# PLACER TESTING PROGRAM

## JAMIE #1

## PLACER LEASE 5533

# PLACER TESTING PROGRAM

# JAMIE #1

# PLACER LEASE 5533

DAWSON MINING DIVISION

NTS 115 P/14

63°54' LATITUDE, 137°11.2' LONGITUDE

Owned by:

CANADA TUNGSTEN MINING CORPORATION LTD.
Executive Office
Box 12525, Oceanic Plaza
Ste. 1600-1066 W. Hastings St.
Vancouver, B.C. V6E 3X1

Work by:

BEMA INDUSTRIES LTD.
19945-56th Avenue
Langley, B.C. V3A 3Y2

KEN HANSEN

SEPTEMBER, 1981

# TABLE OF CONTENTS

## LIST OF FIGURES



## APPENDIX

# PLACER TESTING PROGRAM

# JAMIE # 1

# PLACER LEASE 5533

## 1.0 INTRODUCTION

Bema Industries Ltd. was contracted by Canada Tungsten Mining Corporation Limited to carry out a placer testing program on their thirteen leases in the Clear Creek area. The purpose of the program was to define the heavy mineral potential and to fulfill their assessment requirements for each lease.

## 1.1 LOCATION AND ACCESS

The West Ridge camp is situated in the Yukon Territory approximately 40 miles northwest of Stewart Crossing (see Fig. 1). Access is by travelling east along the Klondike highway for 47 miles then turn north along the Clear Creek road for 18 miles.

The leases are then accessible by a 4-X-4 road which follows Left Clear Creek. Since the leases are located well off the roadway a Bell 47 was used to reach the leases.

# McQUESTEN

## YUKON TERRITORY

## 115 P

FIGURE 1

Scale 1:250,000 Échelle

Miles 0 5 10 15 Miles

Kilometres 0 5 10 15 20 Kilometres

## 2.0 THE PLACER TESTING PROGRAM

The program consisted of trenching, concentration of trenched material, visual examination, assay and geochemical analysis, and calculations of gold, scheelite, and cassiterite values per cubic yard.

## 2.1 TRENCHING

Two methods of trenching were used depending upon access to the lease. Upon easy access a D7G cat was used to excavate a trench. Where access was not possible by cat a two to three man crew was flown in by a Bell 47 to excavate a trench or test pits.

## 2.2 HAND EXCAVATED TRENCHES AND PITS

The hand trenches were dug as deep as possible though all trenches experienced water problems. Therefore the trenches reached a maximum depth of three to five feet. The trenches were dug perpendicular to the active creek.

The trenches were placed in the most favourable locations for heavy mineral concentration, usually below a steep gradient or on the inside curve of a creek.

## 2.3 CONCENTRATION PROCEDURE

The concentration process involves running all material from the hand dug trench through a small sluice.

Large rocks which were part of the sample were washed in a tub, then the residual material run through the sluice. After each sluice clean up a one half to one cubic foot concentrate was taken.

The sluice material was panned to approximately an eight and one half ounce concentrate. This final concentrate was dried for visual inspection.

The small sluice or longtom (see Fig. 5) consisted of a pump, trough, grizzly, and sluice box. A Monark pump was used to supply water at 70 gallons per minute. The grizzly was setup at a forty-five degree angle with one quarter inch by eight inch slotted openings. The oversize gravel was rejected off the side of the grizzly.

(a) The water flows through the four foot trough.

(b) The gravel is placed in the trough.

(c) It is washed and self-fed at a constant rate over the grizzly.

(d) The sized gravel goes in an eight foot by eight inch sluice. The bottom of the sluice has a layer of rubber matting, and on top of this three quarter inch expanded metal.

(e) Panning: the panning of the sluice concentrates were done at base camp. Each sample was panned twice. The final concentrates were placed on trays to dry. An eight ounce panning tails sample was taken for geochemical analysis to ensure accuracy.

## 2.4 VISUAL EXAMINATION

The visual examination procedure is as follows:

(a) Dry panned, concentrate and tails.

(b) Weigh concentrate and tails.

(c) Sieve dried concentrate using a ten and twenty mesh screen (Tyler series).

(d) Take counts on scheelite grains larger than twenty mesh with the aid of an ultraviolet lamp; at the same time note the presence of barite.

(e) Take counts on gold using the following scale:

coarse gold (cg) - larger than ten mesh
medium gold (mg) - smaller than ten mesh but larger than twenty mesh
fine gold (fg) - smaller than twenty mesh but larger than forty mesh
very fine gold (vfg) - smaller than forty mesh.

(f) Examine each sieved portion under a binocular microscope. Take general overall counts on scheelite, barite, arsenopyrite pyrite, hematite and magnetite using the following scale:

0 - no mineral grains were observed
1 - trace
2 - low
3 - moderate
4 - high
5 - abundant

Note: Originally cassiterite counts were to be taken but field tests failed to provide any positive results of suspect grains.

## 3.0 RESULTS

JAMIE #1
PLACER LEASE 5533

| | GOLD | SCHEELITE | BARITE | ARSENOPYRITE | PYRITE | HEMATITE | MAGNETITE |
|---|---|---|---|---|---|---|---|
| J1-T1 concentrate | 12 vfg | 3 | 3 | 0 | 3 | 3 | 4 |
| J1-T1 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| J1-T2 concentrate | 20 vfg | 1 gr ≥10 mesh 3 1 gr ≥20 mesh | 3 | 3 | 2 | 4 | 4 |
| J1-T2 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| J1-T3 concentrate | 15 vfg | 3 | 3 | 3 | 2 | 4 | 4 |
| J1-T3 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| J1-T4 concentrate | 7 vfg | 2 | 3 | 0 | 2 | 3 | 4 |
| J1-T4 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| J1-T5 concentrate | 3 vfg | 2 | 2 | 1 | 1 | 2 | 3 |
| J1-T5 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |

## 3.0 RESULTS

### GOLD

| | | | |
|---|---|---|---|
| Coarse Gold | (cg) | - | larger than 10 mesh |
| Medium Gold | (mg) | - | smaller than 10 mesh but larger than 20 mesh |
| Fine Gold | (fg) | - | smaller than 20 mesh but larger than 40 mesh |
| Very Fine Gold | (vfg) | - | smaller than 40 mesh |

### SCALE

| | | |
|---|---|---|
| 0 | - | denotes no mineral grains present |
| 1 | - | trace |
| 2 | - | low |
| 3 | - | moderate |
| 4 | - | high |
| 5 | - | abundant |

## 4.0 CONCLUSIONS

Conclusions pending Chemex Geochemical Analyses.

- APPENDIX I -

JAMIE #1
Placer Lease 5533

STATEMENT OF DIRECT COSTS

LABOUR

| | | | |
|---|---|---|---|
| Ken Hansen, Supervisor | | | |
| $175.00 per day | July 18 (.25 day) 25 (1.0 day)<br>25 (1.0 day) 27 (1.0 day) | | |
| | Total Days 3.25 x $175.00 = | | $ 568.75 |
| Ian Sturrock, Field Technician | | | |
| $125.00 per day | July 18 (.25 day) 25 (1.0 day)<br>26 (1.0 day) 27 (1.0 day) | | |
| | Total Days 3.25 x $125.00 = | | $ 406.25 |
| Mike Wyllie, Field Technician | | | |
| $125.00 per day | July 25 (1.0 day) 25 (1.0 day)<br>27 (1.0 day) | | |
| | Total Days 3.0 x $125.00 = | | $ 375.00 |
| | TOTAL LABOUR | | $1,350.00 |

**DISBURSEMENTS**

| | |
|---|---|
| Gas $2.00 per gallon X .5 gallon per day X 3 days = | $ 3.00 |
| 4.400 $yds^3$ X $1.52 per $yard^3$ = | $ 6.68 |
| Chemex Geochemical Analyses | |
| Preparation $0.65 per sample X 6 | $ 3.90 |
| Each sample tested for Gold ($5.75) | |
| Tin ($4.00) | |
| Tungsten ($4.00) | |
| $13.75 X 6 samples = | $ 82.50 |
| TOTAL DISBURSEMENTS | $ 96.08 |
| TOTAL COST APPLIED TO ASSESSMENT WORK | $1,446.08 |

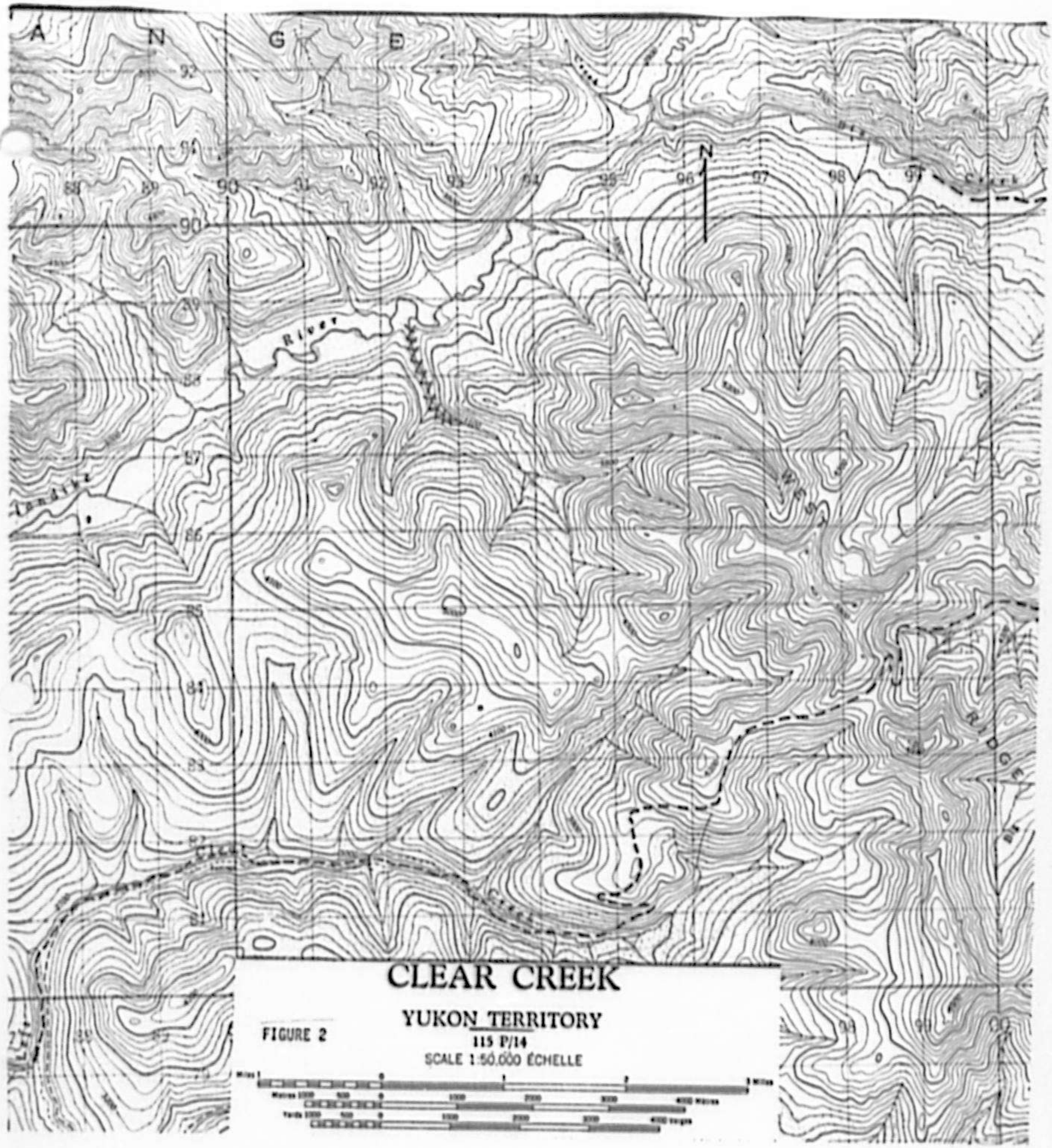

A N G D
92
90
91
92
93
94
95
96
97
98
99
90
River
Creek
CLEAR CREEK
YUKON TERRITORY
115 P/14
SCALE 1:50,000 ÉCHELLE

FIGURE 2

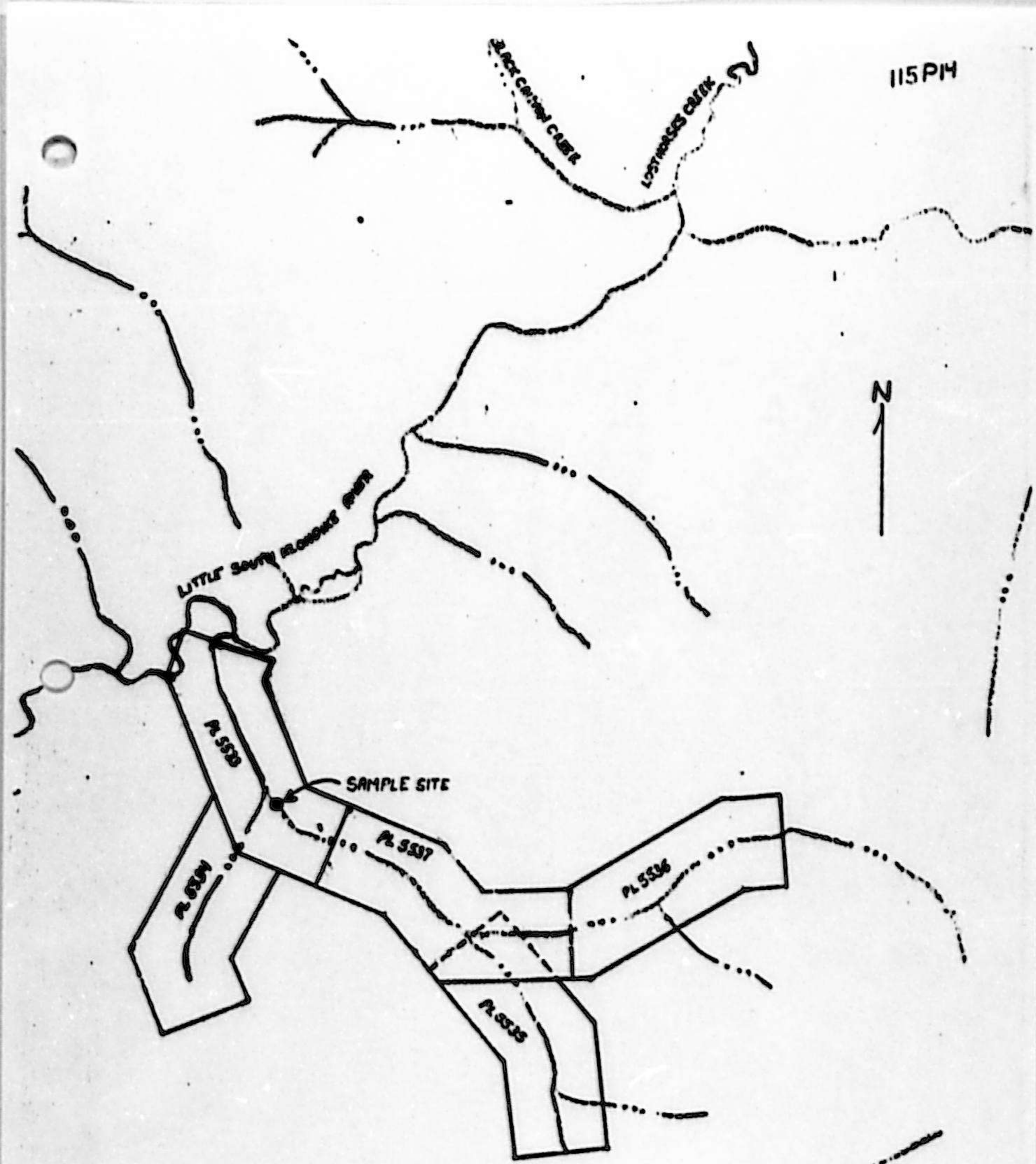
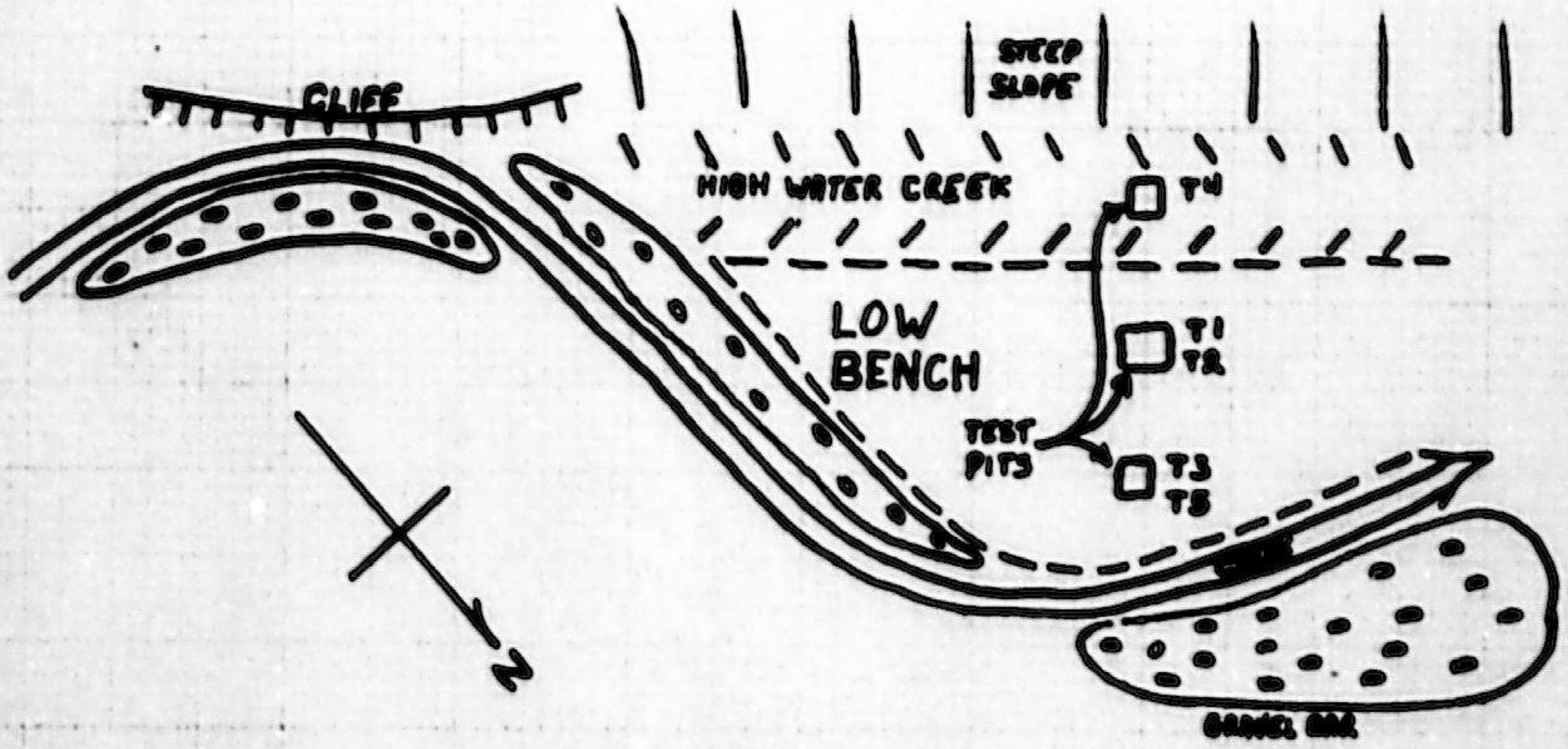

115 PM
BLACK CANYON CREEK
LOST HORSE CREEK
N
LITTLE SOUTH FORK RIVER
PL 5530
PL 5529
SAMPLE SITE
PL 5537
PL 5536
PL 5535
SCALE: 1/2 MILE TO 1 INCH
.25 CUBIC

FIGURE 3

# JAMIE I
# SAMPLE SITE PLAN




## PIT VOLUMES

| | | |
|---|---|---|
| T1•2 | 3'x 5'x 3.3'= 44.5'³ ÷27'³= | 1.8 YD³ |
| T3•5 | 28'x 45'x 28'= 35'³ ÷27'³= | 1.3 YD³ |
| T4 | 28'x 45'x 28'= 35'³ ÷27'³= | 1.3 YD³ |
| | TOTAL | 4.4 YD³ |

SCALE 1 INCH TO 10 FEET

SITE IS M20 YARDS UPSTREAM FROM POST # 1.

FIGURE 4

# SLUICE (LONGTOM)

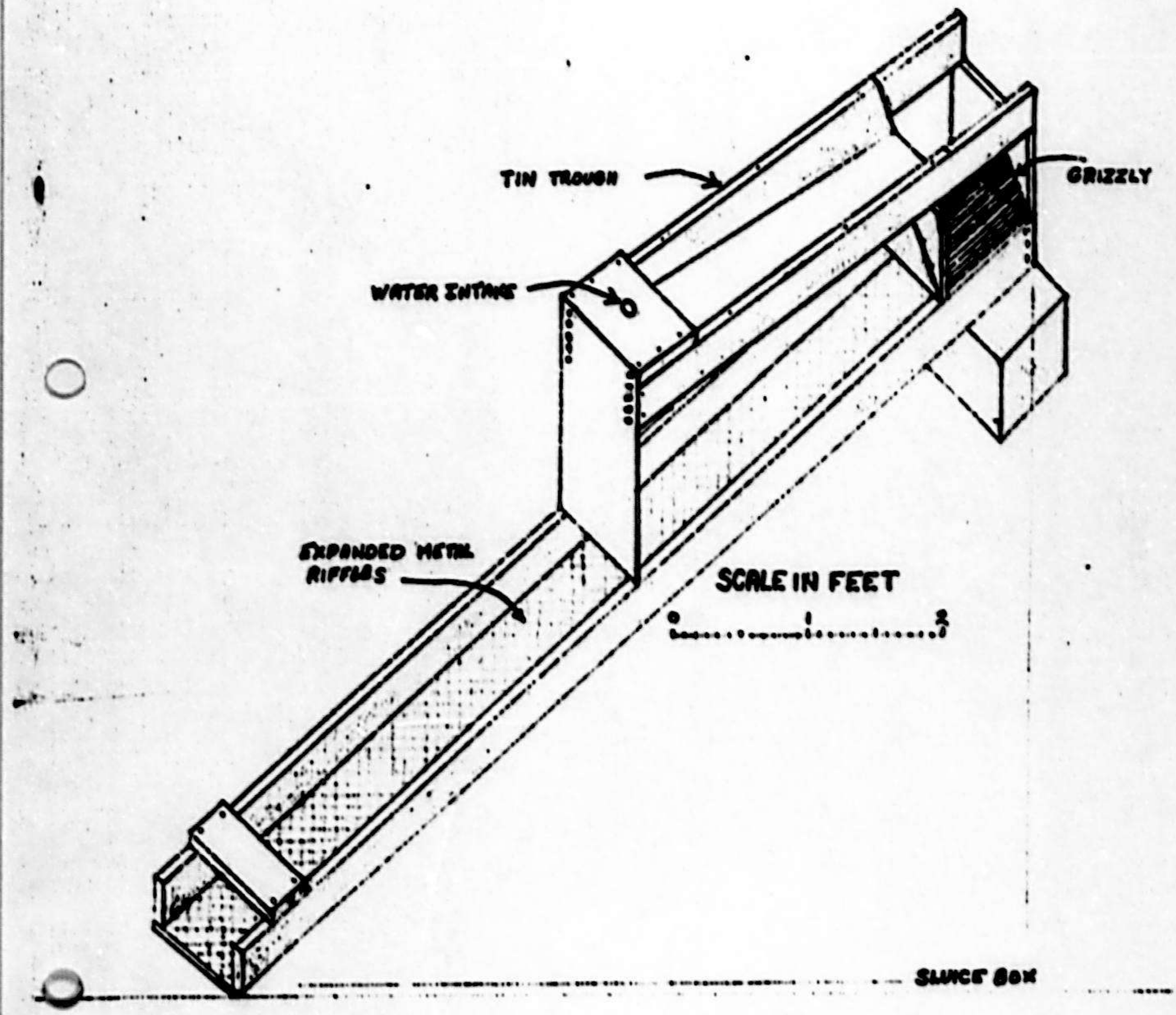



FIGURE 5

# PLACER TESTING PROGRAM

## JAMIE #2

## PLACER LEASE 5537

# PLACER TESTING PROGRAM

# JAMIE #2

# PLACER LEASE 5537

DAWSON MINING DIVISION

NTS 115 P/14

63°53.6' LATITUDE, 137°09.5' LONGITUDE

Owned by:

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KEN HANSEN

SEPTEMBER, 1981

# TABLE OF CONTENTS

## LIST OF FIGURES



## APPENDIX

# PLACER TESTING PROGRAM

## JAMIE #2

## PLACER LEASE 5537

## 1.0 INTRODUCTION

Soma Industries Ltd. was contracted by Canada Tungsten Mining Corporation Limited to carry out a placer testing program on their thirteen leases in the Clear Creek area. The purpose of the program was to define the heavy mineral potential and to fulfill their assessment requirements for each lease.

### 1.1 LOCATION AND ACCESS

The West Ridge camp is situated in the Yukon Territory approximately 40 miles northwest of Stewart Crossing (see Fig. 1). Access is by travelling east along the Klondike highway for 47 miles then turn north along the Clear Creek road for 18 miles.

The leases are then accessible by a 4 X 4 road which follows Left Clear Creek. Since the leases are located well off the roadway a Bell 47 was used to reach the leases.

# McQUESTEN

## YUKON TERRITORY

## 115 P

FIGURE 1

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 Miles

Kilometres 5 0 5 10 15 20 Kilometres

## 2.0 THE PLACER TESTING PROGRAM

The program consisted of trenching, concentration of trenched material, visual examination, assay and geochemical analysis, and calculations of gold, scheelite, and cassiterite values per cubic yard.

### 2.1 TRENCHING

Two methods of trenching were used depending upon access to the lease. Upon easy access a D7G cat was used to excavate a trench. Where access was not possible by cat a two to three man crew was flown in by a Bell 47 to excavate a trench or test pits.

### 2.2 HAND EXCAVATED TRENCHES AND PITS

The hand trenches were dug as deep as possible though all trenches experienced water problems. Therefore the trenches reached a maximum depth of three to five feet. The trenches were dug perpendicular to the active creek.

The trenches were placed in the most favourable locations for heavy mineral concentration, usually below a steep gradient or on the inside curve of a creek.

### 2.3 CONCENTRATION PROCEDURE

The concentration process involves running all material from the hand dug trench through a small sluice.

Large rocks which were part of the sample were washed in a tub, then the residual material run through the sluice. After each sluice clean up a one half to one cubic foot concentrate was taken.

The sluice material was panned to approximately an eight and one half ounce concentrate. This final concentrate was dried for visual inspection.

The small sluice or longtom (see Fig. 5) consisted of a pump, trough, grizzly, and sluice box. A Monark pump was used to supply water at 70 gallons per minute. The grizzly was setup at a forty-five degree angle with one quarter inch by eight inch slotted openings. The oversize gravel was rejected off the side of the grizzly.

(a) The water flows through the four foot trough.

(b) The gravel is placed in the trough.

(c) It is washed and self-fed at a constant rate over the grizzly.

(d) The sized gravel goes in an eight foot by eight inch sluice. The bottom of the sluice has a layer of rubber matting, and on top of this three quarter inch expanded metal.

(e) Panning: the panning of the sluice concentrates were done at base camp. Each sample was panned twice. The final concentrates were placed on trays to dry. An eight ounce panning tails sample was taken for geochemical analysis to ensure accuracy.

## 2.4 VISUAL EXAMINATION

The visual examination procedure is as follows:

(a) Dry panned, concentrate and tails.

(b) Weigh concentrate and tails.

(c) Sieve dried concentrate using a ten and twenty mesh screen (Tyler series).

(d) Take counts on scheelite grains larger than twenty mesh with the aid of an ultraviolet lamp; at the same time note the presence of barite.

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(f) Examine each sieved portion under a binocular microscope. Take general overall counts on scheelite, barite, arsenopyrite pyrite, hematite and magnetite using the following scale:

0 - no mineral grains were observed
1 - trace
2 - low
3 - moderate
4 - high
5 - abundant

Note: Originally cassiterite counts were to be taken but field tests failed to provide any positive results of suspect grains.

## 3.0 RESULTS

JAMIE #2
PLACER LEASE 5537

| | GOLD | SCHEELITE | BARITE | ARSENOPYRITE | PYRITE | HEMATITE | MAGNETITE |
|---|---|---|---|---|---|---|---|
| | | 1 gr. >10 mesh<br>9 gr. >10 mesh | | | | | |
| J2-T1 concentrate | 72 vfg | 3 | 4 | 2 | 2 | 3 | 4 |
| J2-T1 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| | 2 fg | 8 gr. >20 mesh | | | | | |
| J2-T2 concentrate | 68 vfg | 3 | 4 | 2 | 2 | 3 | 4 |
| J2-T2 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| | 3 fg | 14 gr. >20 mesh | | | | | |
| J2-T3 concentrate | 81 vfg | 3 | 4 | 2 | 2 | 3 | 4 |
| J2-T3 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |

## 3.0 RESULTS

### GOLD

| | | | |
|---|---|---|---|
| Coarse Gold | (cg) | - | larger than 10 mesh |
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| Fine Gold | (fg) | - | smaller than 20 mesh but larger than 40 mesh |
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### SCALE

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## 4.0 CONCLUSIONS

Conclusions pending Chemex Geochemical Analyses.

- APPENDIX I -

JAMIE #2
Placer Lease 5537

STATEMENT OF DIRECT COSTS

LABOUR

Ken Hansen, Supervisor
$175.00 per day — July 27 (1.0 day), August 1 (0.5 day), 3 (1.0 day) 30 (0.2 day) 31 (0.2 day)
Total Days 2.9 x $175.00 = $ 507.50

Sean Butler, Geological Assistant
$125.00 per day — August 3 (1.0 day)
Total Days 1.0 x $125.00 = $ 125.00

Bill Mann, Geological Assistant
$125.00 per day — August 3 (1.0 day) 4 (1.0 day) 5 (1.0 day)
Total Days 3.0 x $125.00 = $ 375.00

Tim Olson
$85.00 per day — August 4 (1.0 day) 5 (1.0 day)
Total days 2.0 x $85.00 = $ 170.00

TOTAL LABOUR $1,177.50

**DISBURSEMENTS**

| | | |
|---|---|---|
| Gas $2.00 per gallon x .5 gallon per day X 3 days = | | $ 3.00 |
| 6.8 yds$^3$ X $1.52 per yard$^3$ = | | $ 10.33 |
| Chemex Geochemical Analyses | | |
| Preparation $0.65 per sample X 6 | | $ 3.90 |
| Each sample tested for Gold ($5.75) | | |
| Tin ($4.00) | | |
| Tungsten ($4.00) | | |
| $13.75 X 6 samples = | | $ 82.50 |
| TOTAL DISBURSEMENTS | | $ 99.73 |
| TOTAL COST APPLIED TO ASSESSMENT WORK | | $1,277.23 |

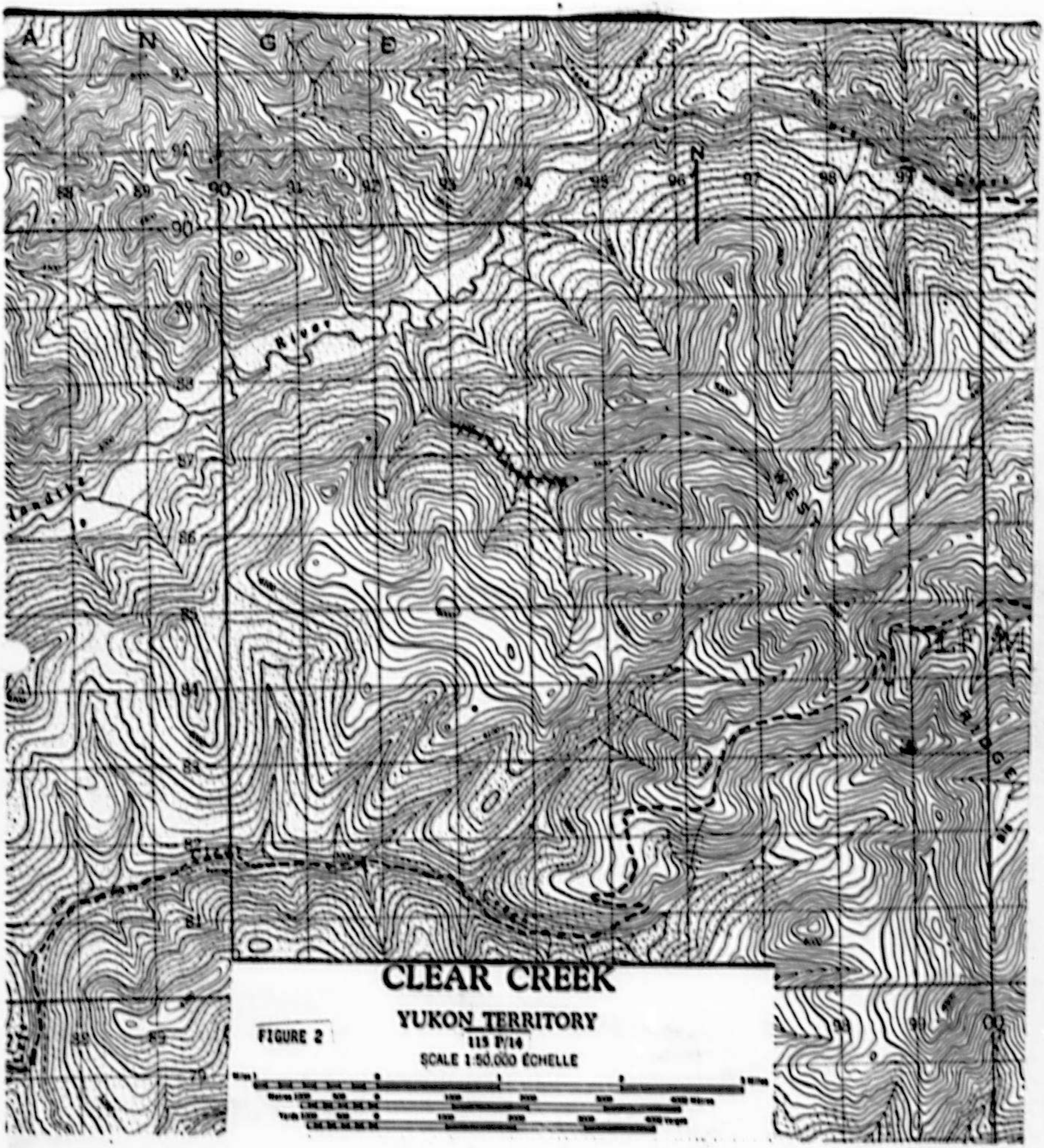
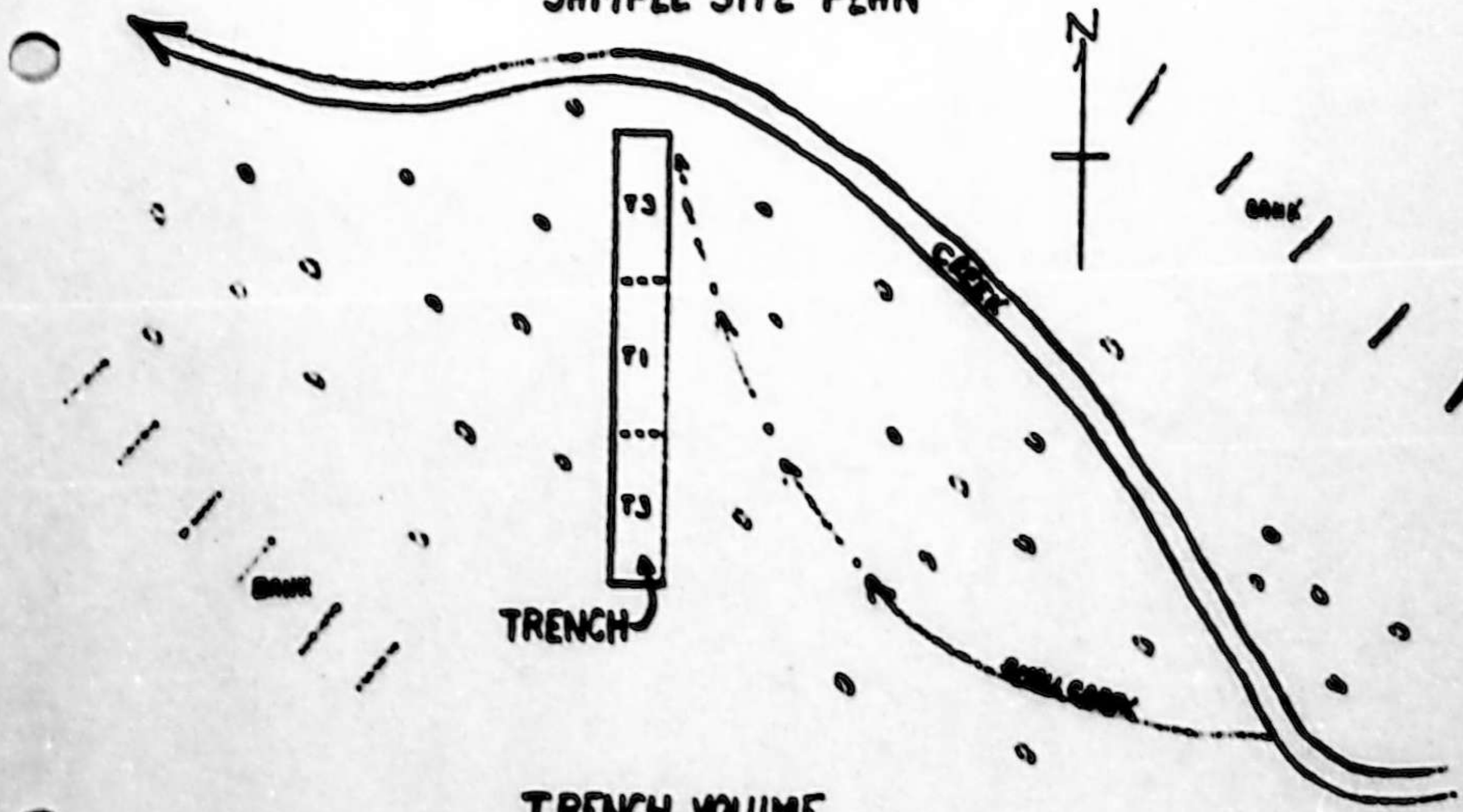

A
N
G
E
R
I
V
E
R
CLEAR CREEK
YUKON TERRITORY
115 P/14
SCALE 1:50,000 ÉCHELLE

FIGURE 2

FIGURE 3

SCALE: 1/2 MILE To 1 INCH

# JAMIE 2
# SAMPLE SITE PLAN




TRENCH VOLUME

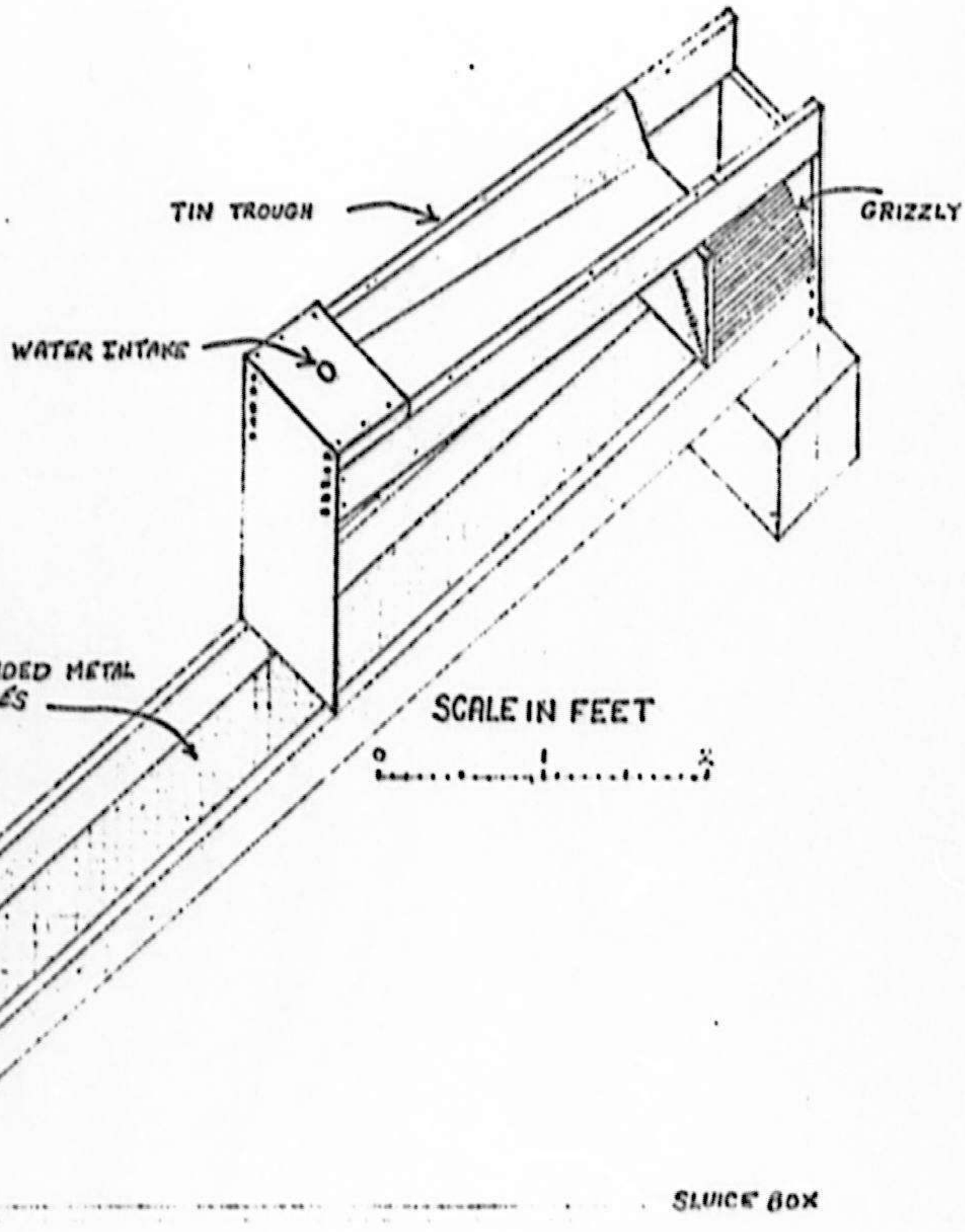
$24.5' \times 3' \times 2.5' = 183.7^{3} \div 27^{3} = 6.8\ YD^{3}$

SCALE 1 INCH TO 10 FOOT

TRENCH IS 1075 YARD UPSTREAM FROM POST #1.

FIGURE 4

SLUICE
(LONGTOM)




SLUICE BOX

FIGURE 5

# PLACER TESTING PROGRAM

## JAMIE #3

## PLACER LEASE 5536

# PLACER TESTING PROGRAM

# JAMIE #3

# PLACER LEASE 5536

## DAWSON MINING DIVISION

## NTS 115 P/14

## 63°53.6' LATITUDE, 137°08.3' LONGITUDE

Owned by:

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KEN HANSEN

SEPTEMBER, 1981

# TABLE OF CONTENTS

## LIST OF FIGURES



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# PLACER TESTING PROGRAM

# JAMIE #3

# PLACER LEASE 5536

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The visual examination procedure is as follows:

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0 - no mineral grains were observed
1 - trace
2 - low
3 - moderate
4 - high
5 - abundant

Note: Originally cassiterite counts were to be taken but field tests failed to provide any positive results of suspect grains.

## 3.0 RESULTS

JAMIE #3
PLACER LEASE 5536

| | GOLD | SCHEELITE | BARITE | ARSENOPYRITE | PYRITE | HEMATITE | MAGNETITE |
|---|---|---|---|---|---|---|---|
| | | 1 gr. > 10 mesh | | | | | |
| J3-T1 concentrate | 8 vfg | 3 | 3 | 4 | 5 | 2 | 3 |
| J3-T1 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| | | 1 gr. > 20 mesh | | | | | |
| J3-T2 concentrate | 10 vfg | 3 | 3 | 5 | 5 | 3 | 3 |
| J3-T2 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| | | 1 gr. > 20 mesh | | | | | |
| J3-T3 concentrate | 4 vfg | 3 | 3 | 4 | 4 | 2 | 4 |
| J3-T3 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| J3-T4 concentrate | 8 vfg | 3 | 3 | 3 | 3 | 2 | 3 |
| J3-T4 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| J3-T5 concentrate | 10 vfg | 3 | 3 | 3 | 4 | 2 | 3 |
| J3-T5 tails | 0 | 1 | 1 | 0 | 0 | 0 | 1 |

## 3.0 RESULTS

### GOLD

| | | | |
|---|---|---|---|
| Coarse Gold | (cg) | - | larger than 10 mesh |
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### SCALE

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## 4.0 CONCLUSIONS

Conclusions pending Chemex Geochemical Analyses.

# - APPENDIX I -

## JAMIE #3
## PLACER LEASE 5536

## STATEMENT OF DIRECT COSTS

**LABOUR**

| | | | |
|---|---|---|---|
| Ken Hansen, Supervisor | | | |
| $175.00 per day | July 2 (0.25 day) 22 (1.0 day)<br>23 (1.0 day) 30 (0.2 day)<br>31 (0.2 day) | | |
| | Total Days 2.65 x $175.00 | = | $463.75 |
| Ian Sturrock, Field Technician | | | |
| $125.00 per day | July 21 (0.25 day) 22 (1.0 day)<br>23 (1.0 day) 24 (1.0 day) | | |
| | Total Days 3.25 x $125.00 | = | $406.25 |
| Mike Wyllie, Field Technician | | | |
| $125.00 per day | July 24 (1.0 day) | | |
| | Total Days 1.0 x $125.00 | = | $125.00 |
| | TOTAL LABOUR | | $995.00 |

**DISBURSEMENTS**

| | |
|---|---|
| Gas $2.00 per gallon x .5 gallon per day X 3 days = | $ 3.00 |
| 6.5 $yds^3$ X $1.52 per $yard^3$ = | $ 9.88 |
| Chemex Geochemical Analyses | |
| Preparation $0.65 per sample X 6 = | $ 3.90 |
| Each sample tested for Gold ($5.75) | |
| Tin ($4.00) | |
| Tungsten ($4.00) | |
| $13.75 X 6 samples = | $ 82.50 |
| TOTAL DISBURSEMENTS | $ 99.28 |
| TOTAL COST APPLIED TO ASSESSMENT WORK | $1,094.28 |

# CLEAR CREEK

## YUKON TERRITORY

115 P/14

SCALE 1:50,000 ÉCHELLE

FIGURE 2

BLACK CANYON CREEK

LOST HORSES CREEK

115 PM

N

LITTLE SOUTH KLONDIKE RIVER

PL 5533

PL 5534

PL 5537

SAMPLE SITE

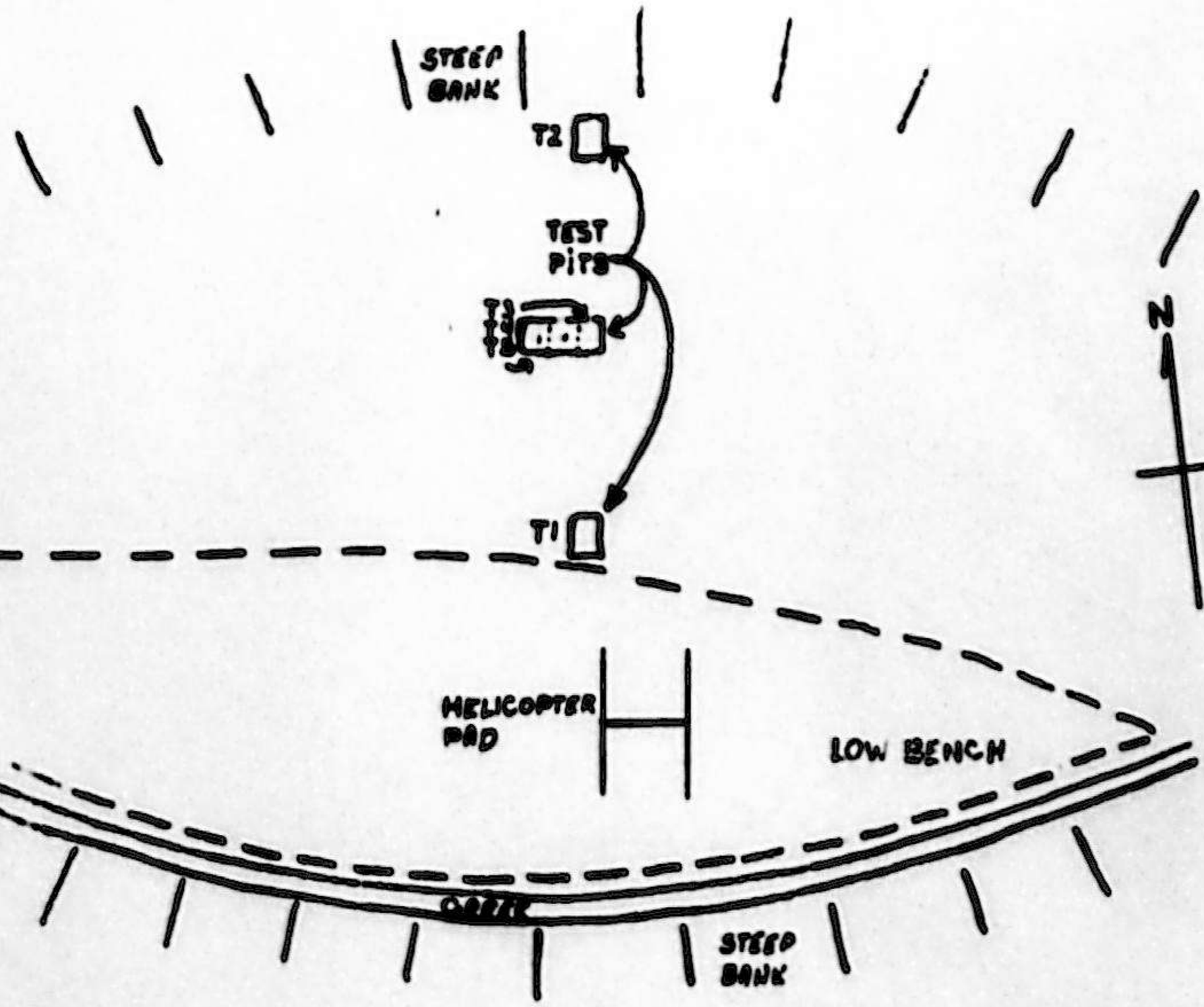
PL 5536

PL 5535

FIGURE 3

SCALE: 1/2 MILE To 1 INCH

# JAMIE 3
# SAMLE SITE PLAN




PIT VOLUMES

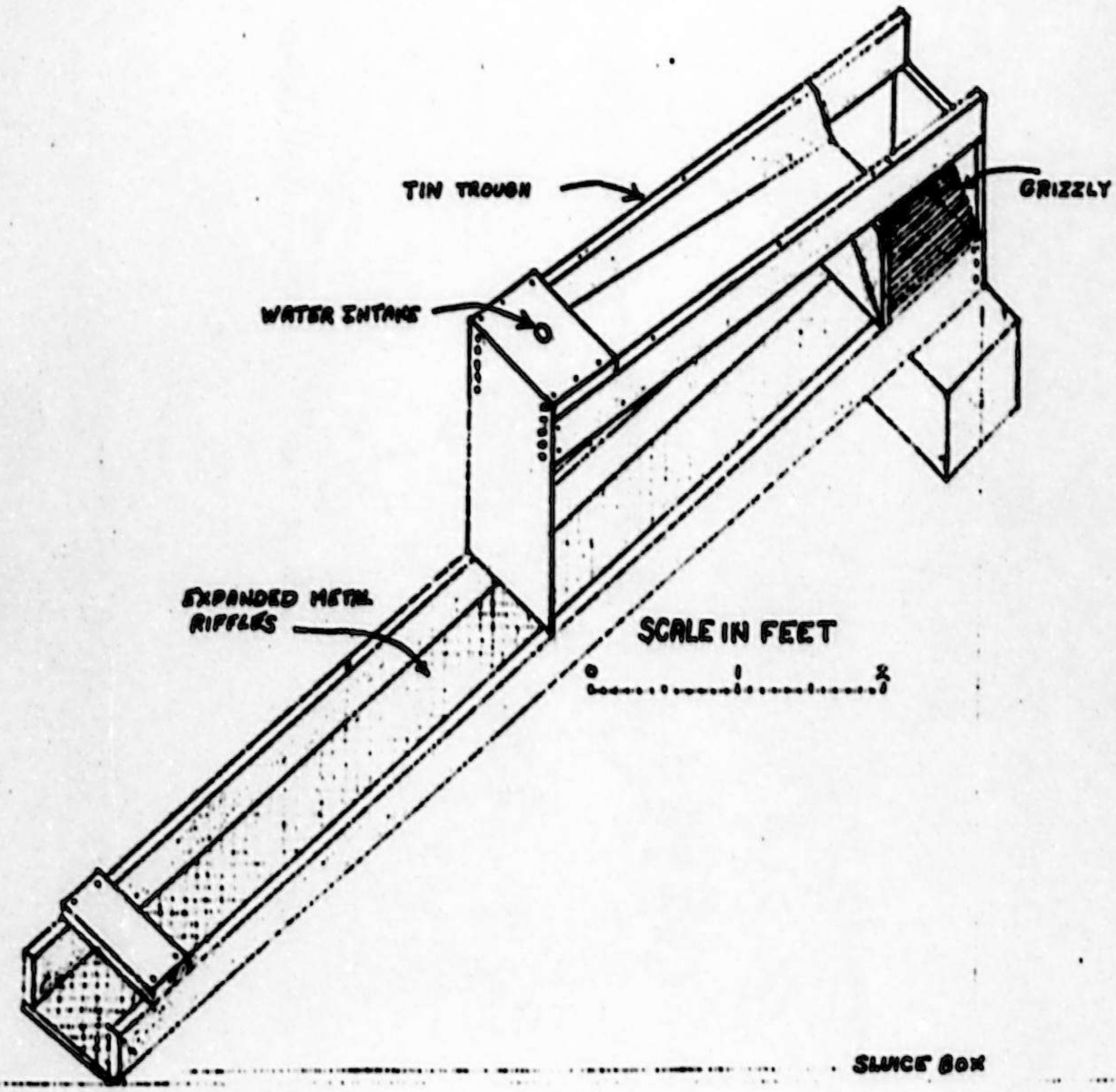
| | | |
|---|---|---|
| T1 | 4' × 3' × 2.1' = 25.2'³ ÷ 27'³ = | 0.9 YD³ |
| T2 | 3.5' × 2.5' × 2.3' = 20'³ ÷ 27'³ = | 0.7 YD³ |
| T 3,4,5 | 8' × 5' × 3.3' = 123'³ ÷ 27'³ = | 4.9 YD³ |
| | TOTAL | 6.5 YD³ |

SCALE 1 INCH TO 20 FEET

SITE IS 290 YARDS UPSTREAM FROM POST #1.

FIGURE 4

SLUICE
(LONGTOM)




SLUICE BOX

FIGURE 5

# PLACER TESTING PROGRAM
# JAMIE #4
# PLACER LEASE 5534

DAWSON MINING DIVISION
NTS 115 P/14
63°53.8' LATITUDE 137°11.7' LONGITUDE

OWNED BY,

CANADA TUNGSTEN MINING CORPORATION LTD.
EXECUTIVE OFFICE
BOX 12525 OCEANIC PLAZA
STE. 1600-1066 W. HASTINGS ST.
VANCOUVER B.C. V6E 3X1

WORK BY:

BEMA INDUSTRIES LTD
#203-19945-56TH AVENUE
LANGLEY B.C. V3A-3Y2

KEN HANSEN
SEPT 1981

## 1.0 INTRODUCTION

BEMA INDUSTRIES LIMITED WAS CONTRACTED BY CANADA TUNGSTEN MINING CORPORATION LIMITED TO CARRY OUT A PLACER TESTING PROGRAM ON THEIR THIRTEEN LEASES IN THE CLEAR CREEK AREA. THE PURPOSE OF THE PROGRAM WAS TO DEFINE THE HEAVY MINERAL POTENTIAL AND TO FULFILL THEIR ASSEMENT REQUIREMENTS FOR EACH LEASE. THIS REPORT COVERS PLACER LEASE 5534 (JAMIE 4).

# TABLE OF CONTENTS



# LIST OF FIGURES

## 2.0 LOCATION AND ACCESS

THE WEST RIDGE CAMP IS SITUATED IN THE YUKON TERRITORY APPROXIMATELY 40 MILES NORTHWEST OF STEWART CROSSING. (SEE FIGURE # 1). ACCESS IS BY TRAVELLING EAST ALONG THE KLONDIKE HIGHWAY FOR 47 MILES THEN TURN NORTH ALONG THE CLEAR CREEK ROAD FOR 18 MILES.

THE LEASES ARE THEN ACCESSIBLE BY A 4×4 ROAD WHICH FOLLOWS LEFT CLEAR CREEK. SINCE THE LEASES ARE LOCATED WELL OFF THE ROAD-WAY A BELL 47 WAS USED TO REACH THE LEASES.

## 3.0 THE PLACER TESTING PROGRAM

THE PROGRAM CONSISTED OF TRENCHING, CONCENTRATION, OF TRENCHED MATERIAL, VISUAL EXAMINATION, ASSAY AND GEOCHEMICAL ANALYSIS, AND CALCULATIONS OF GOLD, SCHEELITE, AND CASSITERITE VALUES PER CUBIC YARD.

DUE TO PROBLEMS WITH THE SAMPLE SITE, ON THE SECOND DAY A PANNING TRAVERS WAS ADOPTED. THE PANNING TRAVERS TAKES THE PLACE OF TRENCHING AND CONCENTRATION OF TRENCHED MATERIAL.

## 3.1 PANNING TRAVERSE PROCEDURE

THE PANNING TRAVERSE AND PROCEDURE AS FOLLOWS:

(A) THE CREEK WAS SURVEYED INTO 100 METER SAMPLE SITES WITHIN THE LEASE.
(B) AT EACH SAMPLE SITE TWO PANS OF MATERIAL WAS COLLECTED.
(C) EACH 16" PAN WAS FILLED TO THE TOP, THEN DUMPED INTO A BUCKET
(D) THE MATERIAL WAS THEN PANNED SO THAT ANY HEAVEYS COULD BE EASLIY OBSERVED

## 3.2 OBSERVATIONS

THE FOLLOWING OBSERVATIONS WERE MADE WHILE WORKING ON THE LEASE:

(A) NO REAL WATE WORN GRAVELS WERE FOUND, ONLY ANGULAR TO SUB-ANGULAR ROCK (BOULDERS) AND SILT. ALL OF LOCAL NATURE.
(B) THE CREEK FLOWS UNDERGROUND IN MANY LOCATIONS, THOU A SURFACE CREEK CAN BE FOLLOWED THE ENTIRE LENGHT
(C) THE CREEK HAS AN AVERAGE GRADIENT OF 8%.
(D) PANNING MATERIAL WAS DIFFICULT TO FIND. THE ONLY RELIABLE SOURCE WAS TO COLLECT THE SAND AND MAINLY SILT FROM UNDER THE CREEK MOSS.
(E) THE SLUICE SAMPLE SITES PROVED TO HAVE BED-ROCK AND FRACTURED BED ROCK TO THE SURFACE

WITHIN 10 FEET OF THE CREEK. THE WATER BOARD PROHIBITS US TO SLUICE SAMPLE WITHIN 25 FEET OF THE CREEK SO THE SITE WAS REJECTED AFTER ONE DAY.

(E) THE SLUICE TESTED MATERIAL HAD ONLY TRACE AMOUNTS OF BLACKSAND.

(G) NO GOLD WAS FOUND WHILE PANNING TRIBUTARYS AND SEEPS WITHIN THE LEASE ON THE 5TH OF AUGUST.

## 3.3 VISUAL EXAMINATION

THE VISUAL EXAMINATION PROCEDURE IS AS FOLLOWS:

(A) DRY PANNED CONCENTRATE AND TAILS

(B) WEIGH CONCENTRATE.

(C) SIEVE DRIED CONCENTRATE USING A TEN AND TWENTY MESH SCREEN (TYLER SERIES).

(D) TAKE COUNTS OF SCHEELITE GRAIN LARGER THAN TWENTY MESH WITH THE AID OF AN ULTRAVIOLET LAMP, AT THE SAME TIME NOTE THE PRESENCE OF BARITE.

(E) TAKE COUNTS ON GOLD USING THE FOLLOWING SCALE:

COARSE GOLD (CG) - LARGER THAN 10 MESH.

MEDIUM GOLD (MG) - SMALLER THAN 10 MESH BUT LARGER THAN 20 MESH.

FINE GOLD (FG) - SMALLER THAN 20 MESH BUT LARGER THAN 40 MESH.

VERY FINE GOLD (VFG) - SMALLER THAN 40 MESH.

(F) EXAMINE EACH SIEVED PORTION UNDER A BINOCULAR MICROSCOPE. TAKE GENERAL OVERALL COUNTS ON SCHEELITE, BARITE, ARSENOPYRITE, PYRITE, HEMITITE AND MAGNETITE USING THE FOLLOWING SCALE:

0 - NO MINERAL GRAINS WERE OBSERVED
1 - TRACE
2 - LOW
3 - MODERATE
4 - HIGH
5 - ABUNDANT

NOTE: ORIGINALLY CASSERITE COUNTS WERE TO BE TAKE BUT FIELD TESTS FAILED TO PROVIDE ANY POSITIVE RESULTS OF SUSPECT GRAINS.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS AND RECOMMENDATIONS PENDING GEOCHEMICAL RESULTS.

# 5.0 VISUAL EXAMINATION RESULTS

| SAMPLE NUMBER | GOLD | SCHEELITE | BARITE | ARSENOPYRITE | PYRITE | HEMITITE | MAGNETITE |
|---|---|---|---|---|---|---|---|
| JS-1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-2 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-3 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-4 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-5 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-6 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-7 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-8 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-9 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-10 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-11 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-12 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| JS-13 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |

SCALE

0 - NO MINERAL GRAINS PRESENT
1 - TRACE
2 - LOW
3 - MODERATE
4 - HIGH
5 - ABUNDANT

SYENITE

RANGE

WEST RIDGE CAMP

N

McQuesten

Stewart Crossing

# McQUESTEN

FIGURE #1

YUKON TERRITORY

115 P

Scale 1:250,000 Echelle

N

Creek

River

WEST

RIDGE

Elk

Creek

# CLEAR CREEK FIGURE 2

## YUKON TERRITORY

**115 P/14**

SCALE 1:50,000 ÉCHELLE

Miles 1 0 1 2 3 Miles

Metres 1000 500 0 1000 2000 3000 4000 Metres

Yards 1000 500 0 1000 2000 3000 4000 Yards

BLACK CANYON CREEK

LOST HORSES CREEK

115 PM

N

LITTLE SOUTH KLONDIKE RIVER

PL 5533

PL 5534

PL 5537

PL 5536

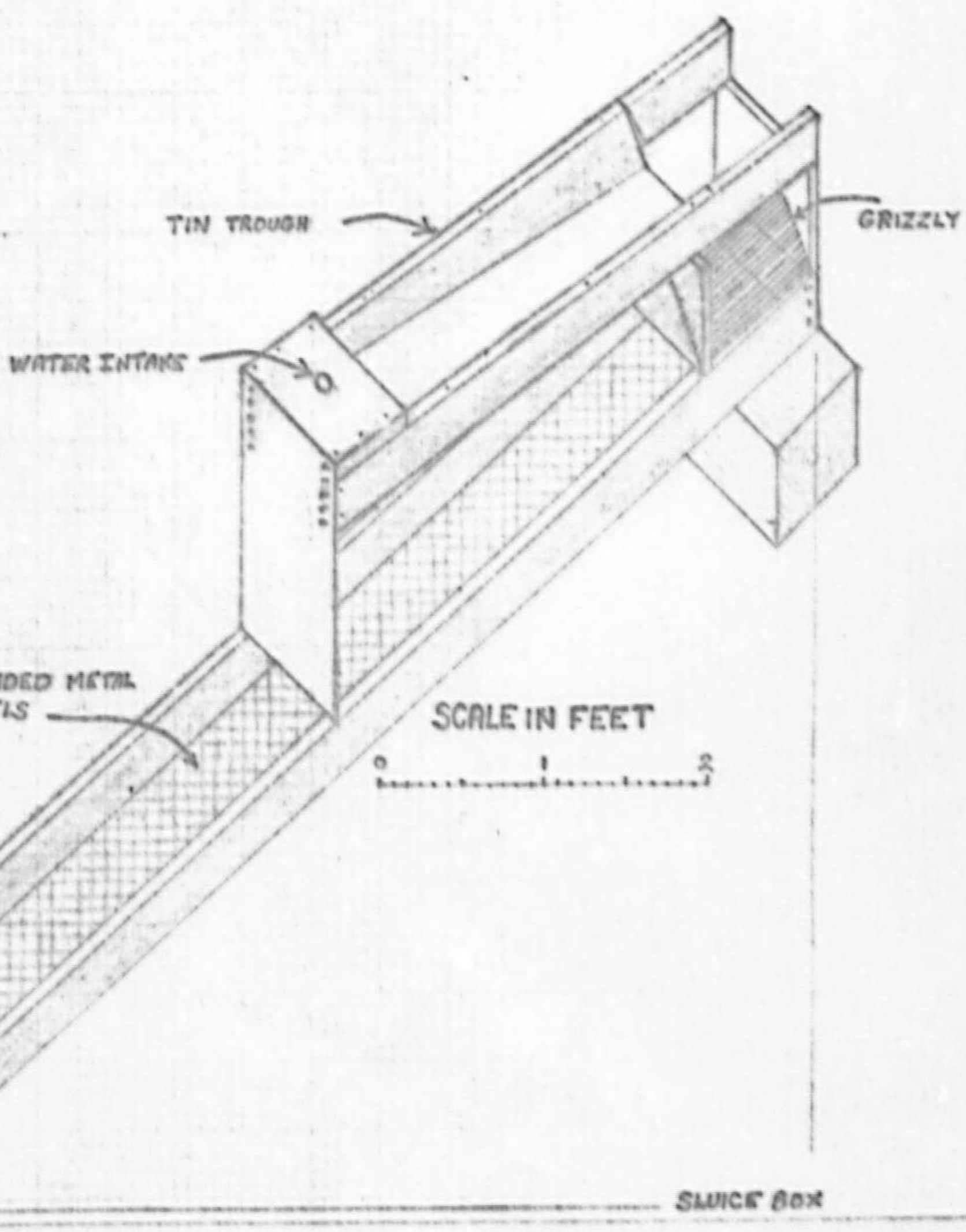
PL 5535

SCALE: 1/2 MILE To 1 INCH

FIGURE 3

TWIN GULCH

# SLUICE
# (LONGTOM)




NOTE THIS SLUICE AND A 1" MONARCK PUMP WAS USED ON THE FIRST DAY OF SAMPLING

FIGURE 4

# JAMIE #4
# STATEMENT OF DIRECT COSTS
# PLACER LEASE 5534

## LABOUR

KEN HANSEN $175.00/DAY — JULY 21 (.25 DAY), 28 (1.0 DAY), 29 (1.0 DAY)
SUPERVISOR — AUGUST 5 (1.0 DAY)
TOTAL DAYS 3.25 × $175 = $568.75 — $568.75

IAN STURROCK $125.00/DAY — JULY 21 (.25 DAY), 28 (1.0 DAY), 29 (1.0 DAY) +
FIELD TECH — 30 (1.0 DAY).
TOTAL DAYS 3.25 × $125.00 = $406.25 — $406.25

MIKE WILEY $125.00/DAY — JULY 30 (1.0 DAY).
FIELD TECH — TOTAL DAYS 1 × $125.00 = $125.00 — $125.00

TOTAL LABOUR $1,100.00

## DISBURSEMENTS

CHEMEX GEOCHEMICAL ANALYSES
PREPERATION $0.65 EACH SAMPLE × 4 SAMPLES = $2.60
EACH SAMPLE TESTED FOR GOLD ($3.75), TIN ($4.00) & TUNGSTEN ($4.00).
TOTAL $13.75 × 4 SAMPLES = $55.00
TOTAL DISBURSEMENTS $57.60

TOTAL COST APPLIED TO ASSESMENT WORK $1,156.60

APENDEX I

# PLACER TESTING PROGRAM

# JAMIE #5

# PLACER LEASE 5535

# PLACER TESTING PROGRAM

## JAMIE #5

## PLACER LEASE 5535

DAWSON MINING DIVISION

NTS 115 P/14

63°53.1' LATITUDE, 137°09' LONGITUDE

Owned by:

CANADA TUNGSTEN MINING CORPORATION LTD.
Executive Office
Box 12525, Oceanic Plaza
Ste. 1600-1066 W. Hastings St.
Vancouver, B.C. V6E 3X1

Work by:

BEMA INDUSTRIES LTD.
19945-56th Avenue
Langley, B.C. V3A 3Y2

KEN HANSEN

SEPTEMBER, 1981

# TABLE OF CONTENTS

## LIST OF FIGURES



## APPENDIX

# PLACER TESTING PROGRAM

# JAMIE #5

# PLACER LEASE 5535

## 1.0 INTRODUCTION

Bema Industries Ltd. was contracted by Canada Tungsten Mining Corporation Limited to carry out a placer testing program on their thirteen leases in the Clear Creek area. The purpose of the program was to define the heavy mineral potential and to fulfill their assessment requirements for each lease.

## 1.1 LOCATION AND ACCESS

The West Ridge camp is situated in the Yukon Territory approximately 40 miles northwest of Stewart Crossing (see Fig. 1). Access is by travelling east along the Klondike hiyhway for 47 miles then turn north along the Clear Creek road for 18 miles.

The leases are then accessible by a 4 X 4 road which follows Left Clear Creek. Since the leases are located well off the roadway a Bell 47 was used to reach the leases.


# McQUESTEN

## YUKON TERRITORY

## 115 P

FIGURE 1

Scale 1:250,000 Échelle

## 2.0 THE PLACER TESTING PROGRAM

The program consisted of trenching, concentration of trenched material, visual examination, assay and geochemical analysis, and calculations of gold, scheelite, and cassiterite values per cubic yard.

### 2.1 TRENCHING

Two methods of trenching were used depending upon access to the lease. Upon easy access a D7G cat was used to excavate a trench. Where access was not possible by cat a two to three man crew was flown in by a Bell 47 to excavate a trench or test pits.

### 2.2 HAND EXCAVATED TRENCHES AND PITS

The hand trenches were dug as deep as possible though all trenches experienced water problems. Therefore the trenches reached a maximum depth of three to five feet. The trenches were dug perpendicular to the active creek.

The trenches were placed in the most favourable locations for heavy mineral concentration, usually below a steep gradient or on the inside curve of a creek.

### 2.3 CONCENTRATION PROCEDURE

The concentration process involves running all material from the hand dug trench through a small sluice.

Large rocks which were part of the sample were washed in a tub, then the residual material run through the sluice. After each sluice clean up a one half to one cubic foot concentrate was taken.

The sluice material was panned to approximately an eight and one half ounce concentrate. This final concentrate was dried for visual inspection.

The small sluice or longtom (see Fig. 5) consisted of a pump, trough, grizzly, and sluice box. A Monark pump was used to supply water at 70 gallons per minute. The grizzly was setup at a forty-five degree angle with one quarter inch by eight inch slotted openings. The oversize gravel was rejected off the side of the grizzly.

(a) The water flows through the four foot trough.

(b) The gravel is placed in the trough.

(c) It is washed and self-fed at a constant rate over the grizzly.

(d) The sized gravel goes in an eight foot by eight inch sluice. The bottom of the sluice has a layer of rubber matting, and on top of this three quarter inch expanded metal.

(e) Panning: the panning of the sluice concentrates were done at base camp. Each sample was panned twice. The final concentrates were placed on trays to dry. An eight ounce panning tails sample was taken for geochemical analysis to ensure accuracy.

## 2.4 VISUAL EXAMINATION

The visual examination procedure is as follows:

(a) Dry panned, concentrate and tails.

(b) Weigh concentrate and tails.

(c) Sieve dried concentrate using a ten and twenty mesh screen (Tyler series).

(d) Take counts on scheelite grains larger than twenty mesh with the aid of an ultraviolet lamp; at the same time note the presence of barite.

(e) Take counts on gold using the following scale:

coarse gold (cg) - larger than ten mesh
medium gold (mg) - smaller than ten mesh but larger than twenty mesh
fine gold (fg) - smaller than twenty mesh but larger than forty mesh
very fine gold (vfg) - smaller than forty mesh.

(f) Examine each sieved portion under a binocular microscope. Take general overall counts on scheelite, barite, arsenopyrite pyrite, hematite and magnetite using the following scale:

0 - no mineral grains were observed
1 - trace
2 - low
3 - moderate
4 - high
5 - abundant

Note: Originally cassiterite counts were to be taken but field tests failed to provide any positive results of suspect grains.

## 3.0 RESULTS

JAMIE #5
PLACER LEASE 5535

| | GOLD | SCHEELITE | BARITE | ARSENOPYRITE | PYRITE | HEMATITE | MAGNETITE |
|---|---|---|---|---|---|---|---|
| J5-T1 concentrate | 0 | 1 | 2 | 0 | 1 | 2 | 3 |
| J5-T1 tails | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| J5-T2 concentrate | 0 | 1 | 2 | 2 | 2 | 3 | 3 |
| J5-T2 tails | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| J5-T3 concentrate | 0 | 1 | 2 | 2 | 2 | 3 | 3 |
| J5-T3 tails | 0 | 1 | 1 | 0 | 1 | 0 | 1 |

## 3.0 RESULTS

GOLD

| | | | |
|---|---|---|---|
| Coarse Gold | (cg) | - | larger than 10 mesh |
| Medium Gold | (mg) | - | smaller than 10 mesh but larger than 20 mesh |
| Fine Gold | (fg) | - | smaller than 20 mesh but larger than 40 mesh |
| Very Fine Gold | (vfg) | - | smaller than 40 mesh |

SCALE

| | | |
|---|---|---|
| 0 | - | denotes no mineral grains present |
| 1 | - | trace |
| 2 | - | low |
| 3 | - | moderate |
| 4 | - | high |
| 5 | - | abundant |

## 4.0 CONCLUSIONS

Conclusions pending Chemex Geochemical Analyses.

- APPENDIX I -

JAMIE #5
Placer Lease 5535

STATEMENT OF DIRECT COSTS

LABOUR

Ken Hansen, Supervisor
$175.00 per day — July 18 (.25 day), August 1 (.5 day)
Total Days 0.75 x $175.00 = $131.25

Sean Butler, Geological Assistant
$125.00 per day — August 1 (1.0 day) 2 (1.0 day)
Total Days 2.0 x $125.00 = $250.00

Bill Mann, Geological Assistant
$125.00 per day — August 1 (1.0 day) 2 (1.0 day)
Total Days 2.0 x $125.00 = $250.00

Mike Wyllie, Field Technician
$125.00 per day — July 31 (1.0 day)
Total Days 1.0 x $125.00 = $125.00

Ian Sturrock, Field Technician
$125.00 per day — July 18 (.25 day) 31 (1.0 day)
Total Days 1.25 x $125.00 = $156.25

TOTAL LABOUR $912.50

**DISBURSEMENTS**

| | |
|---|---|
| Gas $2.00 per gallons X .5 gallon per day X 3 days = | $ 3.00 |
| 4.1 $yds^3$ X $1.52 = | $ 6.23 |
| Chemex Geochemical Analyses | |
| Preparation $0.65 per sample X 6 | $ 3.90 |
| Each sample tested for Gold ($5.75) | |
| Tin ($4.00) | |
| Tungsten ($4.00) | |
| $13.75 X 6 samples = | $ 82.50 |
| TOTAL DISBURSEMENTS | $ 95.63 |
| TOTAL COST APPLIED TO ASSESSMENT WORK | $1,007.88 |

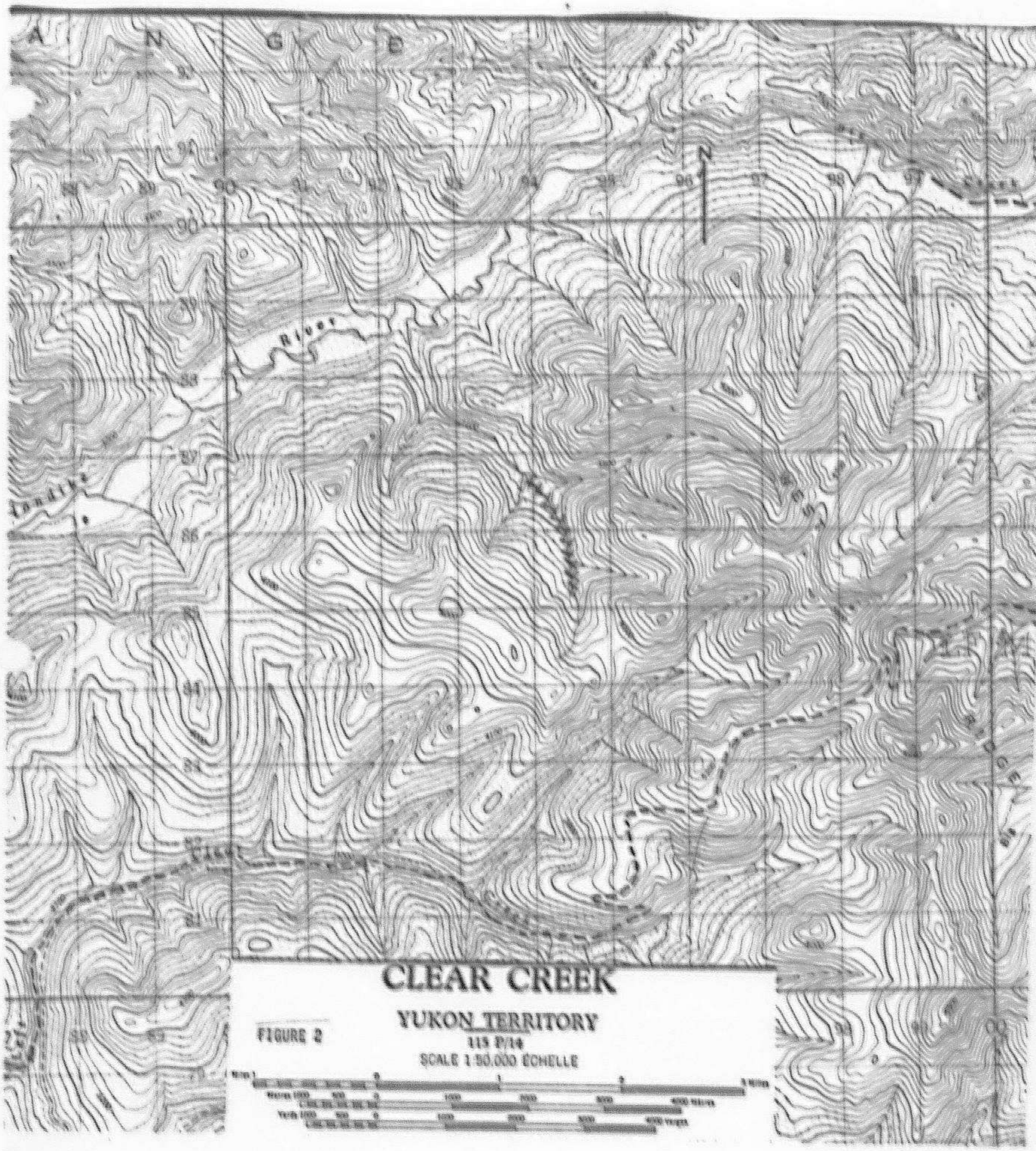
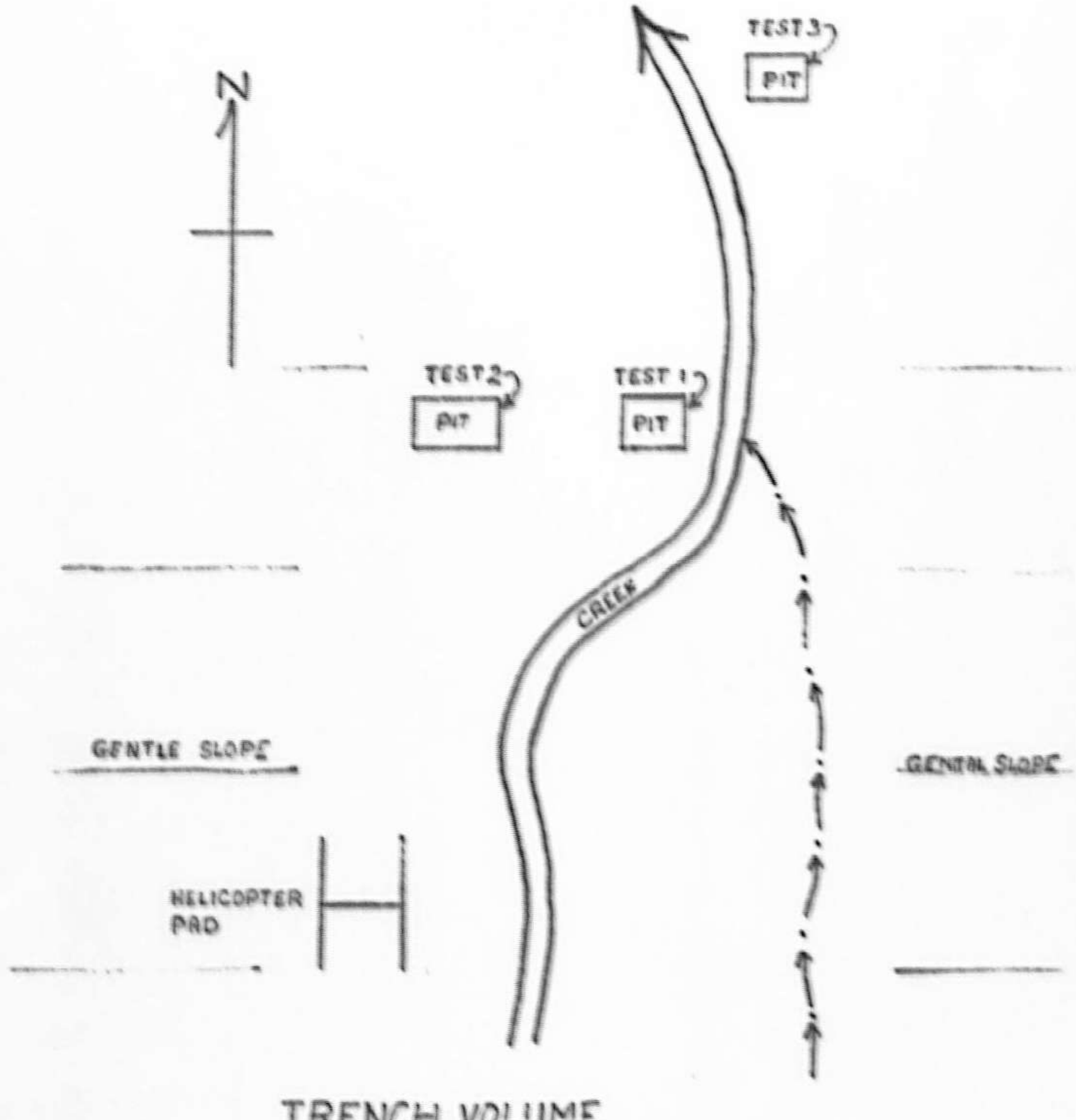



FIGURE 2

FIGURE 3

SCALE: 1/2 MILE To 1 INCH

# JAMIE 5
# SAMPLE SITE PLAN




## TRENCH VOLUME

T1 $3' \times 3.9' \times 2.6' = 30.4'^3 \div 27'^3 = 1.1 YD_S^3$
T2 $3' \times 5.5' \times 3' = 49.5'^3 \div 27'^3 = 1.2 YD_S^3$
T3 $3.6' \times 2.6' \times 2.4' = 22.4'^3 \div 27'^3 = 0.8 YD_S^3$
TOTAL $= 4.1 YD_S^3$

SCALE 1 INCH TO 10 FOOT

SITE IS 1120 YARDS UPSTREAM FROM POST #1.

FIGURE 4

SLUICE
(LONGTOM)

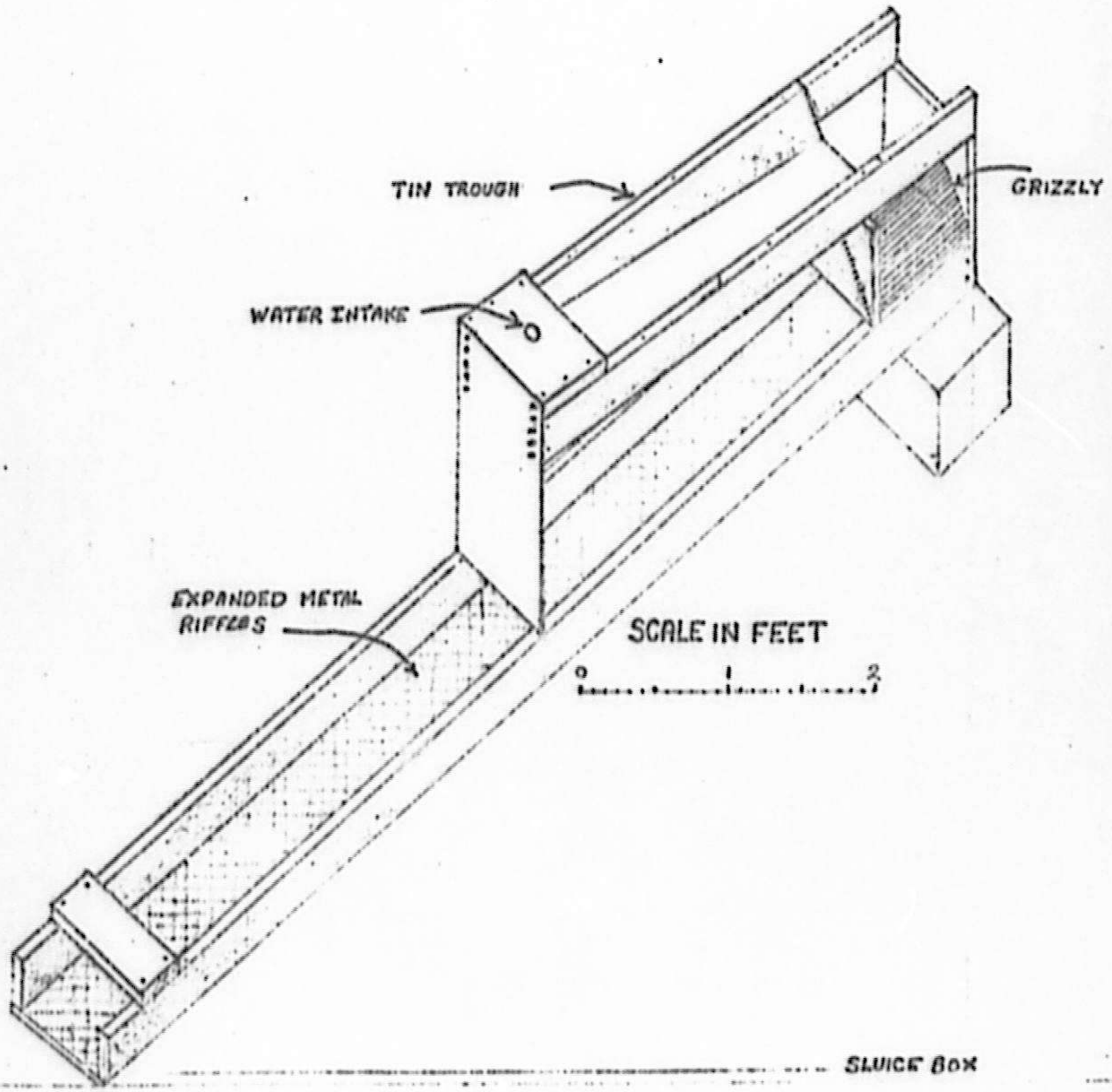



FIGURE 5