

MAP NO. 115 G 6
ASSESSMENT REPORT X
PROSPECTUS
CONFIDENTIAL
OPEN FILE

DOCUMENT NO.: 091698
MINING DISTRICT: WHITEHORSE
TYPE OF WORK: Geology

REPORT FILED UNDER: Yukon Exploration Co.

DATE PERFORMED: May 10 - June 20, 1953

DATE FILED: March 29, 1954

LOCATION: LAT.: 61°18'N

AREA: Halfbreed Creek

LONG.: 138°12'W

VALUE \$: 6,964.81

CLAIM NAME & NO.: RAM 1-72

WORK DONE BY: J.R. Woodcock; W.V. Smitheringale

WORK DONE FOR: Conwest Exploration Co. Ltd.

DATE TO GOOD STANDING | REMARKS: #6 DESTRUCTION

FILE
115 G-6

Report on
RAM GROUP
Halfbreed Creek, Y. T.,
by
J. R. Woodcock,
July 18, 1953.

Yukon Exploration
Approved
A. H. Sawyer
Commissioner
29 Mar '54
"M"
2399

LOCATION:

The Ram Group which consists of 72 claims, held by Yukon Exploration Company, is situated in the Kluane Ranges between Hankins Creek and Halfbreed Creek, six miles west of the Alaska Highway, Yukon Territory. The gravel beds of both Hankins Creek and Halfbreed Creek can be used as means of access to the claims.

WORK DONE:

Work carried out between May 10 and June 20, 1953 with the aid of three prospectors: Wellington Green, Charles Aird, and James Cox, consisted of geologic mapping and prospecting the claims in considerable detail. Several minor showings of copper-nickel and copper mineralization were found. Aerial photographs were used as a base for mapping the geology and a lithologic map was compiled.

GEOLOGY:

Rock Types: The area is underlain by the following main groups of rocks:

- (1) Permian rocks: cherts and chert conglomerates overlain by interbedded volcanic rocks and black slates.
- (2) Triassic (?) Sediments: mostly thinly-bedded grey limestones which are badly crumpled.
- (3) Jurassic (?) Rocks: interbedded andesites and sediments (argillites and black limy slates).

Ram Group - Cont'd.

Geology: (4) Peridotite intrusives which occur in the Permian cherts. They were probably intruded in the late Mesozoic period.

(5) Numerous types of dikes cut the above rocks, but only one type -- a dark grey gabbro -- is of importance to the present investigation. It occurs in irregular plugs or dikes often in the peridotite intrusive or along its footwall.

STRUCTURE:

The main structure is a probable anticline striking NW approximately parallel to the Shakwak Fault.* The anticline is broken along its crest and a wide fault zone, in which the Triassic sediments are exposed, lies NE of the crest. The so-called Jurassic rocks lie NE of the fault zone. The Permian rocks are exposed on the SW limb of the anticline.

The Peridotite intrusives of the Kluane Ranges seem to be confined to the Permian rocks and are usually in the cherts. In the Halfbreed Creek Area, the intrusive is exposed with the cherts on the crest and the SW limb of the anticline. The intrusive is conformable on a large scale, but, in detail, it pinches and swells and, in places, cuts across bedding. It branches SE of Hankins Creek where at least four separate tongues can be found.

MINERALIZATION:

The nickel values in the area are associated with pyrrhotite and chalcopyrite which occur together as disseminated sulphides and as massive sulphides. The disseminated sulphides occur in the peridotite and the gabbro and the massive sulphides are found near the footwall of the SW-dipping peridotite intrusive.

* The Shakwak Fault bounds the Kluane Ranges on the NE.

See: "Geology of the NW Shakwak Valley, H. Bostock, Memoir 267, 1952."

Ram Group - Cont'd.

Mineralization: At station 1 (elevation 5000'), a lens of massive sulphides about 8" thick and 20" long was found in grey gabbro near the footwall of a tongue of the peridotite intrusive. The gabbro carried disseminated sulphides for about two feet on each side of the lens. The massive sulphides assayed: 2.5% Cu., 2.8% Ni., 0.29% Co., 0.19 oz. Pt. and the disseminated sulphides assayed: 0.7% Cu., 0.44% Ni., over a width of two feet.

At Station 2 (elevation 7000'), massive sulphides occur as irregular lenses up to 2" thick and 6" long in the cherts along the footwall of the peridotite intrusive. These lenses are surrounded by oxidized rusty zones up to 6" thick and 18" long. An assay of a specimen containing chert and sulphide showed: 1.1% Cu., 0.78% Ni.

Sparse disseminated sulphides were found over small areas in outcrops of peridotite at Station 3 (elevation 5700') and Station 4 (elevation 4800') and near Station 2 (elevation 7000'). The sulphides in peridotite have an associated host rock alteration consisting of disseminated brownish mica.

Copper mineralization (without accompanying nickel) was seen in small amounts in many places in basic dikes and in clastic rocks. The main showing of this is in the clastic rocks around Station 5 (elevation 6200'). The clastic rock is highly epidotized. It is probably a fine pyroclastic. Chalcopyrite was found in small amounts in the epidotized rock and in several lenses which are less than $\frac{1}{2}$ an inch thick and which occur in fractures. Bornite is disseminated throughout the epidotized rock in one small outcrop. The copper mineralization has no regularity or continuity.

J. R. Woodcock

HALFBREED CREED, YUKON TERRITORY

EXPENSES TO 31st AUGUST, 1953

<u>1953</u>	
June/July	Transportation - <i>Heavy equip in line of pack horses</i> \$ 603.97
	Camp expenses 673.77
	Field expenses 653.19
	Miscellaneous expenses 39.54
July/Aug.	Assaying 24.00
May-July	Salaries and wages <u>2,485.17</u>
	Total expenses to date <u>\$4,479.64</u>

Gas a box (contract)

SUMMARY OF SALARIES & WAGES

<u>1953</u>		<u>Salaries:-</u>	
May	Woodcock	\$ 401.00	
June	Smitheringale, Dr. W. V.	250.00	
	Woodcock	<u>401.00</u>	\$1,052.00
	<u>Wages:-</u>		
May	Green, W. B.	\$ 259.68	
	Aird, C.	222.58	
	Cox, J.	222.58	
June	Green, W. B.	268.33	
	Aird, C.	230.00	
	Cox, J.	<u>230.00</u>	<u>1,433.17</u>
	Total salaries & wages to date		<u>\$2,485.17</u>

*Summary by Comest Ex Co Ltd.
Geological mapping & work done by J. Woodcock
& Dr. Smitheringale, Geologists.*

HALFBREED CREEK AREA

LITHOLOGIC MAP

Scale: 1" = 2500'

J.R. Woodcock 1953

LEGEND

QUATERNARY:

- Recent Cover — talus, gravel, soil, vegetation
- Pleistocene & Recent — moraine

TERTIARY: (hills pre-Tertiary basins & valleys; approximately flat-lying)

- Volcanics — lavas & pyroclastics
- Sediments — conglomerate, sandstone, lignite

MESOZOIC & Paleozoic:

VOLCANICS:

- coarse & fine pyroclastics, andesites
- greenish & reddish andesites

SEDIMENTS:

- Permian — chert, chert conglomerate, quartzite
- Argillite & black limy slate
- Massive limestone
- Undifferentiated sediments — thinly-bedded black limestone, cherts, slates

INTRUSIVES

- Black fine-grained peridotite
- Grey coarse-grained gabbro
- Rhyolite

SYMBOLS

- Stream Bed
- Ridge or Divide
- Fault
- Contact
- Bedding Attitude
- Sulphide Showing



Photo A11383-183

TERTIARY MOUNTAIN
(flat-lying lavas & pyroclastics)

Approximate boundary of
RAM GROUP

Photo A11068-96

Photo A11068-95

(310)

091698

PLACER TESTING PROGRAM

JAMIE 16

PLACER LEASE 5570



PLACER TESTING PROGRAM

JAMIE #6

PLACER LEASE 5570

DAWSON MINING DIVISION

NTS 115 P/14

63°55.4' LATITUDE, 137°04.8' 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

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FIGURE 2	Topography Map	Scale 1:50,000
FIGURE 3	Claim Map	Scale 1 inch to $\frac{1}{2}$ mile
FIGURE 4	Sample Site Plan	Scale 1 inch to 10 feet
FIGURE 5	Sluice (Longtom) Diagram	

APPENDIX

APPENDIX I	Statement of Direct Costs
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PLACER TESTING PROGRAM

JAMIE #6

PLACER LEASE 5570

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.

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

JANIE #6
PLACER LEASE 5570

	GOLD	SCHEELITE	BARITE	ARSENOPYRITE	PYRITE	HEMATITE	MAGNETITE
J6-T1 concentrate	0	1	1	0	1	1	2
J6-T1 tails	0	0	0	0	0	0	1
J6-T2 concentrate	0	1	1	0	1	1	2
J6-T2 tails	0	0	0	0	0	0	1
J6-T3 concentrate	0	1	1	0	1	1	2
J6-T3 tails	0	0	0	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.

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- APPENDIX -

JAMIE #6
Placer Lease 5570

STATEMENT OF DIRECT COSTS

LABOUR

Ken Hansen, Supervisor

\$175.00 per day August 4 (0.5 day) 22 (0.3 day)
Total Days 0.8 x \$175.00 = \$140.00

Tom Borthwick, Geological Assistant

\$125.00 per day August 13 (1.0 day) 14 (1.0 day)
18 (1.0 day)
Total Days 3.0 x \$125.00 = \$375.00

Sean Butler, Geological Assistant

\$125.00 per day August 14 (1.0 day) 18 (1.0 day)
Total Days 2.0 x \$125.00 = \$250.00

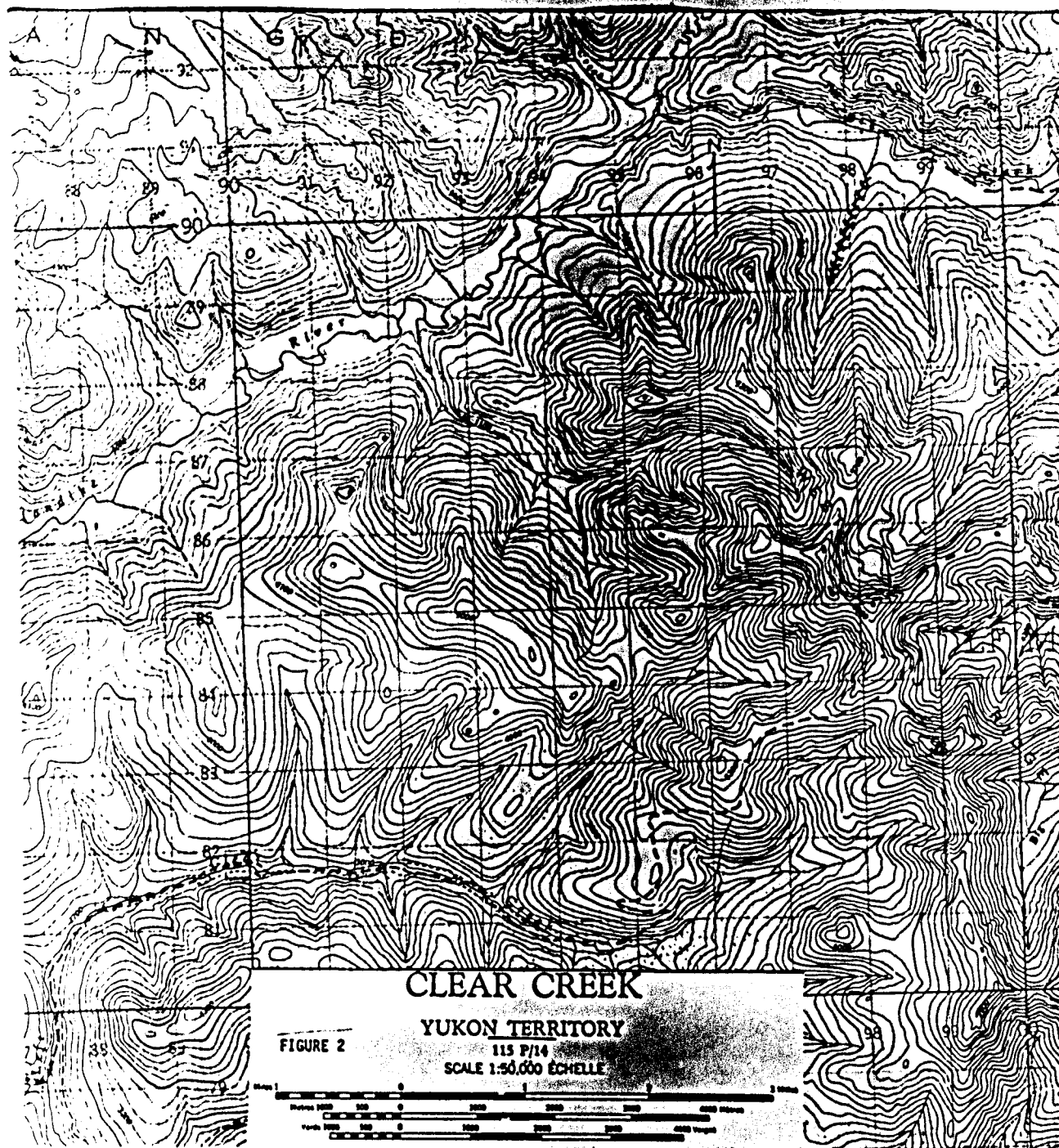
Alan Morrison

\$200.00 per day August 13 (1.0 day)
Total Day 1.0 x \$200.00 = \$200.00

TOTAL LABOUR \$965.00

DISBURSEMENTS

Gas \$2.00 per gallon X .5 gallon per day X 3 days =	\$ 3.00
3 yds ³ 4.5 X \$1.52 per yard ³ =	\$ 6.84
Chemex Geochemical Analyses	
Preparation \$0.65 per sample X 6 samples =	\$ 3.90
Each sample tested for Gold (\$5.75)	
Tin (\$4.00)	
Tungsten (\$4.00)	
\$13.75 per sample X 6 samples =	\$ 82.50
TOTAL DISBURSEMENTS	\$ 96.24
TOTAL COST APPLIED TO ASSESSMENT WORK	\$1,061.24



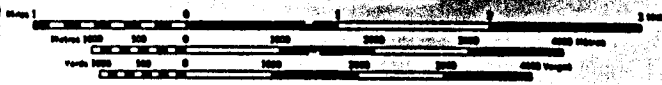
CLEAR CREEK

YUKON TERRITORY

FIGURE 2

115 P/14

SCALE 1:50,000 ÉCHELLE



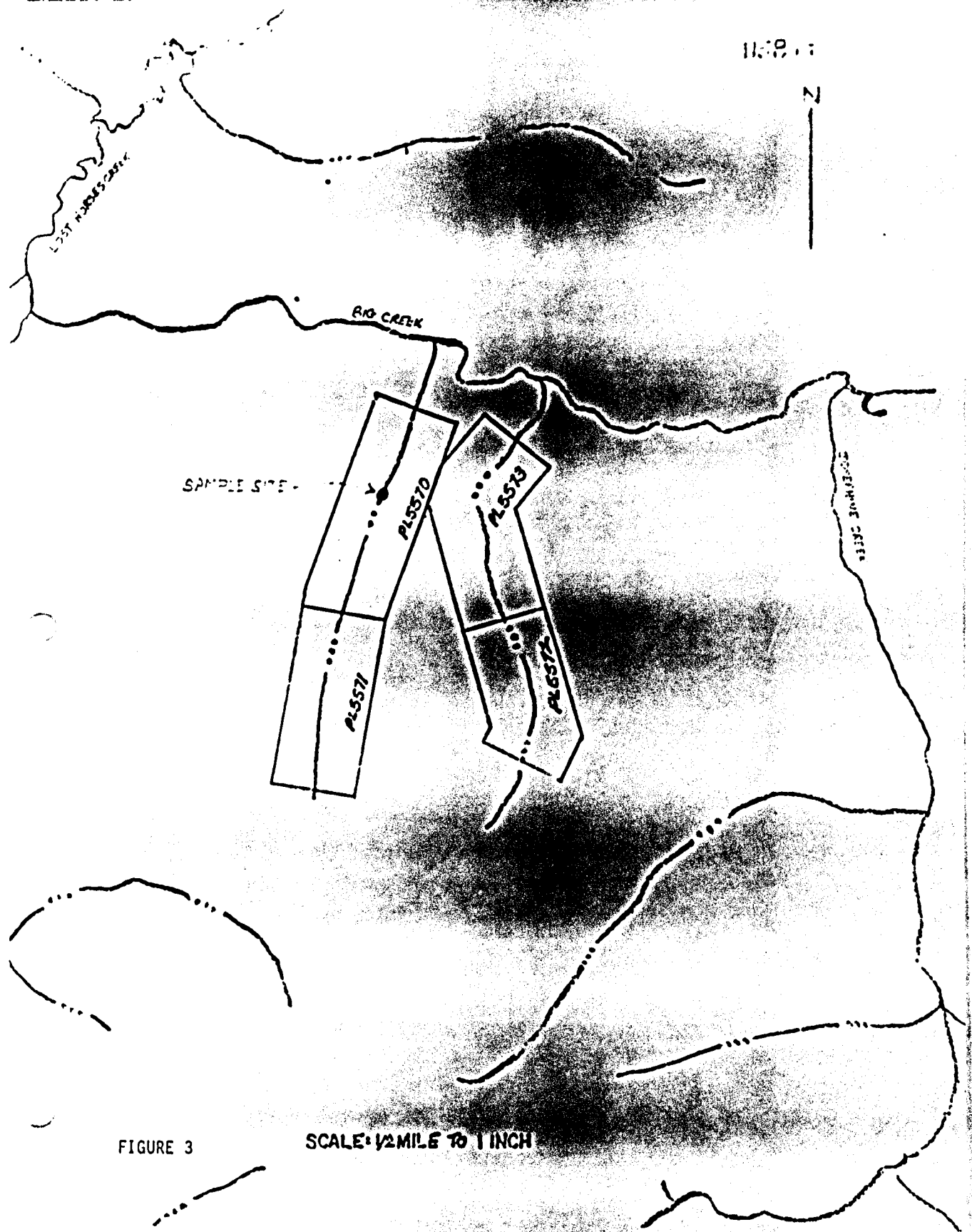
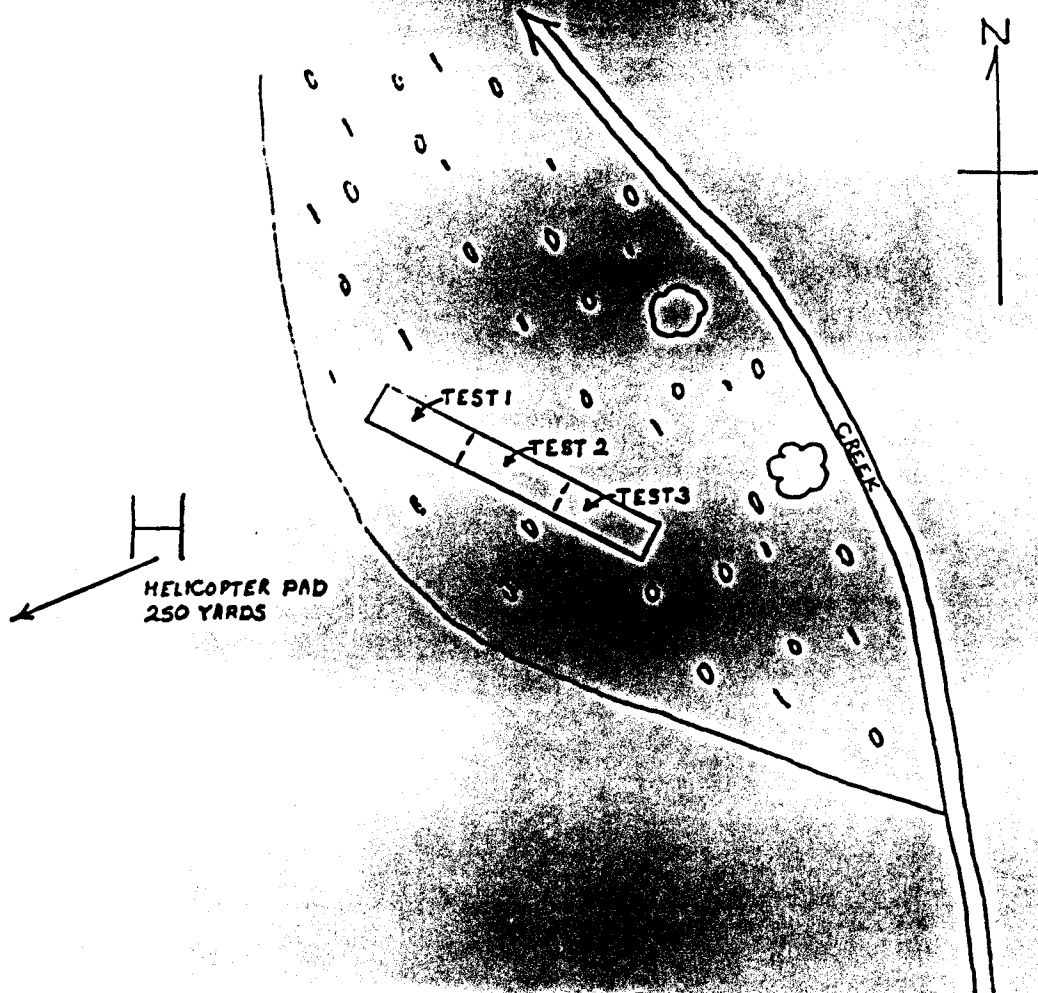


FIGURE 3

SCALE: 1/2 MILE TO 1 INCH

JAMIE 6
SAMPLE SITE PLAN



TRENCH VOLUME
 $19.5' \times 2.5' \times 2.5' = 121.875 \div 27 = 4.5 \text{ YD}^3$

SCALE 1 INCH TO 10 FEET

TRENCH IS 1600 YARDS UPSTREAM FROM POST #1.

FIGURE 4

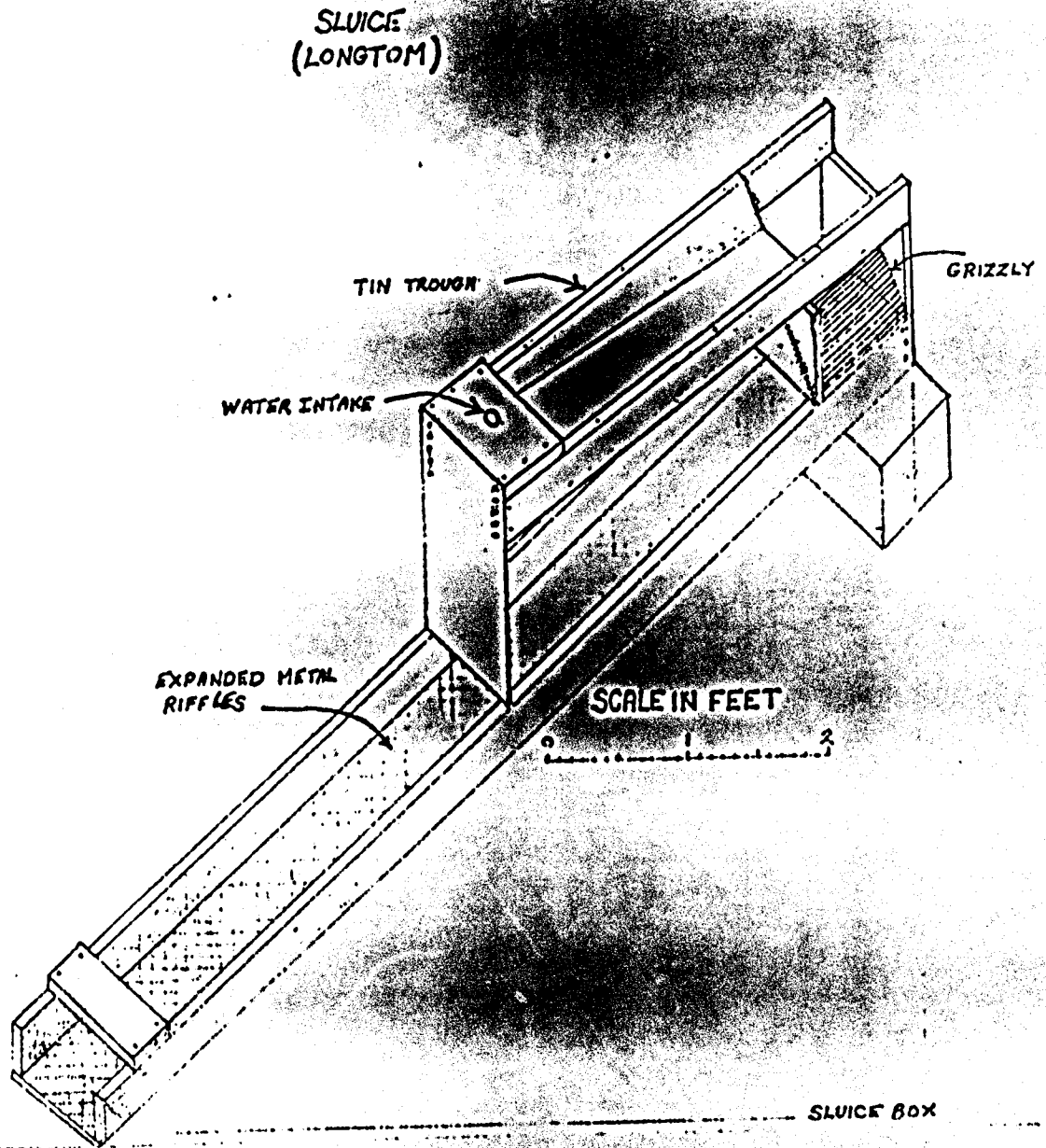


FIGURE 5

PLACER TESTING PROGRAM

JANIE #7

PLACER LEASE 5571



PLACER TESTING PROGRAM

JAMIE #7

PLACER LEASE 5571

DAWSON MINING DIVISION

NTS 115 P/14

63°54.6' LATITUDE, 137°05.3' LONGITUDE

Owned by:

CANADA TUNGSTEN MINING CORPORATION LTD.
Executive Office
Box 12525, Oceanic Plaza
Ste. 1600-1066 W. Hastings St.
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KEN HANSEN

SEPTEMBER, 1981

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PLACER TESTING PROGRAM

JAMIE #7

PLACER LEASE 5571

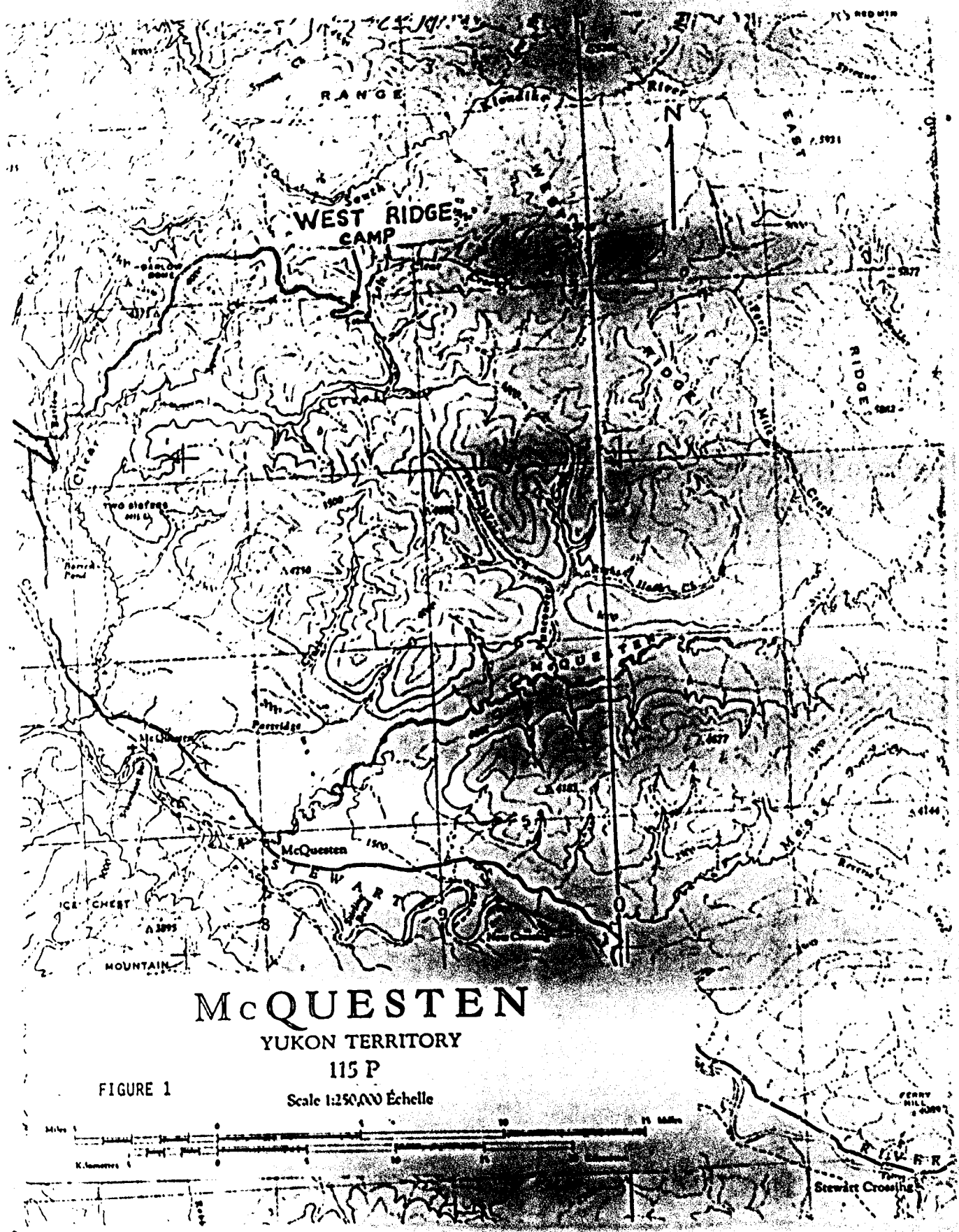
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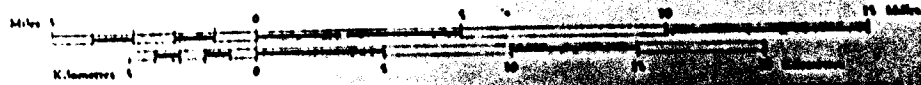
McQUESTEN

YUKON TERRITORY

115 P

FIGURE 1

Scale 1:250,000 Échelle



Stewart Crossing

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.

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- (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 #7
PLACER LEASE 5571

	GOLD	SCHEELITE	BARITE	ARSENOPYRITE	PYRITE	HEMATITE	MAGNETITE
J7-T1 concentrate	0	1	1	0	1	1	2
J7-T1 tails	0	0	0	0	0	0	1
J7-T2 concentrate	0	1	1	0	1	1	2
J7-T2 tails	0	0	0	0	0	0	1
J7-T3 concentrate	0	1	1	0	1	1	2
J7-T3 tails	0	0	0	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.

JAMIE #7
Placer Lease 5571

STATEMENT OF DIRECT COSTS

LABOUR

Ken Hansen, Supervisor			
\$175.00 per day	August 7 (1.0 day)	10 (1.0 day)	
	Total Days 2.0 x \$175.00 =		\$ 350.00
Sean Butler, Geological Assistant			
\$125.00 per day	August 7 (1.0 day)		
	Total Days 1.0 x \$125.00 =		\$ 125.00
Bill Mann, Geological Assistant			
\$125.00 per day	August 6 (1.0 day)	7 (1.0 day)	
	Total Days 2.0 x \$125.00 =		\$ 250.00
Tim Olson, Geological Assistant			
\$85.00 per day	August 6 (1.0 day)		
	Total Days 1.0 x \$85.00 =		\$ 85.00
Bob Cahill, Geological Assistant			
\$125.00 per day	August 10 (1.0 day)		
	Total Days 1.0 x \$125.00 =		\$ 125.00
Tom Borthwick, Geological Assistant			
\$125.00 per day	August 10 (1.0 day)		
	Total Days 1.0 x \$125.00 =		\$ 125.00
		TOTAL LABOUR	\$1,060.00

DISBURSEMENTS

Gas \$2.00 per gallon X .5 gallon per day X 3 days =	\$ 3.00
yds ³ 9.2 x \$1.52 per yard ³ =	\$ 13.95
Chemex Geochemical Analyses	
Preparation \$0.65 per sample X 6 samples =	\$ 3.90
Each tested for Gold (\$5.75)	
Tin (\$4.00)	
Tungsten (\$4.00)	
\$13.75 per sample X 6 samples =	<u>\$ 82.50</u>
TOTAL DISBURSEMENTS	\$ 103.35
TOTAL COST APPLIED FOR ASSESSMENT WORK	<u>\$1,163.35</u>

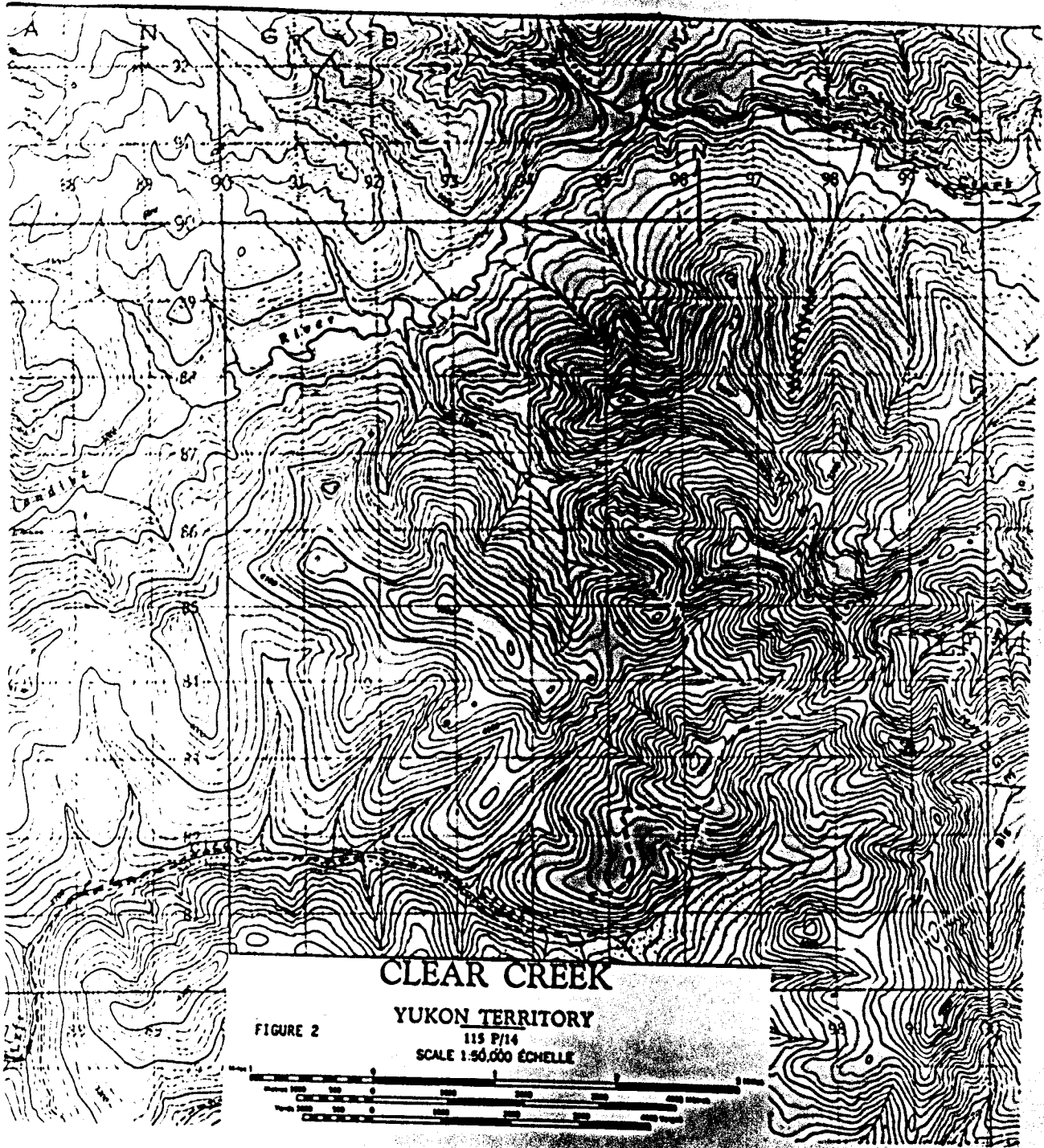


FIGURE 2

CLEAR CREEK

YUKON TERRITORY

115 P/14

SCALE 1:50,000 ÉCHELLE

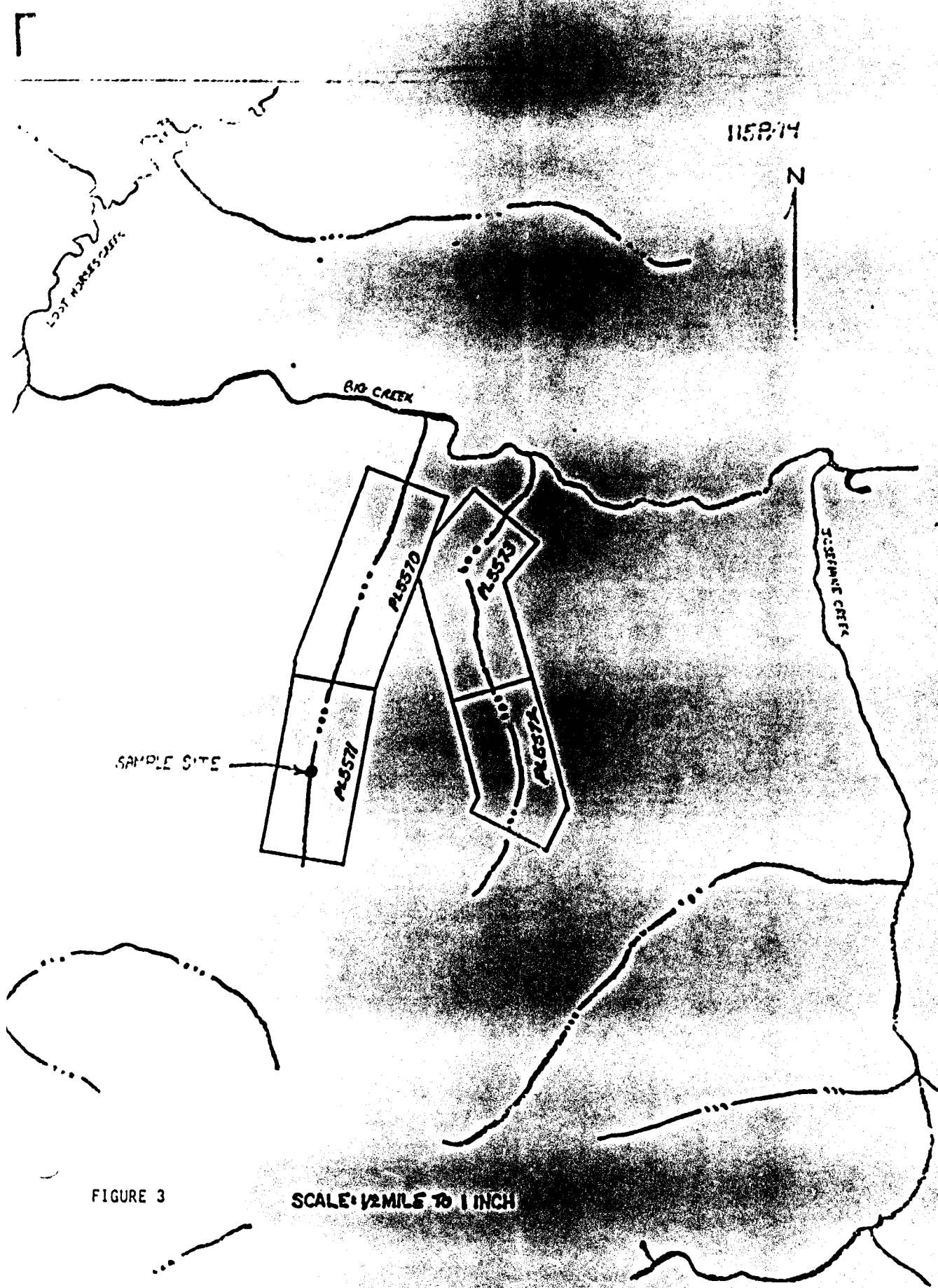
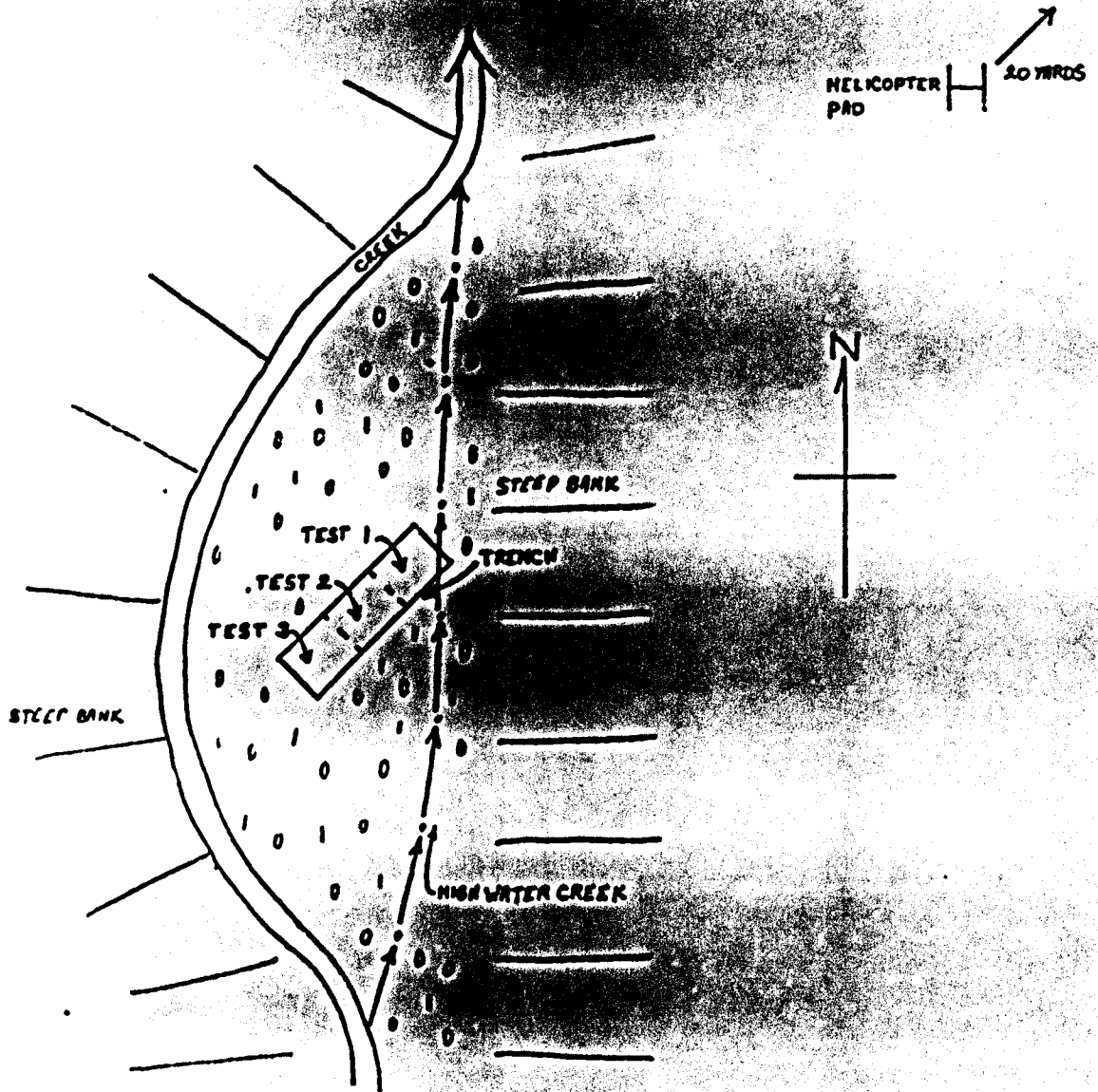


FIGURE 3

SCALE: 1/2 MILE TO 1 INCH

JM7112 /
SAMPLE SITE PLAN



TRENCH VOLUME

$$12.5' \times 5.5' \times 3.6' = 247' + 27' = 9.2 \text{ YD}^3$$

TRENCH IS 820 YARDS UPSTREAM FROM POST #1.

SCALE 1 INCH TO 10 FEET

FIGURE 4

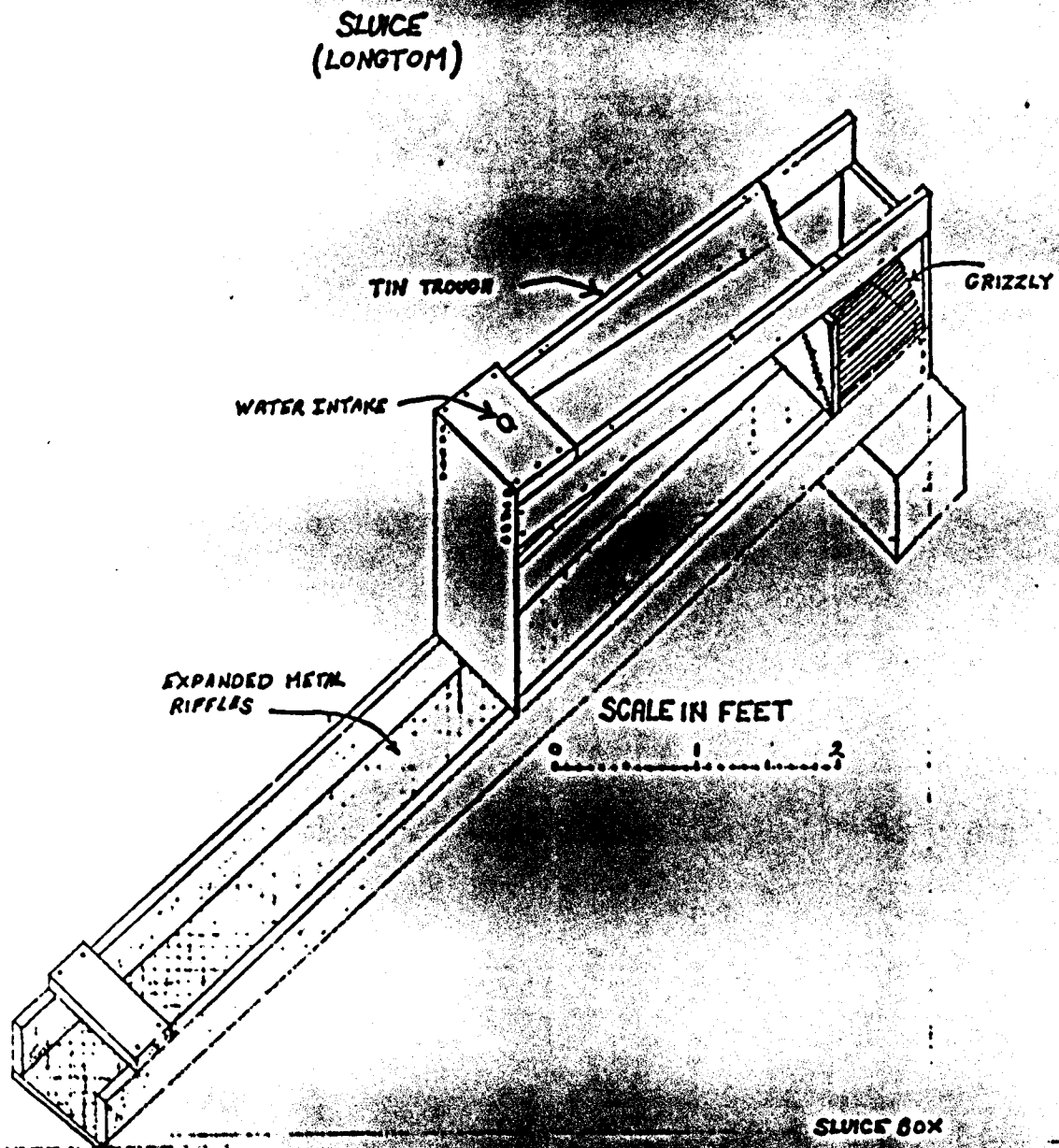


FIGURE 5

PLACER TESTING PROGRAM

JAMIE #9

PLACER LEASE 5572



PLACER TESTING PROGRAM

JAMIE #9

PLACER LEASE 5572

DAWSON MINING DIVISION

NTS 115 P/14

63°54.6' LATITUDE, 137°03.5' 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

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FIGURE 2	Topography Map	Scale 1:50,000
FIGURE 3	Claim Map	Scale 1 inch to ½ mile
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APPENDIX

APPENDIX I	Statement of Direct Costs
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PLACER TESTING PROGRAM

JAMIE #9

PLACER LEASE 5572

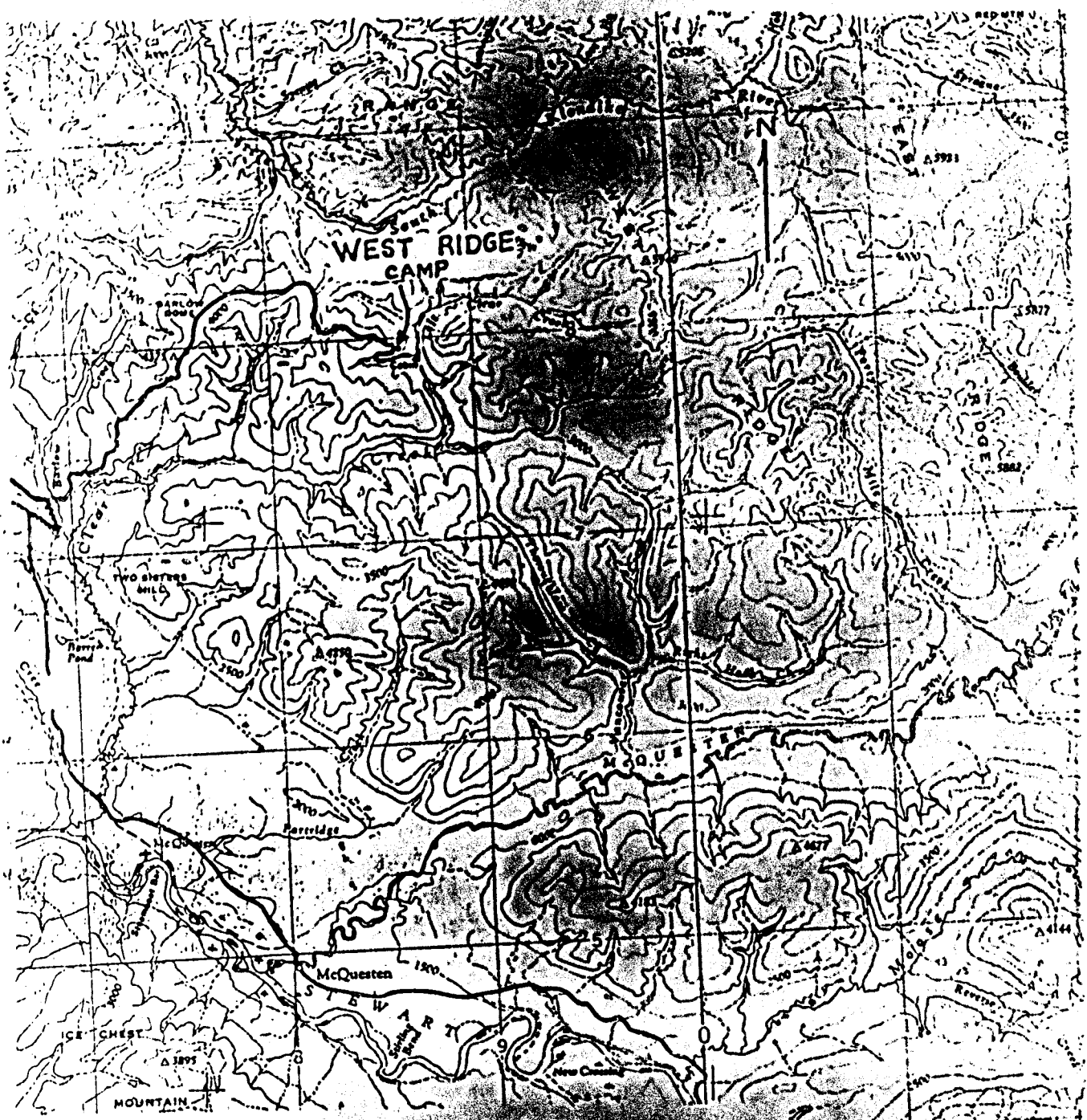
1.0 INTRODUCTION

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.

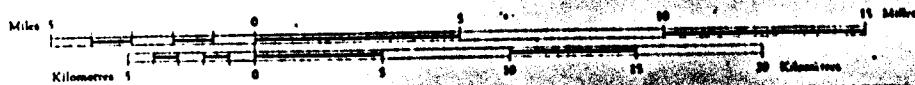


McQUESTEN
YUKON TERRITORY

FIGURE 1

115 P

Scale 1:250,000 Échelle



Stewart Crossing

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 D7G TRENCHES

The cat trenches were dug as deep as possible within an allotted time period. Once the trench reached bedrock or its maximum depth a sample was taken. The cat would push a blade load of material (one to two cubic yards in volume) from the lowest portion of the trench and deposit it on the tails pile to be tested later.

The cat would then refill the trench with surrounding material.

The trenches were sub-parallel to the active creek due to the restrictions in the available work areas.

2.3 CONCENTRATION PROCEDURE

The concentration process involves running as much material as possible from the cat 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 feet 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.

- 4 -

(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 #9
PLACER LEASE 6572**

	GOLD	SCHEELITE	BARITE	ARSENOPYRITE	PYRITE	HEMATITE	MAGNETITE
J9-T1 concentrate	0	1	2	0	0	2	2
J9-T1 tails	0	0	1	0	0	1	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 #9
Placer Lease 5572

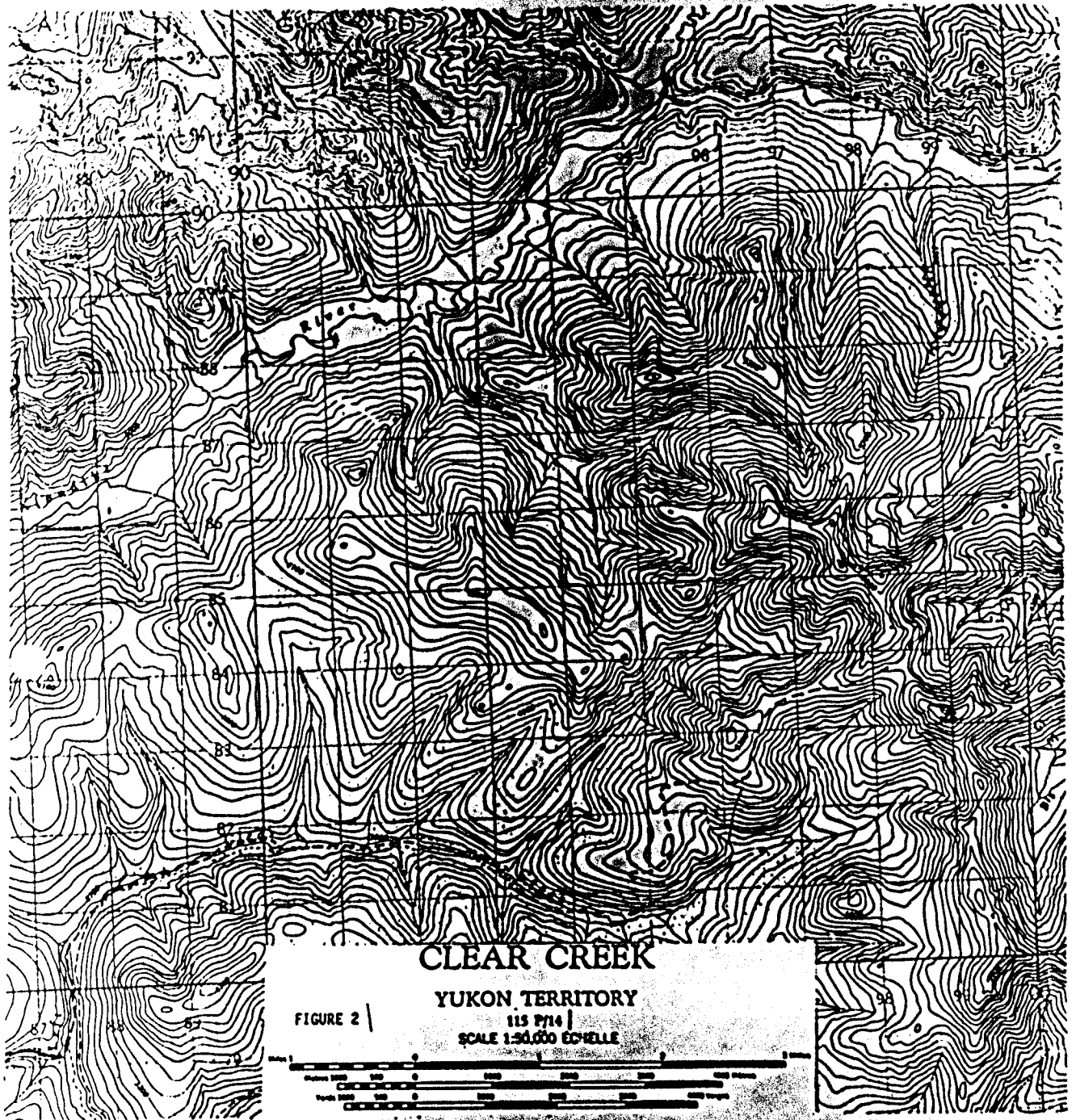
STATEMENT OF DIRECT COSTS

LABOUR

Ken Hansen, Supervisor			
\$175.00 per day	August 12 (1.0 day)		
	Total Days 1.0 x \$175.00 =		\$175.00
Mike Philpot, Geologist			
\$275.00 per day	August 9 (0.5 day)		
	Total Days 0.5 x \$275.00 =		\$137.50
Hugh Astley, Cat Operator			
\$15.50 per hour	August 9 (5.0 hours)		
	Total Hours 5.0 x \$15.50 =		\$ 77.50
Bob Cahill, Geological Assistant			
\$125.00 per day	August 12 (1.0 day)		
	Total Days 1.0 x \$125.00 =		\$125.00
Tom Borthwick, Geological Assistant			
\$125.00 per day	August 12 (1.0 day)		
	Total Days 1.0 x \$125.00 =		\$125.00
		TOTAL LABOUR	\$640.00

DISBURSEMENTS

D7G \$52.50 per hour X 5 hours =	\$ 262.50
Diesel 6 gallons per hour x \$2.30 per gallon x 5 hours =	\$ 69.00
YDs ³ 315 x \$1.00 per yd ³ =	\$ 315.00
Chemex Geochemical Analysis	
Preparation \$0.65 per sample X 2	\$ 1.30
Each sample tested for Gold (\$5.75)	
Tin (\$4.00)	
Tungsten (\$4.00)	
\$13.75 X 2 samples	\$ 27.50
TOTAL DISBURSEMENTS	\$ 675.30
TOTAL COST APPLIED TO ASSESSMENT WORK	\$1,315.30



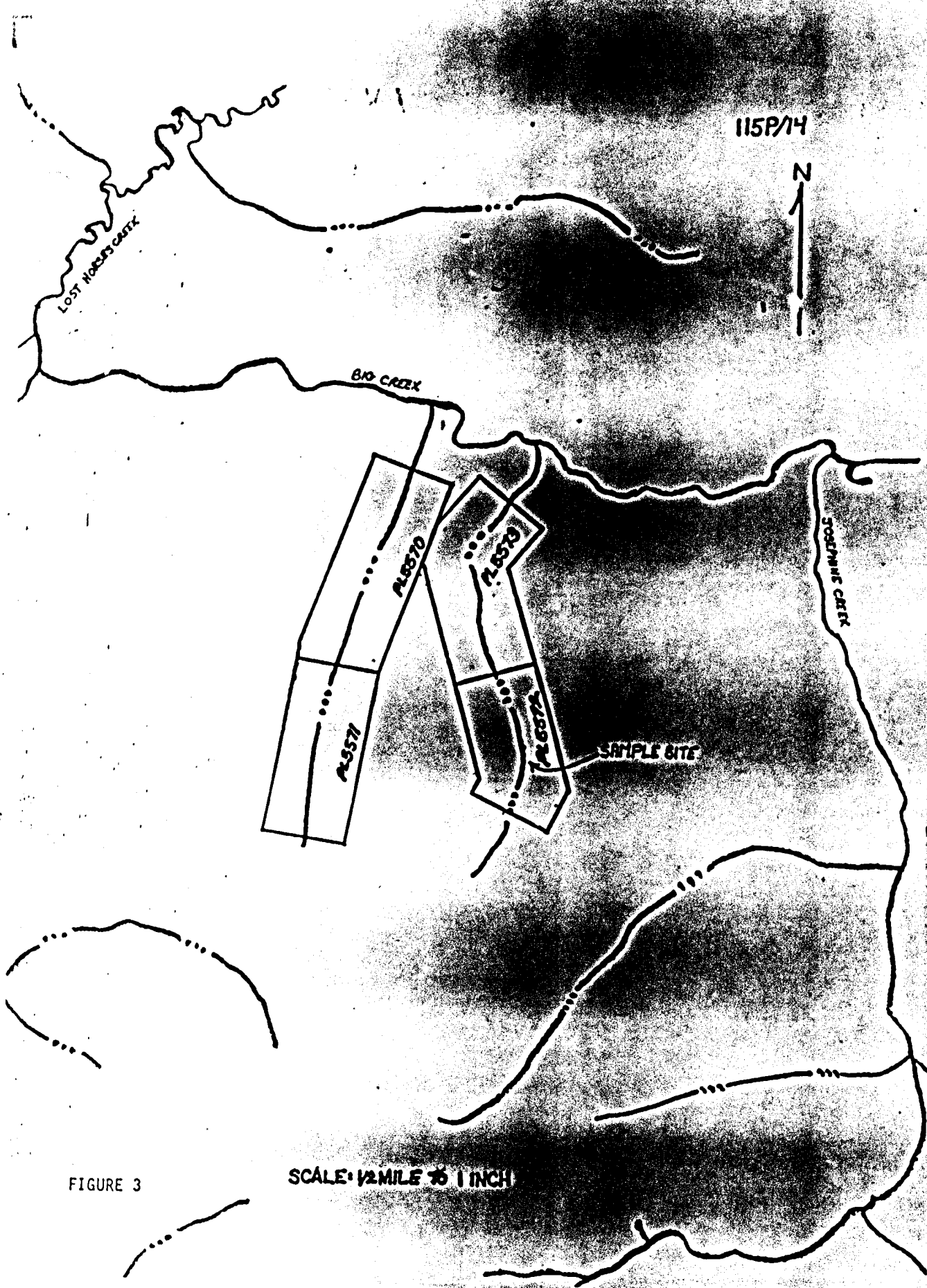
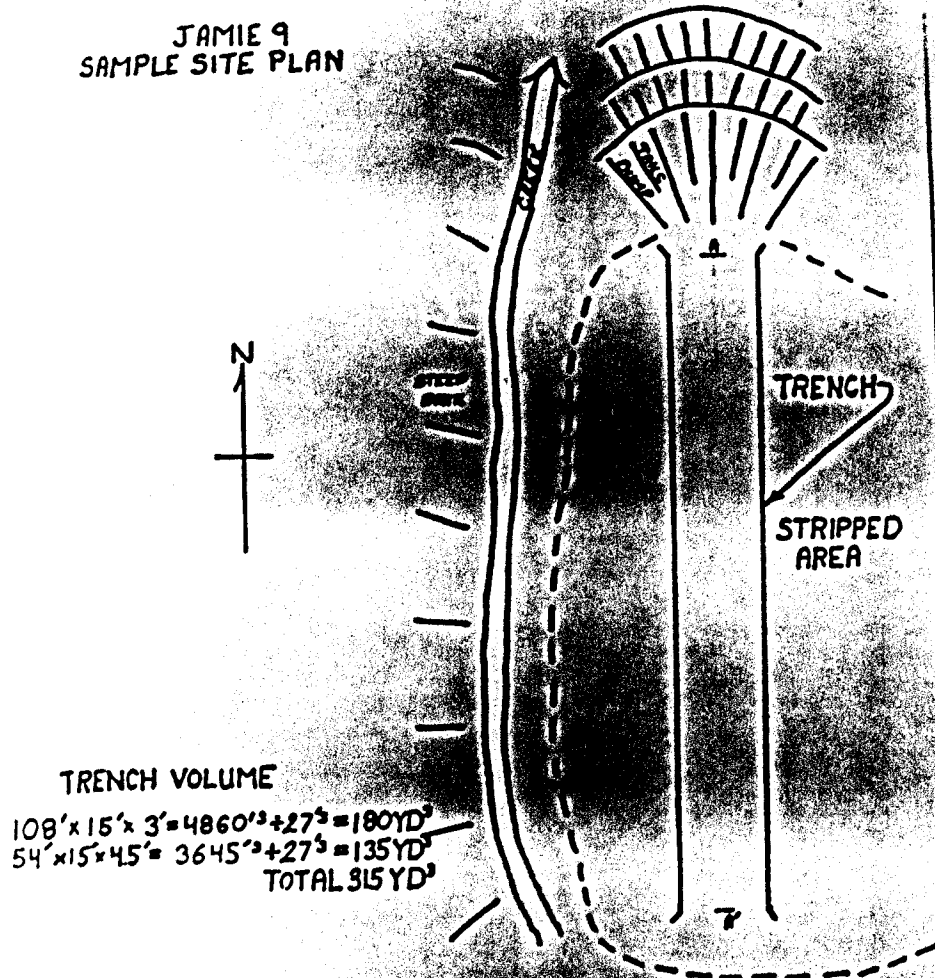


FIGURE 3

SCALE: 1/2 MILE TO 1 INCH

JAMIE 9
SAMPLE SITE PLAN



TRENCH VOLUME
 $108' \times 15' \times 3' = 4860'³ + 27³ = 180'YD³$
 $54' \times 15' \times 4.5' = 3645'³ + 27³ = 135'YD³$
 TOTAL 315 YD³



SCALE 1 INCH TO 20 FEET

TRENCH IS 800 YARDS UPSTREAM FROM POST #1.

FIGURE 4

**SLUCE
(LONGTOM)**

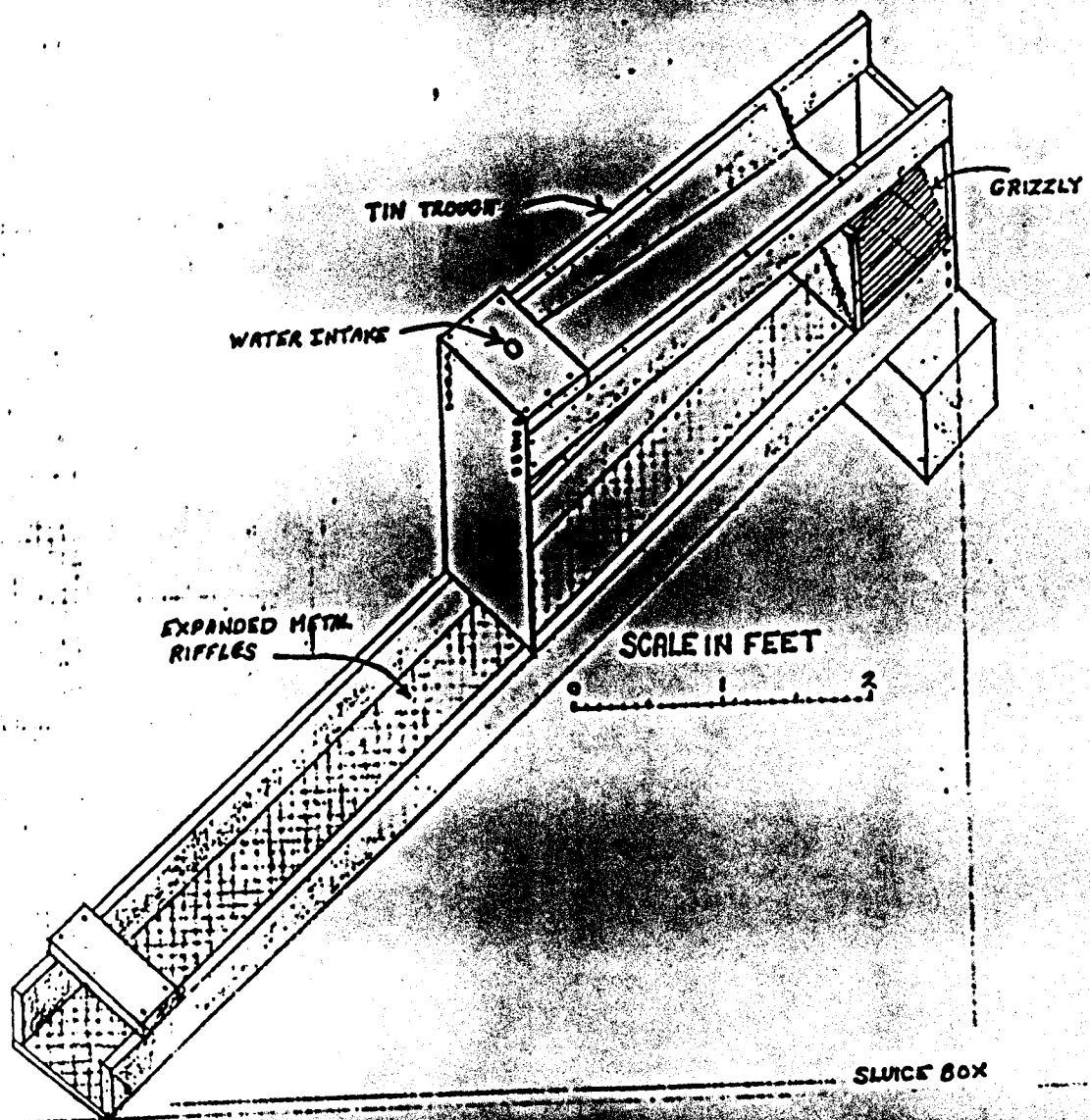


FIGURE 5

PLACER TESTING PROGRAM

JAMIE #10

PLACER LEASE 5574



PLACER TESTING PROGRAM

JAMIE #10

PLACER LEASE 5574

DAWSON MINING DIVISION

NTS 115 P/14

63°51.2' LATITUDE, 137°13.7' LONGITUDE

Owned by:

CANADA TUNGSTEN MINING CORPORATION LTD.
Executive Office
Box 12525, Oceanic Plaza
Ste. 1600-1066 W. Hastings St.
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KEN HANSEN

SEPTEMBER 1981

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APPENDIX I Statement of Direct Costs

PLACER TESTING PROGRAM

JAKIE #10

PLACER LEASE 5574

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.

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 D7G TRENCHES

The cat trenches were dug as deep as possible within an allotted time period. Once the trench reached bedrock or its maximum depth a sample was taken. The cat would push a blade load of material (one to two cubic yards in volume) from the lowest portion of the trench and deposit it on the tails pile to be tested later.

The cat would then refill the trench with surrounding material.

The trenches were sub-parallel to the active creek due to the restrictions in the available work areas.

2.3 CONCENTRATION PROCEDURE

The concentration process involves running as much material as possible from the cat 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 feet 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

**JWIE #10
PLACER LEASE 6574**

	GOLD	SCHEELITE	BARITE	ARSENOPYRITE	PYRITE	HEMATITE	MAGNETITE
J10-T1 concentrate	10 vfg	1 gr. > 20 mesh 2	1	0	0	2	2
J10-T1 tails	0	1	0	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 Analysis.

- 8 -

- APPENDIX I -

JAMIE #10
Placer Lease 5574

STATEMENT OF DIRECT COSTS

LABOUR

Ken Hansen, Supervisor

\$175.00 per day

August 19 (0.2 day) 20 (0.3 day)
22 (0.14 day) 23 (0.14 day)
24 (0.14 day)

Total Days 0.92 x \$175.00 = \$161.00

Sean Butler, Geological Assistant

\$125.00 per day

August 21 (1.0 day)

Total Days 1.0 x \$125.00 = \$125.00

Paul Jones, Geological Assistant

\$95.00 per day

August 21 (1.0 day)

Total Days 1.0 x \$95.00 = \$ 95.00

Hugh Astley, Cat Operator

\$15.50 per hour

August 19 (2 hours) 20 (3 hours)
September 8 (1 hour)

Total Hours 6 x \$15.50 = \$ 93.00

Mike Philpot, Geologist

\$275.00 per day

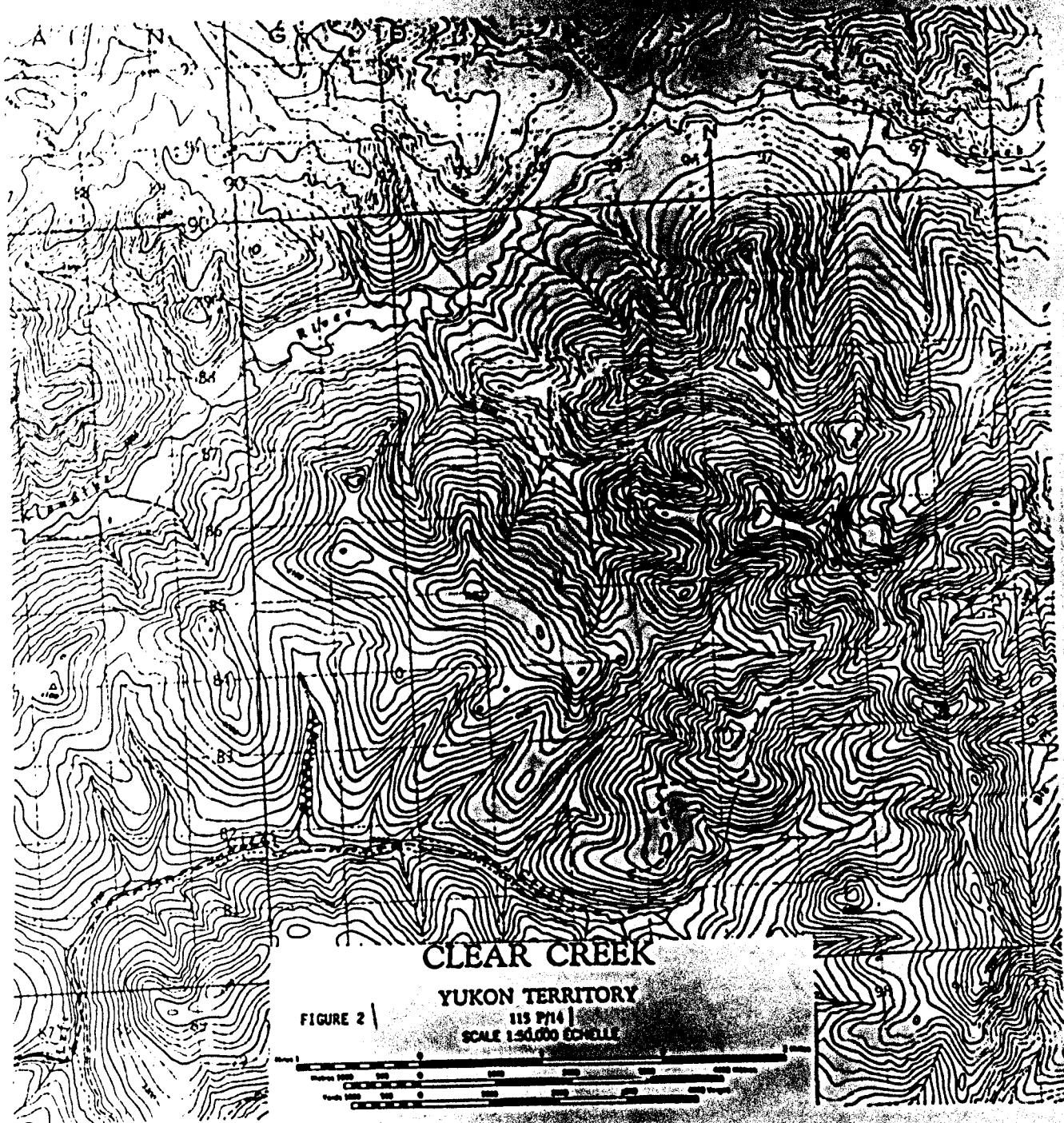
September 8 (0.1 day)

Total Days 0.1 x \$275.00 = \$ 27.50

TOTAL LABOUR \$501.50

DISBURSEMENTS

D7G \$52.50 per hour X 6 hours =	\$ 315.00
Diesel 6 gallons per hour X \$2.30 per gallon X 6 hours =	\$ 82.80
YDs ³ 166.6 x \$1.00 per YD ³ =	\$ 166.60
Chemex Geochemical Analyses	
Preparation \$0.65 per sample X 2	\$ 1.30
Each sample tested for Gold (\$5.75)	
Tin (\$4.00)	
Tungsten (\$4.00)	
\$13.75 X 2 samples	\$ 27.50
	<hr/>
TOTAL DISBURSEMENTS	\$ 593.20
	<hr/>
TOTAL COST APPLIED TO ASSESSMENT WORK	\$1,094.70
	<hr/> <hr/>



CLEAR CREEK

YUKON TERRITORY
115 P714
SCALE 1:50,000 ECHELLE

FIGURE 2



115P-14

LITTLE SOUTH KLONDIKE RIVER

N

PL5577

SAMPLE SITE

PL5574

LEFT CLEAR CREEK

BELL CREEK

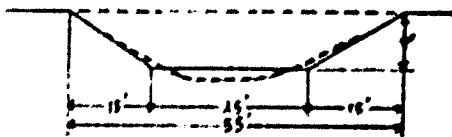
SCALE: 1/2 MILE TO 1 INCH

FIGURE 3



JAMIE 10 SAMPLE SITE PLAN
TRENCH 10

TRENCH SIDE VIEW



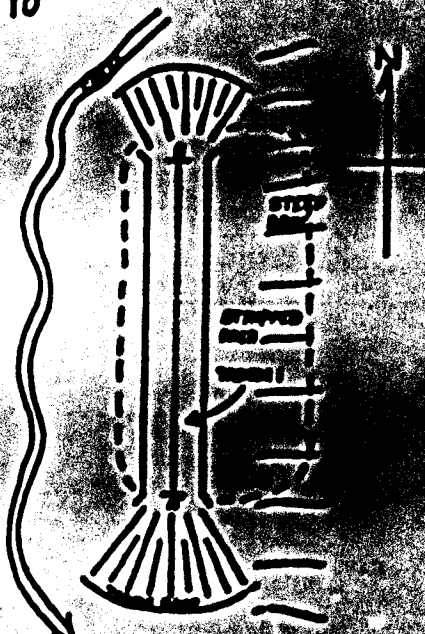
TRENCH VOLUME

$$30' \times 10' \times 4.5' = 1350' + 27' = 50.0 \text{ YD}^3$$

$$25' \times 10' \times 9' = 2550' + 27' = 83.3 \text{ YD}^3$$

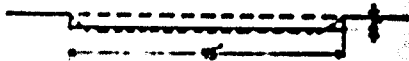
TOTAL 133.3 YD³

TRENCH IS 700 YARDS UPSTREAM
FROM POST #1.



TRENCH 2

TRENCH SIDE VIEW



TRENCH VOLUME

$$45' \times 10' \times 2' = 900' + 27' = 33.3 \text{ YD}^3$$

TRENCH IS 450 YARDS UPSTREAM
FROM POST #1.



SCALE 1 INCH TO 20 FEET

FIGURE 4

SLUCE
(LONGTOM)

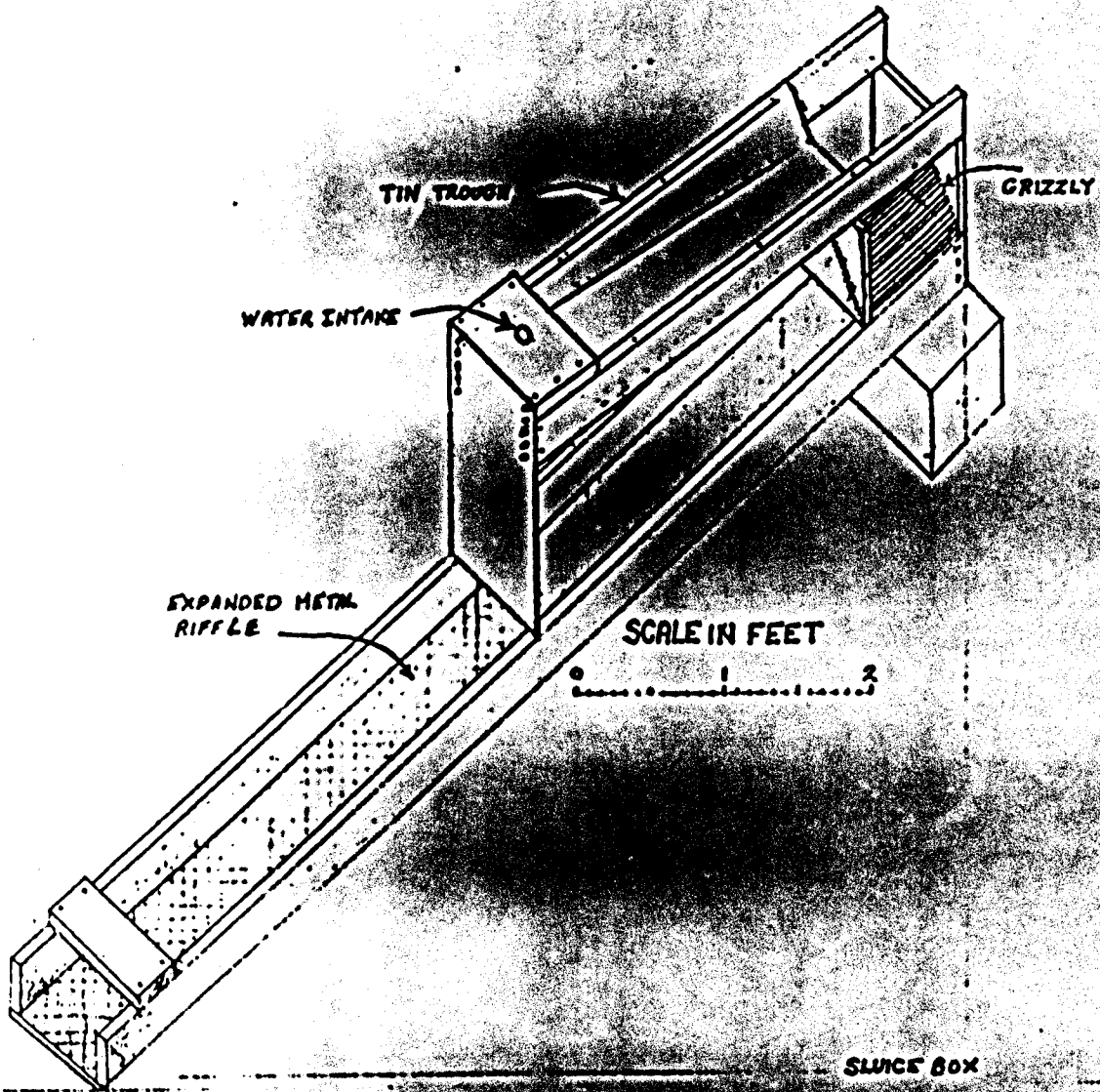


FIGURE 5

PLACER TESTING PROGRAM

JAMIE 11

PLACER LEASE 5576



PLACER TESTING PROGRAM

JAMIE 11

PLACER LEASE 5576

DAWSON MINING DIVISION

N.T.S. 115 P/14

Latitude: $63^{\circ}52.3'$; Longitude: $137^{\circ}07.1'$

Owned by:

CANADA TUNGSTEN MINING CORPORATION LIMITED
Executive Office
Box 12525, Oceanic Plaza
Ste. 1600-1066 W. Hastings Street
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Work by:

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Ken Hansen

September, 1981

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2.3 CONCENTRATION PROCEDURE	2
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3.0 RESULTS	5
4.0 CONCLUSIONS	7
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FIGURE 3	Claim Map	Scale 1 inch to 1/4 mile
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PLACER TESTING PROGRAM

JAMIE 11

PLACER LEASE 5576

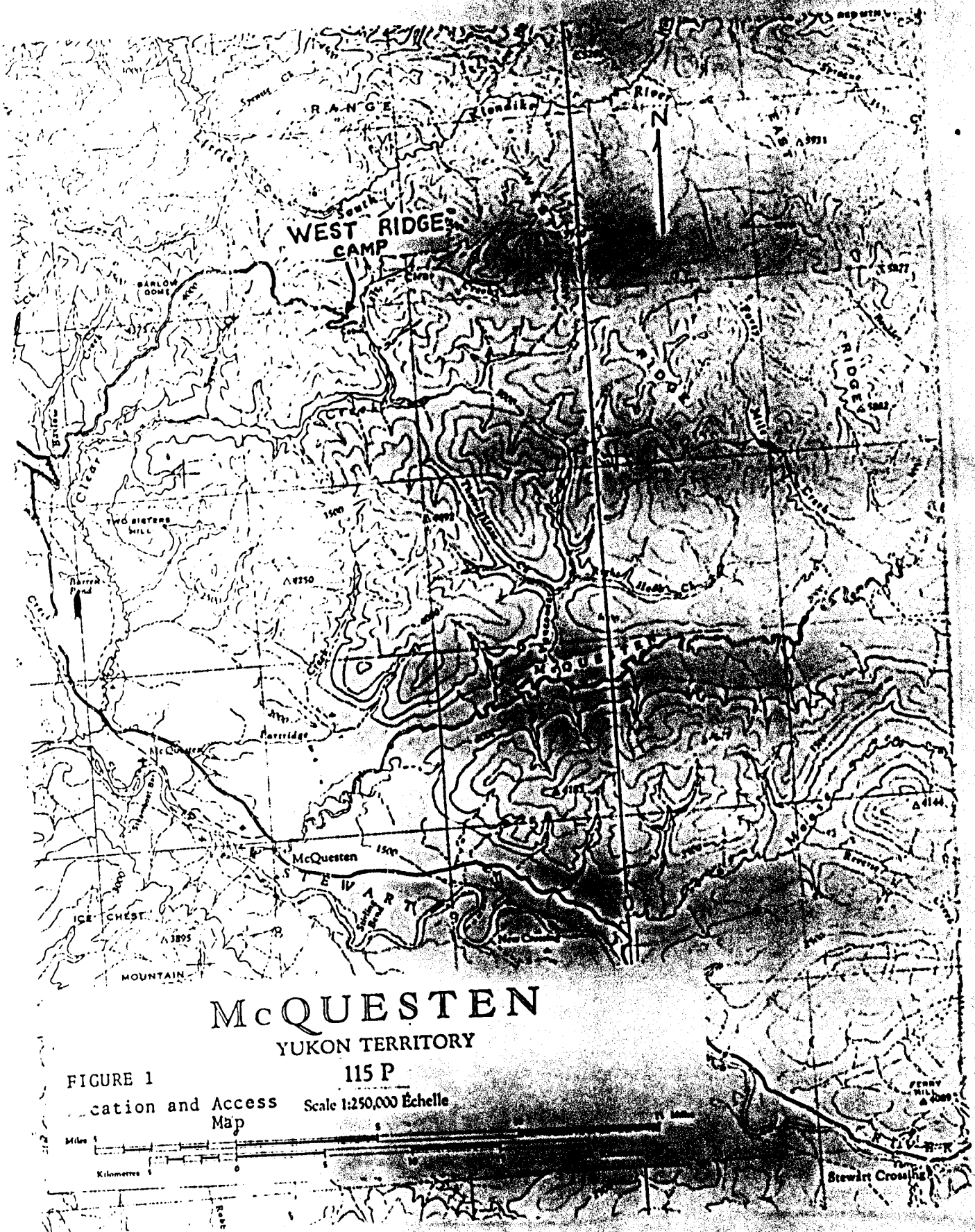
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McQUESTEN
YUKON TERRITORY

115 P

FIGURE 1
Location and Access
Map

Scale 1:250,000 Échelle



Stewart Crossing

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- (d) Take counts on scheelite grains larger than twenty mesh with the aid of an ultra violet 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.