|---|
| 1 | 20 | .3 | 66.6 |
| 2 | 1,100 | 15.1 | 72.8 |
| 3 | 1,800 | 20.3 | 88.6 |
| 4 | 2,400 | 16.7 | 143.7 |
| 5 | 2,250 | 10.4 | 216.3 |
| 6 | 1,700 | 9.7 | 175.2 |

AVERAGE GRADE RECOVERED.....127.2 YDS/TROY OZ

# APPENDIX 2 - MAPS


FORTYMILE PACIFIC J.V. PROPERTY
DAWSON
SCALE 1" = 2 MILES
TOP OF THE WORLD HIGHWAY
CLINTON CREEK ROAD
Forty Mile
(Abandoned)
Clinton Creek
Fortymile R.
Narrow Gauge Ry.
(Abandoned)
Mt. Ina
5260
Thistle Creek
Ballarat Cr.
Cassiar Dome
BM 3471
Swede Dome
4151
BM 3158
Highway
△3972
Stewart Crossing
Dempster Road
Stewart
Sixty Mile
Glacier Creek P.O.
Sixty mile
California
Tailings
BM 3584
△4113
BM 3635
△3920
Quebec
Fort Reliance
(Abandoned)
Fourth
Eagle
Deadwood
Dog
Sister
Moosehide
Indian village
Eisman
Gulch
BM 3263
West Dawson
(Abandoned)
Dawson
10,000
Dawson
Klondike
(Abandoned)
Hunker
Discovery Pup
Hunker Pup
△3113
KLONDIKE




# FORTY MILE
## YUKON TERRITORY

SCALE 1:50,000

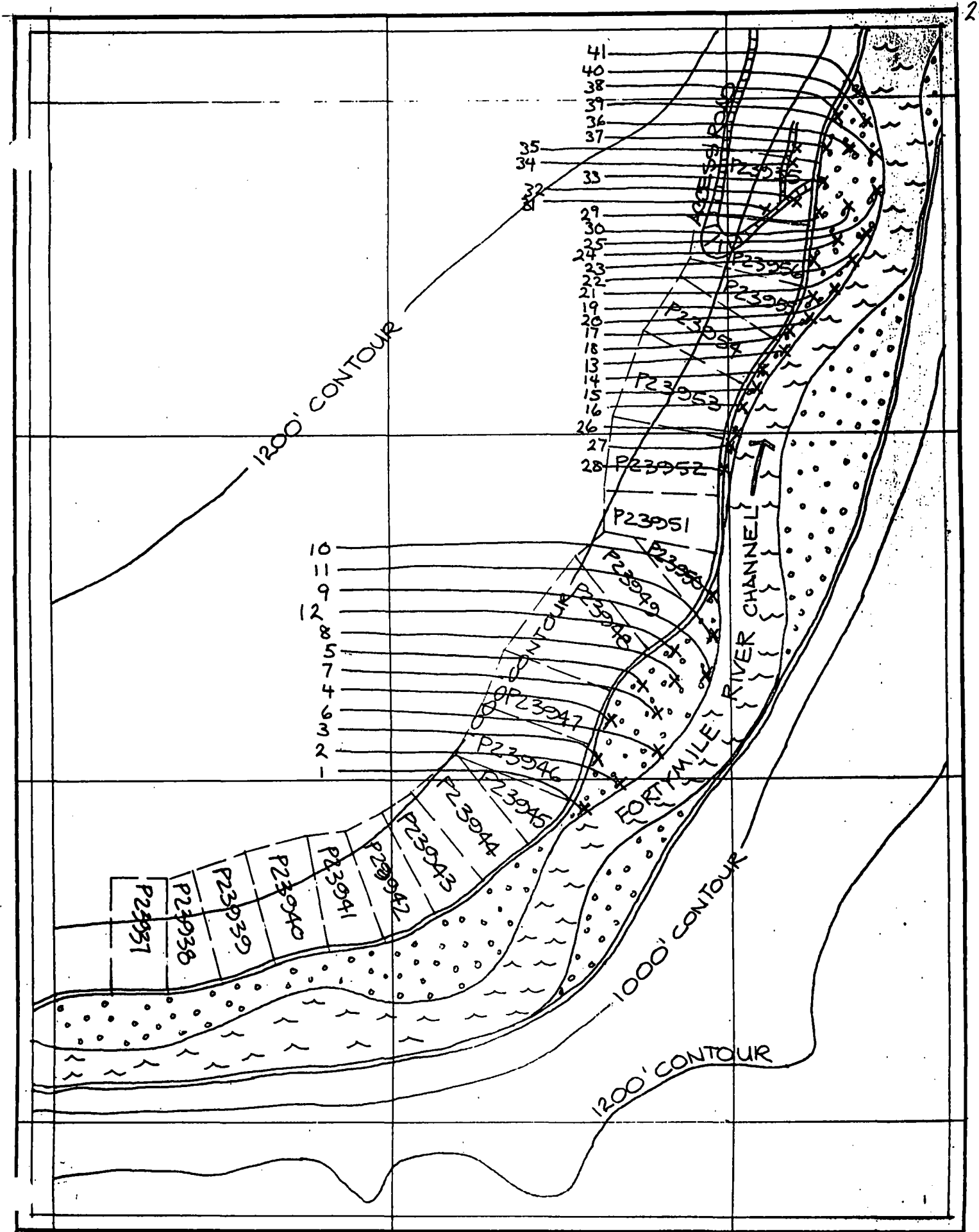
1.25 inches to 1 mile approximately

1 0 1 2 3 Miles

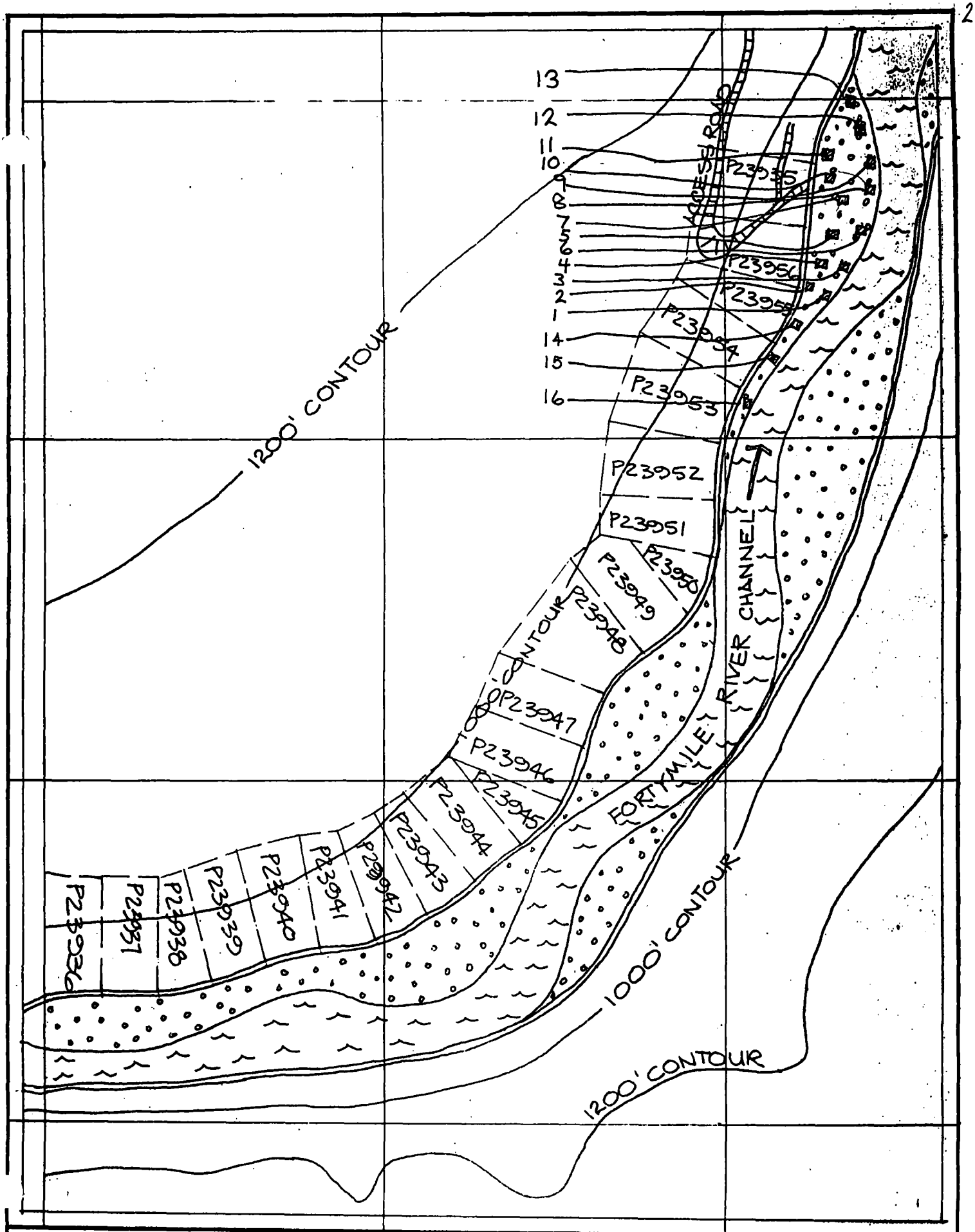
1000 500 0 1000 2000 3000 4000 Metres

1000 500 0 1000 2000 3000 4000 Yards

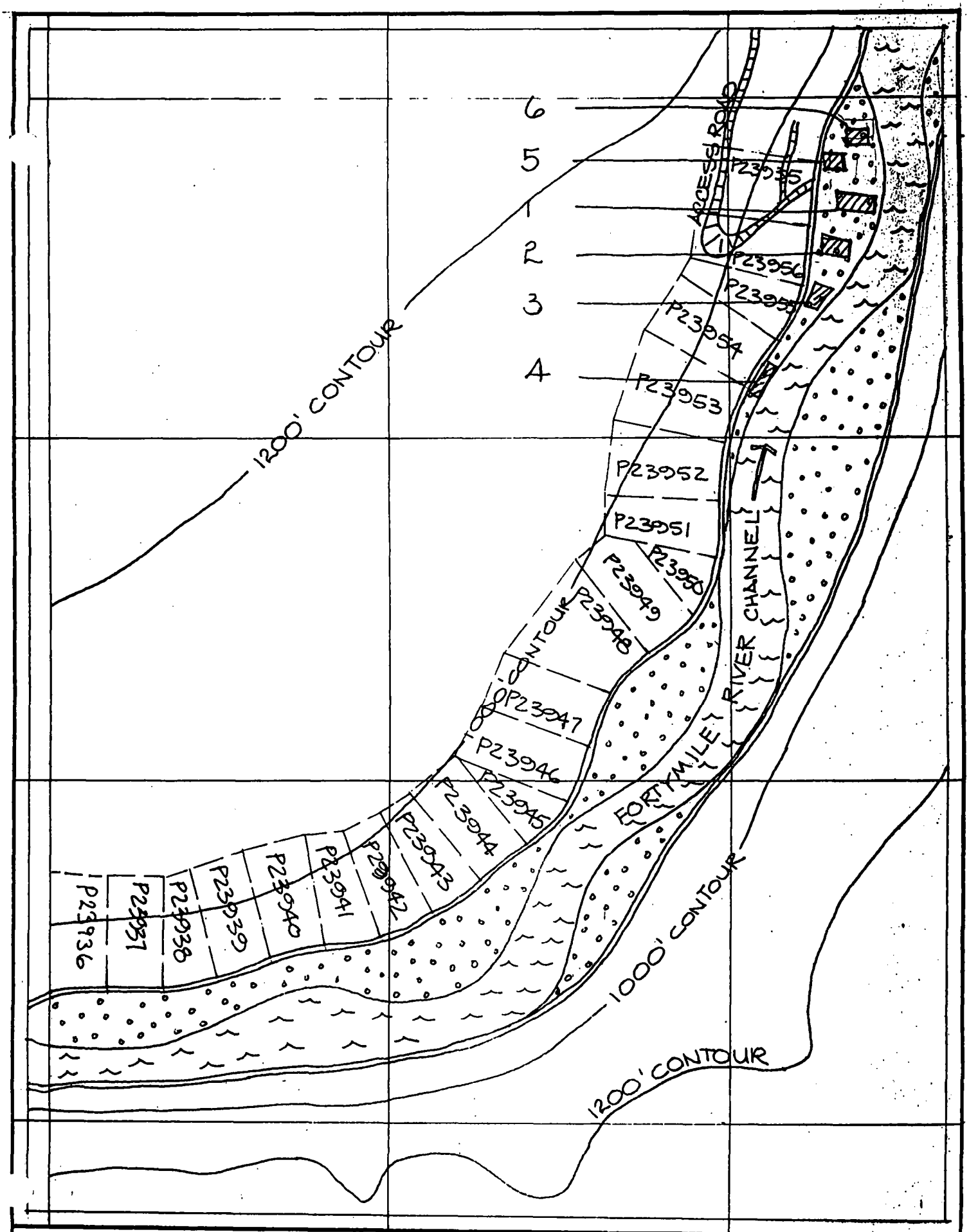
CONTOUR INTERVAL 100 FEET




Map M3 Location of Grab Samples




Map M4 Location of Pits




Map M5 Location of Bulk Samples

## APPENDIX 3 - SUPPLEMENTARY INFORMATION

PEOPLE WHO WORKED ON THE PROJECT

| | |
|---|---|
| Bill Claxton | Marten Creek, Fortymile River, Yukon |
| Leslie Chapman | Marten Creek, Fortymile River, Yukon |
| Keith Svendsen | Dawson City, Yukon |
| David Acker | Whitehorse, Yukon |
| Ron McCready | Dawson City, Yukon |
| Bob Keddie | Dawson City, Yukon |
| Larry Remple | Whitehorse, Yukon |

PREPARATION OF THE REPORT

The report was prepared by Leslie Chapman and Bill Claxton.

PROPERTY INVESTIGATED

Dredging Lease DL83/4, held by Bill Claxton.